

Tulare County Resource Management Agency Economic Development and Planning Branch



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Draft Three Rivers Community Plan 2017 Update

Adopted: ----

Tulare County Board of Supervisors Resolution No. ----

Tulare County Planning Commission Recommendations: Resolution Nos.

Three Rivers Community Plan: GPA 14-004 Zoning District Map: PZC 17-048

Section 18.9 Zoning Ordinance (Mixed Use): PZC 17-047



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EXECUTIVE SUMMARY

Introduction

Since 1998, the County of Tulare, through efforts of the Tulare County Resource Management Agency (RMA) has conducted outreach meetings and has been consistently working towards a new Community Plan for Three Rivers. In 2012, the Tulare County General Plan 2030 Update was approved. Since 2013, the RMA has intensified these efforts and reached out to the Three Rivers Community, and approximately 30 public meetings were held, on a monthly and at times a weekly basis. Through various meetings, "Three Rivers Village Foundation Town Hall meetings and community meetings held at the Three Rivers Arts Building," RMA staff has discussed various County policies, programs, process, and procedures with its residents, to further define this Community Plan.

After 17 years, the Community Plan "the Plan" has been prepared with a balanced approach to address the various viewpoints and community vision shared by the residents of Three Rivers. An Environmental Impact Report has been prepared to inform governmental decision makers and the public about the potential, significant environmental effects of the proposed plan, identify the ways that environmental impacts can be avoided or significantly reduced and prevent significant, avoidable impacts to the environment by requiring changes in future projects through the use of feasible alternatives or mitigation measures.

The vision for the Community is fitting to the context of its setting in the rural Southern Sierra foothills. Which is the gateway to the Sequoia National Park, the highway and rivers flowing through it, and its proximity to Visalia, Fresno, and Bakersfield. It is a standalone destination for its unique qualities, but also serves visitors travelling to the Sequoia National Park, which is home to the longest lived and largest trees in the world. It is a destination that the residents are proud of, and they hold strong views on how its future is managed, and that its history is protected. The vision for this plan embraces these views and strengthens the uniqueness of this Community Plan, which stands alone amongst other Communities within Tulare County.



Location

Three Rivers is a diverse, rural community located in the western foothills of the Sierra Nevada Mountain Range in the unincorporated portion of Tulare County. It is situated approximately 52 miles southeast of Fresno in the north central area of Tulare County. Three Rivers is positioned adjacent to State Route 198, which connects it with Visalia, the County Seat, located 30 miles southwest of Three Rivers. The community is five miles south of the entrance to Sequoia National Park. It lies in a natural valley area created by the convergence of the North, Middle, East, and South Forks of the Kaweah River near the eastern edge of the Lake Kaweah (See Figure 1).

Three Rivers is a unique community with many valuable natural assets including the Kaweah River, with its various forks that flow through the community. Within the planning area of the community, there are thousands of acres of open space defined by oak woodlands, chaparral, and geological features, such as canyons, and rock outcroppings, which are bounded by steep terrain that falls away from the sheer ridge tops into the canyons and ultimately to the Kaweah River. The natural resources and diverse landscape of Three Rivers contributes to the beauty, character, and recreational opportunities enjoyed and valued by the community.

State Route 198 & the Kaweah River

The community is irregular in shape because of the natural terrain; as it is bisected in a northeastsouthwesterly direction by State Route 198 and the Kaweah River, which divides the community into two areas of unequal size, the larger area being situated southeast of the Highway and Middle Fork of the Kaweah River. Three Rivers is a rural service center providing commercial, residential, and recreational land uses for the area. The Planning Area is surrounded on the north and east by agricultural grazing lands and the Sequoia National Park, and on the south and west by agricultural grazing lands. The majority of the existing development in the community lies immediately adjacent to the north, south, east and middle forks of the Kaweah River.







Figure 2 – Three Rivers Aerial Map

Historical Perspective

Existing Adopted Community Plan

The existing, adopted Three Rivers Community Plan was adopted on May 20, 1980. This adoption created the Three Rivers Urban Development Boundary (see Figure 3). It is over 35 years old, and has been amended by the following General Plan Amendments (GPA): 81-01, 81-07, 83-05/5A 85-04B, 87-01, 87-14A/B, 90-02, and 94-03. The 1980 Three Rivers Community Plan is a collection of goals, objectives, and policies for the physical development of the community. The primary purpose of the plan was to outline community goals regarding physical development and to promote the general welfare of the community. The existing, adopted Community Plan (GPA 80-01) serves as a general guide for both public and private decisions affecting the community, and provides for the overall direction, density, and type of growth consistent with the needs of the community.

An important objective in preparing a comprehensive update of a Community Plan for Three Rivers is to develop a plan which can accurately reflect the needs and priorities of the unincorporated community of Three Rivers and of its residents, businesses, and employers. In addition, the County has prepared an Initial Study/DEIR. The DEIR is a programmatic environmental document which will assist in fostering future economic development, grants, programs, plan implementation, and economic development opportunities as the community builds-out during the planning period by addressing potential environmental impacts which may occur, measures to reduce or avoid those impacts, and an analysis of alternatives to the project.

Three Rivers is currently designated as an Unincorporated Community in the 2030 Tulare County General Plan (2012). It has become apparent through community input and direction form the Board of Supervisors though the General Plan Amendment Initiation process (BOS Resolution No. 2014-066), that an updated community plan is needed to preserve the historical rural character and valuable natural resources in the Three Rivers community, while rising to new opportunities to provide economic development to provide services desired by the community.

As with any community plan, the contents of this document are not intended to be absolute. Planning is a continuous process and to be effective, requires periodic re-evaluation and revision to reflect changing needs and priorities. This Plan, therefore, should be reviewed on a periodic basis with the assistance and participation of local citizens, groups, and agencies. By doing so, it is envisioned that the Three Rivers Community Plan will continue to provide meaningful and necessary guidance toward the development and maintenance of the rural character for the community in the foreseeable future.

California Government Code Sections 65300 et seq. requires that each local agency, city or county, prepare and adopt comprehensive long-term general plans for the physical development of lands within its jurisdiction. A general plan must function as "a statement of development policies" and must include a diagram and text setting forth goals, policies, standards, and plan proposals. The plan must include the following elements: land use, circulation, housing, conservation, noise, safety, and open space. State law also provides that a local agency may include one or more of several optional elements depending on the needs and characteristics of the jurisdiction.

In Tulare County, the General Plan has historically been developed on a County-wide basis or by large geographic areas (such as rural valley, foothill and mountain area plans), with development policies emphasizing county-wide and area-wide issues and concerns. In establishing land use planning policies

on an area-wide basis, it has been recognized that several unincorporated communities, including Three Rivers, have localized land use needs and issues that should be addressed in a more specific manner particular to its community, geographic features, location of major roadways (such as State Route 198), population characteristics, availability of water, wastewater treatment methods, preservation its historical rural character and valuable natural resources and other issues unique to the community's area. Therefore, the Three Rivers Community Plan 2017 Update has been prepared with an emphasis on providing an appropriate balance to preserve its historical rural character and valuable natural resources while examining feasible and appropriate economic development opportunities to serve the needs of the community.



Figure 3 - Three Rivers Urban Development Boundary

History of Three Rivers

The Project Study Area is located within an area used by at least two Native American groups. The Wukchumni (Spier's Wikchamni [1978a:426]), a Foothill Yokuts group, were centered on Lemon Cove and present-day Terminus Dam/Lake Kaweah. They made seasonal forays into the lower Sierran foothills and may have traveled into the upper reaches of the South Fork of the Kaweah River in the project area vicinity. Generally the 3,000 ft elevation is considered their upper boundary (Spier 1978a:426). The Patwisha, a Western Mono / Monache group, traditionally occupied the higher elevations of the south-central Sierran slope between 3,000-7,000 ft, often crossing the Sierran crest on trading expeditions with their Eastern Mono neighbors (Spier 1978b:427). During the historic period, the Patwisha (Kroeber's Balwisha [1925:586]), along with other Western Mono groups, appear to have been expanding westward into lands traditionally used by the Wukchumni and other foothill Yokuts groups. Gayton (1948) describes the Patwisha as "a small group of Western Mono on the way to complete absorption by their more numerous and culturally richer Yokuts neighbors" (1948:56).

The Kaweah River area was visited in the early 1800s by Spanish expeditions exploring the interior in search of potential mission sites. Lt. Gabriel Moraga, accompanied by Fr. Pedro Muñoz, about 25 soldiers, and a few neophytes, led an expedition that visited the Kaweah River country in 1806 (Cook 1960:246; Phillips 1993:50). In 1815 Master Sgt. Don Juan de Ortega explored around present-day Visalia and up the Kaweah River to about Lemon Cove (Cook 1960:267). The Kaweah River was named the San Gabriel by Moraga (Derby 1991:59).

From the earliest discovery of the Kaweah River area, EuroAmericans were drawn to its lushness and fertile soils. An early visitor, James H. Carson, waxed ecstatically over the richness and beauty of the Four Creeks region, as the Kaweah River basin was then called, calling it the most lovely spot in California (Browning 1991:59). Carson and Lieutenant George Derby referred to the Kaweah as the Francis (Frances) River (Browning 1991:59).

The community was named Three Rivers because the three branches of the Kaweah River joined at this particular location. The first known white settler in the area was Hale Tharp, who built his log cabin in 1856 at the confluence of Horse Creek and the Kaweah River - now covered by the Kaweah River Reservoir.

Settlement in the Three Rivers area grew very slowly, until 1872, when Mr. Harry O'Farrell discovered silver in the Mineral King area. In July 1873, James A. Crabtree filed the discovery claim for what he called the "White Chief Mine" and after recruiting several assistants word spread that silver had been discovered and the rush began. It was during this period when Joe Palmer introduced apple trees in the Three Rivers area, thus the start of the apple industry.

The first road, known as the Mineral King Road, was nothing more than a crude wagon trail. The first school opened on September 9, 1873, and the first Post Office opened December 23, 1879. Between 1884 and 1891, the area along the North Fork of the Kaweah River, referred to as Kaweah Colony, was settled. The first colony settlement was called Arcady and later called Haskell's Bluff. The colony's first undertaking was to build a road to the timber claims so pine and redwood lumber could be brought from a sawmill in the timberlands to a planing mill for processing as furniture and other wood products. The 1888 Business Directory listed Three Rivers as having 39 adults, 23 farmers, 8 stockmen, 2 fruit growers, 1 lumberman, 1 carpenter, 1 surveyor, 1 supervisor, 1 laborer, and 1 teamster. About this time, Congress formed the Sequoia National Park and further hopes of securing

timber claims were lost. Colony leaders were arrested for cutting timber inside the park and in the Spring of 1891 colonists were ordered out of the timberlands and timber claims were found to be invalid. By 1892, the colonists had disbanded.

The creation of the Sequoia National Park and General Grant Park furthered Three River's growth. About this time, summer cabins were constructed along the river, as well as camping sites and summer resorts. By 1897, the first general merchandise store, Britten Brothers, opened. In 1899, the Mt. Whitney Power Company constructed a power plant and then installed a second one in 1905 with two more under construction. Around 1903, the first telephone came to Three Rivers with power lines being draped over trees, fence posts and on bridges. In approximately 1910, the Three Rivers Branch Library (deposit station) was established at the River Inn. It burned down in September 1911 and was subsequently moved to the Britten Ranch. The Kaweah Branch Library, located next to the Kaweah Post Office on the North Fork Road, had a circulation of 1,031 while the Three Rivers Library had a circulation of 1,299.

By 1913, Three Rivers had a population of 615 and by 1966, the population reached approximately 1,016. The population in 1980 was approximately 1,645. According to Census data, Three Rivers experienced a slight decrease in population between 1990 and 2000. The population in Three Rivers decreased from 2,248 in 2000 to 2,182 in 2010. In essence, the population has remained essentially static since the turn of the century. Today, Three Rivers is primarily a rural residential/recreation service area, whose residents enjoy the scenic qualities of the area and its quiet rural atmosphere.

Community Vision

The Three Rivers Community Plan is a bold statement regarding the diversity of fundamental community values. The vision for the Community Plan shares the multitude of viewpoints from throughout the Community (See Attachment A-1). The Community vision coincides with and implements the County's 2030 General Plan (Adopted in 2012), and anticipates a 15-year outlook, through 2030. The vision includes 21 key statements, as included below which will provide appropriate direction to help guide balanced public and private decisions affecting the community including provisions for the overall direction, density, type of growth and protection of the natural environment that is consistent with the needs and desires of the Three Rivers Community to maintain its rural character. These vision statements intensify what is already recognized throughout the State, that Three Rivers is a one of a kind destination that is unique among rural foothill communities as the gateway to the prestigious Sequoia National Park.

Protection of the natural environment including the Kaweah River, which is the heart of the community is the most important Community asset. The Kaweah River is an essential element of the community's unique character and natural environment. The floodways and floodplains along the river enhance the quality of life in Three Rivers by promoting biological and habitat diversity in the community. As part of the future vision for Three Rivers, residents would like to preserve the Kaweah River, in its natural course through the community. Maintaining the Kaweah River in its natural course maintains the dynamic interaction between river flow, river form, people, plants, fish and wildlife to maintain the river in the natural, healthy form. Water to support residential and commercial development in Three Rivers is limited. Any planned residential or commercial development must ensure that adequate water resources are available to support the proposed development before construction begins.

THE PURPOSE OF THE THREE RIVERS COMMUNITY PLAN IS TO PRESERVE AND PROTECT THE VALUES, CHARACTER AND ASSETS OF THE COMMUNITY, INCLUDING PRESERVATION OF ITS HISTORICAL RURAL CHARACTER AND VALUABLE NATURAL RESOURCES, WHILE ENSURING THAT ECONOMIC GROWTH REMAINS VIBRANT AND SUSTAINABLE, CONSISTENT WITH THE DESIRED CHARACTER OF THE COMMUNITY. THREE RIVERS POSSESSES HISTORICAL AND CULTURAL RESOURCES SIGNIFICANT THAT THE COMMUNITY WISHES TO PRESERVE AND MAINTAIN AS THE AREA GROWS. ONE OF THE SHARED VISIONS FOR THREE RIVERS IS A COMMUNITY THAT CONTAINS A STRONG CENTRAL CORE AREA WITH CLUSTERED COMMERCIAL DEVELOPMENT, WHICH CAN HELP CREATE A FOCAL POINT OR TOWN CENTER FOR THE COMMUNITY, AND CAN ALSO REINFORCE A SENSE OF PLACE AND COMMUNITY IDENTITY. THE COMMUNITY PLAN WILL HELP TO MAINTAIN A RURAL ATMOSPHERE, WHILE ENSURING THAT AN APPROPRIATE TYPE AND SCALE OF FUTURE DEVELOPMENT IS PROVIDED WITH ADEQUATE COMMUNITY INFRASTRUCTURE WHILE PROTECTING NATURAL RESOURCES, AND UPHOLDING COMMUNITY VALUES.

It is important to community members that Three Rivers continues to be a livable community with a diversity of housing types and commercial and civic uses. Community public facilities services are an essential part of the quality of life in Three Rivers. High quality schools and recreation facilities contribute to creating a self-sustaining, healthy community with a sense of identity and character. Transportation Management in Three Rivers is integral to maintaining the rural character of the community, as well as ensuring public safety and welfare for residents and visitors. It is important to balance the rural character of the community with the need for adequate emergency and safety access including appropriate disaster planning and response.

Like the rugged mountains that surround them, the communities of Three Rivers and Kaweah have always included a rugged, individualistic spirit. The early pioneers, cowboys, and artisan's wanted a place to live, work, and raise their families that would foster in them an indomitable quest to pursue their dreams. That rugged, individualistic, spirit still exists today in the hearts and minds of those who live, work, and play in the foothills and mountains of Three Rivers. As a result, the Community Plan is an important tool for protecting Three Rivers' assets and guiding future growth and development. As indicated above, the Community Plan will provide appropriate direction to help guide balanced public and private decisions affecting the community including provisions for the overall direction, density, type of growth and protection of the natural environment that is consistent with the needs and desires of the Three Rivers Community to maintain its rural character.

Over the course of nearly two decades, the Vision Statements included below have been drafted, reviewed and redrafted to effectuate the desires of the Community. The ideals included in these statements have helped to develop the goals, objectives and policies of the Community Plan. As a result, the Visioning Statements are directly drawn in the policies and vision statement matrix below. The numerical references associated with the vision statements are not prioritized but have a comparable level of importance to the community.

Three Rivers Community Plan Vision Statements

(1) Create a Town Center or centers with a Concentration of Commercial, Retail and Social Uses to

Help Strengthen Three Rivers as a Livable Community.

- (2) Establish Standards for signage which balances practical business considerations with community design standards.
- (3) Development of Noise Standards Reflective of a Foothill and Canyon Community Environment.
- (4) Establish Standards for fences.
- (5) Apply Rural Compatibility Standards through the County Project Review Committee process.
- (6) Establish Lighting Standards for Night Sky Conservation and Protection.
- (7) Protect and Preserve Oak, Sycamore and Cottonwood Woodlands.
- (8) Preserve Visual Resources, Including Viewsheds and Ridgelines.
- (9) Preserve Historical, Cultural and Archaeological Resources Including the Kaweah Post Office, Historical Bridges, and Cultural Native American Resources.
- (10) Provide Land Uses Consistent Community Character including an Urban Development Boundary (UDB) that is contiguous with the existing Planning Area Boundary.
- (11) Ensure adequate land use supplies for residential, commercial, industrial and public uses to accommodate future growth and ensure the community's economic viability.
- (12) Manage growth.
- (13) Ensure compatibility between land use types and intensities.
- (14) Encourage a diversity of housing options for all Three Rivers residents, including affordable housing for families, seniors, and National Park Service employees.
- (15) Ensure that future development is compatible with existing development and the natural environment.
- (16) Establish rural compatibility standards.
- (17) Vegetation standards.
- (18) Establish Setback standards for residential development.
- (19) Establish Streetscape guidelines for roadways, paths and sidewalks.
- (20) Develop a Traffic Circulation Plan with management strategies and improvements to increase safety and community access.
- (21) Development of a Community Park.

Please see Appendix A-1 which provides a demonstration as to how the community vision is implemented through the Three Rivers Community Plan policy plan.

Community Plan Balanced Approach

All community plans, including this one, must address a range of diverse, sometimes divergent, public interests. They must do so within a consistent, well-integrated policy framework. A county utilizes broad discretion to weigh and balance competing interests in formulating community plan policies. In implementing those policies, it is the task of the Board of Supervisors, or its delegates, to make determinations in a manner that promotes the objectives and policies of all aspects of the community plan, and does not obstruct their attainment. Policy implementation may require reasonable and thoughtful consideration of a number of community plan policies. Such implementation decisions will be made on a case-by-case basis as the Board of Supervisors, Planning Commission, County staff, and others work to implement the entire community plan. When implementing the Community plan or reviewing projects or approvals for consistency with the Community plan, the County will need to balance numerous planning, environmental and policy considerations.

Another overall principle to guide the reading and interpreting of the Community plan and its policies is that none of its provisions will be interpreted by the County in a manner that violates State or Federal law. For example, PFS-1.3: Impact Mitigation (Tulare County General Plan Chapter 14), requires new development to pay for its proportionate share of the costs of infrastructure required to serve the project. This policy will be implemented subject to applicable legal standards, including but not limited to the U.S. Constitution's "Takings" clause. In reading every provision of the Community plan, one should infer that it is limited by the principle: "to the extent legally permitted".

Policies throughout the Community plan use the terminology "shall" and "should." For the purposes of interpreting the policies in this Community plan, the term "shall" indicates a mandatory or required action or a duty to undertake an action unless the context indicates otherwise, in which case the term is synonymous with "should." The term "should" indicates a directive subject to discretion and requires at least review or consideration and, in that context, substantial compliance with the spirit or purpose of these Community plan policies. The term "may" indicates at the sole discretion of the County.

In addition, a number of policies reference the term "feasible" which is derived from the California Environmental Quality Act (CEQA) ((Public Resources Code 21000–21189) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387). "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

Finally, the term "reasonable" is used to describe a fair, balanced, and sensible approach, based on sound judgment that is supported by the application of policies contained in the community plan.

Community Plan Key Features

Land Use Plan Update

- 1. Land Use Plan (Consistency with Zoning Districts).
- 2. Zoning Plan (Consistency with Land Use Designations).
- 3. Town Center Concept.

4. Incorporation of applicable General Plan Land Use Policies (General Plan Land Use Element).

- 5. Designated Scenic Routes and Highways Guidelines.
- 6. Dark Sky Strategy Guidelines.
- 7. Urban Development Boundary (No major changes, minor alignments to geo-rectify to section lines or parcel lines).

Transportation and Circulation Plan Update

- 1. Circulation Element and Circulation Plan (Functional Classification).
- 2. Transit, Bike, and Pedestrian Plan.
- 3. Complete Streets Program.
- 4. Road Maintenance Plan.
- 5. Tulare County Development and Improvement Standards.
- 6. Roadway Conditions and Traffic Safety Considerations

Flooding (FEMA/Primary and Secondary Flood Plain Zoning)

1. Flood Damage Prevention Ordinance.

2. FEMA/FIRM Definitions (Zones, Descriptions, Flood Risk, Encroachment, and Mitigation).

4. FEMA FIP Construction Requirements

5. Tulare County Zoning Districts F-1 Primary Flood Plain Zone and F-2 Secondary Flood Plain Combining Zone (Descriptions, Flood Risk, Encroachment, and Mitigation).

6. Incorporation of applicable General Plan Policies (Flooding)

Emergency Preparedness and Access

- 1. State Responsibility Area (SRA) Fire Safe Regulations.
- 2. Tulare County Hazard Mitigation Plan.Public Services and Safety
- 3. Emergency Access.
- 4. Community Signage and Address Signage.
- 5. Incorporation of applicable General Plan Policies (Fire, Flood, and Emergency Response)

Development on Slopes

- 1. Incorporation of applicable General Plan Policies.
- 2. (Development Standards, policies, and guidelines).

Development Standards

- 1. Tulare County Improvement Standards.
- 2. Development Standards.
- 3. Development Checklist.
- 4. State Responsibility Areas (SRA Fire Safe Regulations).
- 5. General Plan Policies Development Standards.

Noise

- 1. Incorporation of General Plan Policies (Health and Safety Element)
- 2. Noise Technical Study Recommendations.

Water Quality and Quantity

1. Incorporation of General Plan Policies (Water Resources, Planning Framework, Public Facilities and Services).

2. Water Quality and Water Supply Studies.

THREE RIVERS BACKGROUND REPORT

Community Profile

<u>Climate</u>

The mild climate in Three Rivers is generally characterized as a Mediterranean climate. The area tends to be clear, sunny, warm, dry and generally free of fog. The mean temperatures range from a low of 35°F in January to a high of 95°F in July. The average yearly rainfall for the area is approximately 18 inches with 90 percent of the precipitation falling between the months of November and April. The winds in the area are considered light, moving up the canyons in the mornings and down the canyons in the evening.

Topography

Topography within the Three Rivers area is quite varied - from relatively flat areas immediately adjacent to the north, south and middle fork of the Kaweah River to very rugged, mountainous terrain particularly at the southern end of South Fork Drive. Elevations along the South Fork Drive area range from about 1200 feet above sea level to over 3600 feet. North Fork area elevations range from a low of approximately 980 to over 2400 feet in the vicinity of Comb Rocks. Elevations along the State Route 198 area range from a low elevation of about 772 by Lake Kaweah to a high elevation of 2400 feet east of the entrance to the Sequoia National Park.

The natural environment is Three Rivers' most valuable asset. The natural resources and diverse landscape of Three Rivers contribute to the beauty, character, and recreational opportunities enjoyed and valued by the community. The natural environment in Three Rivers encompasses the diverse and varied resources, including the Kaweab River, beautiful topography, and cultural resources. Throughout the planning process, the community has stated that maintaining a pristine natural environment and protecting the area's valuable resources is the top priority in planning for the community's future.

Approximately 64 percent of the entire study area has slopes over 25 percent while approximately 1/3 of the entire study area or 36 percent has slopes less than 25 percent. These areas with slopes less than 25 percent slope are found adjacent to the north, south, east and middle forks of the Kaweah River; it is within these areas where almost all of the development has occurred to date.

Existing Urban Development Boundary

The Three Rivers Planning Area and adopted Urban Development Boundary (UDB) is coterminous and is comprised of approximately 21,000 acres, or 33 square miles. This is considerably larger than the area of the Three Rivers Community Services District, which totals approximately +/- 5,400 acres, or 8.4 square miles.

Existing Land Use Plan

The following section examines the land uses as reflective of the 1980 Three Rivers Community Plan as amended including relevant policies from the adopted Tulare County General Plan (see Attachment A-2, for a compartative analysis with the current plan). Recommendations regarding the proposed amendments to the Three Rivers Community land use, zoning and circulation plans are contained in Implementation Section.

The expansion of urban development within the Planning Area could affect the area's environmental character, most noticeably as urban development replaces existing agricultural lands and rural open

spaces. Urbanization may also impact other aspects of the local environment such as ambient noise levels, air quality, indigenous wildlife and flora, surface water drainage patterns, and the underground water reservoir. The Land Use portion of this Plan provides the mechanism to minimize or avoid the potential adverse impacts of urban growth. An orderly, harmonious land use pattern and appropriate implementation measures are designed to reduce potential conflict between neighboring uses.

The land use designations within the existing Three Rivers Community Plan UDB is shown in **Table 1** respectively. Agriculture/Grazing and land use designations, constitute approximately 50%, residential 40%, commercial 3%, industrial 12.5%, parks and recreation 1%, rights-of-way 1%, In total, there is approximately 2,100 acres of designated lands in the Three Rivers Community Plan Area and approximately 357 acres within the planning area are dedicated to ROW.

Table 1 - Adopted Land Use Plan		
Land Use Designation	Existing Acres	Percent*
Agriculture/Grazing	10,329	50
Airport	16	0.25
Commercial Recreation	520	2
Community Commercial	92	0.75
Elementary School	8	0.25
High Density Residential	265	1.5
Kaweah River	355	1.5
Kaweah River Floodway	554	2
Light Industry	31	0.25
Low Density	3,843	18
Med Density Residential	4,213	20
MH on Individual Lots	6	0.25
Multi-Family	84	1
Parks and Recreation	85	1
Proposed School Site	12	0.25
Road, ROW & Unclassified	357	1
Total	20,768	100
* Percentages have been rounded. Source: Tulare County GIS		

Low Density Residential

Not more than one family per 5 acres. Mobilehome Parks are prohibited within the Low Density Residential area and mobilehomes on individual lots are prohibited.

There are approximately 3,800 acres designated with Low Density Residential designations within the community of Three Rivers. The current distribution of Low Density Residential is shown in **Figure 4.** Low Density Residential land use designations are generally located along South Fork Drive, The Southwest, North Central, Central, and Northeast areas.

Medium Density Residential

Not more than one family per acre. Mobilehome Parks are prohibited within this area with the exception of Sequoia RV Ranch (Trailer Isle Mobilehome Park). Mobilehomes on individual lots are prohibited except as allowed by M overlay zoning.

There are approximately 4,300 acres designated with Medium Density Residential designations within the community of Three Rivers. This land use designation is prevalent on both sides of SR 198 throughout the community, along both sides of North Fork Drive, and east of South Fork Drive south to the Heidi Road area.

High Density Residential

Not More than one family per half acre. Domestic animals such as sheep, goats and horses are prohibited on lots less than one acre in size. Mobilehome Parks are prohibited within the Low Density Residential area and mobilehomes on individual lots are prohibited.

Approximately 265 acres are currently designated as High Density Residential in the 1980 adopted plan as amended. There are three primary areas designated as High Density Residential. Two areas are located in the Northern UDB area, one along Dinely Drive and the other is adjacent to Kaweah Drive. The third area is centered in the Cherokee Oaks area and also along Pierce Drive south of Highway 198.

Individual Mobilehomes (Residential)

New Mobilehomes on individual lots (one-acre minimum per mobilehome) are encouraged. Mobilehomes are also permitted in those areas designated for agriculture on the plan map. The minimum area requirement is five acres per mobilehome. A mobilehome is defined as a vehicle without motive power, 30 feet or more in length, and designed as a single-family dwelling unit when connected to appropriate utility lines. Approximately 6 acres are designated for Individual Mobilehomes in the 1980 adopted plan as amended. This area is located along North Fork Drive near the northern boundary of the UDB.

Multiple Family Residential

Not more than 12 families per acre. The plan presumes that high density multiple-family development will require a community water system and an on-site engineered septic system or an alternative waste disposal system.

Two areas containing approximately 85 acres are designated for Multiple Family Residential dwelling units. One area is located east of Highway 198 in the vicinity of the Three Rivers Elementary School and Three Rivers County Library. The second area is located north of Old Three Rivers Road and west of South Fork Drive.

Mobilehome Parks and Recreation Vehicle Parks

Mobilehome parks and recreation vehicle parks are encouraged in commercial recreation areas along SR 198 as dileneated on the land use map. Mobilehome and vehicle recreation parks are required to be appropriately screened utilizing such techniques as earth berms, landscaping, architectural screening, etc., so as not to be visible from SR 198. The also recognizes the existing Sequoia RV Ranch (Trailer Isle Mobilehome Park) as an appropriate area. The Board of Supervisors adopted the

policy that all mobilehomes both in mobilehome parks and on individual lots be required to have skirting or other kinds of screening around the base of the individual mobilehomes.

Community Commercial

Approximately 90 acres of existing commercial development is designated as Community Commercial. The term Community Commercial defines those types of commercial retail services designed to meet the daily shopping needs of the residents of the community. One area of approximately 10 acres is located along the west side of State Route 198 North and South if its intersection with North Fork Drive. This area is almost totally developed in is considered to be one of several existing commercial core areas of Three Rivers. The second area containing 80 acres is located in the triangular area of formed by State Route 198, Old Three Rivers Drive and South Fork Drive. This areas designated is the new community commercial core. It is ideally suited for planned commercial development because of access on three sides and the fact that the natural ridgeline separates the community commercial area from the adjacent multiple-family area to the east.

Commercial Recreation

The plan designates four separate areas totaling approximately 400 acres for Commercial Recreation. Commercial Recreation is defined as other types of commercial retail services that is primarily oriented or associated with recreational uses or opportunities for tourists and highway travelers, as well as for local residents. The majority of the areas delineated on the land use map are partially developed with single family and commercial uses. All of the existing uses a recognized by the plan and designated for commercial recreation to allow continuation of the existing use, plus a limited area for expansion.

A significant additional area (added by GPA 94 – 03) containing 137 acres is located north of the Middle Fork of the Kaweah River about one-half mile west of the intersection of North Fork Drive and State Route 198. The area known as The Thorn Ranch (Schrock Ranch), is ideally suited for use as a destination resort or conference facility due to its proximity to the highway and physical separation from residential areas. Such a facility is recommended in the Tulare County Economic Development strategies which was adopted by the Board of Supervisors in June 1989 as one of the perceived facility requirements needed to enhance tourism within the Tulare County region. However, because the site does not have direct access to State Route 198, it's important to restrict the use only to destination Resort and/or conference related purposes. This can be addressed through the PD zoning process as required under Goal IV Objective 3 Policy 6 of this plan.

Light Industry

One area approximately 31 acres in size is designated for light industry. Light industry is defined as those types of light industrial or manufacturing uses where the processing of materials produce a material of higher value than that of the original materials. Light industrial uses are to be completely enclosed with a building and shall not cause any offense of odors, noise, dust or other types of pollution. Small craft industries are encouraged. The area designated for light industry has access to State Route 198 and Pierce drive, it is presently use for grazing purposes. Approximate fifty percent of the area as slopes greater than 25%. State Route 198State Route 198

Parks and Recreation

Two areas totaling approximately 85 acres are designated for Parks and Recreation. One area is located immediately west of the Three Rivers Airport site containing approximately 7 acres. The second area

is Bear Ranch which is located in the Northeast portion of the planning area and includes approximately 78 acres within the Three Rivers UDB.

Kaweah River Designated Floodway

The designated floodway is showing on the land use plan map contains 840 Acres. Structural development within the designated floodway is prohibited unless approved by the county of Tulare and the the Central Valley Flood Protection Board (CVFPB).

Kaweah River Designated Floodway Overlay

This community plan designates the Kaweah River floodway approximately at the 100-year flood line. It is the intent of this plan to discourage new development within the designated floodway but yet to recognize existing development located within the designated floodway.

All properties within the Kaweah River designated floodway that contain existing structures, including a reasonable area around said structures, should be zoned to an appropriate base zone to make the existing structures conforming, and said base zone shall be combined with the F-2 secondary floodplain combining zone. Vacant properties within the Kaweah River designated floodway should generally be zoned to the F-1 primary floodplain zone. However on certain vacant properties within the Kaweah River designated floodway, it may be appropriate to allow new development where unique circumstances justify expanded land use opportunities, such as infilling within an established commercial node, provided that necessary flood protection measures are undertaken. Where such unique circumstances existed prior to permitting alternative land uses on such vacant properties, the following procedures shall be followed:

- 1) The Central Valley Flood Protection Board should be consulted with as to the feasibility of establishing proposed structures and or activities within the designated floodway;
- 2) For all proposed non-residential uses, a general plan amendment shall be filed with the County of Tulare pursuant to Board of Supervisors Resolution Number 83-1693 (and as may subsequently be amended). For proposed residential uses, single-family dwellings will be permitted (after Central Valley Flood Protection Board approval and after County approval of the appropriate zoning) without a general plan amendment, and for other residential uses, the necessity for a general plan amendment shall be evaluated on a case-by-case basis while small-scale projects may be reclassified without a general plan amendment, however it is generally intended that larger-scale residential projects secure the appropriate amendments;
- 3) Zoning to the appropriate based on along with the F-2 combining zone shall be secured for the properties in question.

Potential Shakespearean Festival

The 1980 community plan, included, as part of the implementation strategy, the potential for a future Shakespearean Festival east of South Fork Drive and north of the cemetery. The proposed site contained approximately 300 acres and was under consideration to be developed as a planned unit development including a mixture of residential, recreational, and commercial uses. Subsequent to the 1980 plan, a large portion of that area has developed into a residential subdivision.
Elementary School

The Three Rivers Union School lies within the Three Rivers Union School District. The school is located on a 9.14-acre parcel of land at 41932 Highway 198.

Proposed Elementary School

The 1980 community plan, included a proposed school site located north of the intersection of North Fork Drive and Kaweah River Drive. The Three Rivers Union School District is not currently looking at this location as a potential school site.



Figure 4 - Adopted Land Use Map

Visual resources¹

Overview of Area and Community Visual Resources as viewed along State Route 198

The easternmost section of Highway 198 as it approaches and runs through the Community of Three Rivers is 16 miles long. This easternmost section extends from the Road 248 intersection in the valley citrus groves up to the entrance to Sequoia National Park. The route takes the traveler up Lemon Hill, around Lake Kaweah, through the Community of Three Rivers, following the Kaweah River to Sequoia National Park. The 16 mile section of Highway 198 is best presented and described in three segments: the Lake Kaweah segment, the Three Rivers Community segment, and the River Gorge segment.



A significant feature contributing to the enjoyment of the highway is that it closely follows Lake Kaweah and runs alongside the Kaweah River, providing a shared element to the highly diversified landscape. The high visual contrast between the scenes at the start in the citrus groves on the valley floor and those of the foothills and mountains beyond is a particularly memorable feature. Throughout the route the distant views of what's ahead creates curiosity and anticipation. Not to be overlooked is the role of the highway itself. Mostly two-lanes, with an occasional passing lane along the Kaweah Lake portion the roadway, with its many curves, rise and fall in elevations, and shifting directional views, provides a visual stage from which to experience the scope of the scenic visual resources in the area.

¹ Melanie Keeley, 2006, updated by Tulare County RMA staff 2016



The lake, river and landscape show a wide diversity with the seasons and the amount of water present. Plant life varies as the elevation increases or the slope aspect changes. The stark white, twisted trunks of the California sycamore grow on the riverbanks contrasting with shining cottonwoods. Further up the bank, along the highway, ancient towering valley oaks, can be seen as they dot the slopes around the lake. The steeper slopes at higher elevations are covered by evergreen drought-tolerant chaparral shrubs such as the buckeye, redbud, lupine, deerbrush and manzanita.

Wildlife abounds with migratory birds and mammals often visible at dawn, dusk and after dark. Sightings may include that of black bear, gray fox, coyote, bobcat, deer, skunk, raccoon, opossum, quail, and red shoulder and red tail hawks. Cattle will be seen grazing on the hillsides. It is also possible to see a majestic bald eagle along migratory corridors around the lake and throughout Three Rivers.

Yokut people centuries ago found many resources here along the Kaweah, rich with oak_acorns, wildlife and fish. Much of the highway and local roads have their origin in routes used by these Native Americans as well as early explorers, settlers and miners who used these same routes to access the big tree groves and high mountain meadows and peaks. Cattleman Hale Tharp started a ranch at the confluence of the Kaweah River and Horse Creek in 1856. He lived here until his death in 1912. Today, the Community of Three Rivers remains unique in its placement amid the confluence of the multiple river forks of the Kaweah River watershed.

Segment 1

Lake Kaweah Portion (Road 248 to Three Rivers Entrance (Mile 0.0 to 7.2, length 7.2 miles) This segment of the route is defined by its close relationship to the boundaries and character of Lake Kaweah. The lake was created with the construction of the Terminus Dam in 1962. In addition to the beauty and recreational outlet the lake gives the area, the dam protects the valley below from seasonal flooding, stores water for agricultural use during the dry summer season, and generates hydroelectric power for regional use. The relative absence of private or commercial development along the lake segment of the route has left the land in an unusually intact and highly scenic state. Expansive vistas across Lake Kaweah and up toward the rugged snow-capped peaks leave a vivid and lasting impression on those who travel this road.

In each season, the views vary profoundly. The annual ebb and flow of water drastically changes the appearance of the lake area. In early summer, with the onset of snowmelt, the reservoir is full and at its recreational peak. Towards the end of summer, as water is released from the dam to irrigate Central Valley crops, the water recedes, replaced by a verdant valley scene. During the winter, when water is held as snow pack on the peaks of the High Sierra, the Kaweah River slows and is seen as a meandering stream in the lake basin.

This segment through its length is relatively free from visual intrusions, limited to the minor intrusion of some scattered homes on the distant hillsides and the occasional structures at lakeside that support recreational use and maintenance.



Segment 1 Route Detail

Mile 0.0 The first highway segment begins at Road 248. To the west, looking out over the valley, rows of citrus orchards dominate the view, with rolling foothills as background. Old farmhouses attest to the historical use of the rich farmland, created by the alluvial deposits of the powerful Kaweah River. Spring brings a perfumed atmosphere as the orange and lemon trees burst into blossom. Bush lupines along the road produce showy purple springtime flowers. Moss-covered boulders and rugged blue oaks pepper the hills. To the north is a good view of Dry Creek Canyon, renowned for its groves of native California sycamores. Ahead, gently rolling grass-covered foothills dominate the view, with oaks marching up the ridgelines.

The highway climbs and passes through a narrow gorge of fractured rocks, revealing spectacular views of the towering, snow-capped Sierra Nevada. Alta Peak, towering at 11,200 feet, and Moro Rock & Castle Rocks are striking landmarks, visible from across the expansive Lake Kaweah basin. At **Mile 1.2** there is an opportunity for the traveler to pull off at the Lemon Hill Recreational Area, where there is an excellent lake overview with ample parking and a visitor information center. From this vantage point is the best view of the Terminus Dam. Its unique fuse gates are the largest in the world and were part of a project completed in 2004 to raise the water level of the lake to increase water storage and enhance flood protection below the dam. In the cove far below, a boat marina adds an interesting contrast to the dam.

Continuing on, rounding the bend, at Mile 2.0 there is a full panorama view of the lake. Snow-covered

Alta Peak and part of the Sierra Nevada mountain range can be seen in the distance. At **Mile 2.5** down by the lakeside a boat ramp and picnic area come into view. Situated at a major curve in the highway it presents a pleasant cove with parking and restrooms. The water tank and power poles provide the necessary utilities to this public area. While these structures are a minor intrusion, they represent a relatively small portion of the total vistas the traveler experiences from the highway.

Ascending the gently rolling hills surrounding Lake Kaweah, the traveler enjoys blue oak savannahs, interspersed with striking seasonal shows of colorful wildflowers. In this area, rocky out-crops of marble occasionally protrude out of granite, supporting unique plant life. Approaching **Mile 3.6** there is one of the most popular vista points on the Lake Segment. This high point on the road provides a composite view looking beyond roadside native plants, across the lake and toward the mouth of the Kaweah River, all framed by graceful oak-covered hills. Occasional buildings on the distant hillsides allow the traveler to gain perspective on the dimensions of the scene. Towering at the far view, through the river canyon, the jagged snow-capped peaks of the Sierra Nevada again beckon.

Less than a mile from this vista point at **Mile 4.4** is the entrance to the Horse Creek Campground. In this area, oak savannahs prevail and waves of wildflowers occur on nature's schedule from late winter through springtime.

At **Mile 5.3** the traveler crosses the Horse Creek Bridge. Sightings of bobcat, mountain lion, coyote and gray fox may occur along this natural wildlife corridor. In late spring and early summer, the lake rises and is visible on both sides of the bridge. After the bridge the road rises sharply. High granite fractured rock surfaces enclose the roadway on the sides and directly ahead. As the road bears left a spectacular vista begins to slide into view, as if a giant curtain has been drawn away. At **Mile 5.9** this beautiful panorama stretches over the lake 180 degrees from the Kaweah River inlet to the Horse Creek Bridge. The dam, far in the distance, now appears small. A pullout area on the right is a welcome convenience and is often used by photographers to capture the sun setting over the lake basin.

This segment ends at **Mile 7.2** at the Slick Rock Recreation Area. This was a popular habitation site for the indigenous people and many bedrock mortar grinding holes are visible down on the riverbank rock. Today this site is a popular summer swimming spot on the lake with a picnic area and a restroom stop. Fishermen enjoy fishing on the banks here as well as further upstream. There is a nicely contrasted and layered view from the road, looking across the lake, over the river and into the mountains. The area in the springtime is a showplace for flowers of all kinds.



Segment 2

Three Rivers Community Segment (Three Rivers Community Entrance to Dinely Drive (Mile 7.2 to 12.5, length 5.3 Miles)

The commercial section of Three Rivers stretches ribbon-like along the highway for the next five miles. Wedged among the converging rivers and the enveloping slopes, the town looks to have settled into its available space and is in visual harmony with the natural landscape. Some have likened the effect to that of a small village nestled within the protection of its hillsides. The distinctness of the area comes from the steep slopes and the sharp ridgelines, giving the visual sense of fully formed mountains. And it is apparent the town values the beauty of the natural visual and physical resources that surrounds it. Much of the town remains naturally wooded. There appears to be little effort given to pretension, and any sign of franchised modern growth is largely absent.

The architecture of the town businesses as well as the visible residences are varied, but many structures resemble a western mountain town and reminds the visitor of an earlier time. Historical buildings and sites dating back to the earliest settlements are scattered along or not far from the highway. Descendents from some of the early Three Rivers settlements continue to reside here today.

Intrusions within town, although of varying size, attractiveness, significance or distraction, can generally be considered minor to moderate in the context of the total vistas that envelop the traveler. While moderate intrusions from structures are present, the surrounding vegetation, river, slopes and uniquely formed small mountain peaks dominate the overall scene.



Segment 2 Route Detail

At **Mile 7.2** the traveler sees Blossom Peak, a short distance east of the highway, with its steep rocky peaks towering over the first glimpses of roadside residences and visitor accommodations. The bungalow-like structures of the first motel are of rustic appearance, set among oaks and seem appropriate to the area. An isolated advertising sign on the right intrudes on an otherwise natural scene. A bit farther on at **Mile 8.2**, another motel sits low from the road and is protected from lake high water by a surrounding levee system. Majestic white-trunk sycamores line the river corridor and vivid pink redbud trees compete with the verdant hillsides.

From here the route passes by a restaurant, an old general store and a large, attractively landscaped, but currently unoccupied resort complex.

The highway crosses the South Fork of the Kaweah at **Mile 8.7** where there are upstream views of the tangled tree-lined river, with water sliding over polished river rocks. To the left, downriver, there are homes partially hidden by numerous ancient, picturesque sycamores.

The route passes the Three Rivers official entrance sign at **Mile 9.1** and enters into the first concentration of structural intrusions, mostly moderate, by the businesses and services in town. The motel on the right, while well maintained, is larger than the other structures in the area. The other buildings in this area are generally single-story with well-kept landscaping. Architectural styling is fairly consistent with rural mountain communities. Across the highway is the new California Department of Forestry Fire Station for which residents, being in a high fire risk area, have a great deal of affection. Through collective community efforts, a fire resistant native plant demonstration garden has recently been placed on the grounds.

Beyond this area structures are less frequent, with a builders' supply on the right and the entrance to

a golf course which is currently closed on the left. The golf course has attractive fairways with majestic heritage Valley oaks and California sycamores and the beautiful hillsides in the distance. The roadway climbs to reveal a beautifully formed signature oak on the hilltop ahead, silhouetted against the sky. Cresting over the hill there is the South Fork Drive on the right. This road tracks along the South Fork of the Kaweah and leads back into some of the largest old ranch complexes in the region.

At **Mile 10.0** there is a visible auto repair yard with the carcasses of wrecked cars and several old-time tow trucks visible. A stark reminder of the dangers of mountain driving, the yard has, over the years, become somewhat of a community landmark. Next is the bridge to the North Fork Road. This road parallels the north fork of the Kaweah and leads to the Three Rivers Arts Building, Lions Club Roping Arena, and several historic sites including the old Post Office of the Kaweah Colony, a utopian colony founded in 1886. Beyond is the site of Colony Mill Road, the earliest road up to what is now the Park. Now just a walking trail, it still extends all the way to the Sequoia groves above.



Along the river, just east of the North Fork Bridge are remnants of the former bridge which was destroyed Christmas Day in 1955 during a massive flood. The high waters reached all the way into Visalia and gave impetus to the construction of the Terminus Dam. The older Three Rivers commercial area begins at **Mile 10.2**, characterized again by the moderate intrusions of mostly small, single-story storefront western style buildings lining the available space between river and hillsides. In addition to the Three Rivers School and a church, an eclectic mix of restaurants, offices, grocery market and gas stations attest to the service orientation of the area.

On the left, nestled in the trees at **Mile 10.6** is a geodesic domed structure, followed by a coffee house in a rustic-styled cabin, both reflecting their own earlier times. Locals and travelers alike are often noted at the outside tables, enjoying a riverside repast, sometimes in the company of a flock of wild ducks. Amidst mixed residential and commercial properties, on the right is the Three Rivers Historical

Museum. Many artifacts from earlier times in the area are on display here. The large Paul Bunyan statue in front owes its celebrity to having been carved from a single Sequoia log by a local artist. In the museum parking lot there is a cross-section cut of a Sequoia tree, its growth rings showing its existence during biblical times.

The road continues past other commercial buildings including an artfully painted candy and ice cream store, a perennially favorite destination for day visitors from the valley. Landscape plantings along the highway provide cover and soften the feel of pavement and structure. After passing scattered residential buildings and a glimpse of the church on the hill, the traveler reaches the Veterans' Memorial Building, a popular meeting venue for community activities and community meetings. The grounds have been recently landscaped to bring the site back into harmony with a native foothill appearance. At **Mile 12.5** the Dinely Bridge on the left offers the second route over the Kaweah and accesses many riverside residences on the north side of the river.

Segment 3 - River Gorge Portion



The route now enters a segment highly contrasted from what has come before. The highway, now feeling narrower, more closely borders the river, and begins to gain altitude, hugging the hillsides on the right. The highway follows a serpentine path with few structures and the natural landscape becomes even more intact and free from intrusions. In the spring and early summer, the main fork_of the Kaweah noisily surges down the gorge, dominating all in its path as it relieves the mountains of their snow.

This segment has popular launching points for more advanced kayakers and rafters who challenge the

difficult rapids in the area. This segment of the Highway ends at the Ash Mountain entrance to Sequoia National Park.

Intrusions most notable in this segment are the minor intrusions of residential and commercial structures, a few in need of repair, a power generating facility and several areas where communication and power lines border or cross the highway.

Segment 3 Route Detail

Starting at **Mile 12.5** the winding road offers spectacular views of the Kaweah River down on the left. The historic Salt Creek Bridge is crossed at **Mile 12.9**, followed by the side-road leading to the St Anthony's Retreat on the right. Across the canyon, clinging to the hillside, there is one of the historic power station water flumes, still operational today. Rounding a curve at **Mile 13.6**, the Edison Hydroelectric Power Plant, appears on the left. Operational since 1879 in what was then called Hammond, it began as the Mount Whitney Power Company and is famous for providing the earliest electric power to farming operations in the distant valley. Looking up to the right there is a fine view of Red Hill.



Reaching **Mile 14.0**, in the 1920's there was a large county facility here on the river for children's health and recreation (called Kiddie Camp), for the purpose of countering the major tuberculosis threat of that time. At the right is the turnoff to the renowned Mineral King area where hopeful 19th century silver miners staked their claims. Just into the turn is the historic Hammond Station, an early facility serving area fire operations. A trip up the primitive 25 mile-long Mineral King Road provides views of the East Fork and canyons with many and varied wildflowers during the seasons. Today the Mineral King area attracts backpackers to the trailheads leading to some of the finest alpine meadows, lakes and peaks in the southern Sierra Nevada.

Rounding a curve at Mile 14.4 a panoramic view unfolds, beginning with Shepherd Peak to the left,

then Ash Peaks Ridge, Moro Rock and Alta Peak. Below, the main fork of the Kaweah River descends as rapids through an "S" turn with a steep drop-off into large pools. Here large sycamores and cottonwoods border the river and Blue heron sightings are common occurrences. The curving road has high, sheer cliffs on one side of Highway 198 and unobstructed views of the river as water cascades over large granite boulders with the rugged mountains beyond.

The highway descends at **Mile 14.8** into Shepherd Cove, a small community with a convenience store and some visitor accommodations. To the left is a view of Shepherd Pass. Well-maintained and shielded condominium units are visible farther down the road on the left followed by a small cluster of homes at **Mile 15.2** in an area that was known in earlier times as Pumpkin Hollow.

At **Mile 15.6** the graceful arches of the historic Pumpkin Hollow Bridge are now in view, straddling the main fork of the Kaweah. Constructed in 1922, the bridge, which is listed in the National Register of Historic Places, gets its name from the summer color of the leaves of the buckeye trees that are so plentiful here. Crossing the bridge, on the right, there is the memorable scene of the waters tumbling around massive boulders. Looking further upstream, the confluence of the east fork and main fork of the Kaweah is visible.

Immediately beyond the bridge, minor intrusions in the form of commercial structures closely line the road. A picturesque scene is created by the combination of the bridge, restaurant, and cascading waters. The gorgeous view from this location has made the restaurant a landmark stopover point for both local residents and visitors. The inn on the left, even though positioned close to the road, attractively reflects quality mountain architecture. After this short stretch of commerce, the heavily vegetated roadside narrows even more with a few private parcels partially visible on the right behind wooden fencing.

Approaching the park entrance the traveler again enjoys a closer view forward of majestic Moro Rock, Alta Peak, and the Castle Rocks. Moro Rock gets its name from its color, a Spanish word for the hue of a blue roan mustang. Toward the southeast, up toward east fork Kaweah River, a narrow canyon rimmed with high peaks is seen. Looking to the east across the river is another hydroelectric facility, dating back to 1913, partially screened by the trees at the river's edge. Abundant and verdant growths of buckeye trees, oaks, lots of redbud, flowering ash, lupines and a bower of flowers and grasses carpet the hillsides, reminding the visitor of the uniqueness and diversity of the flora.

At **Mile 16.0**, at the eastern end of Highway 198, the route comes to an end. The travelers, as they have driven up from the valley, on winding roadways through broad vistas of changing landscapes and rising hills, have enjoyed an ideal prologue for what is now beyond. Sequoia National Park retains the primitive beauty and promise of adventure that existed when it was made the nation's second National Park back in 1890.



Demographics

Introduction

An important part of planning is having information that describes the characteristics of a community's population. Collectively, these characteristics are known as "demographics," which is data typically consisting of the age, gender (i.e., male or female), income, race, employment, and other characteristics of a community. This data, and looking at historical trends of this data, allows a reasonable way to project what may occur in the future and thereby provides a guide to which issues need to be addressed in a community plan. For example, knowing the age and percentage of a population allows proper planning for school needs for school-age children; knowing how many people may eventually live in a community allows for proper planning to meet housing needs and the amount of land needed to provide housing for a growing population. If a population can be estimated, it is possible to project how much water and/or sewer service may be needed for a community. The following information provides a summary of some of the more important demographic data needed to craft a plan that can realistically address the needs of smaller communities such as Three Rivers.

Historic Population Growth

Between 1970 and 2000, the Three Rivers population grew at an annual growth rate of 3.7%. The community experienced a large growth between 1980 and 1990, with a 7% annual growth rate during that decade. However, during 1990 and 2000, the Community did not experience growth, and actually experienced a very small decline in population. According to Planning Department figures, the Three Rivers Population increased 29.2 percent over the years 1970 to 1979.

The 2000 Census was the first Census to designate the Three Rivers Community as a Census Designated Place, or CDP. The Census counts for the previous years included Tulare County Census Tract 1, Block Groups 3-6. This was a larger geographic area than the CDP. Thus, due to the recalculation of the Three Rivers Census area, the more accurate figure for the 2000 population was the CDP population, which was 2,248 people at the time.

Population

The population in Three Rivers decreased from 2,248 in 2000 to 2,182 in 2010. Three Rivers continues to have more women than me. The female population decreased from 1,158 in 2000 to 1,101 in 2010. The male population decreased from 1,090 in 2000 to 1,081 in 2010 (see Table 2).

Table 2 - Population (2000 & 2010)										
		2000			2010					
Geography	Total Population (2000)	Male (2000)	Female (2000)	Total Population (2010)	Male (2010)	Female (2010)				
California	33,871,648	16,874,892	16,996,756	37,253,956	18,517,830	18,736,126				
Tulare County	368,021	184,010	184,011	442,179	221,442	220,737				
Three Rivers CDP	2,248	1,090	1,158	2,182	1,081	1,101				
Three Rivers Percentage		48.5 %	51.5%		49.5%	50.5%				
Source: California Departr	nent of Finance									

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Projected Population

"The San Joaquin Valley faces major challenges. One concern is how to handle future growth. The population in the Valley is expected to nearly triple by 2050, from 3.6 million to 9.4 million people, the equivalent of adding 11 new towns the size of Fresno to the area. Tulare County is expected to grow to over 1,000,000 residents by 2050, well over doubling its current population."² Projecting an annual growth rate of 1.3%, the Three Rivers 2010 population of 2,182 would increase by 643 persons to a population of 2,825 by the year 2030 (see Table 3).

	Table 3 - Projected Population							
Year	Population	%Growth	Population Growth Per Year (Number of Persons)					
2010	2,182	0.013						
2011	2,210	0.013	28					
2012	2,239	0.013	29					
2013	2,268	0.013	29					
2014	2,298	0.013	30					
2015	2,328	0.013	30					
2016	2,358	0.013	30					
2017	2,388	0.013	30					
2018	2,420	0.013	32					
2019	2,451	0.013	31					
2020	2,483	0.013	32					
2021	2,515	0.013	32					
2022	2,548	0.013	33					
2023	2,581	0.013	33					
2024	2,614	0.013	34					
2025	2,648	0.013	34					
2026	2,683	0.013	35					
2027	2,718	0.013	35					
2028	2,753	0.013	35					
2029	2,789	0.013	36					
2030	2,825	0.013	36					
Projected Popul	ation Increase 201	5-2030	643					

² Tulare County Regional Blueprint, page 7

Median Age

The median age in Three Rivers has increased between 2000 and 2010. The median age of Three Rivers in 200 was 47.1 which is older than Tulare County (29.2) and the State of California (33.3). In 2010, the median age of Three Rivers was 52.3 which is still older than Tulare County (29.6) and the State of California (35.2) (see Table 4).

Table 4 - Median Age (2000 & 2010)						
Geography	2000	2010				
	Median age (years)	Median age (years)				
California	33.3	35.2				
Tulare County	29.2	29.6				
Three Rivers CDP	47.1	52.3				

Source: California Department of Finance

Three Rivers (see has a higher percentage of persons over 21 at 81.1% than Tulare County (22.3%) and the State of California (16.4%). Three Rivers also has a higher elderly population. Persons 55 years old and over made up 45.5% of the Three Rivers population. Comparatively persons 55 years and older in Tulare County was 12.7% and in the State of California was 14.6%.

Table 5 - 2010 Age Percentage										
Geography	Persons Under 5Persons Under 18Persons PersonsPersons PersonsPersons AgeographyyearsyearsAge 21+Age 55+Age 60+65+									
California	4.5%	16.4%	46.3%	14.6%	10.7%	7.5%				
Tulare County	6.4%	22.3%	42.8%	12.7%	9.3%	6.5%				
Three Rivers CDP	3.3%	16.2%	81.1%	45.5%	34.2%	24.4%				

Source: California Department of Finance

Ethnicity and Race

In 2000, approximately 87.7% of the Three Rivers residents were classified as White, 0.2% Black/African American, 1.3% American Indian and Alaska Native, 0.7% Asian, and 4.1% as two races or more. Approximately 6.6% of the residents were classified as Hispanic/Latino (any race) (see Table 6).

Table 6 - Race & Ethnicity (2000)											
	Total Population	White	Hispanic or Latino (of any race)	Black or African American	American Indian and Alaska Native	Asian	Total Population of Two or More Races				
California	33,871,648	20,170,059	10,966,556	2,263,882	333,346	3,697,513	1,607,646				
Tulare County	368,021	213,751	186,846	5,852	5,737	12,018	16,938				
Three Rivers CDP	2,248	1,972	148	5	29	15	92				
Three Rivers % of Total		87.7%	6.6%	0.2%	1.3%	0.7%	4.1%				

Source: California Department of Finance

In 2010, approximately 87.7% of the Three River residents were classified as White, 0.3% Black/African American, 1.1% was American Indian/Alaska Native, 1.0% was Asian, and 2.4% as two races or more. Approximately 9.7% of the residents were classified as Hispanic/Latino (of any race) (see Table 7).

	Table 7 - Race & Ethnicity (2010)										
	Total Population	White	Hispanic or Latino (of any race)	Black or African American	American Indian and Alaska Native	Asian	Total Population of Two or More Races				
California	37,253,956	21,453,934	14,013,719	2,299,072	362,801	4,861,007	1,815,384				
Tulare County	442,179	265,618	268,065	7,196	6,993	15,176	18,424				
Three											
Rivers CDP	2,182	1,976	212	7	25	29	53				
Three											
Rivers % of											
Total	-	90.6%	9.7%	0.3%	1.1%	1.0%	2.4%				

Source: California Department of Finance

In the decade between 2000 and 2010, the proportion of the White population increased from 87.7 in 2000 to 90.6 in 2010. The African American population percentage increased from 0.2% in 2000 to 0.3% in 2010. The Asian population percentage increased from 0.7% in 2000 to 1.4% in 2010. The two or more race demographic decreased from 4.1% in 2000 to 2.4% in 2010. The Hispanic (of any race) increased from 6.6% in 2000 to 9.7% in 2010.

As demonstrated by **Table 8**, in the 5-year period between 2010 and 2015, the proportion of the White population decreased by 5.6%, the Black/African American population decreased by 0.3. The proportion of the American Indian and Alaska Native increased by 0.2%. The population of Asian, two or more races and Hispanic/Latino (any race) population remained approximately the same.

	Table 8 - Race & Ethnicity (2015)									
	Total Population	White	Hispanic or Latino (of any race)	Black or African American	American Indian and Alaska Native	Asian	Total Population of Two or More Races			
California	38,421,464	23,747,013	2,265,387	287,028	5,261,978	150,370	1,734,897			
Tulare County	454,033	367,167	7,846	6,089	15,427	615	15,547			
Three	2.105	1.057	215	0	20	22	F 4			
Rivers CDP	2,185	1,857	215	0	29	22	54			
Three										
Rivers % of										
Total	-	85%	9.8%	0.0%	1.3%	1.0%	2.5%			

Source: 2011-2015 American Community Survey 5-Year Estimates

Economic Conditions

Employment Projections California

"By the end of the 2008-2018 projection period-, total nonfarm employment in California is projected to grow to nearly 16.5 million jobs. This exceeds the peak job level of just over 15.2 million jobs reached before the Great Recession (February 2008 to February 2010) by over 1.2 million jobs. From June 2007 to June 2009, 1.1 million jobs were lost (not seasonally adjusted). Over the 2008-to-2018 projection period, nonfarm employment is expected to rebound by 1,511,100 jobs as the economy recovers from these recessionary job losses. More than 50 percent of all projected nonfarm job growth is in education services (private), health care, and social assistance, and professional and business services. The largest number of new jobs is expected in education services, health care, and social assistance, with a gain of more than 421,000 jobs.

Factors fueling the economic recovery in California include the state's population growth and a rise in foreign imports and exports. The state's population increased by more than 3.3 million from 2000 to 2010 and the California Department of Finance projects the population will increase by another 4.3 million from 2010 to 2020. A steady increase in foreign imports and exports has strengthened the wholesale, retail, and transportation industry sectors."³

Tulare County's Local Economy

"Similar to the broader Central Valley area, Tulare County's economy has been largely based on agriculture, food processing, and manufacturing, while professional services jobs have been limited. Tulare is the most productive agricultural county in a State that itself is by far the most productive in the nation. Overall, agribusinesses produced billions of dollars in commodities, with the County considered as the largest milk producer in the United States.

Tulare County is also a major distribution hub because of its central location in the State, 200 miles north of Los Angeles and 225 miles south of San Francisco. The County's employment base has been significantly impacted by the recent downturn with unemployment increasing to 18.3 percent in January 2010, significantly above the historic range of between 8.5 and 18.2 since 1990. In 2008, the median household income was approximately \$44,000.

The County's major employers are Tulare County government, Porterville Development Center, 2 Kaweah Delta Healthcare, and Ruiz Food Products. The top 20 employers combine for about 19,300 jobs, or 11 percent of the overall county employment. The major distributors include JoAnn Fabrics, VF Distribution, Wal-Mart, and Best Buy Electronics that combine for nearly 3.5 million square feet of distribution space. The county's overall industrial market includes about 23 million square feet of building space."⁴

Employment in Three Rivers

According to the 2011-2015 American Community Survey, the unemployment rate for Three Rivers was about 3.22%. Keeping in mind that this number includes only the employable labor force (that is, not every person of the population) results in about 64 unemployed persons of Three Rivers' 1,038 person labor force (see Table 9).

³ California Labor and Market and Economic Analysis, 2012, page 27

⁴ Visalia General Plan Update: Existing Conditions Report, page 3-16

Table 9 - Employment Status									
Employment Status	California	Tulare County	Three Rivers						
Population 16 years & over	30,312,429	325,404	1,982						
In labor force	19,269,449	194,420	1,038						
Civilian labor force	19,137,441	194,102	1,038						
Employed	17,246,360	170,780	974						
Unemployed	1,891,081	23,322	64						
Armed Forces	132,008	318	0						
Not in labor force	11,042,980	130,984	944						

Source: 2011-2015 American Community Survey 5-Year Estimates

<u>Income</u>

Median household income in Three Rivers (\$45,833) was on par with Tulare County (\$42,031); however, was lower than the State of California (\$61,818) (see Table 10).

Table 10 - 2011-2015 American Community Survey: Income								
MedianMeanMedianMeanIhouseholdhouseholdfamilyfamilycaincomeincomeincomeincomeincomeGeography(dollars)(dollars)(dollars)(dollars)								
California	\$61,818	\$87,877	\$70,720	\$97,665	\$30,318			
Tulare County	\$42,031	\$58,678	\$44,814	\$62,138	\$17,876			
Three Rivers CDP	\$45,833	\$68,375	\$80,083	\$93,782	\$33,878			

Source: California Department of Finance

Poverty

According to the California Department of Finance, the 2011-2015 American Community Survey data indicated that an estimated 6.0% of all families in Three Rivers live below the poverty line. Three Rivers has a lower level of poverty overall with 11.7% of the total population living in poverty compared to Tulare County at 28.1% and the State of California at 16.3%. Female-headed households with no husband present have even lower rates of poverty with 11.3% of those in Three Rivers living below the poverty line (see Table 11).

Table 11 - 2011-2015 American Community Survey: Poverty											
Families with											
			female								
			householder,								
		Married couple	no husband		Persons under						
Geography	All families	families	present	All people	18 years						
California	12.2%	7.3%	27.9%	16.3%	22.5%						
Tulare County	23.2%	15.9%	41.6%	28.1%	37.9%						
Three Rivers CDP	Three Rivers CDP 6.0% 2.6% 27.4% 11.7% 11.3%										
Source: 2011-2015 America	n Community Sur	vey 5-Year Estimates									

Housing Characteristics

Three Rivers is a "bedroom community", that is, most people who live in Three Rivers have jobs away from the community and/or travel to shop outside of Three Rivers, as there are limited employment and shopping opportunities within the community. Approximately 61% of Three Rivers residents

work outside of the Three Rivers community and have a mean commute time of 26.4 minutes for according to the Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates. Housing characteristics account for things such as the number of living quarters (called "housing units" as they can be homes or apartments), housing types (which can be singlefamily homes, mobile homes, and/or apartments), tenure (ownership or renting of places where one lives), housing

It is important to community members that Three Rivers continues to be a livable community with a diversity of housing types and commercial and civic uses. The community would like to ensure that residents are able to find adequate housing opportunities within the area during every stage in their life. This necessitates housing options that are appropriate for families with children as well as for senior citizens.

conditions and age (which sometimes go hand-in-hand because the age of a unit can affect its condition), household size (that is, the number of persons living in a housing unit) and vacancy rate (which is important because it typically indicates the number of places to live that are available or unavailable). As the community grows, it will be important to provide new housing opportunities, allow expansion of the size of existing housing (for example, increase a unit by an additional bedroom), and allow various housing types (such as mobile homes).

Housing Units

During the decade between 2000 and 2010, the number of housing units in Three Rivers increased from 985 to 1,018, which represents an increase of 3.3% (see Table 12). This increase was lower than the percent increase in Tulare County of 18.4% and the State of California at 12.0%.

Table 12 - Housing Units (2000 & 2010)									
Geography	2000 Total housing units	2010 Total housing units	Percent Increase						
California	12,214,549	13,680,081	12.00%						
Tulare County	119,639	141,696	18.44%						
Three Rivers CDP	985	1,018	3.3%						

Source: California Department of Finance

Housing Types

According to the California Department of Finance, the 2011-2015 American Community Survey data indicated that the majority (approximately 89.4%) of housing in Three Rivers consists of single-unit dwellings (2.5% detached units and 1.3% attached units). Approximately 3.4% of housing consists of multi-family dwellings with less than ten units (1.3% 2-units, 0.0% 3 or 4 units, and 0.5% 5 to 9 units). The remaining housing units (2.5%) are mobile homes and 2.2% other units. The percentage of single-unit detached homes in Three Rivers are higher than those of Tulare County (76.0%) and higher than California (58.1%). The percentage of multi-family dwelling (1.3% of two or more units) in Three Rivers are less than that of Tulare County (2.7%) and (2.5%) for California. The percentage of mobile homes (2.5%) in Three Rivers is less than that of California (3.8%) and that in Tulare County (7.0%) (see Tables 13).

Table 13 - 2011-2015 American Community Survey: Unit Types %											
	1-unit,	1-unit,	2 units	3 or 4	5 to 9	10 to 19	20 or	Mobile	Other		
Geography	uetacheu	attacheu	units	units	units	units	units	nome			
California	58.1%	6.9%	2.5%	5.6%	6.2%	5.3%	11.6%	3.8%	0.1%		
Tulare County	76.0%	2.5%	2.7%	5.2%	2.8%	1.2%	2.4%	7.0%	0.1%		
Three Rivers CDP	89.4%	2.5%	1.3%	0.0%	0.5%	1.6%	0.0%	2.5%	2.2%		
Source: 2011-2015 Am	nerican Commu	Source: 2011-2015 American Community Survey 5-Year Estimates									

Table 14 - 2011-2015 American Community Survey: Unit Types										
	1-unit,	1-unit,	2 units	3 or 4	5 to 9	10 to 19	20 or	Mobile	Other	
Geography	uetacheu	attached		units	units	units	units	nome		
California	8,044,831	959,528	347,451	769,437	853,934	733,003	1,602,058	519,972	15,576	
Tulare County	110,070	3,590	3,961	7,560	4,124	1,729	3,436	10,139	183	
Three Rivers	3	33	17		6	21			29	
CDP	1,171			0			0	33		
Source: 2011-2015	Source: 2011-2015 American Community Survey 5-Year Estimates									

<u>Tenure</u>

During the decade between 2000 and 2010, the home ownership percentage in California remained approximately the same while in Tulare County that percentage declined by approximately 3%. In Three Rivers the homeownership percentage remained approximately the same. During this same timeframe the average household size increased among owner- and renter- occupied units in the State of California, Tulare County, and remained the same in Three Rivers between 2000 and 2010 (see Table 15)

	Table 15 - Ownerwhip and Household Size (2000 & 2010)									
		2000			2010					
	Percent of owner- occupied units	Average household size of owner- occupied units	Percent of renter- occupied units **	Average household size of renter- occupied units	Percent of owner- occupied units	Average household size of owner- occupied units	Percent of renter- occupied units	Average household size of renter- occupied units		
California	56.9%	2.93	43.1%	2.79	55.5%	2.95	44.1%	2.83		
Tulare County	61.5%	3.18	38.5%	3.43	58.8%	3.24	41.2%	3.52		
Three Rivers CDP	73.2	2.27	26.8	2.30	72.8%	2.27	27.2	2.07		
Source: 2011-20	15 American Con	nmunity Survey 5-	Year Estimates	•						

According to the California Department of Finance, the 2011-2015 American Community Survey data indicated that 79.5% of the housing units in Three Rivers were owner-occupied, which is approximately 23.8% more than Tulare County (56.7%) and approximately 25.2% more than the State of California (54.3%). The average household size in Three Rivers is larger for owner-occupied units (2.10 persons per unit) than for renter-occupied units (1.86 persons per unit), and the household sizes

in Three Rivers for both owner- and renter-occupied units are lower than both Tulare County and the State of California (see Table 16)

	Table 16 - 2011-2015 American Community Survey: Tenure									
	Total Occupied Housing Units	Owner- occupied Housing Units	%	Average household size of owner- occupied unit	Renter- occupied Housing Units	%	Average household size of renter- occupied unit			
California	12,717,801	6,909,176	54.3	3.00	5,808,625	45.7	2.91			
Tulare County	133,570	75,685	56.7	3.24	57,885	43.3	3.50			
Three Rivers CDP	1,064	846	79.5	2.10	218	20.5	1.86			
Source: 2011-2015 Amer	Source: 2011-2015 American Community Survey 5-Year Estimates									

Housing Conditions

According to the Tulare County Housing Element 2015 Update, approximately 84% of the housing units in Three Rivers surveyed in the Housing Conditions Survey were found to be structurally sound. Approximately 15% of the housing units suffered some degree of deterioration and 0.0% were found to be dilapidated (see Table 17).

Table 17 - 2015 Housing Conditions Survey											
Survey Area	Sou	nd	Mi	Deteriorated Minor Moderate Substantial				Dilapi	idated	Total Units in Survey Sample	
	Units	%	Units	%	Units	%	Units	%	Units	%	
Three Rivers	377	84%	38	8%	29	6%	4	1%	0	0%	448
Source: 2011-20	15 America	an Comm	unity Surve	ey 5-Year E	lstimates						

The percentage of substandard housing in Three Rivers increased by 15 % between 1992 and 2015. The percentage was 13% in 1992, 14% in 2003, 10% in 2009 and 16% in 2015.⁵ (see Table 18)

Table 18 - Percentages of Substandard Housing Units, Unincorporated Communities in Tulare County1992-2015								
	1992 Survey Results	2003 Survey Results	2009 Survey Results	2015 Survey Results				
Three Rivers	1%	14%	10%	16%				
Source: 2011-2015 American Community Survey 5-Year Estimates								

Age of Structures

According to the US Census Bureau, the 2011-2015 American Community Survey data indicated that approximately 100% of the housing structures in Three Rivers were built in 2009 or earlier. Approximately 5.3% of the housing structures were built in the 20-year period between 1940 and

⁵ Op. Cit.

1959. Approximately 28.6% of housing structures were built in the 20-year period between 1960 and 1979. Approximately 28.7% of housing structures were built in the 20-year period between 1980 and 1999. Approximately 19.3% of housing structures were built in the decade between 2000 and 2009 and no new housing structures have been built since 2009 (see Table 19).

Table 19 - 2011-2015 Amer	Table 19 - 2011-2015 American Community Survey: Year Structures Built									
Age of Structures	Number	Percentage								
Built 2014 or later	0	0.0%								
Built 2010 to 2013	0	0.0%								
Built 2000 to 2009	253	19.3%								
Built 1990 to 1999	179	13.7%								
Built 1980 to 1989	197	15.0%								
Built 1970 to 1979	148	11.3%								
Built 1960 to 1969	227	17.3%								
Built 1950 to 1959	150	11.5%								
Built 1940 to 1949	70	5.3%								
Built 1939 or earlier	86	6.6%								
Total:	1,310	100								
Note: Percentages have been rounded										
Source: 2011-2015 American Commu	nity Survey 5-Year Estimates									

Household Size (Overcrowding)

Overcrowding is defined by the State Department of Housing and Community Development as units which have more than one person per room (every room in the home is included in the calculation)⁶. "The U.S. Census defines an overcrowded unit as one occupied by 1.01 persons or more per room (excluding bathrooms and kitchens). Units with more than 1.5 persons per room are considered severely overcrowded. Overcrowding increases health and safety concerns and stresses the condition of the housing stock and infrastructure. Overcrowding is strongly related to household size (particularly for large and very-large households) and the availability of suitably sized housing. Overcrowding impacts both owners and renters; however, renters are generally more significantly impacted. In 2000, renter households [in the State of California] were three times more likely than owners to be overcrowded, regardless of household size. While family size and tenure are critical determinants in overcrowding, household income also plays a strong role in the incidence of overcrowding. As a general rule, overcrowding levels tend to decrease as income rises, especially for renters (particularly for small and large families). The rate of overcrowding for very low-income households is generally nearly three times greater than households over 95 percent of the area median income. As with renters, owner households with higher incomes have lower rates of overcrowding."

According to the US Census Bureau, the 2006-2010 American Community Survey data indicated that 100% of the occupied units in Three Rivers are not overcrowded These percentages are lower than those for Tulare County and the State of California.

The 2011-2015 American Community Survey (see Table 20) data indicated that 100% of the occupied units in Three Rivers are not overcrowded. During this same 5-year period, Tulare County

⁶ California Department of Housing and Community Development, California's Housing Future: Challenges and Opportunities, Page 16, <u>http://www.bcd.ca.gov/policy-research/plans-reports/docs/California's-Housing-Future-Full-Public-Draft.pdf</u>, accessed May 2, 2017.

⁷ California Department of Housing and Community Development, Overpayment and Overcrowding, <u>http://www.bcd.ca.gov/community-development/building-blocks/bousing-needs/overpayment-overcrowding.shtml</u>, accessed May 2, 2017.

saw a 0.6% decrease in overcrowding (0.1% overcrowded and 0.5% severely overcrowded), while the State of California saw a 0.2% increase in overcrowding (0.1% overcrowded and 0.1% severely overcrowded)

Table 20 - Overcrowding: Percentage of Occupied Housing Units									
		2010			2015				
	1.00 or less	1.01 to 1.50 1.51 or more		1.00 or less	1.01 to 1.50	1.51 or more			
	occupants occupants occupants			occupants	occupants	occupants			
Geography	per room	per room	per room	per room	per room	per room			
California	92.0%	5.3%	2.7%	91.8%	5.4%	2.8%			
Tulare County	88.8%	8.4%	2.8%	89.4%	8.3%	2.3%			
ThreeRiversCDP	100%	0.0%	0.0%	100%	0.0%	0.0%			
Source: California Dep	partment of Finan	ce							

Between 2000 and 2010, the average household size in Three Rivers decreased from 2.28 to 2.14 persons per occupied unit and was less than the average household sizes of Tulare County and the State of California. During this decade, the average household size in Tulare County increased from 3.28 to 3.36 persons per occupied unit and the average household size in the State of California also increased from 2.87 to 2.90 persons per occupied unit. According to the US Census Bureau and the California Department of Finance, the 2011-2015 American Community Survey data indicated that over the 5-year survey period between 2010 and 2015 the average household size in Three Rivers decreased to 2.10 persons, the State of California increased to 2.96, while the average household size in Three Rivers remained lower than the average household sizes in Tulare County remained constant at 3.36. The average household size in Three Rivers remained lower than the average household sizes in Tulare County and the State of California (see Table 21).

Table 21	- Average Househo	old Size Per Occupie	d Unit				
	Average Household Size						
Geography	2000	2010	2015				
California	2.87	2.90	2.96				
Tulare County	3.28	3.36	3.36				
Three Rivers CDP	2.28	2.14	2.10				
Source: California Department of Finance							

Vacancy Rate

According to the US Census Bureau, the 2006-2010 American Community Survey data indicated that the vacancies in Three Rivers were higher than the vacancies in Tulare County and the State of California. Similarly, the homeowner and rental vacancy rates in Three Rivers were also lower than the vacancy rates in Tulare County and the State of California.

The 2011-2015 American Community Survey data indicated that the number of vacant housing units and the vacancy rates decreased in the 5-year period between 2011 and 2015. The number of vacant housing units in Three Rivers decreased from 10.7% to 6.7%. Likewise, the vacancies in Tulare County decreased from 8.6% to 7.8% and in the State of California from 8.6% to 8.1%. While the homeowner vacancy rates decreased in Tulare County from 2.2% to 1.7% and in the State of California

from 2.2% to 1.4%, the vacancy rate in Three Rivers increased from 3.1% to 3.6%. The rental vacancy rates decreased in Three Rivers 7.6% to 3.1%, in Tulare County from 4.5% to 3.7%, and in the State of California from 5.0% to 4.1% (see Table 22)

Table 22 - Vacant Housing Units and Vacancy Rates									
		2010			2015				
	Vacant Housing Units	Vacant Housing Units Homeowner vacancy rate Ren vacanc		Vacant Housing Units	Homeowner vacancy rate	Rental vacancy rate			
California	8.6%	2.2%	5.0%	8.1%	1.4%	4.1%			
Tulare County	8.6%	2.2%	4.5%	7.8%	1.7%	3.7%			
Three Rivers CDP	10.7%	3.1%	7.6%	6.7%	3.6%	3.1%			
Source: California Depa	artment of Finan	ice							

Renter Affordability

According to the US Census Bureau, the 2011-2015 American Community Survey (see Table 23) data indicated that in 2015 the cost of rent in Three Rivers was lower than in Tulare County and the State of California, but that rent constituted a larger percentage of household income. The median rent was \$746 in Three Rivers; whereas the median rent was \$830 in Tulare County and \$1,255 in the State of California, respectively. In Three Rivers, the percentage of households paying 35% or more of income on housing was 44.98% while the percentage of households paying 35% or more of non-housing was 46.8% in Tulare County and 47.5% in the State of California.

Table 23 - 2011-2015 American Community Survey: Renter Cost										
	Median	Gross Rent as a % of Household Income								
Geography	ography	Less than 15.0 %	15.0% to 19.9%	20.0% to 24.9%	25.0% to 29.9%	30.0% to 34.9%	35.0% or more			
California	\$1,255	9.0%	10.5%	12.1%	11.5%	9.4%	47.5%			
Tulare County	\$830	9.5%	11.2%	12.6%	10.7%	9.3%	46.8%			
Three Rivers CDP	\$746	8.6%	10.3%	8.1%	12.4%	15.7%	44.9%			
Source: 2011-2015 An	nerican Commu	nity Survey 5-Yea	r Estimates							

Owner Affordability

According to the US Census Bureau, the 2011-2015 American Community Survey data indicated that in 2015 the cost of a mortgage in Three Rivers was higher than in Tulare County but lower than the State of California. The mortgage constituted a larger percentage of household income compared to Tulare County and the State of California. The median owner cost (with mortgage) was \$1,680 in Three Rivers; whereas the median owner cost was \$1,353 in Tulare County and \$2,155 in the State of California, respectively. In Three Rivers, the percentage of households paying 35% or more of income on housing was 38.9%. The percentage of households paying 35% or more of income on housing was 33.2% in Tulare County and 33.7% in the State of California (see Table 24).

	Table 24 - 2011-2015 American Community Survey: Owner Cost										
	Owner Cost		Mortgage as a % of Household Income								
Geography	(with mortgage)	Less than 20.0%	20.0% to 24.9%	25.0% to 29.9%	30.0% to 34.9%	35.0% or more					
California	\$2,155	28.9%	15.1%	12.7%	9.6%	33.7%					
Tulare County	\$1,353	32.6%	14.2%	12.2%	7.8%	33.2%					
Three Rivers CDP	\$1,680	33.0%	9.7%	10.9%	7.5%	38.9%					
Source: 2011-2015	Source: 2011-2015 American Community Survey 5-Year Estimates										

Regional Housing Needs Assessment (RHNA)

State housing element law assigns the responsibility for preparing the Regional Housing Needs Assessment (RHNA) for the Tulare County region to the Tulare County Association of Governments (TCAG). The RHNA is updated prior to each housing element cycle. The current RHNA, adopted on June 30, 2014, is for the fifth housing element cycle and covers a 9.75-year projection period (January 1, 2014 – September 30, 2023).

The growth projections applied in the Tulare County Housing Element Update are based upon growth projections developed by the State of California. A "Regional Housing Needs Assessment Plan" provides a general measure of each local jurisdiction's responsibility in the provision of housing to meet those needs. The TCAG was responsible for allocating the State's projections to each local jurisdiction within Tulare County including the County unincorporated area, which is reflected in the Housing Element.

"The Sustainable Communities and Climate Protection Act of 2008 (SB 375) was passed to support the State's climate action goals...to reduce greenhouse gas (GHG) emissions through coordinated transportation and land use planning. The bill mandates each of California's Metropolitan Planning Organizations (MPO) prepare a *sustainable communities strategy* as part of its regional transportation plan (RTP). The SCS contains land use, housing and transportation strategies that, if implemented, would allow the region to meet its GHG reduction targets."⁸

"In the past, the RHNA was undertaken in dependently from the RTP. SB 375 requires that the RHNA and RTP/SCS processes be undertaken together to better integrate housing, land use, and transportation planning. The law recognizes the importance of planning for housing and land use in creating sustainable communities where residents of all income levels have access to jobs, services, and housing using transit, or by walking and bicycling."⁹

⁸ TCAG, Final Regional Housing Needs Plan for Tulare County 2014-2023, Page 5, <u>http://www.tularecog.org/wp-content/uploads/2015/07/Final-Regional-Housing-Needs-Plan-for-Tulare-County-2014-2023.pdf</u>

⁹ Ibid.

	Janu	Tula Jary 1, 2	are Cour 014 to S	nty Regi eptemb	on er 30, 2	023			
Jurisdiction	1/1/2014 Housing Unit Control Totals A	2023 Housing Unit Control Totals B	Estimated 9/30/2023 Housing Units		2024	Housing Units 9/30/2023 (Based on Allocation of 26,910 units)			
			Housing Units	Percent of Total	Unit Control Totals	Total Housing Units	Percent of Total	Net New Housing Units 1/1/2014- 9/30/2023	
			С	D	E	F	G	н	
Dinuba	6,223	7,106	7,186	4.05%	7,212	7,188	4.05%	965	
Exeter	3,803	4,305	4,426	2.50%	4,365	4,428	2.50%	625	
Farmersville	2,878	3,253	3,343	1.89%	3,298	3,344	1.89%	466	
Lindsay	3,384	3,858	3,972	2.24%	3,914	3,974	2.24%	590	
Porterville	17,764	20,331	20,952	11.82%	20,639	20,960	11.82%	3,196	
Tulare	20,022	22,908	23,606	13.32%	23,255	23,616	13.32%	3,594	
Visalia	47,380	55,411	57,379	32.37%	56,386	57,401	32.37%	10,021	
Woodlake	2,187	2,486	2,558	1.44%	2,521	2,559	1.44%	372	
Unincorporated County	46,774	52,477	53,834	30.37%	53,151	53,855	30.37%	7,081	
Total	150,415	172,134	177,255	100.00%	174,741	177,325	100.00%	26,910	

Figure 5 – RHNA 2014-2023

Sources

Columns A, B, and E: TCAG 2040 Demographic Forecast (2013)

Column C: Estimated using trendline growth between Columns B and E

Column D: Column C divided by countywide total from Column C (177,225)

Column F: Proportionally scaled up from Column D to 9/30/2023 countywide total (177,325)

Column G: Column F divided by countywide total from Column F (177,325)

Column H: Column A subtracted from Column F

"In addition to the RHNA requirements, SB 375 requires that TCAG address the region's housing needs in the SCS of the RTP, to include sections on state housing goals (Government Code Section 65080(b)(2)(B)(vi)); identify areas within the region sufficient to house all the population of the region (including all economic segments of the population) over the course of the planning period for the RTP (out to 2040 for the 2040 RTP/SCS); and identify areas within the region sufficient to meet the regional housing needs."¹⁰

The RHNA housing results are summarized in **Figure 5**. The Tulare County RHNA Plan recommends that the County provide land use and zoning for approximately 7,081 units per year in the unincorporated portions of the County. The County administratively agreed to a housing share of 7,081 units (726 units per year over the 9.75-year RHNA planning period). The RTP allocates 30% of population to the County. The RHNA bases the housing needs assessment on this percentage.

¹⁰ Op. Cit.

Natural and Cultural Resources

Agriculture and Grazing

The Department of Conservation's (see Figure 6) Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance. Tulare County has established an Agricultural Conservation Easement Program to allow the use of agricultural easements to reduce or mitigate any significant impacts found under the California Environmental Quality Act (CEQA) resulting from the conversion of *five* or more acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency,to non- agricultural use.



Williamson Act

The plan designates three areas totaling approximately 10,300 acres for agricultural/grazing purposes. The majority of the areas are in agriculture preserves under the Williamson Act or under the jurisdiction of the Bureau of Land Management (BLM).

Almost all of these areas contain slopes greater than 25% and may contain extremely steep slopes. The first area located in the northwest and western portion of the planning area. The majority of this area is under the jurisdiction of BLM or is under contracted agricultural preserves. The second area is located in the northwest and eastern portion of the plan area. This area also is almost entirely under the jurisdiction of the BLM or under contracted agricultural preserves. The third area is located along the southern boundary of the planning area with over 95% of the area in contracted agricultural preserves. All of the Agricultural areas are used essentially for grazing or resource conservation purposes (see Figure 7).



<u>Air Quality</u>

The Three Rivers Plan Area is within the San Joaquin Valley Air Basin (SJVAB) and under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAB is classified non-attainment/severe for the State 0_3 1-hour standard, non-attainment for the State 0_3 8-hour standard, non-attainment for the State PM₁₀ standard, non-attainment for the federal and State PM_{2.5} standards, and attainment and/or unclassified for the remaining federal and State air quality standards. According to the Tulare County General Plan, the San Joaquin Valley has some of the worst air quality in the nation. The CO and NO_x emissions are typically generated by motor vehicles (mobile sources). The ROG emissions are generated by mobile sources and agriculture. Although emissions have been shown to be decreasing in recent years, the SJVAB continues to exceed state and federal air quality emission standards.

Executive Order S-3-05 issued by Governor Schwarzenegger in 2005, established targets for greenhouse gas (GHG) emissions for the State. The Global Warming Solutions Act of 2006 (or Assembly Bill (AB) 32 directed the California Air Resources Board (CARB) to develop and adopt statewide GHG emission limits in order to reduce emission levels to those experienced in 1990, by the year 2020. In order to achieve those targets, CARB adopted the Climate Change Scoping Plan in December 2008.

Sustainable Communities and Climate Protection Act of 2008, also known as Senate Bill (SB) 375, builds upon AB 32 by requiring CARB to develop regional GHG emissions reduction targets for passenger vehicles. Then each Metropolitan Planning Organization (MPO) must prepare a Sustainable Communities Strategy (SCS) to demonstrate how the region will meet its targets. The SCS will be incorporated into the Regional Transportation Plan (RTP).

The SJVAPCD provides a list of potential air quality mitigation measures that are applicable to General Plan updates and community plans:

- Adopt air quality element/general plan air quality policies/specific plan policies;
- Adopt Local Air Quality Mitigation Fee Program;
- Fund TCM program: transit, bicycle, pedestrian, traffic flow improvements, transportation system management, rideshare, telecommuting, video-conferencing, etc.;
- Adopt air quality enhancing design guidelines/standards;
- Designate pedestrian/transit oriented development areas on general plan/specific plan/planned development land use maps;
- Adopt ordinance limiting wood burning appliances/fireplace installations;
- Fugitive dust regulation enforcement coordinated with SJVUAPCD;
- Energy efficiency incentive programs;
- Local alternative fuels programs;
- Coordinate location of land uses to separate odor generators and sensitive receptors;

Air quality is directly related to land use; it is also related to the configuration of land, vegetation, climate, wind direction and velocity, and production of man-made impurities which change the natural qualities of the air. Because Three Rivers is located near the southern end of the Valley with prevailing winds from the northwest, it is in a vulnerable position for the accumulation of adversely modified air, particularly when a temperature inversion occurs which holds down surface air along with its pollutants. Local air pollution sources within the Three Rivers community and its vicinity include

State Route 198 due to its traffic volumes, industrial-related uses that may emit dust and odors, and agricultural-related activities.

Biological Resources

The Three Rivers Area is located on the western side of the Sierra Nevada Mountain Range at elevations between 700 and 3,000 feet. Because of factors such as elevation, slope exposure, hydrologic factors and other physical features which are a function of the aforementioned factors, Three Rivers supports a rich flora and fauna population. A Voluntary Oak Woodlands Management Plan has been included as part of the adoption of this Plan (see Appendix A-9) which includes further background information regarding Oak Woodland features.

Three Rivers supports two major plant communities - Foothill Woodland and Chaparral and one plant association - Riparian Woodland. The Foothill Woodland is the dominant plant community in the foothills. The community is characterized as having a park-like setting with the typical landscape being dotted with Blue Oaks and Buckeye and carpeted with grasses and annual wildflowers during the Spring. At lower elevations, Valley Oak occupies the valley bottoms. In drier microclimates, the Chaparral plant community encroaches on the Foothill Woodland. Generally Chaparral areas, found on south and southwest facing slopes, contain plants which are similar to each other in that they are drought resistant and in many cases fire adapted. Chaparral is important as a winter feed area for deer. Typical plants in the Chaparral are manzanita, ceonothus, chamise, redbud, Scrub Oak and Interior Live Oak.

The Riparian Woodland is associated with both of these communities wherever watercourses are prevalent. At the lower elevations this woodland contains Valley Oak, Sycamore, Cottonwood and Willow. As elevations increase, the vegetation along these watercourses becomes more diverse and lush. Alder and Oregon Ash join Sycamore and Willow to form a vegetational pattern that denotes the existence of water and supports a large wildlife population. Watercourses are identified below in **Figure 8** National Wetlands Inventory Map.



The biological investigation conducted for the Three Rivers Community Plan Update focuses on the status of several Special Status Species. Species and the habitats listed in the CNDDB (see Figure 9) are considered Special Status Species and are often treated as if they were listed under Federal or State Endangered Species Acts requiring avoidance, minimization and/or compensation measures. Additional species and records were added from field notes and documented during surveys.

The likelihood of the species occurring within the UDB was categorized as present, absent, possible or unlikely, based on whether they were detected, are known to exist on the site or immediately adjacent (present), were not detected and not expected, owing to lack of habitat (absent), possibly occurring with suitable or suboptimal habitat present but not detected (possible), not likely to occur with no habitat or suboptimal habitat present and not detected (unlikely).

Because of the geographic pattern of the UDB, following the Kaweah River forks, the UDB stretches over four 7.5 minute USGS quadrangle maps. The UDB Planning Area falls primarily in the Kaweah Quadrangle but a portion of the eastern UDB falls into the Case Mountain Quadrangle and a smaller portion of the South Fork Kaweah River area falls into the Dennison Peak and Chickencoop Canyon

quadrangles. Typical CNDDB methodology includes assessing the relative likelihood of impacts on species documented to be present, or potentially occurring on any of the eight quadrangles surrounding the quadrangle where the Project is located. However, because of the steep, incised physiography/terrain, the habitats and species assemblages present in the lands surrounding the UDB (both above and below) are strongly dissimilar to the habitats in the UDB, with the exception of the River and some of the blue oak woodlands. For example, including the Silver City Quadrangle adds four species not on the Kaweah Quadrangle. However, not one of these four species (three species and one species-based habitat) are present in the UDB, these are high elevation-tied species and habitats not able to persist at the lower elevations in the UDB. There are also giant sequoia groves on the Case Mountain Quadrangle (privately-and BLM-owned; a small portion of the UDB extends into this quad) and in Sequoia National Park. These forests can be observed from various locations in the UDB and are located approximately two air miles from the UDB, but no naturally-occurring giant sequoia trees grow in the UDB. The habitats in the UDB share few species in common with the giant sequoia groves, despite the close proximity.

Therefore, the Kaweah and eight immediately adjacent quadrangles are the focus of this assessment. The majority of the species from adjacent Case Mountain and Dennison Peak quadrangles include species primarily known from higher elevations and different habitats. So, while species are considered from the eight quadrangles surrounding Kaweah, species were not assessed in detail for eight additional quadrangles surrounding Case Mountain and Dennison Peak quadrangles, unless the species there were possible to occur in the UDB or were known to occur there. The nine quadrangles for this assessment are: Auckland, Giant Forest, Case Mountain, Woodlake, Shadequarter Mountain, Dennison Peak, Rocky Hill, Chickencoop Canyon and Kaweah.

As documented in the CNDDB report, seventy-three (73) Special Status Species and four habitats are known to occur in the vicinity. Forty-six (46) Special Status animal species are known to occur in the vicinity of the UDB. However, the Valley elderberry long-horned beetle is no longer listed in Tulare County.

Twenty-seven (27) Special Status plant species were included in the CNDDB printout for the nine relevant quadrangles. Table 1 (Appendix) and Figure 3 summarize the species, habitats and current state of mapping that were in the California Natural Diversity Database and their occurrence summaries.

The following 55 species and habitats, which are the focus of this assessment were listed in the California Natural Diversity Database, 18 species/habitats noted with an asterisk (*) were documented in the CNDDB record for the Kaweah Quadrangle (the primary quadrangle where the UDB is situated):

- 1. Spiny-sepaled button-celery (Eryngium spinosepalum) CNPS 1B.2 *
- 2. Pierpoint Springs dudleya (Dudleya cymosa ssp. Costafolia) CNPS 1B.2
- 3. Aromatic canyon gooseberry (Ribes menziesii var. ixoderme) CNPS 1B.2
- 4. Abrams' onion (*Allium abramsii*) CNPS 1B.2
- 5. American manna grass (Glyceria grandis) CNPS 2B.3
- 6. Bolander's woodreed (*Cinna bolanderi*) CNPS 1B.2
- 7. Munz's iris (Iris munzii) CNPS 1B.3
- 8. Tulare County bleeding heart (Dicentra nevadensis) CNPS 4.3
- 9. Moestan blister beetle (Lytta moesta) *

- 10. Morrison's blister beetle (Lytta morrisoni) *
- 11. Denning's cryptic caddisfly (Cryptochia denningi)
- 12. Tulare cuckoo wasp (Chrysis tularensis)
- 13. Clough Cave harvestman (Calicina cloughensis)
- 14. Moody's gnaphosid spider (Talanites moodyae)
- 15. Vernal pool fairy shrimp (Branchinecta lynchi) Fed Threatened
- 16. Sequoia cave isopod (Bowmanasellus sequoiae)
- 17. California linderiella (Linderiella occidentalis)
- 18. California condor (Gymnogyps californianus) Fed and state Endangered *
- 19. Northern goshawk (Accipiter gentilis) DFW SSC
- 20. Black swift (Cypseloides niger) DFW SSC
- 21. Great blue heron (Ardea herodias)
- 22. Bald eagle (Haliaeetus leucocephalus) State Endangered *
- 23. Burrowing owl (Athene cunicularia)
- 24. California spotted owl (Strix occidentalis occidentalis)
- 25. Golden eagle (Aquila chrysaetos) *
- 26. Greater sage-grouse (Centrocercus urophasianus) Fed Proposed Threatened *
- 27. Lewis' woodpecker (Melanerpes lewis) *
- 28. Red-breasted sapsucker (Sphyrapicus rubber) *
- 29. Tricolored blackbird (Agelaius tricolor)
- 30. Yellow-billed magpie (Pica nuttalli) *
- 31. California tiger salamander (Ambystoma californiense) Fed, State threatened, DFW SSC
- 32. Kings River slender salamander (Batrachoseps regius)
- 33. Gregarious slender salamander (Batrachoseps gregarious)
- 34. Sequoia slender salamander (Batrachoseps kawia)
- 35. Foothill yellow-legged frog (Rana boylii) DFW SSC *
- 36. Sierra Nevada yellow-legged frog (Rana sierrae) Fed Endangered, State Threatened, DFW SSC *
- 37. Southern mountain yellow-legged frog (Rana muscosa) Fed Endangered, State Threatened, DFW SSC
- 38. Western pond turtle (Emys marmorata) DFW SSC *
- 39. Western spadefoot (Spea hammondii) DFW SSC
- 40. Silvery legless lizard (Anniella pulchra pulchra) DFW SSC
- 41. Long-eared myotis (Myotis evotis)
- 42. Fringed myotis (Myotis thysanodes)
- 43. Western small-footed myotis (Myotis ciliolabrum)
- 44. Western mastiff bat (Eumops perotis californicus) DFW SSC *
- 45. Pallid bat (Antrozous pallidus) DFW SSC
- 46. Spotted bat (Euderma maculatum) DFW SSC
- 47. Townsend's big eared bat (Corynorhinus townsendii) State candidate threatened DFW SSC
- 48. Pacific fisher (Pekania pennanti) Fed Candidate, State Candidate threatened, DFW SSC
- 49. Pacific marten (Martes caurina)
- 50. California wolverine (Gulo gulo) State Threatened, DFW FP
- 51. Sierra Nevada red fox (Vulpes vulpes necator) State Threatened
- 52. San Joaquin kit fox (Vulpes macrotis mutica) Fed Endangered State Threatened.
- 53. Central Valley Drainage Hardhead/Squawfish Stream *
- 54. Northern Claypan Vernal Pool
- 55. Sycamore Alluvial Woodland.
These are the primary species expected to occur in the UDB. However, the Kaweah River and it's forks house a diverse and sensitive assemblage of fishes native to these streams. The CNDDB record does not include complete fish species information, nor is the mapping of the habitat for these species considered complete. There is also a small portion of California condor critical habitat in the South Fork Kaweah River Watershed.



Cultural Resources

The recorded history of Three Rivers dates back more than two centuries to when Spanish missionaries and explorers were looking for areas to settle. The native Yokut Indians had established trails in the area that were utilized by the scout Kit Carson and the soldier-explorer John C. Fremont. These trails were evolved into roads as population in the Valley grew.

Three Rivers is located in a highly sensitive archaeological area according to archaeological surveys. Numerous sites have been located in the Three Rivers area, particularly along the middle fork of the Kaweah River.

A Cultural Resources Assessment (CRA) was prepared by Sierra Valley Cultural Planning (SVCP) in July 2016, as indicated in the CRA; "Prior to a windshield survey of the study area, a records search was conducted by staff at the Southern San Joaquin Valley Information Center of the California Historical Resources Information System at CSU Bakersfield to identify areas previously surveyed and identify known cultural resources present within the study area. One hundred and forty-five previously recorded cultural resources have been recorded within the study area, the majority of which (see Attachment A [of the CRA])."¹¹

Three Rivers possesses significant historical and cultural resources that the community wishes to preserve and maintain as the area grows. The community is home to historical buildings and structures such as the Kaweab Post Office and historical bridges, as well as Native American cultural resources. According to archaeological surveys, Three Rivers has numerous archaeological sites. Future development shall be limited and planned to minimize impact on the historical, cultural, and archaeological landscape of the planning area. Buildings and structures of historical and cultural significance shall be well maintained.

"Based on current information, there are 104 documented Native American cultural resource sites within the study area. These includes bedrock mortar milling features, artifact scatters, habitation sites, human burials, housepits, hunting blinds, and rock art sites. The majority of these sites are incompletely documented.

Native American Consultation

The Native American Heritage Commission (NAHC) maintains a contact list of Native American Tribes as having traditional lands located within the County's jurisdiction. The NAHC was notified on August 8, 2016, regarding a Notice of Preparation of a Draft Environmental Impact Report for General Plan Amendment No. GPA 14-005 to Update the Three Rivers Community Plan. Tulare County RMA staff requested a Sacred Lands File (SLF) search and a Tribal Consultation List pursuant to SB 18 and AB52. The SLF search returned, dated August 11, 2016, with negative results, but noting that the Project is located in an area sensitive for potential cultural resources. Pursuant to SB 18 and AB 52, Tulare County RMA staff notified forty-three (43) Native American Tribal representatives, representing twenty-two (22) Tribes, (see Appendix "C") by letter between May 25, 2016, and October 18, 2016, regarding the Update of the Three Rivers Community Plan.

<u>Geology & Seismic Hazards</u>

The geology of the community consists of igneous and metamorphic bedrock overlain by various types of alluvium on many of the gentler Valley slopes. Plutonic igneous rocks are the predominant bedrock type with metamorphic rocks common only in the South Fork area of the Kaweah River.

¹¹ "Cultural Resources Assessment, Proposed Planning Study Area For The Three Rivers Community Plan Update, Tulare County, California." Page 8. Prepared by Sierra Valley Cultural Planning (see Appendix "C" of this DEIR).

Depth to bedrock in the area is highly variable, ranging from zero ft. in areas of bedrock outcrops to over 70 feet where thick alluvial fan deposits overlie a former stream bed channel. The irregularity in depth is due to the configuration of the bedrock surface combined with relatively thin alluvial deposits with the upper surface at varying elevations (SAI Water Resources Division, 1978).

Alluvial deposits in Three Rivers area represent two major depositional regimes; old deposits of former high river strands, mostly likely formed during the ice age, and intermediate to younger deposits formed during modern era high flows and major floods. Alluvial deposits range from silts to boulder conglomerates. The older alluvial deposits have undergone consolidation and compaction processes which reduce the pore space available for water migration. In - Place weathering of these deposits has also increased the clay content which reduces percolation rates compared to boulder conglomerates with greater pore space (SAI Water Resources Division, 1978). There are 35 soil types present in the Three Rivers Planning Area. The majority of the soils in the Three Rivers area are Loam, Sandy Loam, and Rock Outcrops.

"The Official Maps of Earthquake Fault Zones delineated by the California Geological Survey (CGS), State of California Department of Conservation, through December 2010, under the Alquist-Priolo Earthquake Fault Zoning Act, indicate that there are no substantial faults known to occur in Tulare County. The nearest known faults likely to affect Three Rivers are the San Andreas Fault (approximately 75 miles to the west), the Owens Valley Fault (approximately 65 miles to the northeast), and the Pond Fault (approximately 25 miles southwest).

According to the Five County Seismic Safety Element (FCSSE) and **Figure 10** (Seismic/Geologic Hazards and Microzone) of the Tulare County 2030 General Plan Health and Safety Element (GPHSE), the Project area, [Three Rivers] is located in the S-1 zone, characterized as a moderately thick section of marine and continental sedimentary deposits overlying the granitic basement complex. The FCSSE further states that, "Amplification of shaking that would affect low to medium-rise structures is relatively high, but the distance to either of the faults that are expected sources of the shaking [the San Andreas and Owens Valley Faults] is sufficiently great that the effects should be minimal. The California Geologic Survey Regulatory Maps are utilized as applicable in conjunction with the Uniform Building Code on a site specific basis to determine building code requiements related to any geologic hazards. http://maps.conservation.ca.gov/cgs/informationwarehouse/.



Figure 10 - Geologic and Seismic Hazardous Map

<u>Urban and Wildland Fire Hazards</u>

Figure 11 shows areas where FEMA flood zones, 30 percent slope and fire hazards overlap to identify areas vulnerable to flooding after wildfires. Fire Hazard is a way to measure the physical fire behavior in order to predict the damage a fire is likely to cause. Fire hazard measurement includes the speed at which a wildfire moves, the amount of heat the fire produces, and most importantly, the burning fire brands that the fire sends ahead of the flaming front. The fire hazard model considers the wildland fuels. Fuel is that part of the natural vegetation that burns during the wildfire. The model also considers topography, especially the steepness of the slopes. Fires burn faster as they burn up-slope. Weather (temperature, humidity, and wind) has a significant influence on fire behavior. The Fire Hazard model recognizes that some areas of California have more frequent and severe wildfires than other areas. Finally, the model considers the production of burning fire brands (embers) how far they move, and how receptive the landing site is to new fires. **Figure 12** shows where flood hazard zones are located, including the location of historical fires which are also presented on the map. In addition, the general location and distribution of existing and planned uses of land in fire hazard severity zones in state responsibility areas, including roads, and essential public facilities such as power lines and fire stations are identified on the map.



Figure 11 - 30% or Greater Slope Map



Figure 12 - Areas Vulnerable to Flooding after Wildfires in Three Rivers Area

Soils¹²

According to the Central Soils Map of Tulare County, Three Rivers (see Figure 13) is comprised of three soil classes: Class VI, Class VII, and Class VIII, all of which are not suitable for cultivation, but which are suitable for pasture, rangelands, grazing and wildlife.

Blasingame - Rock outcrop - 9 to 50% slope

These soils are located at the northern end of North Fork Drive, in scattered pockets east of State Route 198 in the northeastern portion of the planning area, around Lake Kaweah and along South Fork Drive. This rolling to steeply, sloping soil is found on uneven, side slopes. Permeability of the Blasingame soil is moderately slow and the available water capacity is low or moderate. Surface runoff is medium or rapid and the erosion hazard is moderate or high. Effective rooting depth is 20 to 40 inches. Rock outcrop consists of exposures of hard quartz diorite. These areas are impermeable and vegetative growth is limited to features in the rock structure. Surface runoff is rapid with no erosion hazard. The soil is suitable for rangeland while the potential for urban development is poor because of steep slope, depth of soil and rock outcrops. However, some small isolated areas with gentle slopes are suitable for homesites.

Cieneba - Rock outcrop complex - 15 to 75% slopes

This soil is located in the steep areas along the North Fork adjacent to the park boundary, and adjacent to the planning area boundary south of Lake Kaweah. This hilly to very steeply sloping soil is located on ridge tops, uneven side slopes and mainly south-facing slopes. Vegetation is annual grasses, forbs and scattered shrubs and hardwoods. Rock outcrop consists of exposure of hard granitic rock with vegetative growth limited to fractures in the rock structure. Surface runoff is very rapid with no erosion hazard. The soil is used for rangeland although poorly suited for that use because the soil has a shallow depth resulting in a low available water capacity and limiting root depth. Also, the soil is poorly suited for urban development because of steep slope and shallow depth of the soil.

Vista Coarse Sandy Loam and Vista - Rock outcrop complex - 9 to 50% slope

These soils are located at the southern end of the North Fork of the Kaweah River and along the Middle Fork of the Kaweah River. Permeability of the Vista soil is moderately rapid and the available water capacity is very low or low. Surface runoff is medium or rapid and the erosion hazard is moderate or high. Rock outcrop consists of exposures of hard quartz diorite. The rock outcrop areas are impermeable and vegetative growth is limited to fractures in the rock structure. Surface runoff is rapid with no erosion hazard. The soil is suitable for rangeland and poorly suited for urban development because of steep slope rock outcrop, and depth of soil. The soil should have an on-site evaluation to determine urban uses.

Walong - Rock outcrop complex - 15 to 50% slope

Large pockets of this soil are located along the northeastern boundary of the planning area and at the southern extremity of South Fork Drive. This hilly to steeply sloping soil is found on ridges and uneven side slopes. Vegetation is annual grasses, forbs, shrubs and hardwoods with the shrubs and hardwoods becoming more dense on north facing slopes and at higher elevation. The Walong soil is a moderately deep, well-drained soil and the available water capacity is very low or low. Surface runoff is rapid with high erosion hazards. Effective rooting depth is 20 to 40 inches. Rock outcrop consists of exposures of hard granitic rock with vegetative growth limited to fractures in the rock structure. Surface runoff is very rapid with no erosion hazard. The soil is suitable for rangeland and poorly

¹² United States Department of Agriculture, Natural Resources Conservation Service, Soils Map for Central Tulare County, 2009

suited for urban development because of steep slopes, rock outcrops and depth of soil.



Figure 13 - NRCS Soils Map - Three Rivers

Greenhouse Gases

"Executive Order S-3-05 was signed by Governor Schwarzenegger on June 1, 2005. This executive order established [GHG] emission reduction targets for California. Specifically, the executive order established the following targets:

- ▶ By 2010, reduce GHG emissions to 2000 levels.
- ▶ By 2020, reduce GHG emissions to 1990 levels.
- ▶ By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The executive order additionally ordered that the Secretary of the California Environmental Protection Agency (Cal EPA) would coordinate oversight of the efforts among state agencies made to meet the targets and report to the Governor and the State Legislature biannually on progress made toward meeting the GHG emission targets. Cal EPA was also directed to report biannually on the impacts to California of global warming, including impacts to water supply, public health, and agriculture, the coastline, and forestry, and prepare and report on mitigation and adaptation plans to combat these impacts.

In response to the EO [executive order], the Secretary of Cal EPA created the Climate Action Team (CAT), composed of representatives from the Air Resources Board; Business, Transportation, & Housing; Department of Food and Agriculture; Energy Commission; California Integrated Waste Management Board (CIWMB); Resources Agency; and the Public Utilities Commission (PUC). The CAT prepared a recommended list of strategies for the state to pursue to reduce climate change emission in the state..."¹³

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.), which requires the CARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020.

The Sustainable Communities and Climate Protection Act of 2008, also known as Senate Bill (SB) 375, builds upon AB 32 by requiring CARB to develop regional GHG emissions reduction targets for passenger vehicles. Then each Metropolitan Planning Organization (MPO) must prepare a Sustainable Communities Strategy (SCS) to demonstrate how the region will meet its targets. The SCS will be incorporated into the Regional Transportation Plan (RTP).

The Air District adopted the *Climate Change Action Plan* (CCAP) in August 2008. "The CCAP directed the District Air Pollution Control Officer to develop guidance to assist Lead Agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project specific greenhouse gas (GHG) emissions on global climate change.

On December 17, 2009, the San Joaquin Valley Air Pollution Control District (District) adopted the guidance: Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA, and the policy: District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. The guidance and policy rely on the use of performance based standards, otherwise known as Best Performance Standards

¹³ Tulare County General Plan 2030 Update RDEIR, pages 3.4-4 to 3.4-5

(BPS), to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA.

"The Tulare County Climate Action Plan (CAP) (last updated in 2016), serves as a guiding document for County of Tulare ("County") actions to reduce greenhouse gas emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the 2030 General Plan Update. The General Plan provides the supporting framework for development in the County to produce fewer greenhouse gas emissions during Plan buildout. The CAP builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets consistent with California legislation."¹⁴

Flooding¹⁵

Three Rivers is subject to Standard Project Floods and Intermediate Regional Floods from the Kaweah River and its tributaries. Intermediate Regional Floods, such as the December 1966 flood, are floods having an average frequency of occurrence in the order of once in 100 years although the flood may occur in any year. Standard project floods on the North, Middle, and South Forks of the Kaweah River would be about three feet higher than those of the Intermediate Regional Flood.

The Kaweah River system has a long history of periods of high water and flooding. Past records indicate periods of high water and flooding occurred in 1844, 1852, 1862, 1867, 1879, 1884, 1890, 1891, 1893, 1901, 1914, 1916, 1937, 1945, 1950, 1955, 1963, and 1966 [1995?] Major floods occurred in 1862, 1968, 1906, 1937, 1950, 1955 and 1966 and can occur anytime during the period November through June.

Lake Kaweah is located primarily downstream but is adjacent to Three Rivers during higher water levels associated with the annual Sierra Nevada Mountain spring-summer water run-off conditions. The lake was formed by the construction of Terminus Dam on the Kaweah River in 1962 by the U.S. Army Corps of Engineers to provide flood damage reduction and water conservation. Terminus Dam **(see Figure 14)** was originally constructed as an earthen dam and was later expanded on utilizing 21-foot-tall fusegates, the largest in the country. The addition of the fusegates allows for an additional 43,000 acre feet of water storage as well as providing additional flood control. During the spring run-off season Lake Kaweah can store a total of 185,630 acre feet of water. Energy production was added in 1990 with the construction of the Terminus Power Plant. The hydroelectric plant produces an average of 40 million kilowatt-hours of electricity annually, which is equivalent to 67,000 barrels of oil.

¹⁴ Tulare County Climate Action Plan, page 1

¹⁵ Federal Emergency Management Agency, 2009. National Flood Insurance Rate Map, Map Number 06107C1958E, Panel Number 1958 of 2550, June 16, 2009. <u>https://msc.fema.gov/portal/</u>



Figure 14 - Terminus Dam Fusegates

The Kaweah River floodway, as delineated by the California State Reclamation Board, is shown generally on the Land Use Plan map; however, for detailed delineation, refer to the aerial photographs (one inch = 100 feet) on file in the County Planning Department and the Department of Public Works. Future developments within the floodway must have an encroachment permit approved by the Reclamation Board. Application forms for the encroachment permits can be obtained from the Tulare County Resource Management Agency, 5961 S. Mooney Blvd, Department of Public Works, Flood Control Operations.

California Department of Water Resources Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California 2017.¹⁶ "The Kaweah river drainage is very short, and the topography climbs rapidly from around 1,000 feet in Three Rivers to between 3,000 and 5,000 feet on the ridgelines of the local watersheds, and continues climbing to 14,000 feet at Mt. Whitney, 50 miles to the east. The Kaweah River is a 58.5 mile-long river (Wikipedia 2017) located in the Southern Sierra Nevada."

"There are "enormous peak flows in the spring and early summer. Flow shrinks to a trickle by late autumn. Winter rainstorms in lower elevations of the basin can also lead to very high but fleeting peak flows" (Wikipedia 2017). The U.S. Geological Survey (USGS) collects flow information for the upper Kaweah River at a stream gage located below Terminus Dam. Data is available for water years 1962–1990. During this period, the largest recorded flow was 6,000 cubic feet per second (cfs)."

"Runoff largely depends on watershed size and elevation. Watersheds at lower elevations that receive little snowfall tend to have brief peak-stream flows during and right after rainfall events throughout the rainy season; these streams usually have little to no flow during the dry months. Rivers and streams from larger and higher elevation watersheds normally reach peak flows during the snowmelt runoff period in spring and early summer. These flows can be enormous for a few months, but are usually

¹⁶ DWR, 2016, pages 12-16. Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California.

reduced to a trickle by late summer. Average annual flow during this period ranged from 104 cfs during dry years to 2,000 cfs during wet years."

"There are two stream gages located near Three Rivers. USGS stream gage 11210500 is located at elevation 611 feet (msl), downstream of Three Rivers and above Lake Kaweah. This location was monitored monthly from May, 1903 to September, 1961. Drainage area above the gage is 519 square miles. The stream gage measures flow from all four main forks of the Kaweah River. During this period, average annual flow was 6,731 cfs. The largest monthly flow was 4,837 cfs, which occurred in June, 1906. The smallest monthly flow was 12.6 cfs, which occurred in September of 1924."

"The second stream gage near Three Rivers is USGS gage 11209900, located at elevation 810 feet (msl), upstream of Three Rivers. This location was monitored monthly from October, 1958 to September, 1990. The drainage area above the gage is 418 square miles. The stream gage measures flow from three of the four main forks of the Kaweah River, but lays upstream of the confluence with the South Fork of the river. During this period, average annual flow was 6,757 cfs. The largest monthly flow was 4,474 cfs, in June of 1983. The smallest monthly flow was 18.5 cfs, in October, 1961."

"The large size of the watershed, its steep terrain, and rapid drop in slope combine to produce the potential for significant flood events. The primary cause of floods appears to be a result of large atmospheric rivers and related storm events. The largest documented event to affect the entire State of California was an 1861–1862 event that lasted 43 days and submerged central California under 20–30 feet of water. A larger atmospheric river hit the Tulare County area in 1867–1868, as a storm that began in mid-November and lasted through December. The impact of this storm on the Three Rivers area is described below. Atmospheric rivers resulting in flooding have occurred in 1950, 1955, 1966, 1969, 1983, 1986, 1995, 1997, and 2014. Atmospheric rivers capable of producing megafloods have a recurrence interval of 100–200 years (Dettinger, Ingram 2013). Atmospheric rivers are also known as *drought busters*, with one-third to nearly one-half of all persistent droughts in California ending in flooding resulting from atmospheric rivers (Dettinger 2013)."

"The following relies substantially on information from a 2013 report by John T. Austin, *Floods and Droughts of the Tulare Lake Basin*. During large atmospheric river events, rain and snow can last for considerable periods.

As noted by Austin, for a storm that occurred in December, 1867:

It had been raining in the Three Rivers area almost steadily for some 41 days, with heavy snows above the 5,000 foot elevation level. All the rivers were very high. The storm caused a large landslide dam on the South Fork of the Kaweah River. From the same source: "This is the largest landslide to have occurred in the national parks in historic time. This event is included in a USGS report of documented historical landslide dams from around the world. "A mass of dirt and vegetation broke loose from near the crest of Dennison Ridge ... It swept 21/2 miles down into the canyon of the South Fork of the Kaweah." It was calculated that "350 million board feet of timber came down in that slide ... When it came to rest [the landslide] formed a landslide dam that was ½ mile wide and over 400 feet high at its highest point. The South Fork Kaweah was presumably running at flood or near-flood stage because of all the previous rain and snow. It didn't take the river long to fill the temporary reservoir. The dam failed about 1:00 a.m. on December 22, just 25 hours after the slide occurred. The collapse of the landslide dam produced a flood surge about 40 feet deep that rushed down the South Fork Canyon. Joseph Palmer was a homesteader who lived in that canyon, several miles below the slide. "On leaving my cabin in the morning, I found that despite the heavy rain the river was and cause a flood ... About 1:30 a.m.

I was aroused by a tremendous thundering and rumbling sound ... I jumped out of bed, grabbed my clothing, and ran for safety up the mountain side some 200 yards from the river. In a few minutes the flood came along with a crest of water some 40 feet in depth that extended across the canyon, carrying with it broken up trees which were crashing end over end in every direction with terrific force and sound." The bursting of the landslide dam at 1:30 a.m. on the morning of December 22 let loose a great flood, and the impounded water spilled and smashed its way down the South Fork Canyon, carrying everything before it, including giant sequoia logs ... The flood swept past what is now Three Rivers, 15 miles below the landslide.

A series of four atmospheric river events occurred in November and December, 1950. According to Austin: In Three Rivers, the rain was continuous for 20 hours. Long-time residents of that community could not recall such a heavy downpour... The 1950 flood was so newsworthy that it was written up in at least two issues of the New York Times... Flood crests on the Kings, Kaweah, Tule, and Kern Rivers exceeded all previous records. At the time, this was the biggest flood to occur on those rivers since the 1867-68 flood, an event that occurred before the onset of formal recordkeeping. The 1867-68 flood remains the biggest flood to have occurred in historic times in the Tulare Lake Basin... The peak of the 1950 flood began coming through Three Rivers late on the night of November 18 and continued rising into the early morning hours of the 19th... That was the highest flow on that river since record-keeping began in 1910. In the December 1955 and December 1966 floods, the North Fork would experience flows over twice this great." Considerable damage was down to the Three Rivers area, including washed out bridges and roads, homes washed away, and damaged flumes. "So many water systems were contaminated that the county health department set up a program to inoculate all Three Rivers residents against typhoid... One source said that eight bridges in the town had been so badly damaged that they remained impassable." This included losing the "only highway bridge in and out of town, families on the North Fork were isolated from the main part of town because the Upper North Fork Bridge was gone. More than a dozen families on the South Fork Road were also isolated from the main part of town until the three bridges on that road could be replaced.

There were two atmospheric river events in the winter of 1955–1956. As noted by Austin:

In Three Rivers, the various branches of the Kaweah rose steadily all day on December 22 due to the heavy downpour. There was no cause for alarm until shortly after midnight, when the rivers surged up with a thunderous roar and swept everything from their path. Many of the town residents were caught up in the battle to save lives that night." Bridges and roads were washed out. "Water and sand flooded all three of SCE's powerhouses, and all were knocked out of operation... The Three Rivers Motel and Trailer Court was demolished... Many homes were washed away and many others severely damaged. Much livestock was lost... The Highway 198 bridge over the South Fork of the Kaweah River withstood the flood. However, immediately east of that bridge, the mainstem of the Kaweah River overtopped and washed away 1,600 feet of the highway... This washed away five houses and the Dunlap Motel... Almost immediately after the flood, a cable trolley was rigged at the site of the washed-out North Fork Bridge so that people could be pulled back and forth.

An atmospheric river in December 1966 caused extensive flooding across the region. As noted by Austin:

December 1966 was the wettest five days ever at 58 California stations... A total of 42 stations recorded their highestever 5-day rainfalls during this storm event. A total of 11 stations reported rainfall totals in excess of a storm with a recurrence interval of 1,000 years... Damage to Three Rivers included bridge and road washouts, damaged homes, damage to the SCE transmission Kaweah... The River Isle Trailer Park was located several miles up North Fork Drive... The trailer park was surrounded and overtopped by the 1966 flood, scattering trailers everywhere. Mobile homes stood on end, upside down, and sideways, completely ruined by the water. The situation was so dire that 19 people had to be evacuated by helicopters from Lemoore Naval Air Station... Fifteen-foot waves were reported to have been common the mainstem of the Kaweah River... The American Red Cross launched a major relief operation... Tulare Lake had been dry since about August 14, 1958. It came back to life on December 6, 1966."

Federal Emergency Management Agency (FEMA)

"Official floodplain maps are maintained by the Federal Emergency Management Agency (FEMA). "Floodplain" or "flood-prone area" means any land area susceptible to being inundated by water from any source. "Base Flood" is the flood having a one percent chance of being equaled or exceeded in any given year. "One-hundred-year flood" or "100 year flood" has the same meaning as "base flood." "Special flood hazard area" is the land in the floodplain subject to a one percent or greater chance of flooding in any given year. "Floodway" means the channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. The floodway is delineated on the Flood Boundary Floodway Map, on maps adopted by the State Reclamation Board when acting within its jurisdiction, and on the County Zoning Map (signified by the F-1 Primary Flood Plain Zone). The F-2 Secondary Flood Plain Combining Zone which is intended for application to those areas of the County which lie within the fringe area or setback of the flood plain and are subject to less severe inundation during flooding conditions than occur in the F-1 Zone.

FEMA determines areas subject to flood hazards and designates these areas by relative risk of flooding on a map for each community, known as the Flood Insurance Rate Map (FIRM). These areas are designated as Zone A, AE (1% BFE and not BFE), and X and X 2% on the FIRM. A 100-year flood is considered for purposes of land use planning and protection of property and human safety. The boundaries of the 100-year floodplain are delineated by FEMA on the basis of hydrology, topography, and modeling of flow during predicted rainstorms. **(See Figure 15)**. Within Three Rivers there are areas of localized ponding and puddling that occur during heavy rainfall events. Additional projects will be required in the future to further expand storm water drainage capacity. The elevation of building pads should eliminate the potential for loss of property should flooding occur.

The County of Tulare has taken steps to be a part of the National Flood Insurance Program (NFIP), which means the County of Tulare agreed to manage flood hazard areas by actively adopting minimum regulatory standards as set forth by Federal Emergency Management Agency (FEMA). The National Flood Insurance Program (NFIP) is administered by the (FEMA) to offer flood insurance to properties located in special flood hazard areas (SFHAs). Information about the NFIP, is available at the following website: www.fema.gov. As part of the county's participation in the NFIP, individuals are eligible to obtain flood insurance. Further flood information is available at the County of Tulare Resource Management Agency the following website: at http://tularecounty.ca.gov/rma/index.cfm/public-works/flood-hazard-information/flood-controlinformation/. On June 16, 2009, Tulare County adopted the new Digital Flood Insurance Rate Maps (DFIRMs). Information is available to determine if a property is located in a SFHA by using the following FEMA Map Service Center link as follows: https://msc.fema.gov/portal.



Figure 15 - Three Rivers FEMA Flood Zone Maps

<u>Noise</u>

Tulare County adopted a new noise element as part of the Health and Safety Chapter of the 2030 General Plan Update. The noise contours were prepared in terms of day-night average decibel level (Ldn), which are descriptive of the total noise exposure at a given location for an annual average day.

The Noise Element identifies noise-impacted areas throughout Tulare County. These areas include lands which have existing or projected noise levels exceeding 60 decibels (dBa) Ldn. This decibel figure is considered to be the maximum normally acceptable noise level for single family residential areas. Roadways and traffic noise are the dominant source of ambient noise in the County. Table 1 summarizes the daily traffic volumes along State Route 198. Together, these noise sources place a portion of Three Rivers's urbanized areas within the 60 dB Ldn noise contour. The Noise Element includes performance standards for new residential or other noise-sensitive land uses which are to be located near noise-impacted areas. The Element indicates that these uses will not be permitted unless effective design measures can be integrated into the development to mitigate the impact of noise.

The Noise Study Report conducted for Tulare County by VRPA Technologies, Inc., for the purposes of the Community Plan Update (see Table 25), has made the following recommendations and observations:

"Existing noise levels in the Three Rivers Community are principally generated by transportation noise sources. Vehicular traffic noise is the dominant source in most areas, but amplified sound generated from commercial sites are also sources of environmental noise in the local areas surrounding these operations. Noise is generated by either mobile or stationary sources."¹⁷

"Mobile source noise is typically associated with transportation, such as cars, trains, and aircraft. The most significant mobile source of noise in the Three Rivers Community is SR-198 (Sierra Drive)."

"Stationary noise sources are any 'fixed' noise generating source. Examples of stationary sources include outdoor machinery (i.e. such as heating/air conditioning systems), amplified events, and the Kaweah River. Noise generated from construction sites also falls into the category of stationary sources."

Table 25 - Three Rivers - Existing Traffic Noise Levels								
Receptor	Location	Type of	Existing Noise	Existing	Existing			
ID		Development	Level Leq dB	Noise Level	Noise Level			
				Ldn dB	CNEL dB			
1	Open Field – located	Open Space	57.3	59.2	59.9			
	approximately 60 feet from SR							
	198 centerline							
2	Commercial area – located	Commercial	56.5	59.2	59.6			
	approximately 60 feet from SR							
	198 centerline							
3	Lodging/Commercial area -	Lodging	61.5	67.8	68.1			
	located approximately 30 feet							
	from SR 198 centerline.							

This Community Plan Update does not include any changes to land use patterns, as such, the areas

¹⁷ VRPA, 2017, page 11.. Noise Study Report, Standards of Significance. G:\Environmental Planning Division\Community Plans\Three Rivers Community Plan Update Master File\Technical Studies\Noise

where most noise impacts occur (the SR 198 corridor) are, and will remain, predominantly commercial and residential reserve land uses. If development within the residential reserve area occurs during the planning period, design features such as noise attenuating walls and setback distances can be incorporated into the design of future residential areas along SR 198 to prevent exceedances of the 60 dB Ldn (or CNEL) as specified in General Plan policy HS-8.3 and Table 10.1 (Land Use Compatibility for Community Noise Environments) of the Tulare County Health and Safety Element. Commercial and Industrial areas have a higher noise standard (65 dB Ldn - 75 dB Ldn, respectively) and, as development occurs, could also include noise attenuating walls and building material insulation to prevent exceedances of these standards.

State of California General Plan Guidelines (California Governor's Office of Planning and Research, 2003) identifies guidelines for the Noise Elements of city and county General Plans, including a sound level/land-use compatibility chart that categorized, by land use, outdoor Ldn ranges in up to four categories (normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable). These guidelines provide the State's recommendations for city and county General Plan Noise Elements (see Figure 16).

"Noise level data collected during continuous monitoring included the hourly Leq and Lmax and the statistical distribution of noise levels over each hour of the sample period. The community noise survey results indicate that typical noise levels in noise-sensitive areas of the unincorporated areas of Tulare County are in the range of 29-65 dB Ldn. As would be expected, the quietest areas are those that are removed from major transportation-related noise sources and industrial or stationary noise sources."¹⁸

¹⁸ Tulare County, 2010, page 8-77. Tulare County General Plan 2030 Update Background Report. <u>http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf</u>

		Figu	re 16 - Com	munity Noi	ise Exposure	2			
		Community Noise Exposure L _{dn} or CNEL (dB)							
La	and Use Category	50	55	60	65	70	75	80	
Residentia	al - Low Density Single	() and (
Family, D	uplex, Mobile Homes								
Pacidanti	al Multi Comite	(IIII)							
Nesidenia	ar- Muneranniy								
Transient	I odging - Motels Hotels								
Turiotorit	Louging wood, Thomas			-					
Schools, I	ibraries, Churches,								
Hospitals,	Nursing Homes								
Auditoriun	ns, Concert Halls,	1	_						
Amphithea	aters	_							
Sports Ar	enas, Outdoor Spectator	0	_	_	_				
Sports									
Playgrour	nds, Neighborhood Parks								
Golf Cour Recreatio	ses, Riding Stables, Water								
Office Buil	dings, Business Commercial ssional	0							
Industrial, Agriculture	Manufacturing, Utilities, e								
	ale esten e	Ou se Stand Jamed 11	a to a Bata to to to	ikar walata kata kata ka	a a sa	en Kardista an Saran K			
	Acceptable	construction, with	iout any special i	based upon the a noise insulation re	assumption that an equirements.	iy bullaings involv	ed are of normal	conventional	
free of	Conditionally	New construction or development should be undertaken only after a detailed analysis of the noise reduction							
	Acceptable	requirements is made and needed noise insulation reatures are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.							
	Normally	New construction or development should generally be discouraged. If new construction or development does proceed,							
	Unacceptable	a detailed analys the design.	sis of the noise re	duction requirem	ents must be mad	e and needed noi	se insulation feat	ures included in	
	Clearly Unacceptable	New construction	ı or developmen	t generally should	d not be undertake	en.			
Source: T	ulare County General Plan								

Infrastructure

Infrastructure is defined as "the basic physical and organizational structures needed for the operation of a society or enterprise or the services and facilities." In regards to Three Rivers, this Community Plan Update is intended to identify deficiencies and address as feasible and appropriate the need for infrastructure improvements as applicable, (for example streets, transit, sidewalks, bridges, storm drainage etc.).

There are no community wide water or sewer systems and none are anticipated during the 20 years planning period. Domestic water is provided primarily by individual well and private water companies. Sewage disposal is provided by individual septic systems. An On-Site Wastewater Management

Disposal District was formed on April 25, 1979 by the Community Services District. There is an On-Site Wastewater Management Disposal District in Three Rivers, which was formed by the Community Services District. The purpose of the CSD is to improve water quality by repairing failing septic systems and requiring property owners within the boundaries of the Community Services District to properly maintain their systems.

The District, approximately eight square miles in size, was formed in October of 1973. Functions performed by the District include trash (barrel) pickup along State Route 198 and contracting for sewerage system reports. The Community Services District is financed through ad valorem taxes. Its mailing address is: P.O. Box 423, Three Rivers, CA 93271.

The District was established in accord with the Community Services District Law, Government Code Section 6100 et seq., and amendments thereto. It is governed by a board of directors of five members elected at large by the voters of the district; each director must be a registered voter residing in the district.

In addition to its general powers, a community services district <u>may exercise</u> any of the statutory powers prescribed by Section 61600 of the Government Code, to wit:

- a. Supply water of all types.
- b. Disposal of sewage and storm water.
- c. Garbage and refuse collection and disposal.
- d. Fire protection.
- e. Public recreation.
- f. Street lighting.
- g. Mosquito abatement.
- h. Police protection.
- i. Library service.
- j. Construction of streets.
- k. Construction or works incidental to streets.
- 1. Conversion of overhead electric and communication facilities to underground installations.
- m. Contract for ambulance service subject to approval of a majority vote of the electorate.
- n. Provide and operate public airports.

A district has only those of the aforementioned powers as are specifically set forth in the petition for information of the district or which have been added subsequently by majority vote of the electorate. In addition, a district has the following specific powers provided by statute: (Numerical references are to sections of the Government Code.)

Prescribe and collect rates and charges for the services and facilities furnished by the district (61621), including water standby and availability charges (61765).

Levy and collect an ad valorem tax on all taxable property within the district (61755). The maximum tax rate is \$1.00 per \$100 of assessed valuation (except for bond interest and redemption). The tax ceiling may be lifted by majority vote of the electorate of the district (61755.5).

Energy Natural Gas/Electricity

Southern California Edison (SCE) is the main provider of electrical power and the Southern California Gas Company provides gas in Tulare County, which maintains an extensive network of high-voltage and low-voltage electrical lines, substations, natural gas mains, and related facilities. In addition to power produced by its plants, SCE purchases power from other producers for use within its service area. The Southern California Gas Company does not presently serve the Three Rivers area as transmission and high pressure distribution lines do not extend past the easterly alignment of SR 245.

Water Supply & Quality

The primary source of groundwater in the Kaweah River drainage basin is precipitation as rain and snow, part of which percolates downwards through the soil to eventually become ground water. The

remainder either becomes surface runoff or is retained by the soil where it is later lost to the atmosphere by evaporation and plant transpiration. Throughout the summer months, this water feeds springs that supply water to the Middle, North, and South Forks of the Kaweah River.

Conventional groundwater conditions such as those found in the aquifers on the valley floor do not exist in the Three Rivers area. The upper soil mantle consists of decomposed materials that rarely exceed six feet in thickness. The hardrock underlying this soil provides little, if any, value for water storage The Kaweah River is one of the most valuable natural assets in Three Rivers, and is an essential element of the community's unique character and quality natural environment. The floodways and floodplains along the river enhance the quality of life in Three Rivers, and promote biological and babitat diversity in the community. As part of the future vision for Three Rivers, residents would like to preserve the Kaweah River, in its natural course through the community. Maintaining the Kaweah River in its natural course describes the dynamic interaction between river flow, river form, people, plants, fish and wildlife to maintain the river in the natural, healthy form.

other than what is contained in the rock fractures and exfoliation of the granite rock. There are four types of water sources available: river wells, dug wells, hardrock wells and the flumes. The majority of the wells are hardrock wells, which are drilled to depths ranging from 70 to 600 feet.

River wells and dug wells, located near the river, utilize water from the sand and gravel strata underlying the river beds which traverse this area. Water infiltrates into the wells and is pumped out to the users. They are classified as water sources or under the direct influence of surface water. Water services connected to the flumes are primarily located in the North Fork Area.

The Environmental Health Services Division (EHSD) of the Tulare County Health and Human Services Agency (HHSA) works closely with the California Department of Public Health (CDPH) and the California Regional Water Quality Control Board (RWQCB) regarding water quality issues in Tulare County. The California Department of Public Health (CDPH) provides direct regulatory oversight of all public water systems having 5 or more service connections. CDPH has delegated direct regulatory oversight of public water systems having less than 200 service connections to the Environmental Health Services Division (EHSD). The EHSD's water program provides a periodic inspection of the water source, usually a well, and the water storage components of a public water system. The water program oversees the sampling and analysis of water for bacteriological, inorganic, and organic chemical contamination. Sustainability factors such as source water protection and adequate storage capacity are also evaluated in this program.

Additionally, the EHSD requires sampling and analysis of all new individual domestic water wells in the county. Analysis for bacteria, nitrates, and DBCP are required for wells installed on the valley floor. Analysis for bacteria, nitrates, and radiological constituents are required for wells installed in foothill or mountain locations.

The Regional Water Quality Control Board (RWQCB) provides direct regulatory oversight of all activities that are deemed to have contaminated, or have the potential to contaminate, the waters of the state. The RWQCB has delegated direct regulatory oversight of activities pertaining to the storage of petroleum products to the EHSD. This program oversees the investigation and remediation of confirmed leaks from either underground or above ground storage tanks at gas stations and bulk gasoline storage facilities. A component of this program is designed to prevent storage tank leaks from occurring and minimizing the environmental impact should leakage occur.

Water Quality

Water in Three Rivers is essentially provided by individual wells and private water companies. Existing sources of domestic water in the community of Three Rivers include private wells, private water companies, spring water and ditch water. A study of water systems in the Three Rivers area by Tulare County show 31 active public water systems that provide water to the community (see Table 26) Three Rivers Public Water Systems.

Table 26 - Three Rivers Public Water System							
System Number	System Name	Status	Population	Connection	City	State	County
5403113	SOUTH FORK ESTATES MUTUAL	Active	375	103	THREE	CA	TULARE
5403061	RIVERVIEW RESTAURANT	Active	50	1	THREE	CA	TULARE
5401026	DEER MEADOW MUTUAL	Active	75	22	THREE	CA	TULARE
5400747	SIERRA LODGE	Active	52	3	THREE	CA	TULARE
5400754	SO KAWEAH MUTUAL WATER CO	Active	300	105	THREE	CA	TULARE
5400749	GATEWAY RESTAURANT	Active	150	3	THREE	CA	TULARE
5400556	RIVER RETREAT MUTUAL	Active	100	21	THREE	CA	TULARE
5400644	SEQUOIA VILLAGE INN	Active	35	8	THREE	CA	TULARE
5400629	SEQUOIA RV RANCH	Active	22	57	THREE	CA	TULARE
5400968	IMPROVEMENT DIST #1	Active	200	77	THREE	CA	TULARE
5400940	SIERRA KING HOMEOWNERS ASSN	Active	120	40	THREE	CA	TULARE
5400637	BUCKEYE TREE LODGE	Active	35	3	THREE	CA	TULARE
5400506	NORTH KAWEAH MUTUAL WATER	Active	75	35	THREE	CA	TULARE
5400623	BEST WESTERN - HOLIDAY LODGE	Active	100	54	THREE	CA	TULARE
5400704	THREE RIVERS SCHOOL	Active	300	1	THREE	CA	TULARE
5400737	ST ANTHONY RETREAT	Active	130	3	THREE	CA	TULARE
5400751	THREE RIVERS HIDEAWAY	Active	50	14	THREE	CA	TULARE
5400761	LAKE ELOWIN RESORT	Active	40	12	THREE	CA	TULARE
5400838	THREE RIVERS VILLAGE	Active	25	9	THREE	CA	TULARE
5400887	PARK INVESTMENTS	Active	100	5	THREE	CA	TULARE
5400907	WHITE HORSE INN	Active	200	3	THREE	CA	TULARE
5401001	SEQUOIA CIDER MILL	Active	30	3	THREE	CA	TULARE
5402037	THREE RIVERS LIBRARY	Active	80	1	THREE	CA	TULARE
5403014	THREE RIVERS LIONS CLUB	Active	100	3	THREE	CA	TULARE
5403001	LOWER SPRINGS WATER CO	Active	50	3	THREE	CA	TULARE
5403062	COMFORT INN & SUITES	Active	125	1	THREE	CA	TULARE
5403071	THREE RIVERS CHEVRON	Active	50	1	THREE	CA	TULARE
5400875	VILLAGE APARTMENTS	Active	32	16	THREE	CA	TULARE
5400750	KAWEAH PARK RESORT	Active	246	22	THREE	CA	TULARE
5400743	SEQUOIA MOTEL IN THREE RIVERS	Active	75	26	THREE	CA	TULARE
5400744	EAST THREE RIVERS MUTUAL	Active	28	19	THREE	CA	TULARE

All water sources are treated before use either through chlorination or ultra-violet light source.

The hardrock well is the type used by the majority of people living in the Three Rivers Area. This well consists of drilling into the granite rock until a fissure or crack containing a water source is found. The water is then pumped and used.

River wells are those wells set in or adjacent to the river beds which draw water from the sand strata beneath the river. The water is then pumped and used.

The flume and ditch water is used the least; however, many people use it especially in the North Fork area. This type of water use consists of a flume or ditch constructed by the property owners that brings water from upstream to their property where it is piped into holding tanks for use as needed.

The groundwater present in the Three Rivers aquifers is a blend of high quality surface water and variable groundwater which flows through the rock fractures. Groundwater of the area has historically been of high quality with a low mineral content, however a few wells contain elevated dissolved minerals, sulfur, or hydrogen sulfide. Wells that historically test high for sulfur or hydrogen sulfide are largely due to the underlying bedrock, typically metamorphic rock (Department of Water Resources, 2016).

To identify groundwater quality issues that may pertain to problematic septic systems in Three Rivers area, constituent sampling data from Public Water Systems (PWSs) was organized by year and constituent type, with particular significance for Nitrates, E. Coli, Salts (Electrical Conductivity), and Fecal Coliform. A total of fifty-seven (57) total Public Water Systems were identified in the Three Rivers area, with 31 of those systems determined to be active. The remaining systems contained incomplete record data or were inactive. Consumer Confidence Reports and State Water Resources Control Board (SWRCB) water quality data were collected and summarized for the 31 active Public Water Systems in the Three Rivers Community.

Water quality data from the SWRCB and consumer confidence reports is summarized in **Table 27**.-Public Water System Annual Maximum level of Nitrate and **Table 28** - Public Water Systems - Annual Maximum Lever of Electrical Conductance. From the queried data, Public Water System entities reported no violations or detections of E. Coli for Fecal Coliform during the years.

	Table 27 Public Water Systems - Annual Maximum Nitrate Level I							
Ststem	System Name	Maximum Nitrate level mall - 45						
Numbers		2011	2012	2013	2014	2015		
5400623	Best Western – Holiday Lodge	0.0	0.0		0.0			
5400637	Buckeye Tree Lodge	0.4	0.4	0.5	0.8	0.5		
5403062	Comfort Inn & Suites	25.0	20.0	12.0	8.5			
5401026	Deer Meadow Mutual	0.4	0.4	0.4	0.4	0.4		
5400749	Gateway Restaurant		0.4	0.4	0.6	0.7		
5400968	Improvement District #1	0.7	12.2	6.7	9.9			
5400761	Lake Elowin Resort	0.4	0.4	0.4	0.4			
5403001	Lower Springs Water Co.	18.0	20.0	21.0	21.0			
5400506	North Kaweah Mutual Water Co.	0.4			1.3			
5400887	Park Investments	1708	19.8	20.3	18.3	17.1		
5400556	River Retreat Mutual					0.4		
5403061	Riverview Restraurant		2.0	5.8		1.3		
5401001	Sequoia Cider Mill	0.0			0.0	0.0		
5400629	Sequoia RV Ranch	40.3	36.5	26.8	26.1			
5400644	Sequoia Village Inn		0.4			2.0		
5400940	Sierra King Homeowners Association	7.4	4.7	3.8	1.8	3.1		
5400747	Sierra Lodge	0.4	0.6		0.4	0.9		
5400754	South Kaweah Mutual Water Company	12.4	0.9	10.9	9.7	9.8		
5403113	South Fork Estates Mutual Water Co.	27.3	21.1	17.5	14.3	17.0		
5400737	St. Anthony Retreat		6.1		5.5			
5403071	Three Rivers Chevron	29.0	30.3	26.0	29.0	29.0		
5400751	Three Rivers Hideaway	0.0			0.0			
5402037	Three Rivers Library	22.0	18.3	15.0		9.5		
5403014	Three Rivers Lion Club	0.0	11.6	15.8	16.7	17.5		
5400704	Three Rivers School	34.0		30.1	22.0	25.9		
5400838	Three Rivers Village	3.3	2.7	5.9		5.0		
5400875	Village Apartments		14.2	7.9		16.2		
5400907	White Horse Inn	28.0	23.0	12.0	25.0			
5400744	East Three Rivers Mutual			12.5				

*Blank cells indicate no sample California State Water Resources Control board Water Quality Analyses Database

Table 28 Annual Maximum Lovel of Electrical Conductance								
Flectrical Conductance								
System Name System Number ??? Year								
Improvement District #1	5400968	1490	2011					
North Kaweah Mutual Water Company	5400506	100	2011					
River Retreat Mutual	5400556	1100	2011					
Sierra king Homeowners Association	5400940	380	2011					
Soouth Kaweah Mutual Water Company	5400754	671	2011					
South Fork Estates Mutual Water Company	5403113	560	2012					
River Retreat Mutual	5400556	1600	2013					
East Three Rivers Mutual	5400744	765	2013					
Sierra King Homeowners Association	5400940	336	2013					
South Kaweah Mutual Water Company	5400754	616	2013					
South Fork Estates Mutual Water Co.	5403113	560	2014					
Improvement District #1	5400968	502	2014					
Sierra King Homeowners Association	5400940	381	2014					
South Kaweah Mutual Water Company	5400754	816	2014					
South Fork Estates Mutual Water Co.	5403113	557	2015					
Improvement District #1	5400968	480	2015					
Three Rivers Library	5402037	380	2015					
South Fork Estates mutual Water Co.	5403113	580	2016					
Improvement District #1	5400968	434	2016					
South Kaweah Mutual Water Company	5400754	757	2016					

California State Water Resources Control Board Water Quality Analyses Database

The resulting analysis of water quality data from the PWSs in Three Rivers show nitrate levels with higher concentrations in the west. However, the nitrate level in the Three Rivers area has been decreasing since 2011.

The analysis of electrical conductance data for the Three Rivers area shows only one Maximum Contaminant Level (MCL) exceedance during the 5 year study period that occurred in 2012.

Onsite Wastewater Treatment Systems

Assembly Bill 885 (Statutes of 2000) required the State Water Resources Control Board (State Board) to adopt standards or regulations for the permitting and operation of Onsite Wastewater Treatment Systems (OWTS) by January 1, 2004. A draft policy was released in 2005, but was not adopted because of opposition by public agencies and other interest groups. In 2011, *Heal the Ocean Santa Barbara* and *Heal the Bay Santa Monica* filed a lawsuit against the State Board for failure to act. This action resulted in adoption of the statewide policy in June 2012, entitled *Water Quality Control Policy for Siting, Design, Operation and Maintenance of OWTS* (The Policy). This Policy became effective in May 2013, and for the first time, established a statewide, risk-based tiered approach for the regulation and management of OWTS installations. The State Board adopted policy changes regarding siting, design, operation, and maintenance of OWTS that will impact local land owners. In 2000, state legislation directed the State Board to adopt statewide standards for the permitting and operation of septic systems.

In May 2013, the State Board approved statewide policy, and subsequently each Regional Water Quality Control Board (Regional Board) updated Basin Plans to reflect the policy. The statewide policy is designed to allow for the installation of OWTS, while being protective of groundwater resources throughout California (Tier 1 Criteria). The Policy does not take into consideration local soil or groundwater conditions. To address this concern, counties may develop and submit a Local Agency

Management Program (LAMP) to the Regional Board that proposes alternative design standards for new and replacement systems (Tier 2).

Existing onsite wastewater treatment systems that are properly functioning and do not meet the conditions of failing systems or otherwise require corrective action fall into Tier 0 and are waived of discharge requirements if they meet the following requirements:

- Have a projected flow of 10,000 gallons per day or less;
- Receive only domestic wastewater from residential or commercial buildings, or high-strength wastewater from commercial food service buildings that do not exceed 900 mg/L BOD and has a properly sized and functioning oil/grease interceptor (a.k.a grease trap);
- Continue to comply with any previously imposed permitting conditions;
- Do not require supplemental treatment under Tier 3;
- Do not require corrective action under Tier 4;
- Do not consist of a cesspool as a means of wastewater disposal;

Any existing system will remain in Tier 0 so long as it conforms with the above requirements. Any systems not deemed to be in compliance with these standards may be denied coverage by the Regional Water Board or local agency and further corrective action may be required (State Water Resources Control Board, 2013).

New onsite wastewater treatment systems in the Three River Community will be subject to Tier 1-Low Risk New or Replacement OWTS requirements. The Three Rivers Community is not located near any bodies of water deemed "impaired" by the SWRCB, therefore Tier 3 regulations will not apply.

New and Replacement OWTS sites require a qualified professional to perform site evaluations for soil depth, highest anticipated groundwater levels within the dispersal field, percolation tests, and proper permits through the respective permitting agencies. A licensed General Engineering Contractor (Class A), General Building Contractor (Class B), Sanitation System Contractor (Specialty Class C-42), or Plumbing Contractor (Specialty Class C-36) shall install all new and replacement systems in accordance with California Business and Professions Code Sections 7056, 7057, and 7058 and Article 3, Division 8, Title 16 of the California Code of Regulations. A property owner may also install his/her own OWTS if the as-built diagram and the installation are inspected and approved by the Regional Water Board or the responsible local agency, while the OWTS is exposed for inspection (prior to covering with soil) (State Water Resources Control Board, 2013).

Tier 1 Low Risk New or Replacement OWTS also requires the following:

- 5 feet minimum setback from parcel property lines and structures
- 100 feet minimum setback from water wells and monitoring wells
- 100 feet minimum setback from any unstable land mass or areas subject to earth slides
- 100 feet minimum setback from springs and flowing surface water bodies

- 200 feet minimum setback from vernal pools, wetlands, and the high water mark of lakes and reservoirs
- 150 feet minimum setback from public water wells where the depth of effluent dispersal system does not exceed 10 feet.
- Percolation test results shall not exhibit a flow rate greater than one minute per inch (1 MPI) or slower than one hundred twenty minutes per inch (120 MPI) in the effluent disposal area.
- Natural ground slope in all areas used for effluent disposal shall not exceed 25 percent.
- Expected influent flow not to exceed 3,500 gallons per day.
- Minimum twelve inches (12") soil cover on all gravity dispersal systems.
- Minimum six inches (6") soil cover on all pressure distribution systems.
- 100% replacement area available for future use.
- Dispersal systems shall not exceed 10 feet as measured from the ground surface to the bottom of the trench.

A New or Replacement OWTS under Tier 1 shall not exceed the allowable density values for a singlefamily dwelling unit. These density values are summarized in **Table 29** Allowable Average Densities per Subdivision under Tier 1 below.

Table 29 - Allowable Average Densities Per Subdivision Under Tier 1					
Average Annual Rainfall (Inched/year)	Allowable Density (Single Family Dwelling Unit)				
0-15	2.5				
>15-20	2				
>20-25	1.5				
>25-35	1				
>35-40	0.75				
>40	0.5				

Water Quality for Siting, Design, Operation, and Maintenance of Onsite Water Treatment Systems - May 13, 2013 State Water Resources

Three Rivers receives between 17 inches and 21 inches of average annual rainfall, depending on specific site location. Site specific analyses will need to be conducted prior to determining allowable density for each system location.

During the site evaluation for each new or replacement system, a percolation test and highest anticipated depth to groundwater must be conducted. Based on the determined percolation rate, the minimum depth of groundwater below the bottom of the leaching trench, and the native soil depth immediately below the leaching trench, shall not be less than described in **Table 30**- Tier 1 Minimum Depths to Groundwater and Minimum Soil Depth from the Bottom of the Dispersal System below. **Table 29**- Tier 1 Minimum Depths to Groundwater and Minimum Soil Depth from the Soil Depth from Bottom of Dispersal System

Table 30 - Tier 1 Minimum Depts to Ground Water and Minimum Soil Depth					
Percolation Rate (minutes/inch (MPI))	Minimum Depth (feet)				
1.0	Requires tier 2 Local Agency Management Plan				
>1.0 and 5.0	20				
>5.0 and 30	8				
>30 and 120	5				
>120	Requires Tier 2 Local Agency Management Plan				

Water Quality Policy for Siting, Design, Operations, and Maintenance of Onsite Water Treatment Systems, May 13, 2013 – State Water Resources Control Board.

Onsite Wastewater Treatment Systems that do not meet the Tier 1 regulations as described above and in the Policy provided by SWRCB shall be required to implement Tier 2 requirements, which involves a management program submitted by a local agency. The OWTS must be installed and managed per the requirements of the approved management program. The Local Agency Management Programs may include standards that differ from Tier 1 requirements, such as seepage pits. Local Agency Management Programs must be developed individually on a site by site basis and approved by the Regional Water Board or other authorized local agency.

Water Supply

Water is available in Three Rivers from three sources: river wells, hardrock wells and flumes. Depth to groundwater in the Three Rivers area is generally very shallow as the groundwater elevations in the area is comparatively high. Well logs from known wells in the area show that most wells were drilled to depths 100 to 500 feet, with the remaining wells drilled at less than 100 feet (California Department of Water Resources, 2017). These wells tap water that has been trapped in the cracks and crevices of the granite rock underlying the entire area.

River wells, located close to the river, use water from the sand and gravel strata underlying the river beds which traverses this area. The water services that are connected to the flumes in the area are primarily located in the North Fork area and have existed for many years. Today there are few, if any, new connections being made in the area using this method. The majority of new water systems being installed are either using hardrock or river wells averaging 10 to 20 feet in depth.

In 2016, the Department of Water Resources finalized a detailed report entitled: *Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California* (hereafter the "DWR Study").¹⁹ Among other data, the DWR Study provides a supportable basis for determining current water use within the Plan area. Although the geographic coverage of the DWR Study varies from that of the Plan, with the DWR Study covering a greater area, the vast majority of current residents and businesses exist within the concurrent areas (see Figure 17). As reported by the DWR Study, an estimated 1,273 residential services are located in the area (DWR Study, Table 35). While some residences are located outside of the Plan area but contained within the DWR Study's area, the number is negligible. For purposes of this memo, the DWR Study values are assumed to all be within the Plan area. Using data from a residential water use analysis, the DWR Study determined the average residential water use per connection is 310 gallons per day – translating to approximately 440 acre-feet per year (DWR Study, p. 29).

¹⁹ The DWR Study is available from the County at: <u>http://tularecounty.ca.gov/rma/index.cfm/planning/three-rivers-community-plan-revised/dwr-geology-hydrology-quality-of-water-and-water-supply-of-the-three-rivers-area-california/</u>

The DWR Study did not estimate the water needs of existing non-residential users. However, based upon representations in other foothill communities, the ratio of residential to non-residential use indicates residential use is typically 60% to 80% of the overall demand.²⁰ While the exact ratio in the Plan area is not known, a conservative value for purposes of estimating total existing water use can be developed using this range. If commercial demands are assumed to represent 40% of the total, the estimated Plan area total water use would be approximately 730 acre-feet. If commercial demands are assumed to only represent 20% of the demand, the total water use would be approximately 550 acre-feet.

The higher, more conservative total demand value of 730 acre-feet per year will be assumed for purposes of this memo. This represents an existing residential demand of 440 acre-feet and an existing commercial demand of 290 acre-feet per year.

In the future, these existing water users would be expected to decrease their individual water use as a result of implementing various water conservation measures, installing more water efficient appliances and fixtures over time, and generally adopting a water-conserving mindset.²¹ Some of these drivers are detailed in the next section. However, because the intent of this memo is to assess the availability of water supplies to serve existing and future uses, existing uses are conservatively assumed to see no reduction in the future – instead remaining at the annual estimate of 730 acre-feet.

²⁰ The ratio of residential to non-residential varies by community. But, reporting by urban water suppliers to the State Water Resources Control Board beginning in July 2015 through December 2016 includes representative "percent residential use" listed by each supplier as part of determining residential per-capita water use rates (see http://www.waterboards.ca.gov/water_issues/programs/conservation_portal/conservation_reporting.shtml). Three Rivers also has a tourism industry catering to those visiting the local state and federal parks. These uses would be "non-residential" and likely result in the Three Rivers area having a residential to non-residential ratio closer to the lower end of the range.

²¹ The Governor's May 2016 Executive Order has directed state agencies to push for greater water conservation and for all Californians to make conservation a way of life (see <u>https://www.gov.ca.gov/news.php?id=19408)</u>.



Figure 17 - DWR Study and Plan Area Overlap

To estimate the additional water demands that could result from growth consistent with the Plan's land uses, unique demand factors for future residential and commercial uses need to be developed. There are several considerations that affect the development of unit water demand factors, ranging from state landscape mandates to changes in the plumbing and building codes.

Assuming the unincorporated area annual growth rate assumed by the in the County's General Plan of 1.3 percent, the current number of residences (housing units) increases from 1,273 units to 1,759 units by 2035 – an increase of 486 residential units spread throughout the Plan growth boundary. Although the type of home, occupancy rates, landscaping and other factors affecting water use are unknown, an estimate of the demand for each new residence can be made based upon the conservation factors discussed previously and the following assumptions:

- 1. Occupancy averages 2 people per home (the current occupancy rate is 1.7 people per house, as presented in the DWR Study's review of 2010 census data (DWR Study, p. 17).
- 2. Residential indoor use is based upon 55 gallons per person per day.²²
- 3. Residential outdoor use is equivalent to the indoor use, assuming implementation of new MWELO (e.g. 50% of the total residential demand is for outdoor needs, and 50% is for indoor).
- 4. Non-residential use is equivalent to 40% of the new residential use (consistent with the assumption for existing demand).
- 5. To reflect anticipated new community parks, potential increased tourism activities (restaurant use, hotel and campground stays, etc.), and various distribution system losses,²³ the incremental demand estimate is increased by an additional 25%.

These assumptions result in a conservative estimate for residential use equal to 220 gallons per person per day (compared to the 310-gallon value presented for current residents). If the entire allowed growth were to occur, the potential 486 new residential units would demand approximately 120 acrefeet annually.

Non-residential use would add approximately 48 acre-feet, for a total estimated demand of 168 acre-feet annually. With the conservative addition of 25%, the incremental demand to meet the allowable land use in the Plan is forecast to be 210 acre-feet annually. This would increase the total demand from 730 acre-feet to 940 acre-feet annually, representing a 28% increase in water demand associated with the 38% increase in residences and associated non-residential uses.²⁴

²² The assumed per-person rate of 55 gallons per day is derived from California Water Code Section 10608.20(b)(2)(A), which states a value of 55 gallons per capita (i.e., per person) per day (gpcd) be used for estimating indoor residential use targets.

²³ Often, distribution system losses represent water that is lost due to system leaks, fire protection, unauthorized connections, and inaccurate meters. Essentially, this is the water that is pumped from surface or groundwater sources that does not make it to an end user. In most instances, the predominant source of distribution system losses is from leaks that inevitably exist in pipes and fitting that bring water from the source to an end-user (whether part of a community water system or personal well).

²⁴ Agricultural water use is not included in this analysis and is expected to remain consistent under both the existing and the Plan's with-growth conditions. This memo assesses the impact to water availability associated with the increased municipal demands contemplated by the County's Three Rivers Community Plan.

Domestic and municipal water demands in the Three Rivers area are generally met with groundwater, although some of the existing personal and small community water systems also divert surface water from the Kaweah River or its tributaries as defined in various water rights.²⁵ This is detailed in the previously referenced DWR Study:

"Public water supplies rely on surface water from the Kaweah River for 16 percent of the total demand. Groundwater provides the remaining 81 percent of the water supply through water wells, plus an additional 3 percent from spring water." (DWR Study, p. 28)

Surface and groundwater resources are both dependent on the greater Kaweah River watershed of the Southern Sierra Nevada range. Precipitation falling within the watershed boundaries becomes streamflow in the Kaweah and its tributaries, percolates into fractured bedrock, and fills the alluvial aquifer in the Three Rivers area. The availability of water to serve the existing as well as the plausible residential and non-residential growth contemplated by the Plan is based upon the quantity of precipitation in the watershed, the geologic and hydrogeologic characteristics of the fractured rock and alluvial aquifers, the location, depth and pumping capabilities of wells and diversion facilities, and the timing of supply in relation to demand.

Once again, the DWR Study provides detailed information and analysis that can be utilized for understanding this availability. Specifically, the DWR Study provides a comparative analysis of existing water demands (see prior discussion in Section 2) to the availability of water – especially groundwater – based upon an assessment of groundwater recharge. **Table 31** provides the DWR Study's representation of recharge based upon a detailed analytic process. The primary message from the analysis is the availability of over 50,000 acre-feet of total groundwater recharge within the DWR Study's boundary (see Figure 17) during average precipitation years.

Kaweah River Tributary	Watershed	Area of Watershed	Groundwater Recharge per Watershed (AF)	Groundwater Recharge per Tributary (AF)
	N. Fork Kaweah River	11,722	8,417	
North Fork	Lower N. Fork Kaweah River	7,425 7,901	1,656 1,026	11,100
	Lake Kaweah			
	Marble Fork Kaweah River	8,512	5,544	
Middle Fork		11,326	3,886	9,430
	North Side Lake Kaweah			
	East Fork Kaweak River	8,191	14,889	32,664
East Fork		12,712	17,775	
	Lower East Fork Kaweah River			
	South Fork Kaweah River	5,984	2,461	
South Fork		8,863	1,399	3,860
	Lower South Fork Kaweah River			
Total All Watersheds:		82,636	57,053	57,053

			<u> </u>		
Fable 31 -	Groundwater	Recharge -	Three	Rivers A	rea
	Giounawater	meeninge	Imee	Invers 1	nca

Source: DWR Study

²⁵ For example, Statement of Diversion and Use reports are available at the State Water Resource Control Board's web site (<u>http://ciwqs.waterboards.ca.gov/ciwqs/ewrims/EWMenuPublic.jsp</u>) for S011476, S008181, and S016103 (among others). Most, if not all, are riparian or pre-1914 water right claims to surface water on the Kaweah River and its tributaries.

Importantly, however, the DWR Study also notes, but does not detail, that "[o]n the other hand, periods of extended drought, such as the current four-year drought, would produce a water balance significantly different than that shown above." (DWR Study, p. 30). The DWR Study goes on to speculate that during 2014 and 2015, the water balance may have been negative.

While the recharge versus use may have been negative for a given year or years, the aquifer would generally have stored water or water from prior year's percolation still available. This fact is demonstrated when evaluating the number of wells that failed in the Three Rivers area during the most recent drought period. As documented by the County as part of its monthly assessment and reporting of well conditions throughout the County, as of January 2017, six groundwater wells in the Three Rivers area have been documented by the County as having failed in some manner.²⁶ Reviewing the archived reports between fall 2014 and the most recent 2017 reports, the number of wells reported to the County as failing never exceeded six.

According to the DWR Study, there are over 800 active community and personal wells operating in the Plan area to serve the over 1,200 residences and associated non-residential operations. While concerning, the failure of less than 1% of the wells during the unprecedented drought of the past several years indicates the resilience of the fractured bedrock and alluvial aquifers to meet the vast majority of the existing water demands during extremely dry hydrologic conditions. The limited effect of the drought on water supply availability demonstrates the beneficial magnitude of the differential between the more than 50,000 acre-feet of annual recharge and the existing annual demands of approximately 730 acre-feet.

As presented in Section 2, the future demand is anticipated to be approximately 940 acre-feet annually, which represents less than two percent of the over 50,000 acre-feet of average groundwater recharge in the watershed. On a watershed basis, there is and will continue to be sufficient water supplies recharging the fractured rock and alluvial aquifers to meet the forecast future demands. For purposes of this memo, all new water demands will be met by groundwater resources rather than surface rights.²⁷

The location and characteristics of each new well, however, will have more of a potential impact on the sufficiency and available of water than the overall demands effect on the available quantity of groundwater. To further address this potential availability and sufficiency limitation, this section provides suggested answers to common CEQA impact analysis questions, as well as offers County policies that can provide additional assurance and mitigation mechanisms to ensure future demands are met with no or less than significant impacts on existing water resources and existing water users.

Three Rivers CSD

"The Three Rivers CSD (see Figure 18) is located approximately 11.7 miles east of the City of Woodlake. The District's jurisdictional boundaries encompass a 5,937 acre area that is spread out along Highway 198. The District was formed in 1973 (LAFCO Resolution 73-036, LAFCO Case 459). The District's Active Powers include:

1. Preparation of project reports for sewer systems

²⁶ http://tularecounty.ca.gov/emergencies/index.cfm/drought/drought-effects-status-updates/2017/week-of-january-2-2017/

²⁷ Because new surface rights are difficult to obtain, and use of surface water for domestic water use would likely require treatment, the future water demands would be expected to be met with individual wells or new or expanded small community system wells, either relying on the existing aquifer systems.

- 2. Trash pick up
- 3. Monitoring of potable water sources
- 4. Monitoring of individual septic systems"²⁸

According to BOS Resolution 73-2662, the District's Latent Powers include:

- Provision of water for various uses
- Collection and disposal of refuse matter
- Operation of recreational facilities
- Street Lighting
- Maintain and equip a police force
- Acquire facilities for public use
- Maintenance/improvement of roads
- Flood Protection

The TRCSD was formed in 1973 (BOS Resolution 73-2662). It consists of 5,397 acres. The Three Rivers CSD provides service outside of its boundaries. The additional area serviced by the CSD is considered sparsely populated. A Sphere of Influence (SOI) has not been established for the CSD. The Three Rivers CSD boundaries contain approximately 1,350 parcels (the number of residential units is used to determine number of customers). The District has indicated that it plans to expand its jurisdictional boundaries to include the South Fork Estate Development. As mentioned above; however, subdivision proponents have not sought approvals from Tulare County RMA.

The District's web page lists the following as service provided by the TRCSD:

- Frequent monitoring or rivers and wells
- Provide low cost drinking water testing
- No charge septic system inspections
- Responds to environmental complaints (site is tested if not monitored already)

All landowners within the area are considered customers and they are tracked according to assessors parcel number (APN). There are currently 1350 parcels being serviced by the Three Rivers CSD. The Three Rivers CSD reported no infrastructure deficiencies. The District does not plan to expand or acquire new infrastructure in the foreseeable future.

The upgrade and maintenance of equipment and supplies or capacity expansion associated with district services does not require costly capital expenditures like those associated with sewer or potable water service. Additionally, equipment and supplies used to provide services are not susceptible to sudden failure or being compromised in any other way. The Tulare County LAFCO 2011 Municipal Service Review determined that the District's facilities and infrastructure are in adequate condition and that the District's current capacity is sufficient to serve the District's existing population. LAFCO further determined that future increased demand can be accommodated in a timely and adequate manner based on the limited services the District provides.

²⁸ Group 4 MSR, page 9-1


Figure 18 - Three Rivers CSD

State Responsibility Area (SRA) Fire Safe Regulations (Title 14- Natural Resources Division 1.5-Department of Forestry Chapter 7- Fire Protection Subchapter 2 SRA Fire Safe Regulations Articles 1-5)

SRA regulations have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRA. These measures provide for emergency access; signing and building numbering; private water supply reserves for emergency fire use; and vegetation modification. These regulations do not apply to existing structures, roads, streets and private lanes or facilities. These regulations apply as appropriate to all construction within the SRA approved after January 1, 1991, **(see Figure 19)** SRA Zones.



Figure 19 - Three Rivers SRA Fire Safe Areas

Storm Drainage

"A storm drainage system is designed to drain excess rain and groundwater (from roads, sidewalks, etc.) to some point where it is discharged into a channel, ponding basin, or piped system. The system itself typically consists of pipes connecting inlets and is facilitated by curbs and gutters, manholes, and sumps. The operation of the system consists of runoff being collected in the inlets and transported by pipes to a discharge location. Manholes provide access to storm drain pipes for inspection and cleanout. A sump is a shallow, artificial pond designed to infiltrate storm water through permeable soils into the groundwater aquifer. It does not typically discharge to a detention basin.

Storm drainage systems should be designed so they have adequate capacity to accommodate runoff that enters the system for the design frequency and should also be designed considering future development. An inadequate roadway drainage system could result in the following:

- ✓ Water overflowing the curb and entering adjacent property leading to damage.
- ✓ Accelerated roadway deterioration and public safety concerns may occur due to excessive water accumulation on roadways.
- ✓ Over saturation of the roadway structural section due to immersion will lead to pavement deterioration."²⁹

Three Rivers does not currently have a community wide storm drainage system.

Solid Waste

Solid waste collection in the Three Rivers area is provided by Mid Valley Disposal, which has a license with the County of Tulare. Tulare County operates two active landfills: Visalia and Teapot Dome. The Visalia landfill has enough capacity to provide at least 140 years (2014-2154) of disposal capacity.

Assembly Bill 939 requires cities and counties to reduce their solid waste volumes by 25 percent by 1995 and 50 percent by the year 2000. To achieve this reduction in volume, AB 939 requires local entities to engage in waste characterization; source reduction; recycling; composting; solid waste facility capacity; education and public information; funding; special waste (asbestos, sewage sludge, etc.); and household hazardous waste. The County is also required to prepare Source Reduction and Recycling Elements (SRRE) for its unincorporated area, with the same components described above, and a countywide siting element, specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the jurisdiction which cannot be reduced or recycled for a 15 year period.

Public Services

The Public Services the County provides to the Three Rivers Community includes policing (sheriff), fire protection, recreation, schools, and libraries. The Community Plan addresses these services below and discusses the operation of the facilities within and outside the Community.

Tulare County Sheriff

Police protection services are provided in Three Rivers by the Tulare County Sheriff's Department main Sheriff's Office located at 2404 W. Burrel Avenue, in Visalia, approximately 30 miles west of

²⁹ Tulare County Housing Element – Action Program 9, pages 4-2 to 4-3

Three Rivers. The Tulare County Sheriff's Department has a resident deputy serving the rural population of Three Rivers. The resident deputy works one shift five days week. Presently the sheriff's department does not maintain a substation in Three Rivers. After hours law enforcement response to the community is dependent on request for service. Response times from the Valley floor are dependent on officer availability, call volume, and physical distance.

Tulare County Fire Department

Fire protection and emergency medical services are provided for Three Rivers by the Tulare County Fire Department. There is a Tulare County fire station in Three Rivers located near the intersection of State Route 198 and South Fork Drive. The station is presently equipped with a 750 gallon pumper, is staffed by one firefighter, and is supported by 10 volunteers. This fire station provides a full range of structural fire protection as well as wildland fires. Community response time varies from one minute on a fairly flat terrain to three minutes on steeper terrain.

Hammond fire station, a state operated fire station, is located near the intersection of Mineral King Road and State Route 198. The fire station is designed primarily to fight wildland fires, but will respond to structural fire if firefighting personnel is available. This station is equipped with three wildland trucks, one 280-gallon truck and two 650 gallon trucks. During the summer season, the station is staffed by 8 to 9 firemen and 5 firemen during the winter season.

Water pressure from the Alta Acres Community Service District and the South Kaweah Mutual Company water systems is adequate to meet the residential fire flow requirements of 500 GPM during a two-hour period.

Water lines in the other water systems in Three Rivers are too small (2-3 inches) to provide adequate water pressure to meet the minimum fire flow requirements of 500 GPM.

Twleve fire hydrants (see Table 32) are found within Three Rivers. These fire hydrants are located within the County right-of-way. Figure 20 displays Existing Fire Hydrants in Three Rivers.

Table 32 - Existing Fire Hydrants in Three Rivers			
No.	Location		
1	Sierra Drive north of US Post Office/Serrano's Restaurant		
2	Sierra Drive north of Three Rivers Drug Store		
3	Quail Run Drive east of Fork Drive		
4	Quail Run Drive west of Black Oak Drive		
5	Quail Run Drive and Black Oak Drive		
6	Black Oak Drive north of Quail Run Drive		
7	Black Oak Drive and Corral Drive		
8	Corral Drive east of Black Oak Drive		
9	Black Oak Drive north of Corral Drive		
10	Black Oak Drive north of Corral Drive		
11	Black Oak Drive north of Quail Run Drive		
12	Black Oak Drive north of Quail Run Drive		



Figure 20 - Inventory of Fire Infrastructure in Three Rivers

Schools

Schools are an especially important component of a community. Not only do they provide educational services to our children, but the physical facilities of the schools also serve the community at large.

The quality of residential development is often measured by whether schools exist in close proximity to the neighborhood. As a result, schools are often a gravitational factor in attracting residential development to certain areas of a community.

"A total of 48 school districts provide education throughout Tulare County of the 48 school districts, seven are unified districts providing educational services for kindergarten through 12th grade. The remaining 41 districts consist of 36 elementary school districts and four high school districts."³⁰

The Three Rivers Union School lies within the Three Rivers

Union School District. The school is located on a 9.14-acre parcel of land at 41932 Highway 198. It offers Kindergarten through 8th grade education and has a 2016-2017 enrollment of 140 students **(see Table 33)** Three Rivers Student Enrollment 2000-2017, School enrollment has been variable since 2000, but has generally decreased from a high of 232 students in 2000 to 140 students in 2017. The current design capacity of the school is for 300 students. One class is available for each grade level. The existing facilities are dated, but state modernization plans have been approved and the school is currently in line for state modernization funding. The students are offered a variety of supplemental activities in varied curriculum areas: science & technology, language arts, writing, art, and other areas. High School students are bussed to Woodlake Union High School.

Table 33 - Three Rivers Student Enrollment 2000-2017				
Year	Enrollment	Change		
2000-2001	232			
2001-2001	222	-10		
2002-2003	205	-17		
2003-2004	181	-24		
2004-2005	192	+9		
2005-2006	187	-5		
2006-2007	164	-23		
2007-2008	164	0		
2008-2009	162	-2		
2009-2010	157	-5		
2010-2011	158	+1		
2011-2012	138	-20		
2012-2013	142	+4		
2013-2014	155	+13		
2014-2015	143	-12		
2015-2016	143	0		
2016-2017	140	-3		

Source: California Department of Education DataQuest Enrollment Reports

Community public facilities services are an essential part of the quality of life in Three Rivers. High quality schools and recreation facilities contribute to creating a selfsustaining, healthy community with a sense of identity and character. It is important to maintain these facilities in the future to ensure a high quality environment for all residents and for future generations of Three Rivers residents.

³⁰ General Plan Background Report, pages 7-75 and 7-76

The school also owns a 14 acre parcel on North Fork Drive which it is currently using for environmental studies for grades 4 through 8. Because of sufficient capacity of the Three Rivers Union School and the fact that population growth in Three Rivers has leveled off within the past decade student enrollment is leveling off, it appears that the additional 14 acre site may not be needed for expansion purposes within the next 20 years (see Figure 21).





Libraries

"The Tulare County Public Library System is comprised of interdependent branches, grouped by services, geography and usage patterns to provide efficient and economical services to the residents of the county. At present, there are 14 regional libraries and one main branch."³¹ Three Rivers' Branch

Table 34 - Library Location & Hours				
Branch	Address	Service Hours (2017)		
Three Rivers	42052 Eggers Dr. Three Rivers, CA 93271-0216	Tuesday: 12 pm - 5 pm, 6 pm - 8 pm Wednesday: 10 am - 1 pm, 2 pm - 6 pm Thursday: 12 pm - 5 pm, 6 pm - 8 pm Friday: 10 am - 1 pm, 2 pm - 6 pm Saturday: 10 am - 1 pm, 2 pm - 5 pm		

Library hours current as of September 2017

Library information is shown on Table 34.

"On December 10, 1910, at the written request of ten Three Rivers residents, a County Library deposit station was set up in the River Inn Hotel. The entire library collection was lost when the Inn was destroyed by fire in September, 1911. In 1912, the Three Rivers Branch reopened in the home of Mrs.

³¹ General Plan Background Report, page 7-96

J. S. Silverton. The same year, the Kaweah Branch opened in the home of Mrs. Laura Hopping. And in December 1918, the Hammond Branch was established with Mr. Lawrence Hough as custodian. In 1928 the Hammond Powerhouse was shut down and the Hammond Branch was closed. In June, 1959 the Three Rivers Branch was moved to the Wylie Building on Highway 198. The Kaweah and Three Rivers Branches were consolidated at this location in 1960. The present library building (see Figure 22) was built by the County and opened to the public on August 1, 1977."³²



Figure 22 - Three Rivers Library

³² http://www.tularecountylibrary.org/threeriversbranch.html

Parks & Recreation

Recreation is essential for the physical, emotional, moral, health and well-being of the individual and society as a whole. Public recreation areas, those areas to be used by the public for active or passive recreation purposes, are limited in Three Rivers. In general, active recreation involves those activities which require some degree of physical exertion such as swimming, fishing, hunting and dancing. Passive recreation involves the quieter and less physical activities such as music, picnicking, and nature study.

Community residents have expressed a need and an interest for many years in public recreation facilities and public restrooms within the community, particularly when Sequoia and Kings Canyon National Parks reaches capacity during the summer holiday weekends. There are no County owned/operated public parks in Three Rivers, but based on the significant interest in the community, research is being conducted to determine the feasibility of funding public restrooms and-or park facilities. The nearest parks are the Slick Rock Recreation Area located adjacent to SR 198, just above Lake Kaweah and just below the community of Three Rivers and the Cobble Knoll recreation area. There is a 1-mile hiking trail between Cobble Knoll recreation area and Slick Rock recreation area.

The community's primary public recreation facility is located at the Three Rivers Elementary School. The athletic grounds of the local school serves as playing fields during after-school hours. A tot lot playground operated by the Three Rivers CSD is available for public use and is located behind the Three Rivers Library.

There is a private 9-hole golf course, located in the community. This golf course is located near the Village Market commercial area of Three Rivers on the west side of State Route 198, but it is currently closed.

THREE RIVERS CIRCULATION SYSTEM

Existing Circulation and Traffic Conditions

Three Rivers is a small community and the most heavily traveled roadway is State Route 198. **Figure 23** shows the Three Rivers Community Plan major street and highway network of existing roads. The Community Plan circulation element includes a map specifying the type and location of major streets and highways together with goals and policies determined appropriate for establishing and maintaining this circulation system.

Three Rivers circulation system is comprised of one principal arterial (State Route 198), five collectors North Fork Drive, Dinely Drive, Kaweah Drive, South Fork Drive, Mineral King Road. and the private road built by the Edison Company) and numerous minor streets (such as Alta Acres Drive, Cherokee Oaks Drive, Pierce Drive, etc.).

Three Rivers is essentially bisected by State Route 198, a principal arterial, which traverses the community in a southwest-northeast direction, and is a two-lane highway, with one lane in each direction.

North Fork Drive, a collector street, bisects the northwest portion of the planning area in a north-southeast direction. It is a narrow two-lane road with a modest elevation gain that is relatively flat at the southern end of the facility. South Fork Drive, a collector street, bisects the southeastern portion of the community in a northwestsoutheast direction. It also is a narrow two-lane road. The County maintains a portion of South fork Drive from its intersection with State Route 198 south past the intersection of Blossom Drive. From that point south, it is privately maintained. Transportation Management in Three Rivers is integral to maintaining the rural character of the community, as well as ensuring public safety and welfare for residents and visitors. Due to its location at the gateway to Sequoia National Park, Three Rivers experiences high volumes of traffic, often at high speeds along Highway 198. Highway 198 is the only means of ingress and egress for the community. Traffic management measures and improvements such as traffic calming shall be utilized to reduce the speed of traffic through the area and to enhance the livability of the community. It is also important to consider the connection between land use and transportation in the community. Locating high intensity, traffic generating uses in close proximity to major roads and transportation corridors will help to minimize traffic impacts throughout the community.

Circulation

Functional classification is the process by which streets and

highways are grouped into classes, or systems, according to the type of service they are intended to provide. Fundamental to thisprocess is the recognition that individual streets and highways do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. The following are general descriptions of the roadway types shown in the Three Rivers

Community:

State Freeways and Highways – There is one state facility serving the Three RiversCommunity Area, State Highway 198. The segment of State Highway 198 (Sierra Drive), which passes through the Planning Area, is classified as a principal arterial.

Collectors – Five (5) roads within the Three Rivers Community area are currently designated as county collector roads. Those roads include, North Fork Drive, Dinely Drive, Kaweah Drive, South Fork Drive, Mineral King Road. The primary function of collector roads is to collect and distribute

traffic between local streets and the arterial roadway system. They generally provide access and movement between residential, commercial, and industrial areas.

Local Streets – Roadways which provide access to individual homes and businesses. Local streets have one lane in each direction. Local streets connect single family homes and other uses not appropriate adjacent to major roadways, to the arterial-collector network. All of the roadways in the Three Rivers Community that are not listed above would be classified as a local street.

Tulare County General Plan Level of Service Standards

"Level of Service (LOS). Operational analyses typically focus on intersections rather than road segments since the capacity of the intersections is usually more critical than the capacity of the roadway. LOS is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions."³³ Tulare County General Plan Policy **TC-1.16** establishes county level of service (los) standards which provide that the County shall strive to develop and manage its roadway system (both segments and intersections) to meet a LOS of "D" or better in accordance with the LOS definitions established by the Highway Capacity Manual (see Tables 35 and 36).

³³ Tulare County General Plan, 2008 Goals and Policies Report, page 12-1.

Table 35 - Uninterrupted Traffic Flow Facilities			
LEVEL OF SERVICE	DEFINITION		
A	Describes free-flow operations. Free-Flow Speed (FFS) prevails on the freeway, and vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed.		
В	Represents reasonably free-flow operations, and FFS on the freeway is maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents and point breakdowns are still easily absorbed.		
С	Provides for flow with speeds near the FFS of the freeway. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service quality will be significant. Queues may be expected to form behind any significant blockages.		
D	At this level speeds begin to decline with increasing flows, with density increasing more quickly. Freedom to maneuver within the traffic stream is seriously limited and drivers experience reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.		
Е	Describes operation at capacity. Operations on the freeway at this level are highly volatile because there are virtually no useable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. Any disruption to the traffic stream, such as vehicles entering from a ramp or changing lanes, can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown and substantial queuing, the physical and psychological comfort afforded to drivers is poor.		
F	 Describes breakdown, or unstable flow. Such conditions exist within queues forming behind bottlenecks. Breakdowns occur for a number of reasons: Traffic incidents can temporarily reduce the capacity of a short segment, so that the number of vehicles arriving at a point is greater than the number of vehicles that can move through it. Points of recurring congestion, such as merge or weaving segments and lane drops, experience very high demand in which the number of vehicles arriving is greater than the number of vehicles that can be discharged. In analyses using forecast volumes, the projected flow rate can exceed the estimated capacity of a given logation. 		

Table 36 - Interrupted Traffic Flow Facilities					
LEVEL OF	DEFINITION				
SERVICE					
А	Describes operations with a control delay of 10 s/veh or less and a volume-to- capacity ratio				
	no greater than 1.0. This level is typically assigned when the volume-to- capacity ratio is low				
	and either progression is exceptionally favorable or the cycle length is very short. If it is due				
	to favorable progression, most vehicles arrive during the green indication and travel through				
D	the intersection without stopping.				
В	Describes operations with a control delay between 10 and 20 s/veh and a volume-to-capacity				
	ratio no greater than 1.0. This level is typically assigned when the volume-to- capacity ratio is				
	than with LOS A with reasonably unimpeded travel between intersections				
С	Describes operations with control delay between 20 and 35 s/yeb and a volume-to- capacity				
C	ratio no greater than 1.0. This level is typically assigned when progression is favorable or the				
	cycle length is moderate. Individual cycle failures (i.e.one or more queued vehicles are not able				
	to depart as a result of the insufficient capacity during the cycle) may begin to appear at this				
	level. The number of vehicles stopping is significant, although many vehicles still pass through				
	the intersection without stopping. May be longer queues and operations between locations may				
	be more restricted.				
D	Describes operations with control delay between 35 and 55 s/veh and a volume-to- capacity				
	ratio no greater than 1.0. Travel speeds are about 40 percent below free flow speeds. This level				
	is typically assigned when the volume-to-capacity ratio is high and either progression is				
	neffective of the cycle length is long. Many vehicles stop and individual cycle failures are				
F	Describes operations with control delay between 55 and 80 s/yeb and a volume-to-capacity				
L	ratio no greater than 1.0. This level is typically assigned when the volume-to- capacity ratio is				
	high, progression is unfavorable, and the cycle length is long. Individual cycle failures are				
	frequent. Average travel speed is one-third of free flow speeds. The facility is generally at full				
	capacity.				
F	Describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio				
	greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high,				
	progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.				
	Extremely slow speeds with average delay of 80 seconds or more. Frequent stop and go				
	conditions.				

Patterns of Blocks and Streets

The prominent curvilinear pattern of County roads provides access primarily to residential properties off of the SR 198 corridor.. As a result the County roadway system complements access to and from SR 198.

County Maintained Roads

The total mileage of maintained County roads is reported by the State of California Department of Transportation (Caltrans) to the State Controller on a monthly basis reflecting changes for State actions such as relinquishment of State Highways to the County. The Streets and Highways Code provides for the County to make annual updates for changes such as adding new roads resulting from subdivisions, and removing roads as a result of city annexations, maintenance agreements and abandonments. The County currently maintains approximately 3,000 miles of roadways in the County and 34 roads in Three Rivers which are listed below in **Table37**.

Table 37 - County Maintained Roads in Three Rivers			
Alta Acres	Ferndale Drive	Oaks Drive	
Black Oak Drive	Grouse Drive	Oak Grove Drive	
Blossom Avenue	Hammond Drive	Oakridge Drive	
Cherokee Oaks Drive	Heidi Drive	Old Three Rivers	
Craig Drive	Kaweah Drive	Pierce Drive	
Crest Lane	La Cienega Drive	Quail Drive	
Crystal Drive	Manzanita Drive	Quail Run Drive	
Dineley Drive	Meadow Drive	Skyline Drive	
Eggers Drive	Mineral King Road	Sierra King Drive	
Elk Drive	Mynatt Drive	South Fork Drive	
Encina Drive	North Fork Drive	Sunset Drive	
		Terminus Court	

Roadway Conditions

As indicated in the Tulare Housing Element – Action Program 9 document, "There are various roadways in Three Rivers (see Table 38) that are in need of repair. Over time, roadway pavement can become damaged or begin to fail due to fatigue, aging, or surface abrasion. The binding agent within road pavement becomes rigid and less flexible as time passes and the surface of the pavement may start losing aggregates. If timely maintenance does not occur, potholes will start to occur within the road.

If the road is still structurally sound, a bituminous surface treatment, such as a chip seal or surface dressing can prolong the life of the road at low cost. Such repairs are considered medium if the maintenance strategy consists of:

✓ Chip seal - surface treatment in which the pavement is sprayed with asphalt and then immediately covered with aggregate and rolled. Chip seals are used primarily to seal the surface of a pavement with cracks not associated with heavy loads.

Some roadways require more extensive repairs such as resurfacing, grinding, remix and or reconstruction. These repairs are considered major if the maintenance strategy consists of:

- ✓ Grind and remix process by which construction materials are recycled and reused to add structure to roadways;
- ✓ Overlay resurfacing operation consists of grinding off selected areas of old asphalt, patching any potholes, placing a fabric (in some cases), placing and compacting hot mix asphalt pavement, and adjusting any street hardware;
- ✓ Asphalt reconstruction consists of excavating the entire roadway, placing and compacting rock beneath the roadway, and placing and compacting hot mix asphalt; and
- ✓ Cold mix reconstruction similar to asphalt reconstruction except cold mix asphalt is used. It is commonly used as patching material and on lower volume service roads.

Table 38 - Road Maintenance Strategies					
No.	Roadway Limits		Repair Code		
1	Black Oak Drive	Quail Run Drive to north end	CHIP		
2	Blossom Drive	Old Three Rivers to east end	CHIP		
3	Cherokee Oaks Drive	Crystal Drive (east connection) to Meadow Drive	CHIP		
4	Craig Drive	Skyline Drive to north end	CHIP		
5	Crest Lane	Sierra King Lane to north end	CHIP		
6	Crystal Drive	Cherokee Oaks Drive (west connection) to Cherokee	CHIP		
		Oaks Drive (east connection)			
7	Dinely Drive	SR 198 to north end	CHIP		
8	Elk Drive	Cherokee Oaks Drive to south end	CHIP		
9	Ferndale Drive	Grouse Drive to west end	CHIP		
10	Grouse Drive	Ferndale Drive to south end	CHIP		
11	Hammond Drive	Mineral King Road to Oak Grove Drive (east	CHIP		
		connection)			
12	Heidi Drive	South Fork Drive to south end	CHIP		
13	Kaweah Drive	North Fork Drive to east end	CHIP		
14	La Cienega Drive	Alta Acres Drive to south end	GRX		
15	Manzanita Drive	Skyline Drive to north end	CHIP		
16	Meadow Drive	Quail Drive to Cherokee Oaks Drive	CHIP		
17	Mineral King Road	SR 198 to Sierra King Drive	GRX		
18	Mineral King Road	Sierra King Drive to 0.35 miles east of Oak Grove	CHIP		
	-	Drive			
19	North Fork Drive	SR 198 to 4+ miles north	CHIP		
20	Oak Drive	Skyline Drive to south end	CHIP		
21	Oak Grove Drive	Hammond Drive to south end	CHIP		
22	Oak Grove Drive	Mineral King Road to south end	CHIP		
23	Oak Ridge Drive	West end to east end	CHIP		
24	Old Three Rivers Road	Blossom Drive to South Fork Drive	CHIP		
25	Pierce Drive	SR 198 (south connection) to SR 198 (north	CHIP		
		connection)			
26	Quail Run Drive	South Fork Drive to east end	CHIP		
27	Sierra King Drive	Mineral King Road to Crest Lane	GRX		
28	Sierra King Drive	Crest Lane to Hammond Drive	CHIP		
29	Skyline Drive	Oak Drive to Craig Drive	CHIP		
30	Skyline Drive	Craig Drive to east end	GRX		
31	South Fork Drive	Old Three Rivers Road to Quail Run Drive	CHIP		
32	South Fork Drive	Blossom Drive to Heidi Drive	GRX		
33	South Fork Drive	Heidi Drive to 1 mile east	CHIP		
34	Terminus Court	Ferndale Drive to south end	OLAY		

OLAY – overlay resurfacing operation CHIP – chip seal

ACST – asphalt reconstruction RCST – cold mix reconstruction

GRX – grind and remix

(Source: County of Tulare Public Works, 2012)



Regional access is available using State Route 198. This highway connects Three Rivers with Visalia, Exeter, and Woodlake to the west.

<u>Pedestrian Traffic (Sidewalks and Americans With Disabilities Act (ADA) Curb</u> <u>Ramps)</u>

Pedestrian facilities include sidewalks, walkways, crosswalks, signals, lighting, and benches, among other items. Sidewalks are typically separated from a roadway by a curb and are designed to accommodate pedestrian travel. They improve mobility for those with disabilities and are also an important part of walking routes to schools. They provide the space for pedestrians to travel within the right-of-way while being separated from vehicles and bicycles. Where such facilities exist, people will be much more likely to make shorter trips by walking rather than by vehicle. "Sidewalks are typically separated from a roadway by a curb and accommodate pedestrian travel. They improve mobility for those with disabilities and are also an important part of walking routes to schools. They provide the space for pedestrians to travel within the public right-of-way while being separated from vehicles.

<u>Sidewalks</u>

Community wide sidewalks are not present in Three Rivers due to the rural context sensitive nature of the community and corresponding improvement standards which typically do not require the development of sidewalks in rural areas of the County. Some sidewalks are, however, present in some of the commercial areas such as the Village Market area and along some of the businesses in the North Fork commercial area. Most of these sidewalks are immediately adjacent to the businesses as opposed to being located as part of the road network.

The 2010 California Building Code identifies a clear width minimum of 48 inches for sidewalks. This clear width minimum is the walkway width that is completely free of obstacles and not necessarily the sidewalk width. However, the 48 inch minimum does not provide sufficient passing space or space for two-way travel. Therefore, the guidelines state that for sidewalks less than 5 feet in clear width, passing lanes (wide enough for wheelchairs) shall be provided at 200-foot intervals. However, the clear width may be reduced to 3 feet if the enforcing agency determines that compliance with the 4-foot clear sidewalk width would create an unreasonable hardship due to right-of-way restrictions, natural barriers, or other existing conditions."³⁴

ADA Curb Ramps

"The Americans with Disabilities Act (ADA) of 1990 included design requirements for persons with disabilities in the public rights-of-way. Curb ramps are an important part of making sidewalks and street crossings accessible to people with disabilities (especially those who use wheelchairs). An ADA compliant curb ramp is a short ramp cutting through or built up to a curb. It consists of the ramp itself which is sloped to allow wheelchair access from the street to the sidewalk and flared sides that bring the curb to the level of the street."³⁵

Curb ramps are most typically found at intersections, but can also be located near on-street parking, transit stations and stops, and midblock crossings. Title II regulations require curb ramps at existing and new facilities.

³⁴ Tulare County Housing Element – Action Program 9, Page 17-6

³⁵ Tulare County Housing Element – Action Program 9, page 17-6

The health benefits from walking and bicycle riding include increased overall health, and a reduction in air quality and greenhouse emissions. According to the Caltrans accepted Victoria Transport Policy Institute, walking has a \$.25 per mile health benefit, while the cost of Greenhouse Gas (CO2e) reductions is \$23 per ton. According to the Federal Highway Administration, sidewalks reduce incidences (with vehicles) to pedestrians by over 80%.³⁶

Street Lights

"Street lights are typically located at the edge of roadways on top of utility poles. They are illuminated at night and improve the visibility and safety of the roadway and sidewalk by increasing motorist visibility and improving nighttime pedestrian security. They can also reduce nighttime pedestrian crashes by increasing the awareness of drivers relative to pedestrians.

Table 39 identifies the location of existing street lights that are maintained by Tulare County, in Three Rivers, as well as their specifications. Figure 3-1 also displays this information graphically. The below table specifies the locations, the pole number, lumens, pole type, arm direction and utility provider. Pole numbers can be arbitrary and are used to match the pole specifications with its location. Lumens measure the amount of light emitted from the bulb (the more lumens the brighter the light). The pole type "W" represents a wood post for which the light is commonly shared with a Utility provider. Similarly, "M" represents metal and "C" represents concrete."

Table 39 - Existing Street Lights								
No	East-West Roadway	North-South Roadway	Location	Pole	Lumens	Pole Type	Arm Direction	Utility
1	North Fork Drive	North of bridge	North side	4417189E	5800	W	S	SCE
2	North Fork Drive	SR 198	SE Corner	4334777E	5800	W	N	SCE
3	North of North Fork Drive	SR 198	South side	N/A	5800	W	N	SCE
4	North of North Fork	SR 198	North side	4629209E	5800	W	N	SCE
5	North of North Fork Drive	SR 198	North side	N/A	N/A	N/A	S	SCE
6	South of Eggers Drive	SR 198	North side	4464488E	9500	W	S	SCE
7	South of Eggers Drive	SR 198	North side	4354778E	5800	W	S	SCE

(Source: Tulare County Public Works, March 2013)

Traffic Impact Study (TIS)

A TIS has been prepared for the purpose of analyzing traffic conditions related to the Three Rivers Community Plan Update. The TIS provides a policy framework to address potential traffic impacts encountered in the planning process. The TIS shall be used as a guide for establishing land use patterns that minimize traffic impacts on the community and shall include measures and solutions to address existing and foreseeable traffic conflicts.

Existing Traffic Conditions

The first step toward assessing Project traffic impacts is to assess existing traffic conditions. Existing AM and PM peak hour turning movements were collected at each study intersection by National Data and Surveying Services. Intersection turning movement counts were conducted for the Saturday afternoon peak hour period of 11:00 AM-3:00 PM for all key intersections on Saturday July 30, 2016. The traffic counts were conducted during fair weather conditions during the height of the tourist

³⁶ <u>http://www.dot.ca.gov/hq/tpp/offices/eab/benefit_cost/LCBCA-economic_parameters.html</u>

season at Sequoia National Park. Average Daily Traffic volumes (ADT) for study roadway segments were also conducted by National Data and Surveying Services on Saturday, July 30, 2016. Traffic count data worksheets are provided in Appendix B of the TIS.

Major street and highway intersections and segments in the Three Rivers Community were analyzed to determine levels of service utilizing HCM-based methodologies. The study intersections and street and highway segments included in this TIS are listed below:

Intersections

- 1. SR 198 (Sierra Drive) / Village Market Southern Driveway
- 2. SR 198 (Sierra Drive) / Valley Oak Credit Union Driveway
- 3. SR 198 (Sierra Drive) / Village Market Northern Driveway
- 4. SR 198 (Sierra Drive) / North Fork Drive

Roadway Segments

- 1. SR 198 (Sierra Drive) between Pierce Drive and Old 3 Rivers Road
- 2. SR 198 (Sierra Drive) between Old 3 Rivers Road and South Fork Drive
- 3. South Fork Drive south of SR 198 (Sierra Drive)
- 4. North Fork Drive north of SR 198 (Sierra Drive)
- 5. SR 198 (Sierra Drive) between North Fork Drive and Eggers Drive
- 6. SR 198 (Sierra Drive) between Eggers Drive and Alta Acres Drive
- 7. SR 198 (Sierra Drive) between Alta Acres Drive and Skyline Drive
- 8. SR 198 (Sierra Drive) south of Canyon View Drive

Traffic Conditions

The peak hour factor used for Existing conditions was determined from the existing counts. Heavy vehicle percentages were applied as follows and are based on the HCM default, traffic counts, or Caltrans' parameters:

- SR 198 9% (Caltrans' TCR shows 9% truck trips in the study area except between
- Mineral King Road and Sequoia Park, which is 6%),
- All other roadways 3%

Results of the analysis show that all of the study intersections are currently operating at acceptable levels of service during the Saturday peak hour. Table 2-1 shows the intersection LOS for the existing conditions.

Roadway Segment Capacity Analysis

Results of the ADT and peak hour LOS segment analysis along the existing street and highway system are reflected in Table 2-2 of the TIS. It should be noted that the peak hour segment volumes shown in Table 2-2 reflect the worst hour from the 24-hour counts that were collected in the study area. Roadway segment analysis was based on the Florida Department of Transportation, Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas (Non-State Roadways, Major City/County Roadways), which are commonly utilized in the central valley. Results of the analysis show that all of the study roadway segments are currently operating at acceptable levels of service.

Queuing Analysis

Table 2-3 of the TIS provides a queue length summary for the study intersections for the Existing scenario. Traffic queue lengths at an intersection or along a roadway segment assist in the determination of a roadways overall performance. Excessive queuing at an intersection increases vehicle delay and reduces capacity. If a dedicated left turn lane doesn't provide adequate storage, vehicles will queue beyond the left turn storage pocket and into other travel lanes, thus increasing vehicle delay and reducing capacity. The queuing analyses is based upon methodology presented in Chapter 400 of Caltrans' Highway Design Manual (HDM). Appendix C includes Chapter 400 of Caltrans' HDM. The queue results shown in Table 2-3 represent the approximate queue lengths for the respective lane movements.

The Sequoia National Park entrance is located approximately a third of a mile north of the Buckeye Tree Lodge and Gateway Restaurant and Lodge area. It is not uncommon for traffic to back up from the Park entrance to the lodge area during the height of the tourist season. Traffic data collected on July 30, 2016 shows that over 500 vehicles arrive at the Park entrance in a onehour period beginning at 11:45am. That equates to approximately 17 vehicles every two minutes assuming a constant arrival rate. It is therefore reasonable to assume that vehicle queuing can be observed near the Buckeye Tree Lodge area since vehicles have to stop at the booth to pay the entrance fee and/or ask questions. This level of queuing can create access and pedestrian safety issues for patrons of the lodges.

Future Year Traffic Forecasts

To assess the impacts that the adopted Three Rivers Community Land Use Plan may have on the surrounding street and highway segments and intersections, the first step is to evaluate the variation in future year traffic model growth and the historic population growth within the community. The levels of traffic expected in the year 2040 relate to the cumulative effect of traffic increases resulting from the implementation of the General/Community Plans of local agencies. Traffic forecasts in the Three Rivers Community area for Future Year 2040 were provided by Tulare County Association of Government (TCAG) staff. TCAG manages public transportation, biking, streets, highways, air quality, rail, Measure R, congestion, and infrastructure plans & funding in Tulare County. TCAG's Future Year 2040 model exhibited a growth rate of approximately 1.8% in the study area. Traffic projections in Caltrans' SR-198 Transportation Concept Report displayed a growth rate of approximately 1.6% in the study area. Historical growth in the unincorporated portion of Tulare County is approximately 1.3% based on population trends as forecasted in the Tulare County General Plan 2030 Update. In consultation with Tulare County RMA and Caltrans staff it was determined that a growth rate of 1.3% was consistent with the overall growth in the study area and should be used to evaluate Future Year 2040 conditions. The process for determining Future Year 2040 traffic projections can be summarized as follows:

A 1.3% growth rate was applied to existing 2016 peak hour and ADT counts collected in the study area For study area intersections, existing AM and PM peak hour turning movements and the forecasted 2040 roadway segment traffic forecasts were input to the TurnsW32 program and the program calculated 2040 AM and PM peak hour turning movements The resulting Year 2040 traffic volumes were evaluated for consistency with the study area and were manually adjusted as necessary.

The resulting Future Year 2040 traffic as a result of the process described above is shown in Figures 3-2a and 3-2b. The TIS does not include changes or modifications to the adopted Land Use Plan as changes to existing land use designations are not anticipated to be significant. Any future development

project or parcel of land requiring a change in land use would be required to follow California Environmental Quality Act (CEQA) protocol and procedures.

Intersection Capacity Analysis

Table 3-1 in the TIS shows the anticipated level of service conditions at study intersections for the Future Year 2040 scenario. Results of the analysis show that all of the study intersections will meet Caltrans' LOS "D" criteria. Caltrans' SR 198 TCR, dated June 2016, indicates that roadway shoulders shall be constructed along SR 198 in the study area in addition to upgrading/installing guard rails. These are non-capacity increasing operational improvements that will enhance safety along the corridor.

Roadway Segment Capacity Analysis

Table 3-2 shows the anticipated level of service conditions at study roadway segments for the Future Year 2040 scenario. Results of the analysis show that all of the study roadway segments will meet Tulare County's and Caltrans' LOS "D" criteria. As noted above, Caltrans' SR 198 TCR, dated June 2016, indicates that roadway shoulders shall be constructed along SR 198 in the study area in addition to upgrading/installing guard rails. These are non-capacity increasing operational improvements that will enhance safety along the corridor.

Potential Improvements to Address Queuing

The level of queuing experienced at the Sequoia National Park entrance can create issues for patrons of the lodges in regards to access and pedestrian safety. Potential improvements to address the queuing at the park entrance are listed below.

Signage – A greater presence of advance signing can be incorporated to advise motorists that they are approaching the Sequoia National Park entrance and that an entrance fee is required. In addition, warning signs prior to the Buckeye Tree Lodge and Gateway Restaurant and Lodge area may be installed to alert motorists to the presence of pedestrians. Installation of SW24-2(CA), SW24-3(CA), or W11-2 with W16-7P warning signs would minimize vehicle pedestrian conflicts. Pedestrian Blinker-Sign Systems can be incorporated into the design and installation of signage. The Blinker-Sign System provides a high-visibility, real-time warning that pedestrians are crossing the street. Customized signage alerting pedestrians to the presence of vehicles could also be incorporated.

Park Entrance Improvements – Increasing the number of park entrance booths will helpreduce excessive queuing at the park entrance during Saturday peak hours. In general, toll plazas typically use parallel gates (entrance booths) to assist passing motorists. Parallel gates are located side by side and require greater width than tandem gates, which are located along the same lane of travel with some spacing between them. Adding parallel gates to the existing entrance is probably infeasible due to the topography. However, incorporating tandem gates or entrance booths may be feasible given the space that is available downstream or north of the existing booths. Presently, there are two (2) park entrance lanes

and one (1) bypass lane. Tandem gates installed at Grand Canyon National Park showed a 75% increase in lane capacity when a second gate was installed.

The Sequoia and Kings Canyon National Parks recently introduced a new pilot program where visitors can now get their entrance pass online prior to arriving at the parks. Once purchased, electronic passes can be printed or shown on a mobile device for use at the park on the date of purchase or at a specified future date. Park staff at the entrance booth will validate the electronic pass upon presentation at the

park entrance. This system will help reduce queuing at the gate and ultimately minimize vehicles backing up to the lodge area.

Local Business Access along SR 198

SR 198 (Sierra Drive) provides access to numerous businesses in the Three Rivers Community. In particular, the Village Market area located approximately ½ mile north of Old 3 Rivers Road and the area north of North Fork Drive include several businesses utilized by tourists and residents of the community.

Three Rivers Village/Village Market Area

There are three (3) driveways within a 400 feet segment along SR 198 (Sierra Drive) that provide access to the Three Rivers Village and Valley Oak Credit Union. Table 3-1 in the TIS indicates that the three (3) driveways are projected to operate at LOS 'C' under the Future Year 2040 scenario. In addition, Table 3-3 indicates that queuing at the driveways will be minimal and is not anticipated to create any significant impacts.

There is some concern related to pedestrians from the Comfort Inn & Suites walking along andcrossing SR 198 to access the Village Market and Three Rivers Village. The presence of three (3)driveways in the Three Rivers Village/Village Market area in combination with pedestrian conflicts creates realistic safety issues given the narrow shoulders, lack of pedestrian signage, the horizontal curve south of the retail area, and the 40-mph speed limit along SR 198. Caltrans' Highway Design Manual identifies a 'stopping sight distance' of 300 feet and a 'decision sight distance' of 600 feet for 40-mph roadways. A preliminary review of the most southern driveway at the Three Rivers Village/Village Market area indicates that the sight distance from the south is approximately 650 feet. Therefore, the location of the most southern driveway meets sight distance requirements as recommended in Caltrans' Highway Design Manual.

The Three Rivers Village Market area includes approximately 20,000 square feet of retail space with approximately 65 parking spaces. The Institute of Transportation Engineers' (ITE) Parking Generation handbook identifies the need for 55 – 62 parking spaces for 20,000 square feet of retail space in a rural area. Therefore, the existing number of parking spaces (65) are adequate to accommodate the parking demand at the Three Rivers Village/Village Market. In addition, parallel parking has also been observed along the Three Rivers Village/Village Market property frontage along SR 198, which is located approximately 20 feet from the SR 198 southbound travel lane.

Three Rivers Downtown

Presently, there is a row of businesses to the west of SR 198 between North Fork Drive and EggersDrive. Perpendicular Parking for a majority of these businesses is only available along theproperty's frontage which generates safety concerns when motorists exit the site. When exiting The site, motorists must back into SR 198 before proceeding north or south along SR 198. This creates a conflict between motorists traveling along SR 198 and those desiring to exit the businesses adjacent to SR 198. In addition, the visibility of a driver exiting this retail area is limited when parked next to a larger vehicle. During a field reconnaissance of the study area, VRPA staff observed a motorist make several attempts to leave an office building adjacent to SR 198. The existing topography surrounding the row of businesses north of North Fork Drive and the lack of available open space prohibits the development of a 'parking lot'. One possible way to minimize safety issues along SR 198 in this area

would be to reduce the speed limit along SR 198. Caltrans periodically performs "Speed Zone Survey's" to validate the posted speed on state facilities. The last "Speed Zone Survey" performed for SR 198 in the study area was completed in June of 2011. Through the community of Three Rivers there are two contiguous reduced-speed zones. On the west end of Three Rivers, beginning approximately 400 feet west of Pierce Drive, there is a 1.7- mile long 45-mph zone that ends approximately 400 feet of Pierce Drive. From Pierce drive, headed northeast, a 40-mph zone begins and continues for about 3.0 miles to about Dinely Drive. For the 40-mph zone, the 85th percentile data points varied from 40 to 48-mph. The average 85th percentile, also referred to as the "critical speed", was determined to be 45-mph. Therefore, the "Speed Zone Survey" data provided by Caltrans supports the posted speed limit of 40-mph near the Three Rivers Downtown area.

Potential Improvements to Address Safety Issues

The following improvements can be incorporated in the Three Rivers area to address safety issues and concerns discussed above.

Signage – A greater presence of advance signing (warning signs) along SR 198 can be incorporated to advise or alert motorists to the presence of pedestrians ahead. Installation of SW24-2(CA), SW24-3(CA), or W11-2 with W16-7P warning signs are applicable to the Three Rivers Village/Village Market area as well as the Three Rivers 'Downtown' area. Pedestrian Blinker-Sign Systems can be incorporated into the design and installation of signage. The Blinker-Sign System provides a high-visibility, real-time warning that pedestrians are crossing the street. Customized signage alerting pedestrians to the presence of vehicles could be incorporated to minimize vehicle-pedestrian conflicts. Regulatory Signs R1-5 or R1-5a may also be considered.

Crosswalk – Installation of a crosswalk at the southernmost driveway of the Three RiversVillage/Village Market area would assist in alerting drivers to the presence of pedestrians. The crosswalk would be similar to the existing school crosswalk at the Three Rivers Union School District along SR 198. It should be noted that installation of a crosswalk along SR 198 would need to go through Caltrans' evaluation process since SR 198 is a Caltrans facility. All pedestrian facilities proposed within the State highway right-of-way shall comply with Chapter 17 "Encroachments and Utilities," and shall follow the guidance in Chapter 31 "Nonmotorized Transportation Facilities" in the Project Development Procedures Manual.

Future Retail Access – Development of policy that allows one (1) driveway or access point along SR 198 that could serve multiple developments or parcels. This would encourage interconnection of parking lots as well as limit traffic congestion along SR 198. Dedicated Left-Turn Lanes – While the intersection capacity analysis (Section 3.2) does not identify the need for roadway improvements, incorporation of dedicated left-turn lanes should be considered at major intersections/driveways along SR 198. Left-turn lanes remove vehicles waiting to turn left from the through-traffic stream, thus reducing the potential for rear-end collisions. Installation of left-turn lanes also increase the overall efficiency and capacity of an intersection.

Public Transit, Bikeways, and Pedestrian Circulation

The Three Rivers Community has limited transit service and pedestrian and bicycle facilities. Public transit is likely to remain a limited option due to fiscal constraints and the high cost of providing services to a rural and relatively low-density community. Furthermore, the low level of auto congestion in Three Rivers and the surrounding communities, now and into the future suggests that driving will

continue to be more convenient than transit for those with access to a private car. For those without access to a car, the best approach for improving transit in will be to enhance rider information systems that give potential transit patrons precise arrival and departure times for transit and paratransit vehicles. Such real-time information systems, by reducing the uncertainty and time spent waiting, can both increase demand for transit and paratransit and improve riders' overall experience.

With respect to pedestrian and bicycle modes, the current and projected low levels of vehicular traffic in Three Rivers, together with short travel distances within the community, means that these modes can be very competitive for trips within the community, even with minimal facilities. Caltrans' SR-198 Transportation Concept Report, dated June 2016, indicates that bike use is permitted along SR-198 throughout the Three Rivers Community. However, it should be noted that roadway shoulders along SR-198 are generally between 4 - 8 feet.

Numerous Deputy Directives, Assembly Bills, and Senate Bills have been passed in effort to reduce greenhouse gas emissions and improve air quality in California. Complete Streets is a transportation policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation. Designing streets to accommodate all modes of travel will encourage the use of other modes of travel besides the automobile.

Potential Improvements to Enhance Bikeways and Pedestrian Circulation

The following improvements can be incorporated in the Three Rivers area to enhance Bikeways and Pedestrian Circulation throughout the Three Rivers Community.

Signage – A greater presence of advance signing (warning signs) along SR 198 can be incorporated to advise or alert motorists to the presence of pedestrians ahead. Installation of SW24-2(CA) and SW24-3(CA) warning signs are applicable to the Three Rivers Village/Village Market area as well as the Three Rivers 'Downtown' area. Regulatory Signs R1- 5 or R1-5a may also be considered.

Designating Collector roadways within Three Rivers as Class II or Class III Bike Routes may increase bicycle use within the community. Signage and pavement marking consistent with the latest edition of the California Manual on Uniform Traffic Control Devices (MUTCD) should be applied. Five (5) roads within the Three Rivers Community area are currently designated as county collector roads. Those roads include, North Fork Drive, Dinely Drive, Kaweah Drive, South Fork Drive, Mineral King Road. These roads generally provide access and movement between residential, commercial, and industrial areas.

Emergency Access

Three Rivers is located in the Kaweah River Canyon, just above Lake Kaweah, approximately 28 miles east of the City of Visalia. The surrounding terrain is marked by oak woodland forest and foothills. California Department of Forestry and Fire Protection (Cal Fire) adopted Fire Hazard Severity Zone maps for State Responsibility Areas (SRA) in November 2007, which characterizes Three Rivers as a 'High' to 'Very High' fire hazard severity zone. It should be noted that SR 198 is the only public means of ingress and egress for the Three Rivers community, which residents would seek to access in the event of an evacuation. Cal Fire has right-to-pass on fire control roads which connect to North Fork Drive and South Fork Drive that may not be not be open to residents of Three Rivers due to property rights and easements (see Figure 24).

The only other means of ingress and egress for the Three Rivers Community is North Fork Drive and South Fork Drive based upon a review of aerial photos of the area. Along North Fork Drive, approximately 5 miles north of SR 198, there is a fire control road that ultimately connects to SR 216 via Dry Creek Drive. Yokohl Valley Drive can be accessed from South Fork Drive via Mountain Road 276 and other small roads.

Red Cross typically sets up temporary shelters during a disaster which provide meals and medicine to residents of the disaster area. In the event of a wildfire in the Three Rivers community, temporary centers could be set up at the Lions Arena, the Memorial Building, and/or Three Rivers Union School District. The location of the temporary shelter would be dependent upon Cal Fire's assessment of the current situation. Residents in the Three Rivers Community could utilize these temporary shelters in the event they were instructed to evacuate.



Alternative Transportation

<u>Transit</u>

Recognizing the need to provide transportation services to those who are disadvantaged, the County of Tulare provides public transportation services to the elderly, handicapped, low-income, and residents without access to transportation. Public transit is currently available in Three Rivers (see Figure 25). Tulare County Transit Agency (TCAT) operates fixed-route services currently available Monday through Friday on a fixed route bus service. TCAT provides round-trip transportation for Three Rivers residents to Visalia through Ivanhoe, Woodlake, and Lemon Cove . The Northeast Route operates Monday through Friday with one morning and one afternoon pick-up/drop off.³⁷

Per TCAT staff, TCAT offers route deviation up to 3/4 of a mile from the designated bus route in Three Rivers, though this deviation may be limited to ADA soon. The only publically accessible provider that is a common carrier is the Sequoia Shuttle with an unstaffed stop at Three Rivers Memorial Building. The Sequoia Shuttle, operating all summer long, travels to the Sequoia National Park. The shuttle departs from various convenient locations throughout Visalia, Exeter, Three Rivers, and Lemon Cove, Ca. several times a day, seven days a week. Reservations are required and round-trip tickets are only \$15, this includes unlimited shuttle service inside the park. TCAT vehicles are wheelchair accessible and all full size buses include bike racks. As such, public transit is likely to remain a limited option due to fiscal constraints and the high cost of providing services to a community of less than one thousand residents. The low level of auto congestion in Three Rivers, now and as forecasted into the future, suggests that driving will continue to be more convenient in rural communities than the use of transit for those with access to a private car.

³⁷ Tulare County Transit Agency information accessed on June 26, 2015 at: http://www.tularecounty.ca.gov/rma/index.cfm/documents-and-forms/public-works-documents/transportation-documents/tcat-bus-route-schedules-maps-and-fees/route-80-porterville-terra-bella-transit-schedule/



Figure 25 - Northeast Bus Route - Visalia to Three Rivers

Bicycle Facilities

The 2014 Regional Transportation Plan (adopted June 30, 2014) prepared by the Tulare County Association of Governments (TCAG) provides for a regional bicycle network intended to provide a safe alternative mode of travel. The 2010 Tulare County Regional Bicycle Transportation Plan as a proposed Class II Bike Project.³⁸ In Tulare County, bicycle travel is not yet considered a major mode of transportation and bicycles are rarely seen outside of cities and towns. The current Tulare County Bicycle Plan designates SR 198 as a proposed Class II bike facility. The Bike Plan provides for connections between the major urban areas and recreation facilities in the County and is expected to be satisfactory for the foreseeable future.

Investment in bikeways provide an inexpensive environment-friendly transportation opportunity. Bicycling is considered an effective alternative mode of transportation that can help to improve air quality and reduce the number of vehicles traveling along existing highways, especially within the cities and unincorporated communities. While the numbers of cyclists is small in comparison to the amount of auto traffic, the size of the community of Three Rivers means that most local trips can be as fast by bicycle as by car.

³⁸ TCAG Action Element, TCAG 2014 Regional Transportation Plan. Page 3-89.

It should be noted that significant physical considerations related to the alignment of SR 198 due to slope constraints and the Middle Fork of the Kaweah River present challenges regarding capacity enhancement recommendations, bike lanes, or planned operational and safety improvements. At the same time, recommending Class II bike lanes through the community is an integral component of facilitating a complete streets approach within the community. As the Community Plan looks at a 20-year horizon, the Class II bike lane designation would allow for appropriate and more detailed feasibility analysis in the future before 30% plans could be recommended. The Class II designation would also allow for future consideration if funding and or feasibility studies determine that the project could be successfully implemented.

Aviation

The nearest airport providing commercial air transportation services for residents of the Three Rivers community is Visalia Municipal Airport. Visalia Municipal Airport does not have the service demand to economically accommodate large passenger and cargo aircraft and is thus limited to extensive commuter air service. Visalia Municipal Airport (VMA) is located approximately 30 miles west of Three Rivers. VMA provides local charter service, flight schools, agricultural application services, fixed- and rotary-winged parts, maintenance, and repair services, and a U.S. Forest Service fire suppression operation.

Three Rivers previously had an Airport site that existed on a site 850 feet above sea level in a canyon formed by the North Fork of the Kaweah River. The confluence of the North and South Forks and the main body of the Kaweah River are less than a half mile from its southern boundary. Its western boundary is defined by a County access road which runs into private property at the north end of the runway and the floodplain on the North Fork. The eastern margin is bordered by a strip of vacant, flat land which runs along the base of immediately adjacent foothills that rise with varying slopes of 13 to 25 percent. The eastern ridge top is approximately 1,800 feet above sea level. A nearby 2,526 foot peak overlooks the airport's western boundary. As a result of its poor approaches and the overflight of residential areas, the airport has been closed to all but emergency operations (including forest service fire suppression direction flights).

<u>AMTRAK</u>

The Hanford AMTRAK station, located approximately 50 miles to the west in Kings County, is the closest station to Three Rivers providing passenger rail service. The San Joaquin Joint Powers Authority (SJJPA) is comprised of ten agencies (including TCAG) currently oversees the operation of seven daily trains serving this station. Service is provided to points north including San Francisco and Sacramento and to points south including Bakersfield and the Los Angeles basin (via connecting Amtrak Thruway) bus service.

The Need for a Community Plan

<u>Purpose</u>

The purpose of the Three Rivers Community Plan or (Community Plan) or (Plan) or (Community Plan Update) is to preserve and protect the values and assets of the community. The Community Plan is a statement on the fundamental values and a shared vision for the future of the Three Rivers community. Its purpose is to direct and coordinate future balanced planning decisions, and to guide the physical changes while protecting natural resources in Three Rivers. The Plan also describes the desired character of the community, and the quality of future development, as well as the process for how the development should proceed. As the Community of Three Rivers moves into the future, the Community must strive to preserve its historical rural character and valuable natural resources, while rising to new opportunities and challenges.

The Community Plan is an important tool for protecting Three Rivers' assets and character, and guiding future growth and development. Tulare County decision makers will use the Community Plan in considering land use and planning decisions. County staff will use the Plan on a day-to-day basis to administer and regulate land use and development activity. Residents can use the Plan to understand the Community's desired approach to regulating development, protecting resources, and upholding values.

The Community Plan will help to guide public and private decisions affecting the community and provides for the overall direction, density, and type of growth and protection of the natural environment that is consistent with the General Plan and the vision expressed by the Three Rivers Community. The Community Plan will help to maintain a rural atmosphere, while ensuring that the appropriate type and scale of development and adequate context sensitive community infrastructure is implemented through a balanced planning process.

The Three Rivers Community Plan is a collection of goals, objectives, policies, and implementation measures for the physical development of the community for the next 20 years. The primary purpose of the plan is to outline community goals regarding physical development and to promote the general welfare of the community. Upon adoption by the Tulare County Planning Commission and the Board of Supervisors, the plan serves as a general guide for both public and private decisions affecting the community, and provides for the overall direction, density and type of growth consistent with the needs and desires of the community.

In order to remain an effective document over time, the Three Rivers Community Plan must be updated periodically. Planning is a continuous process and to be effective requires periodic reevaluation and revision to reflect changing needs and priorities. Thus, the plan should be reviewed on a multi-annual basis; however, unless unforeseen changes occur, the basic goals, objectives and policies should not require major alterations, but the specific development proposals should be refined and revised as part of the continuing planning process. The Performance Plan as outlined in Chapter 10 is to be used to measure and evaluate the success of the plan in achieving its goals. Such measures may derive from Census data (percent ownership of housing, average household income, crime statistics), community service districts (CSD) statistics (water quality statistics), or land use parameters (acres of parkland or miles of bikelanes within the UDB per resident). Such data can be used in the

annual General Plan review, as applicable, and will provide information to help the Board of Supervisors evaluate the effectiveness of the community plan program over the long term.

Relationship to the General Plan

The 2012 Tulare County General Plan (2030) provides a comprehensive statement of the objectives, goals, policies, and implementation measures, which the community is seeking to achieve in the areas of land use, growth management, community design, transportation, open space, parks and public facilities, environmental conservation, health and safety, noise, and housing. The Three Rivers Community Plan is essentially an extension of the General Plan, but more specific to Three Rivers. Therefore, the Community Plan incorporates, by definition, the stated general objectives, themes and policies and, where more specific objectives and policies are stated makes reference to such objectives and policies. It also provides additional elaboration on the ways in which the Community Plan is responsive to this guidance. Relevant General Plan goals, policies, and programs that provide direction and input to this Community Plan are provided in this document. In addition, this plan has specific policies for the Community of Three Rivers.

Community Plan Content

Section 65302 of the Government Code of the State of California defines a general plan as "a statement of development policies" including diagrams and text setting forth objectives, principles, standards and plan proposals. The law requires that a plan include the following elements: Land Use, Circulation, Housing, Conservation, Open Space, Seismic Safety, Noise, Scenic Highways and Safety. The Tulare County General Plan addresses these plan elements on a county-wide basis and, therefore, the County's development policies emphasize county-wide issues and concerns.

On the other hand, a community plan must respond to the problems and needs of the particular community and the content of the plan must be directed toward these problems and needs. As these problems are more often expressed in terms of physical development needs at the community level, in Tulare County a community plan concentrates upon land use and circulation planning. The content of the community plan responds to the vision and needs of the particular community. As these issues are often expressed in terms of physical development needs at the community. As these issues are often expressed in terms of physical development needs at the community level, in Tulare County, a community plan focuses on land use and circulation planning.

This does not mean that the other elements will not be addressed. However, a community plan can also address other elements. Depending upon the community, a community plan will contain any or all of the so-called "mandated" elements, plus such other elements that, in the judgment of the community, are important to the physical development of the community. These other elements include, but are not limited to: Recreation, Transit, Public Services and Facilities, Public Buildings, Community Design, Adaptive Re-use and Historical Preservation. However, for the most part, the typical community plan speaks to land use and circulation.

The Community Plan Land Use Element is to consists of:

- 1) An identification of land use issues in terms of assumptions and constraints.
- 2) A series of goals, objectives and policies.
- 3) A description of the areas of proposed land uses, including text, map and standards for physical development.
- 4) An implementation strategy, including a description of the measures necessary to achieve the community's land use objectives.

The Circulation Element must contain:

- 1) An identification and analysis of circulation needs and issues.
- 2) A statement of circulation goals, objectives and policies.
- 3) A diagram or maps of the proposed circulation system.
- 4) A description of the proposed circulation system and the interrelationship among the parts.
- 5) Standards for the location, design and operation of the circulation system.
- 6) A guide to the implementation of the circulation system.
- 7) A Complete Streets Program.

An Implementation Program is included in the Plan. The purpose of Implementation Program is to prescribe a proposed approach to implement the recommendations contained in the Three Rivers Community Plan. **Appendix 7** contains implementation resources which include regulations, standards, and guidelines to assist in the future review of development proposals and implementation strategies. **Appendix 8** contains an Implementation Program for future feasibility studies requested by the community to address important community topics such as development of a Town Center, Community Park, and State Scenic Highway designation for Highway 198. The community plan also contains an environmental impact analysis of the plan in conformance with the California Environmental Quality Act. This environmental evaluation measures undertaken after the plan is adopted. The following components that comprise the Three Rivers Community Plan Implementation Program strategy inclusive of **Appendices 7 and 8**.

San Joaquin Valley Regional Blueprint

"The San Joaquin Valley Blueprint is the result of an unprecedented effort of the eight Valley Regional Planning Agencies (RPA), that include the Fresno Council of Governments, the Kern Council of Governments, the Kings County Association of Governments, the Madera County Transportation Commission, the Merced County Association of Governments, the San Joaquin Council of Governments, the Stanislaus Council of Governments, and the Tulare County Association of Governments, to develop a long-term regional growth strategy for the future of the San Joaquin Valley. Following three years of visioning and outreach by the eight Valley RPAs, the Regional Policy Council (RPC), the decision-making body for the Valleywide process, adopted the Valley Blueprint in April 2009.

The Blueprint is a long-range vision for a more efficient, sustainable, and livable future for the Valley. The Valleywide Blueprint is made up three elements: a 2050 growth scenario diagram that identifies areas of existing development, new development, and future regional transit and highway improvements; a Valleywide average target density of 6.8 units per acre for new residential growth to the year 2050; and a set of 12 Smart Growth Principles. Importantly, the Blueprint recognizes and incorporates by reference the visioning and outreach efforts undertaken by the eight Valley Regional Planning Agencies."³⁹

Tulare County Regional Blueprint

"TCAG and its member agencies felt that it was important to prepare a Tulare County Regional Blueprint that clarified Tulare County's role in the Blueprint process. The Tulare County Regional Blueprint is a stand-alone policy document that is consistent with the San Joaquin Valley Regional

³⁹ San Joaquin Valley Blueprint Roadmap Guidance Framework, page i

Blueprint. This document represents Tulare County's local vision and goals as a participant in the San Joaquin Valley Regional Blueprint process."⁴⁰ Key elements of the preferred growth scenario outlined in the Tulare County Regional Blueprint include 25% increase in overall density and focused growth in urban areas.

TCAG, Tulare County Regional Bicycle Transportation Plan, Regional Transportation Plan (RTP) and Sustainable Communities Strategy

TCAG in 2014 updated a Regional Bicycle Plan that does not include any bicycle facilities through the Community of Three Rivers. TCAG funded the grant for this Complete Streets Policy and in the RTP Action Element describes bicycle circulation patterns and pedestrian policies focusing on the Americans with Disabilities Planning Strategies and Transportation Demand Management to increase pedestrian activity. In addition, rail and goods movement is part of the Sustainable Communities Strategy in lieu of utilizing diesel powered freight trucks.

Tulare County Climate Action Plan (TCAP)

Under State Assembly Bill 32 and Senate Bill 375, the Tulare County CAP calls for a reduction on a project (over 50 vehicles) by project basis of 6% through a mixture of measures that are spelled out in Appendix J of the CAP. Utilization of alternative means of transportation will reduce GHG emissions and will help projects and the region meet their targets. TCAP was last updated in 2016.

Senate Bill 244, Housing Element Implementation

Senate Bill (SB) 244, passed by the California Legislature and signed into law in 2011, requires California municipalities analyze the inequality and infrastructure deficits within disadvantaged unincorporated communities (DUCs), which lack basic community infrastructure like sidewalks, safe drinking water, and adequate waste processing. As a part of this process and the implementation of the Housing Element the County continues to identify housing related infrastructure needs, such as; water, sewer, natural gas or streetlights, using community needs assessments, housing condition surveys, public comments at community meetings, redevelopment implementation plans and amendments, community plans and other relevant information from the Health & Human Services Agency (HHSA) Environmental Health Services, Regional Water Quality Control Board, public utility districts, community services districts and other agencies. The County of Tulare prepared a 2016 Disadvantage Unincorporated Communities Assessment (infrastructure needs assessment) of the County in conjunction with SB 244 and Action Program 9 as part of the 2015 Tulare County Housing Element Update.

Sustainable Highway 99 Corridor Plan

The Sustainable Highway 99 Corridor Plan is a plan that serves as a foundation planning document to guide the preparation of future community plans for unincorporated and economically disadvantaged communities along the corridor, and provide sustainable planning practices, standards and strategies for the abundant agricultural and natural lands in between the communities. The primary project objectives of this plan are as follows: Promote Public Health, Promote Equity, Increase Affordable Housing, Revitalize Urban and Community Centers, Protect Natural Resources and Agricultural Lands, Reduce Automobile Usage and Fuel Consumption, Improve Infrastructure Systems, Promote Energy Efficiency and Conservation, Strengthen the Economy.

⁴⁰ Tulare County Regional Blueprint, page 3

Tulare County 2030 General Plan Implementation

On January 28, 2014, the Tulare County Board of Supervisors (BOS) approved, the Planning Branch proposal to update the Three Rivers Community Plan. The Three Rivers Community Plan Update General Plan Amendment (GPA 14-004) components are described later in this section, and will become consistent with the Tulare County General Plan 2030 Update⁴¹, and will include the following primary goals and objectives.

- 1. Land Use and Environmental Planning Promote the balanced maintenance of a rural atmosphere, protection of natural, visual, cultural and archaeological resources, an appropriate scale of development consistent with the historical rural character of the community, and adequate context sensitive community infrastructure to the extent feasible, as allowed by law in order to implement the following General Plan goals:
 - a) To direct and coordinate balanced future planning decisions that will guide the physical changes in the community while protecting existing natural, visual, cultural and archaeological resources to the extent feasible as allowed by law.
 - b) Ensure the text and mapping of the Community Plan Designations and Zoning Districts address various development matters, such as encouraging Agricultural Adaptive Reuse activities, recognizing Non-Conforming Use activities and facilitating economic development opportunities;
 - c) Encourage infill development within Urban Development Boundaries, thereby discouraging leapfrog development within Tulare County;
 - d) Reduce vehicle miles travelled throughout the County, thereby positively affecting air quality and greenhouse gas reduction; and
 - e) Improve the circulation system within this community, including, but not limited to, laying the groundwork for the construction of key projects, such as Safe Routes to Schools, Complete Streets, and Bike Lanes/Pedestrian Paths.
- 2. **Economic Development –** Promote development in order to implement the following General Plan goals:
 - a) Enhance target marketing capabilities for the community;
 - b) Enhance tourism and film activities; and
 - c) Enhance opportunities for community economic development.
- 3. Three Rivers Community Plan Vision Statements The Community Plan will provide appropriate direction to help guide balanced public and private decisions affecting the community including provisions for the overall direction, density, type of growth and protection of the natural environment that is consistent with the Tulare County General Plan and balanced with needs and desires of the Three Rivers Community to maintain its rural character:
 - a) Protect and Preserve Oak, Sycamore and Cottonwood Woodlands.
 - b) Preserve Visual Resources, Including Viewsheds and Ridgelines.
 - c) Preserve Historical, Cultural and Archaeological Resources Including the Kaweah Post Office, Historical Bridges, and Cultural Native American Resources.

⁴¹ Tulare County General Plan 2030 Update may also be referred to as General Plan or 2030 General Plan.

- d) Provide Land Uses Consistent Community Character including an Urban Development Boundary (UDB) that is contiguous with the existing Planning Area Boundary.
- e) Create a Town Center with a Concentration of Commercial, Retail and Social Uses to Help Strengthen Three Rivers as a Livable Community.
- f) Ensure adequate land use supplies for residential, commercial, industrial and public uses to accommodate future growth and ensure the community's economic viability.
- g) Manage growth.
- h) Ensure compatibility between land use types and intensities.
- i) Encourage a diversity of housing options for all Three Rivers residents, including affordable housing for families, seniors, and National Park Service employees.
- j) Ensure that future development is compatible with existing development and the natural environment.
- k) Establish rural compatibility standards.
- l) Establish Standards for signage which balances practical business considerations with community design standards.
- m) Development of Noise Standards Reflective of a Foothill and Canyon Community Environment.
- n) Vegetation standards.
- o) Establish Setback standards for residential development.
- p) Establish Streetscape guidelines for roadways, paths and sidewalks.
- q) Apply Rural Compatibility Standards through the County Project Review Committee process.
- r) Develop a Traffic Circulation Plan with management strategies and improvements to increase safety and community access.
- s) Establish Lighting Standards for Night Sky Conservation and Protection.
- t) Development of a Community Park.
- 4. **Strengthening Relationship with TCAG -** An important benefit of this community plan process will be the opportunity for RMA to strengthen the County's relationship with the Tulare County Association of Governments (TCAG) in that this community plan will help to facilitate the funding and implementation of key transportation programs, such as Complete Streets, and major state Transportation Improvement Program (STIP) project.

By pursuing these transportation programs through a heightened collaborative process, the likelihood of getting actual projects in the ground will be realized faster than historically achieved. In doing so, this community, and others, can become safer and healthier by providing a more efficient transportation network.

Three Rivers Community Plan Vision

The Three Rivers Community Plan is a statement regarding fundamental community values including a shared vision for the future of the Three Rivers Community. Three Rivers is a unique rural residential

community located in the unincorporated portion of Tulare County, in the foothills of the Sierra Nevada Mountain Range with many valuable natural assets, including the Kaweah River, open space, steep terrain, natural blue oak woodland and riparian communities, and is the gateway to the Sequoia National Park. The natural resources and diverse landscape of Three Rivers contribute to the beauty, character, and recreational opportunities enjoyed and valued by the community.

Protection of the natural environment including the Kaweah River which is the heart of the community, is the most important Community asset. The Kaweah River is an essential element of the community's unique character and quality natural environment. The floodways and floodplains along the river enhance the quality of life in Three Rivers, and promote biological and habitat diversity in the community. As part of the future vision for Three Rivers, residents would like to preserve the Kaweah River, in its natural course through the community. Maintaining the Kaweah River in its natural course through the community. Maintaining the Kaweah River in its natural course maintains the dynamic interaction between river flow, river form, people, plants, fish and wildlife to maintain the river in the natural, healthy form. Water to support residential and commercial development in Three Rivers is limited. Any planned residential or commercial development must ensure that adequate water resources are available to support the proposed development before construction begins.

The purpose of the Three Rivers Community Plan is to preserve and protect the values, character and assets of the community, including preservation of its historical rural character and valuable natural resources while ensuring that economic growth remains vibrant and sustainable consistent with the desired character of the community. Three Rivers possesses significant historical and cultural resources that the community wishes to preserve and maintain as the area grows. One of the shared visions for Three Rivers is a community with strong central core area with clustered commercial development which can help create a focal point or town center for the community, and can also reinforce a sense of place and community identity. The Community Plan will help to maintain a rural atmosphere, while ensuring that an appropriate type and scale of future development is provided with adequate community infrastructure while protecting natural resources, and upholding community values.

It is important to community members that Three Rivers continues to be a livable community with a diversity of housing types and commercial and civic uses. Community public facilities services are an essential part of the quality of life in Three Rivers. High quality schools and recreation facilities contribute to creating a self-sustaining, healthy community with a sense of identity and character. Transportation Management in Three Rivers is integral to maintaining the rural character of the community, as well as ensuring public safety and welfare for residents and visitors. It is important to balance the rural character of the community with the need for adequate emergency and safety access including appropriate disaster planning and response.

Like the rugged mountains that surround them, the communities of Three Rivers and Kaweah have always included a rugged, individualistic spirit. The early pioneers, cowboys, and artisan's wanted a place to live, work, and raise their families that would foster in them an indomitable quest to pursue their dreams. That rugged, individualistic, indomitable spirit still exists today in the hearts and minds of those who live, work, and play in the foothills and mountains of Three Rivers. As a result, the Community Plan is an important tool for protecting Three Rivers' assets and guiding future growth and development. The Community Plan will provide appropriate direction to help guide balanced public and private decisions affecting the community including provisions for the overall direction,
density, type of growth and protection of the natural environment that is consistent with the needs and desires of the Three Rivers Community to maintain its rural character.

This Section of the Three Rivers Community Plan prescribes the policy framework which will govern the development of the community through the year 2030. It includes text, which sets out explicit policy statements about the quality, character, and manner in which development in the community will take place.

The Plan, although long range in scope, is intended to be used on a day-to-day basis to guide the decisions of County staff, the Planning Commission, and the Board of Supervisors, as they affect community development. Further, it will provide residents and property owners in the Community with direction and guidelines regarding the evolution and growth of their town, and its resources. This Plan will also aid other public agencies and entities, such as the school district and the Three Rivers Community Services District, in their own long-range planning and capital expenditure programming. Each subsequent section of this chapter addresses a topical aspect of the community planning environment. For each aspect, background discussion of relevant issues is included, policies are stated, and implementation programs and activities are outlined.

Community Outreach Process

Historical Planning Efforts in Three Rivers (1968-1980)

The initial Three Rivers planning effort was first initiated by means of a petition to the Tulare County Board of Supervisors in which the people of the community expressed their desire for an Area General Plan. On June 6, 1968, the Board of Supervisors directed the Planning Department staff to commence work on the preparation of a General Plan for the Three Rivers Area. By the Spring of 1969, seven committees were formed consisting of an average of 13 members each. The various subcommittees formed were:

Original Committees

- Commercial Development
- Schools
- Community Facilities
- Circulation
- Residential Development
- Parks, Recreation, and Agriculture
- Community Appearance

After numerous meetings and many hours of staff work, several documents were published. Status Report and Guidelines for Completion of the Parks and Recreation Element - May 1, 1970 Status Report and Guidelines for Completion of the Community Facilities Element - May 1, 1970 Transportation - Status Report and Guidelines for Completion of the Circulation Element - August, 1970

- Three Rivers and Its People Attitude Survey September, 1970
- Three Rivers Visual Survey October, 1971
- Preliminary Draft Three Rivers Community Plan (December 29, 2017)

From 1972 until June 28, 1977, relatively little progress was made toward completing the plan, primarily because of limited community interest and other County priorities. However, on June 23, 1977, the Board of Supervisors, by Resolution No. 77-1583, appointed a new nine member Citizens Advisory Committee to work with the Planning Department towards completion of a Community Plan. Several members of the newly appointed Committee had served on former subcommittees.

After two and one-half years of almost regular monthly meetings with the Citizens Advisory Committee (CAC), a preliminary draft Community Plan was completed in response to the need for long-term planning for the community of Three Rivers. The plan text and plan map were approved by the CAC. The Plan was developed in conjunction with the Three Rivers Citizens Advisory Committee and other interested groups and citizens and was culminated with the recommendation of the plan by the Planning Commission in March of 1980, and was adopted on May 20, 1980 by the Board of Supervisors.

Historical Process (1999-2009)

In July, 1999, the County was awarded a \$10,000 LEGACI grant from the Great Valley Center for the preparation of a comprehensive update to the Three Rivers Community Plan in conjunction with the Three Rivers Community Plan Update Committee. These funds were used to retain a consultant to prepare the first phase of the Three Rivers Community Plan Update. At the outset of the 2000 plan update process, a number of Three Rivers citizens expressed a need for Community Plan policies that are enforceable and that help to meet the goals of the community. The initial work plan included community visioning, the preparation of a policy plan, a recommended Urban Development Boundary, and alternative land use plans. The consultant was responsible for working with County staff and the Three Rivers Community Plan Update Committee to ensure that the plan developed was reflective of community goals.

The Consultant conducted a Community Visioning charrette and the Three Rivers Community Plan Revision Committee conducted a Community Image Survey, a participation tool for envisioning a more livable community. Presentations were made throughout the community with local organizations such as the Three Rivers Lions Club, Three Rivers Women's Club, Three Rivers Seniors League, Parent Teachers Association, The Kaweah Land Trust and the employees of Sequoia and Kings National Parks.

This methodology was chosen as a way to gather input from a large segment that typically does not participate in community planning, in order to help determine what a greater number of people wanted for the future of Three Rivers.

The Community Image Survey is a slideshow of demonstrative images, a questionnaire, and followup discussion based on specific planning concerns. It was a major step towards updating the community plan. Everyone in the community was encouraged and invited to participate in this process. It helped participants evaluate the existing environment in Three Rivers. It allowed people with different opinions to come together and identify those features of Three Rivers that most people valued and would like to see preserved in the future. It served as an educational tool to help local citizens understand some of the elements that create a livable community. It helped residents understand some of the elements that create livable communities.

The Survey enabled every participant to have input into the planning process and provided a method for recording and tabulating the responses to the various possibilities offered. Over 200 individuals participated in the survey, which represented close to 8 percent of the local population, at that time.

Throughout the process, a committee of Three Rivers' citizens has worked closely with County staff and consultants to ensure that the content and direction of the plan would address the needs and desires of the community. Additionally, several public workshops were held in Three Rivers during the update process, one in June 2001, and a follow up workshop in March 2002. These workshops were well attended and the Three Rivers' residents provided valuable input and feedback to the community plan update process which laid the framework for the community vision statements.

Work continued on the draft community plan in 2003. In September, 2003 a number of Three Rivers residents formed an ad-hoc Open Space and Recreation Facilities Task Force to conduct a community needs assessment and locate an appropriate site for a community park. On January 19, 2004, representatives from the Central California Arts Institute and the Three Rivers Community Park Task Group met to brainstorm options for development of a Town Center to provide a civic and cultural heart for the Three Rivers Community. The Town Center concept was further explored in a 2005 study prepared by the Craig School of Business at Fresno State University which also conducted a community needs survey. Approximately 74% of the Three Rivers residents surveyed supported a Town Center Concept.

There was interest expressed, and a focused work effort was undertaken in 2005 by some of the community residents to designate Highway 198 as a Scenic Highway. The Scenic Highway concept was supported by the Three Rivers CSD, U.S. Army Corps of Engineers, and National Park Service. In 2006 the Tulare County Board of Supervisors endorsed the Scenic Highway proposal and directed staff to complete the steps required for the formal designation of the segment of Highway 198 from Road 248 to the entrance at Ash Mountain of the Sequoia National Park. The concept was examined, community volunteers prepared visual assessments, County staff evaluated Caltrans requirements for establishing a Scenic Corridor, community meetings were held in 2008, and the Board of Supervisors determined that the topic needed further study based on concerns from the business community that Scenic Corridor Protection Plan requirements prescribed by Caltrans may be too rigorous to support sustainable business development.

In 2005 the Tulare County Board of Supervisors approved the preparation and submittal of a Transportation Enhancement Activities (TEA) grant funding application in conjunction with the Three Rivers Historical Society for the construction of a rest stop adjacent to State Route 198 in the community of Three Rivers. The project received TEA through Caltrans funds for completing the preliminary engineering and environmental work. After funding was approved for this project and preliminary engineering and environmental documentation work was underway, the County was advised by Caltrans that this project did not meet the eligibility requirements for the program under which it was approved and that further funding for construction would not be approved. The County received reimbursement from Caltrans for the costs the County had incurred working on this project. After notification from Caltrans, the County's work on this project was terminated. On December 16, 2008 the Tulare County Board of Supervisors took action to not extend funding for the project and allowed the remaining TEA funds to lapse. The County work effort on the actual plan document between 2005 and 2007 was essentially suspended due to the focused interest in the Town Center, Rest Stop, and Scenic Highway projects. In addition the County work program directed towards the

preparation the draft General Plan 2030 Update document, associated Draft EIR, and extensive public outreach was also a major factor in attention being directed away from the plan.

Work on the plan resumed between 2007 and 2009 utilizing the draft recommendations from the work performed in 2002 and a draft 2009 Community plan document was prepared in conjunction with community outreach meeting. The 2009 Draft Plan focused on the development of draft polices, town center concept and background information. The plan did not address, however, recommendations regarding updating diagrams for Land Use, Zoning, and Circulation.

Community Out reach 2014-2016

Work was suspended on the community plan in 2010 due to the concentrated effort of completing the General Plan 2030 Update in 2012, and subsequent implementation activities between 2012 and 2014. On January 28, 2014, the Board of Supervisors approved a General Plan Initiation request to initiate work on the Three Rivers Community Plan Update project. The first community meeting directed entirely to the Three Rivers Community Plan Update project was held at the Three Rivers Arts Building on February 4, 2014.

The purpose of public workshops or community meetings is to engage in discussions with local residents and business owners regarding specific topics, e.g., Land Use Plan Update, Transportation and Circulation Plan Update, Flooding (FEMA/Zoning), Emergency Preparedness and Access, Development on Slopes, Development Standards, Water Quality and Quantity, Noise, CEQA Appendix G Considerations, and Oak Woodland Management. Public outreach efforts were held in several formats including regular monthly meetings and attendance at Three Rivers Town Hall Meetings. Formal community meetings were held at the Three Rivers Arts Building on North Fork Drive, and Three Rivers Veteran's Memorial Building, located at 43490 Sierra Drive in Three Rivers.

Publicity for meeting times and locations generally consisted of e-mail noticing, citizens distributing information through electronic media, and the establishment of a comprehensive website dedicated to all matters relating to the community plan update. The Three Rivers Community Plan Update Website <u>http://www.tularecounty.ca.gov/rma/index.cfm/planning/three-rivers-community-plan-update/</u> contains all the monthly meeting agendas and attachments for the meetings, as well as a library of documents that are placed on the web site for thorough consideration of this important community planning matter.

Three Rivers Public Meetings

Over 75 hours of staff outreach was dedicated to public meetings between January 2014 and April 2016, while the Tulare County Resource Management Agency was concurrently updating 21 other Community, Hamlet and Legacy Plans in Tulare County. Each meeting ran for generally 2 hours, and the proposed Community Plan is a result of such public outreach efforts. A complete listing of public meetings is displayed below:

2014

January 6, 2014 – Three Rivers Town Hall February 4, 2014 – Community Meeting March 10, 2014 – Community Meeting April 14, 2014 – Community Meeting May 12, 2014 – Community Meeting June 9, 2014 –Community Meeting July 14, 2014 –Community Meeting August 11, 2014 –Community Meeting September 15, 2014 –Community Meeting October 13, 2014 –Community Meeting November 10, 2014 –Community Meeting December 8, 2014–Community Meeting

2015

February 9, 2015 –Community Meeting March 9, 2015 –Community Meeting April 13, 2015 –Community Meeting May 4, 2015 – Three Rivers Town Hall May 11, 2015 –Community Meeting June 8, 2015 –Community Meeting August 10, 2015 –Community Meeting September 14, 2015 –Community Meeting October 12, 2015 –Community Meeting November 9, 2015 –Community Meeting December 7, 2015 – Three Rivers Town Hall December 14, 2015 –Community Meeting

2016

January 11, 2016 –Community Meeting February 8, 2016 –Community Meeting March 14, 2016–Community Meeting April 11, 2016 –Community Meeting May 9, 2016–Community Meeting (EIR Scoping)

Sustainability

Climate Change/Adaptation/Resiliency/Sustainability

According to the Draft 2017 Tulare County Multi Jurisdiction Local Hazard Mitigation Plan (LHMP) Climate change has occurred throughout the history of the planet. Due to variations in the earth's inclination to the sun, volcanic activity and other factors such as asteroid impacts, the amount of solar radiation reaching the earth's surface rises and falls. The temperature of the planet correlates to the amount of solar radiation arriving at the surface and with it the climate.

In relatively recent history, the last glacial period, popularly known as the Ice Age, occurred from c. 110,000 to 12,000 years ago. This most recent glacial period is part of a larger pattern of glacial and interglacial periods known as the Quaternary glaciation (c. 2,588,000 years ago to present). From this point of view, scientists consider this "ice age" to be merely the latest glaciation event in a much larger ice age, one that dates back over two million years and is still ongoing. During this last glacial period, there were several changes between glacier advance and retreat. The Last Glacial Maximum, the maximum extent of glaciation within the last glacial period, was approximately 22,000 years ago. While

the general pattern of global cooling and glacier advance was similar, local differences in the development of glacier advance and retreat make it difficult to compare the details from continent to continent. Generally, the pattern of temperature variation and glaciation has lagged atmospheric carbon dioxide (CO2) content.

The Tulare County (County) has prepared the Draft 2017 Multi-Jurisdictional Local Hazard Mitigation Plan (MJLHMP) to assess the natural, technological, and human-caused risks to County communities, to reduce the potential impact of the hazards by creating mitigation strategies. The 2017 MJLHMP represents the County's commitment to create a safer, more resilient community by taking actions to reduce risk and by committing resources to lessen the effects of hazards on the people and property of the County.

The plan complies with The Federal Disaster Mitigation Act (DMA 2000), Federal Register 44 CFR Parts 201 and 206, which modified the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) by adding a new section, 322 - Mitigation Planning. This law, as of November 1, 2004, requires local governments to develop and submit hazard mitigation plans as a condition of receiving Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP) and other mitigation project grants. The County; the Cities of Dinuba, Exeter, Farmersville, Lindsay, Porterville, Tulare, Visalia, and Woodlake; the Tule River Tribe; and Special District staffs have coordinated preparation of the MJLHMP in cooperation with stakeholders, partner agencies and members of the public.

Tulare County Climate Action Plan

Tulare County adopted a Climate Action Plan (CAP) on August 28, 2012. The CAP is an implementation measure of the 2030 General Plan Update. The policies, regulations, and programs considered in the CAP include those by federal, state, and local governments.

"The Tulare County Climate Action Plan (CAP) serves as a guiding document for County of Tulare ("County") actions to reduce greenhouse gas emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the 2030 General Plan Update. The General Plan provides the supporting framework for development in the County to produce fewer greenhouse gas emissions during Plan buildout. The CAP builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets consistent with California legislation."⁴²

Tulare County General Plan Policies (Sustainability)

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to Sustainability include the following.

LU-1.1 Smart Growth and Healthy Communities

The County shall promote the principles of smart growth and healthy communities in UDBs and HDBs, including:

- 1. Creating walkable neighborhoods,
- 2. Providing a mix of residential densities,
- 3. Creating a strong sense of place,

⁴² Tulare County Climate Action Plan, page 1

- 4. Mixing land uses,
- 5. Directing growth toward existing communities,
- 6. Building compactly,
- 7. Discouraging sprawl,
- 8. Encouraging infill,
- 9. Preserving open space,
- 10. Creating a range of housing opportunities and choices,
- 11. Utilizing planned community zoning to provide for the orderly pre-planning and long term development of large tracks of land which may contain a variety of land uses, but are under unified ownership or development control, and
- 12. Encouraging connectivity between new and existing development.

LU-1.8 Encourage Infill Development

The County shall encourage and provide incentives for infill development to occur in communities and hamlets within or adjacent to existing development in order to maximize the use of land within existing urban areas, minimize the conversion of existing agricultural land, and minimize environmental concerns associated with new development.

LU-7.15 Energy Conservation

The County shall encourage the use of solar power and energy conservation building techniques in all new development.

LU-7.16 Water Conservation

The County shall encourage the inclusion of "extra-ordinary' water conservation and demand management measures for residential, commercial, and industrial indoor and outdoor water uses in all new urban development.

LU-7.17 Shared Parking Facilities

The County shall encourage, where feasible, the use of shared parking facilities. Such areas could include developments with different day/night uses.

AQ-3.3 Street Design

The County shall promote street design that provides an environment which encourages transit use, biking, and pedestrian movements.

AQ-3.5 Alternative Energy Design

The County shall encourage all new development, including rehabilitation, renovation, and redevelopment, to incorporate energy conservation and green building practices to maximum extent feasible. Such practices include, but are not limited to: building orientation and shading, landscaping, and the use of active and passive solar heating and water systems.

AQ-3.6 Mixed Land Uses

The County shall encourage the clustering of land uses that generate high trip volumes, especially when such uses can be mixed with support services and where they can be served by public transportation.

TCAG Sustainable Communities Strategy (2014 Regional Transportation Plan)

AB 32 set emission targets for the State of California. SB375 requires the California Air Resources Board to set greenhouse gas emission targets for different regions in California. Under SB 375 Metropolitan Planning Organizations like TCAG are required to create a Sustainable Communities Strategy. TCAG included this strategy in the 2014 Regional Transportation Plan. Highlights of the implementation strategies include:

- Encourage jurisdictions in Tulare County to consider bicycle lanes, public transit, transitoriented and mixed-use development, pedestrian networks, rain and other complete streets development during updates of general plan or other local plans.
- Implement a Complete Streets Program whereby agencies will prepare plans to accommodate all transportation users, including pedestrians, bicyclists, transit riders, and motor vehicle operators and riders, and implement those plans as aggressively as feasible.
- Provide for continued coordination and evaluation of the planned circulation system among cities and the county.
- Fund the development of capital improvement programs for complete streets and active transportation-type plans, as funds are available.
- Evaluate intersections, bridges, interchanges, and rail grade crossings for needed safety improvements.
- Develop funding strategies for safety projects in cooperation with Caltrans and member agencies.
- Examine alternative funding sources for streets, roads, state highways, rail systems, transit, bicycle, pedestrian, and other transportation mode improvements.
- Utilize Cap and Trade funds available for transit, if available, for projects in Tulare County.
- Encourage local agencies to support implementation of bicycle support facilities such as bike racks, showers, and other facilities during the project review process.
- Utilize Cap and Trade funds available for bicycle and pedestrian projects, if available, for projects in Tulare County.
- Encourage mixed-use developments in urbanized areas.

- Encourage provision of an adequate supply of housing for the region's workforce and adequate sites to accommodate business expansion to minimize interregional trips and long-distance commuting.
- Support and participate in efforts and coalitions promoting use of Cap and Trade funding for projects that help reduce greenhouse gas emissions in Tulare County.
- Support investment in bicycle and pedestrian systems, giving attention to projects and networks that will allow residents to walk and bicycle to frequented destinations, including schools, parks, healthcare institutions and transit stops.
- Provide environmental justice communities opportunities for input into transportation plans, programs, and projects in a manner consistent with Title VI of the 1964 Civil Rights Act and Executive Order 12898 on Environmental Justice, including the prohibition of intentional discrimination and adverse disparate impact with regard to race, ethnicity or national origin.

These implementation strategies are compatible with the Tulare County General Plan policies.

California Government Code Section 65302 (g) (4) Climate Adaptation and Resiliency

The following discussion provides a crosswalk to demonstrate how the Tulare County Climate Action Plan (CAP) and Draft 2017 Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) address compliance with California Government Code Section 65302 (g) (4) Climate Adaptation and Resiliency.

(4) Upon the next revision of a local hazard mitigation plan, adopted in accordance with the federal Disaster Mitigation Act of 2000 (Public Law 106-390), on or after January 1, 2017, or, if a local jurisdiction has not adopted a local hazard mitigation plan, beginning on or before January 1, 2022, the safety element shall be reviewed and updated as necessary to address climate adaptation and resiliency strategies applicable to the city or county. This review shall consider advice provided in the Office of Planning and Research's General Plan Guidelines and shall include all of the following: (A) (i) A vulnerability assessment that identifies the risks that climate change poses to the local jurisdiction and the geographic areas at risk from climate change impacts, including, but not limited to, an assessment of how climate change may affect the risks addressed pursuant to paragraphs (2) and (3).

LHMP Pages 40-44 CAP Pages 21-35

(ii) Information that may be available from federal, state, regional, and local agencies that will assist in developing the vulnerability assessment and the adaptation policies and strategies required pursuant to subparagraph (B), including, but not limited to, all of the following:

(I) Information from the Internet-based Cal-Adapt tool.

LHMP Page 43

(II) Information from the most recent version of the California Adaptation Planning Guide.

LHMP Page 43

(III) Information from local agencies on the types of assets, resources, and populations that will be

sensitive to various climate change exposures.

LHMP Pages 40-44 addresses resources and populations. Risk assessment is addressed in Chapter 5 Hazard Identification, Analysis.

LHMP Assets are identified in Table 4-1 through 4-6 Pages 29-34 CAP Page 30 addresses resources and populations.

<u>(IV)</u> Information from local agencies on their current ability to deal with the impacts of climate change.

LHMP: Capabilities Assessments are conducted for each jurisdiction (Appendix J Annexes). CAP Pages 21-35

(V) Historical data on natural events and hazards, including locally prepared maps of areas subject to previous risk, areas that are vulnerable, and sites that have been repeatedly damaged.

LHMP Risk Assessment Section 5.3 Table 5-13 (CPRI Summary) and no repetitive loss structures were identified in any jurisdiction (Section 6.4). Appendix B Hazard Figures. Health and Safety Element: Figures 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-6A-G.

(VI) Existing and planned development in identified at-risk areas, including structures, roads, utilities, and essential public facilities.

LHMP Assets are identified in Table 4-1 through 4-6 Pages 29-34. LHMP Risk Assessment Section 5.3 Table 5-13 (CPRI Summary) and no repetitive loss structures were identified in any jurisdiction (Section 6.4). Appendix B Hazard Figures. Health and Safety Element: Figures 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-6A-G.

(VII) Federal, state, regional, and local agencies with responsibility for the protection of public health and safety and the environment, including special districts and local offices of emergency services.

LHMP Table 3-2: Administrative & Technical Capabilities includes local Department or Agency Staff/Personnel Resources. Health and Safety Element: Federal and state agencies are discussed in the Safety Element introduction Page 10-4.

(B) A set of adaptation and resilience goals, policies, and objectives based on the information specified in subparagraph (A) for the protection of the community.

LHMP Table 6-2 County-Specific Actions and Applicable Hazards Strategies 3-2, 3-3, 3-4, 3-5, 3-6, 3-7, 3-8, 3-9, 3-10, 3-11, & 3-12.

CAP:

Water Supply (CAP Pg. 31)

• WR-1.5 Expand Use of Reclaimed Wastewater

• WR-1.6 Expand Use of Reclaimed Water

• WR-3.5 Use of Native and Drought Tolerant Landscaping

• ERM-1.7 Planting of Native Vegetation

Flooding (CAP Pg. 31)

FGMP-8.3 Development in the Floodplain

• HS-1.4 Building and Codes

• HS-1.5 Hazard Awareness and Public Education

• HS-1.11 Site Investigations

• HS-5.1 Development Compliance with Federal, State, and Local Regulations

• HS-5.2 Development in Floodplain Zones

• HS-5.3 Participation in Federal Flood Insurance Program

• HS-5.4 Multi-Purpose Flood Control Measures

• HS-5.5 Development in Dam and Seiche Inundation Zones

• HS-5.6 Impacts to Downstream Properties

• HS-5.7 Mapping of Flood Hazard Areas

• HS-5.8 Road Location

• HS-5.9 Floodplain Development Restrictions

• HS-5.10 Flood Control Design

• HS-5.11 Natural Design

• PFS-4.1 Stormwater Management Plans

• PFS-4.3 Development Requirements

• PFS-4.6 Agency Coordination

Agriculture and Forest (CAP Pg. 32)

• AQ-3.2 Infill near Employment

• LU-1.4 Compact Development

• LU-1.8 Encourage Infill Development

• LU-3.3 High Density Residential Locations

• LU-2.1 Agricultural Lands

• AG-1.8 Agriculture within Urban Boundaries

• ERM-5.15 Open Space Preservation

• LU IM 3 Encourage Smart Growth Incentives

I A set of feasible implementation measures designed to carry out the goals, policies, and objectives identified pursuant to subparagraph (B) including, but not limited to, all of the following:

(i) Feasible methods to avoid or minimize climate change impacts associated with new uses of land.

LHMP Chapter 6 Tables 6-2 and 6-3.

(ii) The location, when feasible, of new essential public facilities outside of at-risk areas, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, or identifying construction methods or other methods to minimize damage if these facilities are located in at-risk areas.

LHMP Appendix B Hazard Figures.

Health and Safety Element: Figures 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-6A-G.

(iii) The designation of adequate and feasible infrastructure located in an at-risk area.

LHMP Appendix B Hazard Figures. Health and Safety Element: Figures 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-6A-G.

(iv) Guidelines for working cooperatively with relevant local, regional, state, and federal agencies.

LHMP: Table 6-1 Hazard Mitigation Goals Goal 4 Table 6-1 and Table 6-2: County-Specific Actions and Applicable Hazards Strategies 4-1, 4-2, 4-3, 4-4, & 4-5.

(v) The identification of natural infrastructure that may be used in adaptation projects, where feasible. Where feasible, the plan shall use existing natural features and ecosystem processes, or the restoration of natural features and ecosystem processes, when developing alternatives for consideration. For the purposes of this clause, "natural infrastructure" means the preservation or restoration of ecological systems, or utilization of engineered systems that use ecological processes, to increase resiliency to climate change, manage other environmental hazards, or both. This may include, but is not limited to, floodplain and wetlands restoration or preservation, combining levees with restored natural systems to reduce flood risk, and urban tree planting to mitigate high heat days.

LHMP Appendix B Hazard Figures. Health and Safety Element: Figures 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-6A-G.

(D) (i) If a city or county has adopted the local hazard mitigation plan, or other climate adaptation plan or document that fulfills commensurate goals and objectives and contains the information required pursuant to this paragraph, separate from the general plan, an attachment of, or reference to, the local hazard mitigation plan or other climate adaptation plan or document.

(ii) Cities or counties that have an adopted hazard mitigation plan, or other climate adaptation plan or document that substantially complies with this section, or have substantially equivalent provisions to this subdivision in their general plans, may use that information in the safety element to comply with this subdivision, and shall summarize and incorporate by reference into the safety element the other general plan provisions, climate adaptation plan or document, specifically showing how each requirement of this subdivision has been met.

LHMP: Appendix H Climate Adaptation and Resiliency Crosswalk

Urban Development Boundary

Urban Development Boundaries (UDBs) are officially adopted and mapped County lines delineating the area expected for urban growth in cities and unincorporated communities over a 20-year period. Within UDB boundaries, the County and cities will coordinate plans, policies and standards related to building construction, subdivision development, land use and zoning regulations, street and highway construction, public utility systems, environmental studies, and other closely related matters affecting the orderly development of urban fringe areas. These boundaries provide an official definition of the interface between future urban and agricultural land uses.⁴³

⁴³ TCGPU Part 1, Goals and Policies Report, Planning Framework, page 2-3

"For unincorporated communities, the UDB is a County adopted line dividing land to be developed from land to be protected for agricultural, natural, open space, or rural uses. It serves as the official planning area for communities over a 20-year period. Land within an unincorporated UDB is assumed appropriate for development and is not subject to the Rural Valley Lands Plan or Foothill Growth Management Plan (RVLP Policy 1-1)"⁴⁴

The purpose of this chapter is to review the adequacy of the adopted Urban Development Boundary (UDB) and determine through analysis contained in this chapter whether modifications may be required. The proposed UDB will also function as the planning area boundary of the Three Rivers Community Plan. The UDB line establishes a twenty-year growth boundary for the community of Three Rivers. Over the years, services will be extended into this area which will allow new growth to occur. Since the UDB line defines the area where growth will occur, it is logical that it also serves as the planning area boundary for this plan.

In addition to defining the area in which future development of the community of Three Rivers will occur, designating an urban boundary can provide local agencies and citizens with other benefits, including:

- a) Encouraging coordination between land use planning and the provision of governmental services.
- b) Identifying and resolving potential interagency conflicts regarding service areas.
- c) Encouraging efficient, economical and effective delivery of public services.
- d) Allowing property owners to identify the type and level of service their lands presently receive or may receive in the future.

Assisting in the County's efforts to preserve open space and productive agricultural land.UDB Policy Determinations. In determining a UDB and planning area for the Three Rivers Community Plan, it is important to not only fulfill the requirements of State planning law, but to the greatest degree possible, fulfill the local goals and policies that regulate land uses in the area. As discussed earlier, there are many County policies that guide development in Three Rivers area. However, those which have direct effect on the establishment of the community's urban boundary include the following policies in the Tulare County General Plan Planning Framework Element:

An Urban Development Boundary (UDB) will direct future growth to areas that are appropriate and have the carrying capacity to support development. The UDB will be based on existing development, available land, and environmental and infrastructure constraints. Growth and development shall not occur outside of the growth boundary except as permitted by the Foothill Growth Management Plan (FGMP), and land outside of the UDB will be maintained subject to the policies of the Foothill Growth Management Plan.

PF-2.1 Urban Development Boundaries – Communities

The County shall limit urban development to the area within the designated UDB for each community.

PF-2.2 Modification of Community UDB

- 1. The County may consider modification to a community UDB under any of, but not limited to the following circumstances:
 - The location of the UDB shall be evaluated during preparation or update of a community plan.

⁴⁴ TCGPU Part 1, Goals and Policies Report, Planning Framework, page 2-3

- All community UDBs should be reviewed on a five-year cycle to reflect changes in growth and development patterns.
- A request for expansion of the UDB boundary can be applied for as part of a General Plan Amendment to the Land Use Diagram.
- At the request of a special district or the community.
- A UDB should be considered for expansion at such time as land for infill becomes limited. This condition is considered satisfied when 80 percent of the non-Williamson Act land within the UDB is developed for urban uses.
- UDBs should not be expanded onto Prime Farmland if Farmland of Statewide Importance or of lesser quality is available and suitable for expansion.
- 2. Prior to approval of a UDB boundary expansion, the County shall ensure that infrastructure can be provided to serve the new areas added to the UDB and that sufficient water supplies are also available. This may require preparation of an infrastructure master plan that includes methods of financing of improvements and maintenance, as well as representation/documentation of availability and sufficiency of long-term water supplies.
- 3. Preservation of productive agricultural lands shall be the highest priority when considering modifications. Expansion of a UDB to include additional agricultural land shall only be allowed when other non-agricultural lands are not reasonably available to the community or are not suitable for expansion.

PF-2.3 UDB and Other Boundaries

The County shall provide notice and opportunity for special districts, school districts, and other service providers to comment when evaluating the expansion of a Community's UDB.

PF-2.8 Inappropriate Land Use

Areas within UDBs are hereby set aside for those types of urban land uses which benefit from urban services. Permanent uses which do not benefit from such urban services shall be discouraged within the UDBs. This is not intended to apply to agricultural or agricultural supported uses, including the cultivation of land or other uses accessory to the cultivation of land, provided that such accessory uses are time-limited through special use permit procedures.

Planning Study Area

The Planning Study Area is coterminous to the adopted Urban Development Boundary. As the adopted Urban Development Boundary contains approximately 20,000 acres, it is considerably larger than any of the other Community UDB's. It was determined through preliminary analysis conducted as part of the General Plan Initiation process, that the planning study area contained sufficient land area to evaluate forecasted land demand projections.

Recommended Boundary

No changes are recommended to expand the Urban Development Boundary as per the forcasted land demand projections presented in the Assessment of Land Needs (see Table 47).



Figure 26 - Existing Urban Development Boundary

POLICY PLAN

This chapter of the Three Rivers Community Plan prescribes the policy framework which will govern the development of the community over the term of the planning period (through the year 2030). It includes text which sets out explicit policy statements about the quality, character, and manner in which development in the community will take place

The plan, although long-range in scope, is to be used on a day to day basis to guide the decisions of County staff, the Planning Commission, and the Board of Supervisors as they affect community development. Further, it will provide residents and property owners in the community with direction and guidelines regarding the evolution and growth of their town and its resources. And importantly, this plan will aid other public agencies and entities, such as the school district and the water company, in their own long-range planning and capital expenditure programming. Each subsequent section of this chapter addresses a topical aspect of the community planning environment. For each aspect, background discussion of relevant issues is included, policies are stated, and implementation programs and activities are outlined.

Policy Relationship to the General Plan

The Three Rivers Community Plan is a component in Part III of the Tulare County General Plan and, as such, has the same force and effect as any other adopted element of the general plan. Structurally, the Three Rivers Community Plan is part of the Land Use and Circulation Element of the overall general plan. The principal emphasis of the community plan is on establishing local land use and circulation system patterns and prescribing associated standards and policies. In addition to the specific prescriptions of the community plan, the broader policies and standards of the overall Land Use and Circulation Element apply to Three Rivers.

Also applicable to Three Rivers, and governing all future development in the community, are the other elements (e.g. Planning Framework, Environmental Resources Management, Air Quality, Health and Safety, Transportation and Circulation, etc.) of the Tulare County General Plan. In instances where the policies and/or standards of the Three Rivers Community Plan are more specific or more restrictive than those in other elements of the general plan, the community plan shall take precedence and prevail.

GENERAL PLAN POLICIES

In addition to the specific standards and policies of the Three Rivers Community Plan, the broader policies and standards of the overall of the Tulare County General Plan will continue to apply as applicable to Three Rivers. The following policies contained in the Tulare County General Plan are relevant to Community Plans and associated Urban Development Boundaries.

Land Use Policies

PF-1.3 Land Uses in UDBs/HDBs

The County shall encourage those types of urban land uses that benefit from urban services to develop within UDBs and HDBs. Permanent uses which do not benefit from urban services shall be discouraged within these areas. This shall not apply to agricultural or agricultural support uses, including the cultivation of land or other uses accessory to the cultivation of land provided that such accessory uses are time-limited through Special Use Permit procedures.

PF-2.6 Land Use Consistency

The County shall require all community plans, when updated, to use the same land use designations as used in this Countywide General Plan (See Chapter 4-Land Use). All community plans shall also utilize a similar format and content. The content may change due to the new requirements such as Global Climate Change and Livable Community Concepts, as described on the table provided (Table 2.1: Community Plan Content). Changes to this format may be considered for unique and special circumstances as determined appropriate by the County. Until such time as a Community Plan is adopted for communities without existing those Community Plans, the land use designation shall be Mixed Use, which promotes the integration of a compatible mix of residential types and densities, commercial uses, public facilities, and services and employment opportunities.

PF-2.8 Inappropriate Land Use

Areas within UDBs are hereby set aside for those types of urban land uses which benefit from urban services. Permanent uses which do not benefit from such urban services shall be discouraged within the UDBs. This is not intended to apply to agricultural or agricultural supported uses, including the cultivation of land or other uses accessory to the cultivation of land, provided that such accessory uses are time-limited through special use permit procedures.

PF-4.7 Avoiding Isolating Unincorporated Areas

The County may oppose any annexation proposal that creates an island, peninsula, corridor, or irregular boundary. The County will also encourage the inclusion of unincorporated islands or peninsulas adjacent to proposed annexations.

Land Use Element

LU-1.1 Smart Growth and Healthy Communities

The County shall promote the principles of smart growth and healthy communities in UDBs and HDBs, including:

- 1. Creating walkable neighborhoods,
- 2. Providing a mix of residential densities,
- 3. Creating a strong sense of place,
- 4. Mixing land uses,
- 5. Directing growth toward existing communities,
- 6. Building compactly,
- 7. Discouraging sprawl,
- 8. Encouraging infill,
- 9. Preserving open space,

- 10. Creating a range of housing opportunities and choices,
- 11. Utilizing planned community zoning to provide for the orderly pre-planning and long term development of large tracks of land which may contain a variety of land uses, but are under unified ownership or development control, and
- 12. Encouraging connectivity between new and existing development.

LU-1.2 Innovative Development

The County shall promote flexibility and innovation through the use of planned unit developments, development agreements, specific plans, Mixed Use projects, and other innovative development and planning techniques.

LU-1.3 Prevent Incompatible Uses

The County shall discourage the intrusion into existing urban areas of new incompatible land uses that produce significant noise, odors, or fumes.

LU-1.4 Compact Development

The County shall actively support the development of compact mixed use projects that reduce travel distances.

LU- 1.5 Paper Subdivision Consolidations

The County shall encourage consolidation of paper parcels/subdivisions, especially those lots that are designated Valley Agriculture (VA), Foothill Agriculture (FA), or Resource Conservation (RC), are irregular in shape, inadequate in size for proper use, or lack infrastructure.

LU-1.6 Permitting Procedures and Regulations

The County shall continue to ensure that its permitting procedures and regulations are consistent and efficient.

LU-1.7 Development on Slopes

The County shall require a preliminary soils report for development projects in areas with

shallow or unstable soils or slopes in excess of 15 percent. If the preliminary soil report indicates soil conditions could be unstable, a detailed geologic/hydrologic report by a registered geologist, civil engineer, or engineering geologist shall be required demonstrating the suitability of any proposed or additional development.

LU-1.8 Encourage Infill Development

The County shall encourage and provide incentives for infill development to occur in communities and hamlets within or adjacent to existing development in order to maximize the use of land within existing urban areas, minimize the conversion of existing agricultural land, and minimize environmental concerns associated with new development.

LU-1.10 Roadway Access

The County shall require access to public roadways for all new development.

LU-3.1 Residential Developments

The County shall encourage new major residential development to locate near existing infrastructure for employment centers, services, and recreation.

LU-3.2 Cluster Development

The County shall encourage proposed residential development to be clustered onto portions of the site that are more suitable to accommodating the development, and shall require access either directly onto a public road or via a privately-maintained road designed to meet County road standards.

LU-3.3 High-Density Residential Locations

The County shall encourage high-density residential development (greater than 14 dwelling units per gross acre) to locate along collector roadways and transit routes, and near public facilities (e.g., schools, parks), shopping, recreation, and entertainment.

LU-3.4 Mountain, Rural, and Low-Density Residential

The Mountain, Rural, and Low-Density Residential development located outside of a UDB shall be subject to the following requirements:

- Able to meet the Rural Valley Lands Plan policies, Foothill Growth Management Plan policies, or Mountain Framework Plan policies and requirements,
- Areas which qualify for minimum densities greater than 1 unit per 10 acres must meet the following characteristics (unless clustering is used):
- Average slopes must be below a 30 percent grade,
- Not identified as a moderate-to-high landslide hazard area, and
- Access to new development is provided via an existing publicly-maintained road or via a new road improved consistent with adopted County standards.

LU-3.6 Project Design

The County shall require residential project design to consider natural features, noise exposure of residents, visibility of structures, circulation, access, and the relationship of the project to surrounding uses. Residential densities and lot patterns will be determined by these and other factors. As a result, the maximum density specified by General Plan designations or zoning for a given parcel of land may not be attained.

LU-7.3 Friendly Streets

The County shall encourage new streets within UDBs to be designed and constructed to not only accommodate traffic, but also serve as comfortable pedestrian and cyclist environments. These should include, but not be limited to:

- Street tree planting adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and automobiles, where appropriate,
- 2. Minimize curb cuts along streets,

- 3. Sidewalks on both sides of streets, where feasible,
- 4. Bike lanes and walking paths, where feasible on collectors and arterials, and
- 5. Traffic calming devices such as roundabouts, bulb-outs at intersections, traffic tables, and other comparable techniques.

LU-7.4 Streetscape Continuity

The County shall ensure that streetscape elements (e.g., street signs, trees, and furniture) maintain visual continuity and follow a common image for each community.

LU-7.5 Crime Prevention through Design

The County shall encourage design of open space areas, bicycle and pedestrian systems, and housing projects so that there is as much informal surveillance by people as possible to deter crime.

LU-7.15 Energy Conservation

The County shall encourage the use of solar power and energy conservation building techniques in all new development.

LU-7.16 Water Conservation

The County shall encourage the inclusion of "extra-ordinary' water conservation and demand management measures for residential, commercial, and industrial indoor and outdoor water uses in all new urban development.

LU-7.13 Preservation of Historical Buildings

The County shall encourage and support efforts by local preservation groups to identify and rehabilitate historically significant buildings.

LU-7.14 Contextual and Compatible Design

The County shall ensure that new development respects Tulare County's heritage by requiring that development respond to its context, be compatible with the traditions and character of each community, and develop in an orderly fashion which is compatible with the scale of surrounding structures.

LU-7.15 Energy Conservation

The County shall encourage the use of solar power and energy conservation building techniques in all new development.

LU-7.16 Water Conservation

The County shall encourage the inclusion of "extra-ordinary' water conservation and demand management measures for residential, commercial, and industrial indoor and outdoor water uses in all new urban development.

ED-2.11 Industrial Parks

As part of new or updated community plans, the County shall designate sites for industrial development to meet projected demand.

Housing Policy 3.24

When locating agricultural industry in rural areas, a determination should be made that there are transit opportunities and an adequate employment base living within a reasonable distance to the site.

AQ-3.2 Infill near Employment

The County shall identify opportunities for infill development projects near employment areas within all unincorporated communities and hamlets to reduce vehicle trips.

AQ-3.6 Mixed Land Uses

The County shall encourage the clustering of land uses that generate high trip volumes, especially when such uses can be mixed with support services and where they can be served by public transportation.

PFS-8.4 Library Facilities and Services

The County shall encourage expansion of library facilities and services as necessary to meet the needs (e.g., internet access, meeting rooms, etc.) of future population growth.

Circulation Policies

Q-3.3 Street Design

The County shall promote street design that provides an environment which encourages transit use, biking, and pedestrian movements.

LU-7.3 Friendly Streets

The County shall encourage new streets within UDBs to be designed and constructed to not only accommodate traffic, but also serve as comfortable pedestrian and cyclist environments. These should include, but not be limited to:

- Street tree planting adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and automobiles, where appropriate,
- Minimize curb cuts along streets,
- Sidewalks on both sides of streets, where feasible,
- Bike lanes and walking paths, where feasible on collectors and arterials, and
- Traffic calming devices such as roundabouts, bulb-outs at intersections, traffic tables, and other comparable techniques.

LU-7.4 Streetscape Continuity

The County shall ensure that streetscape elements (e.g., street signs, trees, and furniture) maintain visual continuity and follow a common image for each community.

LU-1.10 Roadway Access

The County shall require access to public roadways for all new development.

SL-2.1 Designated Scenic Routes and Highways

The County shall protect views of natural and working landscapes along the County's highways and roads by maintaining a designated system of County scenic routes and State scenic highways by:

• Requiring development within existing eligible State scenic highway corridors to

adhere to land use and design standards and guidelines required by the State Scenic Highway Program,

- Supporting and encouraging citizen initiatives working for formal designation of eligible segments of State Route 198 and State Highway 190 as State scenic highways,
- Formalizing a system of County scenic routes throughout the County, and
- Requiring development located within County scenic route corridors to adhere to local design guidelines and standards.

SL-4.1 Design of Highways

The County shall work with Caltrans and Tulare County Association of Governments (TCAG) to ensure that the design of SR 99 and other State Highways protects scenic resources and provides access to vistas of working and natural landscapes by:

- 1. Limiting the construction of sound walls that block views of the County's landscapes (incorporate setbacks to sensitive land uses to avoid noise impacts whenever feasible),
- 2. Using regionally-appropriate trees and landscaping and incorporating existing landmark trees,
- 3. Preserving historic and cultural places and vistas,
- 4. Avoiding excessive cut and fill for roadways along State scenic highways and County scenic routes, and along areas exposed to a large viewing area, and
- 5. Promote highway safety by identifying appropriate areas for traffic pull-outs and rest areas.

SL-4.2 Design of County Roads

The County's reinvestment in rural County roads outside urban areas should, in addition to meeting functional needs and safety needs, preserve the experience of traveling on the County's "country roads" by:

1. Maintaining narrow as possible rights-ofways,

- 2. Limiting the amount of curbs, paved shoulders, and other "urban" edge improvements,
- 3. Preserving historic bridges and signage, and
- 4. Promote County road safety by identifying appropriate areas for traffic pull-out.

SL-4.3 Railroads and Rail Transit

The County shall encourage rail infrastructure for freight and passenger service to be planned and designed to limit visual impacts on scenic landscapes by:

- 1. Concentrating infrastructure in existing railroad rights-of-ways,
- 2. Avoiding additional grade separated crossings in viewshed locations, and
- 3. Using new transit stations supporting rail transit as design features in existing and future core community areas.

TC-1.1 Provision of an Adequate Public Road Network

The County shall establish and maintain a public road network comprised of the major facilities illustrated on the Tulare County Road Systems to accommodate projected growth in traffic volume.

TC-1.2 County Improvement Standards

The County's public roadway system shall be built and maintained consistent with adopted County Improvement Standards, and the need and function of each roadway, within constraints of funding capacity.

TC-1.6 Intermodal Connectivity

The County shall ensure that, whenever possible, roadway, highway, and public transit systems will interconnect with other modes of transportation. Specifically, the County shall encourage the interaction of truck, rail, and airfreight/passenger movements.

TC-1.7 Intermodal Freight Villages

The County shall consider the appropriate placement of intermodal freight villages in

locations within the Regional Growth Corridors.

TC-1.8 Promoting Operational Efficiency

The County shall give consideration to transportation programs that improve the operational efficiency of goods movement, especially those that enhance farm-to-market connectivity

TC-1.9 Highway Completion

The County shall support State and Federal capacity improvement programs for critical segments of the State Highway System. Priority shall be given to improvements to State Routes 65, 99, and 198, including widening and interchange projects in the County.

TC-1.10 Urban Interchanges

The County shall work with TCAG to upgrade State highway interchanges from rural to urban standards within UDBs.

TC-1.11 Regional Significant Intersections

To enhance safety and efficiency, the County shall work to limit the frequency of intersections along regionally-significant corridors.

TC-1.12 Scenic Highways and Roads

The County shall work with appropriate agencies to support the designation of scenic highways and roads in the County.

TC-1.16 County Level Of Service (LOS) Standards

The County shall strive to develop and manage its roadway system (both segments and intersections) to meet a LOS of "D" or better in accordance with the LOS definitions established by the Highway Capacity Manual.

TC-1.18 Balanced System

The County shall strive to meet transportation needs and maintain LOS standards through a balanced Multimodal Transportation Network that provides alternatives to the automobile.

TC-1.19 Balanced Funding

The County shall promote a balanced approach to the allocation of transportation funds to optimize the overall County transportation system.

TC-2.1 Rail Service

The County shall support improvements to freight and expanding passenger rail service throughout the County.

TC-2.2 Rail Improvements

The County shall work with cities to support improvement, development, and expansion of passenger rail service in Tulare County.

TC-4.1 Transportation Programs

The County shall support the continued coordination of transportation programs provided by social service agencies, particularly those serving elderly and/or handicapped.

TC-4.2 Determine Transit Needs

The County will continue to work with TCAG, cities, and communities in the County to evaluate and respond to public transportation needs.

TC-4.3 Support Tulare County Area Transit

The County shall request the support of TCAG for development of transit services outlined in the County's Transit Development Plan (TDP). Efforts to expand Tulare County Area Transit should be directed towards:

- Encouraging new and improving existing transportation services for the elderly and disabled; and
- Providing intercommunity services between unincorporated communities and cities.

TC-4.4Nodal Land Use Patterns that Support Public Transit

The County shall encourage land uses that generate higher ridership including; high density residential, employment centers, schools, personal services, administrative and professional offices, and social/recreational centers, to be clustered within a convenient walking distance of one another.

TC-4.7 Transit Ready Development

The County shall promote the reservation of transit stops in conjunction with development projects in likely or potential locations for future transit facilities.

TC-5.1 Bicycle/Pedestrian Trail System

The County shall coordinate with TCAG and other agencies to develop a Countywide integrated multi-purpose trail system that provides a linked network with access to recreational, cultural, and employment facilities, as well as offering a recreational experience apart from that available at neighborhood and community parks.

TC-5.2 Consider Non-Motorized Modes in Planning and Development

The County shall consider incorporating facilities for non-motorized users, such as bike routes, sidewalks, and trails when constructing or improving transportation facilities and when reviewing new development proposals. For developments with 50 or more dwelling units or non-residential projects with an equivalent travel demand, the feasibility of such facilities shall be evaluated.

TC-5.3 Provisions for Bicycle Use

The County shall work with TCAG to encourage local government agencies and businesses to consider including bicycle access and provide safe bicycle parking facilities at office buildings, schools, shopping centers, and parks.

TC-5.4 Design Standards for Bicycle Routes

The County shall utilize the design standards adopted by Caltrans and as required by the Streets and Highway Code for the development, maintenance, and improvement of bicycle routes.

TC-5.5 Facilities

The County shall require the inclusion of bicycle support facilities, such as bike racks, for new major commercial or employment locations.

TC-5.7 Designated Bike Paths

The County shall support the creation and development of designated bike paths adjacent to or separate from commute corridors.

TC-5.8 Multi-Use Trails

The County shall encourage the development of multi-use corridors (such as hiking, equestrian, and mountain biking) in open space areas, along power line transmission corridors, utility easements, rivers, creeks, abandoned railways, and irrigation canals.

TC-5.9 Existing Facilities

The County shall support the maintenance of existing bicycle and pedestrian facilities.

Housing Policies

Housing Guiding Principle 1.1

Endeavor to improve opportunities for affordable housing in a wide range of housing types in the communities throughout the unincorporated area of the County.

Housing Policy 1.11

Encourage the development of a broad range of housing types to provide an opportunity of choice in the local housing market.

Housing Policy 1.13

Encourage the utilization of modular units, prefabricated units, and manufactured homes.

Housing Policy 1.14

Pursue an equitable distribution of future regional housing needs allocations, thereby providing a greater likelihood of assuring a balance between housing development and the location of employment opportunities.

Housing Policy 1.15

Encourage housing counseling programs for low income homebuyers and homeowners.

Housing Policy 1.16

Review community plans and zoning to ensure they provide for adequate affordable residential development.

Housing Guiding Principle 1.2

Promote equal housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, family status, disability, or any other arbitrary basis.

Housing Guiding Principle 1.3

Strive to meet the housing needs of migrant and non-migrant farmworkers and their families with a suitable, affordable and satisfactory living environment.

Housing Policy 1.31

Encourage the provision of farmworker housing opportunities in conformance with the Employee Housing Act.

Housing Guiding Principle 1.4

Enhance and support emergency shelters and transitional and supportive housing programs that assist the homeless and others in need.

Housing Policy 1.51

Encourage the construction of new housing units for "special needs" groups, including senior citizens, large families, single heads of households, households of persons with physical and/or mental disabilities, minorities, farmworkers, and the homeless in close proximity to transit, services, and jobs.

Housing Policy 1.52

Support and encourage the development and improvement of senior citizen group housing, convalescent homes and other continuous care facilities.

Housing Policy 1.55

Encourage development of rental housing for large families, as well as providing for other housing needs and types.

Housing Guiding Principle 1.6

Assess and amend County ordinances, standards, practices and procedures considered necessary to carry out the County's essential housing goal of the attainment of a suitable, affordable and satisfactory living environment for every present and future resident in unincorporated areas.

Housing Policy 2.14

Create and maintain a matrix of Infrastructure Development Priorities for Disadvantaged Unincorporated Communities in Tulare County thorough analysis and investigation of public infrastructure needs and deficits, pursuant to Action Program 9.

Housing Guiding Principle 2.2

Require proposed new housing developments located within the development boundaries of unincorporated communities to have the necessary infrastructure and capacity to support the development.

Housing Policy 2.21

Require all proposed housing within the development boundaries of unincorporated communities is either (1) served by community water and sewer, or (2) that physical conditions permit safe treatment of liquid waste by septic tank systems and the use of private wells.

Housing Guiding Principle 3.1

Encourage "smart growth" designed development that serves the unincorporated communities, the environment, and the economy of Tulare County.

Housing Policy 3.11

Support and coordinate with local economic development programs to encourage a "jobs to housing balance" throughout the unincorporated area.

Housing Policy 3.23

Prepare new and/or updated community plans that provide adequate sites for a variety of types of housing within the development boundaries of community.

Conservation Policies

AG-1.1 Primary Land Use

The County shall maintain agriculture as the primary land use in the valley region of the County, not only in recognition of the economic importance of agriculture, but also in terms of agriculture's real contribution to the conservation of open space and natural resources.

AG-1.4 Williamson Act in UDBs and HDBs

The County shall support non-renewal or cancellation processes that meet State law for lands within UDBs and HDBs.

AG-1.5 Substandard Williamson Act Parcels

The County may work to remove parcels that are less than 10 acres in Prime Farmland and less than 40 Acres in Non-Prime Farmland from Williamson Act Contracts (Williamson Act key term for Prime/Non-Prime).

AG-1.6 Conservation Easements

The County shall consider developing an Agricultural Conservation Easement Program (ACEP) to help protect and preserve agricultural lands (including "Important Farmlands"), as defined in this Element. This program may require payment of an in-lieu fee sufficient to purchase a farmland conservation easement, farmland deed restriction, or other farmland conservation mechanism as a condition of approval for conservation of

important agricultural land to non-agricultural use. If available, the ACEP shall be used for replacement lands determined to be of statewide significance (Prime or other Important Farmlands), or sensitive and necessary for the preservation of agricultural land, including land that may be a part of a community separator as part of а comprehensive program to establish community separators. The in-lieu fee or other conservation mechanism shall recognize the importance of land value and shall require equivalent mitigation.

AG-1.7 Preservation of Agricultural Lands

The County shall promote the preservation of its agricultural economic base and open space resources through the implementation of resource management programs such as the Williamson Act, Rural Valley Lands Plan, Foothill Growth Management Plan or similar types of strategies and the identification of growth boundaries for all urban areas located in the County.

AG-1.8 Agricultural within Urban Development Boundary

The County shall not approve applications for preserves or regular Williamson Act contracts on lands located within a UDB and/or HDB unless it is demonstrated that the restriction of such land will not detrimentally affect the growth of the community involved for the succeeding 10 years, that the property in question has special public values for open space, conservation, other comparable uses, or that the contract is consistent with the publicly desirable future use and control of the land in question. If proposed within a UDB of an incorporated city, the County shall give written notice to the affected city pursuant to Government Code §51233.

AG-1.10 Extension of Infrastructure into Agricultural Areas

The County shall oppose extension of urban services, such as sewer lines, water lines, or other urban infrastructure, into areas designated for agriculture use unless necessary to resolve a public health situation. Where necessary to address a public health issue, services should be located in public rights-ofway in order to prevent interference with agricultural operations and to provide ease of access for operation and maintenance. Service capacity and length of lines should be designed to prevent the conversion of agricultural lands into urban/suburban uses.

AG-1.11 Agricultural Buffers

The County shall examine the feasibility of employing agricultural buffers between agricultural and non-agricultural uses, and along the edges of UDBs and HDBs. Considering factors include the type of operation and chemicals used for spraying, building orientation, planting of trees for screening, location of existing and future rights-of-way (roads, railroads, canals, power lines, etc.), and unique site conditions.

AG-1.13 Agricultural Related Uses

The County shall allow agriculturally-related uses, including value-added processing facilities by discretionary approvals in areas designated Valley or Foothill Agriculture, subject to the following criteria:

- The use shall provide a needed service to the surrounding agricultural area which cannot be provided more efficiently within urban areas or which requires location in a non-urban area because of unusual site requirements or operational characteristics;
- The use shall not be sited on productive agricultural lands if less productive land is available in the vicinity;
- The operational or physical characteristics of the use shall not have a significant adverse impact on water resources or the use or management of surrounding agricultural properties within at least onequarter (1/4) mile radius;
- A probable workforce should be located nearby or be readily available; and

• For proposed value-added agricultural processing facilities, the evaluation under criterion "1" above shall consider the service requirements of the use and the capability and capacity of cities and unincorporated communities to provide the required services.

AG-1.16 Schools in Agricultural Zones

The County shall discourage the location of new schools in areas designated for agriculture, unless the School District agrees to the construction and maintenance of all necessary infrastructure impacted by the project.

AG-2.6 Biotechnology and Biofuels

The County shall encourage the location of industrial and research oriented businesses specializing in biotechnologies and biofuels that can enhance agricultural productivity, enhance food processing activities in the County, provide for new agriculturally-related products and markets, or otherwise enhance the agricultural sector in the County.

LU-7.12 Historic Buildings and Areas

The County shall encourage preservation of buildings and areas with special and recognized historic, architectural, or aesthetic value. New development should respect architecturally and historically significant buildings and areas. Landscaping, original roadways, sidewalks, and other public realm features of historic buildings or neighborhoods shall be restored or repaired where ever feasible.

LU-7.13 Preservation of Historical Buildings

The County shall encourage and support efforts by local preservation groups to identify and rehabilitate historically significant buildings.

LU-7.14 Contextual and Compatible Design

The County shall ensure that new development respects Tulare County's heritage by requiring

that development respond to its context, be compatible with the traditions and character of each community, and develop in an orderly fashion which is compatible with the scale of surrounding structures.

LU-7.15 Energy Conservation

The County shall encourage the use of solar power and energy conservation building techniques in all new development.

LU-7.16 Water Conservation

The County shall encourage the inclusion of "extra-ordinary" water conservation and demand management measures for residential, commercial, and industrial indoor and outdoor water uses in all new urban development.

Housing Guiding Principle 4.1

Support and encourage County ordinances, standards, practices and procedures that promote residential energy conservation.

Housing Policy 4.13

Promote energy efficiency and water conservation.

Housing Policy 4.21

Promote energy conservation opportunities in new residential development.

Housing Policy 5.24

Encourage the development of suitable replacement housing when occupied housing units are demolished due to public action.

ERM-1.1 Protection of Rare and Endangered Species

The County shall ensure the protection of environmentally sensitive wildlife and plant life, including those species designated as rare, threatened, and/or endangered by State and/or Federal government, through compatible land use development.

ERM-1.2 Development in Environmentally Sensitive Areas

The County shall limit or modify proposed development within areas that contain sensitive habitat for special status species and direct development into less significant habitat areas. Development in natural habitats shall be controlled so as to minimize erosion and maximize beneficial vegetative growth.

ERM-1.3 Encourage Cluster Development

When reviewing development proposals, the County shall encourage cluster development in areas with moderate to high potential for sensitive habitat.

ERM-1.4 Protect Riparian Areas

The County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls.

ERM-1.5 Riparian Management Plans and Mining Reclamation Plans

The County shall require mining reclamation plans and other management plans to include measures that protect, maintain, and restore riparian resources and habitats.

ERM-1.6 Management of Wetlands

The County shall support the preservation and management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats.

ERM-1.8 Open Space Buffers

The County shall require buffer areas between development projects and significant watercourses, riparian vegetation, wetlands, and other sensitive habitats and natural communities. These buffers should be sufficient to assure the continued existence of the waterways and riparian habitat in their natural state.

ERM-1.12 Management of Oak Woodland Communities

The County shall support the conservation and management of oak woodland communities and their habitats.

ERM-2.1 Conserve Mineral Deposits

The County will encourage the conservation of identified and/or potential mineral deposits, recognizing the need for identifying, permitting, and maintaining a 50 year supply of locally available PCC grade aggregate.

ERM-2.2 Recognize Mineral Deposits

The County will recognize as a part of the General Plan those areas of identified and/or potential mineral deposits.

ERM-3.2 Limited Mining in Urban Areas

Within the County UDBs and HDBs, new commercial mining operations should be limited due to environmental and compatibility concerns.

ERM-4.1 Energy Conservation and Efficiency Measures

The County shall encourage the use of solar energy, solar hot water panels, and other energy conservation and efficiency features in new construction and renovation of existing structures in accordance with State law.

ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation

The County shall promote the planting and maintenance of shade trees along streets and within parking areas of new urban development to reduce radiation heating.

ERM-7.1 Soil Conservation

The County of Tulare shall establish the proper controls and ordinances for soil conservation.

WR-1.4 Conversion of Agricultural Water Resources

For new urban development, the County shall discourage the transfer of water used for

agricultural purposes (within the prior ten years) for domestic consumption except in the following circumstances:

- The water remaining for the agricultural operation is sufficient to maintain the land as an economically viable agricultural use,
- The reduction in infiltration from agricultural activities as a source of groundwater recharge will not significantly impact the groundwater basin.

WR-1.5 Expand Use of Reclaimed Wastewater

To augment groundwater supplies and to conserve potable water for domestic purposes, the County shall seek opportunities to expand groundwater recharge efforts

WR-1.6 Expand Use of Reclaimed Water

The County shall encourage the use of tertiary treated wastewater and household gray water for irrigation of agricultural lands, recreation and open space areas, and large landscaped areas as a means of reducing demand for groundwater resources.

WR-3.3 Adequate Water Availability

The County shall review new development proposals to ensure the intensity and timing of growth will be consistent with the availability of adequate water supplies. Projects must submit a Will-Serve letter as part of the application process, and provide evidence of adequate and sustainable water availability prior to approval of the tentative map or other urban development entitlement.

HS-9.2 Walkable Communities

The County shall require where feasible, the development of parks, open space, sidewalks and walking and biking paths that promote physical activity and discourage automobile dependency in all future communities.

PF-1.4 Available Infrastructure

The County shall encourage urban development to locate in existing UDBs and HDBs where infrastructure is available or may conjunction be established in with development. The County shall ensure that development does not occur unless adequate infrastructure is available, that sufficient water supplies are available or can be made available, and that there are adequate provisions for long term management and maintenance of infrastructure and identified water supplies. **Open-Space** Policies

LU-2.3 Open Space Character

The County shall require that all new development requiring a County discretionary approval, including parcel and subdivision maps, be planned and designed to maintain the scenic open space character of open space resources including, but not limited to, agricultural areas, rangeland, riparian areas, etc., within the view corridors of highways. New development shall utilize natural landforms and vegetation in the least visually disruptive way possible and use design, construction and maintenance techniques that minimize the visibility of structures on hilltops, hillsides, ridgelines, steep slopes, and canyons.

SL-1.3 Watercourses

The County shall protect visual access to, and the character of, Tulare County's scenic rivers, lakes, and irrigation canals by:

- Locating and designing new development to minimize visual impacts and obstruction of views of scenic watercourses from public lands and right-of-ways, and
- Maintaining the rural and natural character of landscape viewed from trails and watercourses used for public recreation.

ERM-5.1 Parks as Community Focal Points

The County shall strengthen the role of County parks as community focal points by providing

community center/recreation buildings to new and existing parks, where feasible.

ERM-5.2 Park Amenities

The County shall provide a broad range of active and passive recreational opportunities within community parks. When possible, this should include active sports fields and facilities, community center/recreation buildings, children's play areas, multi-use areas and trails, sitting areas, and other specialized uses as appropriate.

ERM-5.3 Park Dedication Requirements

The County shall require the dedication of land and/or payment of fees, in accordance with local authority and State law (for example the Quimby Act), to ensure funding for the acquisition and development of public recreation facilities.

ERM-5.5 Collocated Facilities

The County shall encourage the development of parks near public facilities such as schools, community halls, libraries, museums, prehistoric sites, and open space areas and shall encourage joint-use agreements whenever possible.

ERM-5.6 Location and Size Criteria for Parks

Park types used in Tulare County are defined as follows:

- Neighborhood Play Lots (Pocket Parks). The smallest park type, these are typically included as part of a new development to serve the neighborhood in which they are contained. Typical size is one acre or less. If a park of this type is not accessible to the general public, it cannot be counted towards the park dedication requirements of the County. Pocket Parks can be found in communities, hamlets, and other unincorporated areas.
- **Neighborhood Parks**. Neighborhood parks typically contain a tot lot and playground for 2-5 year olds and 5-12 year

olds, respectively, one basketball court or two half-courts, baseball field(s), an open grassy area for informal sports activities (for example, soccer), and meandering concrete paths that contain low-level lighting for walking or jogging. In addition, neighborhood parks typically have picnic tables and a small group picnic shelter. These park types are typically in the range of 2 to 15 acres and serve an area within a ½ mile radius. Neighborhood parks can be found in communities, hamlets, and other unincorporated areas.

- Community Parks. Community parks are designed to serve the needs of the community as a whole. These facilities can contain the same facilities as the neighborhood park. In addition, these parks can contain sports facilities with lighting, community night centers, swimming pools, and facilities of special interest to the community. These parks are typically 15 to 40 acres in size and serve an area within a 2 mile radius. Community parks can be found in communities, planned community areas, and large hamlets.
- **Regional Parks**. Regional parks are facilities designed to address the needs of the County as a whole. These facilities may have an active recreation component (play area, group picnic area, etc.), but the majority of their area is maintained for passive recreation (such as hiking or horseback riding), and natural resource enjoyment. Regional parks are typically over 200 acres in size, but smaller facilities may be appropriate for specific sites of regional interest.

The following guidelines should be observed in creating and locating County parks:

• The County shall strive to maintain an overall standard of five or more acres of County-owned improved parkland per

1,000 population in the unincorporated portions of the County,

- Neighborhood play lots (pocket parks) are encouraged as part of new subdivision applications as a project amenity, but are not included in the calculation of dedication requirements for the project,
- Neighborhood parks at three acres per 1,000 population, if adjoining an elementary school and six acres per 1,000 population if separate [ERME IV-C; Open Space; Policy 3; Pg. 101],
- Community parks at one-acre per 1,000 population if adjoining a high school and two acres per 1,000 population if separate [ERME IV-C; Open Space; Policy 4; Pg. 101],
- Regional parks at one-acre per 1,000 population,
- Only public park facilities shall be counted toward Countywide parkland standards, and
- A quarter mile walking radius is the goal for neighborhood parks.

ERM-5.12 Meet Changing Recreational Needs

The County shall promote the continued and expanded use of national and State forests, parks, and other recreational areas to meet the recreational needs of County residents.

ERM-5.13 Funding for Recreational Areas and Facilities

The County shall support the continued maintenance and improvement of existing recreational facilities and expansion of new recreational facilities opportunities for County, State, and Federal lands. The County shall strive to obtain adequate funding to improve and maintain existing parks, as well as construct new facilities.

ERM-5.15 Open Space Preservation

The County shall preserve natural open space resources through the concentration of development in existing communities, use of cluster development techniques, maintaining large lot sizes in agricultural areas, discouraging conversion of lands currently used for agricultural production, limiting development in areas constrained by natural hazards, and encouraging agricultural and ranching interests to maintain natural habitat in open space areas where the terrain or soil is not conducive to agricultural production.

HS-9.1 Healthy Communities

To the maximum extent feasible, the County shall strive through its land use decisions to promote community health and safety for all neighborhoods in the County by encouraging patterns of development that are safe and influence crime prevention, promote a highquality physical environment and encourage physical activity by means such as sidewalks and walking and biking paths that discourage automobile dependency in existing communities.

Other

ERM-6.3 Alteration of Sites with Identified Cultural Resources

When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development should be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource.

WR-3.9 Establish Critical Water Supply Areas

The County shall designate Critical Water Supply Areas to include the specific areas used by a municipality or community for its water supply system, areas critical to groundwater recharge, and other areas possessing a vital role in the management of the water resources in the County.

PFS-6.1 Telecommunications Services

The County shall work with telecommunication providers to ensure that all residents and businesses have access to telecommunications services. including broadband internet service. To maximize access to inexpensive telecommunications services, the County shall encourage marketplace competition from multiple service providers.

PFS-8.4 Library Facilities and Services

The County shall encourage expansion of library facilities and services as necessary to meet the needs (e.g., internet access, meeting rooms, etc.) of future population growth.

PFS-8.5 Government Facilities in Community Centers

The County shall actively support development and expansion of federal, State, County, districts, and other governmental offices and facilities where infrastructure exists within community core areas.

PFS-9.1 Expansion of Gas and Electricity Facilities

The County shall coordinate with gas and electricity service providers to plan the expansion of gas and electrical facilities to meet the future needs of County residents.

GENERAL PLAN POLICIES THAT RELATE TO HEALTH

Health and Safety Element

HS-1.4 Building and Codes

Except as otherwise allowed by State law, the County shall ensure that all new buildings intended for human habitation are designed in compliance with the latest edition of the California Building Code, California Fire Code, and other adopted standards based on risk (e.g., seismic hazards, flooding), type of occupancy, and location (e.g., floodplain, fault).

HS-1.5 Hazard Awareness and Public Education

The County shall continue to promote awareness and education among residents regarding possible natural hazards, including soil conditions, earthquakes, flooding, fire hazards, and emergency procedures.

HS-1.6 Public Safety Programs

The County shall promote public safety programs, including neighborhood watch programs, child identification and fingerprinting, public awareness and prevention of fire hazards, and other public education efforts.

HS-1.7 Safe Housing and Structures

The County shall continue to seek grant funding for the rehabilitation of deteriorated and dilapidated structures and provide available information regarding housing programs and other public services.

HS-1.9 Emergency Access

The County shall require, where feasible, road networks (public and private) to provide for safe and ready access for emergency equipment and provide alternate routes for evacuation.

HS-1.10 Emergency Services Near Assisted Living Housing

In approving new facilities, such as nursing homes, housing for the elderly and other housing for the mentally and physically infirm, to the extent possible, the County shall ensure that such facilities are located within reasonable distance of fire and law enforcement stations.

HS-4.3 Incompatible Land Uses

The County shall prevent incompatible land uses near properties that produce or store hazardous waste.

HS-4.4 Contamination Prevention

The County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous materials contamination.

HS-4.5 Increase Public Awareness

The County shall work to educate the public about household hazardous waste and the proper method of disposal.

HS-4.6 Pesticide Control

The County shall monitor studies of pesticide use and the effects of pesticide on residents and wildlife and require mitigation of the effects wherever feasible and appropriate.

HS-4.8 Hazardous Materials Studies

The County shall ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations required to satisfy federal or State cleanup standards outlined in the studies will be implemented as part of the construction phase for each project.

HS-5.1 Development Compliance with Federal, State, and Local Regulations

The County shall ensure that all development within the designated floodway or floodplain zones conforms with FEMA regulations and the Tulare County Flood Damage Prevention Ordinance.

New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions.

HS-5.2 Development in Floodplain Zones

The County shall regulate development in the 100-year floodplain zones as designated on maps prepared by FEMA in accordance with the following:

- Critical facilities (those facilities which should be open and accessible during emergencies) shall not be permitted.
- Passive recreational activities (those requiring non-intensive development, such as hiking, horseback riding, picnicking) are permissible.
- New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions.

HS-9.1 Healthy Communities

To the maximum extent feasible, the County shall strive through its land use decisions to promote community health and safety for all neighborhoods in the County by encouraging patterns of development that are safe and influence crime prevention, promote a highquality physical environment and encourage physical activity by means such as sidewalks and walking and biking paths that discourage automobile dependency in existing communities.

HS-9.2 Walkable Communities

The County shall require where feasible, the development of parks, open space, sidewalks and walking and biking paths that promote physical activity and discourage automobile dependency in all future communities.

Noise Policies

HS-8.5 State Noise Standards

The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code (UBC). Title 24 requires that interior noise levels not exceed 45 dB Ldn (or CNEL) with the windows and doors closed within new developments of multi-family dwellings, condominiums, hotels, or motels. Where it is not possible to reduce exterior noise levels within an acceptable range the County shall require the application of noise reduction technology to reduce interior noise levels to an acceptable level.

HS-8.6 Noise Level Criteria

The County shall ensure noise level criteria applied to land uses other than residential or other noise-sensitive uses are consistent with the recommendations of the California Office of Noise Control (CONC).

HS-8.7 Inside Noise

The County shall ensure that in instances where the windows and doors must remain closed to achieve the required inside acoustical isolation, mechanical ventilation or air conditioning is provided.

HS-8.8 Adjacent Uses

The County shall not permit development of new industrial, commercial, or other noisegenerating land uses if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas designated and zoned for residential or other noise-sensitive uses, unless it is determined to be necessary to promote the public health, safety and welfare of the County.

HS-8.9 County Equipment

The County shall strive to purchase equipment that complies with noise level performance standards set forth in the Health and Safety Element.

HS-8.10 Automobile Noise Enforcement

The County shall encourage the CHP, Sheriff's office, and local police departments to actively enforce existing sections of the California Vehicle Code relating to adequate vehicle mufflers, modified exhaust systems, and other amplified noise.

HS-8.11 Peak Noise Generators

The County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval.

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HS-8.14 Sound Attenuation Features

The County shall require sound attenuation features such as walls, berming, heavy landscaping, between commercial, industrial, and residential uses to reduce noise and vibration impacts.

HS-8.15 Noise Buffering

The County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks.

Safety Policies

HS-1.1 Maintain Emergency Public Services

The County shall ensure that during natural catastrophes and emergency situations, the County can continue to provide essential emergency services.

HS-1.9 Emergency Access

The County shall require, where feasible, road networks (public and private) to provide for safe and ready access for emergency equipment and provide alternate routes for evacuation.

HS-1.10 Emergency Services Near Assisted Living Housing

In approving new facilities, such as nursing homes, housing for the elderly and other housing for the mentally and physically infirm, to the extent possible, the County shall ensure that such facilities are located within reasonable distance of fire and law enforcement stations.

HS-5.2 Development in Floodplain Zones

The County shall regulate development in the 100-year floodplain zones as designated on maps prepared by FEMA in accordance with the following:

- 1. Critical facilities (those facilities which should be open and accessible during emergencies) shall not be permitted.
- 2. Passive recreational activities (those requiring non-intensive development, such as hiking, horseback riding, picnicking) are permissible.
- 3. New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions.

HS-5.8 Road Location

The County shall plan and site new roads to minimize disturbances to banks and existing channels and avoid excessive cuts and accumulations of waste soil and vegetative debris near natural drainage ways.

HS-5.9 Floodplain Development Restrictions

The County shall ensure that riparian areas and drainage areas within 100-year floodplains are free from development that may adversely impact floodway capacity or characteristics of natural/riparian areas or natural groundwater recharge areas.

HS-5.10 Flood Control Design

The County shall evaluate flood control projects involving further channeling, straightening, or lining of waterways until alternative multipurpose modes of treatment, such as wider berms and landscaped levees, in combination with recreation amenities, are studied.

HS-5.11 Natural Design

The County shall encourage flood control designs that respect natural curves and vegetation of natural waterways while retaining dynamic flow and functional integrity.

HS-7.4 Upgrading for Streets and Highways

The County shall evaluate and upgrade vital streets and highways to an acceptable level for emergency services.

PFS-7.1 Fire Protection

The County shall strive to expand fire protection service in areas that experience growth in order to maintain adequate levels of service.

PFS-7.6 Provision of Station Facilities and Equipment

The County shall strive to provide sheriff and fire station facilities, equipment (engines and other apparatus), and staffing necessary to maintain the County's service goals. The County shall continue to cooperate with mutual aid providers to provide coverage throughout the County.

PFS-7.11 Locations of Fire and Sheriff Stations/Sub-stations

The County shall strive to locate fire and sheriff sub-stations in areas that ensure the minimum response times to service calls.

PFS-7.12 Design Features for Crime Prevention and Reduction

The County shall promote the use of building and site design features as means for crime prevention and reduction.

PFS-8.3 Location of School Sites

The County shall work with school districts and land developers to locate school sites consistent with current and future land uses. The County shall also encourage siting new schools near the residential areas that they serve and with access to safe pedestrian and bike routes to school.

HS-7.8 Tulare County Multi-Jurisdiction Hazard Mitigation Plan

The County incorporates the adopted Tulare County Multi-Jurisdiction Hazard Mitigation Plan into the Tulare County General Plan Health and Safety Element. The plan provides guidance and insight into the hazards that exist in Tulare County and suggests possible mitigation projects. The plan should be consulted when addressing known hazards to ensure the general health and safety of Tulare County residents.

HS-7.9 Climate Adaptation and Resiliency

The County incorporates the Climate Adaptation and Resiliency strategies identified in California Government Code 65302 (g)(4) as adopted in the Tulare County Multi-Jurisdiction Hazard Mitigation Plan and Tulare County Climate Action Plan into the Tulare County General Plan Health and Safety Element.

HS-7.3 Maintain Emergency Evacuation Plans

The County shall continue to create, revise, and maintain emergency plan for the broad range of natural and human-made disasters and response activities that could foreseeably impact Tulare County. This shall include, but not be limited to, flooding, dam failure, extreme weather, evacuation/transportation, mass care and shelter, and animal evacuation and sheltering. Emergency Planning projects shall be in line with the County's Strategic Plan and Emergency Operations Plan, and incorporate current guidance and initiatives Federal from State and Emergency Management Agencies.

HS-7.4 Upgrading for Streets and Highways

The County shall evaluate and upgrade vital streets and highways to an acceptable level for emergency services.

HS-7.5 Emergency Centers

The County shall require emergency backup systems to enable uninterrupted continuous operations as required by the California Essential Facilities Act.

HS-7.6 Search and Rescue

The County should continue to provide search and rescue operation capabilities for the Tulare County Sheriff's Department in mountainous areas, including those areas on the eastern side of the Sierra Nevada that are notserved by all weather roads.

HS-7.7 Joint Exercises

The County shall encourage fire, law enforcement, emergency medical services, resource management, public health, and other governmental and non-governmental response partners to periodically conduct joint training exercises with the goal of developing the best possible coordinated action in the event of a natural or human-made disaster across all local jurisdictions.

HS-6.25 Emergency Response Barriers

The County shall support the identification of vital access routes that if removed would prevent fire fighter access (bridges, dams, etc.) as included in the Multi-Jurisdictional Local Hazard Mitigation Plan to address emergency access planning for these areas.

HS-7.1 Coordinate Emergency Response Services with Government Agencies

The County shall coordinate emergency response with local, State, and Federal governmental agencies, community organizations, volunteer agencies, and other response partners during emergencies or disasters utilizing SEMS and NIMS. Urban and Wildland Fire Hazards

HS-6.1 New Building Fire Hazards

The County shall ensure that all building permits in urban areas, as well as areas with potential for wildland fires, are reviewed by the County Fire Chief. The following minimum requirements should be met to review developments or uses within areas of varying fire hazards:

a. Very High Hazard – Extreme caution should be used in allowing development, particularly critical facilities.

b. High Hazard – Strict compliance with existing State statutes and local ordinances should provide adequate fire protection.

c. Moderate Hazard – Development should be allowed, with recommendations for mitigation of hazard by Fire Warden.

HS-6.2 Development in Fire Hazard Zones

The County shall ensure that development in very high or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards. This shall include promoting the use of fire resistant materials designed to reduce fire vulnerability within high or very high fire hazard areas through use of Article 86-A of the 2001 California Fire Code, SRA Fire Safe Regulations, and other nationally recognized standards, as may be updated periodically. Special consideration shall be given to the use of fire-resistant-materials and fireresistant construction in the underside of eaves. balconies, unenclosed roofs and floors, and other similar horizontal surfaces in areas with steep slopes. Ensure new development proposals contain specific fire protection plans, actions, and codes for fire engineering features for structures in Very High Fire Hazard Safety Zones including automatic sprinklers as required by applicable codes.
HS-6.3 Consultation with Fire Service Districts

The County shall consult the appropriate fire service district in areas identified as subject to high and very high fire hazard, for particular regulations or design requirements prior to issuance of a building permit or approval of subdivisions.

HS-6.4 Encourage Cluster Development

The County shall encourage cluster developments in areas identified as subject to high or very high fire hazard, to provide for more localized and effective fire protection measures such as consolidations of fuel buildup abatement, firebreak maintenance, firefighting equipment access, and water service provision.

HS-6.5 Fire Risk Recommendations

The County shall encourage the County Fire Chief to make recommendations to property owners regarding hazards associated with the use of materials, types of structures, location of structures and subdivisions, road widths, location of fire hydrants, water supply, and other important considerations regarding fire hazard that may be technically feasible but not included in present ordinances or policies.

HS-6.6 Wildland Fire Management Plans

The County shall require the development of wildland fire management plans for projects adjoining significant areas of open space that may have high fuel loads.

HS-6.7 Water Supply System

The County shall require that water supply systems be adequate to serve the size and configuration of land developments, including satisfying fire flow requirements. Standards as set forth in the subdivision ordinance shall be maintained and improved as necessary.

HS-6.8 Private Water Supply

The County shall require separately developed dwellings with individual private water supply to provide an acceptable guaranteed minimum supply of water for fire safety, in addition to the amount required for domestic needs.

HS-6.9 Fuel Modification Programs

The County shall actively support fuel modification and reduction programs on public and private lands throughout the County, including vacant residential lots and greenbelts and, with the relevant partners, on adjacent private wildlands or federal lands with fire hazards that threaten the entity's jurisdiction as feasible and appropriate.

HS-6.10 Fuel Breaks

In the Foothill and Mountain Plan Areas, the County shall require fuel breaks of at least 100 feet around structures that are in a wildland fire area to limit the risk of fires and property loss. Secondary fuel breaks up to 200 feet in width shall be required when the County Fire Chief finds that additional precautions are necessary.

HS-6.11 Fire Buffers

The County shall strive to maintain fire buffers along heavily traveled roads within high and very high hazard zones by thinning, disking, or controlled burning. Parks, golf courses, utility corridors, roads, and open space areas shall be encouraged to locate so they serve a secondary function as a fuel break.

HS-6.12 Weed Abatement

The County shall continue to encourage weed abatement programs throughout the County in order to promote fire safety.

HS-6.13 Restoration of Disturbed Land

The County shall support the restoration of disturbed lands resulting from wildfires.

HS-6.14 Coordination with Cities

The County shall coordinate with cities to develop cohesive fire safety plans with overlapping coverage.

HS-6.15 Coordination of Fuel Hazards on Public Lands

The County shall work with local and Federal

agencies to support efforts to reduce fuel related hazards on public lands.

HS-6.16 Consideration of Diverse Occupancies and their effects on Wildfire Protection

The County shall strive to ensure risks to uniquely occupied structures, such as seasonally occupied homes, multiple dwelling structures, or other structures with unique occupancy characteristics, are considered for appropriate and unique wildfire protection needs.

HS-6.17 Integration of Open Space into Fire Safety Effectiveness

The County shall strive to address the facilitation of safe fire suppression tactics, standards for adequate access for firefighting, fire mitigation planning with agencies/private landowners managing open space adjacent to the County jurisdictional area, water sources for fire suppression, and other fire prevention and suppression needs.

HS-6.18 Mitigation for unique pest, disease and other forest health issues leading to hazardous situations

The County shall strive to address unique pest, disease, exotic species and other forest health issues in open space areas for purposes of reducing fire hazard and supporting ecological integrity.

HS-6.19 Wildfire Risk Reduction related to Climate Change

The County shall strive to reduce the wildfire risk as it relates to climate change, such as the drought and it's relation to tree mortality by implementing the Tree Mortality Removal Plan.

HS-6.20 Fire Suppression Defense Zones

The County shall support the creation of wildfire defense zones for emergency services, including fuel breaks or other staging areas where WUI firefighting tactics could be most effectively deployed as appropriate consistent with the strategies identified in the Multi-Jurisdictional Local Hazard Mitigation Plan.

HS-6.21 Redevelopment of Structures in High and Very Hazardous Areas

In High and Very hazardous areas, the County shall strive to ensure that the redevelopment of structures utilize state of the art fire resistant building and development standards to improve past 'substandard" fire safe conditions as feasible and appropriate according to applicable codes.

HS-6.22 Long Term Maintenance of Fire Hazard Reduction Mitigation Projects

Consistent with the Multi-Jurisdictional Local Hazard Mitigation Plan, the County shall support maintenance of the post-fire-recovery projects, activities, or infrastructure as feasible and appropriate.

HS-6.23 Reassessment of Fire Hazards Following Wildfire Events

The County shall strive as reasonable and appropriate to adjust fire prevention and suppression needs for both short and long term fire protection in the reassessment of fire hazards following wildfire events.

HS-6.24 Consideration of Wildlife Habitat/Endangered Species in Developing Long Term Fire

Area Recovery and Protection Plans

The County shall consider wildlife habitat/endangered species in developing long term fire area recovery and protection plans, including environmental protection agreements such as natural community conservation plans.

HS-6.25 Emergency Response Barriers The County shall support the identification of vital access routes that if removed would prevent fire fighter access (bridges, dams, etc.) as included in the Multi-Jurisdictional Local Hazard Mitigation Plan to address emergency access planning for these areas. Water Resource Element

WR-2.1 Protect Water Quality

All major land use and development plans shall be evaluated as to their potential to create surface and groundwater contamination hazards from point and non-point sources. The County shall confer with other appropriate agencies, as necessary, to assure adequate water quality review to prevent soil erosion; direct discharge of potentially harmful substances; ground leaching from storage of raw materials, petroleum products, or wastes; floating debris; and runoff from the site.

WR-2.2 National Pollutant Discharge Elimination System (NPDES) Enforcement

The County shall continue to support the State in monitoring and enforcing provisions to control non-point source water pollution contained in the U.S. EPA NPDES program as implemented by the Water Quality Control Board.

WR-2.3 Best Management Practices (BMPs)

The County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board.

Three Rivers Community Plan Goals, Objectives, and Policies

Policy Plan Interpetation

All community plans, including this one, must address a range of diverse, sometimes divergent, public interests. They must do so within a consistent, well-integrated policy framework. A county utilizes broad discretion to weigh and balance competing interests in formulating community plan policies. In implementing those policies, it is the task of the Board of Supervisors, or its delegates, to make determinations in a manner that promotes the objectives and policies of all aspects of the community plan, and does not obstruct their attainment. Policy implementation may require reasonable and thoughtful consideration of a number of community plan policies. Such implementation decisions will be made on a case-by-case basis as the Board of Supervisors, Planning Commission, County staff, and others work to implement the entire community plan. When implementing the Community plan or reviewing projects or approvals for consistency with the Community plan, the County will need to balance numerous planning, environmental and policy considerations.

Another overall principle to guide the reading and interpreting of the Community plan and its policies is that none of its provisions will be interpreted by the County in a manner that violates State or Federal law. For example, PFS-1.3: Impact Mitigation (Tulare County General Plan Chapter 14), requires new development to pay for its proportionate share of the costs of infrastructure required to serve the project. This policy will be implemented subject to applicable legal standards, including but not limited to the U.S. Constitution's "Takings" clause. In reading every provision of the Community plan, one should infer that it is limited by the principle: "to the extent legally permitted".

Policies throughout the Community plan use the terminology "shall" and "should." For the purposes of interpreting the policies in this Community plan, the term "shall" indicates a mandatory or required action or a duty to undertake an action unless the context indicates otherwise, in which case the term is synonymous with "should." The term "should" indicates a directive subject to discretion and requires at least review or consideration and, in that context, substantial compliance with the spirit or purpose of these Community plan policies. The term "may" indicates at the sole discretion of the County.

In addition, a number of policies reference the term "feasible" which is derived from the California Environmental Quality Act (CEQA) ((Public Resources Code 21000–21189) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387). "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

Finally, the term "reasonable" is used to describe a fair, balanced, and sensible approach, based on sound judgement that is supported by the application of policies contained in the community plan.

General Plan Framework

Value Statements

- 1. The beauty of the County and the health and safety of its residents will be protected and enhanced.
- 2. The County will create and facilitate opportunities to improve the lives of all County residents.
- 3. The County will protect its agricultural economy while diversifying employment opportunities.
- 4. Every community will have the opportunity to prosper from economic growth.
- 5. Growth will pay its own way providing sustainable, high quality infrastructure and services.

Framework Concepts

Concept 1: Agriculture

One of the most identified assets in Tulare County is the rich agricultural land on the valley floor and in the foothills. The General Plan identifies agriculture not only as an economic asset to the County but also as a cultural, scenic, and environmental element to be protected and to insure that the utilization of these resources may continue to economically succeed.

Concept 2: Land Use

Tulare County has a number of unincorporated communities that will grow and develop and natural resource lands (agriculture, mineral extraction, and open space) that will be preserved and permitted to expand. It is anticipated that much of the projected population growth will require a range of housing choices, neighborhood support services, and employment producing uses that are centrally located in cities and unincorporated communities. The County will also utilize its goals and policies to guide the conversion of agricultural and natural resource lands to urban uses.

• Concept 3: Scenic Landscapes

The scenic landscapes in Tulare County will continue to be one of its most visible assets. The Tulare County General Plan emphasizes the enhancement and preservation of these resources as critical to the future of the County. The County will continue to assess the recreational, tourism, quality of life, and economic benefits that scenic landscapes provide and implement programs that preserve and use this resource to the fullest extent.

Concept 4: Natural and Cultural Resources

As Tulare County develops its unincorporated communities, the County will ensure that development occurs in a manner that limits impacts to natural and cultural resources through the implementation of its Goals and Policies and through proper site planning and design techniques.

Guiding Principles

• Principle 1: Opportunities

Provide opportunities for small unincorporated communities to grow or improve quality of life and their economic viability.

- Principle 2: Reinvestment
 Promote reinvestment in existing unincorporated communities in a way that enhances the quality
 of life and their economic viability in these locations.
- Principle 3: Protection of Resources
 Protect the County's important agricultural resources and scenic natural lands from urban encroachment through the implementation of Goals and Policies of the General Plan.
- Principle 4: Limit Rural Residential Development
 Strictly limit rural residential development potential in important agricultural areas outside of

unincorporated communities, hamlets, and city UDBs, UDBs (i.e., avoid rural residential sprawl).

- Principle 5: Agricultural Facilities
 Allow existing and outdated agricultural facilities in rural areas to be retrofitted and used for new agricultural related businesses (including non-agricultural uses) if they provide employment.
- *Principle 6: Planning Coordination and Cooperation* Enhance planning coordination and cooperation with the agencies and organizations with land management responsibilities in and adjacent to Tulare County.

Goal 1: Compatible Development

Maintain the Rural Gateway Character of Three Rivers through land uses and new development that are compatible and consistent with the existing development in Three Rivers, preserve the unique visual and community character natural environment and create a distinct sense of place.

Objective 1.1 Development Compatibility: Ensure compliance with the Community Plan to ensure compatibility between and within new and existing development. This includes new public or private development, such as buildings and infrastructure, which is harmonious with natural features and historic structures. Visual resources include agricultural lands, woodlands, forestlands, watercourses, mountains, meadows, structures, communities, and other types of scenery that contribute to the visual beauty of the Three Rivers Community.

,,,,,,	Implementation
	Mechanism
Policies	(Numbers refer to
	descriptions of
	mechanisms)
1.1.1 New Residential Development Compatibility	Development Standards
Ensure that new residential development is compatible with the	Design Guidelines
character of the community through the enforcement of rural standards	County Project Review
and guidelines.	Committee
	Development Review
1.1.2 Mixed Uses	Development Standards
Ensure that development to accommodate growth includes a balanced	Design Guidelines
mix of residential, commercial and public uses that enhance the	County Project Review
community's economic vitality while maintaining its rural character and	Committee
quality of life.	Development Review
	Development
	Regulations (Zoning)
1.1.3 Commercial Uses- Limiting Negative Impacts	Development Standards
Limit commercial or recreational uses that generate negative impacts,	Design Guidelines
such as noise, lighting, traffic, odors and emissions in residential and	County Project Review
rural residential neighborhoods.	Committee
(a) The height, size, mass, scale, and design of new development shall	Development Review
be consistent in size, and compatible with the character of the	Development
surrounding natural or built environment. Structures shall be	Regulations (Zoning)
designed to follow natural contours of the landscape and clustered	
in the most accessible, least visually prominent and most	

realogically stable partian or partians of a site. Structures will be	
sited so as not to obstruct significant views	
(h) In all most a development beink standard based on the existing	
(b) implement a development neight standard, based on the existing	
building code, with maximum building height not to exceed 35' as	
identified in the FGMP page 41).	
The following general provisions are recommended:	
(a). Distance: to be determined based on the following factors:	
(b) Stabilization of edge condition	
(c). Types of operation	
(d) Types of land uses (i.e. schools, etc.)	
(e) Building orientation	
(f) Planting of trees for screeping	
(a) Location of existing and future rights of way	
(b) Types of uses allowed incide the project area	
(i) Unique site conditions	
(i) Responsibility for maintenance	
(b) Scale of development	
(k). Scale of development.	Development Standards
Encouraça compatible commercial establishments personary to sorre	Development Baviow
residents and tourists that are components with the scale and	Development Review
intensity of the community preserve the environment and which do	County Droiget Porriery
intensity of the community, preserve the environment, and which do	County Project Review
not have to the extent reasible, significant traffic, light, noise of visual	Committee
115 Chaster Community.	
1.1.5 Cluster Commercial Uses	Community Plan Map
Cluster commercial uses in compact areas and development patterns to	Development Review
discourage strip development and encourage the development of a	Design/Dev. Tools
10wh Center of Centers.	Decele and est Standards
1.1.6 Land Use Protections	Development Standards
Protect land uses adjacent to State Route 198 from noise impacts by	
requiring adequate landscape screening and buttering.	
	Development Standards
Require adequate buffers (setback, side and rear yards, landscaping and	Development Review
screening) between commercial and/or industrial development and	Development
residential areas.	Regulations (Zoning)
1.1.8 Increase Public Input	Development Review
Increase the opportunities for public involvement and participation for	
planning and development processes in Three Rivers.	
a. Publish public notices for development projects in Three Rivers in	
a public, visible location including a legally recognized local	
community newspaper of general circulation.	
b. Facilitation of local community input process through the Three	
Rivers Village Foundation Town Hall Meetings.	
1.1.9 LU-1.3 Prevent Incompatible Uses	Development Standards
The County shall discourage the intrusion into existing residential and	Development Review
rural residential areas of new incompatible land uses that produce	Development
significant noise, odors, or fumes.	Regulations (Zoning)

1.1.10 LU-3.8 Rural Residential InterfaceDevelopment StandardsThe County shall minimize potential land use conflicts at the interfaceDevelopment Reviewbetween commercial, industrial, or medium to high density residentialDevelopment Reviewdevelopment and existing developed rural-residential areas.Regulations (Zoning) 1.1.11 LU-6.2 Buffers-Non Compatible Land Uses Development StandardsThe County shall ensure that residential and other non-compatible landDevelopment Reviewuses are separated and buffered from major public facilities such asDevelopment
The County shall minimize potential land use conflicts at the interfaceDevelopment Reviewbetween commercial, industrial, or medium to high density residentialDevelopmentdevelopment and existing developed rural-residential areas.Regulations (Zoning)1.1.11 LU-6.2 Buffers-Non Compatible Land UsesDevelopment StandardsThe County shall ensure that residential and other non-compatible landDevelopment Reviewuses are separated and buffered from major public facilities such asDevelopment
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uses are separated and buffered from major public facilities such as Development
and and service and service from major public fuenties such as portophilent
landfills, airports, and sewage treatment plants. Regulations (Zoning)
1.1.12 LU-4.5 Commercial Building DesignDevelopment Standards
The County shall encourage that new commercial development is Development Review
consistent with the existing design of the surrounding community or Development
neighborhood by encouraging similar façades, proportionate scale, Regulations (Zoning)
parking, landscaping, and lighting that provides for night sky
conservation and protection.
1.1.13 LU-7.4Streetscape Continuity in Town CentersDevelopment Standards
The County shall ensure that streetscape elements in Town Centers Development Review
(e.g., street signs, trees, and furniture) maintain visual continuity and Development
follow a common image for each community including incorporating Regulations (Zoning)
walkable community concepts and context sensitive standards.
1.1.14 LU-7.12 Historic Buildings and AreasDevelopment Standards
The County shall encourage preservation of buildings and areas with Development Review
special and recognized historic, architectural, or aesthetic value. New Development
development should respect architecturally and historically significant Regulations (Zoning)
buildings and areas. Landscaping, original roadways, sidewalks, and
other public realm features of historic buildings or neighborhoods shall
be restored or repaired where ever feasible.
1.1.15 LU-7.14 Contextual and Compatible Design Development Standards
The County shall ensure that new development respects Three Rivers' Development Review
long heritage by requiring that development respond to its context, be Development
compatible with the traditions and character of the community, and Regulations (Zoning)
develop in an orderly fashion which is compatible with the scale of
surrounding structures.
Objective 1.2 Rural Gateway Character: Maintain and balance the existing natural environment
with the rural gateway character of Three Rivers.
1.2.1 New Development Compatibility Development Standards
Ensure that the size, type, and scale of new development in Three Design Guidelines
Rivers is compatible with the rural character of the community. Development Review
County Project Review
Committee
Development
Regulations (Zoning)
1.2.2 Visitor Serving Uses Development Review
Encourage visitor serving uses which are low intensity, and which do CEQA Review
not have negative traffic, noise or visual impacts to the community. Development
Regulations (Zoning)

The County shall ensure that the "gateway highway" (State Route 198) Design Guidelines to the Sequeias feature the County's unique history and scenery by: Development Review a. Maintaining the rural character of roadway rights-of-ways, highway signage, and related roadway and structure design, Development Review b. Protecting primary viewsheds from development, Development c. Prohibiting development of highway commercial projects that do not respond to their physical or cultural context, and Regulations (Zoning) 1.24 LU2-7.10 Gateways/Entry-points Community Plan Map The County shall identify key entry points on the edges of the communities on make each community more distinctive and inviting for residents and visitors. Community Plan Map 1.25 LU-7.2 Integrate Natural Features Development Review The County shall require Natural Features Development Review The County shall require new development to maintain visual access to views of hillsides, creeks, and other distinctive natural areas by regulations (Idening) Development Review The County shall require new development to maintain visual access to views of hillsides, creeks, and other distinctive natural areas by regulations (Idening) Development Review The County shall require that all new development requiring a County discritial uses to minimize visual impacts. Development Review The County shall require that all new development requiring a County dis	1.2.3 SL-2.2 Gateways to the Sequoias	Development Standards
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1.2.10 SL-1.1 Natural Landscapes Development StandardsDuring review of discretionary approvals, including parcel and subdivision maps, the County shall as appropriate, require new davalepment to not cignificantly impact or block views of TularaDevelopment Standards Design Guidelines Development Review	hilltops, hillsides, ridgelines, steep slopes, and canvons.	
During review of discretionary approvals, including parcel and Design Guidelines subdivision maps, the County shall as appropriate, require new Development Review development to not significantly impact or block views of Tulara County Preject Paview	1.2.10 SL-1.1 Natural Landscapes	Development Standards
subdivision maps, the County shall as appropriate, require new Development Review	During review of discretionary approvals, including parcel and	Design Guidelines
development to not significantly impact or block views of Tulara County Droject Review	subdivision maps, the County shall as appropriate, require new	Development Review
- UCVCIODINCILL TO HOL SIGNIFICATION INDICE OF DIOLE VIEWS OF FUBILE FUCIDITIES FOR THE PROPERTY I	development to not significantly impact or block views of Tulare	County Project Review
County's natural landscapes. To this end, the County may require new Committee	County's natural landscapes. To this end, the County may require new	Committee
development to:	development to:	Development

I	a.	Be sited to minimize obstruction of views from public lands and	Regulations (Zoning)
		rights-of-ways,	
	b.	Be designed to reduce visual prominence by keeping development	
		below ridge lines, using regionally familiar architectural forms,	
		materials, and colors that blend structures into the landscape,	
	с.	Screen parking areas from view,	
	d.	Include landscaping that screens the development,	
	e.	Limit the impact of new roadways and grading on natural settings,	
	c		
	f.	Include signage that is compatible and in character with the location	
ŀ	1 0	and building design.	Derrolo amont Standarda
	1.2 Th	County shall protect viewal access to and the character of Tulare	Development Standards
		untry's sconic rivers, lakes, and irrigation canals by	Design Guidennies
		Locating and designing new development to minimize visual	Coupty Project Review
	а.	impacts and obstruction of views of scenic watercourses from	Committee
		public lands and right-of-ways and	Development
	h	Maintaining the rural and natural character of landscape viewed	Regulations (Zoning)
	υ.	from trails and watercourses used for public recreation.	(Loning)
ŀ	1.2	12 SL-3.2 Community Expansion–Edges	Development Standards
	Th	e County shall design and plan the edges and interface of	Design Guidelines
	cor	nmunities with working and natural landscapes to protect their	Development Review
	sce	nic qualities by:	County Project Review
	a.	Maintaining separators between cities and communities,	Committee
	b.	Encouraging cities to master plan mixed-density neighborhoods at	Development
		their edges, locating compatible lower density uses adjacent to	Regulations (Zoning)
		working and natural landscapes, and	
	c.	Protecting important natural, cultural, and scenic resources located	
l		within areas that may be developed in the future.	
	1.2	13 SL-3.3 Highway Commercial	Development Standards
	Th	e County shall require highway commercial uses to be located and	Design Guidelines
	des	igned to reduce their visual impact on the travel experience along	Development Review
	Sta	te scenic highways and County scenic routes by:	County Project Review
	a.	Encouraging commercial development to locate in existing	Committee
	_	communities and hamlets,	Development
	b.	Designing highway commercial areas as an extension of community	Regulations (Zoning)
		street patterns and vernacular design traditions, allowing the	
		individual personalities of each community to extend to the	
		highway edge, and	
	c.	Discouraging development of frontage roads consistent with	
		commercial strips except when consistent with regional growth	
ŀ	10	corridor and community plans.	\mathbf{D} and \mathbf{D} and $\mathbf{C} = 1, 1, 1$
	1.2. T1-	14 ERMI-5.19 Interagency Cooperation	Development Standards
	in	buding the National Bark Service to develop and promote the	Design Guidelines
		blishment of Three Rivers as a cateway community including	Coupty Droject Poriory
1	1	anced web site interaction to provide easy access and quality	Committee
ļ	enr		

information.	Development
	Regulations (Zoning)
1.2.15 Information Sharing	Development Standards
Encourage proactive sharing of relevant information between Sequoia	Design Guidelines
National Park, the County, and the Three Rivers Village Foundation.	County Project Review
	Committee
	Development
	Regulations (Zoning)
1.2.16 Interagency Meetings	Development Standards
Encourage regular meetings between the National Park Service, Key decision makers and the Three Rivers Village Foundation to advise of	Design Guidelines
current or upcoming activities or changing priorities.	County Project Review
	Committee
	Development
	Regulations (Zoning)
1.2.1 / FGMIP-1.5 Preserving Visual Resources	Development Standards
that preserves the visual quality of the foothill setting by encouraging	Development Review
the use of curvilinear streets, vegetation reestablishment on cuts and	County Project Review
fills, cluster development, and housing site locations that to the extent	Committee
feasible for new development that causes a significant impact to the	Development
skyline and scenic panorama to blend into the landscape rather than becoming a focal point given reasonably available and feasible	Regulations (Zoning)
mitigation measures	
1.2.18 FGMP-6.1 Preservation of Scenic Highways	Development Standards
The County shall ensure that the visual qualities of State Highway198	Design Guidelines
and County scenic routes are maintained and protected against	Development Review
obtrusive development improvements.	Committee
	Development
	Regulations (Zoning)
1.2.19 FGMP-6.4 Development Within Scenic Corridors	Development Standards
The County shall require that projects located within a scenic corridor	Design Guidelines
amenities of that thoroughfare The County shall support through the	County Project Review
use of its authority and police powers, the design of infrastructure that	Committee
minimizes visual impacts to surrounding areas by locating roadways in	Development
areas that minimize the visual impact on rural and natural places	Regulations (Zoning)
whenever teasible.	\mathbf{D} 1 (\mathbf{C} 1 1
1.2.20 FGMIF-0.5 Cluster Development The County shall encourage projects proposed on lands within a scenic	Development Standards
corridor with a non-agricultural or non-open space land use	Development Review
designation, to use a cluster development concept. Appropriate land	County Project Review
uses for the open space areas shall include, but will not be limited to,	Committee
public or private open space, wildlife habitat or agriculture.	Development
	Regulations (Zoning)

 1.2.21 SL-2.1 Designated Scenic Routes and Highways The County shall protect views of natural and working landscapes along the County's highways and roads by maintaining a designated system of County scenic routes and State scenic highways by: Requiring development within existing eligible State scenic highway corridors to adhere to land use and design standards and guidelines required by the State Scenic Highway Program, Supporting and encouraging citizen initiatives working for formal designation of eligible segments of State Route 198 and State Highway 190 as State scenic highways, Formalizing a system of County scenic routes throughout the County (see Figure 7-1), and Requiring development located within County scenic route corridors to adhere to local design guidelines and standards. 	Development Standards Design Guidelines Development Review County Project Review Committee Development Regulations (Zoning)
Objective 1.3 Rural Development Standards: Establish and impled evelopment which incorporate the rural standards of the community.	ement standards for rural
Policies	ImplementationMechanism(Numbers refer to descriptions of mechanisms)
 1.3.1 County Project Review Committee New development proposals may be subject to County Project Review Committee for all new development in Three Rivers. a. Unless otherwise specified in this Community Plan, apply Foothill Growth Management Plan standards to the extent feasible as determined to be reasonable and appropriate by the affected decision makers. 	Foothill Growth Management Plan County Project Review Committee
1.3.2 Development Standards Ensure that development proposals conform to all development standards and guidelines to the extent feasible as determined to be reasonable and appropriate by the affected decision makers.	Design Guidelines Development Review Development Standards County Project Review Committee
1.3.3 Noise Standards Apply the noise standards found in the Tulare County Health and Safety Element (Part 1 Section 10.8). Utilize recommendations included in the community plan EIR to address and develop feasible noise standards to the extent feasible reflective of a foothill canyon environment.	Noise Element
 1.3.4 Setbacks Require adequate setbacks for residential, commercial and industrial uses, including, side and rear yards, landscaping and screening, as determined by the County Project Review Committee. a. Increase the required front and side yard setbacks for new development. 	Design Guidelines Development Regulations (Zoning) Development Standards Overlay Zone

1.3.5 Signage Standards	Design Guidelines
Require standards for signage in Three Rivers, including regulations for:	Development Standards
size height scale color lighting and material Incorporate Caltrans	County Project Review
signage standards with community standards as they apply to Highway	Committee
108	Gommittee
Balance reasonable business considerations with community design	
a. Datatice reasonable business considerations with community design	
distances that will determine size height and bulk	
b. Drobibit the use of exterior peop or blipking signs and source lit.	
b. Promoti the use of extenor fleor of binking signs and source it	
Signs.	Design Cuidelines
Establish lishting standards and suidelings as feasible and appropriate.	Design Guidennies
Establish light a light a light and guidelines as leasible and appropriate	Development Standards
to minimize light pollution, glare, and light trespass and to protect the	
dark skies in Three Rivers.	Regulations (Building
a. Require outdoor light fixtures on public and private property to be	Code)
	County Project Review
b. Externally illuminated signs, displays, and building identification	Committee
shall use top mounted light fixtures which shine light downward	
and which are fully shielded.	
c. Require motion sensors for security purposes, rather than intrusive	
security lights.	
d. Require that lights are pointed in a downward direction, and are	
turned off when not in use or if the business is not open.	
e. Restrict the use of commercial lights during nighttime hours to	
indirect, non-glaring lighting.	
f. Consider the International Dark Sky Association Model Ordinance	
to establish lighting standards and guidelines to minimize light	
pollution, glare, and light trespass.	
1.3.7 Vegetation Standards	Design Guidelines
Establish vegetation standards for residential and commercial	Development Standards
development, and encourage the use of native vegetation in	County Project Review
landscaping, when visible to common roadways.	Committee
a. Encourage the use of drought resistant vegetation.	
b. Minimize the disturbance of existing vegetation.	
c. Prohibit the use of non-invasive plant species.	
1.3.8 Rural Walkable Communities' Guidelines	Circulation Plan
Establish rural walkable communities' guidelines to maintain the rural	Design Guidelines
character for roadways, paths, and sidewalks to ensure that they are	Development Standards
compatible with the natural environment and scenic resources.	Development Review
1.3.9 Fencing Standards	Design Guidelines
Establish standards for fences and other similar structures to ensure	Development Standards
that they are aesthetically pleasing, and compatible with the character	County Project Review
of the neighborhood.	Committee
1.3.10 Residential Development Height Standards	Foothill Growth
Implement a residential development height standard of 35 feet, based	Management Plan
on the existing policies of the FGMP.	County Project Review
	Committee

1.3.11 Scenic Corridor Zoning Provision	Scenic Corridor
Implement the standards of the Scenic Corridor Zoning Provision.	Designation
1.3.12 FGMP-6.3 Development Along Scenic Highways	Circulation Plan
The County shall require that development along all scenic highways	Design/Dev. Tools
and routes meet the development standards of the FGMP.	Development Review
	Development Standards
1.3.13 SL-4.1 Design of Highways	Circulation Plan
The County shall work with Caltrans and Tulare County Association of	Design/Dev. Tools
Governments (TCAG) to ensure that the design of State Route 198	Development Review
protects scenic resources and provides access to vistas of working and	Development Standards
natural landscapes by:	· · · · · · · · · · · · · · · · · ·
a. Limiting the construction of sound walls that block views of the	
County's landscapes (incorporate setbacks to sensitive land uses to	
avoid noise impacts whenever feasible)	
b Using regionally appropriate trees and landscaping and	
incorporating existing landmark trees	
c. Preserving historic and cultural places and vistas	
d. Avoiding expressive out and fill for readways along State scorie.	
d. Avoiding excessive cut and mi for roadways along state seeme	
large viewing area and	
Dramata highway asfaty by identifying annuanista areas for traffic	
e. Promote nighway safety by identifying appropriate areas for trainc	
pull-outs and rest areas.	
1.3.14 SL-4.2 Design of County Roads	Circulation Plan $D = \frac{1}{2} D = \frac{1}{2}$
The County's reinvestment in County roads in the Three Rivers UDB	Design/Dev. Tools
should, in addition to meeting functional needs and safety needs,	Development Review
preserve the experience of traveling on the County's "country roads"	Development Standards
by:	
a. Maintaining narrow as possible rights-of-ways,	
b. Limiting the amount of curbs, paved shoulders, and other "urban"	
edge improvements,	
c. Preserving historic bridges and signage, and	
d. Promote County road safety by identifying appropriate areas for	
traffic pull-out.	
1.3.15 PF-2.7 Improvement Standards in Communities	Design/Dev. Tools
The County shall require development within the designated UDBs to	Development Review
meet standards for improvements as determined reasonable and	Development Standards.
appropriate by requiring that development respond to its context, be	County Project Review
compatible with the traditions and character of the community, and	Committee
develop in an orderly fashion which is compatible with the scale of	
surrounding structures. Typical improvements may include	
infrastructure such as streets, and community wastewater and water	
systems as determined to the extent feasible to be reasonable and	
appropriate by the affected decision makers.	
1.3.16 LU-1.7 Development on Slopes	Design/Dev. Tools
The County shall require a preliminary soils report for development	Development Review
projects in areas with shallow or unstable soils or slopes in excess of 15	Development Standards
percent. If the preliminary soil report indicates soil conditions could be	÷

unstable, a detailed geologic/hydrologic report by a registered geologist civil engineer, or engineering geologist shall be required	
demonstrating the suitability of any proposed or additional	
development.	
Objective 1.4 Quality Office, Commercial and Light Industrial De	velopment: Establish and
apply development and design standards to ensure quality professional of	ffice, commercial, and light,
non-polluting industrial development.	
1.4.1 Professional Office Design Standards	Circulation Plan
Design professional office, commercial and light, non-polluting,	Design/Dev. Tools
industrial developments to minimize adverse traffic impacts to	Development Review
residential areas.	Development Standards
1.4.2 Buffer Strips	Development Standards
Require office, commercial, and light industrial development to provide	County Project Review
a naturally planted buffer strip, including shade trees, to separate the	Committee
1 4 3 Visual Standards	Development Standards
Establish landscaping screening and visual standards for commercial	Development Standards
and industrial uses along Highway 198.	Design Ouldennes
1.4.4 Visual Screening	Development
Require automobile storage yards and commercial and multi-family	Regulations (Building
trash bins to be screened from view.	code)
	Development Standards
1.4.5 New Commercial Resort Development Standards	PUD
No new commercial resort development proposal which either exceed	
40 acres in area or 100 guest rooms shall be allowed without approval	
of a Planned Unit Development pursuant to Section 18.5, or a Planned	
Development pursuant to Section 18.6 Subsection G of the Tulare	
County Zoning Ordinance has been secured. (GPA 94-003).	
Encourage mixed use project review under the Planned Unit	FOD
Development procedure instead of the conventional procedure in	
order to further achieve and promote the goals, objectives, and policies	
of this plan.	
1.4.7 AQ-1.4 Air Quality Land Use Compatibility	Development Standards
The County shall evaluate the compatibility of industrial or other	Design Guidelines
developments which are likely to cause undesirable air pollution with	Development Review
regard to proximity to sensitive land uses, and wind direction and	County Project Review
circulation in an effort to alleviate effects upon sensitive receptors.	Committee
	Development
	Regulations (Zoning)
1.4.8 HS-8.8 Adjacent Uses	Development Standards
ine County shall not permit development of new industrial,	Design Guidelines
commercial, or other noise-generating land uses if resulting noise levels	Coupty Droiogt Doview
and zoned for residential or other poise sensitive uses upless it is	Committee
determined to be necessary to promote the public health safety and	Development
welfare of the County.	Regulations (Zoning)
1.4.8 HS-8.8 Adjacent Uses The County shall not permit development of new industrial, commercial, or other noise-generating land uses if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas designated and zoned for residential or other noise-sensitive uses, unless it is determined to be necessary to promote the public health, safety and welfare of the County.	Development Regulations (Zoning) Development Standards Design Guidelines Development Review County Project Review Committee Development Regulations (Zoning)

	\mathbf{D} 1 \mathbf{C} 1 1
1.4.9 LU-5.6 Industrial Use Butter	Development Standards
Unless mitigated, the County shall prohibit industrial uses within a	Design Guidelines
minimum of 500 feet from schools, hospitals, or populated residential	Development Review
areas (more than 10 dwelling units within a quarter mile diameter area).	County Project Review
The buffer area may be used for activities not creating impacts to	Committee
adjoining sensitive land uses for uses accessory to the heavy industrial	Development
use. The establishment of a buffer may not be required when mitigated	Regulations (Zoning)
or may not apply to industrial uses that do not impact adjoining uses	0 0
identified herein. The buffer area shall be landscaped and maintained	
Where the side or rear lot line of a site adjoins any "R" Zone (R_{-1} R-	
A $B \cap B^2$ or B^3 there shall be a solid wall fence or equivalent	
handsceps screening at least six (6) fast in height leasted along the	
landscape screening at least six (0) reet in neight located along the	
common lot line, except in a required front or side yard. Open storage	
of materials and equipment shall be permitted only with an area	
surrounded and screened by a solid wall or fence or compact evergreen	
hedge (with solid gates where necessary), and not less than six (6) feet	
in height, provided that no materials shall be stored to a height greater	
than that of the wall, fence or hedge. Fulfillment of the requirements	
of this paragraph shall not be required for buildings and uses which	
were established in accordance with all applicable building and zoning	
regulations and which were existing in the M-1 Zone on the effective	
date of this paragraph, until such time as a permit or other grant of	
approval for expansion, alteration or development of the property is	
approved by the County.	
Objective 15 Urban Development Boundary: Establish an Urba	n Development Boundary
(UDB) that is contiguous with the existing Planning Area Boundary.	in Development Doundary
1.5.1 UDB and Future Development	Community Plan Map
Consider areas within the UDB for future development, with growth	UDB
directed to specific areas such as a Town Center	
152 Develop Suitability Analysis	Natural Resources
Conduct development suitability analyses to determine areas within the	Mapping
UDB that are most suitable for future development	Dublic Health /Safety
ODD that are most suitable for future development.	Public Health/Safety
152 UDD Consistence	Concernity Plan Man
1.5.5 UDB Consistency	Community Plan Map
Require that development densities within the UDB are consistent with	
the adopted Community Plan.	
1.5.4 Applying FGMP Policies	
	Foothill Growth
Encourage the application of the Foothill Growth Management Plan	Foothill Growth Management Plan
Encourage the application of the Foothill Growth Management Plan (FGMP) policies to areas adjacent to Three Rivers that are outside of	FoothillGrowthManagementPlan(FGMP)
Encourage the application of the Foothill Growth Management Plan (FGMP) policies to areas adjacent to Three Rivers that are outside of the UDB.	Foothill Growth Management Plan (FGMP)
Encourage the application of the Foothill Growth Management Plan (FGMP) policies to areas adjacent to Three Rivers that are outside of the UDB.1.5.5 Prohibiting Public Services Outside of UDB	Foothill Growth Management Plan (FGMP)
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 Encourage the application of the Foothill Growth Management Plan (FGMP) policies to areas adjacent to Three Rivers that are outside of the UDB. 1.5.5 Prohibiting Public Services Outside of UDB Prohibit extension of public services outside of the UDB. 1.5.6 5 Year UDB Review Establish a review of the UDB every five years. 1.5.7 PF-2.2 Modification of Community UDB 1. The County may consider modification to a community UDB under any of but not limited to the following circumstances: 	FoothillGrowthManagementPlan(FGMP)VExtension ofPublicServicesVCommunityPlanImplementationVImplementationPlan

a. The location of the UDB shall be evaluated during preparation or	
update of a community plan.	
b. All community ODDs should be reviewed on a live-year cycle to reflect changes in growth and development patterns	
A request for expansion of the UDB boundary can be applied for	
as part of a General Plan Amendment to the Land Use Diagram	
d At the request of a special district or the community	
e. A UDB should be considered for expansion at such time as land for	
infill becomes limited. This condition is considered satisfied when	
80 percent of the non-Williamson Act land within the UDB is	
developed for community uses.	
f. UDBs should not be expanded onto Prime Farmland if Farmland	
of Statewide Importance or of lesser quality is available and suitable	
for expansion.	
2. Prior to approval of a UDB boundary expansion, the County shall	
ensure that infrastructure can be provided to serve the new areas added	
to the UDB and that sufficient water supplies are also available. This	
may require preparation of an infrastructure master plan that includes	
methods of financing of improvements and	
maintenance, as well as representation/documentation of availability	
and sufficiency of long-term water supplies.	
3. Preservation of productive agricultural lands shall be the highest	
priority when considering modifications. Expansion of a UDB to	
include additional agricultural land shall only be allowed when other	
are not suitable for expansion	
158 PE-28 Inappropriate L and Use	Development Standards
Areas within UDBs are hereby set aside for those types of community	Development Standards
land uses which benefit from urban type services. Permanent uses	Development Review
which do not benefit from such urban type services shall be	County Project Review
discouraged within the UDBs. This is not intended to apply to	Committee
agricultural or agricultural supported uses, including the cultivation of	Development
land or other uses accessory to the cultivation of land, provided that	Regulations (Zoning)
such accessory uses are time-limited through special use permit	
procedures.	
Objective 1.6 Town Center: Create a Town Center in the communi	ity with a concentration of
commercial, retail and social services to help strengthen Three Rivers as	a livable community.
1.6.1 Designating a Town Center	Community Plan Map
Designate a "Town Center" and -or "Town Center "sites in Three	
Rivers as a potential future town center for the community.	
1.6.2 Specific Plan Development	Specific Plan
Develop a Specific Plan for the Town Center to ensure the appropriate	
mix of uses for this area of Three Rivers and a high quality	
development.	
1.6.3 Commercial Clusters	Community Plan Map
Require commercial clustering adjacent to the existing Highway 198	Design/Development

164 Mixed Use Development Town Center	Community Dlan Man
France mixed use development in the Town Center	Design / Develorment
Encourage mixed-use development in the Town Center.	Design/Development
a. Establish a mixed-use land use designation and zone.	
b. Integrate new high density residential uses with planned commercial	Development
areas in the Town Center.	Regulations (Zoning)
1.6.5 SL-3.1 Community Centers and Neighborhoods	Development Standards
The County shall support investments in unincorporated communities	Design Guidelines
to improve the image, quality of infrastructure, amenities, and visual	Development Review
character by:	County Project Review
a. Encouraging restoration of existing historic buildings and	Committee
developing new buildings that reflect the local culture and climate,	Development
b. Creating or enhancing overall community design frameworks with	Regulations (Zoning)
a hierarchy of connected block and street patterns, open spaces,	
town centers, neighborhoods, and civic facilities,	
c. Reducing the need for sound-walls and gated neighborhoods by	
having residential and non-residential uses interface along streets	
and open spaces (not adjoining property lines) and locating	
residential uses on local-serving streets,	
d. Planning residential development as interconnected neighborhoods	
with definable social and physical centers that incorporate parks,	
schools, and commercial services,	
e. Enhancing the comfort and scenic experience of transit riders,	
cyclists, and pedestrians, and	
f. Developing open spaces, streets, and pedestrian facilities that	
include landscaping and streetscaping that improve the image of	
the community and make it a more comfortable pedestrian	
environment.	
	Implementation
	Mechanism
Policies	(Numbers refer to
	descriptions of
	mechanisms)
1.7.1 Development Suitability Analysis	Natural Resource
Base residential densities and intensity on development suitability	Mapping
analysis of the natural environment, including but not limited to: soil	
suitability, riparian setback requirements, slope gradient, and viewshed	
analysis.	
1.7.2 Density Regulations-Soil	Public Health/Safety
Base density regulations on suitability of the soils to provide for proper	Requirements
disposal of septic tank effluent and the land's capacity to provide water.	
1.7.3 Conservation Practices for Single-Family Developments	Natural Resource
Encourage single-family developments to conserve and protect open	Mapping
space, habitat areas, viewsheds, and natural resources from	Design/Dev. Tools
development disturbances.	Development Review
	County Project Review
	Committee
	1 1

intensity and densities that will efficiently utilize existing public services within the Three Rivers UDB.	
1.8.1 Community Services District Requirements	Public Health/Safety
 Require existing and new large-scale developments or subdivisions within the Community Services District to sponsor their share of certain needed public services. New development shall apply for water and wastewater services as reasonable, feasible and appropriate, and these services shall be provided on a service area basis as applicable under jurisdictional authority, ie (Mutual Water Company, County Service Area, or Improvement District under the auspices of the Community Services District). a. Require that engineered disposal systems for new residential, commercial and light industrial development are consistent with the standards of the State Water Quality Control Board (OWTS/Tulare County LAMP), the Tulare County Health Department and Three Rivers Community Services District and be approved by the necessary authorities with respect to the protection of all existing waterways, including but not limited to seasonal and perennial creeks, manmade ditches, and ponds greater than 30' in diameter. 	Requirements
1.8.2 Maximum Exceedance Limits Ensure that new development shall not exceed the maximum physical holding capacity of the parcel consistent with health and safety requirements	Requirements
183 Sufficient Lot Area	Development Review
 Require sufficient lot area for all new residential development to ensure an adequate area for on-site sewage disposal. a. For properties within the CSD, encourage CSD staff to inspect all new septic system installations. b. Require property owners to repair or replace failing septic systems and require property owners to properly maintain their separate systems. 	Development Regulations (Zoning and Subdivision Ordinance) Public Health/Safety Requirements
1.8.4 Utility Review Process	Public Health/Safety
Through development review, ensure that utilities are adequately sized to accommodate proposed development.	Requirements Maintenance Controls Development Review

Goal 2: Economic Vitality

A strong, diversified economic environment within Three Rivers which is consistent with the rural and visual atmosphere of the community.

Objective 2.1 Adequate Land Use Supplies: Ensure adequate land use supplies for residential, commercial, industrial, and public uses to accommodate future growth within the UDB and constrained by development suitability analysis to ensure the community's economic vitality.

Policies	Implementation Mechanism
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	(Numbers refer to
	descriptions of
	mechanisms)
2.1.1 Limiting Nuisance Conditions	CEOA Review
Accommodate light industrial development which does not create	Community Plan Map
nuisance conditions.	Development Regulations
	(Zoning)
	Development Standards
	County Project Review
	Committee
212 Community Commercial Shopping Area	Community Plan Man
Encourage a mixed use community commercial shopping area and	Design/Dev. Tools
higher density residential development in the "Town Center" area in	Specific Plan
Three Rivers	specific Fian
2.1.3 Concentrate Commercial Development	Community Plan Man
Promote a concentration of industrial professional office and	Development Regulations
commercial activities and high density residential development within	(Zoning)
selected areas to allow for cost efficient provision of necessary services	
and to protect residential neighborhoods from negative impacts	
2.1.4 Highway-Oriented Commercial Development	Community Plan Man
Maintain existing commercial areas along State Route 198 to the extent	Development Regulations
feasible for highway-oriented commercial development	(Zoning)
215 FD-54 Recreational Accommodations	CEOA Review
The County shall support the development of visitor serving	Community Plan Man
attractions and accommodations in unincorporated areas near natural	Development Regulations
amenities and resources that would not be diminished by tourist	(Zoping)
antenness and resources that would not be diministred by tourist	Development Standards
activities.	County Droiget Poview
	County Project Review
	CEOA Barian
2.1.0 ED-5.5 Rivers	CEQA Review
The County shall encourage the development of recreational activities	Community Plan Map
and promote tourism along the Kawean River.	Development Regulations
	(Zoning)
	Development Standards
	County Project Review
	Committee
2.1./ ED-5.0 Lakes	CEQA Keview
The County shall promote Lake Kaweah as a major recreational area	Community Plan Map
that includes camping, water sports, hiking, golf, conference/hotel	Development Regulations
facilities, and historic attractions.	(Zoning)
	Development Standards
	County Project Review
	Committee
2.1.8 ED-5.7 Foothills	CEQA Review
The County shall encourage additional recreational and visitor-serving	Community Plan Map
development in the Sierra and foothills in areas such as Three Rivers.	Development Regulations
	(Zoning)

	Development Standards
	County Project Review
	Committee
2.1.9 ED-5.8 Foothill Gateways	CEOA Review
The County shall encourage the identification and development of	Community Plan Map
additional recreational opportunities in the foothills and other areas	Development Regulations
where there are "gateway opportunities".	(Zoning)
	Development Standards
	County Project Review
	Committee
2.1.10 ED-5.9 Bikeways	CEQA Review
The County shall support the enhancement of the County's recreational	Community Plan Map
bikeways and promote the bikeway network as a component of the	Development Regulations
County's tourism program.	(Zoning)
	Development Standards
	County Project Review
	Committee
2.1.11 ED-5.10 Visitor-Serving Business	County
The County shall encourage visitor-serving businesses to coordinate	
their advertising.	
2.1.12 ED-5.11 Marketing Programs	County
The County shall regularly evaluate marketing programs and provide	
assistance to marketing campaigns that attract visitors to the County.	
2.1.13 ED-5.13 National Parks Tourism	County
The County shall work with Sequoia and Kings Canyon National Parks,	
Giant Sequoia National Monument, Sequoia National Forest, and	
others to market these areas of the County as tourist destinations.	
2.1.14 ED-5.14 Interagency Cooperation	County
The County shall cooperate with federal land management agencies to	
develop and promote Three Rivers as a gateway community.	
Objective 2.2 Business Attraction, Expansion, and Retention: To	County
promote business growth and industry diversification and maintain a	
favorable business climate and a supportive economic foundation.	
2.2.1 ED-2.1 Business Retention	County
The County shall participate in regional business retention and	
expansion programs, such as the Rapid Response program to ensure	
that County services are accessible to businesses.	
2.2.2 ED-2.5 Small Business	County
Recognizing the powerful job creation potential of small businesses,	
the County shall support entrepreneurial development and small	
business expansion.	2
2.2.3 ED-2.6 Agency Support for Small Businesses	County
The County shall coordinate with other agencies to provide well-	
tailored services and job creation resources for small businesses, such	
as incubator zones.	

2.2.4 ED-2.8 Jobs/Housing Ratio	County
The County shall strive to achieve a jobs-to-housing ratio of greater	5
than one in areas planned for development.	
Objective 2.3 Agricultural Development: Support agricultural development	pment for economic benefit,
visual diversity, and open space preservation.	
2.3.1 Grazing Activities	Community Plan Map
Designate areas on the Land Use Plan for agricultural land and grazing	
activities.	
2.3.2 Williamson Act Integration	County
Encourage extensive and intensive agricultural land currently not in the	
Williamson Act to enter Agricultural Preserves Contracts pursuant to	
the Williamson Act.	
2.3.3 Water Rights	CEQA Review
Require that new development does not interfere with established	Development Review
agricultural water rights.	
2.3.4 Provide Economic Incentives	County
Provide economic incentives to lessen development pressure on	
agricultural land and open space such as conservation easements,	
Williamson Act, mitigation banks and other tax incentives.	
2.3.5 Protect Agricultural Areas	Development Regulations
Protect extensive and intensive agricultural areas as identified by the	(Zoning)
community plan from encroachment of non-agricultural uses through	
the use of large lot exclusive agricultural zoning.	
Objective 2.4 Commercial Development: Support commercial of	levelopment for economic
Objective 2.4 Commercial Development: Support commercial of benefit, visual diversity, and open space preservation.	levelopment for economic
 Objective 2.4 Commercial Development: Support commercial of benefit, visual diversity, and open space preservation. 2.4.1 ED-6.1 Revitalization of Community Centers 	levelopment for economic Community Plan Map
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2.4.4 ED-6.6 Core Area Beautification	Community Plan Map
The County shall promote the beautification of communities, hamlet	Development Regulations
core areas, and mountain service centers.	(Zoning)
	Development Standards
	County Project Review
	Committee
	CEQA Review
2.4.5 ED-6.7 Existing Commercial Centers	Community Plan Map
The County shall help protect the viability of community retail centers	Development Regulations
by promoting a business mix that responds to changing economic	(Zoning)
conditions and provides needed services to surrounding	Development Standards
neighborhoods.	County Project Review
	Committee
	CEQA Review
2.4.6 PFS-6.1 Telecommunications Services	County
The County shall work with telecommunication providers to ensure	-
that all residents and businesses have access to telecommunications	
services, including broadband internet service. To maximize access to	
inexpensive telecommunications services, the County shall encourage	
marketplace competition from multiple service providers.	

Goal 3: Diverse Housing Options

A diversity of affordable and safe housing options for all Three Rivers residents, including families, seniors, and National Park Service employees.

Objective 3.1 Housing Mix: Maintain Three Rivers' predominant land use of single family residential, while providing for a mix of housing types and affordability levels throughout the community.

	Implementation
	Mechanism
Policies	(Numbers refer to
	descriptions of
	mechanisms)
3.1.1 Housing Support	Community Plan Map
Consistent with public health and safety requirements, provide for a	Development
variety of residential products in Three Rivers, including senior, low	Regulations (Zoning)
income, rural and estate housing to accommodate the housing needs of	Development Review
all segments of the community's population.	
3.1.2 Housing Financial Assistance	Grant Programs
Provide information to property owners regarding available state and	
federal low interest housing loans for rehabilitation of deteriorated	
units, and assist them in qualifying for these loans.	
3.1.3 Land Designation for Multi-Family & Senior Housing	Community Plan Map
Designate adequate land to accommodate multi-family and senior	Development
housing in an appropriate area such as the Town Center.	Regulations (Zoning)

314 Cluster Development	Design/Dev. Tools
Bromoto gluster development of senior and affordable bousing options	Design/Dev. 1001s
in Three Pivers in an appropriate area such as the Town Conter	Development Regulations (Zoning)
11 Thee Rivers in an appropriate area such as the Town Center.	Comparison Diag Mar
5.1.5 Mixed-Use Development	Community Plan Map
Encourage mixed use development (including housing components) in	Design/Dev. Tools
Three Rivers in an appropriate area such as the Town Center.	Development
	Regulations (Zoning)
3.1.6 Cluster Residential Development	Development
Encourage planned cluster residential development that groups	Regulations (Zoning)
residential properties in a proposed subdivision closer together in order	County Project Review
to use the rest of the land for open space on suitable sites that can	Committee
accommodate lot coverage while providing adequate open space to the	
extent feasible and appropriate given reasonably available and effective	
mitigation measures.	
3.1.7 High Density Residential Development	CEQA Review
Prohibit high density residential developments in areas with sensitive	Community Plan Map
environmental or visual resources and in areas lacking suitable	Natural Resources
infrastructure or emergency access facilities.	Mapping
	Public Health/Safety
	Requirements
3.1.8 Housing Policy 2.21 Housing Water and Wastewater	Community Plan Map
Require all proposed housing within the development boundaries of	Development
unincorporated communities is either (1) served by community water	Regulations (Zoning)
and wastewater, or (2) that physical conditions permit safe treatment of	Development Standards
liquid waste by septic tank systems and the use of private wells.	County Project Review
	Committee
	CEOA Review
3.1.9 Housing Policy 3.11 Jobs to Housing Balance	Community Plan Map
Support and coordinate with local economic development programs to	Development
encourage a "jobs to housing balance" throughout the Three Rivers	Regulations (Zoning)
Community.	Development Standards
	County Project Review
	Committee
	CEOA Review
3.1.10 Housing Policy 3.12 Neighborhood Parks	Community Plan Map
Support locally initiated programs to provide neighborhood parks and	CEOA Review
recreational facilities for residential areas within the Three Rivers	Development
Community The County shall use a wide range of funding	Regulations (Zoning)
mechanisms such as the following to adequately fund capital	Development Standards
improvements maintenance and on-going operations for publicly-	County Project Review
owned and/or operated facilities:	Committee
1 Establishing appropriate development impact fees	County
2 Establishing assessment districts and	
2. Establishing assessment districts, and 3. Grant Funding	
3. Grant Funding.	Community Plan Man
Security	CEOA Review
Encourage subdivision and housing unit design, which provides for a	Development
L'Encourage subdivision and nousing unit design, which provides for a	Development

reasonable level of safety and security.	Regulations (Zoning)
	Development Standards
	County Project Review
	Committee
3.1.12 Housing Policy 3.16 Grant Funds for Park and Recreation	CEQA Review
Facilities	Community Plan Map
Actively seek federal, state, and private foundation grant funds for park	Development
and recreation facilities in the Three Rivers Community including	Regulations (Zoning)
dual-use storm drainage ponding basins/recreation parks that would be	Development Standards
implemented through project design to accommodate environmental	Coupty Project Review
mitigation. For large projects encourage through a development	Committee
assument the front loading of park and requestion facilities of a	Committee
agreement, the front loading of park and recreation facilities as a	
community benefit.	
3.1.13 Housing Policy 4.21 Promote Energy Conservation	CEQA Review
Promote energy conservation opportunities in new residential	Community Plan Map
development.	Development
	Regulations (Zoning)
	Development Standards
	County Project Review
	Committee
3.1.14 Housing Policy 4.22 Energy-Efficient Subdivision Design	Community Plan Map
	Development
Enforce provisions of the Subdivision Map Act regulating energy-	Regulations (Zoning)
efficient subdivision design.	Development Standards
	County Project Review
	Committee
	CEOA Review
3.1.15 Housing Policy 5.21 Health and Safety Code	Community Plan Man
5.1.15 Housing Foncy 5.21 Health and Safety Code.	CEOA Porriory
	Development
Administer and enforce the relevant portions of the Health and Safety	Development
Code.	Regulations (Zoning)
	Development Standards
	County Project Review
	Committee
Objective 3.2 Mobilehomes: Provide a role for mobilehomes in sati	sfying community housing
needs while ensuring that the mobilehome development is attractive an	nd compatible with existing
development.	
3.2.1 RV & Mobilehome Parks	Community Plan Map
Allow new proposed mobilehome parks and recreation vehicle parks.	Development
by Special Use Permit, in designated commercial-recreation areas along	Regulations (Zoning)
State Route 198 as shown on the plan. or any other suitable areas.	
3.2.2 Screening Requirements for RV & Mobilehome Parks	Development
Require mobilehome parks and recreation vehicle parks adjacent to	Regulations (Zoning)
State Route 198 to be screened from State Route 198 Utilize such	Development Standards
screeping measures as maconry wells or other types of architectural	Coupty Project Review
forging outh borns, rook outgrand, and return writing the	Committee
rencing, earth derms, rock outcrops, and natural variation to	Committee
topography. Kequire the use of natural vegetation where it exists	

supplemented by additional natural landscaping to soften the visible	
effect from the highway.	
3.2.3 Screening Requirements for RV & Mobilehome Parks	Development Standards
In keeping with health and safety requirements, and complementary	County Project Review
with the topography, require screening measures such as skirting or a	Committee
similar type of architectural screening around the base of the	
mobilehome to improve mobilehome appearance and safety.	
3.2.4 Removal of Abandoned Mobilehomes	Building Inspection
Remove abandoned mobilehomes.	Code Compliance
3.2.5 Mobilehome Project Compatibility	Development
Ensure that mobilehome projects are located and designed in a manner	Regulations (Zoning)
that is compatible with existing development patterns and does not	Development Standards
detract from the visual quality of the community.	County Project Review
	Committee

Goal 4: Protection And Conservation Of The Environment

Land use patterns and design solutions which protect and conserve the environmental quality and natural beauty in Three Rivers.

Objective 4.1 Protection of the Natural Environment: Protect the natural environment by prohibiting land uses, activities, and development patterns that will have an adverse effect on the environmental quality of Three Rivers.

	T 1 1
	Implementation
	Mechanism
Policies	(Numbers refer to
	descriptions of
	mechanisms)
4.1.1 Preserving the Natural Environment	CEQA Review
Maintain a serene and attractive natural environment by prohibiting	Development Review
land use activities that create excessive and unwanted noise and/or light	Development Standards
in the community.	-
4.1.2 CEQA Compliance	CEQA Review
Consistent with CEQA, protect water quality and wildlife including	Development Review
sensitive and critical habitat in Three Rivers by prohibiting, to the	Public Health/Safety
extent feasible and appropriate, land use activities that endanger water	Requirements
quality and/or wildlife as a result of pollution and/or sedimentation.	
a. Prohibit, to the extent allowed by law, commercial and industrial	
development with excessive BOD (Biochemical Oxygen Demand) and	
COD (Chemical Oxygen Demand) waste water discharge	
characteristics as described by the State Water Quality Control Board	
and Army Corps of Engineers.	
b. Consistent with CEQA, to the extent feasible and appropriate, the	
Mitigation and Monitoring Program in the Community Plan EIR will	
provide advanced mitigation planning to protect water quality and	
wildlife including sensitive and critical habitat in Three Rivers.	

4.1.3 Mitigating Traffic Impacts	CEQA Review
Ensure that new development does not excessively increase traffic flow	Circulation Plan
through existing or planned residential areas. The County shall require	Development Review
an analysis of traffic impacts for land development projects that may	
generate increased traffic on County roads. Typically, applicants of	
projects generating over 100 peak hour trips per day or where LOS "D"	
or worse occurs, will be required to prepare and submit this study. The	
traffic impact study will evaluate impacts from all vehicles, including	
truck traffic.	
4.1.4 Roadway Subdivision	Circulation Plan
Design roads in residential subdivisions to minimize through traffic	Development Standards
The internal design of subdivision roadways and layout shall be	Development standards
designed based on the functional classification of each roadway which	
promotes the utilization of collector and arterial roads to provide	
promotes the utilization of conector and arterial loads to provide	
11.5 Net well Decises Comment	
4.1.5 Natural Drainage Courses	Development Review
Encourage and Maintain natural drainage courses to ensure that	General Development
alterations do not lessen their capacity or cause obstructions, erosion,	Controls
or sedimentation.	Maintenance Controls
	Natural Resource
	Mapping
	Public Lands/Easements
4.1.6 ERM-1.14 Mitigation and Conservation Banking Program	Natural Resource
The County within the Three Rivers Area shall support the	Mapping
establishment and administration of a mitigation banking program,	Public Lands/Easements
including working cooperatively with TCAG, Federal, State, not-for-	Development
profit and other agencies and groups to evaluate and identify	Regulations (Zoning)
appropriate lands for protection and recovery of threatened and	
endangered species impacted during the land development process.	
4.1.7 ERM-5.15 Open Space Preservation	Development Review
The County within the Three Rivers Area shall preserve natural open	General Development
space resources through the concentration of development in existing	Controls
communities, use of cluster development techniques, maintaining large	Maintenance Controls
lot sizes in agricultural areas, discouraging conversion of lands currently	Natural Resource
used for extensive and intensive agricultural production, limiting	Mapping
development in areas constrained by natural hazards, and encouraging	Public Lands/Easements
agricultural and ranching interests to maintain natural habitat in open	Design Guidelines
space areas where the terrain or soil is not conducive to agricultural	Development Standards
space areas where the terrain of soil is not conductive to agricultural	Coupty Project Review
production.	Committee
	Development
	Development Regulations (Zening)
440 EDM 446 Commence 1/1 W7/1 11/2 A	Regulations (Zoning)
4.1.8 EKM-1.16 Cooperate with Wildlife Agencies	Natural Kesource
The County within the Three Rivers Area shall cooperate with State	Mapping
and tederal wildlife agencies to address linkages between habitat areas.	Public Lands/Easements
	Development
	Regulations (Zoning)

410 FPM 117 Concernation Dian Coordination	Natural Pasauras
The County within the Three Divers Area shall accordinate with local	Manning Resource
State and federal hebitat concernation planning efforts (including	Dublic Londo / Economicato
State, and rederal habitat conservation planning enous (including	Public Lands/ Easements
Section 10 Habitat Conservation Plan) to protect critical nabitat areas	Development Development
that support endangered species and other special-status species.	Regulations (Zoning)
4.1.10 Wildlife Safety & Educational Program	Grant Programs
Implement an educational program for community residents regarding	
Wildlife Safety, and encourage community participation in preservation	
efforts. Wildlife Safety Guidelines are included in Appendix 7.	
Objective 4.2 Kaweah River: Protect and preserve the natural features	s and quality of the Kaweah
River and all of its tributaries, both perennial and intermittent.	
	Implementation
	Mechanism
	(Numbers refer to
Policies	descriptions of
	mechanisms, which
	follow table)
4.2.1 Kaweah River Preservation	Development
Protect and preserve the natural features and quality of the floodways	Regulations (Zoning)
of the Kaweah River. "Floodway" means the channel of a river or other	Development Standards
watercourse and the adjacent land area that must be reserved in order	Floodway Designation
to discharge the base flood without cumulatively increasing the water	Natural Resource
surface elevation more than one (1) foot. The floodway is delineated	Mapping
on the Flood Boundary Floodway Map, on maps adopted by the State	1. mpp8
Reclamation Board when acting within its jurisdiction and/or on the	
County Zoning Man (signified by the E-1 Primary Flood Plain Zone)	
2. Utilize the E 2 Secondary Flood Plain Combining Zone which is	
intended for application to those areas of the County which lie	
within the fringe area or setback of the flood plain and are subject	
to less severe inundation during flooding conditions than occur in	
to its severe mundation during nooding conditions than occur in the E 1 Zone	
b Drobibit to the extent ellowed by law structural development.	
b. Promble, to the extent anowed by law, structural development	
within the hoodway, unless approved by local, state, or rederat	
I agencies with jurisdiction.	
c. Utilize the development standards in the Tulare County Ordinance	
Code Chapter 27. Flood Damage Prevention to ensure that	
permitted development in the floodway is compatible with the	
natural resources of the corridor.	D 1
4.2.2 Floodplain Preservation	Development
Protect and preserve the natural features and the quality of the	Regulations (Zoning)
floodplains of the Kaweah River. "Floodplain" or "flood-prone area"	Development Standards
means any land area susceptible to being inundated by water from any	Floodway Designation
source. "Base Flood" is the flood having a one percent chance of being	Natural Resource
equaled or exceeded in any given year. "One-hundred-year flood" or	Mapping
"100 year flood" has the same meaning as "base flood." "Special flood	
hazard area" is the land in the floodplain subject to a one percent or	
greater chance of flooding in any given year. The area is designated as	

Zone A, AO, A1-A30, AE, A99, or AH on the FEMA FIRM.	
a. Maintain the 100-year floodway by prohibiting the development of	
residences or permanent structures within the floodway unless	
approved by the State Reclamation Board and the County of Tulare	
in accordance with the requirements of Tulare County Zoning	
Ordinance Section 14.7 F-1 Primary Flood Plain Zone. (FGMP-8.3	
page 3-12.)	
4.2.3 Enforce Floodway Standards & Guidelines	Development
Enforce applicable standards and regulations regarding floodway and	Regulations
floodplain preservation, and refer projects in the floodway and	Floodway Designation
floodplain to applicable agencies.	Intergovernmental
a. Encourage the appropriate state and federal agencies to update	Coordination
floodway and floodplain maps, and incorporate the updated maps	Development
into the planning process	Regulations (Zoning)
b New projects subject to applicable floodway and floodplain	Regulations (Zonnig)
regulations must be permitted by the Central Valley Flood	
Distortion Roard including a parmit with a no rise continuation to	
Protection board including a permit with a no fise certification to	
Destructions include but are not limited to any dam well where	
Obstructions include, but are not infined to, any dam, wait, whati,	
embankment, levee, dike, pile, abutment, protection, excavation,	
channelization, bridge, conduit, building, wire, fence, rock, gravel,	
refuse, fill, structure, vegetation or other material in, along, across or	
projecting into any watercourse which may alter, impede, retard or	
change the direction and/or velocity of the flow of water, snare or	
collect debris carried by the flow of water, or is likely to be carried	
downstream.	
4.2.4 Incentivizing Floodway Restoration	Floodway Designation
Create positive incentives for floodway and floodplain restoration and	Grant Programs
protection, including conservation easements and land trust	Public Lands and
management.	Easements
4.2.5 Watercourse Protection	Development
Building improvements (homes, fences, etc.) and septic tank/leach line	Regulations (Zoning)
systems or other activities associated with construction (grading) shall	Development Review
not be permitted within 50' of an intermittent watercourse or 100' of a	Natural Resources
perennial watercourse.	Mapping
	County Project Review
	Committee
4.2.6 Review of Development Proposals in Floodway Areas	Natural Resources
Development proposals located in the designated river floodplain areas	Mapping
shall be subject to the County Project Review Committee	County Project Review
	Committee
	Development Standards
427 Protect Riparian Areas	Natural Resources
In accordance with CEOA protect the ringrian aroas along the Verrach	Mapping
River and all of its tributories	Dublic Londo or
Niver and all of its unbutanes.	Fublic Lands and
a. Discourage the removal of riparian native species, such as sycamores,	Carrierte Drainte D
LAND NATIVE ONLY INCLUDING DUT NOT LIMITED TO DUE ONLY LIVE ONLY AND	LUDUNTY Protect Keview

valley oaks. b. Tree Trimming Protocol Phase 1 as feasible and appropriate:	Committee CEQA Review
1. Notification of the residents in advance of the work to be performed.	
2. Clean up limited to trimming the branches that were fractured as part of the prior trimming process.	
3. Remove the debris in the right of way and convert it to compost.	
c. Tree Trimming Protocol Phase 2 as feasible and appropriate:	
1. Development a long term protocol regarding trimming and removal of existing "young" plants, bushes, trees.	
2. Notification of the residents in advance of the work to be performed.	
3. Selective vs broad-scale trimming. This strategy would involve determining specific trees and plants for trimming.	
4. Determining the appropriate distance for trimming in the right of way and the timing in regards to the particular season when it is best to perform the maintenance work.	
5. Have our maintenance staff working in the area attend town hall meetings as appropriate.	
4.2.8 Control Plant Species	Development Standards.
Limit and control planting of non-native plants and trees in the riparian	Public Lands and
areas by review of the County Project Review Committee of the	Easements
Kaweah River and all of its tributaries utilizing the Introduced,	County Project Review
Invasive, and Noxious Plants lists from the USDA Natural Resources	Committee
Conservation Service and California Native Plant Society.	
4.2.9 Protect & Conserve Open Space	Community Plan Map
Establish a greenway to promote a corridor of protected open space	Design/Development
that is maintained for conservation and recreation along the Kaweah	Tools
River to the extent feasible and appropriate.	Development
	Regulations (Zoning)
	Public Lands and
	Easements
4.2.10 HS-5.4 Multi-Purpose Flood Control Measures	Development Review
The County within the Three Rivers Area shall encourage multipurpose	Design Guidelines
flood control projects that incorporate recreation. resource	Development Standards
conservation, preservation of natural riparian habitat, and scenic values	County Project Review
of the County's streams, creeks, and lakes. Where appropriate, the	Committee
County shall also encourage the use of flood and/or stormwater	Development

retention facilities for use as groundwater recharge facilities.	Regulations (Zoning)
 4.2.11 HS-5.9 Floodplain Development Restrictions The County within the Three Rivers Area shall ensure that riparian areas and drainage areas within 100-year floodplains are free from development that may adversely impact floodway capacity or characteristics of natural/riparian areas or natural groundwater recharge areas. Objective 4.3 Significant Native Trees and Oak Woodlands: woodlands and Native Trees as defined and identified in the Three I Native Tree Inventory 	Development Review Design Guidelines Development Standards County Project Review Committee Development Regulations (Zoning) Protect and preserve oak Rivers Oak Woodland and
Policies	ImplementationMechanism(Numbers refertodescriptionsofmechanisms)
4.3.1 Removing Native Trees Removal or grading around native trees (6" or larger in diameter at breast height (measured at 1.4 m above ground)) which may disturb the root system shall not be allowed during the construction process unless the County deems it is necessary because of road alignment or infrastructure improvements. In the event that mitigation is required resulting from such improvements, it shall be mitigated to the extent feasible	Natural Resources Mapping County Project Review Committee Development Standards Development Review Design Guidelines
4.3.2 Removing Native Trees- Exceptions Removal of native trees in designated open space areas or on private property shall not be allowed unless the health, safety or welfare of residents associated with the on-site or adjacent development is endangered. In the event that mitigation is required resulting from such removal, it shall be mitigated to the extent feasible. a. Any trees proposed for removal must be indicated on the submitted site plan with accompanying information stating the reason for tree removal.	NaturalResourcesMappingPublicLandsBasementsCountyProjectReviewCommitteeDevelopmentDevelopmentReviewDesignGuidelines
4.3.3 Preserving Oak Woodlands County Project Review Committee may be utilized for residential development proposals to ensure the preservation of oak woodlands and significant native trees on the site.	NaturalResourcesMappingCountyProjectReviewCommitteeDevelopmentStandardsDevelopmentReviewDesignGuidelines
4.3.4 Establish 1:1 Replacement Standards Establish a replacement standard of 1:1 to the extent feasible and appropriate for the removal and replacement of significant native trees and oak woodlands. A replacement standard of 2:1 or 3:1 may be	Development Standards

required to the extent feasible and appropriate based on but not limited	
to soil, slope, and applicable biological considerations.	
4.3.5 Tree Preservation Education Program Implement an educational program for community residents regarding oak woodlands, and encourage community participation in preservation efforts. Oak Tree Care Guidelines are included in Appendix 4 . (Consider UC Davis and California Oak Foundation Materials).	Grant Programs
4.3.6 Control Non-Native Plant Species	Development Standards
Limit and control to the extent feasible and appropriate non-native plant species that threaten native oak woodlands.	Public Lands and Easements County Project Review Committee
437 ERM-112 Management of Oak Woodland Communities	Grant Programs
The County shall support the conservation and management of oak woodland communities and their habitats.	Public Lands and Easements
	Natural Resources Mapping
	County Project Review Committee
	Development Regulations (Zoning)
4 3 8 ERM-1 4Protect Riparian Areas	Grant Programs
The County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls.	Public Lands and Easements Natural Resources Mapping County Project Review Committee Development Regulations (Zoning)
4.3.9 ERM-1.8 Open Space Buffers	Grant Programs
The County shall require buffer areas between development projects and significant watercourses, riparian vegetation, wetlands, and other sensitive habitats and natural communities. These buffers should be sufficient to assure the continued existence of the waterways and riparian habitat in their natural state.	Public Lands and Easements Natural Resources Mapping County Project Review Committee Development Regulations (Zoning)
Objective 4.4 Native Vegetation and Habitat: Protect and prese wildlife habitat areas.	erve native vegetation and
4.4.1 Unnecessary Removal of Native Trees	Development
Prohibit to the extent allowed by law unnecessary removal of native trees on development sites prior to the approval of development plans	Regulations Natural Resources
to control erosion, preserve wildlife habitat, and maintain the natural character of Three Rivers.	Mapping Public Lands and

4.4.2 Removal of Natural Vegetation Restrict to the extent feasible and appropriate the removal of natural vegetation, except for wildland fire prevention purposes.	Easements County Project Review Committee Development Review Design Guidelines Development Regulations Natural Resources
4.4.3 Protect Riparian Habitat Prevent to the extent feasible and appropriate encroachment of	Mapping Public Lands and Easements Development Review Design Guidelines Natural Resources Mapping
development into riparian habitat areas and habitat of endangered species and wildlife of special concern.	County Project Review Committee Development Regulations (Zoning) Development Review Design Guidelines
4.4.4 Ensure Appropriate Landscaping Ensure to the extent feasible and appropriate that landscaping of development contains plant material compatible with the surrounding native vegetation.	County Project Review Committee Development Review Design Guidelines
4.4.5 ERM-1.7 Planting of Native Vegetation The County within the Three Rivers Area shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation and wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained (http://www.cnps.org/cnps/grownative/lists.php).	Development Regulations Natural Resources Mapping Public Lands and Easements County Project Review Committee Development Review Design Guidelines
Objective 4.5 Visual Resources: Preserve visual resources in Three Rivers, including viewsheds and ridgelines.	
Policies	ImplementationMechanism(Numbers refer to descriptions of mechanisms)
4.5.1 Implement Foothill Growth Management Plan Policies and Standards Unless otherwise specified in this Community Plan, Implement the policies and standards of the Foothill Growth Management Plan regarding visual resources.	FGMP

4.5.2 Proposals Subject to County Project Review Committee	County Project Review
New development proposals may be subject to County Project Review	Committee
Committee to ensure minimal impacts to visual resources including but	
not limited to significant native trees and oak woodlands, erosion, and	
night sky protection. Projects subject to Project Review Committee	
review requirements shall be determined by the Planning Director	
Planning Commission or Board of Supervisors	
4.5.3 Design Quality	Development
Ensure the quality of design of structures along Highway 198 to	Regulations (Zoning)
maintain the visual quality of the views from the Highway	Development Standards
maintain the visual quality of the views from the Fighway.	Coupty Project Review
	Committee
454 Minimize Viewshed Impact	Development Review
Design roadways to minimize viewshed alteration and impact	Circulation Plan
Design toad ways to minimize view shed alteration and impact.	Design / Development
	Tools
.5.5 Skyline Preservation	Development Review
Design hilltop development to preserve the skyline and maintain an	Design Guidelines
unobstructed scenic panorama.	Development Standards
	County Project Review
	Committee
4.5.6 Ridgeline Development to Blend into the Landscape	Development
Prohibit development on ridgelines to the extent feasible for new	Regulations
development that causes a significant impact to the skyline and scenic	Development Review
panorama by requiring the development to blend into the landscape	Natural Resources
rather than becoming a focal point given reasonably available and	Mapping
feasible mitigation measures. The top of structures shall be designed	County Project Review
to preserve the skyline and maintain an unobstructed scenic panorama.	Committee
The maximum building height measured at foundation ground level	
shall be 35 feet.	
4.5.7 Slope Development	Development Review
Prohibit to the extent feasible and appropriate development on slopes	Natural Resources
30% or greater, unless the inherent problems associated with	Mapping
developing on steep slopes can be mitigated without excessive grading	11 0
given reasonably available and feasible mitigation measures.	
4.5.8 Grading & Slope Stabilization Plan	Development Review
Require a grading and slope stabilization plan for the portion of the	ĩ
development exceeding slopes of 15% or greater.	
4.5.9 Prohibit Existing Slope Alteration	Development Review
Prohibit alteration or cutting of existing slopes to the extent feasible	General Development
and appropriate to decrease the gradient for the purpose of	Controls
development, prior to the submittal of a development application.	Natural Resources
	Mapping
	County Project Review
	Committee
Objective 4.6 Historical, Cultural and Archaeological Resources:	Preserve historical, cultural.
and archaeological resources including the Kaweah post office, historical bridges, and Native	

American cultural resources.	
Policies	ImplementationMechanism(Numbers refer todescriptions ofmechanisms)
4.6.1 Identify Structures with Cultural or Historical Significance Identify historical, cultural, and archaeological resources within the community.a. Create a list of historic buildings and structures to be preserved in Three Rivers.	Archaeological Survey
4.6.2 Preserve Cultural & Historical Value Limit to the extent feasible and appropriate development on sites with identified significant cultural or historical value.	Development Regulations (Zoning)
4.6.3 Incentivize Cultural & Historic Restoration Consider incentives to promote restoration of historic structures and cultural and archeological resources in the community.	Grant Programs
4.6.4 ERM-6.3 Alteration of Sites with Identified Cultural Resources When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource	Archaeological Survey Development Review Design Guidelines Development Standards County Project Review Committee Development Regulations (Zoning)
4.6.5 ERM-6.4 Mitigation If preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records.	Archaeological Survey Development Review Design Guidelines Development Standards County Project Review Committee Development Regulations (Zoning)
4.6.6 ERM-6.8 Solicit Input from Local Native Americans The County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.	Archaeological Survey
4.6.7 ERM-6.9 Confidentiality of Archaeological Sites The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.	Archaeological Survey Development Review Design Guidelines Development Standards County Project Review Committee Development Regulations (Zoning)

4.6.8 ERM-6.10 Grading Cultural Resources Sites	Archaeological Survey
The County shall ensure all grading activities conform to the County's	Development
Grading Ordinance and California Code of Regulations, Title 14,	Regulations (Zoning)
Chapter 3 § 15064.5 et. seq. In the event archaeological and/or buried	
historic resources are discovered during site excavation, grading, or	
construction, work on the site will be suspended until the significance	
of the features can be determined by a qualified archaeologist. If	
significant resources are determined to exist, the archaeologist shall	
make recommendations for protection or recovery of the resource.	

Goal 5: Provide Public Services & Community Facilities

High quality public services and community facilities to serve the existing and future needs of the Three Rivers Community.

Objective 5.1 School Facilities and Programs: The County shall work cooperatively with the Three Rivers Union Elementary School District to ensure that needed school facilities and educational programs are provided in a timely manner in accordance with the pace of development.

Policies	Implementation		
	Mechanism		
	(Numbers refer to		
	descriptions of mechanisms)		
5.1.1 Ensure Quality Education Programs	Intergovernmental		
The County shall coordinate with the Three Rivers Union	Coordination		
Elementary School District to ensure uncrowded classrooms, buses,			
playgrounds, cafeterias and office space essential to offer a quality			
educational program.			
5.1.2 Encourage 5 Year Growth Projections	Intergovernmental		
The County shall encourage the school district to plan future	Coordination		
development activities, based on 5-year growth projections, with			
close attention to functional and architectural compatibility.			
5.1.3 Develop Financing Methods	Grant Programs		
The County shall encourage the school district to study methods of	Intergovernmental		
financing and developing a multi-use community school	Coordination		
recreation/education building.			
Objective 5.2 Open Space and Recreation Facilities: Provide	sufficient open space, public		
recreational areas, and facilities for community recreation needs.			
5.2.1 Reserve Recreational Space	Community Plan Map		
Reserve open space for recreational purposes in conjunction with	Development Review		
future planned unit development residential developments.			
5.2.2 Housing & Subdivision Design	Design/Development Tools		
Facilitate innovation in housing and subdivision design to			
accommodate private recreation and open space areas.			
5.2.3 Community Facility Development	Grant Programs		
Develop a community facility in Three Rivers to provide			
educational, recreational, cultural, and meeting space for community			
residents			
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5.2.4 Facility Maintenance	Maintenance Controls		
Ensure to the extent feasible ongoing maintenance of existing and	Public Health/Safety		
future public recreation areas and facilities.	Requirements		
5.2.5 Retain Natural State of Recreational Space	Development Regulations		
Retain recreational open space in a natural state to avoid high			
maintenance costs and to maintain compatibility with the natural			
environment.			
Objective 5.3: Provision of Water and Wastewater Continue the e	fficient provision of water and		
wastewater services within the Urban Area Boundary (UDB).			
5.3.1 Public Services Provision	Extension of Services		
Ensure that the provision of public services (water and wastewater)	Public Health/Safety		
are consistent with the Three Rivers Community Plan (map and	Requirements		
text).	-		
5.3.2 Provide Safe Water Systems	Extension of Services		
Provide an adequate, reliable and safe water supply, storage, and	Public Health/Safety		
distribution system.	Requirements		
5.3.3 Require Sewage Collection Systems	Development Review		
Require sewage collection systems in planned high density	Extension of Services		
residential and/or commercial areas.	Public Health/Safety		
	Requirements		
5.3.4 Provide Wastewater Treatment Systems	Extension of Services		
Provide adequate wastewater collection and treatment capacity for	Public Health/Safety		
existing and planned development in Three Rivers that is within the	Requirements		
boundaries of the UDB.	-		
5.3.5 Improvement Districts Formation	Development Regulations		
Require commercial areas to form Improvement Districts under the			
auspices of the Community Services District when community water			
and wastewater systems are required.			

Goal 6: Foster Safe & Accessable Transportation/Circulation System

A safe and accessible transportation and circulation system in Three Rivers that enhances the character of the community.

Objective 6.1 Transportation and Circulation System:	Develop a safe and accessible
transportation and circulation system in Three Rivers.	
Policies	Implementation Mechanism (Numbers refer to
	descriptions of mechanisms)

6.1.1 Caltrans Collaboration	Intergovernmental
Coordinate with Caltrans to establish turnouts and rest areas as	Coordination
traffic calming devices along Highway 198	
(12 Creation of The Land	C' = 1 $C' = D1$
6.1.2 Creation of 1 urn Lanes	Circulation Plan
Create a left turn lane from Westbound Highway 198 onto Cherokee	
Oaks Drive and a deceleration lane or improved shoulder for right	
turns from Eastbound 198 onto Cherokee Oaks Drive.	
613 Improve Road Safety	Circulation Plan
Improve and egress safety and access at the Snoshone Inn Location.	
6.1.4 Improve Road Access	Circulation Plan
Improve ingress and egress safety and access to the Cherokee Oaks.	
North Fork and South Fork areas	
(15 Dedectrice Sefet	Cincelation Dlan
6.1.5 Pedestrian Safety	Circulation Plan
Improve pedestrian safety and access in the community, particularly	
near the Three Rivers Elementary school utilizing Complete Streets	
and Active Transportation Program funding.	
a Construct a pedestrian walkway from the elementary school to	
the North Fork Bridge Consideration for connecting existing	
the North Fork Druge. Consideration for connecting existing	
sidewalks with attention to maintaining driveway while provide	
safe pedestrian access on the north side of Highway 198.	
b. Construct a flashing caution sign at the location of the existing	
crosswalk on Highway 198 at the Three Rivers Elementary	
school	
616 Dial-a-Ride Program	Intergovernmental
Establish a Dial a Dida program to improve access and mobility for	Coordination
instabilish a Diai-a-Kide program to improve access and mobility for	Coordination
seniors.	
a. Participate in the annual TCAG Unmet Transit Needs hearing of	
transit providers.	
6.1.7 Traffic Enforcement	Public Health/Safety
Establish and maintain a high level of traffic enforcement in Three	Requirements
Rivers to provide for safe driving conditions to the extent allowed	Intergovernmental
Rivers to provide for sale driving conditions to the extent anowed	
by law.	Coordination
6.1.8 Turn Lane Installation	Development Review
Require the installation of left and right hand turn lanes (as	
necessary) as development conditions of approval.	
Objective 6.2 Access to Transportation: Ensure that land uses	are located with appropriate
access to transportation corridors.	The second se
	Implementation
	Machanism
Policies	
	(Numbers refer to
	descriptions of mechanisms)
6.2.1 Designate Public, Quasi-Public and High Density Uses	Circulation Plan
Require public, quasi-public, and high density residential uses to	Community Plan Map
locate where there is direct and safe access to an appropriately	Development Review
designed or improved street	
acsigned of improved succi.	

6.2.2 Link Commercial Development to Transporation	Circulation Plan
Corridors	Community Plan Map
Require commercial, professional office and light industrial	Development Review
development to locate in areas with adequate access to major	-
transportation corridors.	

Goal 7: Provide Adequate Emergency And Safety Access

Adequate emergency and safety access to all development in Three Rivers.

Objective 7.1 Adequate Emergency Access: Ensure adequate access for emergency and safety vehicles, consistent with the State Response Area (SRA) standards, Foothill Growth Management Plan Development Standards, and Tulare County Improvement standards as applicable.

	T 1			
	Implementation			
Policies	Mechanism			
	(Numbers reter to			
	descriptions of mechanisms)			
7.1.1 Residential Safety Standards	Development Standards			
Incorporate residential safety standards, including driveway	Public Health and Safety			
standards, address coding, and adequate street widths consistent	Requirements			
with State Response Area (SRA) Standards, Foothill Growth				
Management Plan Development Standards, and Tulare County				
Improvement standards as applicable.				
7.1.2 Accessibility to Public Safety Services	Development Review			
Require that new development is accessible to the Tulare County	Development Standards			
Fire Department and Sheriff's Department.	Intergovernmental			
	Coordination			
	Public Health and Safety			
	Requirements			
7.1.3 Provide Local Emergency Services	Intergovernmental			
Pursue a local fire station and ambulance service in Three Rivers that	Coordination			
will be operational throughout the entire year.				
7.1.4 Maintain Rural Community Characteristics	Development Review			
Ensure that the rural characteristics of the community are	Development Standards			
maintained, along with the improvements to emergency access and	1			
public safety including emergency evacuation operations consistent				
with the Tulare County Emergency Operations Plan.				
7.1.5 Establish a Records System	Development Review			
Create and implement a numbering and identification system	Development Standards			
consistent with all applicable electronic records for parcels, public	Intergovernmental			
utilities, sheriff, fire, for all residences and businesses to ensure that	Coordination			
they can be readily accessed by fire, ambulance, and law enforcement				
personnel and vehicles in the event of an emergency including				
providing emergency evacuation operations consistent with the				
Tulare County Emergency Operations Plan.				
a. Adequate numbering will be a development condition for future				
development.				

b.	Ensure	that	this	system	in	consistent	between	all	effected
	agencies	s, incl	uding	g c onsist	ent	standards f	or signage		

Goal 8: Enhance Community Character

Enhancing attributes in a community to make it special, both in terms of the natural and built environment and its population.

Objective 8.1 Foothill Identity:	To maintain the natura	l beauty of the	Three Rivers A	Area while
allowing focused growth in identif	ied growth areas.			

	Implementation
Policies	Mechanism
	(Numbers refer to
	descriptions of mechanisms)
8.1.1 FGMP-1.1 Protection of Values in Three Rivers	Development Standards
The County shall properly address and protect to the extent feasible	Public Health and Safety
the existing values and identity in Three Rivers as development	Requirements
8 1 2 FGMP-3 1 Innovative Residential Design	Development Review
The County shall encourage innovatively designed residential	Development Standards
development in the foothills such as planned unit or cluster	Intergovernmental
development that preserves surrounding open space from	Coordination
superfluous disturbances	Public Health and Safety
	Requirements
8.1.3 FGMP-8.19 Preservation of Unique Features	Intergovernmental
The County shall encourage maintenance and protection of unique	Coordination
open space areas such as riparian woodlands, oak woodlands,	
interesting rock formations, and scenic vistas.	
8.1.4 FGMP-10.1 Compliance with Planning Policies	Development Review
To provide for the integration of efficient road systems, existing	Development Standards
community values, infrastructural improvements, and open space	_
patterns, the County shall encourage development projects within	
the Three Rivers UDB to comply with a common development or	
specific plan designed for that area.	
8.1.5 FGMP-1.2 Grading	Development Review
The County shall ensure that new development is designed in a	Development Standards
manner that minimizes grading, vegetation disturbance, and	Intergovernmental
intrusion onto natural watercourses, canyons and prominent	Coordination
landmarks, or rare and endangered species habitats Stormwater	
retention shall be maintained on-site to the extent feasible and	
appropriate.	

Goal 9: Provide Safe And Secure Environment

The health and safety of Three Rivers residents will be protected and enhanced.

Objective 9.1 The impact of development on the health of a comm	unity and its members, should
be considered.	
	Implementation
Policies	Mechanism
	(Numbers refer to
	descriptions of mechanisms)
9.1.1 Safe Opportunities for Physical Activity	Development Standards
Encourage convenient and safe opportunities for physical activity	Public Health and Safety
for all residents.	Requirements
9.1.2 Alternative Modes of Transportation	Development Review
Encourage the development of Three Rivers such that residents can	Development Standards
be encouraged to regularly walk, bicycle or use public transit for their	Intergovernmental
daily activities.	Coordination
	Public Health and Safety
	Requirements
9.1.3 Maintain Rural Characteristics	Intergovernmental
Ensure that the rural characteristics of Three Rivers are maintained,	Coordination
along with the improvements to emergency access and public safety.	Public Health and Safety
	Requirements
9.1.4 Ensure Easy Access to Health Services	Development Review
Encourage the location of health services throughout Three Rivers	Development Standards
to assure access for residents.	Intergovernmental
	Coordination
	Public Health and Safety
	Requirements
9.1.5 Coordinate Public Transit Services with Health Care	Development Review
Services	Development Standards
Promote the coordination of public transit routes and schedules	Intergovernmental
with health care services.	Coordination
	Public Health and Safety
	Requirements
9.1.6 LU-1.1 Smart Growth and Healthy Communities	Development Review
The County shall promote the principles of smart growth and	Development Standards
healthy communities in Three Rivers, including:	Intergovernmental
13. Creating walkable neighborhoods,	Coordination
14. Providing a mix of residential densities,	Public Health and Safety
15. Creating a strong sense of place,	Requirements
16. Mixing land uses,	
17. Building compactly,	
18. Discouraging sprawl,	
19. Encouraging infill,	
20. Preserving open space,	
21. Creating a range of housing opportunities and choices,	
22. Utilizing planned community zoning to provide for the orderly	
pre-planning and long term development of large tracks of land	
which may contain a variety of land uses, but are under unified	
ownership or development control, and	

23. Encouraging	connectivity	between	new	and	existing
development.					

Existing Adopted Land Use Plan

Existing Land Use Plan

The land use designations within the existing Three Rivers Community Plan UDB is shown in **Table 40** respectively. Agriculture/Grazing and land use designations, constitute approximately 50%, residential 40%, commercial 3%, industrial 12.5%, parks and recreation 1%, rights-of-way 1%, In total, there is approximately 2,100 acres of designated lands in the Three Rivers Community Plan Area and approximately 357 acres within the planning area are dedicated to ROW.

Table 40 - Existing Land Use Plan							
Land Use Designaation Existing Acres Perce							
Agriculture/Grazing	10,329	50					
Airport	16	0.25					
Commercial Recreation	520	2					
Community Commercial	92	0.75					
Elementary School	8	0.25					
High Density Residential	265	1.5					
Kaweah River	355	1.5					
Kaweah River Floodway	554	2					
Light Industry	31	0.25					
Low Density	3,843	18					
Med Density Residential	4,213	20					
MH on Individual Lots	6	0.25					
Multi-Family	84	1					
Parks and Recreation	85	1					
Proposed School Site	12	0.25					
Road, ROW & Unclassified	357	1					
Total	20,768	100					
* Percentages have been rounded. Source: Tulare County GIS							



Figure 27 - Adopted Land Use Plan as Amended Map

Existing Zoning Districts

The zoning designations within the existing Three Rivers Community Plan UDB are shown in **Figure 28.** As demonstrated in **Table 41.**

Table 41 - Existing Zoning Districts					
Zoning Districts	Existing Acres				
AE	2				
AE-20	21				
AE-80	11,689				
AF	454				
C-2-SC	133				
C-2-SC-F-2	7				
C-2-SC-SR	6				
F-1	788				
0	268				
PD-C-2-SC	6				
PD-CO	119				
PD-M-1	31				
R-1-20	224				
R-1-43	29				
R-3	80				
R-A-217	2,696				
R-A-43	2,988				
R-A-43-F-2	6				
R-A-M-43	160				
R-A-M-43-F-2	2				
R-O-43	101				
R-O-44	651				
Road, ROW & Unclassified	307				
Total	20,768				
Source: Tulare County GIS					



Figure 28 - Adopted Zoning Districts Map

Economic Development

There are less than 1,000 people employed in Three Rivers in 2015 (see Table 42). With a median age of 57, many people in Three Rivers are retired. The highest industry percentages of employed residents are Arts, Entertainment, Recreation, Accomodation, & Food Services (19.7%) and Educational services, and health care and social assistance (18.5%).

Table 42 - Jobs by Industry (percentage)				
Industry	California	Tulare County	Three Rivers	
Civilian employed population 16 years and over	17,246,360	170,780	974	
Agriculture, forestry, fishing and hunting, and mining	2.4%	19.5%	1.7%	
Construction	6.0%	4.6%	3.0%	
Manufacturing	9.8%	8.0%	3.2%	
Wholesale trade	3.1%	3.9%	2.2%	
Retail trade	11.1%	11.2%	9.5%	
Transportation and warehousing, and utilities	4.7%	4.5%	8.5%	
Information	2.9%	0.8%	3.5%	
Finance and insurance, and real estate and rental and leasing	6.2%	3.7%	5.3%	
Professional, scientific, management, administrative, & waste management services	12.9%	6.3%	6.7%	
Educational services, and health care and social assistance	21.0%	20.5%	18.5%	
Arts, entertainment, recreation, accommodation & food services	10.2%	6.3%	19.7%	
Other services, except public administration	5.4%	4.1%	7.1%	
Public Administration	4.5%	5.8%	11.1%	

2011-2015 American Community Survey 5-Year Estimates

There are a number business that cater to both local residents and tourists in Three Rivers **(see Table 43)**. These businesses range from restuarants to a golf course (currently maintained but closed). Although there is no major grocery store. There are a number of small markets including Kaweah General Store, Three Rivers Market, Three Rivers Drug Store, and Village Market. Resturants and food establishments include Antoinette's Coffee and Goddies, Anne Langs Emporium, Casa Mendoza Restaurant, Sequoia Cider Mill Restaurant, Gateway Restaurant, River View Restaurant, Ol' Buckaroo, Totem's Market, Sierra Subs & Salad, Subway, and Pizza Factory.

There are at least 21 lodging facilities in Three Rivers that are spread out along or near Highway 198. The lodging facilities are not centrally located in a particular area. The local businesses are also spread out along Highway 198. The Three Rivers community has expressed interest in designating a town center which could serve as a central business district/community gathering place which could benefit the Three Rivers Community.

There are a few businesses have recently closed in Three Rivers:

- 1) We Three Restaurant and Bakery
- 2) Sierra Surplus & Survial.

Table 43 - Businesses in Three Rivers					
Restuarants	Markets	General Retail	Lodging	Health/Beauty	Other
Anne Langs	Three Rivers	Suburban	Comfort Inn &	Family Healthcare	All That
Emporium	Drug Store	Propane	Suites	Network	Bookkeeping
Sierra Subs &	Kaweah	My Sister's	River Inn &	TRU Salon and	California Land
Salad	General Store	Closet	Cabins	Day Spa	Surveying
Sequoia Cider	Three Rivers	Thingerie Thrift	Bellevue	Mosley, Donald,	Sequoia Pacific
Mill Restaurant	Market	Shop	Guesthouse	DDS	Realty
River View	Sequioa	Three Rivers	The Log House	Buckler	Sierra Valley
Restaurant	Shack Shack	Merchantile	Lodge	Chiropractic	
Gateway	The Totem	Sierra Garden	Western	Gary Shadrick	Innovative Structural Class
Case Mandage	Villaga	Center Savlar Saddlary	Logy Louge	Saloli Smithla Cum	A quanta LLC
Casa Mendoza	Market	Sayler Saddlery	Lazy J Kanch	Shith's Gym	Aquanta LLC
Ol' Buckaroo	Jerky This	Chumps Video	Gateway Lodge	Yoga of Sequoias	Bank of the Sierra
Antoinette's		Heart's Desire	St. Anthony's	Lone Oak Vet	Le Britten
Coffee &		Gifts	Retreat	Clinic	Construction
Goodies			~		~ ~
Pizza Factory		Barby's	Sequioa Motel	Three Rivers Golf	Cort Gary Architect
Subway		The Doll Nest	Cort Cottage	Darrell Rich DDS	Citrus Industries
Serrano's		Discoveries	Lake Elowin	The Common	Comforting
Mexican		West	Resort	Element	Assistance
Restaurant		Daimana Can da	Ciama Ladaa	Hanna Caamina	Miles Little CDA
		Reimers Candy	Dia Giama	Happy Gooming	Mike Little, CPA
		River Envy Iris	Rio Sierra Diverbeuse		Mountain view
		Fallin	The Diver Jewel		2 D Construction
		Antiques	The River Jewer		5 K Construction
		Three Rivers	Kaweah Park		Scott Thompson
		Chevron	Resort		Law
		Geoffery	Buckeye Tree		David's Portable
		Photography	Lodge		Welding
		Rocky River	Three Rivers		Valley Oak Credit
		Wear	Hideaway		Union
		Rivers Edge	Riverfront		Loverin Pump &
		Boutique	Cabins		Drilling
		Flora Bella	White Horse		Willima Logan
		Farms	Inn		Attorney
		Creekside Yarns	Sequioa River Dance B&B		Terrathena
			a		T 00
		Fleming Farms	Sequoia Village Inn		Lafferty Insurance

Supporting Economic Development

To promote economic development effectively, the Board of Supervisors adopted a Strategic Business Plan in 2006 emphasizing a strategic initiative designed to enhance the economic well-being of Tulare County's residents by providing, among other things, "a business-friendly" and "can-do work ethic." This economic development initiative is being implemented extensively by the County Administrative Office in conjunction with the Resource Management Agency.

In addition to substantial packing and shipping operations, agriculturally-related facilities are increasing in number and are becoming an important economic factor in the County's total economic picture.

The Tulare County Economic Development Response Team provides assistance to decision-makers who seek to locate, establish or expand businesses in our area with site selection, rapid development permitting, and custom-tailored workforce development solutions.

Additionally, Tulare County is within an Enterprise Zone (EZ) which offers a number of economically-favorable incentives such as:

- 21-Day permit fast-tracking
- 5-year, no interest, development fee deferral
- State tax credits for hiring
- State tax credits for purchasing qualified equipment
- Accelerated expense deductions
- Net interest deduction
- Preference points on state contracts

Opportunities

Assets are the existing characteristics of a community that contribute to the unique character and overall quality of life for residents. Throughout the planning process, Three Rivers community members have emphasized the community's location, natural resources and scenic beauty as the main assets of the community.

These assets present opportunities for the community, yet also present challenges in terms of preserving and maintaining the environmental quality and natural integrity while planning for future growth.

<u>Kaweah River</u>

The community of Three Rivers derives its name because the North Fork, Middle Fork and South Fork of the Kaweah River converge at this location. Historically, development in Three Rivers has occurred along the three forks of the River. Community residents have expressed that the River is one of the most valuable natural assets in Three Rivers. Residents value the Kaweah River for several reasons; for its natural beauty, for the wildlife habitat that it supports, and for the recreational opportunities for both residents and visitors.

<u>Terrain</u>

Three Rivers is located in the foothills of the Sierra Nevada Mountains. The terrain of the area is beautiful and rugged, with a large portion of the land having slopes greater than 25%. The topography of the community serves as a natural resource, as well as a natural constraint to growth and urbanization.

<u>Open Space</u>

Since there are many natural constraints to development in Three Rivers, there is a great amount of open space in the Three Rivers community plan area as well as in the surrounding areas. The open space is a great benefit to the community, as it allows extraordinary views and vistas of the surrounding foothills. Much of the open space surrounding Three Rivers is agricultural land, and the community has a significant agricultural base, in terms of land area.

The area's vast forests and oak woodlands are an important resource to the Three Rivers community. Residents of Three Rivers cite the community's rural character and its proximity to Sequoia National Park as valuable community assets.

Location

Three Rivers is located in the foothills of the Sierra Nevada Mountains, and at the Gateway to Sequoia National Park. There are vast recreational opportunities in the National Park and in other areas in the high country of the Sierras. Residents also enjoy the relatively easy access to the City of Visalia, approximately 30 miles west of the community.

The location of the Three Rivers community serves as a valuable asset, and also a challenge and an opportunity. Many tourists visit the area, which can put a strain on community infrastructure and services. Tourism can also contribute to the economic well being of the community.

Diversity of Lifestyle

While Three Rivers is a small community, the residents are diverse in terms of interests, occupations and backgrounds. As mentioned previously, a large portion of Three Rivers residents have lived there for many years, yet there are also many residents who have moved there more recently because they value the rural lifestyle and the natural environment. Many Three Rivers residents are retired, yet there are also young families with children.

<u>Blue Oak Woodlands</u>

Three Rivers residents have identified the woodland areas within the Planning Area, specifically the blue oak woodlands, as a valuable asset to the community. Blue oaks are a valuable native species and contribute to the character and beauty of Three Rivers. This type of woodland also provides a habitat area for many different animal species. Although blue oak woodlands cover wide areas of the western sierra foothills they are often located in areas that are designated for future development.

Complete Streets

The Complete Streets Act of 2007 (Assembly Bill 1358) requires counties when updating General Plans, to identify how the jurisdiction will provide for the routine accommodation of all users of the roadway including motorists, pedestrians, bicyclists, individuals with disabilities, seniors, and users of public transportation.

Affordable Housing

The community of Three Rivers had a median household income of \$43,913 in 2014 which was considerably less than 60% of the State median income of \$61,489.

As there is limited bus service in Three Rivers, reduced parking is not a realistic strategy to reduce development costs. Affordable housing will require more land in Three Rivers than would typically be required in an area where public transit is available. In terms of siting, medium to high density housing should be located along collector streets and/or arterials. As noted earlier, the Community Plan includes Goals, Objectives, and Policies that will encourage new housing construction within the community to meet the needs of low and moderate income residents.

One of the shared visions for Three Rivers is a community with a strong central core area with clustered commercial development. Concentrated or clustered commercial development serves several purposes. A concentration of commercial development can help create a focal point or town center for the community, and can also reinforce a sense of place and community identity. Community residents have a desire for a central area that can serve as a formal gathering place for civic events, as well as an informal gathering space where residents and visitors can shop, eat, and socialize. A concentrated commercial development in the center of the community can provide this space. Directing the commercial development to a central area will help to limit scattered development in areas that are not appropriate for that scale and intensity of development. Clustered commercial development may also help to reduce traffic impacts throughout the community.

Commercial Potential

There is no anticipated need to expand commercial zoning. With the addition of the mixed use overlay zone, additional commercial potential is allowed. As there is limited discretionary income available from the community (based on the median incomes and proportions going toward housing), new commercial uses will mostly rely on the regional and highway market for revenue potential. As such, there is limited potential for large local community serving commercial uses. New commercial uses will likely be highway oriented, and fit under the new zoning district boundaries or under the new mixed use overlay boundary.

Constraints

There are several constraints or restrictions (obstacles) which will impact the nature and location of future development within the community. In particular, these constraints pertain to existing problems of public health and safety: acceptable noise levels, impacts of deteriorating housing, the lack of a full range or capacity of community services. Following are constraints that were recognized in the preparation of this plan and suggested approaches to resolve, minimize, or remove obstacles to future development.

Urban Development Boundary

Although State planning law does not define specific requirements for establishing planning area boundaries, it is generally agreed that the planning boundaries should include the territory within a community's probable ultimate physical boundaries and service area. Urban Development Boundaries provide a planning framework that promotes the viability of communities, hamlets, and cities while protecting the agricultural, open space, scenic, cultural, historic, and natural resource heritage of the County. In the past, the County used three key planning tools to guide urban development in all unincorporated areas of the County. The first was the Urban Boundaries Element; the second was the

Area Plans; the third was the General Plans for identified incorporated cities and Community Plans for unincorporated communities. In 1974, Tulare County added an Urban Boundaries Element to its General Plan. The element required the designation of an urban boundary for every "viable" unincorporated community in the county. The Urban Boundaries Element also established Urban Improvement Areas (20-year planning boundaries) for certain communities. The 1974 Urban Boundaries Element designated both an Urban Area Boundary and an Urban Improvement Area for Three Rivers.

In 1983, the Urban Boundaries Element was amended to create Urban Development Boundaries (UDBs, which are also to function as 20-year planning boundaries) and to change the function of the Urban Area Boundary to simply a "comment line" around incorporated cities. Under the 1983 amendment, Urban Area Boundaries are no longer established around unincorporated communities and Urban Improvement Areas have been phased out and are replaced with UDBs resulting from GPA 88-01 and the General Plan 2030 Update Planning Framework Element.

For unincorporated communities, the UDB is a County adopted line dividing land to be developed from land to be protected for agricultural, natural, open space, or rural uses. It serves as the official planning area for communities over a 20 year period. Land within an unincorporated UDB is assumed appropriate for development and is not subject to the Rural Valley Lands Plan or Foothill Growth Management Plan.

Development Constraints

Much of the Three Rivers planning area is essentially undevelopable, which is due primarily to the topographical relief prevalent in the planning area. Approximately 63 percent of the planning area has slopes of 25 percent or greater. Many of the steep areas, although undesirable as building sites, are appropriate for grazing, watershed, wildlife habitat, and open space. Approximately 10 percent of the planning area is under the jurisdiction of the Bureau of Land Management (BLM). Almost all of these properties are being leased for agricultural purposes, and are not available for rural or suburban development. Approximately 33 percent of the land in the Three Rivers Planning Area is under the Williamson Act, (see figure 9-3 below) The designated Kaweah River floodway occupies approximately 888 acres, or 4 percent of the planning area, along the north, south, and middle fork of the Kaweah River. This is a constraint in terms of increased development costs for flood proofing and raising the structure above the 100 year floodway.

<u>Noise</u>

Constraint: As described in the General Plan Policies section of this Plan, noise exposure policies will restrict the type of land uses which can be developed within identified noise-impacted areas.

Solution: Mitigation measures identified in the Tulare County 2030 General Plan's Noise Element will allow the development of some land uses provided certain standards are met which reduce the impact of noise within the noise-impacted areas. Properties adjacent State Route 198 are areas designated as noise-impacted in the community.

Infrastructure Needs

Constraint: Community wide water, wastewater, storm drainage, and other related infrastructure does not currently exist in Three Rivers.

Solution: Application of Development Standards is identified in Appendix A-3.

Agricultural Lands

Constraint: Williamson Act Land parcels are located within the Urban Development Boundary. Although a constraint for urban development, Agricultural Preserves prevent premature urban development of agricultural lands and encourage in-filling of existing vacant parcels within the immediate core of the Plan Area.

Solution: As the need arises for developable land (and if justifiable), Agricultural Preserves can be canceled by a landowner with the approval of the Tulare County Board of Supervisors. Another option available to landowners is nonrenewal of their ten-year contracts. This option allows their land to revert to "regular" agricultural lands over a ten-year period and, subsequently allowing the landowner an opportunity to develop his land through the regular permitting process.

County Economic Development Strategy

Tulare County's current Economic Development Strategy focuses on tourism, the agricultural industry and pursuing grants.

Agriculture

Tulare County has a booth at the World Agricultural Exposition (Ag Expo) every year. The Economic Development Office uses the event to promote Tulare County tourism and business opportunities. Partnering with the County's Purchasing Department the Ag Expo provides an excellent method to market directly to the global agriculture related businesses attending the Ag Expo and sell surplus county equipment.

Solar Projects

In Tulare County, there have been 13 Utility Scale Solar Projects that have a capacity of 198 MW. There are 9 projects in /Under Construction with a capacity of 260 MW. In terms of total solar projects (including Utility Scale, Solar on Dairies, Commercial Solar, and Residential Solar) there have been 1570 projects built that accounts for a capacity of 227.5 MW. The Corridor offers realistic potential to locate solar projects closer to the urban areas and outside of the direct line-of-sight viewshed of the Highway 99 Corridor. **Table 44** provides a summary of solar development in Tulare County.

Table 44	- Solar Development in Tulare Co	unty
τ	Utility Scale Solar Projects	
Phase of Construction	No. of Permits	Total Capacity (MW)
Under Review	0	0.0
Pre-construction/Under Construction	1	45.0
Constructed	21	413.0
Total	22	458.0
	Solar Projects on Dairies	•
Phase of Construction	No. of Permits	Total Capacity (MW)
Under Review	0	0.0
Pre-construction/Under Construction	6	3.6
Constructed	44	39.7
Total	50	43.3
Ot	her Commercial Solar Projects	
Phase of Construction	No. of Permits	Total Capacity (MW)
Under Review	0	0.0
Pre-construction/Under Construction	36	8.9
Constructed	172	44.8
Total	208	53.7
	Anaerobic Digesters	
Phase of Construction	No. of Permits	Total Capacity (MW)
Under Review	0	
Pre-construction/Under Construction	16	
Constructed	4	
Total	20	
Residential S	olar Projects (based on 7 kw/sfd a	average)
Phase of Construction	No. of Permits	Total Capacity (MW)
Under Review	13	0.09
Pre-construction/Under Construction	127	0.89
Constructed	2092	14.64
Total	2232	15.6
	Solar Project Totals	
Phase of Construction	No. of Permits	Total Capacity (MW)
Under Review	13	0.09
Pre-construction/Under Construction	186	58.39
Constructed	86	512.14
Total	2532	570.74

<u>Grants</u>

- State Water Resources Control Board State Revolving Fund: \$500,000 for Traver Community Wastewater System Improvements Planning Study and Design, once plans are near complete we will apply for construction funding between \$8 and 10 million.
- State Water Resources Control Board: have applied and received \$5 million in construction funding for Phase 1 of the Yettem Seville Water System.
- County Measure R funding \$575k for sidewalks and ADA improvements in Earlimart.
- ATP Active Transportation Program- Statewide competitive \$2 million funding is anticipated for Safe Routes to School and ADA improvements in and around three (3) Earlimart.
- Low Carbon Transit Program funding \$147,474.00.
- Prop 84 Three Rivers Neighborhood Improvement Program funding \$2,153,900.00.
- Yettem & Seville Project Phase 1 funding \$4,300,200.00
- Navigation Aids at Sequoia Field Airport funding \$340,200.00
- Transit Operations & Maintenance Facility (TOMF) funding \$10,800,000.00

Online Presence

Tulare County is currently developing and growing the Economic Development Website by offering content that is current, informative and useful for decision-makers in an effort to attract, retain and expand a diverse business community in all regions of the County. We are currently building an online industrial/commercial property inventory. We are reaching out to brokers in order to post their listings on our website.

THE TULARE COUNTY ECONOMIC DEVELOPMENT OFFICE MAINTAINS AN ACTIVE PRESENCE ON FACEBOOK AND TWITTER. IN ADDITION, THE TULARE COUNTY FILM COMMISSION CHANNEL CONTAINS THE LATEST VIDEOS OF GROUNDBREAKING AND RIBBON CUTTING EVENTS. CONTENT DEVELOPMENT WILL CONTINUE TO GROW OVER TIME. ASSESSMENT OF LAND NEEDS

Within the existing 21,000 acre Three Rivers Urban Development Boundary, agricultural activities, such as orchards and pasture, currently constitute 50% percent of the UDB Area.

The ratio of urbanized acres per person is calculated by dividing the year 2014 population of 2,278 by 3,990 urbanized acres (developed Residential, Commercial, Industrial area within the UDB), which equals 1.75 persons per urbanized acre (see Tables 9-1 and 9-2 showing population projections). Projecting the population at a 1.3% growth rate adds 523 persons in Year 2030. Multiplying the 523 persons by the 1.75 ratio suggests an additional 915 acres of land will be required to accommodate development by the Year 2030 if projections are realized.

Population Projection

Projecting an annual growth rate of 1.3%, the Three Rivers 2010 population of 2,182 would increase by 643 persons to a population of 2,825 by the year 2030 (see Table 45).

	Table 45 - Popula	Table 45 - Population Projection			
Year	Population	%Growth	Population Growth Per Year (Number of Persons)		
2010	2,182	0.013			
2011	2,210	0.013	28		
2012	2,239	0.013	29		
2013	2,268	0.013	29		
2014	2,298	0.013	30		
2015	2,328	0.013	30		
2016	2,358	0.013	30		
2017	2,388	0.013	30		
2018	2,420	0.013	32		
2019	2,451	0.013	31		
2020	2,483	0.013	32		
2021	2,515	0.013	32		
2022	2,548	0.013	33		
2023	2,581	0.013	33		
2024	2,614	0.013	34		
2025	2,648	0.013	34		
2026	2,683	0.013	35		
2027	2,718	0.013	35		
2028	2,753	0.013	35		
2029	2,789	0.013	36		
2030	2,825	0.013	36		
Projected Popula	ation Increase 2014	-2030	643		

Demand Forecast

To determine whether there is enough land within the exiting UDB to accommodate anticipated growth within the community, the population growth and land use projections in Year 2030 were compared to the vacant land available within the UDB (see Table 46).

Table 46 - Demand Forcast			
	2015	2030	Increase
Population	2,278	2,801	523
Residential Acres	3,500	841	341
Industrial Acres	300	369	69
Commercial Acres	9	11	2
Agricultural Acres	9,000	9,000	0
Vacant Acres	14,563	14,151	412

Population and Housing Units

The Year 2015 baseline population and was determined by projecting the 2014 American Community

Survey (Survey)⁴⁵ data population by an annual growth rate of 1.3% annually. The Survey indicated that in Year 2014 the community had 1,093 dwelling units (including vacant dwellings) with a population of 2,278. At an annual growth rate of 1.3%, the projected housing units are 1,181 and 1,344 in Years 2020 and 2030, respectively, and projected population is 2,462 and 2,801 in Years 2020 and 2030, respectively.

Much of the planning area is essentially undevelopable due to constraints presented by 30% slope and conservation land. Approximately 10 percent of the planning area is under the jurisdiction of the Bureau of Land Management. Almost all of these properties will be or are being leased for agricultural purposes and are not available for rural-suburban development.

Another 50 percent, or is under the Williamson Act. Still another factor adding to the scarcity of developable land is steep topography, requiring lower densities. Approximately 10,000 acres of available vacant land, in the planning area has slopes of 30 percent or more; this includes almost all of the Bureau of Land Management's properties and the majority of the contracted agricultural preserves within the planning area. Many of the steep slope areas, although undesirable as building sites, are appropriate for grazing, watershed, wildlife habitat and open space.

The designated Kaweah River floodway occupies approximately 900 acres along the north, south and middle fork of the Kaweah River. This represents another 4 percent of the planning area. This is a constraint in terms of increased development costs for flood-proofing and raising the structure at least two feet above the 100 year flood line. Proposed development within the designated floodway must be submitted to the County for approval, then, to the State Reclamation Board for approval. Additional criteria for development approval requires the development cannot obstruct river flow in excess of a 1 foot rise, and cannot crease a backwash or increase water flow speed.

Commercial and Industrial Uses

The total land area developed in commercial and industrial units in Year 2014 was provided by the Tulare County Resource Management Agency Geographic Information System (GIS) division. There are currently approximately 300 acres within the UDB that are developed for commercial uses and approximately 9 acres developed for industrial uses. Assuming that the land area needed to accommodate future commercial and industrial growth is consistent with annual population growth projections, the land use growth projections are also assessed at an annual growth rate of 1.3%. At this growth rate, there will be a total of approximately 369 acres of commercial uses and approximately 11 acres of industrial uses in the Year 2035; that is, an increase of approximately 69 acres of commercial uses and approximately 2 acres of industrial uses. As shown in **Table 47**, there are approximately 180 acres of undeveloped commercial lands and approximately 22 acres of industrial lands within the existing UDB. As such, there is adequate land available for development within the existing UDB to accommodate future commercial and industrial and industrial growth through the Year 2030.

Vacant Parcels and Vacation Rentals

There are approximately 1,200 vacant parcels in Three Rivers. This accounts for approximately 14,000 acres.

Vacation Rentals

The high residential vacancy rates are influenced in part by a large number of rental units that are

⁴⁵ See: <u>http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml</u>.

dedicated for seasonal, recreational, or occasional use. The 2010 census reveals that 66% of housing vacancies are vacation oriented rental units. Some community members have expressed concerns regarding vacation rentals which primarily involve two central issues as follows:

- 1) Transient Occupancy Tax (TOT)
 - a) Collection of taxes
 - b) Revising TOT Ordinance to strengthen enforcement and collection of taxes.
 - c) Exploring the opportunity of having Air B&B collect and pay taxes directly online.

2) Short Term Rentals (STR)

- a) Research
 - i) Air B&B
 - ii) Comparison of STR Ordinances or Other Options to Address the Following Areas:
 (1) Septic System Capacity / Rental Capacity
 - (2) Parking
 - (3) Noise
 - (4) Property Management / Local Contact
 - (5) Communication / Posting



Figure 29 - Vacant Parcels

Land Need

The term highway commercial is used in various ways. A highway commercial zone or district can include many types of uses. In general, the purpose of such a district is to provide appropriate sites for the needs of recreation and business travelers. This district is intended to be applied to sites fronting on State Routes (Highways) or along arterial roads that provide access to major recreation destinations. Highway Commercial areas should be designed so that all or most of the needs of the traveling public can be accommodated at one stop. This district is not intended to be applied to strip commercial development along highways or arterials. The actual commercial needs within the UDB is roughly 69 acres.

Table 47 - Available Land Within Existing UDB			
Land Use Type	Acres in UDB	Developed Acres in	Available Acres in UDB
		UDB	
Agriculture	10,300	1,400	8,900
Commercial	480	300	180
Industrial	30	9	21
Residential	8,500	3,500	5,000
Total *	19,310	5,209	14,101
* Total does not include the 350 acres of existing rights-of-way, Kaweah River, Kaweah River Floodway, Road, Public Designations.			

Land need for lodging is based on anticipated need for a hotel to serve the highway traffic and the anticipated enhanced attractiveness of the area with new well-planned development. In addition, allowance is made for food service and convenience retail to service the visitor traffic on SR 198. This demand and land need would be in addition to the projected land need to meet the demand of the local residents. While no detailed visitor market analysis was available, the estimates are based on assumptions about the additional demand that might be generated by visitors, estimated as a percent of the local/regional demand.

Although there is currently a static (that is, experiencing minimal growth and/or declining) growth trend, it is forecasted that residential demands will result in the need to increase residential developable land by 341 acres (341 housing units /1 unit per acre (Medium Density Residential =341 acreas) within the Community during the Year 2030 planning period based on population projections. Commercial land use demand is forecast to be 69 acres. Industrial land use demand is limited, and there is unused industrial vacant land that can be utilized within the existing zoned industrial acreage; therefore, it is unlikely that additional industrial land beyond what is already included in the UBD is needed.

Land Use Plan and Zoning Districts Update

Proposed Land Use Designations

The following land use designations and descriptions available within the County with densities and intensities through the 2030 planning horizon year.

Agriculture Grazing

This designation establishes areas for agricultural activities primarily located in the foothill and mountain regions where extensive commercial agricultural uses can exist without conflicting with other uses, or where conflicts can be mitigated. Uses typically allowed include orchards and vineyards, grazing of cattle, horses, sheep, and goats on grazing lands, resource extraction activities, facilities that directly support agricultural operations, and other necessary public utility and safety facilities. Allowable residential development includes one principal and one secondary dwelling unit per 20, 80, or 160 acres, for relative, caretaker/employee, or farm worker housing.

Minimum Parcel Size: 20, 80 or 160 Acres Maximum Density: 1 dwelling unit per 20, 80, or 160 acres One additional unit may be allowed for every 40 additional acres over 160 acres Maximum Intensity: 0.02 FAR

Resource Conservation

This designation is intended to identify and protect open space lands including State and National forests and parks, Bureau of Land Management lands, and other public lands specifically preserved for timberland protection (non-TP designated), watershed preservation, outdoor recreation, grazing, and wilderness or wildlife/environmental preserves. Uses typically allowed in this designation are those related to resource utilization and resource conservation activities and could include uses that provide a buffer between incompatible types of land use. Resource operations and other facilities such as grazing, hunting and fishing clubs, guest ranches, campgrounds and summer camps on private lands, require a Special Use Permit. Residential uses (1 dwelling unit per 40 acres), may be conditionally allowed. This designation is located primarily outside UDBs in the foothill and mountain regions. This designation applies to those State and federally owned parks, forests, recreational and/or management areas of which the County has no land use jurisdiction.

Minimum Parcel Size: 80 or 160 Acres Maximum Density: 1 Dwelling Unit per 40 acres Maximum Intensity: 0.02 FAR (Special Use Permit required)

Public/Quasi-Public (P/QP)

This designation establishes areas for public and quasi-public services and facilities that are necessary to maintain the welfare of County residents and businesses. Uses typically allowed include: churches; schools; civic centers; hospitals; fire stations; sheriff stations; liquid and solid waste disposal sites; cemeteries; airports; and public utility and safety facilities. This designation is found primarily within UDBs and pursuant to regional growth corridor plans and policies.

Density/Intensity: None Specified

Low Density Residential

Not more than one family per 5 acres. Mobilehome Parks are prohibited within the Low Density Residential area and mobilehomes on individual lots are prohibited.

Medium Density Residential

Not more than one family per acre. Mobilehome Parks are prohibited within this area with the exception of Sequoia RV Ranch (Trailer Isle Mobilehome Park). Mobilehomes on individual lots are prohibited except as allowed by M overlay zoning.

High Density Residential

Not More than one family per half acre. Domestic animals such as sheep, goats and horses are prohibited on lots less than one acre in size. Mobilehome Parks are prohibited within the Low Density Residential area and mobilehomes on individual lots are prohibited.

Mobilehomes on Individual lots (Residential)

New Mobilehomes on individual lots (one-acre minimum per mobilehome) are encouraged. Mobilehomes are also permitted in those areas designated for agriculture on the plan map. The minimum area requirement is five acres per mobilehome. A mobilehome is defined as a vehicle without motive power, 30 feet or more in length, and designed as a single-family dwelling unit when connected to appropriate utility lines.

Multiple Family Residential

Not more than 12 families per acre. The plan presumes that high density multiple-family development will require a community water system and an on-site engineered septic system or an alternative waste disposal system.

Community Commercial (CC)

This designation establishes areas for a full range of retail commercial establishments serving multiple neighborhoods or an entire community and surrounding area. Uses typically allowed include: big box retail, eating and drinking establishments; food and beverage sales; hardware stores; gasoline service stations; public buildings; general merchandise stores; and professional and financial offices. Such facilities are typically arranged as a cluster of uses such as a shopping center. This designation is found primarily within UDBs.

Maximum Intensity: 0.5 FAR

Commercial Recreation (CR)

This designation establishes areas for a mix of commercial uses oriented toward tourists and other visitors. Uses typically allowed include: recreation activities (e.g., golf courses, archery ranges, theme parks); dining; entertainment services; destination-resort hotels; motels; dude ranches; wineries; spas; and on-site employee residential uses. Residential uses would only be allowed in conjunction with resort uses as onsite caretaker or employee housing. This designation is found primarily within the foothill and mountain regions.

Maximum Intensity: 0.5 FAR

Light Industrial (LI)

This designation establishes areas for a range of non-intensive business park, industrial park, and storage uses that do not have detrimental noise or odor impacts on surrounding urban uses. Uses typically allowed include: warehousing, welding & fabrication shops, manufacturing & processing, and business support uses such as retail or eating establishments that serve adjacent light industrial uses and employees. This designation is found primarily within UDBs and pursuant to regional growth corridor plans and policies.

Maximum Intensity: 0.5 FAR

Designated Floodway (Includes the FEMA Regulatory Floodway and Central Valley Flood Control Protection Board Designated Floodway)

Structural development within the designated floodway is prohibited unless approved by the county of Tulare and the the Central Valley Flood Protection Board (CVFPB).

All properties within the Kaweah River designated floodway that contain existing structures, including a reasonable area around said structures, should be zoned to an appropriate base zone to make the existing structures conforming, and said base zone shall be combined with the F-2 secondary floodplain combining zone. Vacant properties within the Kaweah River designated floodway should generally be zoned to the F-1 primary floodplain zone. However on certain vacant properties within the Kaweah River designated floodway, it may be appropriate to allow new development where unique circumstances justify expanded land use opportunities, such as infilling within an established commercial node, provided that necessary flood protection measures are undertaken. Where such unique circumstances existed prior to permitting alternative land uses on such vacant properties, the following procedures shall be followed:

1) The Central Valley Flood Protection Board should be consulted with as to the feasibility of establishing proposed structures and or activities within the designated floodway;

2) For all proposed non-residential uses, a general plan amendment shall be filed with the County of Tulare pursuant to Board of Supervisors Resolution Number 83-1693 (and as may subsequently be amended). For proposed residential uses, single-family dwellings will be permitted (after Central Valley Flood Protection Board approval and after County approval of the appropriate zoning) without a general plan amendment, and for other residential uses, the necessity for a general plan amendment shall be evaluated on a case-by-case basis while small-scale projects may be reclassified without a general plan amendment, however it is generally intended that larger-scale residential projects secure the appropriate amendments;

3) Zoning to the appropriate based on along with the F-2 combining zone shall be secured for the properties in question.

Proposed Zoning Districts

The following land use designations and descriptions available within the County with densities and intensities through the 2030 planning horizon year.

The **MU (Mixed Use) Combining Zone** allows a mix of uses that promotes flexibility in the types of entitlements that can be issued. All uses outlined in the, C-2, C-1, R-1, R-2, and R-3 uses are allowed.

The **M** (Special Mobilehome) Zone provides for mobilehome use in communities and rural areas where, under certain conditions, a mixture of conventional housing and individual mobilehomes for residential use is desirable.

The F-1 Zone. The purpose of the Primary Flood Plain Zone shall be the prevention of loss of life, the minimization of property damage, and the maintenance of satisfactory conveyance capacities of waterways through the prevention of encroachments by obstructions in the floodway which may diminish the ability of the floodway to carry overloads during periods of flooding. This Zone is to be used in concert with the flood damage prevention regulations established in Chapter 8 of Part VII of the Ordinance Code of Tulare County. However, it shall only be delineated on the County Zoning Map when necessary to conform to the County General Plan or when necessary to establish flood plain regulations after completion of a Federal project report pursuant to Section 8411 of the California Water Code.

The F-2 Combining Zone

The purpose of the Secondary Flood Plain Combining Zone shall be the protection of life and property from the hazards and damages which may result from flood waters of the selected flood magnitude. This zone is intended for application to those areas of the County which lie within the fringe area of the flood plain and are subject to less severe inundation during flooding conditions than occur in the F-1 Zone.

This zone is intended to be combined with other zones and may be applied only to those areas located within the boundaries of the selected flood which lie outside the "F-1" Primary Flood Plain Zone, as determined through an analysis of flood frequency, natural topography, bank erosion, channel shifts, flood profiles, velocity flows or other applicable factors.

The SC Combining Zone

The purpose of the Scenic Corridor Combining Zone shall be to preserve and protect the scenic quality of the immediately visible land area adjacent to those scenic highways and scenic roads established by the Tulare County General Plan, and to prevent visual obstructions of the extended view from such scenic highways and roads.

This zone is intended to be combined with other zones and may be applied only to those areas visible from and adjacent to those scenic highways and scenic roads established by the Tulare County General Plan. When this zone is applied to property in conjunction with another zone set forth in this Ordinance, a new zone is thereby created and the regulations set forth in this section shall be applicable in addition to those otherwise applicable in the underlying or base zone. In addition, where the provisions of the underlying or base zone conflict with the requirements of this section, the requirements of this section shall prevail over those in the underlying or base zone. The new combined zone shall be shown on the Zoning Map by the letters "SC" following the symbol of the underlying or base zone.

The SR Site Review Combining Zone

The purpose of the Site Review Combining Zone is to designate those areas of the County where the site plan review process is required in order to determine if the proposed development is in conformance with the policies, standards, and objectives of this Ordinance, the County Ordinance Code and the General Plan.

The SR Zone is intended to be combined with the other zones set forth in this Ordinance and may not be established on the Zoning Map unless it is combined with other zones. When this zone is combined with other zones, a new zone is thereby created, and the regulations of this Section shall be applicable in addition to those which are applicable in the zone with which this zone is combined. In addition, where the provisions of the underlying or base zone conflict with the requirements of this Section, the requirements of this section shall prevail over those in the underlying or base zone. The new combined zone shall be shown on the Zoning Map by the letters "SR" following the symbol of the underlying or base zone.

The PD Planned Development Zone

In certain instances, the objectives of the General Plan and Zoning Ordinance are best achieved by the development of parcels of land in a coordinated and comprehensive fashion so as to take advantage of the superior environment which can result from large scale community planning anddevelopment. The purposes of the PD Zone are to:

- 1. Provide for design flexibility in single-family, multi-family, commercial, professional, industrial and mixed-use developments.
- 2. Stimulate a more desirable living and working environment than would be permitted by the strict application of zoning regulations on a conventional individual-use or lot-by-lot method.
- 3. Encourage innovative and creative approaches to land use and development.
- 4. Provide the means to reduce development costs through the promotion of improved and integrated design and land planning techniques.
- 5. Conserve natural features and open space, while facilitating aesthetic and compatible land use patterns.
- 6. Implement general and specific plans which require a planned development approach.
- 7. Provide an alternative means of achieving the purpose of Section 18.5 of this ordinance.

The PD Zone shall be established on the County Zoning Map in the same manner as other zones created and established under this ordinance. The PD Zone may not be established on the Zoning Map unless it is combined with another zone.

The A-1 Agricultural Zone

The purpose of this zone is to insure that areas zoned A-1 develop in a manner consistent with the General Plan and the public health, safety and general welfare, and to prevent the introduction of incompatible commercial, manufacturing, subdivision, and other urban uses into predominantly agricultural areas of the County. A limitation on minimum parcel size of five (5) acres is included in order to preserve agricultural lands in increments large enough to support commercial agriculture and to discourage the generation of urban land uses in predominantly agricultural areas. The purpose of the zone is also to prepare for eventual adjustments in zoning based on precise planning and development proposals for such areas.

AE Exclusive Agricultural Zone

This zone is intended primarily for application to rural areas of the County which are generally characterized by extensive or intensive agricultural uses of land.

AE-80 Exclusive Agricultural Zone – 80 Acre Minimum

The AE-80 Zone is an exclusive zone for agricultural uses and for those uses which are a necessary

and integral part of the agricultural operation. The purpose of this zone is to protect the general welfare of the agricultural community from encroachments of unrelated agricultural uses which, by their nature, would be injurious to the physical and economic well-being of the agricultural community. It is also the purpose of this zone to prevent or to minimize the negative interaction between various agricultural uses. A related purpose of this zone is to disperse intensive animal agricultural uses to avoid air, water, or land pollution otherwise resulting from compact distributions of such uses. The minimum parcel size permitted to be created in this district is, with certain exceptions, eight (80) acres.

AF Foothill Agricultural Zone

The AF Zone is an exclusive zone for intensive and extensive foothill agricultural uses and for those uses which are a necessary and integral part of intensive and extensive foothill agricultural operations. The purposes of this zone are as follows:

- 1. To protect the general welfare of the foothill agricultural community from encroachments of unrelated uses which, by their nature, would be injurious to the physical and economic wellbeing of the foothill agricultural community and the community at large.
- 2. To prevent to minimize the negative interaction between various foothill agricultural uses.
- 3. To prevent or minimize land use conflicts or injury to the physical or economic wellbeing of urban, suburban, or other non-agricultural uses by foothill agricultural uses.
- 4. To disburse intensive animal agricultural uses in order to avoid air, water or land pollution otherwise resulting from compact distribution of such uses.
- 5. To provide for a minimum parcel standard which is appropriate for foothill areas where soil capability and other characteristics are such that the unregulated breakdown of land would adversely affect the physical and economic well-being of the foothill agricultural community and the community at large.
- 6. To implement land use controls and development standards which are necessary to achieve the goals and objectives for foothill agricultural lands as required by the General Plan.
- 7. To function as a holding zone in certain foothill areas which should be retained in extensive agricultural use until such time as the General Plan is amended to provide for the conversion of such lands to urban use.

The minimum parcel size permitted to be created in this zone is, with certain exceptions, one hundred and sixty (160) acres.

AE-20 Exclusive Agricultural Zone 20 Acre Minimum

The AE-20 Zone is an exclusive zone for intensive agricultural uses and for those uses which are a necessary and integral part of the agricultural operation. The purpose of this zone is to protect the general welfare of the agricultural community from encroachments of unrelated agricultural uses which, by their nature, would be injurious to the physical and economic well- being of the agricultural community. It is also the purpose of this zone to prevent or to minimize the negative interaction between various agricultural uses. A related purpose of this zone is to disperse intensive animal agricultural uses to avoid air, water, or land pollution otherwise resulting from compact distributions of such uses. The minimum parcel size permitted to be created in this zone is, with certain exceptions, twenty (20) acres.

O Recreation Zone

No building or land shall be used and no building shall be hereafter erected or structurally altered, except for the following uses:

1. Any use permitted in the R-3, Multiple Family Zone.

2. Growing and harvesting of field crops, fruit and nut trees, vines, vegetables, horticultural specialties and timber and the operation of plant nurseries and greenhouses for producing trees, vines and other horticultural stock. Raising of sheep, goats, horses, mules, bovine animals, and other similar domesticated Quadrupeds. Commercial uses as specified in the zoning ordinance.

The CO Commercial Recreation Zone

The "CO" Zone is intended primarily for the foothill and mountain areas of Tulare County and allows commercial uses which are oriented to recreation-related activities, services, and other recreational characteristics of these areas, especially where such uses may be located in environmentally sensitive surroundings. The purposes of this zone are as follows:

- 1. To permit retail and service commercial uses that are oriented toward or associated with recreational opportunities for the tourist or highway traveler as well as those that serve the needs of residents of foothill and mountain areas.
- 2. To permit open-space oriented recreation-commercial uses as well as commercial uses commonly associated with recreational resort areas.
- 3. To permit certain types of commercial uses in environmentally sensitive areas where such uses are found to be compatible with the surrounding foothill or mountain environment.
- 4. To implement the goals, objectives, policies, and develop and implement strategies set forth in the Mountain Plan, the Springville Community Plan, and the Three Rivers Community Plan, specific to the commercial-recreation aspects of those communities and locales.
- 5. To permit multiple-family dwelling units on selected properties where such developments will be harmonious with surrounding natural features and compatible with adjacent land uses.

The C-2 General Commercial Zone

The General Commercial Zone is intended for retail stores and businesses which do not involve the manufacture, assembling, packaging, treatment or processing of articles of merchandise for distribution and retail sale.

R-O Single Family Estate Zone

One-family dwellings of a permanent character placed in permanent locations and onefamily manufactured homes installed on a foundation system pursuant to Section 18551 of the California Health and Safety Code which comply with Subsection H of this Section. Private garages to accommodate not more than four (4) cars. Transitional/Supportive Housing, Raising of sheep, goats, horses, mules, bovine animals, and other similar domesticated quadrupeds, subject to restrictions, Underground storage, keeping of ho Bed and Breakfast, Family Day care home, small.

The **R-A (Rural Residential) Zone** allows one-family dwellings of a permanent character placed in permanent locations and one-family manufactured homes installed on a foundation system pursuant to Section 18551 of the California Health and Safety Code which comply with Subsection H of this Section. Additional housing for not more than nine (9) farmworkers and employees who work on the property, provided that the buildings therefor are not located within the required front, side or rear yard areas, and provided further that such housing for farmworkers or employees be permitted on sites of ten (10) acres or more. Private garages to accommodate not more than three (3) cars. The growing and harvesting of field crops, fruit and nut trees, vines, vegetables, horticultural specialties and timber, the operation of plant nurseries and greenhouses for producing trees, vines and other horticultural stock, and animal raising uses are allowed.

The RA-43 (Rural Residential – 1 acre minimum) Zone (See uses listed under the RA Zone)

The R-A 217 (Rural Residential – 5 acre minimum) Zone (See uses listed under the RA Zone)

The **R-1 (One Family) Zone** allows one-family dwellings of a permanent character placed in permanent locations and one-family manufactured homes installed on a foundation system pursuant to Section 18551 of the California Health and Safety Code which comply with Subsection G of this Section. Private garages to accommodate not more than three (3) cars.

The **R-1-20 (Rural Residential – 20,0000 sq. ft. minimum) Zone** (See uses listed under the R-1 Zone)

The R-1- 43 (Rural Residential – 1 acre minimum) Zone (See uses listed under the R-1 Zone)

The **R-3 (Multiple-Family) Zone** allows any use permitted in the "R-2" Two-Family Zone. Multiple dwellings; provided, however, that if more than four (4) dwelling units are proposed to be constructed on one (1) lot, the construction of such units shall be subject to approval of a site plan pursuant to the procedure set forth in Paragraph 1 of Subsection G of Section 16.2 of this Ordinance.

Proposed Planning Areas

One of the most important purposes of the Three Rivers Community Plan is to establish land use patterns and development policies and standards for the community through the year 2030. The general intent of the land use plan for Three Rivers is to identify the most appropriate types and distribution of land uses for the community, based on environmental, circulation, infrastructure, services, opportunities and constraints, urban development boundary suitability analysis and other economic capacities and concerns discussed in the previous chapters and sections of the Community Plan.

The County of Tulare, through existing policies, has encouraged both incorporated and unincorporated communities to establish urban development and land use patterns which are compact and contiguous. This policy position has reduced so-called "leap frog" development County-wide, has helped preserve agricultural lands, and has minimized land use conflicts (also known as compatibility or incompatibility) between urban and agricultural areas.

As suggested earlier, and based on the forecasted growth and the recommended Urban Development Boundary and the Opportunities and Constraints Analysis, the Land Use Plan (see Figure 30 and Table 49) and Zoning Plan map (see Figure 31 and Table 48) have been updated. The update is reflective of the forecast analysis indicating that there is a sufficient supply of vacant parcels that contain land use designations and zoning districts available to meet forecasted land demand projections. As a result, most of the existing land use designations and zoning districts will remain inplace as currently adopted. Proposed land use and zoning recommended updates include the following highlights:

1. Designating the existing Community Commercial zoning in the Village Market area as Mixed Use to support a Town Center concept as a follow-up to community interest and Fresno State University Village Center Feasibility 2005 Study.

- 2. Designating Bureau of Land Management (BLM) land as Resource Conservation consistent with the adopted General Plan 2030 Update land use designations.
- 3. Removal of the Airport Land Use designation at the Rodeo Grounds reflective of the closure of the former airport facility.
- 4. Removal of the Proposed School Site designation on North Fork Drive as the Three Rivers Union School District is not currently looking at this location as a potential school site.
- 5. Correction of land use designations and zoning district inconsistencies.
- 6. Evaluation of property owner requests.

Table 49 - Proposed Land Use		
Land Use	Acres	
Agriculture/Grazing	7,329	
Resource Conservation	3,083	
Commercial Recreation	536	
Community Commercial	92	
Elementary School	8	
High Density Residential	265	
Kaweah River	355	
Kaweah River Floodway	554	
Light Industry	31	
Low Density	3,843	
Med Density Residential	4,225	
MH on Individual Lots	6	
Multi-Family	84	
Road, ROW & Unclassified	357	
Total	20,768	

Table 48 - Proposed Zoning Districts		
Zoning Districts	Acres	
AE	2	
AE-20	21	
AE-80	11,689	
AF	454	
C-2-MU-SC	60	
C-2-SC	73	
C-2-SC-F-2	7	
C-2-SC-SR	6	
F-1	788	
0	268	
PD-C-2-SC	6	
PD-CO	119	
PD-M-1	31	
R-1-20	224	
R-1-43	29	
R-3	80	
R-A-217	2,696	
R-A-43	2,988	
R-A-43-F-2	6	
R-A-M-43	160	
R-A-M-43-F-2	2	
R-O-43	101	
R-O-44	651	
Road, ROW & Unclassified	307	
Total	20,768	







Circulation Element

The purpose of this Circulation Element Update for the community of Three Rivers is to provide for a safe, convenient and efficient transportation system. The Circulation Element has been designed to accommodate anticipated transportation needs based on the land use element. In compliance with state law, all city and county general plans must contain a circulation element that designates future

road improvements and extensions, addresses non-motorized transportation alternatives, and identifies funding options. The intent of this Circulation Element is to:

- Identify transportation needs and issues within Three Rivers, as well as regional relationships that affect the transportation system;
- Consider alternatives to the single-occupant vehicle as a means of providing services and access to facilities; and
- Establish policies that coordinate the Three Rivers transportation and circulation system with the General Plan and area plan land use maps, and provide direction for future decision-making.

Three changes are suggested to the Circulation Plan (see Figure 33)

a. Designating a Class II Bike Facility along the SR 198 alignment within the Three Rivers UDB Designating a Class II Bike Facility on North Fork Drive from SR 198 north through the Three Rivers UDB.

Rivers, such as topography and vegetation, which contribute to the quality of the environment, which also affect can emergency and safety access to residential development. It is important to balance the rural character of the community with the need for adequate emergency and safety access.

There are

in

factors

natural

Three

c. Designating a Complete Streets Candidate Area along the SR 198 alignment within the Three Rivers UDB between Old Three Rivers Road and Eggers Drive

Tulare County Association of Governments (TCAG) Regional Transportation Plan

The Regional Transportation Plan (RTP) is a multi-modal, long-range planning document prepared by the Tulare County Association of Governments (TCAG). The RTP includes programs and policies for congestion management, transit, bicycles and pedestrians, roadways, freight, and finances for Tulare County. The RTP is prepared every four years and contains a listing of projects considered to be financially feasible within a 25-year planning time frame. All federally funded transportation projects must be consistent with the RTP.

The RTP for Tulare is currently being updated and was adopted in July 2014. The RTP is the first to respond to state legislation (SB 375) that requires that the RTP show reductions in greenhouse gas emissions from passenger vehicles. Thus, there is a emphasis in the RTP on promoting ridesharing (transit, van and carpools) and active transportation (walking and bicycling). To this end, the RTP now includes a Sustainable Communities Strategy (SCS), a blueprint for land use patterns and transportation facilities and services that will facilitate fewer vehicle trips and vehicle miles traveled.

San Joaquin Valley Air Quality Management Plan

The San Joaquin Valley Air Pollution Control District (SJVAPCD) has prepared multiple Air Quality Management Plan (AQMP) and various other regulations to reduce air emissions through the SIP. Both the plan and several regulations aim to reduce emissions from mobile sources – automobiles and trucks, as well as other modes of transportation.








Figure 36 - Three Rivers Road Maintenance Plan

Measure R 1/2 Percent Sales Tax for Transportation

Measure R is the half-percent sales tax measure for transportation improvements passed by the voters of Tulare County in 2006 and managed by the Tulare County Transportation Authority (TCTA). The Measure provides funding for transportation projects (highway, transit, and ridesharing) over the 20-year duration of the Measure. Measure R funds are used by the County in Three Rivers to repair streets, and to improve the existing and planned transportation system.

Intelligent Transportation Systems (ITS) Planning

ITS Strategic Plan that may also consider countywide goals and policies to use communication and information technologies to improve mobility and enhance safety within the region. Potential ITS components include Freeway Management; Transit Management; Incident Management; Electronic Fare Payment; Electronic Toll Collection; Railroad Grade Crossings; Emergency Management Services; and Regional Multimodal Traveler Information. Being part of the ITS plan will assist the County with application for federal or State funding for specific types of ITS projects.

Public Transit and Active Transport Systems

While the private automobile is the dominant mode of travel within Three Rivers, as it is throughout Tulare County, other modes of transportation are important. The Census bureau does not collect data on non-work trips, which represent a greater share of travel than work trips, but tend to be less concentrated in peak traffic periods. Off-peak trips also tend to have a greater proportion of shared ride and active (walk and bike) trips. While congestion is not a major issue in Three Rivers, overreliance on automobiles creates other costs for both society and households, and means that many in the community who cannot drive (the young, the old, the disabled, the poor) must rely on those who can drive for their mobility. For this reason, it is important to encourage public transit systems and increased use of active modes of transportation, including bicycles and walking. The public transit system alternatives for Three Rivers include fixed route public transit systems, common bus carriers, and other local agency transit and paratransit services.

Paratransit services are transportation services such as carpooling, vanpooling, taxi service, and diala-ride programs. The County supports reliable and efficient paratransit service by encouraging development of service systems that satisfy the transit needs of the elderly and physically handicapped. In addition the Dial-A-Ride provides same day service to the general public (i.e., non-ADA-certified) passengers based on space availability. Services are operated on weekdays from 6:00 am - 9:30 pm and on weekends from 8:00 am 6:30 pm. Orange Belt Stages also serves this location with one daily service eastbound to Las Vegas, and one westbound service to Hanford where connections can be made to San Luis Obispo.

Goods Movement

The ability of Tulare County to compete domestically and internationally on an economic basis requires an efficient and cost-effective method for distributing and receiving products. Three Rivers is a part of this system with its proximity to both SR 99 and the Union Pacific Railroad mainline.

As industrial and economic growth is anticipated in Three Rivers, industrial-related truck traffic will increase. Statewide, over three-quarters of all freight is shipped by truck. It is anticipated that the region's truck volumes will grow faster than auto traffic through 2040.

Designated truck routes are intended to be used for long-distance truck movement. Truck movements for local deliveries within a community may use the most direct route to the delivery location, including local streets.

Air cargo is a growing method of transporting goods in and out of the Central Valley and is expected to continue to increase. As noted above, Fresno Yosemite International Airport is the major cargo-handling airport in the San Joaquin Valley.

The Union Pacific Railroad provides freight service, connecting Three Rivers with major markets in northern and southern California and beyond. Rail can be the most cost-effective mode for long-haul traffic traveling to or from destinations beyond the Valley. Trucking is still likely to be the predominant mode for freight movements within the County and Valley for the foreseeable future.

Transportation Demand Management

Transportation demand management (TDM) strategies reduce dependence on the single-occupant vehicle, increase the ability of the existing transportation system to carry more people, and enhance mobility in the increasingly congested SR 99 corridor. Examples of TDM strategies include telecommuting, flexible work hours, and electronic commerce that enable people to work and shop from home. According to Caltrans, the major vanpool broker in the Valley, vanpools are becoming more prevalent for short-to-medium range commute trips, as well as for traditional long-distance usage: Key vanpool users include agricultural workers, and employees at large firms and government agencies. Park-n-ride facilities and carpooling will also continue to be a significant link between highway and transit modes."⁴⁶

Objectives & Tactics

The intent of the Three Rivers Community Circulation Element is to establish a comprehensive multimodal transportation system that is efficient, environmentally sound, financially sound, and coordinated with the Land Use Element of the General Plan.

Objective 1: Design and implement a multi-modal transportation system that will serve projected future travel demand, minimize congestion, and address future growth in Three Rivers.

Tactics:

- 1. Utilize existing infrastructure and utilities to the maximum extent practical and provide for the logical, timely, and economically efficient extension of infrastructure and services.
- 2. Designate streets according to the following functional classifications:
 - a. Arterials serve as the principal network for cross-town traffic flow. They connect areas of major traffic generation within the urban area and connect with important county roads and state highways. They also provide for the distribution and collection of through traffic to and from collector and local streets.
 - b. Collectors provide for traffic movement between arterial and local streets, traffic movement within and between neighborhoods and major activity centers, and limited direct access to abutting properties.

⁴⁶ Three Rivers Community Plan Traffic Impact Assessment and Circulation Plan. Pages 5 and 6. Prepared by VRPA Technologies (included as Appendix "E" of this DEIR).

- c. Local streets provide for direct access to abutting properties and for very localized traffic movements within residential, commercial and industrial areas.
- d. All facility-types above (except freeways) should be capable of accommodating transit and paratransit vehicles. Furthermore, all facility-types except freeway should include provisions for active modes of transportation (walking and cycling).
- 3. Develop and apply consistent standards for new streets (and existing streets where feasible without substantial ROW takes) based on the roadway classification.
- 4. Require applicants for new development projects to dedicate needed ROW and construct and/or upgrade to County standards the streets and roads that will serve their projects.
- 5. Plan new arterial and collector streets as needed to improve access and enhance the develop potential of land designated for commercial and industrial uses.
- 6. Improvement standards for local and minor streets shall include perpendicular curbs, gutters and adequate street lighting at intersections.
- 7. Access to arterials by driveways, local and minor streets, and alleys should be controlled as needed in order to ensure efficient traffic flow and safety along these streets.
- 8. Local streets should be designed to discourage high traffic volumes and through traffic.
- 9. Develop a Circulation Map showing the public street system. Designated streets and recommended rights-of-way should be indicated on this map.
- 10. Allow standards for new street development to be altered or refined where it can be demonstrated that projected traffic flows can be accommodated.
- 11. Plan for peak-hour Level of Service (LOS) "D" or better throughout the circulation network.
- 12. Make intersection improvements to the existing major street system selectively, favoring traffic engineering solutions rather than major structural improvements. This could include signalization, intersection channelization, use of directional signs, and diversion of traffic onto underutilized streets.
- 13. Use complete streets concepts in the design of new local streets where such techniques will improve safety and manage traffic flow.
- 14. Ensure the street network provides efficient routes for emergency vehicles, meeting necessary street widths, turn around radius, and other factors as determined by the County in consultation with fire and other emergency service providers.
- 15. Cooperate with local, regional, State and Federal agencies to plan for, establish and maintain good connectivity to an efficient multimodal regional transportation system.

Objective 2: Provide designated routes and loading standards that reduce the noise and safety concerns associated with truck traffic.

Tactics:

- 1. Design interior street systems for commercial and industrial subdivisions to accommodate the movement of heavy trucks.
- 2. Restrict heavy duty truck through-traffic in residential areas and plan land uses so that trucks do not need to traverse these areas.
- 3. Design off-street loading facilities for all new commercial and industrial developments so that they do not face surrounding roadways or residential neighborhoods. Truck backing and maneuvering to access loading areas shall not be permitted on the public road system, except when specifically permitted by the County Engineer.

Objective 3: Provide safe and convenient pedestrian access between residential neighborhoods, open space, and schools that service those neighborhoods.

Tactics:

- 1. Provide a safe walking environment for pedestrians.
- 2. New development should include safe and pleasant designs which promote pedestrian access to arterials and collectors and consider the location of community services, such as schools, parks and neighborhood shopping activity centers in the accessibility of their design for all persons.
- 3. Require the installation of sidewalks as an integral part of all street construction where appropriate recognizing the context sensitive nature of the community through the application of appropriate standards in rural areas of the UDB.
- 4. Require street lighting as feasible and appropriate consistent with safety warrants within the rightsof-way of all public streets while considering Dark Sky Guidelines.
- 5. Include pedestrian signal indicators as an integral part of the installation of traffic signals.
- 6. Maximize visibility and access for pedestrians and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians. Special emphasis should be placed on the needs of disabled persons considering ADA regulations.
- 7. Plan for pedestrian access consistent with road design standards while designing street and road projects. Provisions for pedestrian paths or sidewalks and timing of traffic signals to allow safe pedestrian street crossing shall be included.
- 8. Collaborate with the Three Rivers Union Elementary School to ensure that school children have adequate transportation routes available, such as a local pedestrian or bike paths, or local bus service.
- 9. Encourage safe pedestrian walkways within commercial, office, industrial, residential, and recreational developments that comply with the Americans with Disabilities Act (ADA) requirements.
- 10. Coordinate with TCaT and private bus operators to ensure that pedestrian facilities are provided along and/or near transit routes, whenever feasible. New land developments may be required to provide pedestrian facilities due to existing or future planned transit routes even if demand for a pedestrian facility is not otherwise warranted.
- 11. Review all existing roadways without pedestrian facilities when they are considered for improvements (whether maintenance or upgrade) to determine if new pedestrian facilities are warranted. New roadways should also be assessed for pedestrian facilities.

Objective 4: Ensure the provision of adequate off-street parking for all land uses.

Tactics:

- 1. Require all new development to identify adequate on-street and off-street parking based on expected parking needs.
- 2. Encourage shared parking among nearby uses with complementary parking demand patterns.
- 3. Provide adequate loading areas within off-street parking areas for all commercial and manufacturing land uses.
- 4. Anticipate parking needs at proposed and expected activity centers, particularly commercial areas. *Objective 5: Provide a transportation system that is integrated with the region.*

Tactics:

- 1. Coordinate local transportation planning with the TCAG Congestion Management Plan to ensure eligibility for state and federal funding.
- 2. Incorporate the Regional Transportation Plan, and the Tulare County Short- and Long-Range Transit Plans into the Community Plan Circulation Element, and encourage the active participation of Caltrans in the design of highway capital improvement projects.

Objective 6: Encourage the use of public transit services to reduce reliance on the automobile.

Tactics:

- 1. Encourage transit alternatives to meet the basic transportation needs of the young, the elderly, the handicapped, and people without access to an automobile.
- 2. Consider development of an integrated transit center within Three Rivers where all transit services can connect with each other as well as with private ridesharing.
- 3. Encourage and provide for ridesharing, park and ride, and other programs that can reduce emissions, save energy, and reduce monetary costs for firms and workers.
- 4. Planning and development of arterial and collector streets shall include design features which can be used at future public transit stops.
- 5. Support the expansion and improvement of transit systems by consideration of demand responsive and fixed route services within the UDB as feasible and appropriate, and ride sharing programs to reduce the production of automobile emissions.
- 6. Support the use of alternate fuel vehicles and fueling stations for public transit vehicles, and County public agency vehicles.
- 7. Support TCaT and other transit operators' programs to foster transit usage.
- 8. Support all operator efforts to maximize revenue sources for short and long range transit needs that utilize all funding mechanisms available including federal grants, state enabling legislation, and farebox revenue. This can be accomplished through TCAG and the Tulare County Transit Agency (TCaT) through the development of the Short and Long Range Transit Plans.
- 9. Support programs developed by transit agencies/operators to provide paratransit service.
- 10. Incorporate the potential for public transit service in the design of developments identified as major trip attractions (i.e. community centers and employment centers).
- 11. Explore potential development of a park-n-ride lot in Three Rivers.
- 12. Support continued improvements to AMTRAK rail passenger service within Tulare County and throughout the San Joaquin Valley.

Objective 7: Provide efficient goods movement

Tactics:

- 1. Encourage the efficient movement of goods and people by rail through a shift of a portion of the goods previously moved by trucks onto the rail freight system.
- 2. Implement Street and highway projects to provide convenient and economical goods movement, including access to rail terminals, in areas where large concentrations of truck traffic exist.
- 3. Identify street and highway improvement and maintenance projects that will improve goods movement and implement projects that are economically feasible.
- 4. Encourage use of rail for goods movement whenever feasible.

Objective 8: Provide safe and convenient facilities for non-motorized modes of transportation that enhance the future livability and character of Three Rivers.

Tactics:

- 1. Consider developing a Bikeway plan (see Figure 36) for Three Rivers based on the following facility designations:
- 2. Bike Path (Class I). A special pathway for the exclusive use of bicycles, which is separated from motor vehicle facilities by space or a physical barrier. It is identified by guide signing and pavement markings.

- 3. Bike Lane (Class II). A lane on the paved area of a road for preferential use by bicycles. It is usually located along the right edge of the paved area or between the parking lane and the first motor vehicle lane. It is identified by a "Bike Lane" guide sign, special lane lines, and other pavement markings.
- 4. Bike Route (Class III). A recommended route for bicycle travel along an existing right-of-way, which is signed but not striped.
- 5. Bikeway. All facilities that explicitly provide for bicycle travel. The bikeway can be anything from a separate facility to a simple signed street.
- 6. Give priority to bikeways that will serve the highest concentration of cyclists and destination areas of highest demand, especially Three Rivers Union Elementary School.
- 7. Provide bikeways in proximity to major traffic generators such as commercial centers, schools, recreational areas, and major public facilities.
- 8. Develop a visually clear, simple, and consistent bicycle system with standard signs and markings, as designated by the State of California Traffic Control Devices Committee and the State Bikeway Committee.
- 9. Support the installation of bike parking racks at public and private places of assembly such as parks, schools, employment sites, churches, and retail commercial developments.
- 10. Provide non-motorized alternatives for commuter travel as well as recreational opportunities.
- 11. Provide separate rights-of-way for non-motorized facilities whenever economically and physically feasible.
- 12. Develop bikeways in compliance with the standards established in the Caltrans Highway Design Manual or other appropriate standards.

Objective 9: Design, construct, and operate the transportation system in a manner that maintains a high level of environmental quality.

Tactics:

- 1. Control dust (e.g., by using dust control rules/regulations adopted by the Valley Air District) and mitigate other environmental impacts during all stages of roadway construction.
- 2. Protect residents from transportation generated noise hazards. Increased setbacks, walls, landscaped berms, other sound absorbing barriers, or a combination thereof shall be provided along four lane highways in order to protect adjacent noise-sensitive land uses from traffic generated noise impacts. Additionally, noise generators such as commercial, manufacturing, and/or industrial activities shall use these techniques to mitigate exterior noise levels to no more than 60 decibels (dB Ldn or CNEL).
- 3. Review and monitor proposals for expansion of pipelines for the transport of suitable products and materials, and require mitigation of environmental impacts.
- 4. Encourage the use of non-polluting vehicles for both public and private uses.
- 5. Include noise mitigation measures in the design of roadway projects in Three Rivers.

Objective 10: Support the use of Transportation Demand Management (TDM) strategies to reduce dependence on the single-occupant vehicle, increase the ability of the existing transportation system to carry more people, and enhance mobility along congested corridors.

Tactics:

1. New development shall consider Transportation System Management and Transportation Demand Management as strategies for the mitigation of traffic and parking congestion. Public transit, traffic management, ride sharing and parking management are to be used to the greatest

extent practical to implement transportation management strategies.

2. Coordinate with Caltrans, TCAG, transit agencies and other responsible agencies to identify the need for additional park-and-ride facilities along major commuter travel corridors.

Objective 11: Utilize Intelligent Transportation Systems (ITS) to improve the safety and performance of the surface transportation system using new technology in detection, communication, computing, and traffic control.

Tactics:

1. Encourage the integration of Intelligent Transportation Systems (ITS) consistent with the principles and recommendations referenced in the TCAG Regional Transportation Plan.

COMPLETE STREETS

The current street system functions adequately and, barring unforeseen major development in Three Rivers, will continue to do so through the year 2040. Nonetheless, there are some areas of concern, such as the pavement condition of many local residential streets and the limited, or lack of, facilities resulting from context sensitive improvements such as, bikelanes, sidewalks, curbs, and gutters throughout the community. The County is currently addressing these issues through a community *Complete Streets Program* within the limits of available resources. As indicated in Tulare County Housing Element – Action Program 9, two other issues include:

- 1. While almost all existing and future roadways need be no more than two travel lanes to accommodate projected traffic to Year 2040, wider rights-of-way may be needed at certain junctions to safely handle potential increased truck traffic, or to allow restricted turn movements into developed areas or at intersections.
- 2. Given Three Rivers' location and limited availability of land and facilities for growth in multimodal opportunities, goods movement activities, truck traffic and potential growth in truck traffic should be monitored. Streets and driveway plans should be updated to reflect new growth areas and changes in freight traffic patterns and to examine multimodal opportunities.
- 3. In addition, State Route 198 serves as the main street gateway through the community. The Caltrans SR 198 June 2016 Final Transportation Concept Report includes the following material on page 31 regarding complete streets:
- "A Complete Street is defined as a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Complete Street concepts apply to rural, suburban, and urban areas. Providing Complete Streets increases travel options which, in turn, reduce congestion, increase system efficiency, and enable environmentally sustainable alternatives to single driver automotive trips. *Smart Mobility Framework analysis allows for people to see what Complete Streets strategies might be most appropriate for the land use of an area.*"

Implementing Complete Streets and other multi-modal concepts supports the California Complete Streets Act of 2008 (AB 1358), as well as the California Global Warming Solutions Act

of 2006 (AB 32) and SB 375, which outline the State's goals of reducing greenhouse gas emissions. With AB 1358 and DD-64-R2, both Caltrans and local agencies are working to address common goals.

Through Deputy Directive 64-R2, Caltrans provides for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the State Highway System (SHS). The Department views all transportation improvements (new and retrofit) as opportunities to improve safety, access, and mobility for all travelers and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system."

The Complete Streets Programs Policies, Objectives, and Standards are hereby incorporated by reference. Included in the plan are policies and implementation measures, as provided. The physical plan includes a bicycle network and connected pedestrian travel system incorporating complete safe routes to school network (see Figure 35). The Three Rivers Community has expressed a desire to designate a town center. The two primary areas identified are the Village Market commercial area and commercial areas stretching from North Fork Drive to Eggers Road which also includes the Three Rivers Elementary School site.

It should be noted that significant physical considerations related to the alignment of SR 198 due to slope constraints and the Middle Fork of the Kaweah River present challenges regarding capacity enhancement recommendations, bike lanes, or planned operational and safety improvements. At the same time, recommending Class II bike lanes through the community is an integral component of facilitating a complete streets approach within the community. As the Community Plan looks at a 20-year horizon, the Class II bike lane designation would allow for appropriate and more detailed feasibility analysis in the future before 30% plans could be recommended. The Class II designation would also allow for future consideration if funding and or feasibility studies determine that the project could be successfully implemented. A Smart Mobility Framework analysis or equivalent study is recommended to facilitate future feasible complete streets opportunities to integrate traffic, parking, transit, bicycle, and pedestrian travel in this corridor area.

Complete Streets Pedestrian, Transit, and Bicycle Facilities

The facilities included as the Three Rivers Candidate Complete Streets 2015 are listed as follows:

1. SR 198 Eggers Drive to Old Three Rivers Road

Complete Streets Attributes

While every street cannot be designed to serve all users equally, there are opportunities to enhance service for all users while maintaining its principal transportation function. Complete Streets incorporate community values and support adjacent land uses while ensuring safety and mobility. Proper applications of Complete Streets concepts support sustainable growth and preservation of scenic, aesthetic and historic resources.

Outcomes

As a part of the Circulation Element for the Community Plan Update, this Complete Streets Program and the following Policies Section achieved the following outcomes:

- (i) *Addressed* congestion, climate change and oil dependence by shifting to lower-carbon modes;
- (ii) Improved safety by addressing shoulders, sidewalks, better bus placement, traffic speed

reduction, treatments for travelers with disabilities;

(iii) *Created* "livable communities" by encouraging walking and bicycling for health, and by providing a safe walking and bicycling environment as an essential part of improving transportation movement and safety within the roadways studied.

These outcomes were achieved by the following:

- (a) *Included all users* namely, pedestrians, bicyclists, transit vehicles and users, and motorists. In drafting this report, all users were invited to comment on how the County could better serve the community. The implementation of complete streets directly shifts the emphasis to lower-carbon (using) modes of transportation. The shift from the gas using automobile to pedestrian and bicycle transport is achieved through the creation of sidewalks, improving sidewalks, and including bike lanes and/or bike routes for a wider range of people to use. The shift to transit is included in improving policies, programs and facilities in the operations of the County's transit systems.
- (b) *Created a comprehensive integrated and connected network* that supports "livable communities" that promote a safe interwoven fabric are provide for by the Policies

Section using the transportation goals in the 2030 General Plan Circulation Element and by further defining complete streets network.

(c) *Emphasized flexibility* recognizing that all streets with the Three Rivers are different, and thus, balancing user needs. No one standard can be applied to all streets and street designs need to be adjusted to account for existing conditions, differing jurisdictions, context sensitive standards and the desires of the community.

Conclusions and Future Funding Opportunities

The intended effect of identifying the outcomes and reaching the conclusions in this report is that future funding opportunities will be enhanced because the Community will be supported by fully updated Community Plans. The conclusion to the report includes the Circulation Element of the Community Plan including the policies, and plans.

Specifically, the funding sources that are found in the Funding Section will be pursued actively by Tulare County to complete the work identified in the studies include, but are not limited to, the following:

- Active Transportation Program Funding
- Highway Safety Improvement Funds
- Federal Transportation Activity Program (TAP) Funds
- Federal Transit Funds

- Federal Communities Putting Prevention to Work Grant
- Federal Highway Administration Pedestrian Safety and Design
- Strategic Growth Council

Complete Street Goals

The purpose of the RMA Complete Streets Policy is to create a comprehensive and uniform Complete Streets vision and policy for Tulare County. This will allow the implementing entities to incorporate Complete Streets guidelines and standards into both development and redevelopment actions. The County's goals are:

- Tulare County's transportation network will be supported through a variety of feasible transportation choices, which allows for sustainable growth.
- The livability of neighborhoods and commercial centers located along the County's transportation corridors will be enhanced by a safe and inviting pedestrian environment.
- The design of multimodal roadway facilities will not compromise the needs of larger vehicles such as transit vehicles, fire trucks and freight delivery trucks.
- Inclusion of Complete Streets design elements will allow for design flexibility on different street functions and neighborhood contexts.
- Inclusion of Complete Streets design elements will improve the integration of land use and transportation, while encouraging economic revitalization through infrastructure improvements.

Complete Streets Objectives

- To create an integrated and connected transportation network that supports transportation choices and sustainable growth.
- To ensure that all transportation modes are accommodated to the extent possible in all public roadway facilities in the County.
- To develop and use the latest design standards and guidelines in the design of Complete Streets.
- To provide flexibility in the implementation of this policy so that streets chosen for implementation of Complete Streets elements can be developed to fit within the context of their principal purpose and surroundings without compromising the safety of users and needs of larger vehicles.

Complete Streets Policies

Tulare County General Plan Policies

The Tulare County General Plan Update (2030) in complying with AB 1358 calls for 4 Complete

Streets related principles including:

Principle 1: County-wide Collaboration

Support countywide transportation plans that provide choices in travel modes.

Principle 2: Connectivity

Emphasize connectivity among cities, communities, and hamlets to ensure County residents have access to jobs and services.

Principle 3: Community Circulation

Anticipate and provide transit, traffic, and roadway connections that support the interconnectivity of all communities.

Principle 4: Pedestrian and Bicycle Facilities

Plan for the development and expansion of pedestrian paths and bicycle facilities that provide residents with alternative modes of travel.

These principles are expressed mainly in following policies including:

- TC-1.6 Intermodal Connectivity
- TC-1.7 Intermodal Freight Villages
- TC-5.1 Bicycle/Pedestrian Trail System
- TC-5.2 Non-motorized Modes in Planning and Development

Complete Street Policy Design Criteria

- 1. Tulare County promotes the incorporation of Complete Streets concepts and design standards in all appropriate new and retrofit County public streets (except State highways and freeways).
- 2. Tulare County will seek every opportunity to provide funding for the planning, design, and implementation of Complete Streets.
- 3. New Class I Multi-Use Paths should be a minimum of eight (8) feet wide.
- 4. New Class II Bike Lanes should be a minimum of five (5) feet wide.
- 5. New sidewalks should be a minimum of five (5) feet wide.
- 6. Bulb-outs should be considered in areas of higher speed (35 mph or greater) where sufficient turning radii for trucks is available or as determined by the County Engineer.
- 1. As determined by the County Engineer, installation of posted speed limit vehicle activated traffic calming signs (VATCS) are encouraged in instances of high speed to promote safety.
- 2. Transit shelters and benches are encouraged at all County transit stops if FTA grants are available.
- 3. Street lighting and cross walk are encouraged to promote safety if considered feasible by the County Engineer.
- 4. Design policies should be consistent with the Tulare County Improvement Standards; other references include existing design guides, such as those issued by Caltrans, AASHTO and

the ADA Accessibility Guidelines.

- 5. Public streets excluded from this policy include those where:
 - Complete streets concepts are in conflict with existing laws, codes, or ordinances.
 - Compliance with this policy would conflict with goals or physical conditions related to the unique aspects of the location.
- 6. Exceptions from Complete Street Policies:
 - Accommodation is not necessary where non-motorized use is prohibited, such as freeways.
 - Cost of accommodation is excessively disproportionate to the need or probable use as determined by the County Engineer.
 - A documented As determined by the County Engineer, installation of posted speed limit vehicle activated traffic calming signs (VATCS) are encouraged in instances of high speed to promote safety.
 - Transit shelters and benches are encouraged at all County transit stops if FTA grants are available.
 - Street lighting and cross walk are encouraged to promote safety if considered feasible by the County Engineer.
 - Design policies should be consistent with the Tulare County Improvement Standards; other references include existing design guides, such as those issued by Caltrans, AASHTO and the ADA Accessibility Guidelines.
 - Public streets excluded from this policy include those where:
 - o Complete streets concepts are in conflict with existing laws, codes, or ordinances.
 - Compliance with this policy would conflict with goals or physical conditions related to the unique aspects of the location.
 - Exceptions from Complete Street Policies:
 - Accommodation is not necessary where non-motorized use is prohibited, such as freeways.
 - Cost of accommodation is excessively disproportionate to the need or probable use as determined by the County Engineer.
 - A documented absence of current or future need.
 - absence of current or future need.

Complete Street Mobility Plan

The California Complete Streets Act (AB 1358) of 2008 was signed into law on September 30, 2008. Beginning January 1, 2011, AB 1358 requires circulation elements to address the transportation system from a multimodal perspective. The bill states that streets, roads, and highways must "meet the needs of all users in a manner suitable to the rural, suburban, or urban context of the general plan." Essentially, this bill requires a circulation element to plan for multimodal transportation accommodating all modes of transportation where appropriate, including walking, biking, car travel, and transit. The current functional classification system plan is shown in Circulation Plan.

The Complete Streets Act also requires circulation elements to consider the multiple users of the transportation system, including children, adults, seniors, and the disabled. For further clarity, AB 1358 tasks the Governor's Office of Planning and Research to release guidelines for compliance with this legislation by January 1, 2014. Implementation of complete streets principles should be tailored to the individual jurisdiction and the individual roadway. The Complete Streets Program for Tulare County focuses on a network-based approach that has been tailored to the needs of the Community

of Allensworth. Another principle that is being applied is under SB 743, requiring a change to evaluating traffic using Vehicle Miles Traveled (VMT) versus Level of Service under CEQA analysis, and under AB 32 in reducing Green House Gasses.

Complete Streets: According to the National Complete Streets Coalition, complete streets are a means by which, "… planners and engineers (can) build road networks that are safer, more livable, and welcoming to everyone…. Instituting a complete streets policy ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind – including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities."

Network-Based Complete Streets: Combines individual travel mode networks into one multimodal transportation system, integrating infrastructure where appropriate, ultimately ensuring that all users can safely and efficiently access their destination.

Vehicle Miles Traveled (VMT): Vehicle miles traveled is the metric that identifies the total distance traveled in a car per driver. VMT drives roadway needs (the more people who drive, the more capacity and maintenance are needed on the roadway system). Under the Tulare County Climate Action Plan, in reducing VMT greenhouse gas emissions are reduced, and the County has an overall target of reducing 6% of its greenhouse gas emissions through a reduction in VMT.

Community Plans adopt these principles, which are combined into the following mission statement: The Community Complete Streets Network comprises four types of facilities—vehicular, pedestrian, bicycle, and public transit. This complete streets approach will enable residents to choose which travel mode best suits them. It also will ensure that streets are designed with the users in mind—accommodating for businesses, children, the elderly, bicyclists, and transit users.

Caltrans and Complete Streets

Under Caltrans District Order 64-R1, Caltrans requires that a Complete Streets Implementation Action Plan be developed and implemented for Caltrans owned and maintained Streets. Their Implementation Action plan provides a background by which the Tulare County Completes Street Plan will be implemented.

TCAG, Tulare County Regional Bicycle Transportation Plan, Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS)

TCAG in 2014 updated a Regional Bicycle Plan that does not include any bicycle facilities through the Community of Allensworth. TCAG funded the grant for this Complete Streets Policy and in the RTP Action Element describe bicycle circulation patterns and Pedestrian policies focusing on the Americans with Disabilities Planning Strategies and Transportation Demand Management to increase pedestrian activity. The Cutler-Orosi Complete Streets Plan was prepared in 2014 and includes a Class 1 Facility along Avenue 416 through Allensworth. In addition, rail and goods movement is part of the Sustainable Communities Strategy, Regional Transportation Plan (RTP), in lieu of utilizing diesel powered freight trucks.

Tulare County Climate Action Plan (CAP)

The Tulare County CAP calls for a reduction on a project (over 50 vehicles) by project basis of 6% through a mixture of measures that are spelled out in Appendix J of the CAP. Utilization of alternative means of transportation will reduce GHG emissions and will help projects and the region meet their targets.

Bicycle Facilities

Bicycle facilities consist of Class I, Class II, and Class III facilities as defined below. In Tulare County, this General Plan and the Bicycle Transportation Plan envision a system of bicycle lanes on roadways that will connect the activity centers of the communities to the residents.

Class I

Bike path providing completely separated right-of-way designated for the exclusive use of bicycles and pedestrians. In Tulare County, Class I facilities will primarily be implemented through TCAG. Future bicycle facilities have also been identified through the *Bicycle Transportation Plan* (TCAG - 2010).



Class II

Bikeway that provides designated lanes for the use of bicycles through the use of striping on the roadway and signage designations for the facility.



Class III

Bikeway that provides route designation by signage. Roadways are shared between bicyclists and motorists. Class III facilities in Tulare County are envisioned to be implemented along the major circulation segments of roadway that connect the overall County roadway network. Although not signed on many roads in Allensworth, bicyclists are allowed use the side of the road or share the road on all County roadway facilities excluding freeways.



Pedestrian Facilities

Pedestrian Paths and Sidewalks

Pedestrian paths are primarily developed as part of the roadway and trail systems of a community and reflect the interconnected nature of circulation and transportation systems as a whole. Constructing wide streets increases the distance a pedestrian must travel to cross a street, thereby making it inconvenient for public use and inhibiting pedestrian circulation in the community. Currently, limited continuous sidewalks are provided along major routes in the community. In addition to connecting

available pedestrian resources, the communities have prioritized the completion of sidewalks along safe routes to school. Enhanced pedestrian crossings and sidewalks is considered in areas where high pedestrian demand occurs (such as to and around schools).

Multiuse Trails

Multiuse trails are facilities that can be used by bicycles, pedestrians, equestrians, and other recreational users. No multi use facilities are being considered for the Allensworth Community.

Transit Facilities

Transit options give users the ability to get to a destination without relying on the automobile. This also provides other community benefits, including reduced vehicle miles traveled (VMT). Reducing VMT will help the County achieve their greenhouse gas reduction targets.

Public Bus Service

Public bus service is provided by Tulare County Area Transit (TCaT) Northeast Route 30 (**see Figure** 26).

Additionally, Tulare County has provided guidance for including transit within facilities. These guidelines should be applied when considering new development to ensure appropriate connectivity and design features to support bus service.

Paratransit Service

Paratransit is an alternative mode of passenger transportation that does not follow fixed routes or schedules. Typically, vans or minibuses are used to provide paratransit service. Paratransit services vary considerably on the degree of flexibility they provide their customers. The most flexible systems offer on-demand, call-up, door to door service from any origin to any destination in a service area.

Cost Benefits Analysis, Implementation, and Funding Mechanisms

Caltrans lists the following benefits of Complete Streets in their implementation plan. They include:

- Increased Transportation Choices: Streets that provide travel choices can give people the option to avoid traffic congestion, and increase the overall capacity of the transportation network.
- Economic Revitalization: Complete streets can reduce transportation costs and travel time while increasing property values and job growth in communities.
- Improved Return on Infrastructure Investments: Integrating sidewalks, bike lanes, transit amenities, and safe crossings into the initial design of a project spares the expense of retrofits later.

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- Quality of Place: Increased bicycling and walking are indicative of vibrant and livable communities.
- Improved Safety: Design and accommodation for bicyclists and pedestrians reduces the incidence of crashes.
- More Walking and Bicycling: Public health experts are encouraging walking and bicycling as a response to the obesity epidemic. Streets that provide room for bicycling and walking help children get physical activity and gain independence.

Benefits of Complete Streets

The health benefits from walking and bicycle riding include increased overall health, and a reduction in air quality and greenhouse gas emissions. According to the Caltrans accepted, Victoria Transport Policy Institute, walking has a \$.25 per mile health benefit, while the cost of Greenhouse Gas (GHG) reductions is \$23 per ton. According to the Federal Highway Administration, sidewalks reduce incidences to pedestrians over 80%.1 According to Caltrans, the average costs of highway incidents are stated below (see Table 49).

Table 50 - According to Caltrans Highway Incidences		
Cost of Highway Accident Dollars Per Accident		
Fatal Accident	\$4,800,000	
Injury Accident	\$67,400	
Property Damage Only (PDO) Accident	\$10,200	
Average Cost per Accident	\$52,500	
Cost of an Event	Dollars Per Event	
Cost of a Fatality	\$4,400,000	

Community Specific Complete Street Implementation Measures

As part of a network-based approach, the County has identified (and will implement through pursuing further roadway studies and infrastructure design updates) a complete network for pedestrians on the Candidate Complete Street designated segment on the SR 198 alignment between Old Three Rivers Road and Eggers Drive. The County will also work to deliver feasible and appropriate context sensitive infrastructure to support all modes of transportation. In addition to the General Plan Circulation Element Implementation Section, the key implementation measures include:

- 1. Evaluating Roadways as potential Bike/Pedestrian travel routes,
- 2. Completing pedestrian infrastructure, as appropriate,
- 3. Providing safe and accessible pedestrian facilities in high use areas,
- 4. Designing and building sidewalks for safer routes to school,
- 5. Designating roadways for bicycle routes that are aligned with the Tulare County comprehensive bicycle network,
- 6. Coordination with County Transit.
- 7. Submitting the following list of project and cost to TCAG and Caltrans for consideration under further grant funding opportunities.

Measure R

Bike/Transit/Environmental Projects (14% of Measure R Funding)

On November 7, 2006, the voters of Tulare County Approved Measure R, imposing a ¹/₂ cent sales tax for transportation within the incorporated and unincorporated area of Tulare County for the next 30 years. The transportation measure will generate slightly more than \$652 million over 30 years to Tulare County's transportation needs.

The Goals of Measure R include air quality improvement efforts that will be addressed in the Measure R Expenditure Plan through the Transit/Bike/Environmental Program, which includes funding for transit, bike, and pedestrian environmental projects. The goal of this program is to expand or enhance public transit programs that address the transit dependent population, improve mobility through the construction of bike lanes, and have a demonstrated ability to get people out of their cars and improve

air quality and the environment.

Active Transportation Program (ATP)

On September 26, 2013, Governor Brown signed legislation creating the Active Transportation Program (ATP) in the Department of Transportation (Senate Bill 99, Chapter 359 and Assembly Bill 101, Chapter 354). The ATP consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program with a focus to make California a national leader in active transportation. The proposed projects have been included in the County's Active Transportation Plan (2015).

Citizen Feedback - Public Outreach Efforts

The purpose public workshops or community meetings is to engage in discussions with local residents and business owners regarding specific topics, e.g., transportation related improvements. Formal community meetings were held at town council forums and the Three Rivers Arts Building. Informal meetings were conducted with individual business or property owners associated to specific access concerns or other issues.

Implementation

Selection of Community Priorities

An effort is under way in Tulare County to implement Complete Streets Policies in the unincorporated communities within Tulare County's boundary. Just as the County updated its General Plan in 2012, many of the Community Plans are going through the update process. As a result of the Community

Input general themes that were voiced from residents in each community related to transportation included the <u>need</u> for:

- Sidewalks
- Better road conditions
- Safe walking and biking areas
- Street lights at specified intersections
- Pedestrian crossings
- Safe (lower) vehicle speeds
- Improved drainage
- Increased transit stops

The Complete Streets Plan is prevented in Figure 37.



Implementation Strategy

The purpose of this chapter is to prescribe a proposed approach to implement the general plan recommendations contained in the Three Rivers Community Plan. There are a number of components that comprise the Three Rivers Community Plan implementation strategy as follows:

PLAN PERFORMANCE

Tulare County General Plan Planning Framework Element Implementation Measure #11:

Performance measures shall be included in all community plans to be used to measure and evaluate the success of the plan in achieving its goals. Such measures may derive from Census data (percent ownership of housing, average household income, crime statistics), community service districts (CSD) statistics (water quality statistics), or land use parameters (acres of parkland or miles of bikelanes within the UDB per resident). Such data can be used in the annual General Plan review, as applicable, and will provide information to help the Board of Supervisors evaluate the effectiveness of the community plan program over the long term.

PROGRAM 1 : REVIEW OF	Metrics	Review
CENSUS DATA		Date
Task 1. Population.	 General Population and Housing Characteristics (Population, Age, Sex, Race, Households and Housing) Race and Hispanic or Latino Origin Hispanic or Latino by Type (Mexican, Puerto Rican,) Households and Families (Relationships, Children, Household Size,) 	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
Task 2. Education.	 Educational Attainment (High School, Bachelor's, Advanced Degree,) School Enrollment (Preschool, Kindergarten, High School, College,) Census 2000 Educational Attainment (Age, High School, Bachelor's, Advanced Degree,) School Enrollment (Preschool, Kindergarten, High School, College,) 	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
Task 3. Age.	 Annual Population Estimates for Selected Age Groups by Sex Children's Characteristics (Age, Race, School Enrollment, Poverty) Population 65 Years and Over (Sex, Race, Poverty, Veteran, Disability, Relationships, Characteristics of Teenagers (School Enrollment, Labor Force. 	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
Task 4. Business and Industry.	•Economy-Wide Key Statistics (Number of Establishments, Annual Payroll, Number of	Review at

	I	
	Employees) •Occupation by Sex and Median Earnings •Industry by Sex and Median Earnings Commuting Characteristics by Sex (Means Transportation, Commute Time, Vehicles Available)	5 year intervals, 2021, 2026, 2031, 2036, 2040
Task 5. Housing.	 Selected Housing Characteristics (Occupied or Vacant, Year Built, Rooms, Own or Rent, Home Value,) Financial Characteristics (Household Income, Monthly Housing Costs, Own or Rent,) Occupancy Characteristics (Household Size, Age of Householder, Family Type, Children,) Physical Housing Characteristics for Occupied Housing Units (Units, Year Built, Rooms, Vehicles,) General Housing Characteristics (Occupied or Vacant, Own or Rent, Race,) Tenure, Household Size, and Age of Householder Annual Estimates of Housing Units General Housing Characteristics (Occupied or Vacant, Own or Rent, Race,) Tenure, Household Size, and Age of Householder Annual Estimates of Housing Units General Housing Characteristics (Occupied or Vacant, Own or Rent, Race,) Tenure, Household Size, and Age of Householder 	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
Task 6. Income.	 Selected Economic Characteristics (Employment, Commute, Occupation, Income, Poverty,) Income in the Past 12 Months (Households, Families,) Earnings in the Past 12 Months (Sex, Educational Attainment,) Employment Status (Age, Race, Sex, Poverty, Disability, Education,) Occupation by Sex and Median Earnings in the Past 12 Months. 	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
Task 7. Origins and Language.	 Selected Characteristics of the Native and Foreign-Born Populations (Sex, Age, Race, Language, Income, Poverty,) Language Spoken at Home (Age, Citizens,) Characteristics of People by Language Spoken at Home (Age, Foreign Born, Citizenship, Poverty, Education,) Ancestry (Region, Country,) Selected Social Characteristics (Household and Family Type, Disability, Citizenship, Ancestry, Language,) Selected Social Characteristics (Household and Family Type, Disability, Citizenship, Ancestry, Language,) 	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
Task 8. Poverty.	 Poverty Status in the Past 12 Months (Age, Sex, Race, Education, Employment,) Poverty Status in the Past 12 Months of Families (Family Type and Size, Race, Work, Education, Children,) People at Specified Levels of Poverty (Age, Sex, Race, Hispanic, Education, Citizenship, Work, Disability,) 	Review at 5 year intervals, 2021, 2026, 2031,

Task 9. Veterans.	 Children Characteristics (Poverty, Public Assistance, Age, Race, School Enrollment,) Census 2000 Selected Economic Characteristics (Poverty, Children, Income, Employment,) Individual Poverty Status (Age, Sex,) Popular tables for this geography: 2012 American Community Survey Veteran Status (Period of Service, Sex, Age, Race, Education, Poverty, Disability,) Service-Connected Disability-Rating Status and Ratings for Civilian Veterans 18 Years and Over Economic Census Statistics for All U.S. Firms by Industry, Veteran Status, and Gender (Number of Firms, Employees, Payroll,) 	2036, 2040 Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
PROGRAM 2: MUNICIPAL SERVICES	Metrics	Review Date
Task 1. Domestic Water Services.	 Existing Well Distribution System Analysis Existing Well System Demand and Capacity Water Quality Measures 	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
Task 2. Wastewater Collection, Treatment, and Disposal.	 Existing Septic System Collection System Analysis Existing Septic System Demand and Capacity Water Quality Measures 	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
Task 3. Drainage Infrastructure	 Existing Collection System Analysis Existing System Demand and Capacity Expansion Improvements Capital Improvement Program Financing Alternatives (Incl. Grants) and Connection Fees Cost Estimates and Capital Improvement Plan Groundwater Recharge Measures 	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
Task 4. Transportation and Circulation.	 Existing Circulation System Level of Service Analysis, Existing System Demand and Capacity Identification of Future Improvements, Street, Pedestrians, Bikelanes, Public Transit. Capital Improvement Program 	Review at 5 year intervals, 2021, 2026,

	 Financing Alternatives (Incl. Grants) Cost Estimates and Capital Improvement Plan 	2031,
	• Tracking Measures for construction and improvements	2030, 2040
	i e miles of new road construction or overlay linear feet of	
	new sidewalk and bikelanes new safety improvements	
	bridge retrofit/replacement	
Task 5. Coordination with other	• Existing Level of Service Analysis, Existing System	Review at
agencies.	Demand and Capacity for all service providers including	5 vear
	but not limited to schools, water and wastewater services.	intervals
	Caltrans, etc.	2021
	Identification of Future Improvements.	2021,
	Capital Improvement Program	2026,
	• Financing Alternatives (Incl. Grants)	2031,
	Cost Estimates and Capital Improvement Plan	2036, 2040
	• Tracking Measures for construction and improvements,	
	i.e., new roads, new school facilities, water and wastewater	
	system improvements.	
PROGRAM 3: PUBLIC	Metrics	Review
HEALTH AND SAFETY		Date
Task 1. Sheriff and Fire Protection	 Existing Safety Conditions Analysis 	Review at
	 Identification of future Improvements 	5 year
	Capital Improvement Program	intervals.
	• Financing Alternatives (Incl. Grants)	2021.
	 Cost Estimates and Capital Improvement Plan 	2026
	• Tracking Measures for incident response times, i.e.	2020,
	number of calls and average response times.	2036, 2040
Task 2 Healthy Communities	Existing Conditions Analysis	2030, 2040
Task 2. Healthy Communities	Capital Improvement Program	Review at
	• Financing Alternatives (Incl. Grants)	5 year
	• Cost Estimates and Capital Improvement Plan	intervals,
	• Tracking Measures for healthy communities i.e.	2021,
	community health statistics development of parks farmers	2026,
	markets access to health care, safe routes to schools	2031,
	Vehicle miles travelled. Air Quality (PM-10, PM 2.5.	2036, 2040
	Ozone) etc.	
Task 3 Flood Control	Identification of future Improvements	Review at
Management	•Existing Safety Conditions Analysis	5 vear
	Capital Improvement Program	intervals
	• Financing Alternatives (Incl. Grants)	2021
	 Cost Estimates and Capital Improvement Plan 	2026
	• Tracking Measures for flood safety, i.e. number of flood	2020,
	incidents and tracking of future improvements.	2031,
PROCRAM 4: ECONOMIC	Matrica	2030, 2040
DEVELOPMEN'T AND LAND	wietnes	Neview
USE		Date
Task 1. Economic Development	Identification of future Market Demand	Review at
Program	Identification of Available sites	5 vear
	• Development of Marketing Program	intervale
	• Financing Alternatives (Incl. Grants)	2021
	• Tracking Measures for Economic Development, i.e.	2021,
		2020,

numl proje	per of new commercial, industrial, and mixed use cts developed in the Three Rivers UDB.	2031, 2036, 2040
Task 2. Land Use Plan • Exactle	Assisting Conditions Analysis (Absorption rate and hacy of UDB to meet forecasted land demand.) obtal Improvement Program ancing Alternatives (Incl. Grants) at Estimates and Capital Improvement Plan cking Measures to Track development in all land use nations including healthy communities, i.e. nunity health statistics, development of parks, farmers ets, access to health care, commercial goods and ces etc.	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040
Task3.OakWoodland• TooManagement•• <th>al acreage of oak woodland removed and by habitat for each year and cumulatively Total and incremental acreages of oak woodland erved in County through December 31st e reporting period Acreage conserved by each method (e.g., ervation casement, acquisition, on-site rvation, or other method) creage conserved by oak woodland habitat type. creage of oak woodland habitats under restoration (by ration activity) in the County creage of oak woodland habitat under restoration (by ration activity) lap showing the locations of the above activities monitoring report could also include the following ional information, which would assist implementing reeage requiring replanting creage requiring replanting creage under fully executed conservation easement creage pending conservation easement or other form quisition erceage still requiring mitigation through restoration ssment Questions o what extent have oak woodlands placed under ervation easements or other mitigation methods been tained to the standard of the agreements? s the overall acreage of oak woodlands increased, ased, or remained the same? By oak woodland habitat at percentage of lands with replacement planting shas ved the minimum 10% oak canopy cover or other ration goals? ve adequate lands (i.e., quantity and quality) been ed to meet the off-site mitigation goals for</th> <th>Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040</th>	al acreage of oak woodland removed and by habitat for each year and cumulatively Total and incremental acreages of oak woodland erved in County through December 31st e reporting period Acreage conserved by each method (e.g., ervation casement, acquisition, on-site rvation, or other method) creage conserved by oak woodland habitat type. creage of oak woodland habitats under restoration (by ration activity) in the County creage of oak woodland habitat under restoration (by ration activity) lap showing the locations of the above activities monitoring report could also include the following ional information, which would assist implementing reeage requiring replanting creage requiring replanting creage under fully executed conservation easement creage pending conservation easement or other form quisition erceage still requiring mitigation through restoration ssment Questions o what extent have oak woodlands placed under ervation easements or other mitigation methods been tained to the standard of the agreements? s the overall acreage of oak woodlands increased, ased, or remained the same? By oak woodland habitat at percentage of lands with replacement planting shas ved the minimum 10% oak canopy cover or other ration goals? ve adequate lands (i.e., quantity and quality) been ed to meet the off-site mitigation goals for	Review at 5 year intervals, 2021, 2026, 2031, 2036, 2040

	• Are the funds available from mitigation fees adequate to achieve the mitigation goals for conservation?	
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ATTACHMENTS

A-1 – Policy Matrix Three Rivers Community Plan Proposed Policies and Community Vision
A-2 – Matrix Of Community Plan Policies Compared To The 1980 Three Rivers Community Plan Policy Plan
A-3 – Mixed Use Overlay District (Zone Change Text) Section 18.9: "MU" Mixed-Use Overlay Combining Zone
Three Rivers Development Standards
A-4 – Land Use Matrix
A-5 – Description of Funding Sources
A-6 – Three Rivers Outreach
A-7 – Implementation Resources
A-8 – Future Feasibility Studies Implementation Program
A-9 – Voluntary Oak Woodland Plan

Attachment 1: A-1 – Policy Matrix Three Rivers Community Plan Proposed Policies and Community Vision

Attachment 1 - A-1 Policy Matrix

The Goals of the Plan were originally drafted in 2002, but have since been redrafted (major revision in 2009). The Plan was set aside during the General Plan Update (2010 - 2012). Since then, the goals have been vetted through months of deliberations with the Community over the course of the several years (2014-2015). The following matrix provides a demonstration as to how the community vision is implemented through the Three Rivers Community Plan policy plan.

MATRIX OF THREE RIVERS COMMUNITY PLAN POLICIES AND THE VISIONING STATEMENT FOR THREE RIVERS COMMUNITY

Three Rivers Community	Community Plan Proposed	Implementation Mechanism
Three Rivers Community Plan Vision Statements (VS) (1) Create a Town Center or centers with a Concentration of Commercial, Retail and Social Uses to Help Strengthen Three Rivers as a Livable Community.	Community Plan Proposed Policies Policy 1.6.1 (Designating a Town Center) Policy 1.1.13 (LU-7.4 Streetscape Continuity in Town Centers) Policy 1.5.1 (UDB and Future Development) Policy 1.6.2 (Specific Plan Development) Policy 1.6.3 (Commercial Clusters) Policy 1.6.4 (Mixed-Use Development-Town Center) Policy 1.6.5 (Community Centers and Neighborhoods) Policy 2.1.2 (Community Commercial Shopping Area) Policy 3.1.3 (Land Designation for Multi-Family & Senior Housing) Policy 3.1.4 (Cluster Development) Policy 3.1.5 Mixed Use Development) Policy 9.1.6 (LU 1.1 Smart	Implementation Mechanism Community Plan Map Specific Plan Design/Development Tools Development Regulations (Zoning) Design Guidelines Development Review County Project Review Committee
	Growth and Healthy Communities)	
(2) Establish Standards for signage which balances practical business considerations with community design standards.	Policy 1.3.5 (Signage Standards) Policy 1.2.3 (SL-2.2 Gateways to the Sequoias) Policy 1.2.10 (SL-1.1 Natural Landscapes)	Design Guidelines Development Standards County Project Review Committee
(3) Development of Noise Standards Reflective of a Foothill and Canyon	Policy 1.3.3 (Noise Standards) Policy 1.3.13 SL-4.1 Design of Highways	Noise Element Development Standards Design Guidelines

Community Environment.	Policy 1.4.8 (Adjacent Uses) Policy 4.1.1 (Preserving the Natural Environment)	Development Review County Project Review Committee Development Regulations
(4) Establish Standards for	Deligy 120 (Ferring	(Zoning) CEQA Review
(4) Establish Standards for fences.	Standards) Policy 3.2.2 Screening Requirements for RV & Mobilehome Parks	Development Standards County Project Review Committee
(5) Apply Rural Compatibility Standards through the County Project Review Committee process.	Modificition ParksPolicy 1.1.1 (New Residential Development Compatibility)Policy 1.1.2 (Mixed Uses)Policy 1.1.3 (Commercial Uses- Limiting Negative Impacts) Policy 1.1.9 (LU-1.3 Prevent Incompatible Uses)Policy 1.1.3 (LU-7.4 Streetscape Continuity in Town Centers) Policy 1.1.15 (Contextual and Compatible Design)Policy 1.2.1 (New Development Compatibility)Policy 1.2.3 (SL-2.2 Gateways to the Sequoias) Policy 1.2.19 (FGMP-6.4 Development Within Scenic Corridors) Policy 1.3.1 (County Project Review Committee) Policy 1.3.8 (Rural Walkable Communities' Guidelines) Policy 4.5.1 Implement Foothill Growth Management Plan Policies and Standards Policy 7.1.1 (Residential Safety Standards) Policy 7.1.4 (Maintain Rural Community Characteristics)	Development Standards Design Guidelines Development Regulations (Zoning) County Project Review Committee
(6) Establish Lighting	Policy 1.1.12 (Commercial	Design Guidelines

Standards for Night Sky	Building Design)	Development Standards
Conservation and	Policy 1.3.6 (Lighting	Development Regulations
Protection.	Standards)	(Building Code)
	Policy 4.1.1 (Preserving the	Development Regulations
	Natural Environment)	(Zoning)
		Development Review
		County Project Review
		Committee
		CEQA Review
(/) Protect and Preserve Oak,	Policy 4.3.3 (Preserving Oak	Natural Resources Mapping
Sycamore and	Woodlands) $\mathbf{D} = \frac{1}{2} \mathbf{A} \mathbf{A} \mathbf{A} \mathbf{A}$	County Project Review
Cottonwood woodlands.	Policy 4.3.4 (Establish 1:1 Deplement Standarda)	Committee Development Standards
	Replacement Standards)	Development Bariow
	Education Program)	Development Kevlew
	Policy 436 (Control Non-	Public Lands and Easements
	Native Plant Species)	Grant Programs
	Policy 4.3.7 (Management of	Development Regulations
	Oak Woodland Communities)	(Zoning)
	Policy 4.5.2 (Proposals Subject	Intergovernmental
	to County Project Review	Coordination
	Committee)	
	Policy 8.1.3 (Preservation of	
	Unique Features)	
(8) Preserve Visual Resources,	Policy 1.2.3 (Gateways to the	Development Standards
Including Viewsheds and	Sequoias), Policy 1.1.3	Design Guidelines
Ridgelines.	(Commercial Uses- Limiting	Development Review
	Negative Impacts), Policy	County Project Review
	1.1.13 LU-7.4 (Streetscape	Committee Development Breadting
	Continuity in Town Centers),	Development Regulations
	Uses) Policy 125 (LU72)	(Zonnig) Circulation Plan
	Integrate Natural Features)	Design/Development Tools
	Policy 1 2 7 LU-7 6 Screening)	Design/ Development 10013
	Policy 12.8 LU-5.3 (Storage	
	Screening). Policy 1.2.9 LU-2.3	
	-	
	(Open Space Character),	
	(Open Space Character), Policy 1.2.10 (SL-1.1 Natural	
	(Open Space Character), Policy 1.2.10 (SL-1.1 Natural Landscapes), Policy 1.2.11 (SL-	
	(Open Space Character), Policy 1.2.10 (SL-1.1 Natural Landscapes), Policy 1.2.11 (SL- 1.3 Watercourses), Policy	
	(Open Space Character), Policy 1.2.10 (SL-1.1 Natural Landscapes), Policy 1.2.11 (SL- 1.3 Watercourses), Policy 1.2.13 (SL-3.3 Highway	
	(Open Space Character), Policy 1.2.10 (SL-1.1 Natural Landscapes), Policy 1.2.11 (SL- 1.3 Watercourses), Policy 1.2.13 (SL-3.3 Highway Commercial), Policy 1.2.17	
	(Open Space Character), Policy 1.2.10 (SL-1.1 Natural Landscapes), Policy 1.2.11 (SL- 1.3 Watercourses), Policy 1.2.13 (SL-3.3 Highway Commercial), Policy 1.2.17 (FGMP-1.5 Preserving Visual	
	(Open Space Character), Policy 1.2.10 (SL-1.1 Natural Landscapes), Policy 1.2.11 (SL- 1.3 Watercourses), Policy 1.2.13 (SL-3.3 Highway Commercial), Policy 1.2.17 (FGMP-1.5 Preserving Visual Resources), Policy 1.2.18	
	(Open Space Character), Policy 1.2.10 (SL-1.1 Natural Landscapes), Policy 1.2.11 (SL- 1.3 Watercourses), Policy 1.2.13 (SL-3.3 Highway Commercial), Policy 1.2.17 (FGMP-1.5 Preserving Visual Resources), Policy 1.2.18 (FGMP-6.1 Preservation of	
	(Open Space Character), Policy 1.2.10 (SL-1.1 Natural Landscapes), Policy 1.2.11 (SL- 1.3 Watercourses), Policy 1.2.13 (SL-3.3 Highway Commercial), Policy 1.2.17 (FGMP-1.5 Preserving Visual Resources), Policy 1.2.18 (FGMP-6.1 Preservation of Scenic Highways), Policy 1.2.19	

	Within Courier Courier	
	Within Scenic Corridors),	
	Policy 1.4.3 (Visual Standards),	
	Policy 1.4.4 (Visual Screening),	
	Policy 1.6.5 SL-3.1(Community	
	Centers and Neighborhoods),	
	Policy 3.1.7 (High Density	
	Residential Development).	
	Policy 32.5 (Mobilehome	
	Project Compatibility)	
	Policy (4.4.5 FRM 1.7 Planting	
	of Nativa Vagatation	
	D l' 454 (1 1	
	Policy 4.5.1 (Implement	
	Foothill Growth Management	
	Plan Policies and Standards),	
	Policy 4.5.2 (Proposals	
	Subject to County Project	
	Review Committee), Policy	
	4.5.3 (Design Quality), Policy	
	4.5.7 (Slope Development).	
	Policy 4.5.8 (Grading & Slope	
	Stabilization Plan Policy	
	4 5.0 (Dechibit Existing Slope	
	4.5.9 (Prombit Existing Slope	
	Alteration),	
	Policy 1.1.4 (Compatible	
	Commercial Establishments),	
	Policy 4.5.3 (Design Quality),	
	Policy 4.5.4 (Minimize	
	Viewshed Impact), Policy 4.55	
	(Skyline Preservation), Policy	
	4.5.6 (Ridgeline Development	
	to Blend into the Landscape)	
(9) Preserve Historical	Policy 1114 (Historic	Archaeological Survey
Cultural and	Buildings and Aroos	Development Standards
	Deliar 4 (1 (Identific Structure)	Development Standards
Archaeological Resources	Policy 4.6.1 (Identify Structures	Development Keview
Including the Kaweah Post	with Cultural or Historical	Development Regulations
Office, Historical Bridges,	Significance), Policy 4.6.2	(Zoning)
and Cultural Native	(Preserve Cultural & Historical	Design Guidelines
American Resources.	Value),	
	Policy 4.6.3 (Incentivize	
	Cultural & Historic	
	Restoration),	
	Policy 4.6.4 (Alteration of Sites	
	with Identified Cultural	
	Resources) Policy (4.6.5	
	FRM-64 Mitigation	
	Dolicy A 6 6 (Solicit Loove from	
	Foncy 4.0.0 (Solicit Input from	
	Local Native Americans)	

	\mathbf{D} 1^{\prime} \mathbf{A} (7 (C) C 1 1^{\prime} 1^{\prime} ()	
	Policy 4.6.7 (Confidentiality of	
	Archaeological Sites), Policy	
	(4.6.8 ERM-6.10 Grading	
	Cultural Resources Sites),	
	Policy (5.2.3 Community	
	Facility Development)	
(10) Provide Land Uses	Policy (9.1.3 Maintain Rural	Community Plan Map
Consistent Community	Characteristics) Policy (111	UDB
Character including an	New Residential Development	Extension of Public Services
Under Development	Compatability) Dollary (1.1.2	Extension of 1 ubile Services
	Compatability), Policy $(1.1.2)$	
Boundary (UDB) that is	Mixed Uses), Policy (1.1.3	
contiguous with the	Commercial Uses- Limiting	
existing Planning Area	Negative Impacts), Policy	
Boundary.	(1.1.15 LU-7.14 Contextual and	
	Compatible Design), Policy	
	1.2.1 (New Development	
	Compatibility), Policy (1.2.3	
	SL-2.2 Gateways to the	
	Sequoias) Policy (1 2 9 LU-2 3	
	Open Space Character)	
	Policy (1.2.10 SI 1.1 Natural	
	Londonnoo) Dollary (1.2.11 SI	
	Landscapes), Policy (1.2.11 SL-	
	1.3 Watercourses), Policy (1.3.8	
	Rural Walkable Communities'	
	Guidelines), Policy (1.3.9	
	Fencing Standards), Policy	
	(1.3.15 PF-2.7 Improvement	
	Standards in Communities),	
	Policy (1.6.5 SL-3.1	
	Community Centers and	
	Neighborhoods), Policy (4.4.1	
	Unnecessary Removal of	
	Native Trees) Policy (714	
	Maintain Rural Community	
	Charactoristics) Dollary 151	
	(UDR and Est	
	Development D ¹ 152	
	Development) Policy 1.5.3	
	(UDB Consistency) Policy	
	1.5.5 (Prohibiting Public	
	Services Outside of UDB)	
(11) Ensure adequate land	Policy 1.1.2 (Mixed Uses), 9.1.6	Community Plan Map
use supplies for residential,	(Smart Growth and Healthy	Design/Development Tools
commercial, industrial and	Communities),	Specific Plan
public uses to	Policy 3.1.6 (Cluster Residential	Development Regulations
accommodate future	Development)	(Zoning)
growth and ensure the	Policy 2.1.2 (Community	
community's economic	Commercial Shopping Area)	
viability.	Policy 2.1.3 (Concentrate	
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	Commercial Development),	
	Policy 1.6.3 (Commercial	
	Clusters), Policy 1.5.1 (UDB	
	and Future Development),	
	Policy 1.6.1 (Designating a	
	Town Center), Policy 1.6.3	
	(Commercial Clusters), 1.6.4	
	Mixed-Use Development-	
	Town Center, Policy 1.6.5 SL-	
	3.1 (Community Centers and	
	Neighborhoods), Policy 3.1.5	
	(Mixed-Use Development)	
	Policy 1.1.4 (Compatible	
	or 115 (Cluster Commercial	
	Uses) Policy 1 2 13 (Highway	
	Commercial). Policy 2.1.4	
	(Highway-Oriented	
	Commercial Development),	
	Policy 2.4.1 (ED-6.1	
	Revitalization of Community	
	Centers), Policy 2.4.5 ED-6.7	
	(Existing Commercial Centers)	
(12) Manage growth.	Policy 1.3.1 (County Project	Foothill Growth Management
	Review Committee)	Plan (FGMP)
	Policy 1.5.4 (Applying FGMP	County Project Review
	Policies)	Lotorgovernmentel
	Healthy Communities) Policy	Coordination
	113 (Commercial Uses-	Public Health and Safety
	Limiting Negative Impacts).	Requirements
	Policy 1.2.20 (FGMP-6.5	Development Review
	Cluster Development), Policy	Development Standards
	1.5.7 (PF-2.2 Modification of	1
	Community UDB) Policy 1.5.8	
	(PF-2.8 Inappropriate Land	
	Use), Policy 4.1.2 (CEQA	
	Compliance)	
(13) Ensure compatibility	Policy 1.1.9 (Prevent	Development Standards
between land use types and	Incompatible Uses) Policy 1.1.3	Development Keview
intensities	(Commercial Uses- Limiting Negative Impacts) Policy (1.2.1	(Zoning)
	New Development	Design Guidelines
	Compatibility) Policy 1 1 10	County Project Review
	(Rural Residential Interface)	Committee
	Policy 1.4.7 (Air Quality Land	Intergovernmental

	Use Compatibility) Policy 158	Coordination
	(Incorropriate Land Use)	Public Health and Safety
	Policy 3.2.5 (Mobilehome	Requirements
	Project Compatibility	Requirements
	Policy 0.1.6 (Smort Crowth and	
	Policy 9.1.0 (Smart Growth and	
	Healthy Communities)	
(14) Encourage a diversity	Policy 3.1.1 (Housing Support)	Community Plan Map
of housing options for all	Policy 3.1.2 (Housing Financial	Development Regulations
Three Rivers residents,	Assistance) Policy 3.1.3 (Land	(Zoning)
including affordable	Designation for Multi-Family	Development Review
housing for families,	& Senior Housing) Policy 3.1.4	Grant Programs
seniors, and National Park	(Cluster Development) Policy	County Project Review
Service employees.	3.1.5 (Mixed-Use	Committee
	Development) Policy 3.1.9	CEQA Review
	(Housing Policy 3.11) Policy	Design/Development Tools
	3.1.10 (Housing Policy 3.12)	
	Policy 2.2.4 (ED-2.8	
	Jobs/Housing Ratio) Policy	
	9.1.6 (LU-1.1 Smart Growth	
	and Healthy Communities)	
(15) Ensure that future	Policy 4.1.1 (Preserving the	Development Standards
development is compatible	Natural Environment) Policy	Development Review
with existing development	Policy 4.1.2 (CEOA	Development Regulations
and the natural	Compliance) Policy 1.1.1 (New	(Zoning)
environment	Residential Development	County Project Review
	Compatibility) Policy 113	Committee
	(Commercial Uses- Limiting	Design Guidelines
	Negative Impacts) Policy 114	Design/Dev Tools
	(Compatible Commercial	Design, Dev. 10015
	Establishments)	
	Policy 110 (Prevent	
	Incompatible Uses)	
	Deligy 1112 (Commonoid	
	Policy 1.1.12 (Commercial Building Design)	
	Deliger 1 1 15 (Constantial and	
	Policy 1.1.15 (Contextual and	
	Compatible Design)	
	Policy 1.2.1 (New	
	Development Compatibility)	
	Policy 1.3.8 (Rural Walkable	
	Communities' Guidelines)	
	Policy 1.3.15 (Improvement	
	Standards in Communities)	
	Policy 1./.1 (Development	
	Suitability Analysis), Policy	
	3.1.7 (High Density Residential	
	Development)	
(16) Establish rural	Policy 7.1.4 (Maintain Rural	Development Standards

compatibility standards	Community Characteristics)	Development Review
compatibility standards.	Policy 1.1.1 (New Residential	Development Regulations
	Development Compatibility)	(Zoning)
	Policy 112 (Mixed Uses)	Design Guidelines
	Policy 113 (Commercial	Coupty Project Review
	Lisas Limiting Nagativa	Committee
	Impacts) Delicy 110 (LU13	Committee
	Prevent Incompatible Uses)	
	Policy 1 1 10 (Rural Residential	
	Interface) Delicy 1.2.1 (Now	
	Development Compatibility	
	Development Compatibility) Delicy 1.2.3 (SL.2.2 Catowaya	
	to the Service) Deligy 1.2.11	
	(SI 1.2 Wetergourges) Delien	
	(SL-1.3 Watercourses) Policy	
	Development Within Seerie	
	Considered Deliger 122	
	(Deceler research Strandarda)	
	Delige 0.1.2 (Maintain Brand	
	Policy 9.1.3 (Maintain Rural	
	D L' 127 (V t t	
(17) vegetation standards.	Policy 1.5./ (Vegetation	Design Guidelines
	Standards) Policy 4.4.5	Development Standards
	(Planting of Native Vegetation)	County Project Review
	Policy 1.2.9 (LU-2.3 Open	Committee
	Space Character) Policy 1.2.1/	Development Regulations
	(FGMP-1.5 Preserving Visual	Natural Resources Mapping
	Resources) Policy 3.2.2	Public Lands and Easements
	(Screening Requirements for	
	RV & Mobilehome Parks)	
	Policy 4.4.2 (Removal of	
	Natural Vegetation) Policy	
	4.4.4 (Ensure Appropriate	
	Landscaping) Policy 8.1.5	
	(FGMP-1.2 Grading)	
(18) Establish Setback	Policy 1.1./ (Buffers)	Development Standards
standards for residential	Policy 1.1.11 (Butters)	Development Review
development.	Policy 1.3.4 (Setbacks)	Development Regulations
	Policy 1.3.13 (SL-4.1 Design of	(Zoning)
	Highways)	Design Guidelines
	Policy 1.7.1 (Develop	Overlay Zone
	Suitability Analysis) Policy 4.3.9	Natural Resource Mapping
	(ERM-1.8 Open Space	
	Buffers)	
(19) Establish Streetscape	Policy 1.1.13 (Streetscape	Development Standards
guidelines for roadways,	Continuity in Town Centers)	Development Review
paths and sidewalks.	Policy 1.1.14 (Historic	Development Regulations
	Buildings and Areas)	(Zoning)

	Policy 1.3.8 (Rural Walkable Communities' Guidelines) Policy 1.3.14 (Design of County Roads) Policy 4.1.4 (Roadway Subdivision) Policy 4.5.4 (Minimize Viewshed Impact) Policy 6.1.5 (Pedestrian Safety) Policy 8.1.4 (Compliance with Planning Policies) Policy 9.1.2 (Alternative Modes	Circulation Plan Design Guidelines Intergovernmental Coordination Public Health and Safety Requirements
	Policy 9.1.6 (Smart Growth and	
	Healthy Communities)	
(20) Develop a Traffic Circulation Plan with management strategies and improvements to increase safety and community access.	Policy4.1.4(RoadwaySubdivision)Policy6.1.1(CaltransCollaboration)Policy6.1.2(Creation of TurnLanes)Policy6.1.2(Improve RoadSafety)Policy6.1.4(Improve RoadAccessPolicy6.1.4(Improve RoadAccessPolicy6.1.6(Dial-a-RideProgram)Policy6.1.7(TrafficEnforcement)Policy6.1.8(TurnPolicy6.2.1(Designate Public,Quasi-Public,andHighDensityUses)PolicyPolicy6.2.2(LinkCommercialDevelopmenttoTransportationCorridors)Policy7.1.1(Residential SafetyStandards)Policy7.1.2PublicSafetyServices)	Circulation Plan Development Standards Intergovernmental Coordination Public Health and Safety Requirements Community Plan Map Development Review
	Policy 7.1.4 (Maintain Rural Community Characteristics) Policy 9.1.2 (Alternative Modes of Transportation) Policy 9.1.3 (Maintain Rural	

	Characteristics)	
	Policy 9.1.4 (Ensure Easy	
	Access to Health Services)	
(21) Development of a	Policy 1.6.5 (SL-3.1	CEOA Review
Community Park.	Community Centers and	Community Plan Map
	Neighborhoods)	Development Regulations
	Policy 3.1.10 (Housing Policy	(Zoning)
	3.12 Neighborhood Parks)	Development Standards
	Policy .1.12 (Housing Policy	County Project Review
	3.16 Grant Funds for Park and	Committee
	Recreation Facilities) Policy	
	5.2.2 (Housing & Subdivision	
	Design) Policy 5.2.1 (Reserve	
	Recreational Space) Policy	
	5.2.3 (Community Facility	
	Development) Policy 5.2.4	
	(Facility Maintenance) Policy	
	5.2.5 (Retain Natural State of	
	Recreational Space) Policy 2.1.5	
	(ED-5.4 Recreational	
	Accommodations), Policy 2.1.6	
	(ED-5.5 Rivers) Policy 2.1.8	
	(ED-5.7 Foothills) Policy 2.1.9	
	(ED-5.8 Foothill Gateways)	
	Policy 4.2.9 (Protect &	
	Conserve Open Space) Policy	
	4.2.10 (HS-5.4 Multi-Purpose	
	Flood Control Measures)	
	Policy 4.3.8 (ERM-1.4 Protect	
	Riparian Areas)	
	Policy 9.1.6 (LU-1.1 Smart	
	Growth and Healthy	
	Communities)	

Attachment 2: A-2 – Matrix Of Community Plan Policies Compared To The 1980 Three Rivers Community Plan Policy Plan

Attachment 2 - Matrix Compared to the 1980 Community Plan

The goals, objectives and policies contained in the 1980 Three Rivers Community Plan were evaluated as part of the development of the Three Rivers Community Plan Update process. The following matrix provides a demonstration as to how the 1980 Three Rivers Community Plan policies are addressed through the updated Three Rivers Community Plan policy plan.

From 1980s Policy Outline	Proposed Policies
 <u>COMMUNITY DEVELOPMENT</u>: Goal I: Objective I: Policies: Locate new high density residential uses in close proximity to planned shopping areas. Require public, quasi-public and high density residential uses to locate where direct and safe access to major streets is available. Establish areas zoned exclusively for industry, commerce and residential consistent with the policies in this plan. Prohibit commercial or recreational attractions along residential streets. 	 Policies: 1. Policy 2.1.3 (Concentrate Commercial Development) 2. Policy 6.2.1 (Designate Public, Quasi-Public, and High Density Uses) 3. Policy 1.1.10 (Rural Residential Interface) and Policy 9.1.6 (Smart Growth and Healthy Communities) 4. Policy 1.1.9 (Prevent Incompatible Uses)
 Objective 2: Policies: Require adequate setbacks, side and rear yards, landscaping, and screening between residential and employment areas. Utilize roadway and other physical features such as the Kaweah River to separate planned residential and employment areas. 	 Policies: 1. Policy 1.1.7 (Buffers) 2. Policy 1.1.15 (Contextual and Compatible Design) and 1.1.4 Compatible Commercial Establishments.
 Objective 3: Policies: Encourage commercial, professional office and light industrial development to locate where access is appropriate for such development. Require installation of noise modifying walls, berms or heavy plantings along State Route 198 in conjunction with any new residential development. 	 Policies: 1. Policy 1.4.1 (Professional Office Design Standards) 2. Policy 1.1.6 (Land Use Protections)

Goal II: Objective:

Policies:

- 1. Require existing and new large scale developments or subdivisions within the Community Services District to sponsor their share of certain needed public services. Water and sewer services shall be applied for and provided on a service area basis.
- 2. Prohibit new residential, commercial and light industrial construction within the planning area unless the engineered disposal system is approved by the necessary authorities.
- 3. Require rehabilitation of failing septic systems within the on-site Waste Water Management Zone by the Community Services District.
- 4. Require rehabilitation of failing septic systems outside the On-Site Waste Water Management Zone by having the County Health Department issue citations for correction to property owners having failing systems.
- 5. Prohibit commercial and industrial development with excessive waste water discharge characteristics.
- 6. Encourage the provision of public services (water and sewer) to be done in concert with the Community Plan (map and text).

Policies:

- Policy 1.8.1 (Community Services District Requirements) and Policy 5.3.1 (Public Services Provision)
- Policy 1.8.1 (Community Services District Requirements) Policy 5.3.4 (Provide Wastewater Treatment Systems), 5.3.5 (Improvement Districts formation), Policy 1.7.2 Density Regulations-Soil)
- Policy 1.8.3 (Sufficient Lot Area) (Policy 5.3.2 (Provide Safe Water Systems)
- 4. Policy 1.8.3 (Sufficient Lot Area)
- Policy 1.8.2 (Maximum Exceedance Limits) and Policy 5.3.4 (Provide Wastewater Treatment Systems)
- 6. Policy 5.3.1 (Public Services Provision)

Goal III:

Objective:

Policies:

- 1. Improve water quality by having the On-Site Waste Water Management District repair or replace failing septic systems and require property owners to properly maintain their separate systems. Encourage sewage collection systems in planned high density residential and/or commercial areas.
- 2. Investigate feasibility of and assess community attitude toward eventual incorporation of Three Rivers.

Policy 1.8.3 (Sufficient Lot Area) and Policy 5.3.3 (Require Sewage Collection Systems) or 5.3.4 (Provide Wastewater Treatment Systems)

- 2. Included in future feasibility studies implementation program Appendix B Implementation Measure #7.
- Policy 5.3.1 (Public Services Provision), Policy 1.8.1 (Community Services District Requirements), Policy 2.2.1 ED-2.1 (Business Retention), Policy 2.2.3 ED-2.6 (Agency Support for Small Businesses), Policy 2.4.5 ED-6.7 (Existing Commercial Centers), Policy

Policies:

3.	Coordinate future public services with the Three Rivers Community Plan.		 2.4.6 (PFS-6.1 Telecommunications Services), Policy 7.1.2 (Accessibility to Public Safety Services), Policy (7.1.3 Provide Local Emergency Services), Policy 9.1.4 (Ensure Easy Access to Health Services), Policy 9.1.5 (Coordinate Public Transit Services with Health Care Services)
Goal IV: Objective Policies: 1. 2. 3.	I: Maintain a growth rate that the community can comfortably absorb. The allowable growth rate may vary from area to area depending upon the availability of public services, the anticipation of planned services. In no event, however, should the growth rate be so high that the community or an area of the community, is pushed to a point of no return requiring unplanned services. Encourage large lot single-family developments and planned cluster residential developments. Regulate residential densities based on soil suitability to provide for proper disposal of septic tank effluents.	Policies: 1. 2. 3.	Policy 1.1.2 (Mixed Uses), 1.1.3 (Commercial Uses- Limiting Negative Impacts), 9.1.6 (Smart Growth and Healthy Communities), Policy 8.1.1 FGMP-1.1 (Protection of Values in Three Rivers), Policy 1.7.2 (Density Regulations-Soil) Policy 3.1.6 (Cluster Residential Development) Policy 1.7.2 (Density Regulations- Soil)
Objective 2 Policies: 1. 2.	2: Encourage agricultural land not now in the Williamson Act to enter Agricultural Preserves Contracts pursuant to the Williamson Act. Lessen development pressure on agricultural areas by designating on the Plan areas to be retained for agricultural land or grazing activities.	Policies: 1. 2.	Policy 2.3.2 (Williamson Act Integration) Policy 2.3.1 (Grazing Activities)
Objective 2 Policies: 1. 2. 3.	3: Require the mitigation of adverse effects of development in order to protect the natural landscape, open space and scenic areas. Require undergrounding of utilities in new development where feasible. Establish narrow street paving widths and steeper grade standards	Policies: 1. 2. 3. 4. 5. 6.	Policy 1.2.9 (Open Space Character) Policy 1.4.5 (New Commercial Resort Development Standards) Policy 1.4.6 (Mixed Use Project Review) Policy 1.8.4 (Utility Review Process) Policy 1.3.14 (Design of County Roads) Policy 1.2.10 (Natural Landscapes)

4. 5. 6.	for minor roads serving fewer than 16 parcels in low-density residential areas. Require non-residential and high density multi-family residential development to use landscaping measures such as architectural screenings, vegetative plantings, and the use of natural hills or earth berms to screen parking areas and make them unobtrusive as possible. Encourage the utilization of natural or natural appearing building materials for building facades and advertising signs. No new commercial resort development proposal which either exceed 40 acres in area or 100 guest rooms shall be allowed without approval of a Planned Unit Development pursuant to Section 18.5 or a Planned Development pursuant to Section 18.6, Subsection G of the Tulare County Zoning Ordinance has been secured.	7.	Policy 1.1.12 (Commercial Building Design) or 1.1.15 (Contextual and Compatible Design)
Objective 4	4:	Policies:	
Policies:		1.	Policy 1.1.5 (Cluster Commercial
1. 2. 3.	Group commercial uses in clustered compact areas to discourage strip development. Require commercial areas to form Improvement Districts under the auspices of the Community Services District when community water and sewer systems will be required. Require new multi-family high density residential areas to be located in close proximity to concentrated commercial areas.	2. 3.	Uses) or 1.6.3 (Commercial Clusters) Policy 1.3.15 (Improvement Standards in Communities), Policy 1.8.1 Community Services District Requirements, Policy 5.3.5 (Improvement Districts Formation) Policy 2.1.2 (Community Commercial Shopping Area), Policy 3.1.5 (Mixed- Use Development), Policy 1.6.4 (Mixed-Use Development-Town Center).
ECONOM	IIC BASE:	Policies:	
Goal I: Objective 2 Policies: 1.	l: Accommodate light industrial development which is non-polluting and which will not create nuisance conditions. Light industrial	1.	Policy 1.1.3 (Commercial Uses- Limiting Negative Impacts) Policy 1.1.7 (Buffers), Policy 1.1.11 LU-6.2 (Buffers-Non Compatible Land Uses), Policy 1.4.2 (Buffer Strips), Policy 1.4.9 LU-5.6 (Industrial Use Buffer), Policy
	operations will be totally enclosed or adequately screened from view.	3.	4.3.9 ERM-1.8 (Open Space Buffers) Policy 1.6.3 (Commercial Clusters), Policy 1.5.1 (UDB and Future

 Neighborhoods), Policy 2.1.2 (Community Commercial Shopping Area), Policy 3.1.5 (Mixed-Use Development) 4. Policy 1.1.4 (Compatible Commercial Establishments) or 1.1.5 (Cluster Commercial Uses) 5. Policy 1.2.13 (Highway Commercial), Policy 2.1.4 (Highway-Oriented Commercial Development), Policy
2.4.1 ED-6.1 (Revitalization of Community Centers), Policy 2.4.5 ED-6.7 (Existing Commercial Centers)
icies:
1. Policy 1.1.4 (Compatible Commercial
 Establishments), Policy 1.1.5 (Commercial Uses- Limiting Negative Impacts), Policy 1.4.1 (Professional Office Design Standards), Policy 4.1.3 (Mitigating Traffic Impacts) 2. Policy 1.3.5 (Signage Standards), Policy, 1.3.6 (Lighting Standards)
 Policy 1.4.2 (Buffer Strips) Policy 1.2.8 (Storage Screening)

HOUSING:Goal II:Objective 1:Policies:1. Encourage and make property owners aware of and assist them in efforts to qualify for available state and federal low interest housing loans for rehabilitation of deteriorated units.	Policies: 1. Policy 3.1.2 (Housing Financial Assistance)
 Objective 2: Policies: Permit mobilehome parks and recreation vehicle parks, by Special Use Permit, in designated commercial-recreation areas along State Route 198 as shown on the plan and retain the existing mobilehome park on North Fork Drive presently known as Trailer Isle. Require mobilehome parks and recreation vehicle parks adjacent to State Route 198 to be screened from State Route 198 by utilizing such screening measures as masonry walls or other types of architectural fencing, earth berms, rock outcrops, and natural variation to topography; also require the use of natural vegetation where it exists supplemented by additional natural landscaping to soften the visible effect from the highway. Require skirting or some other type of architectural screening around the base of the mobilehomes on individual lots, by Special Use Permit, in the plan designated area on North Fork Drive. Minimum lot size per mobilehome shall be one acre. 	 Policies: 1. Policy 3.2.1 (RV & Mobilehome Parks) 2. Policy 3.2.2 (Screening Requirements for RV & Mobilehome Parks), Policy 3.2.5 (Mobilehome Project Compatibility) 3. Policy 3.2.3 (Screening Requirements for RV & Mobilehome Parks) Policy3.2.5 (Mobilehome Project Compatibility) 4. Policy 3.2.1 (RV & Mobilehome Parks)
Objective 3: Policies: 1. Encourage large lot and planned cluster residential development.	Policies: 1. Policy 3.1.6 (Cluster Residential Development), Policy 4.1.7 ERM-5.15 (Open Space Preservation),

2. 3.	Discourage high density residential developments. Base density regulations on suitability of the soils to provide for proper disposal of septic tank effluents and land's ability to provide water.	2. 3.	Policy 3.1.7 (High Density Residential Development) Policy 1.7.2 (Density Regulations – Soil)
ENVIRON Goal IV: Objective 2 Policies: 1. 2. 3. 4.	I: Study and plan future growth closely and carefully and its impacts on the educational process to ensure uncrowded classrooms, buses, playgrounds, cafeterias and office space essential to offer a continued quality program. Premise educational planning on service to the students. Encourage the school district to plan future activities, based on 5 year growth projections, with close attention to functional and architectural compatibility. Encourage the school district to study ways to secure a multi-use community school recreation/education building.	Policies: 1. 2. 3. 4.	Policy 5.1.1 (Ensure Quality Education Programs) or 5.1.2 (Encourage 5 Year Growth Projections) Policy 5.1.2 (Encourage 5 Year Growth Projections) Policy 5.1.2 (Encourage 5 Year Growth Projections) Policy 5.1.3 (Develop Financing Methods)
Objective 2 Policies: 1. 2. 3.	2: Prohibit structural development within the designated floodway. Discourage overnight on-street parking in residential areas. Require non-residential lighting be designed to provide proper visibility for public safety.	Policies: 1. 2. 3.	Policy 4.2.1 (Kaweah River Preservation) Policy 4.2.2 (Floodplain Preservation), Policy 4.2.3 (Enforce Floodway Standards & Guidelines), Policy 4.2.4 (Incentivizing Floodway Restoration), Policy 4.2.11 HS-5.9 (Floodplain Development Restrictions) Addressed in Tulare County Ordinance Code Chapter 3 and Chapter 9. Policy 1.3.6 (Lighting Standards)
Objective 3 Policies: 1.	3: Encourage reservation of open space for recreational purposes in conjunction with future residential developments.	Policies: 1.	Policy 3.1.10 (Housing Policy 3.12 Neighborhood Parks), Policy 3.1.12 (Housing Policy 3.16 Grant Funds for Park and Recreation Facilities), Policy 5.2.1 (Reserve Recreational Space)

2. 3. 4. 5.	Facilitate innovation in housing and subdivision so that private recreation and open space areas can be accommodated. Prohibit trespassing on private lands. Improve maintenance of existing public recreation areas. Retain recreational open space in a natural state to avoid high maintenance costs.	2. 3. 4. 5.	Policy 5.2.2 (Housing & Subdivision Design) Addressed in California Penal Code Section 602 PC. Policy 5.2.4 (Facility Maintenance) Policy 5.2.5 (Retain Natural State of Recreational Space)
Objective	4:	Policies:	
Policies: 1.	Designate on the General Plan those areas to be retained for natural habitat of strong populations of song birds, birds of prey, fur bearing mammals, game mammals, and aquatic life.	1.	Policy 4.1.2 CEQA Compliance, Policy 4.1.7 (Open Space Preservation); 4.1.8 (Cooperate With Wildlife Agencies); or 4.1.9 (Conservation Plan Coordination), Policy 4.3.7 (ERM-1.12 Management of Oak Woodland), Policy 4.3.8 (ERM-1.4 Protect Riparian Areas), Policy 4.3.9 (ERM-1.8 Open Space Buffers), Policy 4.4.1 (Unnecessary Removal of Native Trees), Policy 4.4.3 (Protect Riparian Habitat), Policy 1.2.20 (FGMP-6.5 Cluster Development), Policy 1.7.3 (Conservation Practices for Single- Family Developments), Policy 8.1.5
Objective	5:	Policies:	
Policies:		1.	Policy 1.8.3 (Sufficient Lot Area)
1.	Require a sufficient lot area for all new residential development to ensure an adequate area for on-site sewage disposal. Prohibit land use activities that create excessive and unwanted noise and/or light, and prohibit land use	2.	Policy 4.1.2 (CEQA Compliance), Policy 1.1.3 (Commercial Uses- Limiting Negative Impacts), Policy 1.1.4 (Compatible Commercial Establishments), Policy 1.1.9 LU-1.3 (Prevent Incompatible Uses), Policy 1.1.11 (LU-6.2 Buffers-Non Commercial Land Land), Policy 1.1.15
3.	because of pollution and/or sedimentation. Prohibit new development which excessively increases traffic flow through existing or planned residential areas.		(LU-7.14 Contextual and Compatible Design), Policy 1.2.1 (New Development Compatibility), Policy 1.2.12 (SL-3.2 Community Expansion–Edges), Policy 1.8.1 (Community Services District
4. 5.	Encourage roads in residential subdivisions be designed to minimize through traffic. Prohibit future flashing and neon signs and future free standing signs. When businesses are located off the main road, they may have one free		Requirements), Policy 3.1.8 (Housing Policy 2.21 Housing Water and Wastewater), Policy 1.1.6 (Land Use Protections), Policy 1.2.2 (Visitor Serving Uses), Policy 1.3.3 (Noise Standards), Policy 1.3.13 (SL-4.1 Design of Highways), Policy 1.4.8

6. 7. 8.	standing sign at the highway access road. Prohibit alterations to natural drainage courses which lessen their capacity or cause obstruction, erosion or sedimentation. Prohibit development that interferes with established agricultural water rights. Prohibit use of ground water supply when beyond its normal recharge level. Encourage mixed-use project reviews under the Planned Unit Development procedure instead of the conventional procedure in order to further achieve and promote the goals, objectives and policies of this plan.	3. 4. 5. 6. 7. 8.	(HS-8.8 Adjacent Uses), Policy 4.1.1 (Preserving the Natural Environment) Policy 4.1.3 (Mitigating Traffic Impact) Policy 4.1.4 (Roadway Subdivision) Policy 1.3.5 (Signage Standards), Policy 1.1.3 (Commercial Uses- Limiting Negative Impacts), Policy 1.1.12 (LU-4.5 Commercial Building Design), 1.3.6 (Lighting Standards) Policy 4.1.5 (Natural Drainage Courses), Policy 4.2.11 (HS-5.9 Floodplain Development Restrictions) Policy 2.3.3 (Water Rights) Policy 1.4.6 (Mixed-Use Project Review)
	From 1980s Policy Outline		Proposed Policies
COMMUN	NTY DEVELOPMENT:	Policies:	-
Goal I: Objective I Policies: 5. 6. 7. 8.	E: Locate new high density residential uses in close proximity to planned shopping areas. Require public, quasi-public and high density residential uses to locate where direct and safe access to major streets is available. Establish areas zoned exclusively for industry, commerce and residential consistent with the policies in this plan. Prohibit commercial or recreational attractions along residential streets.	5. 5. 7. 8.	Policy 2.1.3 (Concentrate Commercial Development) Policy 6.2.1 (Designate Public, Quasi- Public, and High Density Uses) Policy 1.1.10 (Rural Residential Interface) and Policy 9.1.6 (Smart Growth and Healthy Communities) Policy 1.1.9 (Prevent Incompatible Uses)
Objective 2 Policies: 3. 4.	Require adequate setbacks, side and rear yards, landscaping, and screening between residential and employment areas. Utilize roadway and other physical features such as the Kaweah River to separate planned residential and employment areas.	Policies: 3. 4.	Policy 1.1.7 (Buffers) Policy 1.1.15 (Contextual and Compatible Design) and 1.1.4 Compatible Commercial Establishments.
Objective 3 Policies:	5:	Policies:	

3. 4.	Encourage commercial, professional office and light industrial development to locate where access is appropriate for such development. Require installation of noise modifying walls, berms or heavy plantings along State Route 198 in conjunction with any new residential development.	3. 4.	Policy 1.4.1 (Professional Office Design Standards) Policy 1.1.6 (Land Use Protections)
Goal II:		Policies:	
Objective:		7.	Policy 1.8.1 (Community Services
			District Requirements) and Policy
Policies:			5.3.1 (Public Services Provision)
7.	Require existing and new large scale developments or subdivisions within the Community Services District to sponsor their share of certain needed public services. Water and sewer services shall be applied for and provided on a service area basis.	8. 9.	Policy 1.8.1 (Community Services District Requirements) Policy 5.3.4 (Provide Wastewater Treatment Systems) , 5.3.5 (Improvement Districts formation), Policy 1.7.2 Density Regulations-Soil) Policy 1.8.3 (Sufficient Lot Area)
8.	Prohibit new residential, commercial and light industrial construction within the planning area unless the engineered disposal system is approved by the necessary authorities.	10 11	 (Policy 5.3.2 (Provide Safe Water Systems) Policy 1.8.3 (Sufficient Lot Area) Policy 1.8.2 (Maximum Exceedance Limits) and Policy 5.3.4 (Provide Wastewater Treatment Systems)
9.	Require rehabilitation of failing septic systems within the on-site Waste Water Management Zone by the Community Services District.	12	Policy 5.3.1 (Public Services Provision)
10.	Require rehabilitation of failing septic systems outside the On-Site Waste Water Management Zone by having the County Health Department issue citations for correction to property owners having failing systems		
11.	Prohibit commercial and industrial development with excessive waste		
12.	water discharge characteristics. Encourage the provision of public services (water and sewer) to be done in concert with the Community Plan (map and text).		
Goal III: Objective: Policies: 4.	Improve water quality by having the On-Site Waste Water Management	Policies: 4.	Policy 1.8.3 (Sufficient Lot Area) and Policy 5.3.3 (Require Sewage Collection Systems) or 5.3.4 (Provide Wastewater Treatment Systems)
	District repair or replace failing		wastewater reathent systems;

 septic systems and require property owners to properly maintain their separate systems. Encourage sewage collection systems in planned high density residential and/or commercial areas. 5. Investigate feasibility of and assess community attitude toward eventual incorporation of Three Rivers. 6. Coordinate future public services with the Three Rivers Community Plan. 	 Included in future feasibility studies implementation program Appendix B Implementation Measure #7. Policy 5.3.1 (Public Services Provision), Policy 1.8.1 (Community Services District Requirements), Policy 2.2.1 ED-2.1 (Business Retention), Policy 2.2.3 ED-2.6 (Agency Support for Small Businesses), Policy 2.4.5 ED-6.7 (Existing Commercial Centers), Policy 2.4.6 (PFS-6.1 Telecommunications Services), Policy 7.1.2 (Accessibility to Public Safety Services), Policy (7.1.3 Provide Local Emergency Services), Policy 9.1.4 (Ensure Easy Access to Health Services), Policy 9.1.5 (Coordinate Public Transit Services with Health Care Services)
 Goal IV: Objective I: Policies: Maintain a growth rate that the community can comfortably absorb. The allowable growth rate may vary from area to area depending upon the availability of public services, the anticipation of planned services, or the unavailability of services. In no event, however, should the growth rate be so high that the community or an area of the community, is pushed to a point of no return requiring unplanned services. Encourage large lot single-family developments and planned cluster residential developments. Regulate residential densities based on soil suitability to provide for proper disposal of septic tank effluents. 	 Policies: 4. Policy 1.1.2 (Mixed Uses), 1.1.3 (Commercial Uses- Limiting Negative Impacts), 9.1.6 (Smart Growth and Healthy Communities), Policy 8.1.1 FGMP-1.1 (Protection of Values in Three Rivers), Policy 1.7.2 (Density Regulations-Soil) 5. Policy 3.1.6 (Cluster Residential Development) 6. Policy 1.7.2 (Density Regulations- Soil)
 Objective 2: Policies: 3. Encourage agricultural land not now in the Williamson Act to enter Agricultural Preserves Contracts pursuant to the Williamson Act. 4. Lessen development pressure on agricultural areas by designating on the Plan areas to be retained for agricultural land or grazing activities. 	Policies: 3. Policy 2.3.2 (Williamson Act Integration) 4. Policy 2.3.1 (Grazing Activities)

Objective	3:	Policies:	
Policies:		8.	Policy 1.2.9 (Open Space Character)
7.	Require the mitigation of adverse	9.	Policy 1.4.5 (New Commercial
	effects of development in order to		Resort Development Standards)
	protect the natural landscape, open	10.	Policy 1.4.6 (Mixed Use Project
	space and scenic areas.		Review)
8.	Require undergrounding of utilities	11.	Policy 1.8.4 (Utility Review Process)
	in new development where feasible.	12.	Policy 1.3.14 (Design of County
9.	Establish narrow street paving		Roads)
	widths and steeper grade standards	13.	Policy 1.2.10 (Natural Landscapes)
	for minor roads serving fewer than 16	14.	Policy 1.1.12 (Commercial Building
	parcels in low-density residential		Design) or 1.1.15 (Contextual and
	areas.		Compatible Design)
10.	Require non-residential and high		
	density multi-family residential		
	development to use landscaping		
	measures such as architectural		
	screenings, vegetative plantings, and		
	the use of natural hills or earth berms		
	to screen parking areas and make		
11	them unobtrusive as possible.		
11.	encourage the utilization of hatural		
	materials for building facades and		
	advertising signs		
12	No new commercial resort		
12.	development proposal which either		
	exceed 40 acres in area or 100 guest		
	rooms shall be allowed without		
	approval of a Planned Unit		
	Development pursuant to Section		
	18.5 or a Planned Development		
	pursuant to Section 18.6, Subsection		
	G of the Tulare County Zoning		
	Ordinance has been secured.		
Objective -	4:	Policies:	
Policies:		4.	Policy 1.1.5 (Cluster Commercial
4.	Group commercial uses in clustered	_	Uses) or 1.6.3 (Commercial Clusters)
	compact areas to discourage strip	5.	Policy 1.3.15 (Improvement
-	development.		Standards in Communities), Policy
5.	Require commercial areas to form		1.0.1 Community Services District
	improvement Districts under the		Kequirements, Policy 5.5.5
	District when community water and		(Improvement Districts Formation)
	sower systems will be required	0.	Shopping Area) Doliny 2.1.5 (Minut
6	Require new multi-family high		Use Development) Policy 1.6.4
0.	density residential areas to be located		(Mixed Lies Development), Policy 1.0.4
	actionly residential areas to be located		(mixed-Use Development-Town Center)

	in close proximity to concentrated commercial areas.		
ECONON	IIC BASE:	Policies:	
Goal I:	<u>IIO BIIOL.</u>	6.	Policy 1.1.3 (Commercial Uses-
Objective ²	1:		Limiting Negative Impacts)
Policies:		7.	Policy 1.1.7 (Buffers), Policy 1.1.11
7.	Accommodate light industrial		LU-6.2 (Buffers-Non Compatible
	development which is non-polluting		Land Uses), Policy 1.4.2 (Buffer
	and which will not create nuisance		Strips), Policy 1.4.9 LU-5.6
	conditions. Light industrial		(Industrial Use Buffer), Policy
	operations will be totally enclosed or		4.3.9 ERM-1.8 (Open Space Buffers)
	adequately screened from view.	8.	Policy 1.6.3 (Commercial Clusters),
8.	Require adequate buffers (setbacks,		Policy 1.5.1 (UDB and Future
	side and rear yards, landscaping and		Development), Policy 1.6.1
	screening) between commercial		(Designating a Town Center), Policy
	and/or industrial development and		1.6.3 (Commercial Clusters), 1.6.4
	residential areas.		Mixed-Use Development-Town
9.	Encourage the development of a		Center, Policy 1.6.5 SL-3.1
	community commercial shopping		(Community Centers and
	area and high density residential area		Neighborhoods), Policy 2.1.2
	in the area bounded by State Route		(Community Commercial Shopping
	198, South Fork Drive and Old Three		Area), Policy 3.1.5 (Mixed-Use
	Rivers Road.		Development)
10.	Promote a concentration of	9.	Policy 1.1.4 (Compatible Commercial
	industrial, professional office, and		Establishments) or 1.1.5 (Cluster
	commercial activities and high		Commercial Uses)
	density residential development	10	. Policy 1.2.13 (Highway Commercial),
	within selected areas to allow for cost		Policy 2.1.4 (Highway-Oriented
	efficient provision of necessary		Commercial Development), Policy
	services and to protect residential		2.4.1 ED-6.1 (Revitalization of
	neighborhoods.		Community Centers), Policy 2.4.5
11.	Maintain existing commercially used		ED-6.7 (Existing Commercial
	areas along State Route 198 for		Centers)
	highway-oriented commercial		
10	development.		
12.	for "Commercial Recreation"		
	development by CDA 04.02 for a		
	destination type resort such as a		
	guest ranch conference facility		
	health spa golf course or equestrian		
	establishment Development of the		
	site for retail or service commercial		
	use, unless identical to the primary		
	use of the site for a destination-type		
	resort, shall be prohibited.		
Obianting	2.	Doligion	
Dojective 2	2:	roncies:	Policy 114 (Compatible Commercial
roncies:	Assure that professional office) 3.	Establishments) Dolloy 1 1 3
5.	commercial and light non-polluting		(Commercial Uses- Limiting Negative

6. 7. 8.	industrial developments are designed so that traffic will not adversely impact residential areas. Require all new advertising signs to be indirectly lighted. Require future non-residential developments to provide a naturally planted buffer strip, including shade trees, to separate the parking area or the building from State Route 198. Require automobile storage yards and commercial and multi-family trash bins to be screened from view.	6. 7. 8.	Impacts), Policy 1.4.1 (Professional Office Design Standards), Policy 4.1.3 (Mitigating Traffic Impacts) Policy 1.3.5 (Signage Standards), Policy, 1.3.6 (Lighting Standards) Policy 1.4.2 (Buffer Strips) Policy 1.2.8 (Storage Screening)
HOUSING	<u>3:</u>	Policies:	
Goal II:		2.	Policy 3.1.2 (Housing Financial
Objective 2	1:		Assistance)
Policies:			
2.	Encourage and make property owners aware of and assist them in efforts to qualify for available state and federal low interest housing loans for rehabilitation of deteriorated units.		
Objective 2	2:	Policies:	
Policies:		5.	Policy 3.2.1 (RV & Mobilehome
5.	Permit mobilehome parks and		Parks)
	recreation venicle parks, by Special	6.	for RV & Mobilehoma Darks) Dollar
	commercial-recreation areas along		32.5 (Mobilehome Project
	State Route 198 as shown on the plan		Compatibility)
	and retain the existing mobilehome	7.	Policy 3.2.3 (Screening Requirements
	park on North Fork Drive presently		for RV & Mobilehome Parks)
	known as Trailer Isle.		Policy3.2.5 (Mobilehome Project
6.	Require mobilehome parks and		Compatibility)
	recreation vehicle parks adjacent to	8.	Policy 3.2.1 (RV & Mobilehome
	State Route 198 to be screened from		Parks)
	State Route 198 by utilizing such		
	screening measures as masonry walls		
	or other types of architectural		
	and natural variation to topography		
	also require the use of natural		
	vegetation where it exists		
	supplemented by additional natural		
	landscaping to soften the visible		
	effect from the highway.		
7.	Require skirting or some other type		
	of architectural screening around the		
	pase of the mobilehome to improve		
	moonenome appearance and safety.		

 8. Permit mobilehomes on individual lots, by Special Use Permit, in the plan designated area on North Fork Drive. Minimum lot size per mobilehome shall be one acre. Objective 3: Policies: 4. Encourage large lot and planned cluster residential development. 5. Discourage high density residential developments. 6. Base density regulations on suitability of the soils to provide for proper disposal of septic tank effluents and land's ability to provide water. 	 Policies: 4. Policy 3.1.6 (Cluster Residential Development), Policy 4.1.7 ERM-5.15 (Open Space Preservation), 5. Policy 3.1.7 (High Density Residential Development) 6. Policy 1.7.2 (Density Regulations – Soil)
 ENVIRONMENTAL QUALITY: Goal IV: Objective 1: Policies: 5. Study and plan future growth closely and carefully and its impacts on the educational process to ensure uncrowded classrooms, buses, playgrounds, cafeterias and office space essential to offer a continued quality program. 6. Premise educational planning on service to the students. 7. Encourage the school district to plan future activities, based on 5 year growth projections, with close attention to functional and architectural compatibility. 8. Encourage the school district to study ways to secure a multi-use community school recreation/education building. 	 Policies: 5. Policy 5.1.1 (Ensure Quality Education Programs) or 5.1.2 (Encourage 5 Year Growth Projections) 6. Policy 5.1.2 (Encourage 5 Year Growth Projections) 7. Policy 5.1.2 (Encourage 5 Year Growth Projections) 8. Policy 5.1.3 (Develop Financing Methods)
 Objective 2: Policies: Prohibit structural development within the designated floodway. Discourage overnight on-street parking in residential areas. Require non-residential lighting be designed to provide proper visibility for public safety. 	Policies: 4. Policy 4.2.1 (Kaweah River Preservation) Policy 4.2.2 (Floodplain Preservation), Policy 4.2.3 (Enforce Floodway Standards & Guidelines), Policy 4.2.4 (Incentivizing Floodway Restoration), Policy 4.2.11 HS-5.9 (Floodplain Development Restrictions)

		5.	Addressed in Tulare County Ordinance Code Chapter 3 and Chapter 9.
		6.	Policy 1.3.6 (Lighting Standards)
Objective 3	3:	Policies:	
Policies:	Encourage reconnection of open analog	6.	Policy 3.1.10 (Housing Policy 3.12)
0.	for recreational purposes in		(Housing Policy 3.16 Grant Funds for
	conjunction with future residential		Park and Recreation Facilities),
7	developments. Eacilitate inprovation in housing and		Policy 5.2.1 (Reserve Recreational
1.	subdivision so that private recreation	7.	Policy 5.2.2 (Housing & Subdivision
	and open space areas can be		Design)
0	accommodated.	8.	Addressed in California Penal Code
o. 9.	Improve maintenance of existing	9.	Policy 5.2.4 (Facility Maintenance)
	public recreation areas.	10	. Policy 5.2.5 (Retain Natural State of
10.	Retain recreational open space in a		Recreational Space)
	maintenance costs.		
Objective 4	4:	Policies:	Deligy 412 CEOA Compliance
Policies:	Designate on the General Plan those	۷.	Policy 4.1.2 CEQA Compliance, Policy 4.1.7(Open Space
	areas to be retained for natural		Preservation); 4.1.8 (Cooperate With
	habitat of strong populations of song		Wildlife Agencies); or 4.1.9
	mammals, game mammals, and		Policy 4.3.7 (ERM-1.12 Management
	aquatic life.		of Oak Woodland), Policy 4.3.8
			(ERM-1.4 Protect Riparian Areas),
			Policy 4.5.9 (ERM-1.8 Open Space Buffers) Policy 4.4.1 (Unnecessary
			Removal of Native Trees), Policy
			4.4.3 (Protect Riparian Habitat),
			Policy 1.2.20 (FGMP-6.5 Cluster Development) Policy 1.7.3
			(Conservation Practices for Single-
			Family Developments), Policy 8.1.5
Objective	5.	Policies	(FGMP-1.2 Grading)
Policies:	J.	9.	Policy 1.8.3 (Sufficient Lot Area)
9.	Require a sufficient lot area for all	10	. Policy 4.1.2 (CEQA Compliance),
	new residential development to		Policy 1.1.3 (Commercial Uses-
	sewage disposal.		1.1.4 (Compatible Commercial
10.	Prohibit land use activities that		Establishments), Policy 1.1.9 LU-1.3
	create excessive and unwanted noise		(Prevent Incompatible Uses), Policy
	and/or light, and prohibit land use activities that endanger water quality		Compatible Land Uses). Policy 1.1.15
	because of pollution and/or		(LU-7.14 Contextual and Compatible
	sedimentation.		Design), Policy 1.2.1 (New

11. Prohibit new development which	Development Compatibility), Policy
excessively increases traffic flow	1.2.12 (SL-3.2 Community
through existing or planned	Expansion–Edges), Policy 1.8.1
residential areas.	(Community Services District
12. Encourage roads in residential	Requirements), Policy 3.1.8 (Housing
subdivisions be designed to	Policy 2.21 Housing Water and
minimize through traffic.	Wastewater), Policy 1.1.6 (Land Use
13. Prohibit future flashing and neon	Protections), Policy 1.2.2 (Visitor
signs and future free standing signs.	Serving Uses), Policy 1.3.3 (Noise
When businesses are located off the	Standards), Policy 1.3.13 (SL-4.1
main road, they may have one free	Design of Highways), Policy 1.4.8
standing sign at the highway access	(HS-8.8 Adjacent Uses), Policy 4.1.1
road.	(Preserving the Natural Environment)
14. Prohibit alterations to natural	11. Policy 4.1.3 (Mitigating Traffic
drainage courses which lessen their	Impact)
capacity or cause obstruction,	12. Policy 4.1.4 (Roadway Subdivision)
erosion or sedimentation.	13. Policy 1.3.5 (Signage Standards),
15. Prohibit development that interferes	Policy 1.1.3 (Commercial Uses-
with established agricultural water	Limiting Negative Impacts), Policy
rights. Prohibit use of ground water	1.1.12 (LU-4.5 Commercial Building
supply when beyond its normal	Design), 1.3.6 (Lighting Standards)
recharge level.	14. Policy 4.1.5 (Natural Drainage
16. Encourage mixed-use project	Courses), Policy 4.2.11 (HS-5.9
reviews under the Planned Unit	Floodplain Development
Development procedure instead of	Restrictions)
the conventional procedure in order	15. Policy 2.3.3 (Water Rights)
P P	
to further achieve and promote the	16. Policy 1.4.6 (Mixed-Use Project
to further achieve and promote the goals, objectives and policies of this	16. Policy 1.4.6 (Mixed-Use Project Review)
to further achieve and promote the goals, objectives and policies of this plan.	16. Policy 1.4.6 (Mixed-Use Project Review)
to further achieve and promote the goals, objectives and policies of this plan.	16. Policy 1.4.6 (Mixed-Use Project Review)
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline	16. Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT:	16. Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policies:
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline <u>COMMUNITY DEVELOPMENT</u> : Goal I:	16. Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policies: 9. Policy 2.1.3 (Concentrate Commercial
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT: Goal I: Objective I:	16. Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policies: 9. Policy 2.1.3 (Concentrate Commercial Development)
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT: Goal I: Objective I: Policies:	16. Policy 1.4.6 (Mixed-Use Project Review) Policies: 9. Policy 2.1.3 (Concentrate Commercial Development) 10. Policy 6.2.1 (Designate Public, Quasi-
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT: Goal I: Objective I: Policies: 9. Locate new high density residential	16. Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policies: 9. Policy 2.1.3 (Concentrate Commercial Development) 10. Policy 6.2.1 (Designate Public, Quasi- Public, and High Density Uses)
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT: Goal I: Objective I: Policies: 9. Locate new high density residential uses in close proximity to planned	16. Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policies: 9. Policy 2.1.3 (Concentrate Commercial Development) 10. Policy 6.2.1 (Designate Public, Quasi- Public, and High Density Uses) 11. Policy 1.1.10 (Rural Residential
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT: Goal I: Objective I: Policies: 9. Locate new high density residential uses in close proximity to planned shopping areas.	 Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policies: 9. Policy 2.1.3 (Concentrate Commercial Development) 10. Policy 6.2.1 (Designate Public, Quasi- Public, and High Density Uses) 11. Policy 1.1.10 (Rural Residential Interface) and Policy 9.1.6 (Smart
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT: Goal I: Objective I: Policies: 9. Locate new high density residential uses in close proximity to planned shopping areas. 10. Require public, quasi-public and	 Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policies: 9. Policy 2.1.3 (Concentrate Commercial Development) 10. Policy 6.2.1 (Designate Public, Quasi- Public, and High Density Uses) 11. Policy 1.1.10 (Rural Residential Interface) and Policy 9.1.6 (Smart Growth and Healthy Communities)
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT: Goal I: Objective I: Policies: 9. Locate new high density residential uses in close proximity to planned shopping areas. 10. Require public, quasi-public and high density residential uses to locate	 Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policy 2.1.3 (Concentrate Commercial Development) Policy 6.2.1 (Designate Public, Quasi- Public, and High Density Uses) Policy 1.1.10 (Rural Residential Interface) and Policy 9.1.6 (Smart Growth and Healthy Communities) Policy 1.1.9 (Prevent Incompatible
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT: Goal I: Objective I: Policies: 9. Locate new high density residential uses in close proximity to planned shopping areas. 10. Require public, quasi-public and high density residential uses to locate where direct and safe access to major	 Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policy 2.1.3 (Concentrate Commercial Development) Policy 6.2.1 (Designate Public, Quasi- Public, and High Density Uses) Policy 1.1.10 (Rural Residential Interface) and Policy 9.1.6 (Smart Growth and Healthy Communities) Policy 1.1.9 (Prevent Incompatible Uses)
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT: Goal I: Objective I: Policies: 9. Locate new high density residential uses in close proximity to planned shopping areas. 10. Require public, quasi-public and high density residential uses to locate where direct and safe access to major streets is available.	 16. Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policy 2.1.3 (Concentrate Commercial Development) 10. Policy 6.2.1 (Designate Public, Quasi- Public, and High Density Uses) 11. Policy 1.1.10 (Rural Residential Interface) and Policy 9.1.6 (Smart Growth and Healthy Communities) 12. Policy 1.1.9 (Prevent Incompatible Uses)
to further achieve and promote the goals, objectives and policies of this plan. From 1980s Policy Outline COMMUNITY DEVELOPMENT: Goal I: Objective I: Policies: 9. Locate new high density residential uses in close proximity to planned shopping areas. 10. Require public, quasi-public and high density residential uses to locate where direct and safe access to major streets is available. 11. Establish areas zoned exclusively for	 16. Policy 1.4.6 (Mixed-Use Project Review) Proposed Policies Policies: 9. Policy 2.1.3 (Concentrate Commercial Development) 10. Policy 6.2.1 (Designate Public, Quasi-Public, and High Density Uses) 11. Policy 1.1.10 (Rural Residential Interface) and Policy 9.1.6 (Smart Growth and Healthy Communities) 12. Policy 1.1.9 (Prevent Incompatible Uses)
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5.	Require adequate setbacks, side and rear yards, landscaping, and screening between residential and employment areas. Utilize roadway and other physical features such as the Kaweah River to separate planned residential and employment areas.	6.	Policy 1.1.15 (Contextual and Compatible Design) and 1.1.4 Compatible Commercial Establishments.
Objective 3 Policies: 5. 6.	3: Encourage commercial, professional office and light industrial development to locate where access is appropriate for such development. Require installation of noise modifying walls, berms or heavy plantings along State Route 198 in conjunction with any new residential development.	Policies: 5. 6.	Policy 1.4.1 (Professional Office Design Standards) Policy 1.1.6 (Land Use Protections)
Goal II: Objective:		Policies: 13.	Policy 1.8.1 (Community Services
Policies: 13. 14. 15. 16.	Require existing and new large scale developments or subdivisions within the Community Services District to sponsor their share of certain needed public services. Water and sewer services shall be applied for and provided on a service area basis. Prohibit new residential, commercial and light industrial construction within the planning area unless the engineered disposal system is approved by the necessary authorities. Require rehabilitation of failing septic systems within the on-site Waste Water Management Zone by the Community Services District. Require rehabilitation of failing septic systems outside the On-Site Waste Water Management Zone by having the County Health	14. 15. 16. 17. 18.	 5.3.1 (Public Services Provision) Policy 1.8.1 (Community Services District Requirements) Policy 5.3.4 (Provide Wastewater Treatment Systems) , 5.3.5 (Improvement Districts formation), Policy 1.7.2 Density Regulations-Soil) Policy 1.8.3 (Sufficient Lot Area) (Policy 5.3.2 (Provide Safe Water Systems) Policy 1.8.3 (Sufficient Lot Area) Policy 1.8.2 (Maximum Exceedance Limits) and Policy 5.3.4 (Provide Wastewater Treatment Systems) Policy 5.3.1 (Public Services Provision)
17.	Department issue citations for correction to property owners having failing systems. Prohibit commercial and industrial development with excessive waste water discharge characteristics.		

18.	Encourage the provision of public services (water and sewer) to be done in concert with the Community Plan (map and text).		
Goal III: Objective: Policies: 7. 8. 9.	Improve water quality by having the On-Site Waste Water Management District repair or replace failing septic systems and require property owners to properly maintain their separate systems. Encourage sewage collection systems in planned high density residential and/or commercial areas. Investigate feasibility of and assess community attitude toward eventual incorporation of Three Rivers. Coordinate future public services with the Three Rivers Community Plan.	Policies: 7. 8. 9.	Policy 1.8.3 (Sufficient Lot Area) and Policy 5.3.3 (Require Sewage Collection Systems) or 5.3.4 (Provide Wastewater Treatment Systems) Included in future feasibility studies implementation program Appendix B Implementation Measure #7. Policy 5.3.1 (Public Services Provision), Policy 1.8.1 (Community Services District Requirements), Policy 2.2.1 ED-2.1 (Business Retention), Policy 2.2.3 ED-2.6 (Agency Support for Small Businesses), Policy 2.4.5 ED-6.7 (Existing Commercial Centers), Policy 2.4.6 (PFS-6.1 Telecommunications Services), Policy 7.1.2 (Accessibility to Public Safety Services), Policy (7.1.3 Provide Local Emergency Services), Policy 9.1.4 (Ensure Easy Access to Health Services), Policy 9.1.5 (Coordinate Public Transit Services with Health Care Services)
Goal IV: Objective I Policies: 7. 8. 9.	I: Maintain a growth rate that the community can comfortably absorb. The allowable growth rate may vary from area to area depending upon the availability of public services, the anticipation of planned services, or the unavailability of services. In no event, however, should the growth rate be so high that the community or an area of the community, is pushed to a point of no return requiring unplanned services. Encourage large lot single-family developments and planned cluster residential developments. Regulate residential densities based on soil suitability to provide for proper disposal of septic tank effluents.	Policies: 7. 8. 9.	Policy 1.1.2 (Mixed Uses), 1.1.3 (Commercial Uses- Limiting Negative Impacts), 9.1.6 (Smart Growth and Healthy Communities), Policy 8.1.1 FGMP-1.1 (Protection of Values in Three Rivers), Policy 1.7.2 (Density Regulations-Soil) Policy 3.1.6 (Cluster Residential Development) Policy 1.7.2 (Density Regulations- Soil)

Objective 2	2:	Policies:	
Policies:	Encourage agricultural land not now	5.	Policy 2.3.2 (Williamson Act
5.	in the Williamson Act to enter	6	Policy 2 3 1 (Grazing Activities)
	Agricultural Preserves Contracts	0.	Toney 2.3.1 (Grazing Retivities)
	pursuant to the Williamson Act.		
6.	Lessen development pressure on		
	agricultural areas by designating on		
	the Plan areas to be retained for		
	agricultural land or grazing activities.		
Objective	2.	Policios:	
Policies:	5.	15.	Policy 1.2.9 (Open Space Character)
13.	Require the mitigation of adverse	16.	Policy 1.4.5 (New Commercial
	effects of development in order to		Resort Development Standards)
	protect the natural landscape, open	17.	Policy 1.4.6 (Mixed Use Project
	space and scenic areas.		Review)
14.	Require undergrounding of utilities	18.	Policy 1.8.4 (Utility Review Process)
	in new development where feasible.	19.	Policy 1.3.14 (Design of County
15.	Establish narrow street paving		Roads)
	widths and steeper grade standards	20.	Policy 1.2.10 (Natural Landscapes)
	for minor roads serving fewer than 16	21.	Policy 1.1.12 (Commercial Building
	areas		Compatible Design)
16.	Require non-residential and high		
200	density multi-family residential		
	development to use landscaping		
	measures such as architectural		
	screenings, vegetative plantings, and		
	the use of natural hills or earth berms		
	to screen parking areas and make		
15	them unobtrusive as possible.		
1/.	Encourage the utilization of natural		
	or natural appearing building		
	advertising signs.		
18.	No new commercial resort		
	development proposal which either		
	exceed 40 acres in area or 100 guest		
	rooms shall be allowed without		
	approval of a Planned Unit		
	Development pursuant to Section		
	18.5 or a Planned Development		
	pursuant to Section 18.6, Subsection		
	Ordinance has been secured		
	Orumance has been secured.		
Objective 4	4:	Policies:	
Policies:		7.	Policy 1.1.5 (Cluster Commercial
7.	Group commercial uses in clustered		Uses) or 1.6.3 (Commercial Clusters)
	compact areas to discourage strip	8.	Policy 1.3.15 (Improvement
	development.		Standards in Communities), Policy

- 8. Require commercial areas to form Improvement Districts under the auspices of the Community Services District when community water and sewer systems will be required.
- 9. Require new multi-family high density residential areas to be located in close proximity to concentrated commercial areas.

ECONOMIC BASE:

Goal I: Objective 1:

Policies:

- 13. Accommodate light industrial development which is non-polluting and which will not create nuisance conditions. Light industrial operations will be totally enclosed or adequately screened from view.
- 14. Require adequate buffers (setbacks, side and rear yards, landscaping and screening) between commercial and/or industrial development and residential areas.
- 15. Encourage the development of a community commercial shopping area and high density residential area in the area bounded by State Route 198, South Fork Drive and Old Three Rivers Road.
- 16. Promote a concentration of industrial, professional office, and commercial activities and high density residential development within selected areas to allow for cost efficient provision of necessary services and to protect residential neighborhoods.
- 17. Maintain existing commercially used areas along State Route 198 for highway-oriented commercial development.
- 18. Promote the use of the site approved for "Commercial-Recreation" development by GPA 94-03 for a destination-type resort such as a guest ranch, conference facility, health spa, golf course or equestrian establishment. Development of the site for retail or service commercial use, unless identical to the primary

1.8.1 Community Services District Requirements, Policy 5.3.5 (Improvement Districts Formation)

 Policy 2.1.2 (Community Commercial Shopping Area), Policy 3.1.5 (Mixed-Use Development), Policy 1.6.4 (Mixed-Use Development-Town Center).

Policies:

- 11. Policy 1.1.3 (Commercial Uses-Limiting Negative Impacts)
- Policy 1.1.7 (Buffers), Policy 1.1.11 LU-6.2 (Buffers-Non Compatible Land Uses), Policy 1.4.2 (Buffer Strips), Policy 1.4.9 LU-5.6 (Industrial Use Buffer), Policy 4.3.9 ERM-1.8 (Open Space Buffers)
- Policy 1.6.3 (Commercial Clusters), Policy 1.5.1 (UDB and Future Development), Policy 1.6.1 (Designating a Town Center), Policy 1.6.3 (Commercial Clusters), 1.6.4 Mixed-Use Development-Town Center, Policy 1.6.5 SL-3.1

(Community Centers and Neighborhoods), Policy 2.1.2 (Community Commercial Shopping Area), Policy 3.1.5 (Mixed-Use Development)

- 14. Policy 1.1.4 (Compatible Commercial Establishments) or 1.1.5 (Cluster Commercial Uses)
- Policy 1.2.13 (Highway Commercial), Policy 2.1.4 (Highway-Oriented Commercial Development), Policy 2.4.1 ED-6.1 (Revitalization of Community Centers), Policy 2.4.5 ED-6.7 (Existing Commercial Centers)

use of the site for a destination-typ resort, shall be prohibited.	e
 Objective 2: Policies: 9. Assure that professional office, commercial and light non-polluting industrial developments are design so that traffic will not adversely impact residential areas. 10. Require all new advertising signs the indirectly lighted. 11. Require future non-residential developments to provide a naturall planted buffer strip, including shadt trees, to separate the parking area of the building from State Route 198. 12. Require automobile storage yards and commercial and multi-family trash bins to be screened from view 	Policies: 9. Policy 1.1.4 (Compatible Commercial Establishments), Policy 1.1.3 (Commercial Uses- Limiting Negative Impacts), Policy 1.4.1 (Professional Office Design Standards), Policy 4.1.3 (Mitigating Traffic Impacts) 10. Policy 1.3.5 (Signage Standards), Policy, 1.3.6 (Lighting Standards) 11. Policy 1.4.2 (Buffer Strips) 12. Policy 1.2.8 (Storage Screening) le or
HOUSING: Goal II: Objective 1: Policies: 3. Encourage and make property owners aware of and assist them in efforts to qualify for available state and federal low interest housing loans for rehabilitation of deteriorated units.	Policies: 3. Policy 3.1.2 (Housing Financial Assistance)
 Objective 2: Policies: 9. Permit mobilehome parks and recreation vehicle parks, by Special Use Permit, in designated commercial-recreation areas along State Route 198 as shown on the pl and retain the existing mobilehome park on North Fork Drive presently known as Trailer Isle. 10. Require mobilehome parks and recreation vehicle parks adjacent to State Route 198 to be screened from State Route 198 by utilizing such screening measures as masonry wa or other types of architectural fencing, earth berms, rock outcrop and natural variation to topography also require the use of natural vegetation where it exists 	Policies: 9. Policy 3.2.1 (RV & Mobilehome Parks) 10. Policy 3.2.2 (Screening Requirements for RV & Mobilehome Parks), Policy 3.2.5 (Mobilehome Project Compatibility) an 11. Policy 3.2.3 (Screening Requirements for RV & Mobilehome Parks) Policy3.2.5 (Mobilehome Parks) Policy3.2.5 (Mobilehome Parks) policy 3.2.1 (RV & Mobilehome Project Compatibility) 12. Policy 3.2.1 (RV & Mobilehome Parks) n Parks)

 supplemented by additional natural landscaping to soften the visible effect from the highway. 11. Require skirting or some other type of architectural screening around the base of the mobilehome to improve mobilehome appearance and safety. 12. Permit mobilehomes on individual lots, by Special Use Permit, in the plan designated area on North Fork Drive. Minimum lot size per mobilehome shall be one acre. 	
 Objective 3: Policies: Encourage large lot and planned cluster residential development. Discourage high density residential developments. Base density regulations on suitability of the soils to provide for proper disposal of septic tank effluents and land's ability to provide water 	 Policies: 7. Policy 3.1.6 (Cluster Residential Development), Policy 4.1.7 ERM-5.15 (Open Space Preservation), 8. Policy 3.1.7 (High Density Residential Development) 9. Policy 1.7.2 (Density Regulations – Soil)
 water. ENVIRONMENTAL QUALITY: Goal IV: Objective 1: Policies: 9. Study and plan future growth closely and carefully and its impacts on the educational process to ensure uncrowded classrooms, buses, playgrounds, cafeterias and office space essential to offer a continued quality program. 10. Premise educational planning on service to the students. 11. Encourage the school district to plan future activities, based on 5 year growth projections, with close attention to functional and architectural compatibility. 12. Encourage the school district to study ways to secure a multi-use community school recreation/education building. 	 Policies: 9. Policy 5.1.1 (Ensure Quality Education Programs) or 5.1.2 (Encourage 5 Year Growth Projections) 10. Policy 5.1.2 (Encourage 5 Year Growth Projections) 11. Policy 5.1.2 (Encourage 5 Year Growth Projections) 12. Policy 5.1.3 (Develop Financing Methods)
Objective 2: Policies: 7. Prohibit structural development within the designated floodway.	Policies: 7. Policy 4.2.1 (Kaweah River Preservation) Policy 4.2.2 (Floodplain Preservation), Policy 4.2.3

 8. Discourage overnight on-street parking in residential areas. 9. Require non-residential lighting be designed to provide proper visibility for public safety. 	 (Enforce Floodway Standards & Guidelines), Policy 4.2.4 (Incentivizing Floodway Restoration), Policy 4.2.11 HS-5.9 (Floodplain Development Restrictions) 8. Addressed in Tulare County Ordinance Code Chapter 3 and Chapter 9. 9. Policy 1.3.6 (Lighting Standards)
 Policies: 11. Encourage reservation of open space for recreational purposes in conjunction with future residential developments. 12. Facilitate innovation in housing and subdivision so that private recreation and open space areas can be accommodated. 13. Prohibit trespassing on private lands. 	 Policies: 11. Policy 3.1.10 (Housing Policy 3.12 Neighborhood Parks), Policy 3.1.12 (Housing Policy 3.16 Grant Funds for Park and Recreation Facilities), Policy 5.2.1 (Reserve Recreational Space) 12. Policy 5.2.2 (Housing & Subdivision Design) 13. Addressed in California Penal Code Section 602 PC.
 14. Improve maintenance of existing public recreation areas. 15. Retain recreational open space in a natural state to avoid high maintenance costs. 	14. Policy 5.2.4 (Facility Maintenance) 15. Policy 5.2.5 (Retain Natural State of Recreational Space)
 Policies: 3. Designate on the General Plan those areas to be retained for natural habitat of strong populations of song birds, birds of prey, fur bearing mammals, game mammals, and aquatic life. 	 3. Policy 4.1.2 CEQA Compliance, Policy 4.1.7(Open Space Preservation); 4.1.8 (Cooperate With Wildlife Agencies); or 4.1.9 (Conservation Plan Coordination), Policy 4.3.7 (ERM-1.12 Management of Oak Woodland), Policy 4.3.8 (ERM-1.4 Protect Riparian Areas), Policy 4.3.9 (ERM-1.8 Open Space Buffers), Policy 4.4.1 (Unnecessary Removal of Native Trees), Policy 4.4.3 (Protect Riparian Habitat), Policy 1.2.20 (FGMP-6.5 Cluster Development), Policy 1.7.3 (Conservation Practices for Single- Family Developments), Policy 8.1.5 (FGMP-1.2 Grading)
Objective 5: Policies: 17. Require a sufficient lot area for all new residential development to ensure an adequate area for on-site sewage disposal.	Policies: 17. Policy 1.8.3 (Sufficient Lot Area) 18. Policy 4.1.2 (CEQA Compliance), Policy 1.1.3 (Commercial Uses- Limiting Negative Impacts), Policy 1.1.4 (Compatible Commercial Establishments), Policy 1.1.9 LU-1.3

 Prohibit land use activities that create excessive and unwanted noise and/or light, and prohibit land use activities that endanger water quality because of pollution and/or sedimentation. Prohibit new development which excessively increases traffic flow through existing or planned residential areas. Encourage roads in residential subdivisions be designed to minimize through traffic. Prohibit future flashing and neon signs and future free standing signs. When businesses are located off the main road, they may have one free standing sign at the highway access road. Prohibit alterations to natural drainage courses which lessen their capacity or cause obstruction, erosion or sedimentation. Prohibit development that interferes with established agricultural water rights. Prohibit use of ground water supply when beyond its normal recharge level. Encourage mixed-use project reviews under the Planned Unit Development procedure instead of the conventional procedure in order to further achieve and promote the 	 (Prevent Incompatible Uses), Policy 1.1.11 (LU-6.2 Buffers-Non Compatible Land Uses), Policy 1.1.15 (LU-7.14 Contextual and Compatible Design), Policy 1.2.1 (New Development Compatibility), Policy 1.2.12 (SL-3.2 Community Expansion–Edges), Policy 1.8.1 (Community Services District Requirements), Policy 3.1.8 (Housing Policy 2.21 Housing Water and Wastewater), Policy 1.1.6 (Land Use Protections), Policy 1.3.3 (Noise Standards), Policy 1.3.3 (Noise Standards), Policy 1.3.13 (SL-4.1 Design of Highways), Policy 1.4.8 (HS-8.8 Adjacent Uses), Policy 4.1.1 (Preserving the Natural Environment) 19. Policy 4.1.3 (Mitigating Traffic Impact) 20. Policy 4.1.4 (Roadway Subdivision) 21. Policy 1.3.5 (Signage Standards), Policy 1.1.3 (Commercial Uses- Limiting Negative Impacts), Policy 1.1.12 (LU-4.5 Commercial Building Design), 1.3.6 (Lighting Standards) 22. Policy 4.1.5 (Natural Drainage Courses), Policy 4.2.11 (HS-5.9 Floodplain Development Restrictions) 23. Policy 2.3.3 (Water Rights) 24. Policy 1.4.6 (Mixed-Use Project Baview)
Development procedure instead of	23. Policy 2.3.3 (Water Rights)
the conventional procedure in order	24. Policy 1.4.6 (Mixed-Use Project
to further achieve and promote the	Review)
goals, objectives and policies of this plan.	
From 1980s Policy Outline	Proposed Policies
COMMUNITY DEVELOPMENT:	Policies:
Goal I:	13. Policy 2.1.3 (Concentrate Commercial
Ubjective I:	Development)
Policies:	14. Policy 6.2.1 (Designate Public, Quasi-
15. Locate new high density residential	Public, and High Density Uses)
shopping areas	15. Policy 1.1.10 (Rufal Residential
snopping areas.	Growth and Healthy Communities)
high density residential uses to locate	16. Policy 1.1.9 (Prevent Incompatible
where direct and safe access to major	Uses)
streets is available.	/
15. Establish areas zoned exclusively for	
industry, commerce and residential	

16.	consistent with the policies in this plan. Prohibit commercial or recreational attractions along residential streets.		
Objective 2 Policies: 7. 8.	2: Require adequate setbacks, side and rear yards, landscaping, and screening between residential and employment areas. Utilize roadway and other physical features such as the Kaweah River to separate planned residential and employment areas.	Policies: 7. 8.	Policy 1.1.7 (Buffers) Policy 1.1.15 (Contextual and Compatible Design) and 1.1.4 Compatible Commercial Establishments.
Objective 3 Policies: 7. 8.	3: Encourage commercial, professional office and light industrial development to locate where access is appropriate for such development. Require installation of noise modifying walls, berms or heavy plantings along State Route 198 in conjunction with any new residential development.	Policies: 7. 8.	Policy 1.4.1 (Professional Office Design Standards) Policy 1.1.6 (Land Use Protections)
Goal II: Objective: Policies: 19. 20. 21.	Require existing and new large scale developments or subdivisions within the Community Services District to sponsor their share of certain needed public services. Water and sewer services shall be applied for and provided on a service area basis. Prohibit new residential, commercial and light industrial construction within the planning area unless the engineered disposal system is approved by the necessary authorities. Require rehabilitation of failing septic systems within the on-site Waste Water Management Zone by the Community Services District. Require rehabilitation of failing	20. 21. 22. 23. 24.	Policy 1.8.1 (Community Services District Requirements) and Policy 5.3.1 (Public Services Provision) Policy 1.8.1 (Community Services District Requirements) Policy 5.3.4 (Provide Wastewater Treatment Systems) , 5.3.5 (Improvement Districts formation), Policy 1.7.2 Density Regulations-Soil) Policy 1.8.3 (Sufficient Lot Area) (Policy 5.3.2 (Provide Safe Water Systems) Policy 1.8.3 (Sufficient Lot Area) Policy 1.8.2 (Maximum Exceedance Limits) and Policy 5.3.4 (Provide Wastewater Treatment Systems) Policy 5.3.1 (Public Services Provision)
22.	Require rehabilitation of failing septic systems outside the On-Site Waste Water Management Zone by		

23. 24.	 having the County Health Department issue citations for correction to property owners having failing systems. Prohibit commercial and industrial development with excessive waste water discharge characteristics. Encourage the provision of public services (water and sewer) to be done in concert with the Community Plan (map and text). 	
Objective: Policies:		10. Policy 1.8.3 (Sufficient Lot Area) and Policy 5.3.3 (Require Sewage
10.	Improve water quality by having the	Collection Systems) or 5.3.4 (Provide
	On-Site Waste Water Management District repair or replace failing	Wastewater Treatment Systems)
	septic systems and require property	implementation program Appendix B
	owners to properly maintain their	Implementation Measure #7.
	collection systems in planned high	Provision), Policy 1.8.1 (Community
	density residential and/or	Services District Requirements),
11	commercial areas.	Policy 2.2.1 ED-2.1 (Business
11.	Investigate feasibility of and assess community attitude toward eventual	(Agency Support for Small
	incorporation of Three Rivers.	Businesses), Policy 2.4.5 ED-6.7
12.	Coordinate future public services	(Existing Commercial Centers), Policy
	Plan.	2.4.6 (PFS-6.1 Telecommunications Services), Policy 7.1.2 (Accessibility
		to Public Safety Services), Policy
		(7.1.3 Provide Local Emergency
		Access to Health Services) Policy
		9.1.5 (Coordinate Public Transit
		Services with Health Care Services)
Goal IV:	Ţ.	Policies:
Policies:		(Commercial Uses- Limiting Negative
10.	Maintain a growth rate that the	Impacts), 9.1.6 (Smart Growth and
	community can comfortably absorb.	Healthy Communities), Policy 8.1.1
	from area to area depending upon	Three Rivers). Policy 1.7.2. (Density
	the availability of public services, the	Regulations-Soil)
	anticipation of planned services, or	11. Policy 3.1.6 (Cluster Residential
	the unavailability of services. In no	Development) 12 Policy 172 (Density Regulations
	rate be so high that the community	Soil)
	or an area of the community, is	
	pushed to a point of no return	
	requiring unplanned services.	

 Encourage large lot single-family developments and planned cluster residential developments. Regulate residential densities based on soil suitability to provide for proper disposal of septic tank effluents. 	
 Objective 2: Policies: 7. Encourage agricultural land not now in the Williamson Act to enter Agricultural Preserves Contracts pursuant to the Williamson Act. 8. Lessen development pressure on agricultural areas by designating on the Plan areas to be retained for agricultural land or grazing activities. 	 Policies: 7. Policy 2.3.2 (Williamson Act Integration) 8. Policy 2.3.1 (Grazing Activities)
 Objective 3: Policies: 19. Require the mitigation of adverse effects of development in order to protect the natural landscape, open space and scenic areas. 20. Require undergrounding of utilities in new development where feasible. 21. Establish narrow street paving widths and steeper grade standards for minor roads serving fewer than 16 parcels in low-density residential areas. 22. Require non-residential and high density multi-family residential development to use landscaping measures such as architectural screenings, vegetative plantings, and the use of natural hills or earth berms to screen parking areas and make them unobtrusive as possible. 23. Encourage the utilization of natural or natural appearing building materials for building facades and advertising signs. 24. No new commercial resort development proposal which either exceed 40 acres in area or 100 guest rooms shall be allowed without approval of a Planned Unit Development pursuant to Section 18.5 or a Planned Development pursuant to Section 18.6, Subsection 	 Policies: 22. Policy 1.2.9 (Open Space Character) 23. Policy 1.4.5 (New Commercial Resort Development Standards) 24. Policy 1.4.6 (Mixed Use Project Review) 25. Policy 1.8.4 (Utility Review Process) 26. Policy 1.3.14 (Design of County Roads) 27. Policy 1.2.10 (Natural Landscapes) 28. Policy 1.1.12 (Commercial Building Design) or 1.1.15 (Contextual and Compatible Design)

G of the Tulare County Zoning Ordinance has been secured.	
 Objective 4: Policies: 10. Group commercial uses in clustered compact areas to discourage strip development. 11. Require commercial areas to form Improvement Districts under the auspices of the Community Services District when community water and sewer systems will be required. 12. Require new multi-family high density residential areas to be located in close proximity to concentrated commercial areas. 	 Policies: 10. Policy 1.1.5 (Cluster Commercial Uses) or 1.6.3 (Commercial Clusters) 11. Policy 1.3.15 (Improvement Standards in Communities), Policy 1.8.1 Community Services District Requirements, Policy 5.3.5 (Improvement Districts Formation) 12. Policy 2.1.2 (Community Commercial Shopping Area), Policy 3.1.5 (Mixed- Use Development), Policy 1.6.4 (Mixed-Use Development-Town Center).
 ECONOMIC BASE: Goal I: Objective 1: Policies: 19. Accommodate light industrial development which is non-polluting and which will not create nuisance conditions. Light industrial operations will be totally enclosed or adequately screened from view. 20. Require adequate buffers (setbacks, side and rear yards, landscaping and screening) between commercial and/or industrial development and residential areas. 21. Encourage the development of a community commercial shopping area and high density residential area in the area bounded by State Route 198, South Fork Drive and Old Three Rivers Road. 22. Promote a concentration of industrial, professional office, and commercial activities and high density residential development within selected areas to allow for cost efficient provision of necessary services and to protect residential neighborhoods. 23. Maintain existing commercially used areas along State Route 198 for 	 Policies: 16. Policy 1.1.3 (Commercial Uses- Limiting Negative Impacts) 17. Policy 1.1.7 (Buffers), Policy 1.1.11 LU-6.2 (Buffers-Non Compatible Land Uses), Policy 1.4.2 (Buffer Strips), Policy 1.4.9 LU-5.6 (Industrial Use Buffer), Policy 4.3.9 ERM-1.8 (Open Space Buffers) 18. Policy 1.6.3 (Commercial Clusters), Policy 1.5.1 (UDB and Future Development), Policy 1.6.1 (Designating a Town Center), Policy 1.6.3 (Commercial Clusters), 1.6.4 Mixed-Use Development-Town Center, Policy 1.6.5 SL-3.1 (Community Centers and Neighborhoods), Policy 2.1.2 (Community Commercial Shopping Area), Policy 3.1.5 (Mixed-Use Development) 19. Policy 1.1.4 (Compatible Commercial Establishments) or 1.1.5 (Cluster Commercial Uses) 20. Policy 1.2.13 (Highway Commercial), Policy 2.1.4 (Highway-Oriented Commercial Development), Policy 2.4.1 ED-6.1 (Revitalization of Community Centers), Policy 2.4.5 ED-6.7 (Existing Commercial Centers)

24. Promote the use of the site approved for "Commercial-Recreation" development by GPA 94-03 for a destination-type resort such as a guest ranch, conference facility, health spa, golf course or equestrian establishment. Development of the site for retail or service commercial use, unless identical to the primary use of the site for a destination-type resort, shall be prohibited.	
 Objective 2: Policies: 13. Assure that professional office, commercial and light non-polluting industrial developments are designed so that traffic will not adversely impact residential areas. 14. Require all new advertising signs to be indirectly lighted. 15. Require future non-residential developments to provide a naturally planted buffer strip, including shade trees, to separate the parking area or the building from State Route 198. 16. Require automobile storage yards and commercial and multi-family trash bins to be screened from view. 	 Policies: 13. Policy 1.1.4 (Compatible Commercial Establishments), Policy 1.1.3 (Commercial Uses- Limiting Negative Impacts), Policy 1.4.1 (Professional Office Design Standards), Policy 4.1.3 (Mitigating Traffic Impacts) 14. Policy 1.3.5 (Signage Standards), Policy, 1.3.6 (Lighting Standards) 15. Policy 1.4.2 (Buffer Strips) 16. Policy 1.2.8 (Storage Screening)
HOUSING: Goal II: Objective 1: Policies: 4. Encourage and make property owners aware of and assist them in efforts to qualify for available state and federal low interest housing loans for rehabilitation of deteriorated units.	Policies: 4. Policy 3.1.2 (Housing Financial Assistance)
Objective 2: Policies: 13. Permit mobilehome parks and recreation vehicle parks, by Special Use Permit, in designated commercial-recreation areas along State Route 198 as shown on the plan and retain the existing mobilehome park on North Fork Drive presently known as Trailer Isle.	 Policies: 13. Policy 3.2.1 (RV & Mobilehome Parks) 14. Policy 3.2.2 (Screening Requirements for RV & Mobilehome Parks), Policy 3.2.5 (Mobilehome Project Compatibility) 15. Policy 3.2.3 (Screening Requirements for RV & Mobilehome Parks) Policy3.2.5 (Mobilehome Project Compatibility)
 14. Require mobilehome parks and recreation vehicle parks adjacent to State Route 198 to be screened from State Route 198 by utilizing such screening measures as masonry walls or other types of architectural fencing, earth berms, rock outcrops, and natural variation to topography; also require the use of natural vegetation where it exists supplemented by additional natural landscaping to soften the visible effect from the highway. 15. Require skirting or some other type of architectural screening around the base of the mobilehome to improve mobilehome appearance and safety. 16. Permit mobilehomes on individual lots, by Special Use Permit, in the plan designated area on North Fork Drive. Minimum lot size per mobilehome shall be one acre. 	16. Policy 3.2.1 (RV & Mobilehome Parks)
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Policies: 10. Encourage large lot and planned cluster residential development.	10. Policy 3.1.6 (Cluster Residential Development), Policy 4.1.7 ERM-5.15 (Open Space Preservation).
11. Discourage high density residential	11. Policy 3.1.7 (High Density Residential
developments. 12. Base density regulations on	Development) 12. Policy 1.7.2 (Density Regulations –
suitability of the soils to provide for	Soil)
effluents and land's ability to provide	
water.	
ENVIRONMENTAL QUALITY:	Policies:
Goal IV: Objective 1:	13. Policy 5.1.1 (Ensure Quality Education Programs) or 5.1.2
Policies:	(Encourage 5 Year Growth
13. Study and plan future growth closely	Projections)
and carefully and its impacts on the educational process to ensure	14. Policy 5.1.2 (Encourage 5 Year Growth Projections)
uncrowded classrooms, buses,	15. Policy 5.1.2 (Encourage 5 Year
playgrounds, cafeterias and office	Growth Projections)
space essential to offer a continued	16. Policy 5.1.3 (Develop Financing
quality program.	Methods)
service to the students.	
15. Encourage the school district to plan	
future activities, based on 5 year	
growth projections, with close	

attention to functional and architectural compatibility. 16. Encourage the school district to study ways to secure a multi-use community school recreation/education building.	
 Objective 2: Policies: Prohibit structural development within the designated floodway. Discourage overnight on-street parking in residential areas. Require non-residential lighting be designed to provide proper visibility for public safety. 	 Policies: 10. Policy 4.2.1 (Kaweah River Preservation) Policy 4.2.2 (Floodplain Preservation), Policy 4.2.3 (Enforce Floodway Standards & Guidelines), Policy 4.2.4 (Incentivizing Floodway Restoration), Policy 4.2.11 HS-5.9 (Floodplain Development Restrictions) 11. Addressed in Tulare County Ordinance Code Chapter 3 and Chapter 9. 12. Policy 1.3.6 (Lighting Standards)
 Objective 3: Policies: 16. Encourage reservation of open space for recreational purposes in conjunction with future residential developments. 17. Facilitate innovation in housing and subdivision so that private recreation and open space areas can be accommodated. 18. Prohibit trespassing on private lands. 19. Improve maintenance of existing public recreation areas. 20. Retain recreational open space in a natural state to avoid high maintenance costs. 	 Policies: 16. Policy 3.1.10 (Housing Policy 3.12 Neighborhood Parks), Policy 3.1.12 (Housing Policy 3.16 Grant Funds for Park and Recreation Facilities), Policy 5.2.1 (Reserve Recreational Space) 17. Policy 5.2.2 (Housing & Subdivision Design) 18. Addressed in California Penal Code Section 602 PC. 19. Policy 5.2.4 (Facility Maintenance) 20. Policy 5.2.5 (Retain Natural State of Recreational Space)
Objective 4: Policies: 4. Designate on the General Plan those areas to be retained for natural habitat of strong populations of song birds, birds of prey, fur bearing mammals, game mammals, and aquatic life.	Policies:4.Policy 4.1.2 CEQA Compliance, Policy 4.1.7(Open Space Preservation); 4.1.8 (Cooperate With Wildlife Agencies); or 4.1.9 (Conservation Plan Coordination), Policy 4.3.7 (ERM-1.12 Management of Oak Woodland), Policy 4.3.8 (ERM-1.4 Protect Riparian Areas), Policy 4.3.9 (ERM-1.8 Open Space Buffers), Policy 4.4.1 (Unnecessary Removal of Native Trees), Policy 4.4.3 (Protect Riparian Habitat), Policy 1.2.20 (FGMP-6.5 Cluster

	Development), Policy 1.7.3
	(Conservation Practices for Single-
	Family Developments). Policy 8.1.5
	(FGMP-1.2 Grading)
Objective 5:	Policies:
Policies:	25 Policy 1 8 3 (Sufficient Lot Area)
25 Require a sufficient lot area for all	26. Policy 412 (CEOA Compliance)
2.5. Require a sufficient for area for an	Policy 1.1.2 (Commercial Uses
ensure an adequate area for on site	Limiting Negative Impacts) Policy
ensure all adequate area for on-site	1.1.4. (Compatible Commonial
Sewage disposal.	Establishmente) Deligy 1.1.0 LU 1.2
20. Promoti fand use activities that	(Decreated Learning), Policy 1.1.9 LU-1.5
create excessive and unwanted noise	(Prevent Incompatible Uses), Policy
and/or light, and prohibit land use	1.1.11 (LU-6.2 Buffers-Non
activities that endanger water quality	Compatible Land Uses), Policy 1.1.15
because of pollution and/or	(LU-7.14 Contextual and Compatible
sedimentation.	Design), Policy 1.2.1 (New
27. Prohibit new development which	Development Compatibility), Policy
excessively increases traffic flow	1.2.12 (SL-3.2 Community
through existing or planned	Expansion–Edges), Policy 1.8.1
residential areas.	(Community Services District
28. Encourage roads in residential	Requirements), Policy 3.1.8 (Housing
subdivisions be designed to	Policy 2.21 Housing Water and
minimize through traffic.	Wastewater), Policy 1.1.6 (Land Use
29. Prohibit future flashing and neon	Protections), Policy 1.2.2 (Visitor
signs and future free standing signs.	Serving Uses), Policy 1.3.3 (Noise
When businesses are located off the	Standards), Policy 1.3.13 (SL-4.1
main road, they may have one free	Design of Highways), Policy 1.4.8
standing sign at the highway access	(HS-8.8 Adjacent Uses), Policy 4.1.1
road.	(Preserving the Natural Environment)
30. Prohibit alterations to natural	27. Policy 4.1.3 (Mitigating Traffic
drainage courses which lessen their	Impact)
capacity or cause obstruction,	28. Policy 4.1.4 (Roadway Subdivision)
erosion or sedimentation.	29. Policy 1.3.5 (Signage Standards),
31. Prohibit development that interferes	Policy 1.1.3 (Commercial Uses-
with established agricultural water	Limiting Negative Impacts), Policy
rights. Prohibit use of ground water	1.1.12 (LU-4.5 Commercial Building
supply when beyond its normal	Design), 1.3.6 (Lighting Standards)
recharge level.	30. Policy 4.1.5 (Natural Drainage
32. Encourage mixed-use project	Courses). Policy 4.2.11 (HS-5.9
reviews under the Planned Unit	Floodplain Development
Development procedure instead of	Restrictions)
the conventional procedure in order	31. Policy 2.3.3 (Water Rights)
to further achieve and promote the	32. Policy 1.4.6 (Mixed-Use Project
goals, objectives and policies of this	Review)
nlan	
himi.	

Attachment 3: A-3 – Mixed Use Overlay District (Zone Change Text) Section 18.9: "MU" Mixed-Use Overlay Combining Zone Three Rivers Development Standards

Attachment 3 - Mixed Use Overlay District

The following regulations shall apply in the community of Three Rivers, unless otherwise provided in this Ordinance.

PURPOSE

A. The purpose of this zone is to use can allow for decreased vehicles miles traveled if residential uses are mixed with uses for employment.

APPLICATION

B. This overlay zone applies to the community of Three Rivers to facilitate a Town Center.

USE

- **C.** No building or land shall be used and no building shall be hereafter erected or structurally altered, except for one or more of the following uses allowed in this this overlay zone are outlined in the community plan for Three Rivers.
- Within the Mixed Use Zoning District, all uses outlined in the C-2, C-1, R-1, R-2 and R-3 uses are allowed. Uses and activities that are found by the Planning Director to be similar to and compatible with those specific zoning districts are also allowed. In addition, use and activities determined to be compatible by the Planning Commission and the Board of Supervisors with the above mentioned zoning districts are also allowed.

All conditional uses allowed in these zoning districts shall also be allowed by right with exception of the following combination of uses:

All uses shall not be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood, or to the general welfare of the county. All uses shall limit impacts related to smoke, fumes, dust, gas, noise, odor, vibrations and other hazards to be considered an allowed use without the need for a special use permit. All allowed uses are subject to the determination of appropriateness by the Director of Planning.

The Director of Planning has the option of deferring any land use application allowed in this district to the Planning Commission for review and decision.

DEVELOPMENT

- 1. <u>Height:</u> No building or structure hereafter erected or structurally altered shall exceed thirty five (35) feet to uppermost part of roof.
- 2. <u>Front Yard:</u> 0 Feet
- 3. <u>Side Yard:</u> Where a lot abuts upon the side of a lot in any "R" Zone (R-A, R-O, R-1, R-2 and R-3), there shall be a side yard of not less than five (5) feet. Where a reversed corner lot rears upon a lot in any "R" Zone, the side yard on the street side of the reversed corner lot shall be not less than fifty (50) percent of the front yard required on the lots in the rear of such corner lot. In all other cases, a side yard for a commercial building shall not be required.

- 4. <u>Rear Yard:</u> Where a lot abuts upon the rear of a lot in any "R" Zone (R-A, R-O, R-1, R-2 and R-3), there shall be a rear yard of not less than fifteen (15) feet. In all other cases, a rear yard for a commercial building shall not be required.
- 5. <u>Lot Area:</u> The minimum lot area shall be ten thousand (10,000) square feet; provided, however, that where a lot has less area than herein required and was of record at the time this paragraph became effective, said lot may be occupied by not more than one (1) main building subject to the provisions of this Section.
- 6. <u>Floor Area Ratio:</u> The maximum Floor Area Ratio is 2. The Floor Area Ratio is the amount of square feet of all structure allowed on a parcel based on parcel size.
- 7. <u>Distance between structures:</u> The minimum distance between structures is 10 feet.
- 8. <u>Parking:</u> Off-street parking and loading shall be required in conformance with Section 15.
- 9. <u>Fences, Walls, and Screening:</u> Where the side or rear lot line of a site adjoins or is located across an alley from any "R" Zone (R-A, R-O, R-1, R-2, and R-3), there shall be a solid wall, fence or equivalent landscaping screening at least six (6) feet in height located along the common lot line, except in the required front or side yard. Open storage of materials and equipment shall be permitted only within an area surrounded and screened by a solid wall or fence or compact evergreen hedge (with solid gates where necessary), not less than six (6) feet in height, provided that no materials shall be stored to a height greater than that of the wall, fence, or hedge. Fulfillment of the requirement of this paragraph shall not be required for buildings and uses which were established in accordance with all applicable buildings and zoning regulations and which were existing in a commercial or manufacturing zone on the effective date of this paragraph, until such time as a permit or other grant of approval for expansion, alteration or development of property is approved by Tulare County.

All other Development Standards are outlined in the Community Plan for Three Rivers. Conformance to development standards is required for all development; however, the Planning Director, Planning Commission, or Board of Supervisors may provide exemptions to particular development standards when deemed appropriate.

Development Standards (Mixed Use Zoning District)

To promote Economic Development within the Three Rivers Urban Development Boundary, a Mixed Use Overlay zoning district is being established to allow for flexibility in the allowed uses within Three Rivers. In addition, the use permit restriction is updated to allow for ministerial approval [by the Planning Director]. Development standards are established to ensure high quality development within this mixed-use overlay district.

ARCHITECTURE

A-1 Entries to buildings should be individualized and clearly identifiable.

A-2 Retail spaces should be accessed directly from the sidewalk, rather than through lobbies or other internal spaces.

A-3 Entrances to upper story uses should not be as prominent as the primary entrances to first story uses.

A-4 The height of first floor commercial should have a minimum ceiling height of 12 feet.

A-5 Architecturally distinguish the ground floor from the upper façade, to form a visual base for the building. Create an intimate scale for the pedestrian environment.

A-6 Each building should have a defined base, body, and cap segment

A-7 Blank walls on ground floor facades adjacent to public sidewalks, public right-of-ways, and public spaces are prohibited.

A-8 Ground floor window openings should range between fifty (50) to eighty (80) percent of the ground floor façade adjacent to sidewalks and private and public plazas, patios, and courtyards. These window openings should consist of transparent "storefront" windows. Second story windows should not exceed fifty (50) percent of the total exterior wall surface.

A-9 Three-dimensional cornice lines, parapet walls, and/or overhanging eaves should be used to enhance the architectural character of the building.

A-10 Wall surfaces should not exceed 250 square feet without including some form of articulation. Acceptable forms of articulation include use of windows, varied reveal patterns, change in material, texture, color, or detail; and a change in wall plane location or direction.

A-11 Openings in the façade should be accentuated with paint, tile, shutters, awnings, planters, and/or other appropriate architectural features in order to create varied shadows and a rich visual texture.

A-12 Articulation and detailing of the exterior walls at the ground level, should be integrated with landscape features (trees, plants, walls, trellises, and unique land forms) to ensure an appropriate transition from ground to wall plane.

A-13 An equal level of architectural detail and landscaping should be incorporated into all sides of freestanding buildings, because they are generally visible from all sides.

A-14 Architectural details should be fully integrated into the design of the building to avoid the appearance of afterthought elements or elements that are "tacked on" to a building.

A-15 Finish materials that give a feeling of permanence and quality should be used at ground level facades.

A-16 A consistent use of window style, size, trims, and accents should be used to ensure a consistent character along the building façade.

A-17 Exposed structural elements (beams, trusses, frames, rafters, etc.) are acceptable when appropriately designed to complement the over design of the façade.

A-18 Tilt-up buildings should incorporate decorative trim, recessed/projecting panels, recessed windows/doors, accent materials, and varied roof height to increase visual interest.

A-19 New buildings located at the corner of the block may be more massive in scale than adjacent buildings to better define the street intersection.

A-20 Corner buildings should have a strong relationship to the corner of the intersection by incorporating a unique architectural element or detail at the corner; such as a tower or primary building entrance.

A-21 Corner buildings should present equally important facades of similar appearance on both streets.

A-22 Articulate side and rear facades in a manner compatible with the design of the front façade. Avoid large blank wall surfaces on side and rear facades which are visible from public areas. In these locations, display windows, store entrances, and upper windows are encouraged. When this is not feasible, consider the use of ornament, murals, or landscaping along large blank walls.

A-23 Remove alterations whose design and/or materials are not consistent with the overall character of the building.

A-24 Where off-street parking or an alley is provided behind a building, a secondary entrance to both first floor and upper floor uses should be provided at the rear of the building.

A-25 Locate and design required vents and access doors to minimize their visibility from public spaces.

A-26 Use high quality detailing for new buildings and replacement elements. For example, new or replacement windows should have sash and frame thicknesses and window depths which are similar to those of original or historic windows. Such level of detailing provides an interplay between light and shadow which adds interest and visual depth to the façade.

A-27 Loading docks, storage areas, and service facilities should be located at the rear of the building and screened from the street as necessary.

A-28 Conceal all electrical boxes and conduits from view, and position light sources to prevent glare for pedestrians and vehicles.

ROOFS AND AWNINGS

RA-1 Awnings should be compatible with other awnings nearby, particularly those on the same building, when these awnings complement the architectural character of the building.

RA-2 Canopies and awnings should be compatible with the style and character of the structure on which they are located.

RA-3 Use matte canvas fabric for awnings; not vinyl, fiberglass, plastic, wood or other unsuitable materials. Glass and metal awnings may be appropriate for some buildings, but must be consistent with the architectural style of the building.

RA-4 Include architectural features such as awnings, canopies, and recessed entries that can protect pedestrians from inclement weather. Design these features as integral parts of the building.

RA-5 Awnings and canopies should not hang below the top of the first floor storefront window. In addition, awnings and canopies should be at least ten (10) feet above the sidewalk.

RA-6 Canopies and awnings should not project more than seven (7) feet from the surface of the building.

RA-7 Awnings and canopies that project into the public right-of-way should not impede pedestrian or vehicular movement.

RA-8 Roof forms, lines, masses, and materials should be continuous and consistent with the overall style, character, scale, and balance of the building.

RA-9 Roof overhangs and exposed structural elements should be designed to be consistent with the overall style and character of the building.

RA-10 Roof mounted HVAC equipment, ducts, vents, and other equipment should be screened from public view.

RA-11 Mansard roofs are prohibited.

RA-12 All flat roofs should have 90% of the roof area covered by solar panels. All sloped roofs should have 50% of the roof area covered by solar panels. Roofs should be painted or colored with a bright white (or similar color) with a reflective glossy finish.

SITE PLANNING

SP-1 Place entrances to storefronts and other ground floor uses so that they are accessible directly from the public sidewalk, not internal lobbies.

SP-2 On corner sites, a prominent streetscape presence should be established and visual interest

should be created by either locating buildings near the intersection to enliven the streetscape or using landscaping to frame the intersection. Parking areas immediately adjacent to intersections are discouraged.

SP-3 Structures and site improvements should be located and designed to avoid conflict with adjacent uses.

SP-4 Gates to parking areas should be designed with materials and color that are compatible with the site.

SP-5 Multi-story buildings that overlook private or common area open space of adjacent residences should be designed to protect privacy of these spaces.

SP-6 Gates to parking areas should be located to prevent vehicle stacking or queuing on the street.

SP-7 Primary site and building entry points are strongly encouraged to generate visual interest with special design features such as decorative or textured paving, flowering accents, special lighting, monuments, walls, shrubs, water features, and the use of sizeable specimen trees.

SP-8 To the extent feasible and practicable, parcels should share access driveways to minimize curb cuts and traffic congestion.

SP-9 Cul-de-sacs are inappropriate except when a freeway, railroad, or canal prevents connectivity.

SP-10 Block lengths should be short, averaging 200 to 300 feet. Maximum block length is be 500 feet.

LANDSCAPING

LA-1 Projects should provide, and maintain, landscaped buffers between commercial uses and lowdensity residential uses, between industrial and residential uses, and between commercial and industrial uses. Plant material will be placed in a manner to suggest natural growth as opposed to a rigid barrier.

LA-2 A predominance of deciduous tree species is encouraged to shade western, southern, and southwestern exposures.

LA-3 The parking lot should not be the dominant visual element of the site as viewed from the street. Locate or place parking lots at the side and rear of buildings or use parking lot screening to soften their appearance. Screen parking lots: Utilize a hedge (recommended height of 36 inches) with a rolling berm to screen parking at the street periphery (Minimum shrub container size should be 5 gallons.)

LA-4 Project sites should be designed so that areas used for outdoor storage, and other potentially unsightly areas are screened from public view. All service yards and outdoor storage areas should be enclosed or screened from view.

LA-5 Loading areas, access and circulation driveways, trash, and storage areas, and rooftop equipment should be adequately screened from the street and adjacent properties, as deemed

necessary. To the fullest extent possible, loading areas and vehicle access doors should not be visible from public streets.

LA-6 Loading driveways should not back onto streets or encroach into landscaped setback areas.

LA-7 Loading doors should be integrated into building elevations and given the same architectural treatment where feasible.

LA-8 Utility equipment such as electric and gas meters, electrical panels, and junction boxes should be screened from view or incorporated into the architecture of the building.

LA-9 Utility devices, such as transformers and backflow preventers, should not dominate the front landscape area.

LA-10 All utility lines from the service drop to the site should be located underground.

LA-11 When security fencing is required, it should be a combination of solid walls with pillars and offsets, or short solid wall segments and segments with metal fencing. Chain-link fencing is strongly discouraged when facing public view and should only be used as interior fencing.

LA-12 Retaining walls at retention basins should utilize a stepped or terraced motif as a visual tool to maintain appropriate human scale.

LA-13 Retention basins visible to public view and common open spaces should be contoured and landscaped in a creative manner to minimize a harsh utilitarian appearance. When feasible, it is recommended to beneficially use the run-off storm water as supplemental watering for the landscape plants.

LA-14 Parking lot run-off should be routed through turf or other landscaping.

LA-15 Parking lots located adjacent to the sidewalks or right-of-ways should be screened to a height of thirty six (36) inches above the grade with landscaping and/or low high quality fencing.

Refuse and Storage Areas

R-1 Trash storage must be enclosed within or adjacent to the main structure or located within separate freestanding enclosures.

R-2 Trash enclosures should be unobtrusive and conveniently accessible for trash collection but should not impede circulation during loading operations.

R-3 Trash enclosures should be located away from residential uses to minimize nuisance to adjacent properties.

R-4 Trash and storage enclosures should be architecturally compatible with the project design. Landscaping should be incorporated into the design of trash enclosures to screen them and deter graffiti.

<u>Lighting</u>

LI-1 Provide lighting at building entrances and for security at ground level.

- LI-2 Lights should be shielded and point down toward the ground.
- LI-3 Parking lot should have uniformly spaced night lighting.

LI-4 Well-lit sidewalks and/or pedestrian walkways should be located to provide safe access from the parking lot to the street sidewalk.

LI-5 Exterior architectural lighting should fully compliment a building's design and character. Light fixtures should work in conjunction (size, scale, and color) with the building's wall, roof. LI-6 Street lighting features should be "pedestrian scale" at twelve (12) to eighteen (18) feet in height above the curb.

WALLS AND FENCES

WF-1 Wall/fence design should complement the project's architecture. Landscaping should be used to soften the appearance of wall surfaces.

WF-2 Walls and fences within front and exterior side yards of commercial sites should be avoided.

WF-3 Unless walls are required for screening or security purposes they should be avoided.

WF-4 Security fencing should incorporate solid pilasters, or short solid wall segments and view fencing.

WF-5 Front yard fences should not abut the sidewalk. The fence should be set back from the sidewalk at least 2 to 3 feet to allow room for landscape materials to soften the fence and to ensure pedestrian comfort.

WF-6 Walls and fences should be designed in such a manner as to create an attractive appearance to the street and to complement the architecture of the industrial park.

WF-7 Gates should be provided in walls or fences where necessary to allow emergency access.

WF-8 High perimeter walls and walls topped with barbed wire, razor wire, or broken glass are strongly discouraged.

WF-9 Inordinately long walls or fences should be broken up by landscaping, pilasters, offsets in the alignment of the wall or fence, and/or changes in materials and colors.

WF-10 Chain link fences should not be visible from streets.

WF-11 Long expanses of fence or wall surfaces should be offset and architecturally designed to prevent monotony. Landscape pockets (12-feet wide by 3- feet deep) should be provided at 70-foot minimum intervals along the wall.

STREETSCAPE

ST-1 A consistent pavement material of varied texture and color should be applied to all crosswalks to clearly define pedestrian crossings, to slow down traffic.

ST-2 Sidewalks widths, excluding curbs, should be a minimum of five (5) feet.

ST-3 Curb and gutters should be constructed with all new development.

ST-4 A planting strip, or tree lawn, 3 to 5 feet wide should be located between the sidewalk and the curb of the street. Existing tree lawns should be preserved.

ST-5 New street trees should be planted on the curb edge of the sidewalk in front of all new development projects.

<u>Signage</u>

SI-1 Sign letter and materials should be professionally designed and fabricated.

SI-2 Each storefront with a ground floor entrance should be allowed two signs that should be attached to the building.

SI-3 All electrical conduits should be concealed from public view.

SI-4 For commercial uses, the primary wall sign should be in the space above a storefront and visibly oriented towards the street.

SI-5 For commercial uses, a secondary sign should be smaller than the primary sign and be oriented towards passing pedestrians. It should extend out perpendicular to the building façade and be mounted or hung from the wall beneath an awning or above a first floor window. The bottom of the wall-mounted sign should be located at least eight (8) feet above the sidewalk. The outer face of the sign should not extend more than four (4) feet from the edge of the building surface, and the maximum area of the sign should have no more than six (6) square feet.

SI-6 Signs should be designed to be compatible with building design in terms of relative scale, overall size, materials, and colors. No sign should dominate the façade. Signage elements should incorporate materials colors, and shapes that appropriately reflect and compliment the building's architecture.

SI-7 Large signs that dominate a building façade or the streetscape should not be permitted.

SI-8 Signage should be constructed of high quality, low maintenance, and long lasting materials. Except for banners, flags, temporary signs, and window signs, all signs should be constructed of permanent materials and should be permanently attached to the ground, a building or another structure by direct attachment to a rigid wall, frame, or structure.

SI-9 No more than twenty (20) percent of window area should be obstructed by signs, posters, advertisements, painted signs, and/or merchandise, and the top one half of the window should be permanently clear and free of obstructions. Awning signage should be of a replaceable-type to accommodate tenant turnover.

SI-10 Wall, canopy, under-canopy, and marquee signs should not exceed three-fourths (3/4) square foot of aggregated display area per lineal foot of frontage.

SI-11 Awning sign should be mounted on the hanging border of the awning and should not protrude beyond the awning surface.

SI-12 Wall signs or advertisements should not project more than twelve (12) inches from the wall face to which they are mounted, should not project beyond building eaves, and should be mounted flat throughout their length and height.

SI-13 Signs for individual tenants within a multiple-tenant, such as offices located above the ground floor, should be grouped together and appropriately scaled to a pedestrian-oriented retail environment.

SI-14 Fin signs or under marquee sign are permitted provided that they are installed with a minimum of eight (8) feet clearance from the lowest point on the sign and support to the top of the walking surface below it.

SI-15 Awning signs and face-mounted signs are permitted provided that the sign should have no more than one line of text and that maximum text height is twelve (12) inches.

SI-16 No signs should be erected in any manner in which the sign, in whole or in part, would create a hazardous condition to pedestrian or automobile traffic alike.

SI-17 Additional business signs should be permitted on windows and on the vertical face of awning valances provided that the signs are permanent in nature and of high quality.

SI-18 The following signs are strictly prohibited:

- Roof signs, signs located above the roof or parapet lines.
- Permanent banner signs.
- Posters.
- Painted window advertisements.
- Billboards
- Large auto-oriented pole-mounted or "lollipop signs."
- Moving signs and flashing signs.

SI-19 Signs advertising an activity, business product, or service no longer conducted on the premises, and/or signs frames, structural members, or supporting poles remaining unused for a period of six (6) months should be removed from the site or building by the property owner.

SI-20 Address markers should be easily identifiable and readable from the street.

SI-21 Freestanding, ground-mounted and monument signs should be not less than one (1) foot behind a property line or designated right-of-way for vehicular and pedestrian traffic, but in no case should be more than ten (10) feet behind a sidewalk and ten (10) feet from any vehicular entrance or driveway. These signs should not interfere with the safety of vehicular traffic entering or exiting the premises.

SI-22 The maximum height of monument signs should be five (5) feet above the top of concrete curb.

SI-23 One freestanding or monument sign with a maximum of thirty-two (32) square feet of display area should be allowed on each street frontage of more than fifty (50) feet. Where two (2) or more freestanding or monument signs are allowed on a single street frontage, one freestanding or monument sign with a maximum of fifty (50) square feet of display area may be used in lieu of several signs on the same frontage.

SI-24 All gateway signs should have a consistent character and style.

SI-25 A hierarchy of gateways signs should be established to differentiate between major and minor gateway entrances.

SI-26 Major gateway signs should be designed as visually prominent towers, monuments, or street spanning arches.

SI-27 Minor gateway signs should be visible to automobile traffic, but also be low enough to be visible to pedestrian traffic.

SERVICE STATIONS AND CAR WASHES

SS-1 Service and carwash bays should not face residential properties or the public street. The visibility of service bays and carwash opening should be minimized.

SS-2 Gas pump canopies should be ancillary to the main building structure. The retail market/office building segment of the facility should be oriented along the street frontage, whenever possible.

SS-3 All structures on the site (including kiosks, carwash buildings, gas pump columns, etc.) should be architecturally consistent and related to an overall architectural theme.

SS-4 Canopy light fixtures should be recessed into the canopy.

SS-5 Outdoor equipment, such as vent risers and clean air separators, should be screened either with an enclosure or if site configuration topography permits, away from street view, screened with landscaping or located at a grade differential.

SS-6 Site-specific architectural design contextual to surroundings is strongly encouraged. Designs based solely on corporate or franchise models are strongly discouraged.

AUTO REPAIR SERVICES

AR-1 Building design should be stylistically consistent, and compatible with surrounding buildings through use off similar scale, materials, colors, and/or detailing.

AR-2 Building materials should have the appearance of substance and permanency; lightweight metal or other temporary appearing structures are discouraged.

AR-3 Vehicle drop-off areas should be provided to prevent vehicle overflow to adjacent streets.

CONTRACTOR, BUILDING SUPPLY, OR LANDSCAPING YARDS

BS-1 The main office or building should be located along the street frontage to screen outdoor sales and minimize the visibility of storage of materials and vehicles.

BS-2 Customer parking should be provided close to the building and not interspersed in the yard. BS-3 All outdoor contractor vehicle storage areas should be enclosed with a screen of sufficient height and constructed with durable and high-quality materials that are compatible with the building and site.

CONSUMER STORAGE FACILITIES

SF-1 The administrative office should be located in a building or building element that is human scale and located in proximity to the street.

SF-2 Parking for visitors should be located near the administrative office, outside of any gated portion of the facility.

SF-3 A storage facility should be consistent with its surrounding area in scale and appearance, through the use of building size transitions, architecture, and landscaping.

SF-4 Loading doors for individual storage units should not face outward toward streets.

SF-5 In order to break up the mass of larger buildings which containing storage units, provide horizontal and vertical articulation through the use of building offsets, windows, and variations in colors and materials.

SF-6 Any area intended for the storage of automobiles and recreational vehicles should be located towards the rear of the site or screened with an enclosure of adequate height

SPECIAL CONDITIONS

SC-1 The project should emit no smoke or should reduce the amount of smoke from an existing use.

SC-2 The project should emit no fumes or should reduce the amount of fumes from an existing use.

SC-3 The project should implement dust control measures sufficient to minimize or prevent dust emissions. Measures should be consistent with, or more effective than, those required by the Valley Air District.

- SC-4 The project should emit no odors or should reduce the amount of odors from an existing use.
- SC-5 The project should not create noticeable vibrations.

Attachment 4: A-4 – Land Use Matrix

Attachment 4 - A-4 Land Use Designations and Zoning District Compatibility Matrix Three Rivers Area Community Plan

"X" Designates Zoning Districts Compatible with Designated Land Uses

DESIGNATED LAND LAND USES	AGRICULTURAL		RESIDE	INTIAL		MOBIL	EHOMES &	z R.V.'S	COMM	ERCIAL	INDUSTRIAL	PUBL	IC USE	FLOOD AREAS
ZONING DISTRICTS AND MINIMUM LOT SIZES	160 Acre Minimum 80 Acre Minimum 20 Acre Minimum	Low Density 5-Acre Min.	Medium Density 1- Acre Min.	High Density 1/2 Acre Min	Multi- Family 12 families/1 acre maximum	Mobilehome on Individual Lots	Mobilehome Parks	Recreation Vehicle Park, Camp Ground	Community Commercial	Commercial Recreation	Light Industrial	Public/ Quasi- Public	Resource Conserva tion	Floodway
A-1 (5 Acre) R-A (6000 sq. ft.)	-	X -	-	-	-	X -	-	X -	-	-	-	X X	-	-
AE (5 Acre) R-A-43 (1 Acre) R-O (12 500 sq. ft.)		- -	- X			- -	-	- -	-	-	-	X X	-	
R-O-43 (1 Acre) R-1 (6,000 sq. ft.)				-	X X	-	-	-	-	-	-	Х	-	-
R-2 (6,000 sq. ft.) R-3 (6,000 sq. ft.)	-			-	X X	-	X X	- -	-	-	-	X	-	-
O (10,000 sq. ft.) C-2, C-2-SC, C-2-SC-SR, C-2- SC-F2, & PD-C-2-SC (6,000 sq. ft.)	-	-	-	-	X X	-	X X	X X	x	x	-	Х	-	-
AE-80 (80 Acres)	Х					Х		X (PSP)				Х	Х	
AE-20 (20 Acres)	Х	-	-	-	-	Х	-	X (PSP)	-	-	-	Х	-	-
AF (160 Acres)	Х	-	-	-	-	Х	-	X (PSP)	-	-	-	Х	Х	Х
R-A-217 (5-Acres)	-	Х	-	-	-	-	-	-	-	-	-	Х	-	-
R-A-M-43 (Mobilehome on One Acre Lot)	-	-	Х	-	-	Х	-	-	-	-	-			-
R-A-20 (1/2 Acre)	-	-	-	Х	-	-	-	-	-	-	-	Х	-	-
R-1-20 (1/2 Acre)	-	-	-	X	-	-	-	-	-	-	-			-
R-O-20 (1/2 Acre) R-1-43 (1 acre)	-	-	X	X -	-	-	-	-	-	-	-	Х	-	-
CC - (Community Commercial) (10,000 sq. ft.)	-	-	-	-	-	-	-	-	X	-	-			-
CO & PD-CO – (Community Recreation) (12,500 sq. ft)	-	-	-	-	-	-	Х	Х	-	Х	-	Х	Х	-
F-1 – (Primary Floodway)	-	-	-	-	-	-	-	Х	-	-	-	-	Х	Х
F-2 – (Secondary Flood Plain Combining Zone)	Х	X	X	Х	X	Х	Х	X	X	Х	Х	Х	Х	Х
PD-M-1 – (Planned Light Industrial) (10,000 sq. ft.)	-	-	-	-	-	-	-	-	-	-	Х			-

Note 1: A box marked with an X denotes consistency between land use designations and zone; a blank box denotes a lack of consistency.

Note 2: A General Plan Amendment is not required to develop land designated under a reserve classification provided that the proposed development is consistent with policy Land Use 1.6.

Note 3: AE-80 may be used as a holding zone in certain areas. In no event should any development or land subdivisions be approved which are inconsistent with the land use plan map or policies of this plan. Where inconsistencies exist between the land use designations and zoning districts, the affected property should be rezoned to be consistent with the land use designations prior to approval of the development entitlements. An alternative to this procedure would be the use of existing Planned Unit Development (PUD) procedures.

Note 4: Application of appropriate zoning to implement the Land Use Plan should follow the nearest property line, section lines, or normal divisions thereof, wherever possible to facilitate legal descriptions.

Note 5: The Mixed Use Zoning Overlay may be applied to the following zoning district, C-2.

Attachment 5: A-5 – Description of Funding Sources

Attachment 5 - Description of Funding Sources

CalTrans Active Transportation Program (ATP):

On September 26, 2013, Governor Brown signed legislation creating the Active Transportation Program (ATP) in the Department of Transportation (Senate Bill 99, Chapter 359 and Assembly Bill 101, Chapter 354). The ATP consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program with a focus to make California a national leader in active transportation. The projects associated with the Completes Streets Program for the Community of Three Rivers will be suggested at the next available round of ATP funding.

Tulare County Measure R

On November 7, 2006, the voters of Tulare County approved Measure R, imposing a 1/2 cent sales tax for transportation within the incorporated and unincorporated area of Tulare County for the next 30 years. The transportation measure will generate slightly more than \$652 million over 30 years to Tulare County's transportation needs.

Local Projects (35% of Measure R Funding)

The Measure R Expenditure Plan allocated 35% of revenues to local programs. Each city and the county will receive funding based on a formula using population, maintained miles, and vehicles miles traveled. The funding will help cities and the county to meet scheduled maintenance needs and to rehabilitate their aging transportation systems.

Regional Projects (50% of Measure R Funding)

The Regional Projects Program comprises 50% of Measure R and includes specific funding for: interchange improvements, regional bridges, regional railroad crossings, regional signals, regional widening projects, and signal synchronization projects. These projects provide for the movement of goods, services, and people throughout Tulare County. Major highlights of this program include the funding of regional projects throughout the county.

Bike / Transit / Environmental Projects (14% of Measure R Funding)

The Goals of Measure R include air quality improvement efforts that will be addressed in the Measure R Expenditure Plan through the Transit/Bike/Environmental Program, which includes funding for transit, bike, and pedestrian environmental projects. The goal of this program is to expand or enhance public transit programs that address the transit dependent population, improve mobility through the construction of bike lanes, and have a demonstrated ability to get people out of their cars and improve air quality and the environment.

San Joaquin Valley Air Pollution Control District (SJAPCD) Bike Path Grants

The District has a grants program for the construction of bicycle infrastructure projects, including Class I (Bicycle Path Construction) or Class II (Bicycle Lane Striping) projects. These grants provide funding to assist with the development or expansion of a comprehensive bicycle-transportation network.

Strategic Growth Council Grants (SGC)

Affordable Housing - Sustainable Communities

The SGC will allocate 50% of its Cap and Trade funding toward disadvantaged communities and 50% for affordable housing. Projects will include: affordable housing that supports infill and compact development, transit capital and programs that support transit ridership, active transportation projects (infrastructure, and non-infrastructure), TOD projects, capital projects that implement complete streets, projects that reduce CHG emissions by reducing auto trips and VMT, acquisition of easements or other approaches to protect agricultural lands under threat of development, planning to support SCS (sustainable communities scope) implementation, including local plans, must be in or adopted SCS, subject to SGC guidelines.

CMAQ (TCAG Funds)

Congestion Mitigation Air Quality (CMAQ) funds are allocated through the Tulare County Association of Governments (TCAG). The CMAQ program funds transportation projects or programs that will contribute to improved air quality standards. Projects include: transportation activities, transportation control measures, public-private partnerships, alternative fuel programs, traffic flow improvements, transit, bicycle/pedestrian projects, rideshare activities, telecommuting, planning, experimental pilot projects, intermodal freight, and public outreach.

DOT: TIGER

TIGER is a multimodal, merit-based discretionary grant program that funds surface transportation capital projects, including transit and rail. Open to state, tribal, local agencies, and subdivisions.

CDBG (Business Assistance)

The CDBG Economic Development grant provides assistance to local businesses and low-income microenterprise owners to create or preserve jobs for low-income workers in rural communities. Funding includes planning and evaluation studies related to any activity eligible for these allocations, business lending, and public infrastructure.

Choice Neighborhoods

Choice Neighborhoods Planning Grants support the development of comprehensive neighborhood revitalization plans which focused on directing resources to address three core goals: Housing, People and Neighborhoods. To achieve these core goals, communities must develop and implement a comprehensive neighborhood revitalization strategy, or Transformation Plan. The Transformation Plan will become the guiding document for the revitalization of the public and/or assisted housing units while simultaneously directing the transformation of the surrounding neighborhood and positive outcomes for families. Choice Neighborhoods Implementation Grants support those communities that have undergone a comprehensive local planning process and are ready to implement their "Transformation Plan" to redevelop the neighborhood.

California Department of Water Resources Prop 50 (Contaminant Removal)

Funds are available to disadvantage communities for developing UV or Ozone systems to disinfect drinking water or to set up pilot/demonstration sites.

Drought Response Funding (SWRCB)

The Governor and Legislature have directed DWR to expedite the solicitation and award of \$200 million (of the \$472.5 million) in IRWM funding to support projects and programs that provide immediate regional drought preparedness, increase local water supply reliability and the delivery of safe drinking water, assist water suppliers and regions to implement conservation programs and measures that are not locally cost-effective, and/or reduce water quality conflicts or ecosystem conflicts created by the drought.

DWR: Water-Energy Grant Program

The 2014 Water-Energy grant supports the implementation of residential, commercial, and institutional water efficiency programs or projects that reduce Green House Gas emissions and also reduce water and energy use. Funding will go toward urban water management, groundwater management, and surface water diversion.

CDPH Clean Water SRF

The Safe Drinking Water State Revolving Fund (SDWSRF) provides funding to correct public water system deficiencies based upon a prioritized funding approach that addresses the systems' problems that pose public health risks, systems with needs for funding to comply with requirements of the Safe Drinking Water Act, and systems most in need on a per household affordability basis.

iBank (Infrastructure State Revolving Fund Program and Economic Development Bank)

iBank provides low cost, long term financing for local governments to fund a variety of public infrastructure projects. (Although this is not a grant, loan rates are largely determined by level of distress within a disadvantaged community).

AAttachment 6: -6 – Three Rivers Outreach

Attachment 6 - Three Rivers Meeting and Public Outreach

<u>Planning Meeting Summary</u> <u>Community Outreach 2014-2016</u>

Work was temporally suspended on the community plan in 2010 due to the concentrated effort of completing the general plan update in 2012 and subsequent implementation activities between 2012 and 2014.

The purpose of public workshops or community meetings is to engage in discussions with local residents and business owners regarding specific topics, e.g., Land Use Plan Update, Transportation and Circulation Plan Update, Flooding (FEMA/Zoning), Emergency Preparedness and Access, Development on Slopes, Development Standards, Water Quality and Quantity, Noise, CEQA Appendix G Considerations, and Oak Woodland Management. Public outreach efforts were held in several formats including regular monthy meetings and attendance at Three Rivers Town Hall Meetings. Formal community meetings were held at the Three Rivers Arts Building on North Fork Drive, and Three Rivers Veteran's Memorial Building, located at 43490 Sierra Drive in Three Rivers.

Publicity for meeting times and locations generally consisted of e-mail noticing, citizens distributing information through electronic media, and the establishment of a comprehensive website dedicated to all matters relating to the community plan update. The Three Rivers Community plan Update Website <u>http://www.tularecounty.ca.gov/rma/index.cfm/planning/three-rivers-community-plan-update/</u> contains all the monthly meeting agendas and attachments for the meetings, as well as a library of documents that were are placed on the web site for thorough consideration of this important community planning matter. Formal public meetings were held in the following dates listed.

Three Rivers Public Meetings

Over 75 hours of staff outreach was dedicated to public meetings between January 2014 and April 2016. A complete listing of public meetings is displayed below:

2014

- January 6, 2014 Three Rivers Town Hall
- February 4, 2014 –Community Meeting
- March 10, 2014 Community Meeting
- April 14, 2014 Community Meeting
- May 12, 2014 Community Meeting
- June 9, 2014 Community Meeting
- July 14, 2014 Community Meeting
- August 11, 2014 Community Meeting
- September 15, 2014 –Community Meeting
- October 13, 2014 Community Meeting
- November 10, 2014 Community Meeting
- December 8, 2014–Community Meeting

2015

- February 9, 2015 Community Meeting
- March 9, 2015 Community Meeting
- April 13, 2015 Community Meeting
- May 4, 2015 Three Rivers Town Hall
- May 11, 2015 Community Meeting
- June 8, 2015 Community Meeting
- July 13, 2015 Community Meeting
- August 10, 2015–Community Meeting
- September 14, 2015 –Community Meeting
- October 12, 2015 Community Meeting
- November 9, 2015 Community Meeting
- December 7, 2015 Three Rivers Town Hall
- December 14, 2015 Community Meeting

2016

- January 11, 2016 Community Meeting
- February 8, 2016 Community Meeting
- March 14, 2016–Community Meeting
- April 11, 2016 Community Meeting

Attachment 7: A-7 - Implementation Resources

Attachment A-7

IMPLEMENTATION RESOURCES

A. THREE RIVERS COMMUNITY PLAN DEVELOPMENT STANDARDS

1. THREE RIVERS COMMUNITY PLAN DEVELOPMENT STANDARDS

B. THREE RIVERS COMMUNITY PLAN DEVELOPMENT STANDARDS CHECKLIST

1. THREE RIVERS COMMUNITY PLAN DEVELOPMENT STANDARDS CHECKLIST

C. COMBINING ZONE REQUIREMENTS

SECTION 14.3: "M" SPECIAL MOBILEHOME ZONE
 SECTION 14.4 "SC" SCENIC CORRIDOR COMBINING ZONE
 SECTION 16.4: "SR", SITE REVIEW COMBINING ZONE
 SECTION 18.5 "PUD" PLANNED UNIT DEVELOPMENT
 SECTION 18.6 "PD" PLANNED DEVELOPMENT ZONE

D. SRA FIRE SAFE STANDARDS

1. SRA FIRE SAFE STANDARDS

E. FLOOD CONTROL REQUIREMENTS

1. DEFINITIONS OF FEMA FLOOD ZONE DESIGNATIONS AND CONSTRUCTION REQUIREMENTS 2. SECTION 14.7 "F-1" PRIMARY FLOOD PLAIN ZONE

3. SECTION 14.8 "F-2" SECONDARY FLOOD PLAIN COMBINING ZONE 4. TULARE COUNTY FLOOD DAMAGE PREVENTION ORDINANCE

F. TULARE COUNTY IMPROVEMENT STANDARDS

1. TULARE COUNTY IMPROVEMENT STANDARDS

G. TULARE COUNTY AGRICULTURAL CONSERVATION EASEMENT PROGRAM

1. TULARE COUNTY AGRICULTURAL CONSERVATION EASEMENT PROGRAM

IMPLEMENTATION RESOURCES

A. THREE RIVERS COMMUNITY PLAN DEVELOPMENT STANDARDS

1. THREE RIVERS COMMUNITY PLAN DEVELOPMENT STANDARDS

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Appendix 1 A. 1

Three Rivers Community Plan Development Standards

Unless it can be demonstrated that an alternative equivalent standard will result in attainment of a superior environment, when preparing Tentative Subdivision Maps, Parcel Maps, Residential, Commercial or Industrial Development on individual parcels or sites, Specific Plans, Master Development Plans, Area Development Plans and standards therein for areas within the Three Rivers Urban Development Boundary, at a minimum, the following development standards shall apply as determined by the Planning Director.

In the case of alternative Guidelines or guidelines, a report shall be provided with an assessment of alternatives and options that are acceptable to the Chief Building Official, County Engineer, Fire Marshall, Environmental Health Official or Planning Director as appropriate. Alternative equivalent standards will be reviewed or recommended and a final determination of acceptance will be at the discretion of the Planning Director, Project Review Committee, Planning Commission, or Board of Supervisors commensurate with the scale and attributes of the proposed project.

The following standards and conditions, as well as all applicable policies, guidelines, and conditions from the various agencies, shall be met by new development.

Residential Densities:

1. The residential density of a new development shall be consistent with the Three Rivers Community Plan Land Use Designations and Zoning Districts, but may be initially limited by the amount of water available for domestic and fire fighting purposes based on water demand specifications provided by the Tulare County Health Department and the County Fire Department. A more specific residential density shall be determined in the project review process. The final allowable density shall correspond to how well the proposed project meets the goals and policies of the Three Rivers Community Plan.

2. As a guideline, the maximum density for land with slopes between 15 percent and 29 percent shall be one (1) residential unit per two and one half (2 $\frac{1}{2}$) acres unless it can be demonstrated that site specific lot design and innovative waste water disposal can overcome the inherent problems of steep slopes and thin soils.

3. Development shall generally be precluded on slopes 30 percent or greater, unless the applicant can sufficiently mitigate the inherent problems associated with developing on steep slopes.

Open Space Requirements:

4. Those portions of the site which are adjacent to a watercourse area, contain undeveloped slopes 30 percent or greater or encompass environmental, archaeological, or historically sensitive areas shall remain in common open space.

Land Alteration Grading:

5. All graded slopes are to be contoured and blended to harmonize with the natural slopes on and around the site.

6. The maximum steepness of exposed cuts and fills shall meet the Guidelines established in the Improvement Guidelines of Tulare County.

7. Graded slopes consisting primarily of soil shall be planted with vegetation to stabilize slopes and

prevent erosion. Native plant materials or similar climactically adapted vegetation shall be used wherever possible.

8. Slope stabilization and erosion prevention shall be completed before the winter months after grading has been completed.

9. Lots shall be designed to fit the natural landscape in a manner that does not require extensive grading.

10. Where two cut or fill slopes intersect, the intersection shall be horizontally rounded and blended. (This standard does not pertain to slopes composed of rock.)

11. Where a cut or fill slope intersects the natural grade, the intersection shall be horizontally rounded and blended. (This standard does not pertain to slopes composed of rock.)

12. Fills shall not encroach on natural watercourses or constructed channels. Excavated materials shall not be stored in watercourses.

13. Grading and excavation shall be phased with the development.

Erosion Control:

14. Sediment shall be retained on site by measures such as sediment basins and sediment traps as outlined in the Drainage Plan.

16. Temporary mulching, seeding, or other suitable stabilization measures shall be used to protect exposed critical areas after the completion of grading.

17. Exposed slopes shall be planted with native plant materials or similar climactically adapted vegetation that protects exposed slopes from erosion.

Drainage:

18. For projects located in areas containing steep slopes or tightly packed soils, the Drainage Plan shall be designed to detain as much water as possible on site to prevent potential sedimentation and flooding.

Vegetation Removal:

20. Removal or grading around native trees (with a trunk of 6" or larger in diameter or 3' above ground surface) which may disturb the root system shall not be allowed during the construction process unless the Planning Commission deems it necessary because of road alignments or infrastructure improvements. Any trees to be removed shall be indicated on the submitted site plan.

21. Removal of native trees in areas restricted to open space shall not be allowed unless the health, safety or welfare of residents associated with the development is endangered. Any trees proposed for removal must be indicated on the submitted site plan with accompanying information stating why the tree must be removed.

Land Improvements: Building Guidelines

22. The maximum building height measured at foundation ground level shall be 35 feet.

23. Properties located along a scenic highway or road shall have a minimum property width of 150 feet

with side yard setbacks of 10 percent of the width of the property.

24. In newly developing areas, those properties that are located along a scenic highway shall have a minimum front yard building setback of 100 feet from the right-of-way line while scenic roads shall have a setback of 100 feet from the centerline of the road.

25. The minimum lot width and front yard setback requirement for property along a scenic highway or road and inside the Three Rivers Urban Development Boundary may be waived by the Project Review Committee, Planning Commission, or Board of Supervisors if it is deemed inappropriate because of existing development patterns or insufficient lot depth due to slope or limitations due to the proximity of Primary or Secondary flood zones.

26. Building improvements (homes, fences, etc.) and septic tank/leach line systems or other activities associated with construction (grading) shall not be permitted within 50 feet of intermittent watercourses or 100 feet of perennial watercourses.

Land Improvements: Well Systems

27. Each residential or planned unit development in the Three Rivers Urban Development Boundary shall join or form an association or community organization, private or mutual water company, or establish an equivalent financing/maintenance mechanism acceptable to the County for purpose of monitoring and maintaining the water system. This section shall not apply to newly created parcels that are 10 acres or larger. The Planning Commission shall have the discretion to recommend a waiver of a common water system based on circumstances such as size or number of lots, topography, existing water systems, or other overriding conditions.

28. Each well system shall meet the requirements of, and have a permit with, the Tulare County Health Department.

Land Improvements: Community Waste Water System

29. Each residential or planned unit development which uses a waste water disposal system other than an individual system shall join or form an association or community organization, or establish an equivalent financing/maintenance mechanism acceptable to the County for purposes of monitoring and servicing the waste water disposal system.

30. The waste water disposal system shall be designed to meet the requirements of the Tulare County Health Department, Three Rivers Community Services District, and the Regional Water Quality Control Board.

31. Application for waste discharge shall be made with a permit received from the Water Quality Control Board.

Land Improvements: Streets

32. All streets, walkways, and bike path improvements shall conform to the Tulare County Improvement Guidelines document unless otherwise modified by the Guidelines contained in this document. Each residential or planned unit development shall provide for a financing and maintenance mechanism acceptable to the County for street maintenance and replacement.

33. The following table will serve as a guide for minimum street Guidelines for public streets permitted within a residential subdivision or planned unit development. Street widths or right-of-way Guidelines are subject to modification during the site plan review process based on factors such as topography, soils, location of watercourses, or development density. One way streets shall be considered for private

maintenance only.

34. Privately maintained streets may be developed to lesser street and right-of-way Guidelines depending upon the location and type of development. In these cases, minimum Guidelines will be determined by the Planning Commission.

Type of Street	Street Characteristics	Pavement Width*	Unp	Right- Of-Way Width				
			Flat Width (0-5% slopes)	Rolling (6-20%)	Mountainous (20% and above)	Desirable		
One Way Street	Projected Average Daily Traffic (ADT) not to exceed 400; on-street parking prohibited; guest parking required	16'	8'	3'	2.5'	50'		
One Way Street	Projected ADT not to exceed 400; on- street parking prohibited.	26'	8'	3'	2.5'	60'		
Two-Way Access Road (adjacent development prohibited)	Projected ADT not to exceed 400; on- street parking prohibited.	28'	8'	3'	2.5'	60'		
	ADT greater than 400	28'	8'	3'	2.5'			
Two-Way Residential Street	Projected ADT 400 or less, on- street parking prohibited; guest parking required.	28'	8'	4'	3'	60'		
Гwo-Way residential street and minor roads	Projected ADT not to exceed 1,000; on-street parking permitted.	32'	A	60'				
*Pavement width may be increased by the Project Review Committee when on-site parking is likely to occur based upon the characteristics of the development (lot size or configuration, the existence of natural or man-made amenities adjacent to the roadway which would serve as an attractive force etc.). In addition, increased pavement width may be required when curb and gutter or asphalt concrete dikes are utilized.

**Reduced right-of-way widths may be considered acceptable by the Project Review Committee in cases where utilities are underground, when small cut and fill slopes are required, and other similar circumstances where the full right-of-way width is not deemed necessary.

Land Improvements: Parking

- 35. For residential uses located in areas where on-street parking is permitted, offstreet parking shall be provided on the basis of two (2) spaces per dwelling unit.
- 36. For residential uses located in areas where on-street parking is prohibited, offstreet guest parking shall be provided on the basis of one (1) space per dwelling unit (driveways not included), in addition to the two (2) spaces per dwelling unit.
- 37. Off-street parking and loading facilities for commercial, industrial and other types of uses shall be determined by the Planning Commission.

Scenic Highway Corridor

- 38. No new off-premises outdoor advertising signs shall be allowed in scenic corridors.
- All new utility improvement shall be located underground if the property lies in a scenic corridor.
- 40. Grading and cut and fill operations shall be kept to a minimum in scenic corridors. All exposed slopes are to be planted with native materials.
- 41. Existing vegetation and unique land forms (rock outcrops, etc.) shall be retained and protected from any unnecessary grading or other development related activities.
- 42. Individual businesses in scenic corridors with on-site signs pertaining to the identification of the permitted use shall be flat to the primary building façade.
- 43. In scenic corridors, on premise, free-standing signs identifying the use of the property shall require discretionary approval by the Planning Commission based on design, setbacks, size, architectural compatibility, traffic safety, and visibility.

Fire Protection

- 44. Each new residential subdivision or planned unit development occurring in a Three Rivers Urban Development Boundary shall be reviewed by the County Fire Warden or his/her agent to insure fire protection measures and Guidelines set forth in the Tulare County Subdivision Guidelines are met.
- 45. New development within the Three Rivers UDB should be located within a 15-minute attack time of a County fire station.
- 46. Water for fire protection shall be available in sufficient quantity and pressure to serve the project in question.
- 47. Fire retardant roofing materials shall be used in new foothill developments.
- 48. Fire resistive construction elements shall be incorporated into stilt or cantilevered construction buildings.
- 49. Street house numbers shall be clearly visible from the main traveled roadway.

- 50. Sufficient clearance of flammable vegetation around buildings shall be maintained.
- Fuel breaks and greenbelts shall be used to protect both developing areas and adjacent wildlands.
- 52. Where possible, take maximum advantage of planned or existing parks, golf courses, tennis courts, or other recreational areas to provide for a buffer zone between development and the wildland.
- 53. Road systems, either public or private, shall provide for a safe evacuation of residents and adequate access for fire and other emergency equipment.
- 54. Bridges shall have a minimum load limit of 40,000 lbs. (20 tons).
- 55. A fire protection plan shall be submitted on all new developments.

Development on Slopes and Steep Slopes Design Guidelines

In designing a development proposal for a site containing slopes or steep hillsides, the following guidelines should be incorporated into the project design as feasible. Projects proposing to encroach into steep hillsides should demonstrate that all applicable design guidelines have been incorporated into the site plan and have resulted in the most compatible design as feasible consistent with the natural features on and adjacent to the site. Projects will be evaluated on a case-by-case basis to determine that the development Guidelines and guidelines utilized create the most compatible development as feasible consistent with the natural features on and adjacent to the site. In the case of alternative Guidelines or guidelines, a report shall be provided with an assessment of alternatives and options that are acceptable to the Chief Building Official, County Engineer, Fire Marshall, Environmental Health Official or Planning Director as applicable. Alternative equivalent Guidelines will be reviewed or recommended and a final determination of acceptance will be at the discretion of the Planning Director, Project Review Committee, Planning Commission, or Board of Supervisors commensurate with the scale and attributes of the proposed project.



Diagram 1 FILL SLOPES BLENDED WITH NATURAL STEEP HILLSIDE

Diagram 2 LANDFORM GRADED SLOPES



Diagram 3 LONG DRIVEWAYS



Diagram 4 STRUCTURES THAT FIT NATURAL CONTOURS



Diagram 5 STEEP HILLSIDE STRUCTURE/FOUNDATION TYPES



Diagram 6 PARKING ON STEEP HILLSIDE SITES







Diagram 8 LOTS THAT FOLLOW HILLSIDE CONTOURS



Diagram 9 SPLIT-LEVEL STREET



Diagram 10 USE OF RETAINING WALLS IN HILLSIDE DEVELOPMENTS



Diagram 11 BLENDED MANUFACTURED SLOPES



Diagram 12 VARIED LOT SIZE AND SHAPE



Diagram 13 DEVELOPMENT LOCATED ON LEAST STEEP AREAS



Diagram 14 BUILDING LOCATED NEAR RIDGELINE



Diagram 15 SINGLE LOADED STREETS



Diagram 16 STEPPED PADS



Diagram 16 PARKING FOR HILLSIDE STRUCTURES



Diagram 16 PARKING LOTS NEAR STEEP HILLSIDES



Diagram 17 VISUAL RESOURCES DESIGN DOWNSLOPE



Diagram 18 VISUAL RESOURCES DESIGN UPSLOPE



Dark Sky Strategy Guidelines

OBJECTIVES:

The purpose of the dark sky Guidelines is to protect and preserve the quality of life, health, and safety of the citizens of the Community of Three Rivers by providing adequate lighting for safety purposes, enacting a street light plan, and installing outdoor lighting that prevents and reduces unnecessary light pollution as feasible and appropriate.

DEFINITIONS:

<u>Footcandle</u>: The Unit of measure expressing the quantity of light received on a surface. One footcandle is the luminance produced by a candle on a surface one foot square from a distance of one foot.

<u>Fully Shielded</u>: A lighting fixture constructed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal plane.

<u>Light Pollution</u>: Any and all nuisances caused by adverse effect of manmade light, including but not limited to glare, light trespass, sky glow, visual clutter, and wasted energy due to excessive or unnecessary lighting; or artificial light that unnecessarily diminishes the ability to view the night sky or is disruptive to flora and fauna.

<u>Light Trespass</u>: Light projected across property lines or into the public right-of-way when it is not required or permitted to do so.

<u>Lumen</u>: A unit used to measure the amount of light that is produced by a light source. The lumen qualifies the amount of light energy produced by a lamp at the lamp, not by the energy input, which is indicated by the wattage. One foot-candle means one lumen per square foot of area illuminated.

<u>Unshielded Fixture</u>: A fixture which, as designed or installed, emits all or part of the light above the lowest part of the light source.

GUIDELINES FOR OUTDOOR LIGHTING:

The purpose of these lighting Guidelines is to implement Policy 1.3.6 of the Three Rivers Community Plan is to minimize glare and light trespass by limiting outdoor lighting that is misdirected, excessive, or unnecessary. The density of outdoor lighting, whether, shielded or unshielded, shall not exceed in aggregate 50,000 lumens per acre in all zones as feasible and appropriate.

a) Highway, neighborhood, street, and property lighting shall conform as feasible and appropriate to the dark sky Guidelines of the Community of Three Rivers as set forth below.

b) All outdoor lighting shall be shielded so that direct light from the fixture does not trespass on neighboring property. Figure A shows examples of fixtures that are generally Unacceptable or Acceptable in meeting this section. A practical way to determine if a light fixture will conform to this provision is to not allow light to escape above a horizontal plane running through the lowest point of the luminous elements: the lamp or tube, any reflective surface or lens cover (clear or prismatic) must not be visible when viewed from above or the side.

c) Street lighting and associated underground street lighting supply circuits shall be installed. The minimum requirement shall be .4 foot candles on the street. All street lights shall be fully shielded such that they produce no light higher than the horizontal plane of the light source. The street lighting plan specifying the number and approximate location of street lights must be included in the final site plan. The style of fixture shall be the standard, Community-approved style for the street and parking lot lights within the Community.

d) The installation of any mercury vapor fixture or lamp for use as outdoor lighting is prohibited. Only high pressure sodium (HIPS), low pressure sodium (LPS), LED or incandescent fixtures shall be permitted in commercial and multifamily residential parking areas. In addition, the level of illumination shall not exceed the maximum lumens as stated in this Guidelines.

e) Lighting shall be placed as to prevent the light rays or illumination there from being cast beyond property lines.

f) Height of the light pole is set to provide the most efficient lighting for the area with safety of the Community as priority, and the photometrics (cone of light) set by limiting the

height of the light source. The maximum height of the poles from the top to the ground will not exceed 30 feet.

g) All metal halide and fluorescent fixtures shall be filtered with glass, acrylic or translucent enclosures.

h) Incandescent Lights 100 watts and less per fixture, fluorescent lights 40 watts and less per fixture, gas fired fixtures, and lights used for holiday decorations are exempt from the requirements of this Guidelines.

i) ERM-1.15 Minimize Lighting Impacts

The County shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than one foot candle above ambient conditions.

FIGURE A: EXAMPLES OF SHIELDED LIGHTING FIXTURES: NEXT PAGE



CONCEPT LIGHTING ZONES:

LZ0: No ambient lighting:

Areas where the natural environment will be seriously and adversely affected by lighting. Impacts include disturbing the biological cycles of flora and fauna and/or detracting from human enjoyment and appreciation of the natural environment. Human activity is subordinate in importance to nature. The vision of human residents and users is adapted to the darkness, and they expect to see little or no lighting. When not needed, lighting should be extinguished.

LZ1: Low ambient lighting:

Areas where lighting might adversely affect flora and fauna or disturb the character of the area. The vision of human residents and users is adapted to low light levels. Lighting may be used for safety and convenience but it is not necessarily uniform or continuous. After curfew, most lighting should be extinguished or reduced as activity levels decline.

LZ2: Moderate ambient lighting:

Areas of human activity where the vision of human residents and users is adapted to moderate light levels. Lighting may typically be used for safety and convenience but it is not necessarily uniform or continuous. After curfew, lighting may be extinguished or reduced as activity levels decline.

LZ3: Moderately high ambient lighting:

Areas of human activity where the vision of human residents and users is adapted to moderately high light levels. Lighting is generally desired for safety, security and/or convenience and it is often uniform and/or continuous. After curfew, lighting may be extinguished or reduced in most areas as activity levels decline.

LZ4: High ambient lighting:

Areas of human activity where the vision of human residents and users is adapted to high light levels. Lighting is generally considered necessary for safety, security and/or convenience and it is mostly uniform and/or continuous. After curfew, lighting may be extinguished or reduced in some areas as activity levels decline.

TWO METHODS - PRESCRIPTIVE AND PERFORMANCE:

Methods to be determined by the Planning Director, Project Review Committee, Planning Commission, or Board of Supervisors as feasible and appropriate.

The *prescriptive method* contains precise and easily verifiable requirements for luminaire light output and fixture design that limit glare, uplight, light trespass and the amount of light that can be used.

The *performance method* allows greater flexibility and creativity in meeting the intent of the Guidelines. Note that both the prescriptive and the performance

method limit the *amount* of light that can be used, but do not control *how* the lighting is to be used.

Prescriptive Method:

Most outdoor lighting projects that do not involve a lighting professional will use the **prescriptive method**, because it is simple and does not require engineering expertise. For the prescriptive method, the initial luminaire lumen allowances defined in will provide basic lighting (parking lot and lighting at doors and/or sensitive security areas) that is consistent with the selected lighting zone. The prescriptive method is intended to provide a safe lighting environment while reducing sky glow and other adverse offsite impacts. The prescriptive method of the MLO restricts uplighting, including upward light emitted by decorative luminaires. A jurisdiction may choose to preserve some types of lighting, including lighting of monuments or historic structures. In this case, the adopting jurisdiction should exempt or otherwise regulate these types of lighting carefully so that it does not inadvertently allow glaring or offensive lighting systems. Where, a traditional method of defining light trespass is to identify a maximum light level at or near the property line. However, this method does not address offensive light that is not directed toward the ground, or the intensity of glaring light shining into adjacent windows.

Performance Method:

The **performance method** used when any lighting designer plans to aim or direct any light fixture upward (above 90 degrees). An engineer or lighting professional generally will be required to design within the performance method. An adopting jurisdiction may also wish to hire an engineer or lighting professional to review and approve projects using this method and/or incorporate review of the performance method into special review procedures. The Performance Method is also best for projects where higher lighting levels are required compared to typical area lighting. An example might be a car sales lot where more light might be required on the new cars than would be needed for a standard parking lot. Another example is a gas station canopy requiring more light than a building entrance canopy. The first step in the performance method regulates over-lighting by establishing the Total Initial Site Lumens that are allowed. The second step in the Performance Method is to determine if the proposed luminaires are producing off site impacts such as glare, sky glow and light trespass.

Designated Scenic Routes and Highways Guidelines (SR 198)

SL-2.1 Designated Scenic Routes and Highways

The County shall protect views of natural and working landscapes along the County's highways and roads by maintaining a designated system of County scenic routes and State scenic highways by:

- Requiring development within existing eligible State scenic highway corridors to adhere to land use and design standards and guidelines required by the State Scenic Highway Program,
- Supporting and encouraging citizen initiatives working for formal designation of eligible segments of State Highway 198 and State Highway 190 as State scenic highways,
- Formalizing a system of County scenic routes throughout the County (see Tulare County

General Plan Figure 7-1), and

• Requiring development located within County scenic route corridors to adhere to local design guidelines and standards.

CALTRANS SCENIC HIGHWAY GUIDELINES: EXAMPLES OF VISUAL INTRUSIONS ALONG SCENIC CORRIDORS

The following examples do not include all visual intrusions possible within the corridor. These examples illustrate many of the typical built elements, and should be used as a guide when developing the mapping for the Scenic Highway Proposal. Where more than one example is listed, only one example needs to occur for an intrusion to be applicable. The District Scenic Highway Coordinator may be consulted for assistance in defining specific levels of visual intrusions.

LEVEL OF INTRUSION

Minor

Moderate

Major

BUILDINGS: Residential Development, Commercial Development, Industrial Development Minor - Widely dispersed buildings. Natural landscape dominates. Wide setbacks and buildings screened from roadway. Forms, exterior colors and materials are compatible with landscape. Buildings have cultural or historical significance.

Moderate - Increased numbers of buildings, not well integrated into the landscape. Smaller setbacks and lack of roadway screening. Buildings do not dominate the landscape or obstruct scenic view.

Major - Dense and continuous development. Highly reflective surfaces. Buildings poorly maintained. Visible blight. Development along ridgelines. Buildings dominate the landscape or obstruct scenic view.

UNSIGHTLY LAND USES: Dumps, Quarries, Concrete Plants, Tank Farms, Auto Dismantling

Minor - Screened from view so that most of facility is not visible from the highway.

Moderate - Not screened and visible but programmed/funded for removal and site restoration. Land use is visible but does not dominate the landscape or obstruct scenic view.

Major - Not screened and visible by motorists. Will not be removed or modified. Land use dominates the landscape or obstructs scenic view.

COMMERCIAL RETAIL DEVELOPMENT

Moderate - Neat and well landscaped. Single story. Generally blends with surroundings. Development is visible but does not dominate the landscape or obstruct scenic view.

Major - Not harmonious with surroundings. Poorly maintained or vacant. Blighted. Development dominates the landscape or obstructs scenic view.

PARKING LOTS

Minor - Screened from view so that most of the vehicles and pavement are not visible from the

highway.

Moderate - Neat and well landscaped. Generally blends with surroundings. Pavement and/or vehicles visible but do not dominate the landscape or degrade scenic view. Major - Not screened or landscaped. Pavement and/or vehicles dominate the landscape or degrade scenic view.

OFF-SITE ADVERTISING STRUCTURES

Major - Billboards degrade or obstruct scenic view. NOISE BARRIERS Moderate - Noise barriers are well landscaped and complement the natural landscape. Noise barriers do not degrade or obstruct scenic view. Major - Noise barriers degrade or obstruct scenic view.

NOISE BARRIERS

Moderate - Noise barriers are well landscaped and complement the natural landscape. Noise barriers do not degrade or obstruct scenic view.

Major - Noise barriers degrade or obstruct scenic view.

POWER LINES AND COMMUNICATION FACILITIES

Minor - Not easily visible from road.

Moderate - Visible, but do not dominate scenic view.

Major - Towers, poles or lines dominate view. Scenic view is degraded.

AGRICULTURE: Structures, Equipment, Crops

Minor - Generally blends in with scenic view. Is indicative of regional culture.

Moderate - Not compatible with the natural landscape. Scale and appearance of structures and equipment visually competes with natural landscape.

Major - Scale and appearance of structures and equipment are incompatible with and dominates natural landscape. Structures, equipment or crops degrade or obstruct scenic view.

B. THREE RIVERS COMMUNITY PLAN DEVELOPMENT STANDARDS CHECKLIST

1. THREE RIVERS COMMUNITY PLAN DEVELOPMENT STANDARDS CHECKLIST

THREE RIVERS DEVELOPMENT STANDARDS CHECKLIST

Project No. _____ Date. _____ By. _____

			Conformance		Condition	1
			Yes	No	of Approval	N/A
1.	RESIDEN	TIAL DENSITY				
	1. As a gui slopes one (1) acres u lot desi overcon thin soi	ideline, the maximum density for land with between 15 percent and 29 percent shall be residential unit per two and one half (2 ½) hless it can be demonstrated that site-specific gn and innovative waste water disposal can me the inherent problems of steep slopes and ls.				
	 Develop 30 per sufficie associa 	oment shall generally be precluded on slopes cent or greater, unless the applicant can ently mitigate the inherent problems ted with developing on steep slopes.				
11.	OPEN SPACE REQUIREMENTS				1	1.1
	 Those p waterco percent archaeo remain 	ortions of the site which are adjacent to a purse area, contain undeveloped slopes 30 or greater or encompass environmental, plogical, or historically sensitive areas shall in common open space.				
III.	LAND ALTERATION			1		
<u></u>	1. Gradin	g		A		
	a. All blei and	graded slopes are to be contoured and aded to harmonize with the natural slopes on around the site.				
	b. The fills Imp	e maximum steepness of exposed cuts and s shall meet the standards established in the provement Standards of Tulare County.				
		Fill Slope: 1-1/2:1				
		Cut Slope: 1:1				
	c. Gra be and sim be u	ded slopes consisting primarily of soil shall planted with vegetation to stabilize slopes prevent erosion. Native plant materials or ilar climactically adapted vegetation shall used wherever possible.				
	d. Sloj be grad	pe stabilization and erosion prevention shall completed before the winter months after ding has been completed.				

e	. Lots shall be designed to fit the natural landscape in a manner that does not require extensive grading.	
f.	Where two cut or fill slopes intersect, the intersection shall be horizontally rounded and blended. (This standard does not pertain to slopes composed of rock.)	
g.	Where a cut or fill slope intersects the natural grade, the intersection shall be horizontally rounded and blended. (This standard does not pertain to slopes composed of rock.)	
h	. Fills shall not encroach on natural watercourses or constructed channels. Excavated materials shall not be stored in watercourses.	
i.	Grading and excavation shall be phased with the development.	
j.	Consistency with Development on Slopes and Steep Slopes Design Guidelines	
2. E	rosion Controls	C
a.	Sediment shall be retained on site by measures such as sediment basins and sediment traps as outlined in the Drainage Plan.	
b.	Temporary mulching, seeding, or other suitable stabilization measures shall be used to protect exposed critical areas after the completion of grading.	
c.	Exposed slopes shall be planted with native plant materials or similar climactically adapted vegetation that protects exposed slopes from erosion	
3. D	rainage	
a.	For projects located in areas containing steep slopes or tightly packed soils, the Drainage Plan shall be designed to detain as much water as possible on site to prevent potential sedimentation and flooding.	
4. V	egetation Removal	
a.	Removal or grading around native trees (with a trunk of 6" or larger in diameter or 3' above ground surface) which may disturb the root system shall not be allowed during the construction process unless the Planning	

	because of road alignments or infrastructure improvements. Any trees to be removed shall be indicated on the submitted site plan.	
t	b. Removal of native trees in areas restricted to open space shall not be allowed unless the health, safety or welfare of residents associated with the development is endangered. Any trees proposed for removal must be indicated on the submitted site plan with accompanying information stating why the tree must be removed.	
IV. LA	AND IMPROVEMENTS	
1. E	Building Standards	
a	a. The maximum building height measured at foundation ground level shall be 35 feet.	
b	b. The minimum lot width and front yard setback requirement for property along a scenic highway or road and inside the Three Rivers Urban Development Boundary may be waived by the Planning Commission or PCR if it is deemed inappropriate because of existing development patterns.	
с	Front yard: Not less than 25% of lot depth or 25 feet, whichever is less.	
d	 Side yard: Interior lots – Not less than 10% of lot width; 3 feet minimum; 5 feet maximum. Corner lots – same as interior lots. Reverse corner lots – same as except that side yard on street side of corner lot of not less than 12-1/2 feet; see Section 18:7(E)(4). 	
e.	. Rear Yard: Minimum 5 feet	
f.	Setbacks for watercourses: No building improvements whatsoever within 50 feet of banks of intermittent watercourse and 100 feet of banks of perennial watercourse.	
g.	. Consistency with Dark Sky Strategy Guidelines.	
h.	. Consistency with the Tulare County General Plan and Three Rivers Noise Policies.	
i,	Consistency with Designated Scenic Routes and Highways Guidelines (SR 198) SL-2.1 Designated Scenic Routes and Highways.	

j.	Compatibility with Three Rivers Community Plan Goal 1 Compatible Development Policies.	
2.	Water Systems	
	c. Each residential or planned unit development in the development corridor shall join or form an association or community organization, private or mutual water company, or establish an equivalent financing/maintenance mechanism acceptable to the County for purpose of monitoring and maintaining the water system. This section shall not apply to newly created parcels that are 10 acres or larger. The Planning Commission shall have the discretion to recommend a waiver of a common water system based on circumstances such as size or number of lots, topography, existing water systems, or other overriding conditions.	
	d. Each well system shall meet the requirements of, and have a permit with, the Tulare County Health Department.	
3.	Community Waste Water System	
	a. Each residential or planned unit development which uses a waste water disposal system other than an individual system shall join or form an association or community organization, or establish an equivalent financing/maintenance mechanism acceptable to the County for purposes of monitoring and servicing the waste water disposal system.	
	 b. The waste water disposal system shall be designed to meet the requirements of the Tulare County Health Department and the Regional Water Quality Control Board. 	
	c. Application for waste discharge shall be made with a permit received from the Water Quality Control Board.	
4.	Streets	
	a. All streets, walkways, and bike path improvements shall conform to the Tulare County Improvement Standards document unless otherwise modified by the standards contained in this document. Each residential or planned unit development shall provide for a financing and maintenance mechanism	

	acceptable to the County for street maintenance and replacement.	
	 b. The following table will serve as a guide for minimum street standards for public streets permitted within a residential subdivision or planned unit development. Street widths or right-of-way standards are subject to modification during the site plan review process based on factors such as topography, soils, location of watercourses, or development density. One way streets shall be considered for private maintenance only. 	
	c. Privately maintained streets may be developed to lesser street and right-of-way standards depending upon the location and type of development. In these cases, minimum standards will be determined by the Planning Commission or PRC.	
5.	Parking	
	a. For residential uses located in areas where on- street parking is permitted, off-street parking shall be provided on the basis of two (2) spaces per dwelling unit.	
	b. For residential uses located in areas where on- street parking is prohibited, off-street guest parking shall be provided on the basis of one (1) space per dwelling unit (driveways not included), in addition to the two (2) spaces per dwelling unit.	
	c. Parking spaces shall be Tulare County Improvement Standards.	
	d. Off-street parking and loading facilities for commercial, industrial and other types of uses shall be determined by the Planning Commission.	
6.	Scenic Highway Corridor	
	 No new off-premises outdoor advertising signs shall be allowed in scenic corridors. 	
	b. All new utility improvement shall be located underground if the property lies in a scenic corridor.	

c.	Grading and cut and fill operations shall be kept to a minimum in scenic corridors. All exposed slopes are to be planted with native materials.		
d.	Existing vegetation and unique land forms (rock outcrops, etc.) shall be retained and protected from any unnecessary grading or other development related activities.		
e.	Individual businesses in scenic corridors with on-site signs pertaining to the identification of the permitted use shall be flat to the primary building façade.		
f.	In scenic corridors, on premise, free-standing signs identifying the use of the property shall require discretionary approval by the Planning Commission or PRC based on design, setbacks, size, architectural compatibility, traffic safety, and visibility.		
7. Fi	re Protection		
a.	Each new residential subdivision or planned unit development occurring in a development corridor shall be reviewed by the County Fire Warden or his/her agent to insure fire protection measures and standards set forth in the Tulare County Subdivision Ordinance are met.		
b.	Water for fire protection shall be available in sufficient quantity and pressure to serve the project in question.		
c.	Fire retardant roofing materials shall be used in new foothill developments.		
d.	Fire resistive construction elements shall be incorporated into stilt or cantilevered construction buildings.		
e.	Street house numbers shall be clearly visible from the main traveled roadway.		
f.	Sufficient clearance of flammable vegetation around buildings shall be maintained.		
g.	Fuel breaks and greenbelts shall be used to protect both developing areas and adjacent wildlands.		
h.	Where possible, take maximum advantage of planned or existing parks, golf courses, tennis courts or other recreational areas to provide for		

	a buffer zone between development and the wildland.		
i.	Road systems, either public or private, shall provide for a safe evacuation of residents and adequate access for fire and other emergency equipment.		
j.	Bridges shall have a minimum load limit of 40,000 lbs. (20 tons).		
k.	A fire protection plan shall be submitted on all new developments.		

C. COMBINING ZONE REQUIREMENTS

1. SECTION 14.3: "M" SPECIAL MOBILEHOME ZONE

SECTION 14.3: "M" SPECIAL MOBILEHOME ZONE

(Added by Ord. No. 1149, effective 7-27-69)

PURPOSE A.

The purpose of this special zone is to provide for mobilehome use in communities and rural areas where, under certain conditions, a mixture of conventional housing and individual mobilehomes for residential use is desirable. (Added by Ord. No. 2453, effective 12-24-81; amended by Ord. No. 2873, effective 4-20-89.)

ZONE REGULATIONS B.

This special zone may be applied to property only in conjunction with the following zones: "R-A" Rural Residential Zone, "R-1" Single Family Residential Zone, "PD-F" Planned Development - Foothill Zone, and "MR" Mountain Residential Zone. When this special zone is applied to property in conjunction with one of the aforementioned zones, the regulations set forth in this Section shall be applicable to the zone. (Added by Ord. No. 1149, effective 7-11-67; amended by Ord. No. 2299, effective 1-17-80; amended by Ord. No. 2417, effective 5-28-81; amended by Ord. No. 2956, effective 4-11-91.)

USEC.

The following uses shall be permitted in the M, Special Mobilehome Zone in addition to the uses set forth in the zone which is combined with the M Zone:

- Mobilehomes for use for residential purposes only on any individual lot or parcel, subject to the limitations set forth in Subsection D of this Section.
- A mobilehome park is not an allowed use in this zone; provided, however, that this subsection shall not be deemed to prohibit the granting of Special Use Permits for mobilehome parks in those zones where such Special Use Permits are authorized by other provisions of this Ordinance. (Amended by Ord. No. 2453, effective 12-24-81.)

LOT AND YARD AREAS D.

- A mobilehome shall be placed in such a manner as to comply with all yard requirements of the zone in which it is located; provided, however, that the rear yard for a mobilehome need not exceed five (5) feet. (Amended by Ord. No. 2453, effective 12-24-81.)
- 2. A mobilehome shall not be located closer than ten (10) feet to any building, other than an accessory building, and shall not be located closer than five (5) feet to any property line, public street or alley
- 3. The minimum lot area for a lot or parcel which is subdivided exclusively for mobilehome use and is restricted to such use under the provisions of this ordinance shall be four thousand (4,000) square feet in all zones except where subject to the Special Combining Zone (Section 14.5 of this Ordinance), the Planned Development Zone (Section 18.6 of this Ordinance), or any more restrictive lot size requirements under the County

Subdivision Ordinance (Tulare County Ordinance Code Section 7-01-1000 et. seq.), in which case any lot or parcel shall be large enough to satisfy those requirements. Any lot or parcel created pursuant to this paragraph may be occupied by no more than one (1) mobilehome and no other permanent dwellings shall be permitted. (Added by Ord. No. 2453, effective 12-24-81.

- 4. If a lot has less area than the minimum area required for a permanent dwelling in the zone in which it is located, and was of record at the time such zone became applicable to the property, said lot may be occupied by one (1) permanent dwelling or one (1) mobilehome, whichever the owner prefers. (Renumbered from Paragraph 3 to Paragraph 4 and amended by Ord. No. 2453, effective 12-24-81.)
- 5. If a lot has more area than the minimum lot area required for a permanent dwelling in the zone in which it is located, said lot may be occupied by two (2) mobilehomes or one (1) mobilehome and one (1) permanent dwelling subject to approval of a site plan pursuant to the procedure set forth in Paragraph 1 of Subsection G of Section 16.2 of this Ordinance. However, approval of a site plan shall not be required if the lot area is equal to or exceeds twice the minimum lot area required for a permanent dwelling in the zone in which it is located. Development of two (2) mobilehomes or one (1) mobilehome and one (1) permanent dwelling on one (1) lot shall be subject to the following requirements:
 - a. The mobilehome(s) and/or permanent dwelling shall comply with the provisions of Paragraphs 1 and 2 of this Subsection.
 - b. The distance between the two mobilehomes or the mobilehome and the permanent dwelling shall be not less than ten (10) feet.
 - c. If the lot is to be occupied by two (2) mobilehomes, no more than one (1) mobilehome may be rented or leased or held out for rent or lease.
 - d. The proposed facilities shall be maintained and operated in accordance with all State and County health regulations.
 - e. Off-street parking shall be provided for each dwelling unit in accordance with subparagraph a of Paragraph 2 of Subsection A of Section 15 of this Ordinance.

The requirement to secure approval of a site plan shall not be applicable to a mobilehome which is replacing another mobilehome previously removed from the property and which is subject to the provisions of Article 5.1 of Chapter 4 of Part VII of the Ordinance Code of Tulare County. (Added by Ord. No. 2453, effective 12-24-81.)

PARKING E.

One (1) off-street parking space shall be provided for said mobilehome.

FOUNDATION SYSTEMS: F.

Any mobilehome permitted under this zone which has been certified under the National Mobilehome Construction and Safety Standards Act of 1974 (42 USC Section 5401 et. seq.) may be placed on a foundation system pursuant to Section 18551 of the Health and Safety Code of the State of California; provided, however, that any such mobilehome shall be placed on a lot in accordance with Subsection D of this Section. (Added by Ord. No. 2453, effective 12-24-81.)

MOBILEHOME DEVELOPMENTS: G.

Any mobilehome development which contains minimum lot areas approved pursuant to Paragraph 3 of Subsection D of this section shall be restricted exclusively for mobilehome use by means of appropriate conditions, covenants and restrictions, approved by the Planning Director, and filed for record with the County Recorder by the subdivider. (Added by Ord. No. 2480, effective 7-1-82.)

SPECIAL ZONING REGULATION ESTABLISHED IN ORD. NO. 2299

Section 5 of Ordinance No. 2299 (effective 1-17-80) provided as follows: "The changes made in Ordinance No. 352 by Section 1 of this Ordinance* shall have no effect on property in the R-3-M, O-M, C-2-M and M-1-M zones until the County has rezoned the property to eliminate the Special M Zone from the property."

*Refers to changes made in Section 14.3-B.

2. SECTION 14.4 "SC" SCENIC CORRIDOR COMBINING ZONE

SECTION 14.4 "SC" SCENIC CORRIDOR COMBINING ZONE

(Added by Ord. No. 2282, effective 10-25-79; amended by Ord. No. 2417, effective 5-28-81)

PURPOSE A.

The purpose of the Scenic Corridor Combining Zone shall be to preserve and protect the scenic quality of the immediately visible land area adjacent to those scenic highways and scenic roads established by the Tulare County General Plan, and to prevent visual obstructions of the extended view from such scenic highways and roads

APPLICATION B.

This zone is intended to be combined with other zones and may be applied only to those areas visible from and adjacent to those scenic highways and scenic roads established by the Tulare County General Plan. When this zone is applied to property in conjunction with another zone set forth in this Ordinance, a new zone is thereby created and the regulations set forth in this section shall be applicable in addition to those otherwise applicable in the underlying or base zone. In addition, where the provisions of the underlying or base zone conflict with the requirements of this section, the requirements of this section shall prevail over those in the underlying or base zone. The new combined zone shall be shown on the Zoning Map by the letters "SC" following the symbol of the underlying or base zone.

PROHIBITION OF OFF-SITE SIGNS C.

No person, firm, or corporation shall erect, build or paint any off-site outdoor advertising display sign on any parcel of real property located within this zone.

COMBINATION WITH PD-F AND AF ZONES D.

When combined with the PD-F, Planned Development-Foothill Zone or the AF, Foothill Agricultural Zone, the following additional requirements shall apply:

- 1. On-premises outdoor advertising signs shall be permitted subject to the following regulations:
 - a. If an on-premises advertising structure pertaining to the identification of a permitted use is to be attached to the primary building facade, such signs shall be permitted without review by the Site Plan Review Committee. However, the requirement for the size, shape and lighting of such signs shall be determined based upon standards adopted by the Planning Commission.
 - b. Any free-standing, outdoor advertising display sign identifying a permitted use of the property shall not be installed or constructed without approval by the Site Plan Review Committee in accordance with the procedures set forth in Paragraph 1 of Subsection G of Section 16.2 of this Ordinance. The review by the Site Plan Review Committee shall be limited to the design, setback, size and architectural compatibility of the proposed sign, and its impact on traffic safety and visibility of scenic resources from scenic highways and roads.
- 2. For any proposed development project which is subject to review by the Site Plan

Review Committee in accordance with Section 16.2 of this Ordinance, the following additional standards for development shall apply:

- a. All new utility improvements shall be located underground.
- b. Grading and/or cut and fill on sloping lands shall be kept to a minimum and shall be prohibited whenever it can be determined that such activities will have an adverse impact on scenic resources visible from scenic highways and roads.
- c. Any exposed slopes resulting from grading and/or cut and fill activity shall be stabilized by plantings of compatible materials as a condition of approval of the project.
- d. Existing vegetation and unique land forms, such as rock outcrops, shall be retained and protected from any unnecessary grading or other development related activities, except where necessary to open up or provide better views of desirable scenic features.
- 3. Yard and Lot Requirements:
 - a. Front Yard: The minimum front yard for lots which front upon a Scenic Highway shall be one hundred (100) feet. The minimum front yard for lots which front upon a scenic road shall be one hundred (100) feet minus a distance equal to one half of the width of the right-of-way of the scenic road across the front of the lot.
 - b. Side Yards: The minimum side yard shall be ten (10) percent of the width of the lot, but not to exceed twenty-five (25) feet, except for corner lots adjacent to a Scenic Highway or road. In this case, there shall be a side yard on the street side of the corner lot which is equivalent to the front yard requirements set forth in Subparagraph a of this paragraph.
 - c. Lot Width: The minimum lot width of any lot with frontage along a scenic highway or a scenic road shall be one hundred and fifty (150) feet.

3. SECTION 16.4: "SR", SITE REVIEW COMBINING ZONE

SECTION 16.4: "SR", SITE REVIEW COMBINING ZONE

(Added by Ord. No. 2910, effective 12-28-89)

PURPOSE A.

The purpose of the Site Review Combining Zone is to designate those areas of the County where the site plan review process is required in order to determine if the proposed development is in conformance with the policies, standards, and objectives of this Ordinance, the County Ordinance Code and the General Plan.

The SR Zone is intended to be combined with the other zones set forth in this Ordinance and may not be established on the Zoning Map unless it is combined with other zones. When this zone is combined with other zones, a new zone is thereby created, and the regulations of this Section shall be applicable in addition to those which are applicable in the zone with which this zone is combined. In addition, where the provisions of the underlying or base zone conflict with the requirements of this Section, the requirements of this section shall prevail over those in the underlying or base zone. The new combined zone shall be shown on the Zoning Map by the letters "SR" following the symbol of the underlying or base zone.

SITE PLAN REVIEW REQUIRED B.

No building or relocation permit shall be issued or special use permit approved, nor shall any grading or construction work be allowed until a final site plan has been reviewed and approved or recommended for approval by the Site Plan Review Committee in accordance with the procedures set forth in Section 16.2 of this Ordinance. However, a site plan shall not be required for any of the following buildings or uses when otherwise allowed by the Zone combined with the SR Zone.

- 1. One (1) single-family residence or mobilehome and buildings accessory thereto on a single lot or parcel.
- 2. Growing and harvesting of field crops, fruit and nut trees, vines, vegetables, horticultural specialties and timber.
- 3. Raising of rabbits and fur bearing animals, poultry, sheep, goats, horses, mules, swine, bovine animals and other similar domesticated quadrupeds.
- 4. Minor improvements, as defined in Section 2 of the Zoning Ordinance.
4. SECTION 18.5 "PUD" PLANNED UNIT DEVELOPMENT

SECTION 18.5: PLANNED UNIT DEVELOPMENT

(Added by Ord. No. 1176, effective 12-14-67)

PURPOSE

A.

B.

In certain instances the objectives of the Zoning Ordinance may be achieved by the development of planned units which do not conform in all respects with the land use pattern designated on the zoning map or the zoning regulations prescribed by this Ordinance. A planned unit development may include a combination of different dwelling types and/or a variety of land uses which complement each other and harmonize with existing and proposed land uses in the vicinity. In order to provide locations for all wellplanned developments which conform with the objectives of the zoning plan, although they deviate in certain respects from the zoning map and the zoning regulations, use permits may be granted for planned unit developments, provided the developments comply with the regulations prescribed in this Section.

A planned unit development shall include only those uses permitted either as permitted uses or special uses in the zone in which the planned unit development is located, subject to the following exceptions:

- Any use permitted in an O, R-A, R-1, R-2, R-3, P-O or C-1 Zone, either as a permitted use or special use, or any combination of such uses, may be included in a planned unit development located in an O, R-A, R-1, R-2, R-3, P-O or C-1 Zone. The uses permitted in the M Zone are also permitted in a planned unit development located in an O, R-A, R-1, R-2, R-3, P-O or C-1 Zone.
- 2. Any use permitted in an M-1 or M-2 Zone as a permitted use, special use, or a use referred to in paragraph 35 of subsection A of Section 14 of this Ordinance, or any combination of such uses, may be located in a planned unit development located in an M-1 or M-2 Zone.

3. Any use permitted in an O, P-O, C-2 or M-1 Zone either as a permitted use or special use, or any combination of such uses, may be included in a planned unit development located in a C-2 Zone.

C. The minimum site area for a planned unit development shall be five (5) acres.

PERMITTED USES

SITE AREA

D.

E.

F.

1.

The standards of site area and dimensions, site coverage, yard spaces, height of structures, distances between structures, off-street parking and off-street loading facilities and landscaped areas need not be equivalent to the standards prescribed by the regulations for the zone in which the planned unit development is located if the applicant has demonstrated by his design proposal that the objectives of the Zoning Ordinance and the objectives of this Section will be achieved.

The average population density may exceed the maximum population density prescribed for the zone and the maximum population density indicated by the General Plan if the applicant can demonstrate by is design proposals that the objectives of this Section will be achieved. If the planned unit development involves a subdivision of land, the applicant must show what changes in conventional street and lot design will be necessary to achieve his goal.

A permit for a planned unit development shall only be granted when all of the property included in the proposed development has been zoned to the most restrictive zone which will allow all of the proposed uses in the development under subsection B of this Section.

Permits for planned unit developments shall be applied for and processed pursuant to the procedure for granting special use permits referred to in paragraph B of Part II of Section 16 of this Ordinance, subject to the following exceptions.

Prior to submitting the application, an applicant shall submit to the Building and Planning Director a preliminary development plan of the entire planned unit development drawn to scale and showing the various elements required in paragraph 2 herein. If the planned unit development is a subdivision, the preliminary development plans shall be filed and processed in accordance with Article 7 of Chapter 1 of Part VII of the Ordinance Code of Tulare County. If the planned unit development is not a subdivision, the preliminary development plan shall be filed and processed in accordance with the requirements for preliminary site plans in Section 16.2 of this Ordinance. The application for the planned unit development permit shall not be filed until a written report of the recommendations of the Site Plan Review Committee has been prepared and furnished to the applicant.

ZONING

PERMIT PROCEDURE

- 2. The application shall be accompanied by a development plan for the entire planned unit development, drawn to scale and showing the following: contours of the site in intervals of not more than five (5) feet; provisions for draining of surface waters; water courses; rail-road and public utility rights-of-way; streets, driveways and pedestrian walks; off-street parking and loading facilities; reservations and dedications for public uses; private uses including dwelling types, lot layout, locations and heights of structures, and landscaped area.
- 3. In addition to the data and drawings prescribed, the application shall be accompanied by a tabulation of the area proposed to be devoted to each land use and a tabulation of the average population density per net acre and per gross acre in any areas proposed to be devoted to residential use.
- 4. The Commission may recommend that the Board of Supervisors grant a permit for a planned unit development as the permit was applied for, or in modified form, if on the basis of the application and the evidence submitted, the Commission makes the following findings:
 - a. That the proposed location of the planned unit development is in accordance with the objectives of this Ordinance and the purposes of the zone in which the site is located.
 - b. That the proposed location of the planned unit development and the conditions under which it would be operated or maintained will not be detrimental to the public health, safety or welfare or materially injurious to properties or improvements in the vicinity.
 - c. That the proposed planned unit development will comply with each of the applicable provisions of this Ordinance.
 - d. That the standards of population density, site area and dimensions, site coverage, yard spaces, heights of structures, distances between structures, offstreet parking and off-street loading facilities and

landscaped areas will produce an environment of stable and desirable character consistent with the objectives of this Ordinance.

That the standards of population density, site area and dimensions, site coverage, yard spaces, heights of structures, distances between structures, and offstreet parking and off-street loading facilities will be such that the development will not generate more traffic than the streets in the vicinity can carry without congestion and will not overload utilities.

f. If applicable, that the proposed Planned Unit Development is consistent with Sections 7.2 and 7.3 of the Tulare County Hazardous Waste Management Plan, which identifies siting criteria for hazardous waste facilities. (Subsection added by Ord. No. 2918, effective 8-25-90.)

When the proposed planned unit development does not comply with the requirements of this section, the Commission may recommend that the Board of Supervisors deny the permit or may recommend that the permit be granted subject to such conditions as will assure compliance with the requirements of this Section. (Amended by Ord. No. 2591, effective March 15, 1985.)

5.

e.

5. SECTION 18.6 "PD" PLANNED DEVELOPMENT ZONE

SECTION 18.6: "PD", PLANNED DEVELOPMENT ZONE

(Added by Ord. No. 2417, effective 5-28-81)

PURPOSE A. In certain instances, the objectives of the General Plan and Zoning Ordinance are best achieved by the development of parcels of land in a coordinated and comprehensive fashion so as to take advantage of the superior environment which can result from large scale community planning and development. The purposes of the PD Zone are to: 1. Provide for design flexibility in single-family, multi-family, commercial, professional, industrial and mixed-use developments. 2. Stimulate a more desirable living and working environment than would be permitted by the strict application of zoning regulations on a conventional individual-use or lot-by-lot method. 3. Encourage innovative and creative approaches to land use and development. Provide the means to reduce development costs through the .4. promotion of improved and integrated design and land planning techniques. 5. Conserve natural features and open space, while facilitating aesthetic and compatible land use patterns. Implement general and specific plans which require a 6. planned development approach. 7. Provide an alternative means of achieving the purpose of Section 18.5 of this ordinance. APPLICATION B. The PD Zone shall be established on the County Zoning Map in the same manner as other zones created and established under this ordinance. The PD Zone may not be established on the Zoning Map unless it is combined with another zone. USE C. 1. When established in combination with any of the following combining zones, no building or land shall be used, no building shall be hereafter erected or structurally altered, and no construction, grading or disturbance of land for

construction purposes shall be initiated except for uses as set forth in the combining zone:

F, Foothill Combining Zone

2.

D.

E.

When established in combination with any of the other zones described in this ordinance, only those uses permitted either as permitted uses or special uses in the zone which is combined with the PD Zone shall be permitted; provided, however, that this requirement shall not be applicable to planned developments approved in accordance with Subsection G of this Section. No building or land shall be used, no building shall be hereafter erected or structurally altered, and no construction, grading or disturbance of land for construction purposes shall be initiated unless approved in accordance with paragraph 2 of Subsection F of this Section; provided, however, that the uses set forth in paragraphs 1 and 2 of Subsection D of this Section shall not be subject to this requirement.

Unless otherwise specified in a zone combined with the PD Zone, no building or relocation permit shall be issued or tentative subdivision map, tentative parcel map or special use permit approved, nor shall any final surveys of streets and lots or any grading or construction work be allowed until a final site plan has been reviewed and approved or recommended for approval by the Site Plan Review Committee in accordance with the procedures set forth in Section 16.2 of this ordinance. However, when the PD Zone is combined with any of the zones set forth in Sections 4 through 14.8 of this ordinance, a site plan shall not be required for any of the following buildings or uses when otherwise allowed by the zone combined with the PD Zone.

1. One (1) single-family residence or mobilehome and buildings accessory thereto on a single lot or parcel.

2. Growing and harvesting of field crops, fruit and nut trees, vines, vegetables, horticultural specialties and timber.

Notwithstanding other provisions of this ordinance, where a specific plan prepared pursuant to Section 65450 et seq. of the Government Code of the State of California has been adopted for any area or tract of land in the PD Zone, no special use permits shall be required for any use of land which is consistent with the adopted specific plan. However, approval of a final site plan by

SITE PLAN REVIEW

SPECIFIC PLANS the Site Plan Review Committee shall be required for any such use in the manner provided in Paragraph 1 of Subsection G of Section 16.2 of this ordinance.

DEVELOPMENT F. STANDARDS If the PD Zone is combined in the Zoning Map with any of the combining zones set forth in paragraph 1 of Subsection C of this Section, the development standards which are described in said combining zones shall be applicable to development projects within the PD Zone.

2. If the PD Zone is combined on the Zoning Map with any of the other zones described in this ordinance, the development standards applicable in the PD Zone shall be established by at least one of the following methods:

- a. Approval of a Specific Plan pursuant to Sections 65450 et seq. of the Government Code of the State of California.
- b. Approval of a Planned Development pursuant to Subsection G of this Section.
- c. Approval of a development agreement pursuant to Section 65864 et seq. of the Government Code of the State of California.

The provisions of this subsection shall only be applicable to those development projects for which development standards are to be established pursuant to subparagraph b of paragraph 2 of subsection F of this Section.

- 2. A planned development as used in this section means an integrated development project in which the land and structures are planned and developed as a whole in a single development operation or a series of operations in accordance with a detailed, comprehensive plan encompassing such elements as the location of structures, the circulation pattern, parking facilities, open space and utilities, together with a program for provision, operation and maintenance of all areas, improvements, facilities and services provided for the common use of the persons occupying or utilizing the property.
- 3. Regardless of the provisions of the zone with which the PD Zone is combined, a planned development may include a

PLANNED DEVELOPMENTS G.

1. .

Section 18.6, Page 3

combination of different dwelling types and/or a variety of land uses which complement each other and harmonize with existing and proposed land uses in the vicinity. A planned development may contain any use or mixture of uses whatsoever provided that the uses are consistent with the General Plan.

4. In order to assure that planned developments conform with the objectives of this ordinance and the general plan a use permit shall be required for any planned development in the PD Zone in accordance with the procedures set forth in Subsection B of Part II of Section 16 of this ordinance.

5. The Commission shall not approve or conditionally approve a use permit for a planned development unless on the basis of the evidence submitted, the Commission makes the following findings:

a. The planned development, together with the provisions for its design and improvement, is consistent with the general plan and the objectives of this ordinance.

b. The planned development would not be detrimental to the public health, safety or welfare, or materially injurious to property or improvements in the vicinity.

c. The planned development will not result in any significant environmental effects or any significant environmental effects thereof have been reduced to an acceptable level.

D. SRA FIRE SAFE STANDARDS

1. SRA FIRE SAFE STANDARDS

Title 14- Natural Resources Division 1.5- Department of Forestry Chapter 7- Fire Protection Subchapter 2 SRA Fire Safe Regulations Articles 1-5

Article 1. Administration Article 2. Emergency Access Article 3. Signing and Building Numbering Article 4. Emergency Water Standards Article 5. Fuel Modification Standards

Article 1. Administration

1270. Title

These regulations shall be known as the "SRA Fire Safe Regulations" and shall constitute the basic wildland fire protection standards of the California Board of Forestry.

1270.01. Purpose

These regulations have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRA. A local jurisdiction may petition the Board for certification pursuant to Section 1270.03. Where Board certification has not been granted, these regulations shall become effective September 1, 1991. The future design and construction of structures, subdivisions and developments in State Responsibility Area (SRA) shall provide for basic emergency access and perimeter wildfire protection measures as specified in the following articles. These measures shall provide for emergency access; signing and building numbering; private water supply reserves for emergency fire use; and vegetation modification. The fire protection standards which follow shall specify the minimums for such measures. Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

1270.02. Scope

These regulations do not apply to existing structures, roads, streets and private lanes or facilities. These regulations shall apply as appropriate to all construction within SRA approved after January 1, 1991. Affected activities include but are not limited to:

 (a) Permitting or approval of new parcels, excluding lot line adjustments as specified in Government Code (GC) Section 66412(d),
 (b) application for a building permit for new construction, not relating to an

(b) application for a building permit for new construction, not relating to an existing structure,

(c) application for a use permit,

(d) the siting of manufactured homes (manufactured homes are as defined by the National Fire Protection Association, National Fire Code, Section 501A, Standard for Fire Safety Criteria for Manufactured Home Installations, Sites and Communities, Chapter 1, Section 1-2, Definitions, page 4, 1987 edition and Health and Safety Code Sections 18007, 18008 and 19971).
(e) road construction, including construction of a road that does not currently exist, or extension of an existing road.

Exemption: Roads required as a condition of tentative parcel maps prior to the effective date of these regulations; roads for agricultural or mining use solely on one ownership; and roads used solely for the management and harvesting of wood products.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

1270.03. Local Ordinances

Nothing contained in these regulations shall be considered as abrogating the provisions of any ordinance, rule or regulation of any state or local jurisdiction providing such ordinance, rule, regulation or general plan element is equal to or more stringent than these minimum standards. The Board may certify local ordinances as equaling or exceeding these regulations when they provide the same practical effect.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4117 and 4290, Public Resources Code.

1270.04. Provisions for Application of these Regulations

This subchapter shall be applied as follows:

(a) local jurisdictions shall provide the Director with notice of applications for building permits, tentative parcel maps, tentative maps, and use permits for construction or development within SRA.

(b) Director shall review and make fire protection recommendations on applicable construction or development permits or maps provided by the local jurisdiction.

(c) the local jurisdiction shall ensure that the applicable sections of this subchapter become a condition of approval of any applicable construction or development permit or map.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

1270.05. Inspection Authority

(a) Inspection shall be made pursuant to Section 1270.06 by:

(1) the Director; or

(2) local jurisdictions that have assumed state fire protection responsibility on SRA lands, or

(3) local jurisdictions where these regulations have been implemented through that jurisdiction's building permit or subdivision approval process.

(b) Reports of violations shall be provided to the CDF Ranger Unit headquarters that administers SRA fire protection in that county.

Note: Authority cited: Sections 4119 and 4290, Public Resources Code. Reference: Section 4290, Public Resources Code.

1270.06. Inspections.

The inspection authority may inspect for compliance with these regulations. When inspections are conducted, they should occur prior to: the issuance of the use permit; certificate of occupancy; the recordation of the parcel map or final map; the filing of a notice of completion; or the final inspection of any project or building permit.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4119, 4290 and 4291, Public Resources Code.

1270.07. Exceptions to Standards

Upon request by the applicant, exceptions to standards within this subchapter and mitigated practices may be allowed by the inspection authority, where the exception provides the same overall practical effect as these regulations toward providing defensible space.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1270.08. Requests for Exceptions

Requests for an exception shall be made in writing to the inspection authority by the applicant or the applicant's authorized representative. The request shall state the specific section(s) for which an exception is requested, material facts supporting the contention of the applicant, the details of the exception or mitigation measure proposed, and a map showing the proposed location and siting of the exception or mitigation measure.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

1270.09. Appeals

Where an exception is not granted by the inspection authority, the applicant may appeal such denial to the local jurisdiction. The local jurisdiction may establish or utilize an appeal process consistent with existing local building or planning department appeal processes. Before the local jurisdiction makes a determination on an appeal, the inspection authority shall be consulted and shall provide to that local jurisdiction documentation outlining the effects of the requested exception on wildland fire protection.

If an appeal is granted, the local jurisdiction shall make findings that the decision meets the intent of providing defensible space consistent with these regulations. Such findings shall include a statement of reasons for the decision. A written copy of these findings shall be provided to the CDF Ranger Unit headquarters that administers SRA fire protection in that county.

Note: Authority cited: Section 4290, Public Resources Code. References: Sections 4290 and 4291, Public Resources Code.

1271.00. Definitions

Accessory building: Any building used as an accessory to residential, commercial, recreational, industrial, or educational purposed defined in the California Building Code, 1989 Amendments, Chapter 11, Group M, Division 1, Occupancy that requires a building permit.

Agriculture: Land used for agricultural purposes as defined in a local jurisdiction's zoning ordinances. Building: Any structure used or intended for supporting or sheltering any use or occupancy that is defined in the California Building Code, 1989 Amendments, Chapter 11, except Group M, Division 1, Occupancy. For the purposes of this subchapter, building includes mobile homes and manufactured homes, churches, and day care facilities.

CDF: California Department of Forestry and Fire Protection.

Dead-end road: A road that has only one point of vehicular ingress/egress, including cul-de-sacs and looped roads.

Defensible space: The area within the perimeter of a parcel, development, neighborhood or community where basic wildland fire protection practices and measures are implemented, providing the key point of defense from an approaching wildfire or defense against encroaching wildfires or escaping structure fires. The perimeter as used in this regulation is the area encompassing the parcel or parcels proposed for construction and/or development, excluding the physical structure itself. The area is characterized by the establishment and maintenance of emergency vehicle access, emergency water reserves, street names and building identification, and fuel modification measures.

Development: As defined in Section 66418.1 of the California Government Code.

Director: Director of the Department of Forestry and Fire Protection or his/her designee.

Driveway: A vehicular access that serves no more than two buildings, with no more than 3 dwelling units on a single parcel, and any number of accessory buildings.

Dwelling unit: Any building or portion thereof which contains living facilities, including provisions for sleeping, eating, cooking and/or sanitation for not more than one family.

Exception: An alternative to the specified standard requested by the applicant that may be necessary due to health, safety, environmental conditions, physical site limitations or other limiting conditions such as recorded historical sites, that provides mitigation of the problem.

Fire valve: see hydrant.

Fuel modification area: An area where the volume of flammable vegetation has been reduced, providing reduced fire intensity and duration.

Greenbelts: A facility or land-use, designed for a use other than fire protection, which will slow or resist the spread of a wildfire. Includes parking lots, irrigated or landscaped areas, golf courses, parks, playgrounds, maintained vineyards, orchards or annual crops that do not cure in the field.

Hammerhead/T: A roadway that provides a "T" shaped, three-point turnabout space for emergency equipment, being no narrower than the road that serves it.

Hydrant: A valved connection on a water supply/storage system, having at least one 2 1/2 inch outlet, with male American National Fire Hose Screw Threads (NH) used to supply fire apparatus and hoses with water.

Local Jurisdiction: Any county, city/county agency or department, or any locally authorized district that issues or approves building permits, use permits, tentative maps or tentative parcel maps, or has authority to regulate development and construction activity.

Occupancy: The purpose for which a building, or part thereof, is used or intended to be used.

One-way road: A minimum of one traffic land width designed for traffic flow in one direction only.

Roads, streets, private lands: Vehicular access to more than one parcel; access to any industrial or commercial occupancy; or vehicular access to a single parcel with more than two buildings or four or more dwelling units.

Roadway: Any surface designed, improved, or ordinarily used for vehicle travel.

Roadway structures: Bridges, culverts, and other appurtenant structures which supplement the roadway bed or shoulders.

Same Practical Effect: As used in this subchapter, means an exception or alternative with the capability of applying accepted wildland fire suppression strategies and tactics, and provisions for fire fighter safety, including:

(a) access for emergency wildland fire equipment,

(b) safe civilian evacuation,

(c) signing that avoids delays in emergency equipment response,

(d)available and accessible water to effectively attack wildfire or defend a structure from wildfire, and

(e) fuel modification sufficient for civilian and fire fighter safety.

Shoulder: Roadbed or surface adjacent to the traffic lane.

State Board of Forestry (SBOF): A nine member board, appointed by the Governor, which is responsible for developing the general forest policy of the state, for determining the guidance policies of the Department of Forestry and Fire Protection, and for representing the state's interest in federal land in California.

State Responsibility Area (SRA): As defined in Public Resources Code Sections 4126-4127; and the California Code of Regulations, Title 14, Division 1.5, Chapter 7, Article 1, Sections 1220-1220.5.

Structure: That which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

Subdivision: As defined in Section 66424 of the Government Code.

Traffic lane: The portion of a roadway that provides a single line of vehicle travel.

Turnaround: A roadway, unobstructed by parking, which allows for a safe opposite change in direction for emergency equipment. Design of such area may be a hammerhead/T or terminus bulb.

Turnouts: A widening in a roadway to allow vehicles to pass. Vertical clearance: The minimum specified height of a bridge or overhead projection above the roadway.

Wildfire: As defined in Public Resources Code Sections 4103 and 4104.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

1271.05. Distance Measurements All specified or referenced distances are measured along the ground, unless otherwise stated.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1272.00. Maintenance of Defensible Space Measures.

To ensure continued maintenance of properties in conformance with these standards and measures and to assure continued availability, access, and utilization of the defensible space provided for in these standards during a wildfire, provisions for annual maintenance shall be included in the development plans and/or shall be provided as a condition of the permit, parcel or map approval.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

Article 2. Emergency Access

1273.00. Intent

Road and street networks, whether public or private, unless exempted under Section 1270.02 (e), shall provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency consistent with Section 1273.00 through 1273.11.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

1273.01. Road Width

All roads shall be constructed to provide a minimum of two nine-foot traffic lanes providing two-way traffic flow, unless other standards are provided in this article, or additional requirements are mandated by local jurisdictions or local subdivision requirements.

Note: Authority cited: Section 4290, Public Resources Code. References: Sections 4290 and 4291, Public Resources Code.

1273.02. Roadway Surface

The surface shall provide unobstructed access to conventional drive vehicles, including sedans and fire engines. Surfaces should be established in conformance with local ordinances, and be capable of supporting a 40,000 pound load.

Note: Authority cited: Section 4290, Public Resources Code. References: Sections 4290 and 4291, Public Resources Code.

1273.03. Roadway Grades

The grade for all roads, streets, private lands and driveways shall not exceed 16 percent.

Note: Authority cited: Section 4290, Public Resources Code. References: Sections 4290 and 4291, Public Resources Code.

1273.04. Roadway Radius

(a) No roadway shall have a horizontal inside radius of curvature of less than 50 feet and additional surface width of 4 feet shall be added to curves of 50-100 feet radius; 2 feet to those from 100-200 feet.

(b) The length of vertical curves in roadways, exclusive of gutters, ditches, and drainage structures designed to hold or divert water, shall be not less than 100 feet.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1273.05. Roadway Turnarounds

Turnarounds are required on driveways and dead-end roads as specified in this article. The minimum turning radius for a turnaround shall be 40 feet from the center line of the road. If a hammerhead/T is used, the top of the "T" shall be a minimum of 60 feet in length.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1273.06. Roadway Turnouts

Turnouts shall be a minimum of 10 feet wide and 30 feet long with a minimum 25 foot taper on each end.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1273.07. Roadway Structures

(a) All driveway, road, street, and private land roadway structures shall be constructed to carry at least the maximum load and provide the minimum vertical clearance as required by Vehicle Code Sections 35550, 35750, and 35250.

(b) Appropriate signing, including, but not limited to weight or vertical clearance limitations, one-way road or single lane conditions, shall reflect the capability of each bridge.

(c) A bridge with only one traffic land may be authorized by the local jurisdiction; however, it shall provide for unobstructed visibility from one end to the other and turnouts at both ends.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1273.08 One-Way Roads

All one-way roads shall be constructed to provide a minimum of one 10-foot traffic lane. The local jurisdiction may approve one-way roads. All one-way roads shall connect to a two-lane roadway at both ends, and shall provide access to an area currently zoned for no more than 10 dwelling units. In no case shall it exceed 2640 feet in length. A turnout shall be placed and constructed at approximately the midpoint of each one-way road.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1273.09. Dead-End Roads

(a) The maximum length of a dead-end road, including all dead-end roads accessed from that dead-end road, shall not exceed the following cumulative lengths, regardless of the number of parcels served:

parcels zoned for less than one acre	800 feet
parcels zoned for 1 acre to 4.99 acres	1320 feet
parcels zoned for 5 acres to 19.99 acres	2640 feet
parcels zoned for 20 acres or larger	5280 feet

All lengths shall be measured from the edge of the roadway surface at the intersection that begins the road to the end of the road surface at its farthest point. Where a dead-end road crosses areas of differing zoned parcel sizes, requiring length limits, the shortest allowable length shall apply.

(b) Where parcels are zoned 5 acres or larger, turnarounds shall be provided at a maximum of 1320 foot intervals.

(c) Each dead-end road shall have a turnaround constructed at is terminus. Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1273.10. Driveways

All driveways shall provide a minimum 10 foot traffic lane and unobstructed vertical clearance of 15 feet along its entire length.

(a) Driveways exceeding 150 feet in length, but less than 800 feet in length, shall provide a turnout near the midpoint of the driveway. Where the driveway exceeds 800 feet, turnouts shall be provided no more than 400 feet apart. (b) A turnaround shall be provided at all building sites on driveways over 300 feet in length, and shall be within 50 feet of the building.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1273.11 Gate Entrances

(a) Gate entrances shall be at least two feet wider than the width of the traffic lane(s) serving that gate. (b) All gates providing access from a road to a driveway shall be located at least 30 feet from the roadway and shall open to allow a vehicle to stop without obstructing traffic on that road. (c) Where a one-way road with a single traffic land provides access to a gated entrance, a 40 foot turning radius shall be used.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

Article 3: Signing and Building Numbering

1274.00. Intent

To facilitate locating a fire and to avoid delays in response, all newly constructed or approved roads, streets, and buildings shall be designated by names or numbers, posted on signs clearly visible and legible from the roadway. This section shall not restrict the size of letters or numbers appearing on street signs for other purposes.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1274.01. Size of Letters, Numbers and Symbols for Street and Road Signs

Size of letters, numbers, and symbols for street and road signs shall be a minimum 3 inch letter height, 3/8 inch stroke, reflectorized, contrasting with the background color of the sign.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1274.02. Visibility and Legibility of Street and Road Signs

Street and road signs shall be visible and legible from both directions of vehicle travel for a distance of at least 100 feet.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1274.03. Height of Street and Road Signs

Height of street and road signs shall be uniform county wide, and meet the visibility and legibility standards of this article.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1274.04. Names and Numbers on Street and Road Signs

Newly constructed or approved public and private roads and streets must be identified by a name or number through a consistent countywide system that provides for sequenced or patterned numbering and/or non-duplicating naming within each county. All signs shall be mounted and oriented in a uniform manner. This section does not require any entity to rename or renumber existing roads or streets, nor shall a roadway providing access only to a single commercial or industrial occupancy require naming or numbering.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1274.05. Intersecting Roads, Streets and Private Lanes

Signs required by this article identifying intersecting roads, streets and private lanes shall be placed at the intersection of those roads, streets and/or private lanes.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1274.06. Signs Identifying Traffic Access Limitations

A sign identifying traffic access or flow limitations, including, but not limited to weight or vertical clearance limitations, dead-end road, one-way road (or single land conditions) shall be placed:

(a) at the intersection preceding the traffic access limitation, and (b) no more than 100 feet before such traffic access limitation.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1274.07. Installation of Road, Street, and Private Lane Signs

Road, street and private land signs required by this article shall be installed prior to final acceptance by the local jurisdiction of road improvements.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1274.08. Addresses for Buildings

All buildings shall be issued an address by the local jurisdiction which conforms to that jurisdiction's overall address system. Accessory buildings will not be required to have a separate address; however, each dwelling unit within a building shall be separately identified.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1274.09. Size of Letters, Numbers and Symbols for Addresses

Size of letters, numbers, and symbols for addresses shall be a minimum 3 inch letter height, 3/8 inch stroke, reflectorized, contrasting with the background color of the sign.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1274.10. Installation, Location and Visibility of Addresses

(a) All buildings shall have a permanently posted address, which shall be placed at each driveway entrance and visible from both directions of travel along the road. In all cases, the address shall be posted at the beginning of construction and shall be maintained thereafter, and the address shall be visible and legible from the road on which the address is located. (b) Address signs along one-way roads shall be visible from both the intended direction of travel and the opposite direction. (c) Where multiple addresses are required at a single driveway, they shall be mounted on a single post. (d) Where a roadway provides access solely to a single commercial or industrial business, the address sign shall be placed at the nearest road intersection providing access to that site. Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code

Article 4. Emergency Water Standards

1275.00. Intent

Emergency water for wildlife protection shall be available and accessible in quantities and locations specified in the statute and these regulations, in order to attack a wildfire or defend property from a wildfire. Such emergency water may be provided in a fire agency mobile water tender, or naturally occurring or manmade containment structure, as long as the specified quantity is immediately available.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1275.01. Application

The provisions of this article shall apply when new parcels are approved by a local jurisdiction. The emergency water system shall be available on-site prior to the completion of road construction, where a community water system is approved, or prior to the completion of building construction, where an individual system is approved.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1275.10 General Standards

Water systems that meet or exceed the standards specified in Public Utilities Commission of California (PUC) revised General Order #103, Adopted June 12, 1956 (Corrected September 7, 1983, Decision 83-09-001), Section VIII Fire Protection Standards and other applicable sections relating to fire protection water delivery systems, static water systems equaling or exceeding the National Fire Protection Association (NFPA) Standard 1231, "Standard on Water Supplies for Suburban and Rural Fire Fighting," 1989 Edition, or mobile water systems that meet the Insurance Services Office (ISO) Rural Class 8, 2nd Edition 3-80, standard shall be accepted as meeting the requirements of this article. These documents are available at CDF Ranger Unit Headquarters.

Nothing in this article prohibits the combined storage of emergency wildfire and structural firefighting water supplies unless so prohibited by local ordinance or specified by the local fire agency. Where freeze protection is required by local jurisdiction, such protection measures shall be provided.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1275.15 Hydrant/Fire Valve

(a) The hydrant or fire valve shall be 18 inches above grade, 8 feet from flammable vegetation, no closer than 4 feet nor farther than 12 feet from a roadway, and in a location where fire apparatus using it will not block the roadway. The hydrant serving any building shall:

(1) be not less than 50 feet nor more than 1/2 mile by road from the building it is to serve, and

(2) be located at a turnout or turnaround, along the driveway to that building or along the road that intersects with that driveway.

(b) The hydrant head shall be brass with 2 1/2 inch National hose male thread with cap for pressure and gravity flow systems and 4 1/2 inch draft systems. Such hydrants shall be wet or dry barrel as required by the delivery system. They shall have suitable crash protection as required by the local jurisdiction.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1275.20 Signing of Water Sources

Each hydrant/fire valve or access to water shall be identified as follows:

(a) if located along a driveway, a reflectorized blue marker, with a minimum dimension of 3 inches shall be located on the driveway address sign and mounted on a fire retardant post, or

(b) if located along a street or road,

(1) a reflectorized blue marker, with a minimum dimension of 3 inches, shall be mounted on a fire retardant post. The sign shall be within 3 feet of said hydrant/fire valve, with the sign no less than 3 feet nor greater than 5 feet above ground, in a horizontal position and visible from the driveway, or

(2) as specified in the State Fire Marshal's Guidelines for Fire Hydrant Markings Along State Highways and Freeways, May 1988.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

Article 5. Fuel Modification Standards

1276.00. Intent To reduce the intensity of a wildfire by reducing the volume and density of flammable vegetation, the strategic siting of fuel modification and greenbelts shall provide (1) increased safety for emergency fire equipment and evacuating civilians; and (2) a point of attack or defense from a wildfire. **Note:** Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1276.01. Setbacks for Structure Defensible Space

(a) All parcels 1 acre and larger shall provide a minimum 30 foot setback for buildings and accessory buildings from all property lines and/or the center of a road.

(b) For parcels less than 1 acre, local jurisdictions shall provide for the same practical effect.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1276.02. Disposal of Flammable Vegetation and Fuels

Disposal, including chipping, burying, burning or removal to a landfill site approved by the local jurisdiction, of flammable vegetation and fuels caused by site development and construction, road and driveway construction, and fuel modification shall be completed prior to completion of road construction or final inspection of a building permit.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1276.03. Greenbelts Subdivisions and other developments, which propose greenbelts as a part of the development plan, shall locate said greenbelts strategically, as a separation between wildland fuels and structures. The locations shall be approved by the inspection authority.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Section 4290 and 4291, Public Resources Code.

1299. Defensible Space.

The intent of this regulation is to provide guidance for implementation of Public Resources Code 4291(a) and (b), and minimize the spread of fire within a 100 foot zone around a building or structure.

(a) A person that owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining any mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material, and is within State Responsibility Area, shall do the following:

 Within 30 feet from each building or structure maintain a firebreak by removing and clearing away all flammable vegetation and other combustible growth pursuant to PRC § 4291 (a). Single specimens of trees or other vegetation may be retained provided they are well spaced, well-pruned, and create a condition that avoids spread of fire to other vegetation or to a building or structure.

(2) Within the 30 feet to 100 feet zone (Reduced Fuel Zone) from each building or structure (or to the property line, whichever is nearer to the structure), provide a fuel break by disrupting the vertical and/or horizontal continuity of flammable and combustible vegetation with the goal of reducing fire intensity, inhibiting fire in the crowns of trees, reducing the rate of fire spread, and providing a safer environment for firefighters to suppress wildfire pursuant to PRC § 4291(b).

(b) Any vegetative fuels identified as a fire hazard by the fire inspection official of the authority having jurisdiction shall be removed or modified provided it is required by subsection (a)(1) & (a)(2).

(c) Within the intent of the regulations, the fire inspection official of the authority having jurisdiction may approve alternative practices which provide for the same practical effects as the stated guidelines.

(d) Guidance for implementation of this regulation is contained in the publication: "General Guidelines for Creating Defensible Space" as published by the Board of Forestry and Fire Protection by resolution adopted on February 8, 2006.







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E. FLOOD CONTROL REQUIREMENTS

1. DEFINITIONS OF FEMA FLOOD ZONE DESIGNATIONS AND CONSTRUCTION REQUIREMENTS

Definitions of FEMA Flood Zone Designations

Flood zones are geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

Moderate to Low Risk Areas

In communities that participate in the NFIP, flood insurance is available to all property owners and renters in these zones:

ZONE	DESCRIPTION	See Note 1 Page 2
B and X (shaded)	Area of moderate flood hazard, usually the area between the limits of the 100- year and 500-year floods. B Zones are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile.	
C and X (unshaded)	Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. Zone C may have ponding and local drainage problems that don't warrant a detailed study or designation as base floodplain. Zone X is the area determined to be outside the 500-year flood and protected by levee from 100- year flood.	

High Risk Areas

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION	See Note 2 Page 2	
A	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.		
AE	The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.		
A1-30	These are known as numbered A Zones (e.g., A7 or A14). This is the base floodplain where the FIRM shows a BFE (old format).		
АН	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.		
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.		
AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations.		
A99	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.		

High Risk - Coastal Areas

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones.

ZONE	DESCRIPTION	Tulare County does not have these zones.	
Ÿ	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.		
VE, V1 - 30	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life a 30-year mortgage. Base flood elevations derived from detailed analyses are shown a selected intervals within these zones.		

Undetermined Risk Areas

ZONE	DESCRIPTION	Tulare County does not have this zone.	
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood		
States and the second	risk.		

From FEMA Map Service Center:

http://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=floodZones&title=FEMA%20Flood%20Zone%20Designations

NOTES:

1 Construction in these zones do not require any mitigation measures; however, structures in a shaded X zone are recommended to be elevated one foot above natural ground. Elevation certificates not required unless property owner wishes to use them for insurance rating purposes; for example, a preferred risk policy.

2 Construction in these zones require mitigation measures. Elevation certificates are required on all new structures/buildings being constructed. In Zone A, Tulare County Ordinance Code Section 7-27-1180 applies. All buildings/structures must be elevated to at least two (2) feet above the highest natural ground elevation on the site. There are some alternatives to this and are presented in said code; although not usually employed. According to 44 CFR 60.3 (b)(3), the NFIP participating community must require all new developments in an unnumbered A zone greater than 50 lots or 5 acres, whichever is the lesser, to include the development of a base flood elevation. A flood study prepared by a civil engineer will likely be required on such developments (special use permit, parcel map, building permit are examples).

In the other A zones, base flood elevations or depths are given on the FIRM panels and all new structures/ buildings are required to be elevated to those elevations. An elevation certificate is required to verify FEMA compliance. Riverine floodplains are comprised of the floodway and the flood fringe. The floodway is comprised of the channel and adjacent overbank areas necessary to effectively convey floodwaters. The flood fringe are lands outside the floodway that are at or below the BFE that store, but do not effectively convey, floodwaters. Lands that compose the flood fringe will be inundated during a 1% chance flood event but, due to physical characteristics of the floodplain, do not effectively convey floodwaters. The floodway and the Base Flood Elevation (BFE) of the 1% chance flood are determined using hydraulic modeling techniques.

FEMA regulatory floodway limits:

FEMA's regulations (Section 9.4) state: "Floodway means that portion of the floodplain which is effective in carrying flow, within which this carrying capacity must be preserved and where the flood hazard is generally highest, i.e., where water depths and velocities are the greatest. It is that area which provides for the discharge of the base flood so the cumulative increase in water surface elevation is no more than one foot."

FEMA's Procedures for "No-Rise" Certificates:

Section 60.3 (d) (3) states Communities shall prohibit encroachments, fill, new development, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses that the proposed encroachment would not result in any increase in flood levels within the community of the base flood (100-year) discharge.
Floodway Encroachments

The floodway is the channel of a river or stream and the overbank areas that must remain open to carry the deeper, faster moving water during a flood. If the remainder of the floodplain, called the floodplain fringe, is completely obstructed, the 100-year flood elevation would not increase more than one foot. The regulatory floodway may be shown on the Flood Insurance Rate Map or on a separate Flood Boundary and Floodway Map. Because floodway boundaries are delineated using computer modeling, they often do not correspond to any features visible at the site.

Why Is the Floodway Different than Other Floodplain Areas?

A basic principle of floodplain management is that *development must not increase the flood hazard on* other properties. "Floodways" are areas where fill or other development is likely to divert flow and contribute to increased water depths during a flood. Floodways may also be subject to high velocities, which can cause severe damage to structures and high risks for occupants and emergency responders. *Ideally, floodways should be undeveloped areas that can accommodate flood flows with minimal risk.* Any new development in the floodway generally requires an engineering analysis of the impact on flood hazards.



What Is Meant by Encroachment?

An "encroachment" is any floodplain development that could obstruct flood flows, such as fill, a bridge, or a building. A driveway, road, or parking lot at grade (without any filling) would not cause an obstruction. Development of lakeshore floodplains, where there is no flow, is not considered an encroachment.

How Are Floodplain Encroachments Regulated?

The development standards for a floodplain encroachment depend on both the project location and the amount of information provided on flood hazard maps:

- <u>Floodplain fringe</u>: The modeling used to establish floodway boundaries indicated that any encroachment or obstruction in the fringe area (outside the floodway) would not result in a "significant" increase in flood levels (i.e. no more than one foot), so no encroachment analysis is required.
- Floodway: No new development is permitted within the regulatory floodway unless a licensed professional engineer demonstrates that the proposed encroachment shall not result in any rise in the 100-year flood elevation. This no-rise requirement is in addition to all other floodplain development standards applicable to the proposed project.

- <u>Riverine floodplain with base flood elevations, but no floodway</u>: When the flood hazard map designates base flood elevations (100-year flood heights) but no floodway is delineated, the applicant must demonstrate that the cumulative effect of the proposed development, when combined with all other existing and anticipated floodplain development, would not increase the water surface elevation of the 100-year flood more than one foot at any location.
- <u>Approximate A Zones</u>: When floodplain boundaries were established using approximate techniques (which produce neither floodways nor base flood elevations), the municipality may require an analysis to demonstrate that the project would not result in physical damage to any other property.

Are There Exceptions to the Encroachment Requirements?

Federal standards do not allow communities to issue variances for development within the floodway that would result in increased flood levels. However, there are some situations (such as dams, bridges, or roads) in which a project in the floodway may be justifiable even though it would cause a rise in the flood elevation. This necessitates that the flood hazard map be changed to reflect the new hazard. The applicant must apply to the Federal Emergency Management Agency (FEMA) for (1) a conditional map revision before the development occurs and (2) a final letter of map revision after the development has been completed.¹

No-Rise Certification for Floodway Encroachments

Any proposed encroachment in the floodway requires a technical evaluation by a licensed professional engineer to demonstrate that the project will not affect flood heights. The results of this analysis must be maintained in the municipality's permit file. This can be in the form of a No-Rise Certification supported by technical data and signed by a registered professional engineer. The supporting technical data should be based on the standard step-backwater computer model used to develop the floodway shown on the flood hazard map. Hydraulic modeling of the pre-project and post-project conditions should demonstrate that the change in the 100-year flood height is 0.00 feet.

A detailed surface water profile analysis may not be necessary for a small project located completely within the "conveyance shadow" of an existing obstruction (because flood water is already flowing around the larger obstruction). The limits of this conveyance shadow can be determined as illustrated. However, an engineer must still certify that the floodway encroachment would not cause any rise in the flood elevation.



Upstream of the existing obstruction: draw lines at a 1:1 ratio.

Downstream: draw lines at a 4:1 ratio

Additional Resources

- Floodplain Development and Floodway Guidance, prepared by the NYS Department of Environmental Conservation, available at <u>http://www.dec.ny.gov/lands/24281.html</u>, provides guidance on meeting the "no-rise" and "no adverse effect" criteria using hydraulic modeling techniques.
- Procedures for Compliance with Floodway Regulations, Floodplain Management Information Series Special Report; prepared by U.S. Army Corps of Engineers, Federal Emergency Management Agency, and Pennsylvania Department of Community Affairs (1990); available at <u>http://www.nh.gov/ oep/programs/floodplainmanagement/regulations/documents/floodway regulations.pdf</u>; describes the analyses needed to document floodway impacts and procedures for requesting floodway revisions.

¹ The MT-2 Form for floodplain map revisions that show changes to flood elevations is available at <u>http://www.fema.gov/plan/</u><u>prevent/fhm/d1_mt-2.shtm</u>.



2. SECTION 14.7 "F-1" PRIMARY FLOOD PLAIN ZONE

SECTION 14.7: "F-1" PRIMARY FLOOD PLAIN ZONE

(Added by Ord. No. 1371, effective 4-16-70; amended by Ord. No. 2741, effective 12-4-86)

PURPOSE: A.

The purpose of the Primary Flood Plain Zone shall be the prevention of loss of life, the minimization of property damage, and the maintenance of satisfactory conveyance capacities of waterways through the prevention of encroachments by obstructions in the floodway which may diminish the ability of the floodway to carry overloads during periods of flooding. This Zone is to be used in concert with the flood damage prevention regulations established in Chapter 8 of Part VII of the Ordinance Code of Tulare County. However, it shall only be delineated on the County Zoning Map when necessary to conform to the County General Plan or when necessary to establish flood plain regulations after completion of a Federal project report pursuant to Section 8411 of the California Water Code.

APPLICATION B.

This zone may function either as an exclusive zone or in combination with other zones and may be applied only to those areas within the boundaries of the Selected Flood which have been determined to be the floodway area through an analysis of flood frequency, natural topography, bank erosion, channel shifts, flood profiles, velocity of flood waters or other applicable factors.

USE C.

- 1. When the Zoning Map indicates that the F-1 Zone is an exclusive zone, only the following uses shall be permitted provided such uses are authorized pursuant to the procedures set forth in Chapter 8 of Part VII of the Ordinance Code of Tulare County:
 - The growing and harvesting of field crops, vines, vegetables and horticultural specialties, excluding trees.
 - The operation of apiaries.
 - The grazing of sheep, goats, horses, mules, swine, bovine animals and other similar domesticated quadrupeds.
 - The raising of poultry.
 - Wildlife preserves.
 - One (1) non-expandable recreation vehicle having no permanently attached or detached accessory structures, for each parcel of property under separate ownership, for use only by the owner of the property and/or his guests. Said recreation vehicles shall be maintained in a readily movable state and shall be located on the property only during the months of May through November, inclusive, and shall be removed from the property during the months of December through April, inclusive.
 - Public utility facilities, except those structures for which a use permit is required as specified under Subsection "D" of this Section.
 - Flood control channels, surface water spreading grounds, stream bed retarding basins, and other similar facilities which have been approved by the Tulare County Flood Control District.
 - Parking lots provided any grading or structures do not significantly restrict the

carrying capacity of the floodway.

- When the Zoning Map indicates that the F-1 Zone is combined with other zones, only the following uses shall be permitted:
 - All those uses listed under Paragraph 1 of this subsection which are allowed in the underlying or base zone.
 - Single family dwellings, mobilehomes and accessory residential and agricultural structures shall be allowed if they are allowed in the underlying or base zone, provided that all construction or installations are approved in accordance with the procedures referred to in Chapter 8 of Part VII of the Ordinance Code of Tulare County.
 - All uses allowed in the underlying or base zone which are not allowed under Paragraph
 1 of this subsection if approved in accordance with the procedures referred to in
 Chapter 8 of Part VII of the Ordinance Code of Tulare County.

USE PERMITS D.

The following uses, buildings and structures shall be permitted in this zone only if a Use Permit is approved pursuant to the procedures referred to in Paragraph B of Part II of Section 16 of this Ordinance.

- 1. When the Zoning Map indicates that the F-1 Zone is an exclusive Zone:
 - Private and public recreational uses such as: parks, aquatic facilities, campgrounds, recreation vehicle parks, playgrounds, athletic fields, golf courses, golf driving ranges, fishing and hunting clubs.
 - Temporary and readily removable structures accessory to agricultural uses.
 - Public utility structures.
 - Excavation and removal of rock, sand, gravel and other materials; provided, however, that no Use Permit shall be required if a surface mining permit and/or reclamation plan is required under the provisions of Section 7-25-1000 et seq. of the Ordinance Code of Tulare County.
- 2. When the Zoning Map indicates that the F-1 Zone is combined with other zones:
 - All those uses listed under Paragraph 1 of this subsection which are allowed in the underlying or base zone.
 - All uses which may be permitted subject to the granting of a Use Permit in the underlying or base zone.

Said Use Permit shall be granted only if it is found that any building or structure to be constructed will conform to the requirements set forth in Chapter 8 of Part VII of the Ordinance Code of Tulare County.

2.

3. SECTION 14.8 "F-2" SECONDARY FLOOD PLAIN COMBINING ZONE

SECTION 14.8: "F-2" SECONDARY FLOOD PLAIN

COMBINING ZONE

(Added by Ord. No. 1371, effective 4-16-70; repealed by Section 8 of Ord. No. 2741, effective 12-4-86.)

ORDINANCE NO. 2741

Section 9 of Ordinance No. 2741 states as follows:

"It is the intent of the Board of Supervisors of the County of Tulare that Section 8 of this Ordinance not be effective until the County Zoning Map has been amended to change all existing "F-2" zoning designations to other zoning classifications, in accordance with the procedures established in Section 17 of Ordinance No. 352 for changing zone boundaries or classifications."

PURPOSE A.

The purpose of the Secondary Flood Plain Combining Zone shall be the protection of life and property from the hazards and damages which may result from flood waters of the selected flood magnitude. This zone is intended for application to those areas of the County which lie within the fringe area of the flood plain and are subject to less severe inundation during flooding conditions than occur in the F-1 Zone.

APPLICATION B

This zone is intended to be combined with other zones and may be applied only to those areas located within the boundaries of the selected flood which lie outside the "F-1" Primary Flood Plain Zone, as determined through an analysis of flood frequency, natural topography, bank erosion, channel shifts, flood profiles, velocity flows or other applicable factors.

USE C.

Only the following uses are allowed in the F-2 Zone:

- 1. All those uses listed under Subsection C of Section 14.7 of this Ordinance which are allowed in the underlying or base zone.
- 2. Single family dwellings and accessory residential and agricultural structures shall be allowed if they are allowed in the underlying or base zone, only if they comply with one or more of the following conditions:
 - a. The bottom of the structural floor of any such building will be above the selected flood profile level as shown on the Zoning Map for the building site; or,
 - b. All permanent buildings will be protected from flooding by dikes, levees or other flood protection works whose design has been approved by the Tulare County Flood Control District.

USE PERMITS D.

The following uses, buildings and structures shall be permitted in the "F-2" Zone only if a Use Permit is approved subject to the procedures referred to in Paragraph B of Part II of Section 16 of this Ordinance:

- 1. All uses allowed in the underlying or base zone which are not allowed under Subsection C of this Section.
- 2. All uses which may be permitted under USE Permit in the underlying or base zone.
- 3. Additions or structural modifications to all existing structures and accessory structures which do not comply with the requirements in Subsection C of this Section.

Said Use Permit shall be granted only if it is found that any building or structure to be constructed will be so constructed or located, or will be so protected by levees or other methods of flood proofing as to render them either resistant to flotation or immune to extensive damage by flooding, and to prevent peripheral flooding of other properties as a result of such construction.

4. TULARE COUNTY FLOOD DAMAGE PREVENTION ORDINANCE

CHAPTER 27. FLOOD DAMAGE PREVENTION

ARTICLE 1. GENERAL PROVISIONS

7-27-1000 STATEMENT OF PURPOSE:

It is the purpose of this Chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- (a) To protect human life and health;
- (b) To minimize the need for rescue and relief efforts associated with flooding;
- (c) To minimize potential property losses in special flood hazard areas;
- (d) To minimize damage to public facilities and utilities located in areas of special flood hazard;
- (e) To insure that potential buyers are notified that property is in an area of special flood hazard; and
- (f) To insure that those who occupy the areas of special flood hazard assume responsibility for their actions.

7-27-1001 STATUTORY AUTHORIZATIONS:

The Legislature of the State of California has in Government Code Sections <u>65302</u>, <u>65560</u>, and <u>65800</u> conferred upon local government units authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Board of Supervisors of the County of Tulare does hereby adopt the floodplain management regulations set forth in this Chapter.

(Amended by Ord. No. 3212, effective 10-29-98)

7-27-1002 FINDINGS OF FACTS:

The flood hazard areas of the County of Tulare are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. These flood losses are caused by uses that are inadequately elevated, floodproofed, or protected from flood damage. The cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities also contribute to the flood loss.

(Amended by Ord. No. 3212, effective 10-29-98)

7-27-1005 METHODS OF REDUCING FLOOD LOSSES:

In order to accomplish its purposes, this Chapter includes methods and provisions for:

(a) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities.

(b) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.

(c) Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters.

(d) Controlling, filling, grading, dredging, and other development which may increase flood damage.

(e) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

7-27-1010 DEFINITIONS:

Unless specifically defined below, words or phrases used in this Chapter shall be interpreted so as to give them the meaning they have in common usage and to give this Chapter its most reasonable application.

"ACCESSORY USE" means a use which is incidental and subordinate to the principal use of the parcel of land on which it is located.

"ALLUVIAL FAN" is an area subject to flooding when the floodplain is comprised of low flow channels where sediment accompanies the shallow flooding and the unstable soils scour and erode during a flooding event.

"APPEAL" means a request for a review of the Floodplain Administrator's interpretation of any provision of this Chapter.

"AREA OF SHALLOW FLOODING" is a designated Zone A, AO, A1-A30, AE, A99, or AH on the Flood Insurance Rate Map. In these zones, the base flood depths range from one to three feet; a clearly defined channel does not exist; the noticeable path of flooding is unpredictable and indeterminate; and noticeable velocity flow may be evident.

"AREA OF SPECIAL FLOOD HAZARD" has the same meaning as "SPECIAL FLOOD HAZARD AREA."

"BASE FLOOD" is the flood having a one percent chance of being equaled or exceeded any given year.

"BASEMENT" means any area of the building having its floor subgrade (below ground level on all sides).

"BREAKAWAY WALLS" are any types of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic or any other suitable building material which is not part of the structural support of the building and which is so designed as to break away under abnormal flood conditions without damage to the structural integrity of the building on which they are used or any building to which they might be carried by flood waters.

"BUILDING" has the same meaning as "Structure."

"BUILDING PERMIT" means a permit issued pursuant to Chapter 15 of Part VII of the Ordinance Code, including a mobile home installation permit.

"DEVELOPMENT" is any man-made change to improved or unimproved real estate (including filling, grading, paving, excavation, mining, dredging, storage of equipment or materials, or drilling operations) located within the area of special flood hazard.

"ENCROACHMENT" means the advance of infringement of uses, plant growth, fill, excavation, building, permanent structures or development into a floodplain which may impede or alter the flow capacity of a floodplain.

"EXISTING MANUFACTURED HOME PARK OR SUBDIVISION" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by the County. "EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

"FLOOD" OR "FLOODING" is a general and temporary condition of a partial or complete inundation of normally dry land areas from:

(a) The overflow of inland waters and/or

(b) The unusual and rapid accumulation of runoff of surface waters from any source.

"FLOOD BOUNDARY FLOODWAY MAP" is the official map on which the Federal Emergency Management Agency has delineated both the areas of flood hazards and the floodways.

"FLOOD HAZARD BOUNDARY MAP" means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated the areas of flood hazards.

"FLOOD INSURANCE RATE MAP" or "FIRM" is the official map on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

"FLOOD INSURANCE STUDY" is the official report provided by the Federal Emergency Management Agency that includes flood profiles, the Flood Insurance Rate Map (FIRM), the Flood Boundary Floodway Map, and the water surface elevation of the base flood.

"FLOODPLAIN" OR "FLOOD-PRONE AREA" means any land area susceptible to being inundated by water from any source. Also see "Flood" or "Flooding."

"FLOODPLAIN ADMINISTRATOR" is the individual or individuals appointed to administer and/or enforce the floodplain management regulations. See Section 7-27-1095.

"FLOODPLAIN MANAGEMENT" means the operation of an overall program of the corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

"FLOODPLAIN MANAGEMENT REGULATIONS" means this chapter and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control) and other applications of police power which control development in flood-prone areas. This term describes federal, state or local regulations in any combination thereof which provide standards for preventing and reducing flood loss and damage.

"FLOODPROOFING" means any combination of structural and non-structural additions, changes or adjustments to non-residential structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents (Refer to FEMA Technical Bulletins TB 1-93, TB 3-93 and TB 7-93 for guidelines on dry and wet floodproofing).

"FLOOD-RELATED EROSION" is a condition that exists in conjunction with a flooding event that alters the composition of the bank of a watercourse and increases the possibility of loss due to the erosion of the land area adjacent to the watercourse.

"FLOODWAY" means the channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. The floodway is delineated on the Flood Boundary Floodway Map, on maps adopted by the

State Reclamation Board when acting within its jurisdiction, and/or on the County Zoning Map (signified by the F-1 Primary Flood Plain Zone).

"FLOODWAY FRINGE" is that area of the floodplain on either side of the "regulatory floodway" where encroachment may be permitted.

"FRAUD AND VICTIMIZATION," as related to Section <u>7-27-1265</u> of this Chapter pertaining to variances, means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the Governing Body will consider the fact that every newly constructed building adds to government responsibilities and remains a part of the community for fifty to one hundred years; that buildings that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, damage and suffering that those increased flood damages bring; and that, in addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates.

"GOVERNING BODY" means the Board of Supervisors of the County of Tulare which is empowered to adopt and implement regulations to provide for the public health, safety and general welfare of its citizenry.

"HABITABLE FLOOR" means any floor usable for living purposes, which includes working, sleeping, eating or recreation, or a combination thereof. For flood insurance purposes, "Habitable floor" and "Lowest floor" will share the same definition.

"HARDSHIP" as related to Section 7-27-1265 of this Chapter pertaining to variances means the exceptional hardship that would result from a failure to grant the requested variance. The hardship justifying a variance must be exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot as a rule qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

"HIGHEST ADJACENT GRADE" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

"HISTORIC STRUCTURE" means any structure that is:

(a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

(b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

(c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

(d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved state program as determined by the Secretary of the Interior or directly by the Secretary of the Interior in states without approved programs.

"LEVEE" means a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

"LEVEE SYSTEM" means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

"LOWEST FLOOR" means the lowest floor of the lowest enclosed area, including basement (see definition of "Basement"), as follows:

(a) An unfinished or flood resistant enclosure below the lowest floor that is useable for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor provided it conforms to applicable non-elevation design requirements including but not limited to:

- (1) the wet floodproofing standard in Section 7-27-1180,
- (2) the anchoring standards in Section 7-27-1170,
- (3) the construction materials and methods standards in Section 7-27-1175,
- (4) The standards for utilities in Section 7-27-1200.

(b) For residential structures, all the subgrade enclosed areas are prohibited as they are considered to be basements (see "Basement" definition). This prohibition includes below-grade garages and storage areas.

"MANUFACTURED HOME" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for the use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

"MANUFACTURED HOME PARK OR SUBDIVISION" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

"MARKET VALUE" shall be determined by estimating the cost to replace the structure in new condition and adjusting that cost figure by the amount of depreciation which has accrued since the structure was constructed. The cost of replacement of the structure shall be based on a square foot cost factor determined by reference to a building cost estimating guide recognized by the building construction industry. The amount of depreciation shall be determined by taking into account the age and physical deterioration of the structure and functional obsolescence as approved by the floodplain administrator, but shall not include economic or other forms of external obsolescence. Use of replacement costs or accrued depreciation factors different from those contained in recognized building cost estimating guides may be considered only if such factors are included in a report prepared by an independent professional appraiser and supported by a written explanation of the differences.

"MEAN SEA LEVEL" means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

"MOBILE HOME" is a structure, including a manufactured home certified under the National Mobile Home Construction and Safety Standards Act of 1974, that is transportable in one or more sections, built on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities. It does not include recreational vehicles or travel trailers placed on a site for less than 180 consecutive days, or factory-built housing on permanent slab foundation.

"NEW CONSTRUCTION" means structures for which the "start of construction" commenced on or after the effective date of this Chapter, and includes any subsequent improvements to such structures.

"NEW MANUFACTURED HOME PARK OR SUBDIVISION" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of this Chapter.

"OBSTRUCTION" includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, snare or collect debris carried by the flow of water, or is likely to be carried downstream.

"ONE-HUNDRED-YEAR FLOOD" or "100 YEAR FLOOD" has the same meaning as "BASE FLOOD."

"PUBLIC SAFETY AND NUISANCE" as related to Section <u>7-27-1265</u> of this Chapter pertaining to variances means that the granting of a variance must not result in anything which is injurious to safety or health of an entire community, neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, river, bay, stream, canal, or basin.

"RECREATIONAL VEHICLE" means a vehicle which is:

- (a) Built on a single chassis,
- (b) Four hundred (400) square feet or less when measured at the largest horizontal projection,
- (c) Designed to be self-propelled or permanently towable by a light-duty truck, and

(d) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

"REGULATORY FLOODWAY" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

"REMEDY A VIOLATION" means to bring the structure or other development into compliance with State or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of this Chapter or otherwise deterring future similar violations, or reducing State or Federal financial exposure with regard to the structure or other development.

"RIVERINE" means relating to, formed by, or resembling a river (including tributaries), stream, brook, creek, or other similar watercourses.

"SHEET FLOW AREA" has the same meaning as "Area of shallow flooding."

"SPECIAL FLOOD HAZARD AREA" is the land in the floodplain subject to a one percent or greater chance of flooding in any given year. The area is designated as Zone A, AO, A1-A30, AE, A99, or AH on the FIRM.

"START OF CONSTRUCTION" includes substantial improvement and other proposed new development and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days from the date of the permit. The "actual start" means either the first placement of permanent construction of a structure on a site such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the installation of a mobile home to its permanent site. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the "actual start of construction" means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

"STRUCTURE" is a walled and roofed building or mobile home that is principally above ground; this includes a gas or liquid storage tank or a manufactured home.

"SUBSTANTIAL DAMAGE" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

"SUBSTANTIAL IMPROVEMENT" means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

(a) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

(b) Any alteration of a "historic structure"; provided, that the alteration will not preclude the structure's continued designation as a "historic structure."

"VARIANCE" means a grant of relief from the requirements of this Chapter which permits construction in a manner that would otherwise be prohibited by this Chapter.

"VIOLATION" means the failure of a structure or other development to be fully compliant with this Chapter. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this Chapter is presumed to be in violation until such time as the documentation is provided.

"WATER SURFACE ELEVATION" means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum where specified), of floods of various magnitudes and frequencies in the floodplains of the coastal or riverine areas.

"WATERCOURSE" means a lake, river, creek, stream, wash, arroyo, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

(Amended by Ord. No. 3212, effective 10-29-98; amended by Ord. No. 3425, effective 6-9-11; amended by Ord. No. 3436, effective 3-29-12)

7-27-1015 APPLICATION:

This Chapter shall apply to all areas of special flood hazards within the jurisdiction of the County of Tulare.

7-27-1020 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD:

The areas of special flood hazard identified by the Federal Insurance Administration, through the Federal Emergency Management Agency in a scientific and engineering report entitled "The Flood Insurance Study for Tulare County, California," dated September 29, 1986, with an accompanying Flood Insurance Rate Maps and Flood Boundary and Floodway Maps, dated September 29, 1986, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this Ordinance. The Flood Insurance Study is on file at the County Public Works Department.

(Amended by Ord. No. 3212, effective 10-29-98)

7-27-1025 COMPLIANCE:

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this Chapter and other applicable regulations.

7-27-1030 ABROGATION AND GREATER RESTRICTIONS:

This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter and another chapter, ordinance, easement, covenant, or deed restriction, conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

7-27-1035 INTERPRETATION:

In the interpretation and application of this Chapter, all provisions shall be:

- (1) Considered as minimum requirements.
- (2) Liberally construed in favor of the County of Tulare.
- (3) Deemed neither to limit or repeal any other powers granted under state statutes.

7-27-1040 WARNING AND DISCLAIMER OF LIABILITY:

The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man made or natural causes. This Chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This Chapter shall not create liability on the part of the County of Tulare, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damages that result reliant on this Chapter or any administrative decision lawfully made thereunder.

7-27-1041 SEVERABILITY:

This Chapter and the various parts thereof are hereby declared to be severable. Should any section of this Chapter be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the Chapter as a whole or any portion thereof, other than the section so declared to be unconstitutional or invalid.

(Amended by Ord. No. 3212, effective 10-29-98)

ARTICLE 3. ADMINISTRATION

7-27-1090 ESTABLISHMENT OF BUILDING PERMIT:

A Building Permit shall be obtained in accordance with Chapter 15 of this Part before construction or development is commenced within any area of special flood hazard established in section <u>7-27-1020</u> of this Chapter. In addition to the requirements of Chapter 15, an application for a Building Permit shall be made on forms furnished by the Planning and Development Director and may include, but not be limited to: plans in duplicate scale showing the nature, location, dimensions, and elevation of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(a) Site plan, including but not limited to:

(1) For all proposed structures, spot ground elevations at building corners and 20-foot or smaller intervals along the foundation footprint, or one foot contour elevations throughout the building site; and

(2) Proposed locations of water supply, sanitary sewer, and utilities; and

(3) If available, the base flood elevation from the Flood Insurance Study and/or Flood Insurance Rate Map: and

- (4) If applicable, the location of the regulatory floodway; and
- (b) Foundation design detail, including but not limited to:

 Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; and (2) For a crawl-space foundation, location and total net area of foundation openings as required in Section 7-27-1180 of this Chapter and FEMA Technical Bulletins TB1-93 and TB7-93; and

(3) For foundations placed on fill, the location and height of fill, and compaction requirements (compacted to 95 percent using the Standard Proctor Test method); and

(c) Proposed elevation in relation to mean sea level to which any nonresidential structure will be floodproofed, as required in Section <u>7-27-1180</u> of this Chapter and FEMA Technical Bulletin TB 3-93; and

(d) All appropriate certifications listed in Section 7-27-1180 of this Chapter; and

(e) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

7-27-1095 DESIGNATION OF RESPONSIBILITY:

The Planning and Development Director and Public Works Director are hereby appointed as Floodplain Administrators to jointly administer and implement this Chapter by granting or denying building permit applications in accordance with its provisions.

(Amended by Ord. No. 3212, effective 10-29-98)

7-27-1100 JOINT DUTIES AND RESPONSIBILITIES:

The joint duties and responsibilities of the Planning and Development Director and Public Works Director shall include, but not be limited to:

(a) Development Review:

(1) Review of all building permits to determine that the permit requirements of this Chapter have been satisfied.

- (2) Review of all other required state and federal permits have been obtained.
- (3) Review of all permits to determine that the site is reasonably safe from flooding.

(4) Review of all building permits to determine if the proposed development adversely affects the flood carrying capacity of the area of special flood hazard. For purposes of this Chapter, "adversely affected" means that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point.

(5) Review of all proposals for the development of five (5) or more lots or dwelling units to assure that the flood discharge exiting the development after construction is equal to or less than the flood discharge at the location prior to development.

(b) Review Use and Develop Other Base Flood Data:

(1) When the base flood elevation data has not been provided in accordance with section <u>7-27-1020</u> (special flood hazard areas designated as Zone A on the FIRM), the Planning and Development Director and Public Works Director shall obtain, review, and reasonably utilize the best base flood data available from any source (federal, state, or other) such as: high water mark(s), floods of record, or private engineering reports, in order to administer Article 5 of this Chapter and provide the developer with an estimated base flood elevation.

(2) If no base flood elevation data is available from a federal or state or other source, then a base flood elevation shall be obtained using one of two methods from the FEMA publication "Managing Floodplain Development in Approximate Zone A Areas—A Guide for obtaining and developing Base (100 year) Flood Elevations" dated July 1995 in order to administer Article 5:

(A) Simplified method.

(i) 100 year or base flood discharge shall be obtained using the appropriate regression equation found in a U.S. Geological Survey publication, or the discharge-drainage area method; and

(ii) Base flood elevation shall be obtained using the Quick-2 computer program developed by FEMA; or

(B) Detailed method. The 100 year or base flood discharge and the base flood elevation shall be obtained using detailed methods identified in FEMA Publication 265, published in July 1995 and titled: "Managing Floodplain Development in Approximate Zone A Areas—A Guide for obtaining and developing Base (100 year) Flood Elevation."

(C) Documentation of Floodplain Development. Obtain and maintain for public inspection and make available as needed the following:

Certification required by Section <u>7-27-1180</u> and Section <u>7-27-1210</u> (lowest floor elevations).

(D) Map Determinations. Make interpretations, where needed, as to the exact location of the boundaries of the special flood hazard. Where there appears to be a conflict between a mapped boundary and actual field conditions, grade and base flood elevations shall be used to determine the boundaries of the special flood hazard area. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section <u>7-27-1315</u>.

(E) Remedial Action. Take action to remedy violation of this Chapter as specified in Section <u>7-27-1025</u>.

- (c) Notification of other agencies:
 - Alteration or relocation of a watercourse:

 (A) Notify adjacent communities and the California Department of Water Resources prior to alteration or relocation;

(B) Submit evidence of such notification to the Federal Emergency Management Agency; and

(C) Assure that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained.

(2) Base Flood Elevation changes due to physical alterations:

(A) Within 6 months of information becoming available or project completion, whichever comes first, the floodplain administrator shall submit or assure that the permit applicant submits technical or scientific data to FEMA for a Letter of Map Revision (LOMR).

(B) All LOMRs for flood control projects are approved prior to the issuance of building permits. Building Permits must not be issued based on Conditional Letters of Map Revision (CLOMRs). Approved CLOMRs allow construction of the proposed flood control project and land preparation as specified in the "start of construction" definition.

Such submissions are necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements are based on current data.

(3) Changes in corporate boundaries: Notify FEMA in writing whenever the corporate boundaries have been modified by annexation or other means and include a copy of a map of the community clearly delineating the new corporate limits. (Amended by Ord. No. 3212, effective 10-29-98; amended by Ord. No. 3425, effective 6-9-11; amended by Ord. No. 3436, effective 3-29-12)

7-27-1105 DUTIES AND RESPONSIBILITIES OF THE PLANNING AND DEVELOPMENT DIRECTOR: The duties and responsibilities of the Planning and Development Director shall include, but not be limited to:

(a) Referral and inspection:

(1) Refer all building permits for property located within special flood hazard areas to the Public Works Director for review prior to approval.

(2) Inspect all construction, including installation of mobilehomes, to insure compliance with the requirements of this Chapter.

(b) Information to be Obtained and Maintained: Obtain and maintain for public inspection and make available as needed for flood insurance policies:

- (1) The certified elevation required in section 7-27-1180(a); (residential)
- (2) The certification required in section 7-27-1180(b); (shallow flooding)
- (3) The certification required in section 7-27-1180(c); (Zone A)
- (4) The floodproofing certification required in section 7-27-1180(d); (non residential)
- (5) The certified elevation required in section 7-01-2035; (subdivision) and
- (6) The anchoring and compliance certification required in section 7-27-1210(b) and (d) (mobile-home).
- (c) FEMA Reports:

Upon request by the Federal Emergency Management Agency (FEMA), prepare and submit reports to FEMA concerning the County's participation in the National Flood Insurance Program.

7-27-1110 DUTIES AND RESPONSIBILITIES OF THE PUBLIC WORKS DIRECTOR:

The duties and responsibilities of the Public Works Director in his capacity as Engineer to the Tulare County Flood Control District shall include, but not be limited to:

(a) Alteration of Watercourses: Notify adjacent cities and counties and the California Department of Water Resources prior to any alteration or relocation of a watercourse, submit evidence of such notification to the Federal Emergency Management Agency (FEMA), and assure that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained.

(b) Interpretation of Flood Insurance Rate Map (FIRM) Boundaries: Provide interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazards. Where there appears to be a conflict between a mapped boundary and actual field conditions, the applicant may file for a "Letter of Map Amendment" (LOMA) in accordance with the National Flood Insurance Program. The LOMA may be filed with the Public Works Director for transmittal to FEMA in the manner provided by law.

(Amended by Ord. No. 3425, effective 6-9-11)

7-27-1115 FLOOD CONTROL MASTER PLAN:

The Board of Supervisors, Planning Commission, Site Plan Review Committee and Zoning Administrator shall weigh all requests for future floodplain development against the Flood Control Master Plan of the Tulare County Control District. Consideration of the following elements are required before approval:

- (1) Determination of whether or not a proposed development is in or affects a known flood plain.
- (2) Inform the public of the proposed activity.

- (3) Determine if there is a practicable alternative or site for the proposed activity.
- (4) Identify the impact of the activity on the flood plain.

(5) Provide a plan to mitigate the impact of the activity in accordance with the provisions in section <u>7-27-1100</u>
 (a)(4).

ARTICLE 5. PROVISIONS FOR FLOOD HAZARD REDUCTION

7-27-1165 STANDARDS OF CONSTRUCTION:

In all areas of special flood hazard shown on the FIRM, the standards set forth in this Article shall be required.

7-27-1170 ANCHORING:

(a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

(b) All mobilehomes shall meet the anchoring standards of section 7-27-1210(a).

7-27-1175 CONSTRUCTION MATERIALS AND METHODS:

(a) All new construction and substantial improvements shall be constructed with flood resistant materials as specified in FEMA Technical Bulletin TB 2-93, and utility equipment resistant to flood damage.

(b) All new construction and substantial improvement shall use methods and practices that minimize flood damage.

(c) All elements that function as a part of the structure, such as furnace, hot water heater, air conditioner, etc., shall be elevated to or above the base flood elevation or depth number specified on the Flood Insurance Rate Map (FIRM).

(d) If within Zones AH or AO, so that there are adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

(Amended by Ord. No. 3212, effective 10-29-98)

7-27-1180 ELEVATION AND FLOODPROOFING:

(a) New construction and substantial improvement of any structure shall have the bottom of the lowest floor, including basement, elevated to or above the base flood elevation. Nonresidential structures may meet the optional standards in paragraph (d) of this Section. Prior to issuance of the occupancy permit or certificate, the elevation of the lowest floor, including the basement, shall be certified by a registered civil engineer or land surveyor that the elevation requirements have been met and verified by the County Surveyor. Notification of compliance shall be recorded as set forth in Section <u>7-27-1105(b)</u>.

(b) New construction and substantial improvement of any structure in Zone AO shall have the bottom of the lowest floor, including basement, elevated to or above the depth number specified on the Flood Insurance Rate Map (FIRM) as measured from the highest adjacent grade. Nonresidential structures may meet the optional standards in paragraph (d) of this Section. Prior to issuing the occupancy permit, compliance with the elevation requirement shall be certified by a registered civil engineer or land surveyor and verified by the County Surveyor. Notification of compliance shall be recorded as set forth in Section <u>7-27-1105(b)</u>.

(c) If no base flood elevation or depth number is provided on the FIRM (Zone A), any new construction or substantial improvement of any structure shall have the bottom of the lowest floor, including basement, elevated to:

(1) Said base flood elevation shall be determined by one of the methods in Section 7-27-1100 (b); or

(2) If the Planning and Development Director and Public Works Director determine that it is unreasonable to determine the base flood elevation pursuant to Section <u>7-27-1100(b)</u> then the Planning and Development

Director and Public Works Director may require that any new construction or substantial improvement of any structure shall have the bottom of the lowest floor, including basement, elevated to:

- (A) A height of at least two feet above the highest adjacent grade, or
- (B) Eighteen (18) inches above the top of the curb across the front of the lot.

Nonresidential structures may meet the optional standards set forth in paragraph (d) of this section. Prior to issuing the occupancy permit, compliance with the elevation requirement shall be certified by a registered civil engineer or land surveyor, and verified by the County Surveyor. Notification of compliance shall be recorded as set forth in Section <u>7-27-1105</u>(b).

(d) Nonresidential construction shall either be elevated in conformance with paragraph (a), (b) or (c) of this section or together with attendant utility and sanitary facilities, be floodproofed to the base flood elevation by one or more of the following:

- (1) Installation of watertight doors, bulkheads, and shutters.
- (2) Reinforcement of walls to resist water pressure.
- (3) Use of paints, membrane, or mortars to reduce seepage through walls.
- (4) Addition of mass or weight to structure to resist flotation.
- (5) Armour protection of all fill materials from scour and/or erosion.

Certification by a registered civil engineer or architect that the standards of this paragraph are satisfied shall be provided to the Planning and Development Director as set forth in section <u>7-27-1105(b)</u>.

(e) Flood openings. All new construction and substantial improvements of structures with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement shall follow the guidelines in FEMA Technical Bulletins TB 1-93 and TB 7-93, and must meet the following minimum criteria:

(1) For non-engineered openings:

(A) Have a minimum of two openings on different sides having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

(B) The bottom of all openings shall be no higher than one foot above grade;

(C) Openings may be equipped with screens, louvers, valves or other coverings or devices; provided, that they permit the automatic entry and exit of flood water; and

(D) Buildings with more than one enclosed area must have openings on exterior walls for each area to allow flood water to directly enter; or

(2) Be certified by a registered civil engineer or architect.

(Amended by Ord. No. 3212, effective 10-29-98; amended by Ord. No. 3425, effective 6-9-11; amended by Ord. No. 3436, effective 3-29-12)

7-27-1185 STANDARDS FOR ELEVATION CERTIFICATES:

(a) Certification of the elevation of the lowest floor or floodproofed elevation is required at that point where the footings are set and slab poured. Failure to submit an elevation certification shall be cause to issue a stop-work order for the project. As built plans certifying the elevation of the lowest adjacent grades is also required.

(b) Except within zones A and AO, the benches that are shown on the FIRM shall be used in calculating the elevation of the lowest floor.

(c) If fill is used to elevate a structure above the base flood elevation, the permit holder may apply for a Letter of Map Amendment (LOMA), as set forth in section <u>7-27-1110(b)</u>.

(Amended by Ord. No. 3212, effective 10-29-98)

7-27-1190 STANDARDS FOR ALLUVIAL FANS:

Areas subject to alluvial fan flooding have irregular flow paths that result in erosion of existing channels and the undermining of fill material. Those areas are identified on the Flood Insurance Rate Map (FIRM) as AO Zones with velocities.

(a) All structures must be securely anchored to minimize the impact of the flood and sediment damage.

(b) All new construction and substantial improvements must be elevated on pilings, columns, or armoured fill so that the bottom lowest floor beam is elevated at or above the depth number.

(c) Use of all fill materials must be armoured to protect the material from the velocity of the flood flow.

(d) All proposals for subdivision development must provide a mitigation plan that identifies the engineering methods used to:

- (1) Protect structures from erosion and scour caused by the velocity of the flood flow.
- (2) Capture or transport flood and sediment flow through the subdivision to a safe point of disposition.

(e) All mobilehomes shall be prohibited within the identified hazard area except within existing mobilehome parks or subdivisions.

7-27-1195 STANDARDS FOR STORAGE OF MATERIALS AND EQUIPMENT:

(a) The storage or processing of materials that are, in time of flooding, buoyant, flammable, explosive, or could be injurious to human, animal, or plant life, is prohibited.

(b) Storage of other materials or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation or if readily removable from the area within the time available after flood warning.

7-27-1200 STANDARDS FOR UTILITIES:

(a) All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from systems into flood waters

(b) On site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

7-27-1205 STANDARDS FOR SUBDIVISIONS:

(a) All new subdivision proposals and other proposed development, including proposals for manufactured home parks and subdivisions, greater than 50 lots or 5 acres, whichever is the lesser, shall:

- (1) Identify the Special Flood Hazard Areas (SFHA) and Base Flood Elevations (BFE).
- (2) Identify the elevations of lowest floors of all proposed structures and pads on the final plans.

(3) If the site is filled above the base flood elevation, the following as-built information for each structure shall be certified by a registered civil engineer or licensed land surveyor and provided as part of an application for a Letter of Map Revision based on Fill (LOMR-F) to the Floodplain Administrator:

(A) Lowest floor elevation.

- (B) Pad elevation.
- (C) Lowest adjacent grade.

(b) All subdivision proposals and other proposed development shall be consistent with the need to minimize flood damage.

(c) All subdivision proposals and other proposed development shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(d) All subdivisions and other proposed development shall provide adequate drainage to reduce exposure to flood hazards.

(Amended by Ord. No. 3425, effective 6-9-11)

7-27-1210 STANDARDS FOR MOBILEHOMES AND MOBILEHOME PARKS AND SUBDIVISIONS:

(a) All new mobilehomes and additions to mobilehomes shall be anchored to resist flotation, collapse, or lateral movement by at least one of the following methods:

(1) By providing an anchoring system designed to withstand horizontal forces of 15 pounds per square foot and uplift forces of 9 pounds per square foot; or

(2) By the anchoring of the unit's system, designed to be in compliance to the Department of Housing and Urban Development Mobilehome Construction and Safety Standards: or

(3) By bolting the frame or undercarriage to a reinforced, permanent foundation such as a retaining wall or storm wall used to set the unit.

As set forth in section <u>7-27-1105(b)</u>, certification meeting the standards above is required of the installer or state agency responsible for regulating the placement, installation, and anchoring of individual mobilehome units.

(b) The following standards shall be required for mobilehomes not placed in mobilehome parks or subdivisions, new mobilehome parks or subdivisions, expansions to existing mobilehome parks or subdivisions, and repair, reconstruction, or improvements to existing mobilehome parks or subdivisions that equals or exceeds 50 percent of the value of the streets, utilities, and pads before the repair, reconstruction or improvement commences:

(1) Adequate surface drainage and access for a hauler shall be provided.

(2) All mobilehomes shall be placed on pads or lots elevated on compacted fill or on pilings so that the lowest floor of the mobilehome is at or above the base flood level. If elevated on pilings:

- (i) The lots shall be large enough to permit steps.
- (ii) The pilings shall be placed in stable soil no more than ten (10) feet apart.
- (iii) Reinforcement shall be provided for pilings more than six (6) feet above ground level.

(c) Certification of compliance is required of the developer responsible for the plan or state agency responsible for regulating mobilehome placement.

(d) Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.

7-27-1211 STANDARDS FOR RECREATIONAL VEHICLES:

All recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's Flood Insurance Rate Map will either:

(a) Be on the site for fewer than 180 consecutive days, and be fully licensed and ready for highway use a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the sit only by quick disconnect type utilities and security devices, and has no permanently attached additions, or

(b) Meet the permit requirements of Article 3 of this Chapter and the elevation and anchoring requirements for manufactured homes in Section <u>7-27-1210</u>.

(Added by Ord. No. 3212, effective 10-29-98)

7-27-1215 FLOODWAYS:

Areas designated as floodways are located within areas of special flood hazard established in section <u>7-27-1020</u>. Since the floodway is an extremely hazardous area due to the flood velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

(a) Prohibit encroachments, including fill, new construction, substantial improvements, and other development, unless certification by a registered civil engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

(b) Until a regulatory floodway is adopted, no new construction, substantial development, or other development (including fill) shall be permitted within Zones A1–30 and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other development, will not increase the water surface elevation of the base flood more than 1 foot at any point.

(c) No mobilehome shall be placed in a floodway, except in an existing mobilehome park or existing mobilehome subdivision.

(d) The requirements of section 14.7 of the County Zoning Ordinance (Ordinance No. 352 as amended) shall also be applicable at such time that the County Zoning Map is amended to apply F I zoning within the floodway.

(Amended by Ord. No. 3425, effective 6-9-11)

ARTICLE 7. VARIANCES

7-27-1265 VARIANCES: AUTHORITY TO ACT:

If practical difficulties, unnecessary hardships or results inconsistent with the general purpose of this Chapter result through the strict interpretation and enforcement of this Chapter, then the Zoning Administrator shall have the authority to grant a variance from the provisions of this Chapter such as may be in harmony with its general purpose and intent, so that the spirit of this Chapter shall be observed, public safety and welfare served and substantial justice done.

7-27-1270 APPLICATIONS FOR VARIANCES: FEES:

(a) The Zoning Administrator shall grant a variance under the provisions of this Article only upon the filing of a written application therefore by the owner of the real property affected or his or her authorized agent. The Resources Management Agency Director shall prescribe the form of application for such variances.

(b) Unless otherwise provided, the Board of Supervisors shall adopt, from time to time by resolution, a schedule of fees to be paid by applicants with each application for a variance to defray the expenses incidental to the proceedings. No part of said fee shall be returned to the applicant if he or she subsequently withdraws the application, except in accordance with Section 130 of this Ordinance Code.

(c) An additional fee in the amount of Ten Dollars (\$10.00) shall be collected for each variance application to defray the expenses incidental to maintaining and enhancing the automated permit processing equipment and software utilized in the Planning and Development Department for processing of planning and building permits and certificates. (d) Unless otherwise provided herein, whenever there is a joint filing of multiple applications and the applicant consents to the consolidated processing of those applications, the applicable filing fees shall be reduced by twenty-five percent (25%). As used here in, the term "multiple applications" shall consist of two (2) or more applications for changes of zone, special use permits (including amendments thereto), variances, planned unit developments and planned developments, tentative subdivision maps, tentative parcel maps (including vesting maps), building line setback variances, flood variances, and surface mining permits and reclamation plans (including amendments thereto) which pertain to the same project.

(Amended by Ord. No. 3184, effective 6-7-97.) (Amended by Ord. No. 3262, effective 10-2-01)

7-27-1275 PROCEDURE FOR PROCESSING VARIANCES:

(a) Before acting on a variance the Zoning Administrator shall hold at least one (1) public hearing. Notice of such public hearing shall be given by publishing a notice of such hearing setting forth the time and place of the hearing and the nature of the variance requested, in a newspaper of general circulation published in the County, once, not less than ten (10) days prior to the date of such public hearing, and by mailing a copy of the notice of said hearing, not less than ten (10) days prior to the date of such public hearing, to the following persons or agencies:

- (1) The applicant.
- (2) County Flood Control Engineer.
- (3) County Public Works Director.
- (4) Supervisor of the Supervisorial District in which the property is located.
- (5) State Reclamation Board.

(6) All owners of real property as shown on the latest equalized assessment roll within 300 feet of the real property which is the subject of the variance.

(b) The decision of the Zoning Administrator shall be in writing and shall include findings of facts relied on in making the decision.

(c) A copy of the decision of the Zoning Administrator shall be publicly posted at or near the door of the Planning and Development Department for a period of one (1) week following the making thereof. Not more than two (2) days after making the decision on the application, the Zoning Administrator shall cause a copy of the decision to be mailed to the applicant, to the Board of Supervisors, and to any other person who has expressed an interest therein and has deposited with the Zoning Administrator a self addressed, stamped envelope for that purpose. Failure to mail or to receive such notice, as a result of mistake or inadvertence, shall not affect the validity of the decision.

7-27-1280 VARIANCES: FACTORS TO CONSIDER:

(a) In passing upon such applications, the Zoning Administrator shall consider all technical evaluations and all relevant factors and standards specified in this Chapter, and:

- (1) The danger that materials may be swept onto other lands to the injury of others.
- (2) The danger to life and property due to flooding or erosion damage.

(3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.

- (4) The importance of the services provided by the proposed facility to the County.
- (5) The necessity to the facility of a waterfront location, where applicable.

(6) The availability of alternative locations for the proposed uses that are not subject to flooding or erosion damage.

(7) The compatibility of the proposed use with existing and anticipated development.

(8) The relationship of the proposed use to the County General Plan and the floodplain management program for that area.

(9) The safety of access to the property in times of flood for ordinary and emergency vehicles.

(10) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site.

(11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(b) Any applicant to whom a variance is granted shall be given written notice over the signature of the Zoning Administrator that:

(1) The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$24 for \$100 of insurance coverage; and

(2) Such construction below the base flood level increases risks to life and property.

(Amended by Ord. No. 3212, effective 10-29-98)

7-27-1285 VARIANCES: PRIOR CONSENT:

No variance which is subject to the provisions of section <u>8414.2</u> of the California Water Code shall be approved without the prior written consent of the Department of Water Resources or State Reclamation Board and of the Engineer for the County Flood Control District.

7-27-1290 VARIANCES: LOT SIZE CONSIDERATIONS:

Generally, variances may be approved for new construction and substantial improvements to be erected on a lot of one half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, provided the factors set forth in section <u>7-27-1280</u> have been fully considered. As the lot size increases beyond one half acre, the technical justification required for issuing the variance increases.

7-27-1295 VARIANCES: AUTHORITY TO IMPOSE CONDITIONS:

Upon consideration of the factors set forth in section <u>7-27-1280</u> and the purposes of this Chapter, the Zoning Administrator may attach such conditions to the granting of variances as he or she deems necessary to further the purpose of this Chapter.

7-27-1300 VARIANCES: CONDITIONS:

(a) Variances may be granted for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.

(b) Variances shall not be granted within any floodway if any increase in flood levels during the base flood discharge would result.

(c) Variances shall only be granted upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(d) Variances shall only be granted upon:

(1) A showing of good and sufficient cause such as renovation, rehabilitation, or reconstruction. Variances for reasons of economic considerations, aesthetics, or because variances have been used in past shall not be considered good and sufficient cause.

(2) A determination that failure to grant the variance would result in exceptional hardship to the applicant.

(3) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization to the public, or conflict with existing County ordinances.

(e) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest flood elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation.

7-27-1305 USE PERMIT:

Notwithstanding the provisions of section <u>7-27-1265</u>, no variance shall be required under this Article if the proposed construction or substantial improvements have been approved in accordance with the use permit requirements set forth in section 14.7 of the County Zoning Ordinance (Ordinance No. 352, as amended).

7-27-1310 REVOCATIONS:

Any variance which is granted subject to conditions may be revoked by the Zoning Administrator if any of the conditions are violated. The same procedures shall be followed for revocation of a variance as are followed for granting a variance, including the appeal procedures, except that notice of the public hearing by the Zoning Administrator on revocation need not be published in a newspaper.

7-27-1315 APPEALS:

(a) Except as herein provided, all appeals regarding decisions on variances shall be subject to the provisions of section 165 of this Ordinance Code.

(b) Any person adversely affected by a decision of the Zoning Administrator on the variance may appeal the decision to the Board of Supervisors. An appeal to the Board of Supervisors shall be in writing and filed with the Clerk of the Board of Supervisors within ten (10) days after the date on which the decision of the Zoning Administrator was made. An appeal shall specifically set forth the grounds for the appeal. In addition to the notice requirement of section 165 of this Ordinance Code, the Board shall give notice of the appeal hearing to the persons and agencies named in section <u>7-27-1275</u> of this Article for giving notice by the Zoning Administrator.

(c) At the time of filing the appeal, the appellant shall pay a fee of One Hundred and Fifty Dollars (\$150) to the Planning and Development Director to defray the expenses incidental to the proceedings.

7-27-1320 RECORDS:

The Planning and Development Director as Floodplain Administrator shall maintain a record of all variance actions, including justification for their issuance and any appeal actions, and report any variances issued in its biennial report submitted to the Federal Insurance Administration of the Federal Emergency Management Agency.

(Amended by Ord. No. 3212, effective 10-29-98)

ARTICLE 9. NUISANCE, VIOLATIONS

7-27-1370 NUISANCE:

Any building, structure, substantial improvement, or other installation which is subject to this Chapter and which is not in full compliance with the requirements of this Chapter shall constitute a public nuisance.

7-27-1375 VIOLATIONS:

Any person violating any of the provisions of this Chapter which are declared to be unlawful shall be guilty of an infraction and shall be punishable as provided in section 125 of this Ordinance Code. Each such person shall be

deemed guilty of a separate offense for each and every day, or portion thereof, during which any violation of any such provision of this Chapter is committed, permitted or continued by such person, and shall be punishable therefore as provided hereinabove.

Mobile Version

F. TULARE COUNTY IMPROVEMENT STANDARDS

1. TULARE COUNTY IMPROVEMENT STANDARDS

IMPROVEMENT STANDARDS OF

TULARE COUNTY



County Civic Center Visalia, California

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IMPROVEMENT

STANDARDS

OF

TULARE COUNTY

STANDARDS ADOPTED ON THE 16TH DAY OF JANUARY, 1973, BY THE TULARE COUNTY BOARD OF SUPERVISORS FOR CONSTRUCTION OF IMPROVEMENTS IN SUBDIVISIONS, ROAD RIGHTS-OF-WAY, AND AT OTHER LOCATIONS WHERE SPECIFIED BY ORDINANCE.

> Revised: November 3, 1981/Res. 81-2221 (Fire Flow and Protection) Revised: September 19, 1989/Res. 89-1236 (Concrete Curbs and Sidewalks) Revised: December 10, 1991/Res. 91-1409 (SRA Fire Safe Regulations)

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SECTION I

GENERAL PROVISIONS

A. STANDARDS

Required improvement work shall be done in accordance with the applicable sections of these Improvement Standards including the California Standard Specifications, (hereinafter called the "Standard Specifications"); Sections 7000 - 7126 of the Tulare County Ordinance Code; and such other special provisions prepared by the developer's engineer and approved by the County Public Works Director that are necessary for the successful completion of the required work.

In case of conflict between the approved Special Provisions prepared by the design engineer and these Improvement Standards and/or the Standard Specifications, the approved Special Provisions shall take precedence over and be used in lieu of such conflicting portions of these Improvement Standards and/or the Standard Specifications. To supplement the above, the design engineer shall prepare necessary plans and profiles using accepted principles of civil engineering using, wherever applicable, the Standard Plates found in Section IV of these Improvement Standards.

B. DEFINITIONS

When used for the construction of any improvements required by these Improvement Standards, the definitions and terms listed in Section 1 of the Standard Specifications shall apply with the following exceptions:

<u>Contractor</u> - The person or persons, firm, partnership, corporation or combination thereof, private or municipal, or his or their legal representative, who have entered into an agreement with the County of Tulare for the construction of improvements in accordance with these Improvement Standards. Also a developer performing work under these Improvement Standards. <u>Department of Public Works</u> - The Board of Supervisors of Tulare County.

<u>Director of Public Works</u> - Chairman of the Board of the Tulare County Board of Supervisors.

<u>Department of Transportation</u> - The Tulare County Public Works Department and/or Road Department.

Engineer - Tulare County Road Commissioner and County Public Works Director, acting either directly or through the properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

Laboratory - The laboratory of the Tulare County Road Department or any other laboratory approved by the Tulare County Road Department to test materials and work performed under these Improvement Standards.

<u>Plans</u> - The project plans and Standard Plates, profiles, typical cross sections, general cross sections, working drawings and supplemental drawings, or reproductions thereof, approved by the Engineer, which show the location, character, dimensions and details of the work to be performed. All such documents are to be considered as part of the plans whether or not reproduced in the special provisions.

In the above definitions, the following terms are defined as follows:

Standard Plates - The plates contained in Section IV of these Improvement Standards.

Project Plans - The project plans are specific details and dimensions peculiar to the work and are supplemented by the Standard Plates insofar as the same may apply.

<u>Specifications</u> - The directions, provisions and requirements contained herein as supplemented by the Standard Specifications and by such approved special provisions as may be necessary pertaining to the method and manner of performing the work or to the quantities

and qualities of the materials involved.

<u>Special Provisions</u> - The special provisions are specific clauses or instructions setting forth conditions or requirements peculiar to the project under consideration and covering work or materials not satisfactorily covered by these Improvement Standards and the Standard Specifications. Only those special provisions approved by the Engineer shall be applicable to the work.

<u>State</u> - The County of Tulare except where the word "State" refers to the laws of the State of California.

<u>Work</u> - All the work specified, indicated, shown or contemplated in the improvement, including all alterations, amendments or extensions thereto authorized by the Engineer.

In addition to the definitions and terms of Section I of the Standard Specifications, whenever in these improvement standards, the specifications or on the plans, the following terms are used or pronouns used in place of them, the intent and meaning shall be as follows:

<u>Design Engineer</u> - The Civil Engineer retained by a subdivider or other developer to prepare the plans and specifications and to provide general supervision of the construction of the required improvement work.

<u>Developer</u> - A subdivider or other party who undertakes work by agreement or permit governed by these Improvement Standards.

<u>Improvement Plans</u> - Plans prepared for the developer by his design engineer and approved by the County Public Works Director and Road Commissioner.

State Responsibility Area (SRA) - That area or those areas within the definition of a "State Responsibility Area" as set forth in the Zoning Ordinance of Tulare County, Tulare County Ordinance No. 352, as amended from time to time.

C.

SUBDIVISION PLANS AND SPECIFICATIONS

All improvement plans, specifications, and special provi-

sions shall comply with the requirements of the approved or conditionally approved subdivision tentative map and these Improvement Standards. Prior to beginning any construction and at least 14 days prior to the date on which a developer desires the County Public Works Director to present his final

map of the development to the Board of Supervisors, his engineer shall present completed improvement plans and specifications along with any required special provisions, to the County Public Works Director for his approval.

Construction changes from the approved Improvement Plans shall be permitted only upon approval of the County Public Works Director. As built plans shall be furnished to the County Public Works Director upon completion of the work and shall be a prerequisite to acceptance of the work.

SECTION II

DESIGN

A. STREETS AND HIGHWAYS

1. Road Classification

a. <u>Class 1 Roads</u> - A cul-de-sac or minor residential street so designed that it cannot serve more than 50 lots, the primary function of which is to provide access to abutting property.

b. <u>Class 2 Roads</u> - A minor residential street so designed that it cannot serve more than 120 lots, the primary function of which is to provide access to abutting property.

c. <u>Class 3 Roads</u> - A minor residential collector street that has or is expected to have the dual purpose of providing access to abutting property and of carrying traffic from Class 1 and Class 2 Roads to roads in the County Select System.

d. <u>Select System Roads</u> - All State Highways, Federal Aid Secondary Routes, arterials and collector roads existing or unconstructed, that are designated for inclusion in the Select System by the Board of Supervisors with the approval of the State Department of Transportation.

2. Geometric Design

a. <u>Road Widths</u> - The road widths shall comply with the applicable geometric section shown on Plate No.s A-1, A-2,

A-3, A-1M, A-2M and A-3M of these Improvement Standards.

b. <u>Design Speeds</u> - The minimum design speed shall comply with the applicable design velocities shown on Plate No.s A-1, A-2, A-1M, A-2M and A-3M of these Improvement Standards.

c. <u>Grades</u> - Road grade shall not be less than 0.15%. Maximum allowable grades shall comply with the applicable grades shown on Plate No.s A-1, A-2, A-3, A-1M, A-2M and A-3M.

d. <u>Superelevation</u> - Superelevations shall comply with Plate No. A-5.

e. <u>Sight Distance</u> - Vertical curves shall be constructed to provide the following stopping sight distance or headlight sight distances.

Design Speed, MPH	Sight Distance - Feet
20	120
25	160
30	200
35	240
40	275
50	350
60	475

f. <u>Horizontal Alignment</u> - The curve radii, curve or arc length, and the minimum tangent length between superelevated curves shall be determined from Plate No. A-4.

g. <u>Intersections</u> - Street intersections shall be as near right angles as practical. In no case shall the angle of intersection be less than seventy degrees nor shall the tangent distance measured from the intersection be less than 35 feet. Streets located on opposite sides of an intersecting street shall have their centerlines directly opposite each other or their centerlines shall be separated by not less than 150 feet.

In mountainous areas where a minor residential street or cul-de-sac connects to a minor residential collector street and adequate signing for a full stop is provided, the radius of curvature and sight distance for the minor residential street may be reduced to 50 feet and 85 feet respectively within 150

feet of the intersection.

The centerline grades of intersecting streets shall not exceed 6 percent for a distance measured from the intersection of:

- 50 feet on Class 1 and 2 roads (Minor Residential Street).
- 70 feet on Class 3 (Minor Residential Collector Street).

h. <u>Slopes and Clearing</u> - The limits of clearing on all roads shall be not less than 2 feet outside excavation and embankment slopes and not less than 5 feet from the edge of pavement.

Embankment slopes shall be 1 1/2:1 or flatter. Excavation slopes shall not be steeper than 1:1 for cuts less than 15 feet high nor shall they be steeper than 1 1/2:1 for cuts greater than 15 feet high unless evidence satisfactory to the Road Department is submitted that indicates steeper slopes would be stable.

i. <u>Industrial Streets</u> - The geometric design of roads in industrial areas will be based upon the specific traffic requirements of the area served but shall have the following minimums:

Travel lane widths	12	feet
Parking lane widths	10	feet
Border widths(sidewalk	areas) 8	feet

The design velocity, maximum grade, maximum superelevation and minimum right of way widths shall generally not be less than those specified for Select Roads as shown on Plates A-1, A-2 and A-3 of Section IV of the Improvement Standards.

Structural Design-Roads

The R-value design method used by the California State Department of Transportation shall be used to determine the thickness of the various structural elements of the roadway. A 10 year design life shall be used. The gravel equivalents and minimum thickness of the various structural layers shall be obtained from Plate A-9, Section IV of these

Improvement Standards.

The Traffic Index, T.I., shall be determined from Plate No. A-6 where traffic estimates can be made by conventional means. If traffic estimates cannot be made, the T.I. shall be determined from Plate No. A-7. Commercial and Industrial Streets and alleys shall use a minimum traffic index of 6.0.

The number of dwellings served by a road, including loop roads, shall be the number of dwellings fronting the entire road plus the number of dwellings fronting any other lesser street connected to it that would logically be served by the road under consideration.

4. Structure Design-Bridges

All bridges and culverts shall be designed for the following minimum design loads:

Road Class	AASHT	D	es:	ign	Load
1 & 2	н	15	-	44	
3	HS	15	-	44	
Select System Roads and All Roads in the SRA	HS	20	-	44	

In mountainous areas the minimum clear width of bridges shall not be less than the paved width plus four feet on each side.

In valley areas the width of the bridge shall be sufficient for the full curb to curb width plus standard sidewalk areas and railings on each side of the bridge.

5. Curbs, Gutters and Sidewalks

In valley areas curbs and gutters shall be required on all lots within a subdivision if a majority of the lots contain less than 2.5 acres and/or have less than 200 feet average widths.

Sidewalks, where provided, shall have a minimum width of four (4) feet and shall be located adjacent to the curb unless approved by the Engineer.

6. <u>Auxiliary Drainage Facilities</u>

Culverts, ditches at the bottom of cut slopes, and other such drainage facilities shall be designed for a flood frequency of 10 years or more with inlet not submerged, and a frequency of 50 years or more without overtopping the roadway fill.

Down flumes or other overside drains shall be spaced so as to drain no more than 300 feet of roadway.

Energy dissipators or other suitable forms of erosion protection shall be placed at culvert outlets where the Road Department determines such measures are needed for erosion control.

7. Cul-de-Sacs

Cul-de-sacs in valley areas shall not be more than six hundred and sixty (660) feet in length and shall terminate with a circular turnaround constructed as shown on Plate A-20 of Section IV.

The maximum length of cul-de-sacs in mountainous areas shall be 1,000 feet, except in the SRA where cul-de-sacs serving parcels zoned for less than one acre maximum length shall be 800 feet. The minimum radius of the cul-de-sacs right of way in mountainous areas shall be 45 feet and the minimum radius of the pavement edge shall be 37 feet, except in the SRA where the minimum radius of the cul-de-sacs right of way shall be 48 feet and the minimum radius of the pavement edge shall be 40 feet.

The minimum distance from the centerline of the road to the right of way in mountainous areas may be reduced 5 feet (Distance B, Plate No. A-IM and Plate No. A-2M.)

The maximum paved slope across the bulb of a cul-de-sac shall be 6 percent.

In mountainous areas the sight distance may be reduced to 85 feet within 150 feet of the center of the bulb.

8. Stub Roads

Stub roads shall be completely improved to the subdivision boundary and such boundaries shall not be distorted to specifically exclude the stub road.

Temporary turn-arounds on stub roads exceeding one lot in depth shall be constructed using a pavement radius of 30 feet.

9. Alleys in Valley Areas

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If alleys are provided, they shall be a minimum of twenty (20) feet in width and shall be constructed as shown on Plate A-3, Section IV.

If two alleys intersect, the corners shall be cut either on a twenty (20) foot radius to which the lot boundaries are tangent or on a straight line connecting points on both lot lines fifteen (15) feet from the corner of the lot at the intersection of the alleys.

Alleys thirty (30) feet or more in width may be required at the rear of lots in areas zoned for commercial and industrial use and in unzoned areas proposed for commercial and industrial use.

10. Private Drives in Mountainous Areas

Where reasonable access to abutting property cannot be provided within one lot, the driveway shall be constructed together with other subdivision improvements and the easements for such joint drives shall be shown on the improvement plans.

Joint driveways shall not serve more than 4 lots and shall be surfaced within the public road right of way and the entire driveway shall be constructed to prevent eroded material from being deposited on the public road.

11. Signs

At locations where steep cut or fill slopes prohibit parking off the pavement, "No Parking" signs shall be installed and charged to the developer. The subdivision plans shall clearly indicate such locations so that approval of no parking zones by the Board of Supervisors can be obtained.

12. Redwood Headers

2" X 6" redwood headers shall be installed to protect all edges of asphalt concrete where streets are partially completed prior to placing A.C. surfacing. Header shall be held in place with 2" X 3" stakes 18" long which shall be driven vertically and securely nailed to the headers. The backfill on the unimproved side of the headers shall be compacted to the density of the undisturbed earth.

B. DRAINAGE

1. <u>General</u>

All drainage design shall be done in accordance with the accepted principles of Civil Engineering and these Improvement Standards.

a. Closed Conduits - Waterways whose design dis-

charge may reasonably be conveyed in a 48-inch diameter or smaller concrete pipe shall be placed underground in a closed conduit, except for natural waterways.

2. Hydrologic Design

Hydrologic Design shall be based upon anticipated full development of the tributary watershed.

Average recurrence interval is defined as the average number of years, over a long period of time, in which a given rate of flow is equalled or exceeded in magnitude. Flood flows to be used for the design of waterways, channels and closed conduits shall have minimum average recurrence intervals as follows:

a. <u>Major Waterways</u> having a drainage area of over four square miles shall be designed for an average recurrence interval of 50 years or more.

b. <u>Secondary Waterways</u> having a drainage area of between one and four square miles, and drainage facilities for subdivisions, shall be designed for an average recurrence interval of 10 years or more.

c. <u>Minor Waterways</u> having a drainage area of less than one square mile shall be designed for an average recurrence interval of 5 years or more.

A given waterway, therefore, may be classed as minor in its upper reaches, then change to the secondary classification at a point where the drainage area exceeds one square mile and then change again to the major classification at a point where the drainage area exceeds four square miles.

In the absence of stream gages or other recorded information on major, secondary and minor waterways, the design discharge shall be determined by the use of the following modified rational formula:

Q = KCIA

in which:

- Q = design discharge, cubic feet per second
- C = runoff coefficient (from Plate No. B-1, based upon anticipated full development.)

- I = intensity of rainfall, inches per hour (from Plate No. B-2.)
- A = tributary watershed area, acres.
- K = factor related to annual average rainfall from Plate No.s B-3 and B-4.

Time of concentration shall be based on an initial lot to street time of 10 minutes for lots smaller than 1/2 acre, and 15 minutes for lots of 1/2 acre and larger, plus water travel time.

Where the size of a watershed is too large for application of the rational method in one step, the waterway shall be subdivided into reaches of reasonable length and the rational formula applied to each, step-by-step, properly accumulating the parameters unless another accepted engineering procedure for determining the design discharge is approved by the Engineer.

3. Hydraulic Design

a. <u>General</u> - Minor waterways discharging into major or secondary waterways shall be designed to operate against a 5 year flow in the major or secondary waterways, provided that the ground elevation along the minor system shall be above the 50 year water surface elevation in the major or secondary waterway.

If a secondary or minor waterway is placed in a closed conduit, sufficient additional surface routes for flood flows shall be made available to carry the added flow increment up to the 50 year design discharge with no more than nuisance damage to improvements or projected improvements and with no inundation of present or future buildings. If such surface routes cannot be made available, the secondary or minor waterway shall be designed to carry the 50 year design discharge.

Design depth of flow in gutters shall not exceed 0.4 feet for the 5 year flow, provided the 10 year flow shall be contained within the right-of-way. Roadside ditches are allowed where lot frontage is greater than 200 feet, except that they shall not be used where the design flow is greater than that which could be carried in a standard gutter flowing 0.4 feet deep on the same slope as the road profile slope. Where the discharge exceeds such gutter capacity, or the length of open flow exceeds 1,500 feet, a closed conduit system shall be provided. The minimum size of cross drains, storm sewer mains and laterals over twenty feet in length shall be 15 inches in diameter. The minimum size of any such line twenty feet or less in length shall be 12 inches in diameter.

Open channels shall be constructed to carry the design discharge with 1.5 feet of freeboard. Protective lining may be required when velocity of flow exceeds 3 feet per second and soil conditions would present erosion problems. Fencing of open channels may be required.

b. <u>Manning's "n" values</u> - Manning's "n" value for design shall be as follows:

1.	Concrete Pipe 24" and greater	n	=	0.012
	Concrete Pipe less than 24"	n	=	0.015
2.	Concrete, wood float or broome	d		
	finish	n	=	0.015
3.	Asphaltic Concrete	n	=	0.017
4.	Corrugated Metal Pipe	n	-	0.024

c. Conduit System - Major and secondary waterways

placed within a closed conduit system shall have a minimum 1 foot clearance between the design water surface and the soffit of the conduit. The design depth in circular conduits shall not exceed 0.80 of the diameter of the conduit for major and secondary waterways. Minor waterways placed in closed conduit systems may be designed for full conduit capacity and pressure flow. At inlets and non-pressure type manholes within a closed conduit system, the hydraulic grade line shall be not less than 0.5 foot below the gutter or inlet surface elevation.

d. <u>Alignment and Structures</u> - The alignment of closed conduits shall be as nearly straight as practicable. Manholes shall be provided at all junctions, at all bends which are sharper than those formed by standard single bevel concrete pipe, at intervals not to exceed 500 feet along 21-inch and smaller conduits, at intervals not to exceed 1000 feet along 24-inch and larger conduits, and at the junction of trunk lines with catch basin laterals where the length of the catch basin lateral is greater than 4-feet.

e. <u>Ponding Lots</u> - Ponding lots will be permissible if connection to an existing drainage system is not feasible. The location of a ponding lot shall be located adjacent to a logical storm drain route.

Ponding lot areas are to be established on the basis of one (1) lot for each twenty (20) for 1/2 acre lots and smaller and one (1) lot for each thirty (30) for lots larger than 1/2 acre. Where the ratio requires more than one-half of a lot, a full additional lot will be required. The minimum ponding lot area shall be one lot area (based on the average lot area).

Ponding lots shall have a 1.5 foot minimum freeboard, a 3.0 foot maximum water depth and a water surface elevation of 0.5 foot or more below the grate elevation of the lowest catch basin in the system. Ponding lot construction shall conform to the details shown on Plates B-5 and B-6 in Section IV.

f. <u>Pumping Systems</u> - Pumping systems shall be of sufficient capacity to discharge the peak design flow. Pumping systems on major and secondary systems shall consist of two pumps whose combined capacity equals the total expected peak design flow. The sump shall be designed to provide a minimum storage, in gallons, of one and one-half times the rated capacity of the pumping system in gallons per minute.

All switches and control mechanisms, except for reset switches, shall be enclosed or placed in lockable boxes or buildings so that operation by unauthorized personnel can be prevented. All pumping systems shall be enclosed with standard six foot chain link fence.

g. <u>Irrigation Channels</u> - When disposal of storm waters is proposed to be into an irrigation channel the developer shall first secure written consent of the owner or the operating authority to the discharge of storm waters into irrigation facilities, together with the right to assign such

privilege at no cost to the County. At the conclusion of the improvement work and prior to acceptance of the improvements, the developer shall assign the privilege to the County.

The design engineer representing the developer shall evaluate and certify as to the adequacy of the irrigation facility as a disposal system.

C. WATER SYSTEMS

1. Source of Water

When the source of water is other than an existing system approved by either the State Department of Health Services or the County Department of Health Services, construction of the source facilities shall comply with the requirements of Bulletin No. 74, Water Well Standards, State of California, Department of Water Resources.

2. Quantity of Water

The quantity of water delivered to the distribution system within a subdivision from all source and storage facilities for a period of two (2) hours shall be the maximum domestic demand plus a fire flow quantity of not less than 500 gpm for single family residential, 1500 gpm for multi-family residential-commercial-light manufacturing, and 2500 gpm for heavy manufacturing. For systems up to 625 customer units the domestic quantity shall not be less than Q = 100 plus 25 \sqrt{N} , and Q = 100 plus N for more than 625 customer units at sufficient pressure to provide a minimum pressure of 25 p.s.i.g. to each lot served; where Q equals the rate of flow in gallons per minute delivered from the combined source facilities to the distribution system, and N equals the total number of customer units where each customer unit is equivalent to one for a single family dwelling on a normal subdivision lot. Other types of development shall be assigned appropriate customer unit values by the Engineer as experience with the distribution system or locality indicates. The minimum source and domestic demand storage design requirements shall be in accordance with Plate No. WS-11 of Section IV.

3. Quality of Water

The quality of water supplied for human consumption shall conform to Sections 3, 4 and 5 of the latest United States Public Health Service Drinking Water Standards.

Samples will be taken and tests made by the County Department of Health Services for bacteriological determination of potability.

Chemical and physical tests for potability shall be performed by a commercial laboratory certified by the State Department of Health Services for performance of chemical and physical analysis, and the costs thereof shall be borne by the subdivider.

Construction plans shall show provision for adequately treating the water in order to meet water quality requirements of this section; or before the Engineer shall approve and sign the plans, the Tulare County Health Officer shall certify that the water supply meets the quality requirements of this section.

Installation of water treatment or water conditioning equipment will be accomplished by personnel properly licensed by the State of California.

4. Use of Water

Connection of house services to service laterals and subsequent use of water, either temporarily or permanently, shall not be allowed prior to approval of the distribution system by the County Health Officer and County Public Works Director.

5. Piping and Appurtenances

a. <u>General</u> - The design of water systems shall be based on good engineering practice and the requirements of these Standards, and shall be approved by the Engineer prior to any construction. If the design engineer of the water system can provide satisfactory information and calculations to substantiate that reduced sizes and substitute material will meet the quantity and quality requirements of these standards, the County Public Works Director may allow use of alternate methods and materials. All distribution systems shall be designed to permit circulation of water flows throughout, except where impractical because of a cul-de-sac, or like conditions, or the incomplete development of a grid system. All dead end runs shall be provided with a means of flushing.

b. <u>Water Main Size</u> - The water mains shall be of adequate size and so designed in conjunction with related facilities to maintain a minimum operating pressure of 25 p.s.i.g. for each customer at the time of maximum domestic and fire flow demands in the system.

All water mains in valley subdivisions shall have a minimum nominal diameter of six (6) inches for single-family residential, ten (10) inches for multi-family - commercial light manufacturing, and twelve (12) inches for heavy manufacturing except cul-de-sacs or other streets not required to have a fire hydrant, and serving six (6) lots or less, in which case a minimum size of four (4) inches nominal diameter shall be permitted. Water mains for mountainous areas shall have a minimum nominal diameter of four (4) inches and shall be designed to provide a loop system to maintain adequate pressure for fire protection. Any stub line over 660 feet in length or supporting more than one fire hydrant shall be 6 inches. A four (4) inch waterline from the street main shall be provided to the hydrant outlet.

c. <u>Location</u> - In general, when mains are to be placed in the traveled portion of streets, they shall be as parallel as possible to, and between four (4) and fourteen (14) feet from street centerline, but shall in no case be closer than three (3) feet from the lip of the gutter or edge of pavement.

Street mains shall be laid in the streets on which the property to be served fronts, and in subdivisions such mains shall be run to the limits of the subdivision on stub roads so that adjacent future development will not require excavation of the improved street within the subdivision.

The mains shall be kept a minimum of ten (10) feet from

the sewers.

d. <u>Gate Valves</u> - Gate valves shall be of the same size as the pipeline in which they are installed and a minimum of three valves shall be placed at a cross and two valves at a tee and shall be placed on the projection of the edge of pavement or lip of gutter. Valves on distribution systems shall be so located that any single break, accident, or repair will not necessitate shutting off from service a length of main greater than 800 feet for the valley and 1320 feet in the mountainous areas, except that in commercial or industrial areas, the Engineer may require a maximum length of 500 feet.

e. <u>Air and Vacuum Valves</u> - Air release and vacuum valves of adequate size shall be provided where necessary at all high points on mains. Suitable housing and protection for valves shall be provided and a shut off valve shall be provided in conjunction with each air release and vacuum valve to permit removal of valves for maintenance and servicing.

f. <u>Flexible Couplings</u> - Sufficient flexible couplings shall be provided in all piping adjacent to structures to permit differential settling of the foundations of piping and structures without damage to the piping.

g. <u>Service Laterals</u> - A service lateral shall be provided to each lot in the subdivision. Main water pressure, type of development and expected rate of water consumption shall determine the size of the service lateral, but in no case shall said lateral be smaller than a nominal diameter of 3/4inch. Service laterals shall be placed perpendicular to the main and within the limits of the projection of the property lines of the property to be served. A "T" lateral may be allowed for two adjacent lots if the design engineer can provide calculations and information that the minimum pressure and volume can be maintained.

h. <u>Fire Hydrants</u> - Spacing of said hydrants shall be uniform throughout the subdivision with maximum spacing such that the maximum run of hose required between any hydrant and the nearest available point on the extreme lot shall not exceed 330 feet for single family and 150 feet for other types of development.

In the SRA, fire hydrants serving any building shall be not less than 50 feet nor more than one-half mile by road from the building it is to serve and located at a turnout or turnaround along the driveway to that building or along the road that intersects with that driveway.

Fire hydrants in valley areas shall be placed with the centerline of the hydrant 18 inches behind the face of the curb. If sidewalk is to be constructed or if the subdivision is within an Urban Improvement Area, then hydrants shall be located at the back edge of the sidewalk. For mountainous areas, the hydrants shall be located between 2 and 5 feet beyond the edge of pavement. Hydrants shall be located at street intersections in conformance with Standard Drawings with additional hydrants located at sufficient intervals along the streets to comply with the spacing requirements of these Standards.

In the SRA, fire hydrants shall be 8 feet from flammable vegetation, between 4 and 5 feet beyond the edge of pavement, and in a location where fire apparatus using it will not block the roadway. Furthermore, within a SRA hydrants located along a road or private vehicular access shall be required to have a reflectorized blue marker, with a minimum dimension of 3 inches, mounted on a fire retardant post. Said post shall be within 3 feet of the hydrant with the marker no less than 5 feet above established grade in a position visible from the roadway.

i. <u>Thrust Blocks</u> - All tees, bends, plugs, fire hydrants and other sections of piping and appurtenances that might be capable of being displaced by the action of either working pressures or test pressures within the water system shall be anchored in place by the use of thrust blocks, thrust backing or harnesses as shown on the standard drawings. The bearing areas of thrust blocking on the supporting soil shall

not exceed that allowable for the soil involved. The pressure used to determine the required size of thrust blocks bearing area shall be no less than the test pressure required in Section III herein. Required thrust block bearing areas shall be in accordance with Plates WS-6 and WS-8 in Section IV.

SECTION III

CONSTRUCTION

A. CONTROL OF THE WORK

All work accomplished and all materials furnished under these Improvement Standards shall be subject to the inspection and approval of the Engineer. Such inspection and approval of work and materials shall not relieve the developer of any of his obligations to complete the work as specified. Work and materials not meeting these requirements shall be made good and unsuitable work and materials shall be rejected.

The Engineer shall have access to the work at all times and shall be furnished every reasonable facility for ascertaining that the methods, materials and workmanship are in accordance with the requirements and intent of these Improvement Standards. The developer or his authorized agent shall be in charge of, and responsible for all phases of the work while it is in progress.

The Engineer shall be notified at least twenty-four hours prior to beginning any of the following stages of work, shall be notified when each of the stages has been completed, and subsequent stages shall not be begun without approval of the Engineer. Should the developer fail to so notify the Engineer, the cost of all subsequent inspection and testing necessary to ascertain if the work has met all the specified requirements shall be borne by the developer or the work shall not be approved.

- Roadway and ditch excavation, including the preparation of embankment areas and the placement of embankment material.
- 2. Structure Excavation.
- Placing culvert pipes and storm drains.
- Placing structure backfill material.
- Construction of forms for all concrete work including concrete curbs.
- Placing Concrete.
- Placement of any layer of subbase, base or surfacing material including the preparation of the subgrade therefore.
- 8. Final Cleanup.

In addition to the above, the developer shall notify the Engineer whenever improvement work is to be performed on Saturdays, Sundays or holidays or during hours of the day when such work is normally not performed so that inspection may be provided.

The source of materials used for work performed under

these Improvement Standards shall be approved by the Engineer before delivery is made. The developer shall give the Engineer sufficient notice of sources of material so that such tests and inspections as the Engineer deems necessary can be performed to determine that the materials comply to the specifications. If the source is not already approved the notice shall not be less than 10 working days prior to delivery of the material to the project. Only approved material shall be used in the work. If it is found that sources of supply which have previously been approved do not furnish a uniform product or if the product proves unacceptable at any time, the developer shall furnish acceptable material from another approved source. No material which after approval has in any way become unfit for use shall be used in the work.

All tests of materials and work to determine compliance with the approved specifications shall be in accordance with the methods and procedures in use by the Department of Transportation and defined in Section 6-3.01 of the Standard Specifications or as they may be amended in these Improvement Standards or by the Special Provisions. Should the work not be performed by contract, the test method shall be the test method in effect on the first day of the month preceeding the month in which work is first begun on the project. The developer shall furnish to the Engineer, without charge, samples of all materials to be used in the work. Samples of material from which tests are to be made shall be taken under the supervision of the Engineer, by a recognized laboratory or by the Design Engineer retained by the developer.

In lieu of prior sampling and testing of certain manufactured products such as reinforcing and structural steel, culvert pipe, paint, cement and asphalt products, the Engineer may permit or require certificates of compliance from the supplier of such products before such materials can be used in the work.

Preliminary sampling and testing of the improvement site or sources of materials that are to be made prior to construc-

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tion may, at the option of the Engineer, be performed by the Laboratory of the Tulare County Road Department, by a recognized commercial laboratory or by the Design Engineer retained by the developer. Construction control testing of materials entering the work shall be performed by the Engineer or by a commercial laboratory retained by the County of Tulare. The cost of all preliminary testing not performed by the Laboratory of the Tulare County Road Department shall be paid by the developer. Costs of all preliminary testing performed by the County Laboratory under the direction of the Engineer and all construction control testing performed by the Engineer or laboratory retained by the County shall be paid by the County except as follows:

Whenever a specified percent relative compaction is required and the material or portion thereof so tested fails to meet or exceed the relative compaction specified, the first retest shall be performed at no expense to the contractor. Should the first retest also fail, a charge of \$30.00 for each additional retest performed by the County shall be charged the developer. Failure of the developer to comply with the approved plans and specifications and the procedures specified herein shall be deemed sufficient cause for the rejection by the County of all or any portion of the work. The Engineer may cause rejected work to be remedied, removed or replaced all at the expense of the developer.

- B. STREETS AND HIGHWAYS
 - 1. <u>General</u>

The construction of all streets, highways, drainage structures, and their auxiliary facilities shall comply with the requirements of the following portions of the Standard Specifications, except as such portions shall be amended by these Improvement Standards and/or the special provisions, excluding therefrom all reference to measurement and payment. Measurement and payment for improvement work performed under Division Seven or Twelve of the Streets and Highways Code of the State of California shall be as specified in the Special Provisions. Measurement and payment for other work performed under these improvement standards shall be the responsibility of the developer.

Applicable Sections:

- 1. Definition and Terms
- 5. Control of Work
- 6. Control of Materials
- 10. Dust Control
- 15. Existing Highway Facilities
- 16. Clearing and Grubbing
- 17. Watering
- 18. Dust Palliative
- 19. Earth Work
- 20. Erosion Control and Landscaping
- 22. Finishing Roadway
- 24. Lime Treatment
- 25. Aggregate Subbase
- 26. Aggregate Bases
- 27. Road Mixed Cement Treated Bases
- 36. Penetration Treatment
- 37. Bituminous Seals
- 38. Road Mix Asphalt Surfacing
- 39. Asphalt Concrete
- 51. Concrete Structures

52. Reinforcement

- 53. Air-blown Mortar
- 60. Rubble Masonry
- 64. Asbestos Cement Pipe
- 65. Reinforced Concrete Pipe
- 66. Corrugated Metal Pipe
- 67. Structural Plate Pipe, Arches, and Pipe Arches
- 68. Sub-surface Drains
- 69. Over-side Drains
- 70. Miscellaneous Facilities
- 72. Slope Protection

- 73. Concrete Curb and Sidewalks
- 80. Fences
- 83. Railings and Barriers

Applicable Sub-Sections:

- 4-1.01 Intent of Plans and Specifications
- 4-1.02 Final Cleanup
- 4-1.04 Detours
- 4-1.05 Use of Materials Found on the Work
- 7-1.01 Laws to be Observed, excepting sub-sections 7-1.01A through 7-1.01L; In lieu of these excepted sub-sections, the Developer shall comply with all applicable local, State and Federal laws, and shall hold the County of Tulare harmless from any breach of said laws.
- 7-1.02 Weight Limitations
- 7-1.04 Permits and Licenses
- 7-1.05 Patents
- 7-1.06 Safety Provisions
- 7-1.07 Sanitary Provisions
- 7-1.08 Public Convenience
- 7-1.09 Public Safety
- 7-1.10 Use of Explosives
- 7-1.11 Preservation of Property
- 7-1.12 Responsibility for Damage
- 7-1.13 Disposal of Material Outside the Highway Right of Way
- 7-1.14 Cooperation
- 7-1.16 Contractors Responsibility for the Work and Materials
- 8-1.10 Utility and Non Highway Facilities

2. Earthwork

The earthwork shall conform to the requirements of Section 19 of the Standard Specifications and the following provisions.

All unsuitable or surplus material excavated shall become the property of the Contractor and shall be disposed of in accordance with the provisions in Section 7-1.13 of the Standard Specifications. Such material encountered in subdivision improvements may be used to regrade lots within the subdivision with the approval of the developer and the Engineer provided such regrading is done in a manner which will not prohibit the proper drainage of lots or property within or adjacent to the subdivision.

Selected material for use in subdivision improvements may be obtained from material excavated from a location outside the right of way but within the subdivision when specified in the special provisions, shown on the plans, or designated by the Engineer.

The trench for pipe culverts shall be excavated a minimum depth of 3 inches below the bells or couplings for the full length of the trench under ordinary circumstances and if solid rock or other unyielding material is encountered the material shall be removed to a depth of one-fourth the nominal diameter of the pipe below the couplings or bells but not less than 4 inches. If the foundation is soft, spongy, or unstable, the trench shall be excavated to a stable soil or 1 foot below the bells or couplings, whichever is the least, and the excavation backfilled with structure backfill material of a quality and gradation specified herein.

Below an elevation of 12-inches above the top of the pipe backfill material shall have a sand equivalent of 30 and shall meet the following gradation requirements.

Sie	ve Size	Percent Passing
	3"	100
No.	4	35-100

Backfill around the pipe and to an elevation of 12 inches above the pipe shall be placed carefully to provide uniform support for the pipe and in such a manner as not to injure or disturb the pipe.

Backfill material above an elevation of 12 inches above the pipe may be material from excavation, free from stones or lumps exceeding 3 inches in greatest dimension, vegetable matter, or other unsatisfactory material and shall be compacted to a relative compaction of not less than 90 percent. Backfill material placed below the roadway surfacing or other paved area

shall be compacted to a relative compaction of 95 percent to a depth of 1.5 feet below finished grade or to a depth of 0.5 foot below the lowest layer of surfacing, base or subbase whichever is the greatest.

Surfacing, base or subbase removed during the trenching operations shall be replaced with material equal or better than the material so removed. However, the surfacing replaced shall have a minimum depth of not less than 3 inches.

Jetting may be permitted under favorable conditions with prior approval of the Engineer. Mechanically operated tamping machines employing the impact principal will not be permitted at locations where, in the opinion of the Engineer, their use could cause damage to the pipe being backfilled.

Excavation for compaction of original ground as provided in Section 19-5.02 of the Standard Specifications shall not be required, but this provision will not preclude the necessity of compacting subgrade. The subgrade shall be prepared and compacted as provided in Section 19-1.03 of the Standard Specifications.

The relative compaction of each layer of embankment beneath the surfacing to a depth of 1.5 feet from finished grade or to a depth of 0.5 foot below the lowest layer of pavement, base or subbase, whichever is the greatest, shall not be less than 95 percent. The relative compaction of all other embankment material shall be not less than 90 percent.

3. Aggregate Subbase

Aggregate subbase shall conform to the requirements of Section 25 of the Standard Specifications and the following provisions.

Aggregate Subbase shall be Class 4 and the percentage composition by weight shall conform to the following grading when determined by Test Method No. Calif. 202.

Sieve Sizes	Percentage Passing
2 1/2 inches	100
No. 4	50-100
No. 200	0-25

Class 4 aggregate subbase shall also conform to the following minimum quality requirements:

Tests	Test Method No.	Requirements
Sand Equivalent	217	20
Resistance (R-Value)	301	50

The R-Value requirement will be waived provided the aggregate subbase conforms to the specified grading and has a Sand Equivalent of 25 or more.

Where the required thickness is 0.67 foot or less, the aggregate subbase may be spread and compacted in one layer. Where the required thickness is more than 0.67 foot, the aggregate subbase shall be spread and compacted in 2 or more layers of approximately equal thickness, and the maximum compacted thickness of any one layer shall not exceed 0.67 foot. Each layer shall be compacted in a similar manner.

4. Lime Treatment

Lime Treatment shall conform to the requirements in Section 24 of the Standard Specifications and these provisions.

Lime treated material may be used in place of aggregate subbase provided the minimum thickness of aggregate base and paving is provided.

Lime for use in lime treatment may be a granular quicklime which when sampled at the point of delivery shall conform to the following requirements.

- Free lime, expressed as calcium hydroxide, Ca(OH)₂, shall not be less than 95 percent as determined by Test Method No. Calif. 414-A.
- 2. Granular Quicklime shall meet the following dry mechanical grading analysis. <u>Sieve Size</u> <u>Percentage Passing</u> No. 4 100 No. 100 10 maximum
- Lime reactivity shall be not less than 25° C.
 Lime reactivity shall be expressed as the slaking rate of quicklime after 30 seconds in accordance with ASTM designation Cl10.

5. Aggregate Base

Aggregate base shall conform with the requirements of Section 26 of the Standard Specifications and the following provisions.

Aggregate base shall be Class 2, 3/4 inch maximum in the valley areas.

Aggregate base may be either Class 2, 3/4 inch maximum or Class 3 aggregate base in the mountain areas.

Class 3 aggregate base shall be free from vegetable matter and other deleterious substances and shall be of such nature that it can be compacted readily under watering and rolling to form a firm, stable base.

Aggregate for Class 3 aggregate base shall consist of any one or a mixture of broken or crushed stone, crushed gravel, or natural materials that will meet the specified quality requirements when combined within the specified limits of grading.

The percentage composition by weight of Class 3 aggregate base shall conform to one of the following gradings when determined by Test Method No. Calif. 202.

			Percenta	ge Passing	
Sieve Siz	zes		3/4" max.	1/2" max.	3/8" max.
1"			. 100	-	e e e e e e e e e e e e e e e e e e e
3/4'	•		85-100	100	-
1/2'			l de la companya de l	90-100	100
3/8"			a de Estador de Carlos	-	95-100
No.	4		35-65	50-75	
No.	8			35-60	60-85
NO.	30		10-30	15-35	25-45
No.	200	d.	2-10	4-12	6-15

Class 3 aggregate base shall also conform to the following quality requirements:

		Test Method	
Tests		No. Calif.	Requirements
Resistance	(R-Value)*	301	65 min.

Sand Equivalent

* The R-Value requirement will be waived provided the aggregate base conforms to the specified grading and has a Sand Equivalent value of 35 or more.

In lieu of the requirements of Section 26-1.04B, aggregate base may be spread in accordance with the requirements of spreading aggregate subbase as specified in Section 25-1.04 of the Standard Specifications.

In mountain areas the finished aggregate base may vary up to 0.08 foot above or below the grade established by the Engineer.

6. <u>Road-Mixed Asphalt Surfacing</u> - Road-mixed asphalt surfacing shall conform with the following provisions.

Road-mixed asphalt surfacing shall only be used in mountain areas approved by the County Public Works Director.

The bituminous binder to be mixed with the aggregate shall be liquid asphalt conforming to the provisions in Section 93 of the Standard Specifications and shall be of a grade approved by the Engineer. The amount of liquid asphalt to be mixed with the aggregate shall be determined by the Engineer.

Aggregate may be imported material, selected material, local borrow material, or combination of such materials and shall consist of any one or a mixture of the following materials:

1. Broken or crushed stone, or crushed gravel.

 Natural material having sufficient roughness to meet the specified stabilometer requirements when combined within the specified limits of grading.

The percentage composition by weight of the aggregate shall conform to one of the following gradings when determined by Test Method No. Calif. 202.

	Percentage Passing			
Sieve Sizes	3/4" max.	1/2" max.	3/8" max.	
1"	100		-	
3/4"	85-100	100	÷-	

1/2"	(4 16 m)	90-100	100
3/8"	-	-	95-100
No. 4	35-65	50-75	-
No. 8	-	35-60	60-85
No. 30	10-30	15-35	25-45
No. 200	2-10	4-12	6-15

The combined aggregate shall also conform to the following quality requirements immediately prior to mixing with asphalt binder:

	Test Method		
Tests	No. Calif.	Requirem	ents
Both K _C and K _f - Factors (obtained from C.K.E. Test	t) 303	1.8	Max.
Sand Equivalent	217	35	Min.

The combined aggregate shall also conform to the following quality requirements when mixed with the amount of asphalt determined to be optimum by Test Method No. Calif. 304 which in no case shall be less than 3.8 percent by weight of the dry aggregates:

	Test Method		
Tests	No. Calif.	Requirements	
Stabilometer Value	304	30	Min.
Moisture Vapor Suscepti (Stabilometer Value)	bility 307	20	Min.
Swell	305	0.030	Max.

7. Asphalt Concrete

Asphalt Concrete shall comply with the requirements of Section 39 of the Standard Specifications and the following provisions.

In valley areas the asphalt binder to be mixed with the aggregate shall be a paving asphalt, the grade to be approved by the Engineer.

In mountain areas the asphalt binder to be mixed with the aggregate shall be a paving asphalt or a liquid asphalt of a grade approved by the Engineer.

Aggregate for asphalt concrete shall be Type B, the percentage composition by weight conforming to one of the

29.

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following gradings:

3/4" Maximum (Medium)

3/4" Maximum (Fine)

1/2" Maximum (Coarse)

A prime coat or paint binder meeting the requirements in Section 39-4.02 of the Standard Specifications shall be applied to all areas to be surfaced with asphalt concrete.

When specified by the Engineer, a Fog Seal complying with the requirements of Section 37 of the Standard Specifications shall be applied to the finished surface of the asphalt concrete. The combined mixture of asphaltic emulsion and water shall be applied at the rate of 0.10 gallon per square yard unless a lesser rate of application is required by the Engineer.

In lieu of the requirements in Sections 39-5.03A and 39-5.03B, the minimum rolling equipment specified may be reduced to one 2-axle tandem roller, weighing at least 8 tons, when asphalt concrete is placed at a rate of 100 tons, or less, per hour at any location provided it is demonstrated to the satisfaction of the Engineer that one roller can perform the work.

In mountainous areas, when approved by the Engineer, any course or layer of asphalt concrete may be spread with pneumatic tired motor graders meeting the requirements specified in Section 39-5.01 of the Standard Specifications provided segregation can be avoided and a uniform, smooth pavement obtained.

In mountainous areas the allowable surface tolerance may be increased to the maximum permissible for road-mixed asphalt surfacing as specified in Section 38-4.07 of the Standard Specifications.

8. Concrete Structures

Concrete structures shall be constructed in accordance with the requirements in Section 51 of the Standard Specifications and the following provisions.

When approved by the Engineer concrete may be designated
by 28 day comprehensive strength without reference to the class designation referred to in Section 90 of the Standard Specifications. If designated by compressive strength, the Contractor shall be responsible for furnishing concrete which contains not less than 5.5 sacks nor more than 8.5 sacks of cement per cubic yard of concrete which is workable, and which conforms to the strengths shown on the plans or specified by the Engineer. Unless approved by the Engineer the compressive strength specified shall be obtained without the use of admixtures. The weigh-batch proportions for concrete designated by compressive strength shall be determined by the Contractor.

Concrete may be mixed by hand where the batch size is less than 1/2 cubic yard and the concrete is mixed in accordance with the provisions in Section 90-6.05 of the Standard Specifications.

If approved by the Engineer in advance of mixing, where a truck mixer or agitator is used for transporting concrete, discharge of the concrete may be completed after more than $1\frac{1}{2}$ hours or after 250 revolutions of the drum or blades following the introduction of the cement. The amount of additional time or number of revolutions permitted shall be determined by the Engineer.

The method used for curing concrete shall be determined by the Engineer and shall comply to the provisions in Section 90-7 of the Standard Specifications for the method selected.

A Class 1 surface finish may be waived for certain surfaces designated in Section 51-1.18B where shown on the plans or approved by the Engineer. However, an ordinary surface finish shall be required.

9. Reinforcement

Bar reinforcement, mesh reinforcement, and reinforcing wire shall conform to the requirements in Section 52 of the Standard Specifications and the following provisions.

Steel lists as specified in Section 52-1.03 shall not be required unless requested by the Engineer.

Samples of reinforcing steel to be used in the work may be

taken at the site of the work after delivery of the steel. The number and size of samples to be furnished the Engineer by the Contractor will be determined by the Engineer but shall not exceed two samples 2.5 feet in length from each size in each heat or melt.

10. Drainage and Irrigation Pipe

Pipe and pipe arch for use in drainage and irrigation facilities shall conform to the requirements in Sections 63, 64, 65, 66 and 67 of the Standard Specifications and the following provisions.

The type of pipe specified for work governed by these Improvement Standards may be selected by the developer or the design engineer provided the pipe is of sufficient strength to withstand the loading imposed, has a minimum service life of 50 years, and meets the quality requirements specified in the above named sections of the Standard Specifications. Soil tests may be required by the Engineer where the chemical composition of the soil may be detrimental to certain types of pipes proposed for use.

The strength of the pipe required within the road right of way shall be determined by the design procedure used by the State Department of Transportation.

Non-reinforced concrete pipe up to 18 inches in diameter and reinforced concrete pipe up to 24 inches in diameter that meet the D-load, minimum shell thickness, and minimum reinforcement shown in Plate A-24 of Section IV of these Improvement Standards may be used in lieu of pipe conforming to the quality requirements in said Section 65 provided the pipe can withstand the loading imposed.

Corrugated aluminum pipe and pipe arch shall conform to the provisions in Section 62-1.02C of the Standard Specifications. Band couplers for corrugated pipe shall have the following minimum widths:

Nominal Pipe Diameter	Minimum Band Width
Under 15"	7 *
15" thru 48"	12"
Over 48"	24"

Helically corrugated pipe shall be connected to annular corrugated pipe using a universal coupling band having a minimum width of 12 inches. The coupling of the two types of pipes at locations where a firm, positive connection is desired shall be avoided.

The hydrostatic test specified for siphon and pressure pipe in Sections 65-1.08 and 66-1.09D of the Standard Specifications may be waived by the Engineer under field conditions that he determines make the tests unnecessary or impractical to conduct.

11. Subsurface Drains

Subsurface drains shall conform to the requirements in Section 68 of the Standard Specifications and these provisions.

Permeable material may be either Class 1 or Class 2 material at the option of the Contractor unless otherwise specified on the plans or in the special provisions.

Trenches for underdrains shall be excavated to the width shown on the plans or directed by the Engineer. However, said width shall not be less than 2.0 feet. The trench shall also be excavated to a minimum depth of 6 inches below the grade established for the bottom of the drain line. The height to which the filter material is placed shall be as shown on the plans or as directed by the Engineer, which height shall generally be 6 inches below the natural ground outside the roadway or to the elevation of the grading plane within the roadway.

12. Overside Drains

Overside drains shall conform to the requirements in Section 69 of the Standard Specifications and these provisions.

Overside drains shall be limited to the tapered inlet and flume downdrain type of either ferrous metal or aluminum, except that asphalt concrete may be used where the slope is 4:1 or flatter and the length required is less than 10 feet.

Where soil conditions at the end of the downdrain are subject to erosion; rock, asphalt concrete or other material shall be placed to inhibit erosion.

When there is a question as to the ability of the downdrain to function properly, the Engineer may require water to be deposited on the finished roadway in such a manner that the operation of the downdrain may be tested. Inadequacies determined by such tests shall be corrected.

13. Miscellaneous Facilities

Miscellaneous facilities shall conform to the requirements in Section 70 of the Standard Specifications and these provisions.

The pressure tests specified in Sections 70-1.02B and 70-1.02K of the Standard Specifications may be waived by the Engineer under field conditions that he determines make the tests unnecessary or impractical to conduct.

Driveway culvert pipe placed within the right of way shall have a nominal diameter of not less than 12 inches.

14. Slope Protection

Slope protection shall conform to the requirements in Section 72 of the Standard Specifications and these provisions.

Unless shown on the plans or approved by the Engineer rock slope protection, grouted or ungrouted, shall be placed by Method A Placement. However, the local surface irregularities may vary up to two feet from the planned slope measured at right angles to the slope.

The slopes on which sacked concrete slope protection is to be placed may vary up to 0.5 foot of the planned slope measured at right angles to the slope.

15. Concrete Curbs and Sidewalks

Concrete curbs, sidewalks and gutter depressions shall conform to the requirements in Section 73 of the Standard

Specifications and the following provisions.

Either the 1° or 1 1/2° maximum aggregate grading specified in Section 90-3.04 of the Standard Specifications may be used.

16. Fences

Fences shall conform to the requirements in Section 80 of the Standard Specifications and these provisions.

Fences for ponding basins or lots shall be chain link fence, Type CL-6 constructed as shown on Plate No. B-6, Section IV of these Improvement Standards.

Fences adjacent to freeways or limited access expressways shall be of a type approved by the Engineer.

Property fences not adjacent to freeways or limited access expressways may be of any type and material selected by the developer that does not conflict with State and local ordinances or codes.

C. DRAINAGE

1. Pipelines

Pipe and pipe arch shall conform to item number 10 of Subsection B (Streets and Highways) of this section.

2. Earthwork

Trench compaction and backfill material shall conform to item number 2 of Subsection B (Streets and Highways) of this section.

3. Pumping Plant Equipment

a. <u>General</u> - The drainage pumping equipment and the pumping plant electrical equipment shall conform to the provisions in Section 74, "Pumping Plant Equipment", of the Standard Specifications and these special provisions.

The data required in Section 74-1.04, "Data to be Furnished", of the Standard Specifications shall be limited to 3 copies of the following material:

1. The name of manufacturer, catalog number, size, capacity and all pertinent power ratings of the pump.

2. Pump performance curves.

3. Assembly plans showing the pump, pipes and fittings and any bracing to be installed.

In addition to the above data any parts lists and service instructions packaged with or accompanying the drainage pumping equipment and pumping plant electrical equipment shall be delivered to the Engineer.

b. <u>Drainage Pumping Equipment</u> - The pumping unit shall be suitable for outdoor installation, consisting of a vertical-shaft, single propeller-type pump, direct connected to a vertical shaft induction motor. The unit shall be designed to operate safely in the reverse direction of rotation due to water returning through the pump. The weight of the revolving parts of the pump, including the unbalanced hydraulic thrust of the propeller, shall be carried by a thrust bearing in the motor. The pump shall be supported from a base plate and channels by means of a vertical column having a horizontal discharge located as specified.

The vertical pump supporting column and discharge elbow shall be made of welded plate steel with a minimum wall thickness of 10 gage from 8" through 14" columns and 1/4" for 16" columns and larger in lieu of the 3/8" minimum specified in Section 74-2.04 of the Standard Specifications. The discharge opening shall be plain end, fitted with a Dresser type coupling suitable for connection to the discharge pipe. The discharge elbow shall be as shown on the plans.

The suction bell and pump bowl shall be made of closegrained cast iron and shall be designed for easy removal of the propeller and bearings. The suction bell shall have a flared inlet designed to reduce entrance losses and a sufficient number of vanes to support the lower guide bearings as well as to sustain the weight of propeller and pump shaft when dismantling the pump.

The pump propellers shall be made of bronze or stainless steel and shall be fastened to the shaft in such a manner as to be removed readily. They shall be balanced statically and dynamically to reduce vibration and wear.

The shaft of the pumping unit shall be of ample size to operate without objectionable distortion or vibration at maximum speed in both the forward and reverse direction of rotation. The pump-bowl shaft shall be made of stainless steel and the line shaft shall be made of carbon or alloy steel. The shaft couplings shall be of the threaded type. Provision shall be made at the top of the motor shaft for adjusting the elevation of the propeller with reference to the bowls. If water lubricated lineshaft is supplied, it shall be furnished with a stainless steel shaft sleeve, mechanically replaceable in the field.

All oil-lubricated lineshaft bearings shall be protected from water and foreign matter by an enclosing tube. A shaft seal shall be provided immediately above the top propeller. By-pass ports to drain excess oil from the shaft enclosing tube shall be provided above the seal. All bearings shall be easily replaceable, and spaced not more than five feet apart. All water-lubricated lineshaft bearings shall be furnished of rubber, and installed in bearing retainers spaced at the minimum distance required by good practice in the field. All bearings shall be easily replaceable.

If oil-lubricated, the pump shall be equipped with a solenoid operated lubricating system which shall supply lubricant to each lineshaft bearing. The solenoid-operated oiler shall be designed for outdoor operation and shall have a lockable metal oil reservoir with a capacity of not less than one gallon. If water lubricated, the pump shall be furnished with a deep packing box designed to effectively reduce leakage. The packing box shall have not less than 6 packing rings and shall have a provision for grease lubrication of the packing.

The packing gland shall be of the split type.

The pump shall be controlled by a float type switch as shown on the plans.

The pump stand shall be constructed from information given on plans.

The motor shall be of the 3-phase, 60-cycle, drop-proof,

vertical, ball-bearing, squirrelcage, induction type for outdoor service. It shall be suitable for operation at (220) (440) (2300) volts, and shall be of the low starting current type suitable for across-the-line starting service. The thrust bearing shall be of proper design to carry the weight of the rotating parts of the pump, including the unbalanced thrust of the propeller. Motor conduit box shall be suitable for accommodating leads from solenoid-operated oiler. The unit shall meet applicable requirements of the latest National Electrical Manufacturer's Association standards. The horsepower rating shall be such that the motor will not be overloaded beyond the service factor under the maximum pumping load possible to develop under the range of pumping heads specified.

The maximum pumping capacity, total dynamic head and maximum relative speed shall be shown on the plans and be approved by the Engineer.

D. WATER SYSTEMS

1. Pipe and Fittings

a. <u>Cast Iron</u> - All cast iron pipe shall be cement lined and conform to A.W.W.A. Standard Specifications C 102, C 106 and C 108. Cement lining shall conform to A.W.W.A. Standard Specifications C 104.

The minimum pressure class allowable shall be Class 150. Where necessary, pipe of a higher pressure rating shall be used to give the proper factor of safety. Cast iron fittings shall be of the proper class for the intended use and in no case shall they be of a lower pressure rating than the pipe to which attached.

Cast iron pipe and fittings shall be joined by any of the methods generally accepted in water works practice, including bell and spigot joints, flagged joints, mechanical joints and sleeve type coupling joints. Any newly developed joints not generally accepted in the water works industry must have the approval of the Engineer prior to use. Where caulked bell and spigot joints are used they shall be made up of the following materials:

(1) Caulking or packing material shall consist of
(a) molded or tubular rubber rings, or (b)
asbestos rope, or (c) treated paper rope.
(2) Lead shall be hot poured into the joint and
shall contain not less than 99.73 percent pure
lead. The producer's name or the mark of Lead
Industries shall be clearly cast or stamped upon
each piece of lead.

b. <u>Asbestos-Cement</u> - Asbestos-cement pipe shall conform to A.W.W.A. Standard Specifications C 400.

The minimum pressure class allowable shall be Class 150. Where necessary, pipe of a higher pressure rating shall be used to the proper factor of safety.

Fittings for asbestos-cement pipe shall be of cast iron and shall be of the proper pressure rating for the intended use and in no case shall they be of a lower pressure rating than the pipe to which attached.

Asbestos-cement pipe and cast iron fittings shall be joined by any of the methods generally accepted in water works practice, including continuous bell ring joints and lead caulking. Any newly developed joints not generally accepted in the water works industry must have the approval of the Engineer prior to use.

c. <u>Copper Pipe</u> - Copper pipe for service laterals shall conform to A.S.T.M. Designation B 88 for "Type K Copper Water Tube".

d. <u>Other Types of Pipe and Fittings</u> - Pipe and fittings of any material other than those herein set forth shall have the specific approval of the Engineer prior to their use.

e. <u>Valves</u>

(1) <u>Gate Valves</u> - All gate valves larger than four (4) inches shall conform to A.W.W.A. Standards C 500 when standard operating conditions are encountered. Where other than Standard operating conditions are encountered, such as excessive waterhammer, operating in throttled position or under high operating pressure, gate valves of a design approved by the Engineer shall be used.

Gate values four (4) inches and smaller shall be rated at 200 p.s.i. working pressure for non-shock, cold water service. all working parts of this class value shall be bronze or bronze mounted and shall be standardized and interchangeable.

Gate valve ends shall be of any of the types commonly used in the water works industry, including screwed ends, hub ends, mechanical joint ends, flanged ends, spigot ends, universal ends and ends for direct connection to asbestos-cement pipe with rubber rings. Any ends other than those commonly used in the water works industry must have the approval of the Engineer prior to use.

(2) <u>Plug Valves</u> - The term "plug valve" shall, in these Standards, refer to regular duty plug valves, corporation stops and curb stops.

Regular Duty Plug Valves shall be designed for regular duty service and in sizes below twelve (12) inches, shall have a pressure rating not less than 175 p.s.i. water, oil or gas working pressure. Valves larger than 12 inches shall have a pressure rating approved by the Engineer.

Corporation stops shall have all bronze bodies, keys, stems, stem washers and stem nuts. Corporation stops shall have the proper type threads for the type of pipe or pipe clamp to which attached.

(3) <u>Check Valves</u> - Check valves for regular duty water works service shall employ non-corrosive materials in the construction of hinge pins, hinges, gate faces and seat faces.

Check valves up to twelve (12) inches in size for regular duty shall have a pressure rating of not less than 200 p.s.i. non-shock, cold water, oil or gas rating. Larger valves and valves for use in other than regular duty shall be of a pressure rating approved by the Engineer.

End connections on check valves may be any ends commonly used in water works practice, including hub ends, flange ends and universal ends. Types of ends other than those commonly used in the water works industry shall have the approval of the Engineer prior to use.

(4) <u>Air and Vacuum Release Valves</u> - Air and vacuum and air release valves shall have internal working parts made of corrosion resistant materials.

Air and vacuum and air release valves for regular service shall have a pressure rating of not less than 150 p.s.i., water, oil and gas, non-shock. Where other than regular service operation is required the valves shall have a pressure rating approved by the Engineer prior to their use.

(5) <u>Miscellaneous Valves</u> - Any type of valve not specifically covered in these specifications shall be considered in this category of "Miscellaneous Types of Valves".

Such valve types include: pressure relief valves, pressure regulating valves, altitude valves and globe valves, among other valve types.

Valves in this classification shall have the approval of the Engineer prior to use.

f. <u>Fire Hydrants</u> - When the required fire flow is 500 gpm, wet barrel or dry barrel fire hydrants may be installed. Wet barrel fire hydrants shall be installed when the required fire flow is 1500 gpm or greater.

Each fire hydrant shall have a minimum of one $-2\frac{1}{2}$ " outlet and one $-4\frac{1}{2}$ " outlet, except when the required fire flow in the system is 1500 gpm or greater then each hydrant shall have two $-2\frac{1}{2}$ " outlets and one $-4\frac{1}{2}$ " outlet. Outlets shall have National Standard Hose Threads.

Wet barrel fire hydrants shall meet the requirements of A.W.W.A. Standard C503. Dry barrel fire hydrants shall meet the requirements of A.W.W.A. Standard C502.

Each fire hydrant assembly shall be served with a minimum 6" diameter run of pipe, and shall be provided with a gate valve. Provisions shall be incorporated in the construction of dry barrel hydrants to automatically shut off the flow of water in the event the hydrant is broken off.

Installation of fire hydrants shall be in accordance with Plate WS-9 in valley areas.

In mountainous areas only, the hydrant inlet may be reduced to 4 inches and installed in accordance with Plate WS-10.

g. <u>Valve and Meter Boxes</u> - Valve and meter boxes shall be constructed of materials capable of withstanding the loads imposed upon them.

Adequate access to all boxes shall be provided by means of readily removable covers.

Sizes of boxes shall be determined by sizes of valve or meter served.

Boxes shall be approved by the County Public Works Director prior to use.

2. Installation

a. <u>General</u> - All piping shall be supported and braced against movement as shown on the plans or as specified herein. When temporary supports are used they shall be sufficiently rigid to prevent any shifting or distortion of the pipe.

Where piping is installed on curves the maximum deflection of each joint shall be within the maximum deflection recommended by the pipe manufacturers.

Sufficient flexible couplings of Engineer approved design shall be provided in all piping adjacent to structures to permit differential settling of the foundation of said piping and structures without damage to the piping, or as may be required for ease of installation or removal of the pipe.

All dirt and scale shall be removed from the pipe prior to installing.

b. <u>Earthwork</u> - All trenching work shall conform to the requirements of the Item Number 2 of Subsection B (Streets and Highways) as found in these Standards. c. <u>Depth of Cover</u> - Minimum cover from finished grade shall be as follows:

	4"	- 6" Pipe		36"	12"	Pipe	-	48"	
		8" Pipe		36 "	14"	Pipe	Ħ	48"	
		10" Pipe	a -	36"	14"	+Pipe Count	as y P	required by ublic Work	ys
	d.	Laying a	and H	andling	Pipe -	Prope	er i	mplements,	
tools and	fac	ilities s	satis	factory	to the	Engin	neer	shall be	
provided	and	used by t	he C	ontract	or for	the sa	afe,	convenien	t

and workmanlike prosecution of the work. All pipe, fittings and valves shall be carefully lowered

into the trench in such a manner as to prevent damage to pipe or pipe coating. Under no circumstances shall pipe or accessories be dropped or dumped into the trench. Before lowering and while suspended, the pipe shall be inspected for defects and cast iron pipe shall be rung with a light hammer to detect cracks. Any defective, damaged or unsound pipe shall be rejected and sound material furnished. Cutting of pipe for inserting valves, fittings, or closure pieces shall be done in a neat and skillful manner without damage to the pipe.

All pipe shall be laid and maintained in the required alignment, with fittings and valves at the required locations and with joints centered and spigots home, and with all valve stems plumb. When the pipe is bedded in a trench it shall be brought into true alignment and shall be secured there with proper backfill material, carefully tamped under and on each side of it as specified herein. Care shall be taken to prevent dirt from entering the joint space.

Each length of pipe shall have a swab drawn through it and shall be freed of any visible evidence of contamination, dirt and foreign material before it is lowered into its position in the trench, and it shall be kept clean during and after laying. At times when pipe laying is not in progress, the open ends of any pipe which has been laid shall be plugged. Trench water shall not be permitted to enter the pipe. All installation shall be in full conformance with the manufacturer's recommendation.

e. <u>Service Laterals</u> - Copper service laterals shall be installed in a trench of such depth and direction that the service pipe (tubing) will be at least 24" below finished street grade, shall be laid in a plane perpendicular to the longitudinal axis of the main, shall be as far away from sewer laterals as possible and shall not interfere with other utility installations.

The copper tubing shall be bent in such a manner as to prevent kinking of the tubing.

For 3/4" and 1" services, the corporation stops shall be tapped into that side of the main to which the service is to be installed at a point approximately 60 degrees down from the top of the main with the shut-off value of the corporation stop facing up.

Service laterals may be attached to mains by the use of saddles where recommended by the pipe manufacturer and shall conform to the manufacturer's recommendations.

The house end of the service lateral shall terminate with a curb stop corresponding to the size of the service, with the outlet in a horizontal position facing the lot to be served. If meters are required, a concrete meter box of proper size shall be levelled and longitudinally centered over the end of the service. The meter box shall be set square with the curb or property line in solid ground, with the top of the box at the elevation of the top of the curb or adjacent ground.

f. <u>Thrust Backing and Harness</u> - All tees, bends, plugs, fire hydrants and appurtenances as may be specified on the plans, shall be provided with thrust backing and/or harness in accordance with Standard Drawings.

Thrust backing shall be of Class "B" concrete conforming with requirements of Section 90 of the Standard Specifications cast in place between solid ground and the fittings to be anchored. The backing shall be so placed that the pipe and fitting joint will be accessible for repair. g. <u>Valves</u> - A valve box or masonry pit shall be provided for every valve.

A valve box shall be provided for every valve which has no gearing or operating mechanism or in which the gearing or operating mechanism is fully protected with a cast iron grease case. The valve box shall not transmit shock or stress to the valve and shall be centered and plumb over the wrench nut of the valve, with the box cover flush with the surface of the finished pavement or such other level as may be directed.

A masonry value pit shall be provided for every value which has exposed gearing or operating mechanisms. The value nut shall be readily accessible for operation through the opening in the manhole, which shall be set flush with the surface of the finished pavement or such other level as may be specified. Pits shall be so constructed as to permit minor value repairs and afford protection to the values and pipe from impact where they pass through the pit walls.

h. <u>Fire Hydrants</u> - All fire hydrants shall stand plumb and shall have their outlets parallel with or at right angles to the curb or road centerline with the steamer outlet facing the curb or road centerline, except that hydrants having two hose outlets 90 degrees apart shall be set with each outlet facing the curb or road centerline at an angle of 45 degrees. Hydrants shall be set to the established grade, with outlets a minimum of 18 inches and a maximum of 30 inches above the ground or as otherwise shown on the plans. In the SRA, hydrants shall be set 18 inches above the established grade.

3. Water Storage

Storage facilities shall be provided where necessary to meet the demands of the water system.

Steel storage tanks shall conform to A.W.W.A. D 100 specifications and shall be painted in accordance with A.W.W.A. D 102 specifications.

Other tanks such as wood tanks, hydropneumatic tanks, reinforced concrete tanks and ground storage reservoirs may be acceptable, subject to the approval of the Engineer. Request for approval of any of these facilities shall be accompanied by complete specifications and design calculations.

4. Pressure Testing

a. <u>Hydrostatic Test</u> - After the pipe has been laid and backfilled, said pipe shall be subjected to a hydrostatic pressure no less than the full rated (Maximum recommended) pressure class of the pipe plus an additional 50 p.s.i.

The duration of each test shall be 30 minutes unless otherwise directed by the Engineer.

Each section of pipeline shall be slowly filled with water, and the specified test pressure, measured at the point of lowest elevation, shall be applied by means of a pump connected to the pipe in a manner satisfactory to the Engineer. The pump, pipe connection, and all necessary apparatus, shall be furnished by the Contractor.

During the filling of the pipe and before applying the specified test pressure, all air shall be expelled from the pipeline. To accomplish this, taps shall be made, if necessary, at points of highest elevation, and after completion of the test the taps shall be tightly plugged unless otherwise specified.

During the test, all exposed pipes, fittings, valves, hydrants and joints shall be carefully examined. Any part found to be cracked or defective shall not be accepted and shall be removed and replaced by the Contractor with new, sound material. The test shall then be repeated until satisfactory to the Engineer.

b. <u>Leakage Test</u> - Leakage tests shall be conducted after completion of the hydrostatic test and shall be made at not less than the normal working pressure of the system as determined by the Engineer.

No pipe installation will be accepted until or unless the leakage for the section of line tested is less than the rate specified in the following table.

(inches)	50	75	100	125	150	200	225
4	1.54	1.87	2.16	2.42	2.65	3.07	3.25
6	2.30	2.80	3.25	3.63	3.98	4.50	4.88
8	3.07	3.73	4.33	4.83	5.30	6.13	6.50
10	3.83	4.66	5.41	6.04	6.63	7.66	8.12
12	4.60	5,59	6.50	7.25	7.95	9.20	9.75
14	5.37	6.52	7.58	8.46	9.28	10.73	11.38
16	6.13	7.45	8.66	9.66	10.60	12.27	13.00

LEAKAGE ALLOWANCE Gallons per 1300 feet per hour*

meat Dreagure (noi)

Measurement of allowable leakage need not be made until after the pipe has been filled with water for a period of 24 hours.

5. Disinfection

Disinfection of water mains shall be in accordance with A.W.W.A. Standard C 601. Special attention shall be given during pipe laying to keeping the pipe clean as outlined in Sections 1 through 4 of said standards.

Disinfection of storage tanks shall be in accordance with provisions of A.W.W.A. Standard D 102.

Following disinfection, samples will be taken and tests made by the Tulare County Department of Health Services for adequate disinfection. The Contractor shall request such tests and shall also provide the Engineer with evidence of Health Department acceptance.

* A.C. pipe/13 ft. joints. Leakage allowances for water pipelines constructed with other materials shall be determined by the Engineer.









Note: The distance between face of curb and right of way and distance B may be reduced to 8 feet and 40 feet respectively on existing 80 faat right of ways. The chart below applies to urban areas with speed control zones, and select system

ROAD CLASS	NO. OF LANES	DESIGN VELOCITY	A MIN.	B MIN.	MAX. GRADE	MAX. SUPER
1	2	25 MPH	18	28	10%	4
2	2	30 MPH	20	30	10%	
3	2	35 MPH	20	30	10%	%
3	4	40 MPH	32	42*	8%	- 9 -
SELECT	2	40 MPH	20	30	8%	
SELECT	4	50 MPH	32	42*	8%	

roads outside such areas shall be designed to 60 m.p.h. minimum using a maximum super of 10%.

PUBLIC ROAD STANDARDS

TULARE COUNTY ORDINANCE CODE SECTION No. 7080 GEOMETRIC

SECTIONS

PLATE NO. A-I





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				Ċ	BRAVE	L EQU	IVALE	VT IN	FEET					
ACTUAL		ASPHAL	LT CON	ICRETE		ROAD-MI	XED ASF	H SURF	ACING		CL. B	CL.C.	CL."D"	
THICKNESS	Т. І.	5 BELOW	5.5	6.5	7.5 8.0	5 & BELOW	5.5	6.5	7.5 8.0	AB		BTB,	2 4 4	
IN FEET	FACTOR	2.50	2.32	2.14	2.01	1.50	1.40	1.30	1.20	1.1	1.2	1.2	0.1	
0.13 MIN.		0.32												
0.15		0.38	0.35											
0.20		0.50	0.46	0.43		0.30								
0.25		0.63	0.58	0.54	0.50	0.38	0.35							
0.30		0.75	0.70	0.64	09.0	0.45	0.42							
0.35		0.88	0.81	0.75	0.70	0.53	0.49	0.45		0.39			0.35	
0.40		1.00	0.93	0.86	0.80	0.60	0.56	0.52	0.48	0.44			0.40	
0.45			1.04	0.96	06.0	0.68	0.63	0.59	0.54	0.50	0.68	0.54	0.45	
0.50			1.16	1.07	10.1	0.75	0.70	0.65	0.60	0.55	0.75	0.60	0.50	
0.55				1.18	IL.H		77.0	0.72	0.66	0.61	0.83	0.66	0.55	
09.0					1.21			0.78	0.72	0.66	06.0	0.72	0.60	
0.65					1.31				0.78	0.72	0.98	0.78	0.65	
0.70										0.77	1.05	0.84	0.70	
0.75											1.13	0.90	0.75	
0.80			1								1.20	0.96	0.80	
A. Solid line B. T.I. value	es shall	es minim be round	um thicled to the	kness all he neares	owed. st one ho	ilf.								
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				PU	Ĭ	Ř	OAD	S	TAN	IDA	SDS	GRI	D MIN. 7	JIVALENTS HICKNESS
									,				PLATE	VO. A-9
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Post tops, extension arms, stretcher bars and other required fittings and hardware shall be steel or malleable iron or wrought iron and shall be galvanized.

Wire used in the manufacture of the fabric shall be 11-gage for all fence 84" or less in height, and shall be woven into approximately 2-inch mesh.


















	CROSS w/ PLUG		8	4	2	12	16	WITH
JARE FEET	T E E w/PLUG		5	4	7	12	16	CRETE CRETE SIGO PS.I. IN SOIL AND/OR SOIL TYPES ENGINEER.
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REQUIRED	90° BEND		N	4	7	12	16	(1) THRUST (2) AREAS G 2000 PS INSTALLA ADJUST (3) BLOCKS (4) JOINTS A
÷	PE OF	UADIGYT NOITALLATION	4" "	"9	00	<u>•</u> 0	12	NOTES
W		ER SYSTEM	M :	STA		ARDS	6	TULARE COUNTY ORDINANCE CODE SECTION NO. 7080 THRUST BLOCK BEARING AREA REQUIREMENTS















G. TULARE COUNTY AGRICULTURAL CONSERVATION EASEMENT PROGRAM

1. TULARE COUNTY AGRICULTURAL CONSERVATION EASEMENT PROGRAM

BEFORE THE BOARD OF SUPERVISORS COUNTY OF TULARE, STATE OF CALIFORNIA

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IN THE MATTER OF ESTABLISHING AN AGRICULTURAL CONSERVATION EASEMENT PROGRAM

Resolution No. 2016-0323

UPON MOTION OF <u>SUPERVISOR WORTHLEY</u>, SECONDED BY <u>SUPERVISOR ISHIDA</u>, THE FOLLOWING WAS ADOPTED BY THE BOARD OF SUPERVISORS, AT AN OFFICIAL MEETING HELD <u>MAY 3, 2016</u>, BY THE FOLLOWING VOTE:

AYES: SUPERVISORS ISHIDA, VANDER POEL, WORTHLEY AND ENNIS NOES: SUPERVISOR COX ABSTAIN: NONE ABSENT: NONE

E DOLLOGIA	A.
AND	
	50
CONTRACTOR	

ATTEST:	COUNTY ADMINISTRATIVE OFFICER/ CLERK, BOARD OF SUPERVISORS
BY:	Demen Gorana
* * * * *	Deputy Clerk

Adopted the Agricultural Conservation Easement Program (Exhibit "A") in substantial conformance with the General Plan Update Litigation Settlement, and

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- 2. Approved the Administrative Protocols (Exhibit "B") for implementation of the Program, and
- 3. Directed the Resource Management Agency, in concert with the County Administrative Officer, to take all necessary and proper action to implement the direction of the Board of Supervisors.

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Exhibit "A"

Agricultural Conservation Easement Program

WHEREAS, the introduction to Component B of the County of Tulare General Plan 2030 Update establishes Prosperity Concept 1: One of the most identified assets in Tulare County is the rich agricultural land on the Valley floor and in the foothills. The General Plan identifies agriculture not only as an economic asset to the County, but also as a cultural, scenic, and environmental resource to be protected.

WHEREAS, the Introduction to Component B of the County of Tulare General Plan 2030 Update establishes the following guiding principles:

- A) Agriculture, Principle 1: Protect Agriculture Protect valuable agricultural issues from urban encroachment.
- B) Agriculture, Principle 2: Maintain Separators Maintain rural landscape separators between Tulare County towns and cities.
- C) Land Use, Principle 2: Urban-rural interface. Protect valuable agricultural and scenic natural lands from urban encroachment.
- D) Economic Development, Principle 4: Protect Agricultural Economy Protect, expand and diversify the County's agricultural economy and diversity employment opportunities.

WHEREAS, Policy AG-1.6 of Element, entitled Agriculture, of Component B in the County of Tulare General Plan 2030 Update provides:

- A) The County shall consider development of an Agricultural Conservation Easement Program (ACEP) to help protect and preserve agricultural lands (including "Important Farmlands").
- B) This program may require payment of an in-lieu fee sufficient to purchase a farmland conservation easement, farmland deed restriction, or other farmland conservation mechanism as a condition of approval for conversion of important agricultural land to non-agricultural use.
- C) If available, the ACEP shall be used for replacement lands determined to be of statewide significance (Prime or other Important Farmlands), or sensitive and necessary for the preservation of agricultural land including land that may be a part of a community separator as part of a comprehensive program to establish community separation.
- D) The in-lieu fee or other conservation mechanism shall recognize the importance of land value and shall require equivalent mitigation.

NOW, THEREFORE, BE IT RESOLVED as follows:

INTENT: After considering project description and design, if any private 1. project requiring County discretionary land use entitlements is found to have any significant impact under the California Environmental Quality Act (CEQA) due to the conversion of five acres or more of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use, it is the intent of the County to provide at least one option or alternative for use to reduce or mitigate such impact. This option or alternative is the provision of an agricultural conservation easement pursuant to an ACEP. This option or alternative is not exclusive and shall be available in addition to any other options, alternatives or mitigation measures feasible for this purpose. This option or alternative is also not mutually exclusive but may be used together with any other option in any combination that effectively reduces or mitigates the identified significant impact. This option or alternative may also be considered or used for credit toward or used to meet any project-required, greenhouse gas emission reductions.

2. TYPES OF MITTGATTON: Any significant impact found under CEQA due to conversion of defined agricultural lands to non-agricultural use may be reduced or mitigated by granting farmland conservation easements or other farmland conservation mechanisms as set out in this resolution to or for the benefit of a Qualifying Entity.

3. AGRICULTURAL CONSERVATION EASEMENT PROGRAM (ACEP): This resolution establishes an ACEP to allow the use of agricultural conservations easements to reduce or mitigate any significant impacts found under the CEQA due to conversion of certain agricultural lands to non-agricultural uses. The first step in creating this Program will be to establish the criteria for agricultural conservation easements that may be used to reduce or mitigate any potential significant impact found under the CEQA due to the conversion of five or more acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

4. CRITERIA FOR AN EASEMENT: A "Farmland conservation easement" means for the purposes of this ACEP, an easement over agricultural land for the purpose of restricting its use for the term set forth in this resolution for primarily agricultural and agricultural-compatible uses. Any easement offered or used under this program shall, at a minimum, meet these criteria:

A) Preferably the easement will be located in Tulare County but other suitable land may be encumbered subject to approval by the Board of Supervisors.

B) The easement will include Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. C) The land placed under the easement must be of substantially the same quality, have or could acquire access to water, and could otherwise be feasibly cultivated.

D) The land placed under the easement must be at a minimum of a one to one (1:1) ratio or its functional equivalent to the loss of defined agricultural lands mitigated.

5. PROVISION OF EASEMENT: The provision of an agricultural conservation easement pursuant to Paragraph 4 is subject to these provisions:

A) The applicant shall pay directly to the Qualifying Entity, as described in Section 7, below, a reasonable administrative fee equal to cover the reasonable real estate transaction costs and costs of administering, monitoring and enforcing the farmland conservation easement or other instrument in an amount determined by the decision making body approving the discretionary land use entitlements. The County shall require the payment of an additional fee to cover the cost of its own monitoring of this administration of the conservation easement by the Qualifying Entity described below.

B) The farmland conservation easement or other preservation instruments shall be held by a Qualifying Entity, the choice of which shall be approved by the County decision-making body. The County shall be a co-holder beneficiary of the legal instrument. If the Qualifying Entity refuses to hold the easement or other preservation instrument, it shall be held by the County until a suitable Qualifying Entity is identified and agrees to undertake the duties and responsibilities for such easement established herein.

6. LEGAL INSTRUMENTS: REQUIREMENTS

A) Requirements: The legal instrument creating an agricultural conservation easement or otherwise encumbering property for conservation purposes shall meet the following requirements:

a) It shall be executed by all owners of the agricultural mitigation land.

b) It shall be in form suitable for recordation.

c) It shall contain an accurate legal description setting forth the description of the agricultural mitigation land.

d) It shall prohibit any activity that substantially hampers or diminishes the agricultural productivity of the land. However all activities or land use currently allowed by right under the County's Agriculture zoning designations will be allowed on mitigation land.

e) It shall prohibit new residential (other than the single family dwellings allowed by right and by permits in the applicable agricultural zones) and/or

commercial development on agricultural mitigation land that is not directly needed for agricultural production, regardless of existing zoning.

f) It shall protect the existing water rights and retain them with the agricultural mitigation land.

B) County Interests: The County shall be named a co-holder or backup beneficiary under any instrument conveying the interest in the agricultural mitigation and to a Qualifying Entity.

C) Disposition of Land: Interests in agricultural mitigation land shall be held in trust by a Qualifying Entity and/or by the County in perpetuity. Except as provided in Subsection (d) of this Paragraph, the Qualifying Entity or the County shall not sell, lease, or convey any interest in agricultural mitigation land it acquires. The legal instrument encumbering the agricultural mitigation land shall include the provisions of this Subsection.

D) Change in Circumstances: If the Board of Supervisors or Qualifying Entity finds that the purpose described in this resolution can no longer reasonably be fulfilled as to an interest acquired, the Qualifying Entity's interest in the land held for conservation, as secured by the legal instrument, may be extinguished through sale, and the proceeds shall be used to acquire interests in other suitable land located in Tulare County but other suitable land may be encumbered subject to approval by the Board of Supervisors.

7. QUALIFYING ENTITY:

A) For the purposes of the ACEP, "Qualifying Entity" means a nonprofit public benefit 501(c)(3) corporation or other appropriate legal entity operating in Tulare County for the purpose of conserving and protecting land in agriculture, and approved for this purpose by the Board of Supervisors. The County or a City within the County may designate a Qualifying Entity.

B) Duties and Responsibilities: The Qualifying Entity shall be responsible for, without exception, acquiring or holding interests in land and administering, monitoring and enforcing the farmland conservation easement or other instrument designed to preserve the agricultural values of the land for farmland conservation purposes. The location and characteristics of the agricultural land obtained or held for farmland conservation purposes shall meet the provisions of Paragraph 4. The agricultural land held for farmland conservation purposes may be used for those types of agricultural related activity allowed in the agricultural easement or related legal document. If any Qualifying Entity owning an interest in agricultural lands held for conservation ceases to exist, the duty to hold, administer, monitor and enforce the interest shall pass to the co-holder or backup beneficiary of the legal instrument. The County acting as co-holder or backup beneficiary may designate another Qualifying Entity to assume the responsibilities to hold, administer, monitor and enforce the interest.

8. MONITORING, ENFORCING, AND REPORTING:

A) Monitoring and Enforcing: The Qualifying Entity shall monitor all lands and easements acquired under the ACEP as described in this resolution and shall review and monitor the implementation of all management and maintenance plans for these lands and easement areas. It shall also enforce compliance with the terms of the conservation easements or other agricultural mitigation instruments.

B) Reporting by Qualifying Entity: Annually, beginning one year after first accepting responsibility for an agricultural conservation easement under the ACEP or first accepting payment in-lieu fees, the Qualifying Entity shall provide to the Tulare County Resource Management Agency with reports delineating the activities undertaken pursuant to the requirements of this ACEP and an assessment of these activities. The report(s) shall describe the status of all lands and easements required under this ACEP, including a summary of all enforcement actions.

C) Reporting by the Tulare County Resource Management Agency: Annually the Tulare County Resource Management Agency shall review the reports submitted to it by the Qualifying Entity as well as any other relevant material. It shall prepare an Annual Report that provides an independent assessment of the effectiveness of the ACEP relative to its purpose. The Report shall document the funds collected and map the lands put under conservation easement pursuant to the provisions of this resolution. It shall also document the size and location of the land that is to be converted to a nonagricultural use, which generated the mitigation requirements of this Chapter. The Agency shall present the Report, along with other relevant material received, to the Board of Supervisors at a regular meeting of the Board. Ten days prior to the Board meeting, the Agency shall publish notice in a newspaper of general circulation and post on its webpage the date that the Board will consider the report along with an invitation to the public to submit comments on the report prior to and during the Board's open session consideration of the report.

Exhibit "B"

Administrative Protocols

Agricultural Conservation Easement Program

A. Program Process

- An Agricultural Conservation Easement Program (ACEP) application and fee shall be submitted to the County through the Resource Management Agency (RMA).
- RMA shall determine whether the land proposed for the easement meets the minimum criteria as provided in Stipulated Agreement and corresponding Resolution as revised by the Board of Supervisors.
- A Qualifying Entity will be identified for the purpose of conserving and protecting the affected land in agriculture, and, would be approved for this purpose by the Board of Supervisors.
- The applicant shall pay directly to the Qualifying Entity a reasonable administrative fee equal to cover the reasonable real estate transaction costs and costs of administering, monitoring and enforcing the farmland conservation easement or other instrument in an amount determined by the decision-making body approving the discretionary land use entitlements.

B. Legal Instruments

The following requirements shall apply to the legal instruments when creating an agricultural conservation easement or otherwise encumbering property for conservation purposes:

- The legal instrument shall be executed by all owners of the agricultural mitigation land.
- The legal instrument shall be in a form suitable for recordation.
- The legal instrument shall contain an accurate legal description setting forth the description of the agricultural mitigation land.
- The legal instrument shall prohibit any activity that substantially impairs or diminishes the agricultural productivity of the land. However, all activities or land uses currently allowed by right under the County's agricultural zoning designations will be allowed on mitigation land.
- The legal instrument shall prohibit new residential (other than the single family dwellings allowed by right and by permit in the applicable agricultural zone)

and/or commercial development on agricultural mitigation land that is not directly needed for agricultural production regardless of existing zoning.

 The legal instrument shall protect the existing water rights and retain them within the affected agricultural land.

C. Monitoring, Enforcing and Reporting Activities

- Monitoring and Enforcing: The Qualifying Entity shall monitor all lands and easements acquired under the ACEP, and, shall review and monitor the implementation of all management and maintenance plans for these lands and easement areas. It also shall enforce compliance with the terms of the conservation easements or other agricultural mitigation instruments.
- Reporting by Qualifying Entity: Annually, beginning one year after first accepting responsibility for an agricultural conservation easement under the ACEP or first accepting payment of in-lieu fee, the Qualifying Entity shall provide to RMA reports delineating the activities undertaken pursuant to the requirements of this ACEP and an assessment of these activities. The reports shall describe the status of all lands and easements acquired under this ACEP, including a summary of all enforcement actions.
- Reporting by RMA: Annually, RMA shall review the reports submitted to it by the Qualifying Entity as well as any other relevant material. Thereafter, RMA shall prepare an Annual report that provides an independent assessment of the effectiveness of the ACEP relative to its purpose.
- The report shall document the funds collected and map the lands put under conservation easement pursuant to the provisions of this resolution. It also shall document the size and location of the land that is to be converted to a nonagricultural use which generated the mitigation requirements.
- RMA shall present the report, along with other relevant material received, to the Board of Supervisors at a regular meeting of the Board. Ten days prior to the Board meeting, RMA shall publish notice in a newspaper of general circulation and post on its webpage the date that the Board will consider the report along with an invitation to the public to submit comments on the report prior to and during the Board's open session consideration of the report.

The agricultural conservation easement is subject to approval by the Board of Supervisors.

The agricultural conservation easement shall be recorded with the County Clerk/ Recorder.

D. Staffing

RMA would accept and process the ACEP applications.

RMA will be responsible in coordination with the Qualifying Entity, as applicable, for Monitoring, Enforcing, and Reporting requirements.

RMA will coordinate with the County Administrative Office and Board of Supervisors to process applications and satisfy monitoring and reporting requirements.

County Counsel will review the requirements for legal instruments as required.

The County Clerk Recorder will record the agricultural conservation easement.

E. Fiscal

An agricultural conservation easement application fee of \$510.00 was adopted by the Board as part of RMA's Fee Schedule in July 2015.

RMA will evaluate and report back to the Board of Supervisors with a recommendation regarding an appropriate fee that would be recommended regarding monitoring, reporting and enforcement associated with the ACEP in order to fully implement the program.

In addition, the in-lieu fee option will be evaluated in conjunction with program activities such as project processing, monitoring, reporting, and enforcement.

With respect to these projects, there would not be any Net County Cost as implementation would be funded by application and planning fees approved by the Board of Supervisors as part of RMA's Fee Schedule.

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G. TULARE COUNTY AGRICULTURAL CONSERVATION EASEMENT PROGRAM

1. TULARE COUNTY AGRICULTURAL CONSERVATION EASEMENT PROGRAM



Attachment 8 : A-8 Future Feasibility Studies Implementation Program

Attachment A-8



Future Feasibility Studies Implementation Program

The following table documents the Supporting Reference Materials and Future Feasibility Studies included with the Three Rivers Community Plan Update to consider an evaluate strategies to implement the Community Vision included in the policy plan.

	Implements	Who is	2017-	2022-	2027-	On-
Implementation	what Policy	Responsible	2022	2027	2032	Going
1. The County shall consider	1.15	RMA				
implementing a work program to	1.1.13					
work with citizens groups, TCAG	1.5.1					
and Caltrans to prepare	1.6.1					
background materials,	1.6.2					
inventories of candidate areas,	1.6.3					
evaluate strategies such as	1.6.4					
specific plans, development	1.6.5					
standards, "Sequoia Gateway	2.1.2					
Guidelines' and other	3.1.3					
documents required to determine	3.1.4					
the reasibility to support the	3.1.5					
adoption of a Town Center						
Specific Plan in Three Rivers.						
2. The County shall consider	1.2.18	RMA				
implementing a work program to	1.3.12					
TCAG and Caltrans to propero	1.3.13					
nomination materials, inventorios						
of visual and scenic resources						
corridor protection plans and						
other documents required to						
determine the feasibility to						
support the adoption of State						
scenic highway designation for						
State Highway 198						
3. The County shall consider	165	RMA		Mide		
implementing a work program to	3.1.10		-			
work with citizens groups to	3.1.12					
update inventories to determine						
the feasibility of developing park,						
greenway, trails, and recreation						
areas including seeking grant						
funding required to support the						
adoption and physical						

Implementation	Implements what Policy	Who is Responsible	2017-	2022-	2027-	On- Going
implementation of a community park in Three Rivers. Long term maintenance strategies including assessment district formation and/or park management by the Three Rivers CSD will be included in the feasibility evaluation.						
4. Consistent the Tulare County General Plan Health and Safety Element Implementation Measure #21, the County shall consider implementing a work program to adopt the Tulare County Noise Ordinance to incorporate standards set forth in the Health and Safety Element, and #22 the County shall consider implementing a work program to develop and adopt a peak noise standards ordinance to regulate the operation and use of peak noise generating uses throughout the County and ensure residents and visitors are not subject to excessive peak noise nuisances.	1.1.3 1.1.4 1.1.6 1.2.2 1.3.3 1.3.13 1.4.8 4.1.1	RMA		·		
5. The County shall consider implementing a work program to work with the County Office of Emergency Services to determine the feasibility regarding the identification of emergency evacuation routes to facilitate emergency access and evacuation	7.1.4 7.1.5 9.1.3	RMA				
 The County shall consider implementing a work program to work with local residents to determine the feasibility of adopting a Dark Sky Ordinance or equivalent Dark Sky strategy. 	1.3.6	RMA				
7. Upon initiation of the next Three Rivers Community Plan Update, The County should consider implementing a work program to review the LAFCo Incorporation Requirements and determine whether it is feasible to undertake an incorporation study or determine the feasibility to pursue the activation of any CSD latent powers for the Three Rivers CSD through LAFCo.	5.3.1	RMA, Three Rivers CSD				
8. The County shall consider	4.1.10	RMA				<u> </u>

Implementing a work program to implement an educational program for community residents regarding Wildlife Safety, and encourage community participation in preservation efforts. Evaluate the feasibility of developing a bear protection ordinance or equivalent guidelines focused on developing bear resistant containers and waste receptacle enclosures. Qak RMA 9. The County shall consider implementing a work program to developing an Urban Forestry Program in Three Rivers Oak RMA ■ 10. The County shall consider implementing a work program to evaluate the feasibility of developing and adopting an Oak Woodland Ordinance in Three Rivers. 4.3.7 RMA ■ 11. Community Information Program to work with the Sequoia Foothills Chamber of Commerce to support the Three Rivers Community Information 2.1.12 RMA ■		Implementation	Implements	Who is	2017-	2022-	2027-	On-
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SUPPORTING REFERENCE MATERIALS/FUTURE FEASIBILITY STUDIES

A. THREE RIVERS TOWN CENTER CONCEPT

 THREE RIVERS VISION-TOWN CENTER CONCEPT PUBLIC SURVEY THREE RIVERS COMMUNITY WORKSHOP JUNE 14, 2001 AND JUNE 17, 2002 COMMUNITY VISIONING.
 FSU VILLAGE CENTER AT THREE RIVERS-FEASIBILITY STUDY 2005.
 TOWN CENTER URBAN DESIGN CONCEPT ONE 4. TOWN CENTER URBAN DESIGN CONCEPT TWO

5. MIXED USE OVERLAY DISTRICT CONCEPT 6. MIXED USE OVERLAY DISTRICT CONCEPT DEVELOPMENT STANDARDS

B. HIGHWAY 198 SCENIC HIGHWAY DESIGNATION

1. Caltrans Scenic Highway Guidelines 2. Tulare County Board of Supervisors Agenda Items April 25, 2006 and December 12, 2006

C. COMMUNITY PARKS, OPEN SPACE, TRAILS, GREENWAY, AND RECREATION CONCEPT

 THREE RIVERS VILLAGE FOUNDATION REQUEST OF FORMAL CONSULTATION WITH NATIONAL PARK SERVICE, RIVERS AND TRAILS CONSERVATION ASSISTANCE PROGRAM (RTCAP)
 NATIONAL PARK SERVICE RIVERS, TRAILS AND APPLICATION GUIDELINES CONSERVATION ASSISTANCE PROGRAM
 THREE RIVERS VILLAGE FOUNDATION STATEMENT OF NEED FOR COMMUNITY PARKS AND OPEN SPACE APRIL 4, 2016
 THREE RIVERS REST STOP VISITOR CENTER CONCEPT PROJECT STUDY

D. NOISE ORDINANCE CONCEPT

1. TULARE COUNTY GENERAL PLAN HEALTH AND SAFETY ELEMENT IMPLEMENTATION MEASURES NUMBERS 20, 21, AND 22 2. EPA MODEL NOISE ORDINANCE

E. EMERGENCY ACCESS AND EVACUATION CONCEPT

1. CONCEPT EMERGENCY ACCESS AND EVACUATION ROUTES

F. DARK SKY CONCEPT

1. INTERNATIONAL DARK-SKY ASSOCIATION MODEL LIGHTING ORDINANCE AND USER GUIDE JUNE 15, 2011 2. SIMPLIFIED DARK SKY STRATEGY

G. LAFCO INCORPORATION REQUIREMENTS

1. LAFCO INCORPORATION REQUIREMENTS

H. MANAGEMENT OF URBAN WILDLIFE CONFLICTS

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE INCIDENT REPORTING AND PUBLIC SAFETY GUIDELINES BEAR RESISTANT CONTAINERS SAMPLE ORDINANCE BEAR-RESISTANT WASTE CONTAINER ENCLOSURE GUIDELINES BEAR RESISTANT CONTAINERS

I. URBAN FORESTRY

1. GUIDELINES FOR DEVELOPING URBAN FOREST PRACTICE ORDINANCES

J. COMMUNITY INFORMATION (WELCOME WAGON CONCEPT)

1. SEQUOIA FOOTHILLS CHAMBER OF COMMERCE WEBSITE

SUPPORTING REFERENCE MATERIALS/FUTURE FEASIBILITY STUDIES

A. THREE RIVERS TOWN CENTER CONCEPT

1. THREE RIVERS VISION-TOWN CENTER CONCEPT PUBLIC SURVEY THREE RIVERS COMMUNITY WORKSHOP JUNE 14, 2001 AND JUNE 17, 2002 COMMUNITY VISIONING.

THREE RIVERS COMMUNITY WORKSHOP JUNE 14, 2001 COMMUNITY VISIONING PUBLIC COMMENTS FROM RESIDENTS

Major Themes

The River is the heart of the community Control growth Improve communication (Establish better notification standards) Establish and enforce stronger development standards Balance rural character with higher design standards

Natural Environment

- Preserve the floodways along the Kaweah River.
- Rivers are the heart of Three Rivers. The River is the heart of the community, and the most important
- Community asset.
- Implement an abatement program to eradicate Arundo in the middle of Fork Drive. (2)
- The riparlan areas are key assets to the community.
- Preserve the floodways; it is critical to community. It provides for human, animal and plant life. Many of the naturally occurring species represented in this area are rare and endangered. (3)
- Set back river development to maintain water quality.
- Ensure all buildings and other development is set 25 feet away from floodplain.
- Standardize all floodways.
- The natural environment is very important.
- Encourage residents near parts of the river to clean and remove excessive growth from along the banks.
- This river is the heart of Three Rivers. We need precise standards to guard against development in the 100-year flood zone.
- The floodway is as important as the slopes and the ridgelines. The floodway runs right through the middle of town.
- Prohibit constructions of houses on floodplain and any site that has sandy soil or rounded boulders.
- Provide a more realistic map of the floodplain.
- Keep beach lines well away from the floodplain. It poisons the wildlife, plants and residents with river wells.
- Install a greenway along the river.
- The Sierra Los Tulare Land Trust is mid-way through a one-year, Packard-funded conservation planning efforts that has a special focus on the Kaweah Riparian corridors above the dam. As a result of this planning process the SLTLT will be working with local landowners to protect the biological quality of the corridors.
- Control weeds along the floodway.
- Control non-native plants and trees.
- Keep floodways clear and keep water in town.
- Provide for unimpeded river courses.
- Keep structures and other developments out of flood zone.
- Provide a riparian zone/wildlife corridor.
- Remove and control invasive alien plants in river corridors.
- Stop development on flood plain.

- Require an expensive permit for those who build on the floodplain. The revenue generated from these permits will go toward cleaning and restorations costs of property damaged during a flood.
- Provide repeated ballouts of affected properties.
- Keep septic tanks away from flood the zone.
- Protect rivers from water withdrawals.
- Flooding is important to the health and life cycles of riparian vegetation. I strongly support
 preservation of floodways and minimizing development in the floodplain. Appropriate
 development in the floodplain might be a community park with few structures and native
 vegetation.
- Control non-native vegetation along riparian areas.
- Include enforcement measures.
- Provide incentives to preserve floodplain by buying and placing conservation easements, and/or other protection methods to cease or slow development in flood plain.
- Prohibit the changing of water course/direction to suit property owners desire to increase or decrease water flow past their property
- Yes (Preserve the floodway along the Kaweah River) (7)
- Eradicate/control non-native species in the river
- Establish financial penalties for building in the floodplain
- Update the County floodplain map
- Store water in the dam for recreational use for residents
- The federal government is responsible for illegal dumping in the floodplain
- Preserve alders, sycamores and cottonwoods
- Prohibit clear cutting
- Is it possible to prohibit cutting oak or sycamores?
- This is difficult to enforce
- Obtain biologist's input on the blue oaks
- Identify biological resources in the community, and maintain the data in a planning document
- Is it permitted to build below the ridgelines?
- An issue in the community is building roads on steep slopes
- Highway 198 is eligible for a County designated scenic highway
- The Holiday Inn is built in the wetlands
- Regulate food disposal (to ensure that bears don't have access)

Protect and Preserve Oak Woodlands

- Implement a program to educate surrounding residents about the Blue Oak Woodlands (as stated in the presentation they suffer from poor regeneration). Encourage community to get involved in the preservation of these woodlands.
- Woodlands are essential and beautiful because they provide shade, food and cleaner air.
- Consider replacement standard as a viable option. (2)
- Recognize that the oaks, river, and wildlife are the some of the reasons residents live in Three Rivers.
- This is a good idea but ensure that there is flexibility to create a viable residential building site.
- Encourage saving oaks.
- Sycamore and cottonwoods also need to be preserved. (5)
- We shouldn't have to give up our property to animals that have moved into the overgrowth of the woodlands.

- Property owners should still have the right to cut down trees on their own land. (2)
- Fine property owners and biological reserves on South Fork Drive who allow their animals to do damage to plants and trees.
- High priority for CADFG and for the SLTLT. The SLTLT will be writing a Kaweah-Tulare Conceptual Area Plan by December 2001 that will guide Wildlife Conservation Board funding priorities.
- Protect wildlife.
- Protect and help support and inform new research on Three Rivers.
- Keep new development out of oak woodlands.
- Identify and protect key ecological hotspots.
- Restrict cutting of oaks. (3)
- Oak woodlands have been heavily impacted by development and grazing throughout the state. The oak woodlands are some of the most aesthetically pleasing and ecologically important components of Three Rivers. A number of species depend on these oak woodlands. Any development must minimize its impact on these woodlands.
- Do not clear oak woodlands.
- Eradicate non-native plant species that threaten existing native plants.
- Protect mature trees and saplings of slow growth species.
- Natural flora and fauna are more important than the quality of life for humans living there.
- Yes (Protect and Preserve oak woodlands) (9)

Preserve Visual Resources, Including Viewsheds and Ridgelines.

- Do not build on ridgelines. (9)
- Prohibit development on viewsheds.
- Cut as few trees as possible.
- Community would prefer to see views of nature than houses.
- Keep a close eye on this project.
- Prohibit building on slopes. (5)
- Encourage use of land trusts.
- Be careful not to become over-zealous
- Designate 198 a scenic highway. (3)
- Concerned about the effect buildings will have on viewsheds.
- Fire protection is impossible in some areas of Three Rivers; people have to live with that risk.
- SLTLT mission is to protect the natural, scenic, agricultural and historic lands of the Southern Sierra foothills and Tulare Valley through stewardship, restorations and education. The STLT is working to help make Highway 198 a designated scenic highway. CA Cal already lists it as eligible for this designation.
- Design roadway to minimize viewshed alternation and environmental damage.
- Keep buildings small and low in scale within community so as not to impede views.
- Preserve Three Rivers outstanding views.
- Cap building heights. (2)
- Maintain native vegetation as part of the viewshed in developed areas.
- Create mini sites within the viewsheds that are protected to help us see what we are losing.
- Ensure that there is no new development just below ridgelines.
- Slope standards should preclude notching and modifying slope to allow building or other methods of modification and circumvent the original intent of the standards.
- Marin County did a great job of protecting ridgelines.
- Ensure that any development on ridgelines or slopes is not intrusive.

- Roads cut on a steep slope with proper culverts and drainage swales cause erosion and loss
 of topsoil and plants. These roads are also ugly.
- Yes (Preserve visual resources, including viewsheds and ridgelines.) (4)

Preserve Historical, Cultural and Archaeological Resources Including the Kaweah Post Office, Historical Bridges, and Cultural Native American Resources.

- Establish architectural standards.
- These are our heritage, touchstones of our past; learning opportunities, aesthetically
 pleasing, and they provide continuity and character.
- Kaweah residents deal with things quickly because they don't become bogged down in committees. They simply raise funds and do the work. This is the way they have handled renovating the post office, maintaining of the unique town signs, and patrolling North Fork to reduce gang activity, trash, alcoholic beverages, and drug users.
- The above list of resources does not represent or define all of the towns historical and cultural resources.
- Restore the Pumpkin Hollow Bridge.
- Development should not damage historic resources.
- Add gardens, playgrounds, and restrooms.
- Three Rivers has already lost too many historical resources such as the colonial graveyard at Chilcott Ranch.
- Develop a method to educate new comers about the importance of these historical elements to the community.
- No Caucasian has lived in Three Rivers to have his structures considers historical.
- Prioritize the preservation of Native American structures.
- Yes (Preserve historical, cultural and archaeological resources including the Kaweah post office, historical bridges, and cultural Native American Resources) (9)

Land Use and Community Character

- Establish an Urban Area Boundary (UAB) that is contiguous with the existing Planning Area Boundary.
- Clarify what a UAB means for Three Rivers.
- Do not restrict homes and businesses.
- Extend the CSD boundary to include area within UAB to have control over all septic.
- Do not extend the UAB beyond the planning area, and consider a smaller UAB.
- Relocate businesses along 198 and replace with open space.
- Yes (Establish an Urban Area Boundary (UAB) that is contiguous with the existing Planning Area Boundary). (2)
- Kaweah residents have worked with County officials and raise funds to get the things done.
- Do not establish an Urban Area Boundary.
- Define urban
- Cluster commercial development, so there isn't strip commercial
- Require on-site waste management for larger parcels
- Is zoning going to change land use designations?
- Why is light industrial adjacent to residential in the community plan?
- Is a winery classified as an industrial use?
- The Town Center extends along Highway 198
- The community may face a tradeoff between a scenic corridor or commercial uses
- Are there currently development pressures in Three Rivers?
- Clarify the change in the census definition (Three Rivers as a Census Designated Place)
- Is Three Rivers a growing community?
- The true population of the community is higher than the census figures

Create a Town Center With a Concentration of Commercial, Retail and Social Uses to Help Strengthen Three Rivers as a Livable Community.

- Build a community center that will include youth activities and a large supervised swimming pool. (2)
- Community needs a park that has public restrooms and picnic tables.
- Ensure that Town Center plans include trees and walkways.
- It would be nice if people could get out their cars while running errands to socialize.
- Do not limit the development of businesses outside the proposed Town Center Area.
- Town Center needs to be near the river, because the river is the center of town.
- Develop in Village Town Area. (2)
- Three Rivers already has two rapidly growing 'Town Centers'. One is in the Village Market Area and the other is on North Fork Drive.
- Why honor one Town Center over the other? Develop two areas as commercial centers.
- Create a central business strip; we don't have one currently.
- Develop one Town Center, not two. (2)
- The Village Market Area needs a heart.
- Retain some public open space with a few buildings that will define the area.
- Three Rivers has very little local businesses, but locals don't really support local businesses.
- Don't replicate Oakhurst.
- Three Rivers does not need more commercial development. (5)
- Perhaps existing businesses need to relocate in order to improve river access and views of the river.
- The Town Center should be small in scale and replace the some the existing business that are currently in inappropriate locations.
- Establish height standards less than 50 feet and include standards for natural paint colors and varied elevation aspects.
- The goal of this strategy should be to reduce the concentration of retail establishments in constrained areas with minimal parking and congested traffic along 198 from North Fork to the School.
- Yes (Create a Town Center with a concentration of commercial, retail and social uses to help strengthen Three Rivers as a livable community.) (6)
- No.

Ensure adequate land use supplies for residential, commercial, industrial and public uses to accommodate future growth and ensure the community's economic viability.

- Diversify land uses in the community.
- Prohibit building on floodplain or on steep slopes that may compromise the integrity of the natural environment.
- Preserve wildlife and pedestrian/bicycle amenities.
- This is not economically viable. This area is mostly residential and doesn't have a good tax base.
- Only allow residential development in South Fork Drive. Many residents move to Three Rivers to get away from people.

- Set a standard for new commercial development.
- No art deco or key sheds.
- Residential development should include cluster housing to eliminate over dependence on private autos.
- Preserve open space and farmland.
- The Still's vision is to live in a community where a natural richness complements agricultural richness, creating economic well being and retaining significant vestiges of our natural past.
- Discourage national chains and restrict drive-thru(s).
- This community's economy is based on tourism, retirement dollars, NPS employment, and bedroom commuters not from industrial and other commercial activities.
- If the census 2000 shows 2248, which is fewer that the 1990 census, what's the basis for planning for growth over the next 20 years? Clarify the census figures.

Limit growth.

- Seek entertainment assets.
- Industrial development will create undesired air pollution. (2)
- No (2)

Ensure compatibility between land use types and intensities.

- Preserve existing ranchlands.
- Ensure that the look and feel of the community is rural.
- Minimize light pollution.
- Limit growth to larger parcels with strict adherence to perk tests, leach field sighting, and building permit inspections to maintain water quality.
- Do not mix zones.
- Be careful of types of labels a vineyard is hardly light industrial.
- No
- Consider access and geographic constraints.
- Set a 5-acre minimum lot size.
- The Tulare County Planning and Development Department routinely waives zoning, fire
 protection, leach field regulation when people apply for building permits.
- Set consistent acreage limits or regulations throughout Three Rivers.
- Yes (Ensure compatibility between land use types and intensities) (8)

Encourage a diversity of housing options for all Three Rivers residents, including affordable housing for families, seniors, and National Park Service employees.

- Provide affordable housing for singles.
- Encourage walking and riding bikes.
- If this means more multi-family zoning then make sure that there are strong design guidelines in place.
- Ensure that growth does not result in overcrowding.
- Do not compromise the natural environment.
- Balance housing options with an equal amount of options to preserve open space.
- Consider implementing a minimum lot size or a maximum density to guard against over crowding.
- · Consider impact on septic systems.

- High-density housing usually has negative impacts.
- Land use issues must obtain Tulare County is full cooperation. These issues must be communicated to the entire effected community especially when project and residential permits are involved.
- Implement design standards to ensure the best use of available land.
- Allow for unique and diverse architecture.
- Do not over-regulate land uses.
- Prioritize the development of a Senior Center.
- Yes (Encourage a diversity of housing options for all Three Rivers residents, including affordable housing for families, seniors, and National Park Service employees). (7)
- No

Development Standards.

- Ensure that future development is compatible with existing development and the natural environment.
- Is a zero-growth plan a possibility?
- Consider an option employed by some San Diego communities where new home can only be built on existing sites. Currently, new homes are built on vacant lots while other deserted houses remain on sale for years.
- Be careful of height limits.
- Ensure development is better than existing development.
- Remove CZ zone from all of Three Rivers.
- Review existing zones.
- Cluster commercial development in оле area around Town Center 198.
- Restrictions should not infringe on my personal rights.
- Update flood map.
- Prohibit development that replicates the Holiday Inn. (2)
- Increase notification from County regarding new development.
- Ensure that future development is compatible with the natural environment and the rural, historical/cultural heritage at Three Rivers.
- Create guidelines so that we can keep rural gateway ambience of Three Rivers.
- Include commercial community to employ our resident and provide for their needs.
- This is critical to preserving the character of the community, which residents moved to Three Rivers to enjoy.
- Set standards for height, color, and design.
- Ensure that standards that are set will be permanent and enforced by the County. (2)
- Require the County to notify residents about any new developments.
- Keep buildings and development out inappropriate places like the riverbeds, wetlands, and natural drainages.
- If architectural standards are not implemented soon it will be too late.
- Ensure large site development does not have a negative impact on septic system.
- Is it possible to have a scenic corridor and development standards?
- There is a scenic corridor in place today
- Maintain a scenic corridor in the future
- How was the Holiday Inn permitted, based on current standards?
- There are not enough standards in the existing plan
- Establish more specific standards

- Can we regulate national chains?
- It isn't legal to regulate chains, but can regulate square footage of a use
- Regulate signage for chains
- Restrict lighting at the golf course
- Restrict times of lighting and amount of lighting
- Do not restrict residential development

Establish rural compatibility standards including:

- Lighting standards and guidelines.
- Encourage motion sensors to deter residents from using intrusive security lights. (5)
- Ensure lights are pointed down, and turned off when not in use. (6)
- Create and enforce a dark sky ordinance. (3)
- Reduce light pollution. (5)
- Prohibit bug lights.
- Prohibit or restrict use of business lights at night. (5)
- Prohibit the use of 24-hour security lights. (3)
- Yes (Establish lighting standards and guidelines) (6)

Standards for signage.

- Keep signage small and inconspicuous. (7)
- Use natural materials to make signs.
- Prohibit use of neon or blinking signs. (6)
- Ensure sign lights are only on at night.
- No signs!
- No off-site signs.
- Scenic corridor would require stricter control. (2)
- Signs in town are too high, too large, and too ugly.
- No plastic banners.
- Lighted signs should be turned off when the business is closed.
- Regulate size and materials.
- Ensure surrounding residents approve signs.
- Yes. (Establish standards for signage) (8)

Noise restrictions.

- I would like to be able to hear the river, the birds, the breeze, as opposed to dogs and radios.
- I'm fine with birds singing and cows mooing.
- Prohibit gas powered leaf blowers.
- The Lion's Club is concerned that new restrictions may prohibit various social events that the club holds because they have recently had some complaints from neighbors. The Club has been holding these events for the past 50 years or so and only in last ten years have they received complaints. The events happen less than 20 days of the year.
- Restrict noise caused by off-road vehicles driving on slopes (for recreational purposes) adjacent to residential areas.

- Restrict loud music coming from vehicles and homes.
- Prohibit excess noise after 10PM.
- Prohibit construction before 7AM and after 7PM.

Vegetation standards.

- Retain native vegetation (5)
- Minimize disturbance of existing vegetation.
- Prohibit invasive non-native species of plants. (5)
- Minimize irrigation and use drip irrigation instead of sprinklers.
- Ensure that plants require low amounts of water. (2)
- No more palm trees.
- Have homeowners keep their part of the river clear.
- Yes (Establish vegetation standards) (6)
- No (2)

Setback standards for residential development.

- This is a touchy and explosive subject to address.
- Vary setbacks so as not to have all the houses in rows.
- Encourage low-density development.
- Ensure that existing resources are not impacted.
- Setback is less important than overall site plan.
- Screen buildings with appropriate vegetation.
- Limit acreage.
- Front setbacks to 1/3 of lot.
- Set for both front and side.
- Yes (Establish setback standards for residential development) (9)

Streetscape guidelines for roadways, paths and sidewalks.

- Inconspicuous
- Natural plantings
- One of Three Rivers' most scenic corridors was destroyed the last bike path put in.
- Remove the ugly wire mess on 198.
- No more curbs and gutters.
- This is less of a priority.
- This needs immediate attention.
- Install walkways for commercial areas.
- Plant more trees along walkways and on side of roads.
- Yes (Establish streetscape guidelines for roadways, paths and sidewalks) (8)

Standards for fences

- Ensure that fences are unobtrusive and use natural materials when possible.
- Do not block wildlife movement (2)
- Not necessary in a rural area.
- No (3)
- Encourage diversity.

- This restriction is not necessary—it's too intrusive. (2)
- Prohibit chain-linked fences. (2)
- Prohibit cinder block fences.
- Keep out fences.
- This is a difficult thing to restrict due the variety reasons a person may have for building a fence (decorative, restricting animals, privacy, etc).
- Keep fences low.
- Include standards for other types of closures especially those for commercial places.
- Ensure that fences are aesthetically pleasing and blend in with character of the neighborhood.
- Ensure fences are tall enough to keep animals in and trespassers out.
- Yes (4) (Establish standards for fences)

Apply Rural Compatibility Standards through the site plan review process.

- Ensure that this is enforceable. (2)
- Limit to larger parcels due to water and sewer limitations.
- Enforce stricter standards for on-site waste management.
- Create more prescriptive and precise standards for new development to prevent 3-4 Story structures.
- Encourage diversity in the community, so that Three Rivers does end looking like Santa Barbara.
- Concerned about for safe water and control of septic system.
- Visual and aesthetic design guidelines should be determined through community consensus at another a future town meeting.
- Clarify the concept of rural compatibility standards.
- Landowners in the immediate surrounding area should be notified and have an opportunity to view site plans. (2)
- Tulare County should be more conservative with building permit applications.
- Yes (Apply rural compatibility standards through the site plan process) (6)

Transportation and Public Safety.

- Develop a Traffic Circulation Plan with management strategies and improvements to increase safety and community access.
- Install flashing yellow lights near schools, currently through traffic does not slow down to a safe speed.
- Complete bike lane to Park.
- Keep the gravel/dirt road on South Fork and North Fork Drive
- Install more bike lanes. (2)
- Be careful not to damage scenic corridor.
- Do not place heavy restrictions on businesses.
- We already have a bikeway!
- Include plans for improvements to pedestrian and bicycle amenities. (7)
- Install left turn lanes near large developments. (2)
- There aren't many things needed regarding traffic.
- Develop more public transportation options.
- Install traffic calming devices that will make the traffic slow down. (2)

- Improve access to Cherokee Oaks because current access is unsafe and also a dangerous fire hazard. (4)
- Do not increase access to community.
- Implement free bicycle system.
- Encourage ride-sharing to/from Visalia.
- Require businesses to contribute funds to improve traffic conditions because their businesses contribute to the increase of traffic.
- Develop public transportation to valley and parks.
- Strengthen CHP enforcement of the speed limits.
- Additional walls and guardrails are unnecessary.
- Current roads are not adequate for more growth.
- Improve pedestrian access currently most roads in Three Rivers are not pedestrian-friendly (this is unsafe for walkers). (2)
- Horse Creek Bridge is unsafe.
- Follow-through with Cal-Trans plans for a scenic corridor.
- North Fork Road at Ann Lang's is unsafe. (2)
- Increase number of turnouts for Trailers/RVs.
- Lower speed limit in town to 30 miles/hour.
- Post speed limit more frequently along South Fork Drive.
- Establish a scenic corridor.
- Set standard for business and commercial signs allowed along Highway 198.
- Yes (Develop a Traffic Circulation Plan with management strategies and improvements to increase safety and community access) (5)
- North Fork and South Fork roads present a challenge we don't want to widen the roads, but need to ensure access
- Require left and right turn lanes as development conditions
- Improve address matching
- Are there restrictions regarding fire department access?
- More traffic enforcement is needed
- Access for emergency vehicles conflicts with environmental protection
- Establish Highway 198 is a double fine area for speeding

Questions

- Why is shoreline pointed out?
- Will the walkway be along the highway or river?

Ensure adequate access for emergency and safety vehicles consistent with SRA standards.

- Cherokee Park is a prime example of a congested area with only one exit. A blockage there will capture many.
- Retain rural aspects of community, such as rural roads.
- Keep our fire station open.
- Three Rivers needs a local fire station that will be operated year round. (3)
- Do not compromise the natural environment to improve safety access. Do the minimum bring us up to standards.
- Conflicts with visual standards,

- Review width standards for emergency access into new developments. Incorporate current thinking as evidenced by less width.
- What difference does it make if the County closes the fire station?
- Improve ambulance service.
- Yes (Ensure adequate access for emergency and safety vehicles consistent with SRA standards.) (4)

Additional Comments and Suggestions

- We should look at opportunities for preserving our rural wooded, riparian areas a mitigation bank for neglected lands in the County.
- Install more walkways. (2)
- Preserve wildlife habitats and wildlife corridors. (2)
- Keep things small, quiet, and simple.
- Ensure improvements blend in with the character of the neighborhood.
- Make privacy a priority.
- Ensure sustainable development.
- We do not have to grow much more.
- Save trees and river.
- Need a more precise, prescriptive plan than the current one.
- The plan should not be too restrictive that it may become more exclusive than effective.
- Residential development in most southern part of the site is unrealistic.
- Don't turn Three Rivers into another Truckee or Auburn!
- Protect bears from trash receptacies.
- Improve access to Emergency Medical Care; currently it takes an hour to get to Kaweah Delta Emergency Room.
- Improve fire protection. CAP must maintain adequate staff here during peak fire danger periods.
- Develop standards for trash disposal to guard against Black Bear attacks. (2)
- Provide information on fireproofing homes and buildings.
- There was a lack of communication between Visalia Planning/Support Board and residents in Three Rivers regarding new buildings like the Holiday Express.
- Consider creating car-free, pedestrian-friendly areas that have shade trees and safe walkways for children and elderly.
- Prioritize neatness, safety, and healthy environmental sustainability in plans and guidelines.
- Focus new development in the foothills and avoid covering farmlands in the valley.
- Increase outreach efforts, the turnout for this public meeting was not representative of the community.
- Leave water in lake, it takes some of pressure off the rivers.
- Residents should receive plans in form of a publication for a closer review.
- The Holiday Inn Express is built on the floodplain with an inadequate sewage system. It is too tall and leaves its lights on all night. It is does not blend in with the character of the community.
- The County must enforce present regulations.

Questions.

 How can we allow Three Rivers to grow when we do not have adequate water resources for existing residents?

- What are our funding sources?
- Why does the County allow people to live in travel trailers?

THREE RIVERS COMMUNITY WORKSHOP 6-17-02 COMMUNITY VISIONING PUBLIC COMMENTS FROM RESIDENTS

1. Land Use Community Character

Goal 1: Compatible Development

Objective 1.1 Compatible and consistent development

- Site Plan Reviews: maybe somewhat restrictive for current homeowners.
- Light industrial; why not expand to community commercial.
- An overlay is not a good idea.
- Boundaries are fine; we cannot control the entire world.
- Independence is one of the reasons we live in an area of this nature.
- Public notice in local community paper.
- Put public notice in Three Rivers Newspapers for development project. Notify all adjacent neighbors and those within a mile, we live very spread out, for example we drive 6 miles to get to the post office.
- Site Plan Review for Community standards should be implemented. If possible design standards might be suitable for future implementation.
- How do you do this? Vineyard on a hillside changes the flow of water down the hillside. Each house up the hillside changes the drainage flow. All development has negative effects on the existing development. How would you prevent a Shoshone? Built environment abandoned. Negative effect on the community.
- Please have plan require every county notification to be in the Three Rivers Newspaper, not just once in a while. This has in the past and still is now a pressure on owners of the Newspapers because so much of their advertiser revenue is from really companies.

Objective 1.2: Rural Gateway Character

- Signage character should be implemented as soon as possible; it is not too late.
- Yes!

Objective 1.3: Rural Development Standards

• Prohibit use of invasive species.

Objective 1.4: Quality Office Commercial, and light Industrial development

- Our only light Industrial land in Three Rivers is occupied by a Winery. More land should be designated as such. We do not have land zoned for contractor's yards etc. We have many more conforming uses such as the Red Barn, which although is compatible with the community is not conforming to zoning. Zoning descriptions have not kept up with changes in manufacturing or even storage in the current world.
- The only light industrial development presently zoned is a vineyard. The topography is such that does not lend itself to this type of development. Will there be accommodation for it? Or

is it intentional? How about M1 zoning in the community? Commercial area? What are the time frames for the completion of this plan?

We need to designate more areas as potential light industrial sites.

Objective 1.5: Urban Area Boundary

Too large an area

Objective 1.6: Town Center

 Include senior living condos and apartments in this town center. This is the only area for seniors. We are losing many seniors our community due to lack of adequate housing for this life period, i.e. low maintenance, smaller floor plans, availability of public amenities.

Goal 2: Appropriate Densities

Objective 2.2: Utilization of existing public facilities

What is the physical holding capacity of a parcel?

Goal 3: Economic Vitality

Goal 4: Diverse Housing Options

Objective 4.1: Housing Mix

Drop National Park Service from Goal. Why single out that resident group?

Objective 4.2: Mobile Homes

Be very cautious with mobile home parks.

Goal 5: Environmental protection and conservation

Objective 5.1: Protection of the Natural Environment

- Most important.
- Soil disturbance (e.g. grading activities) should be specifically included here.
- Surface water diversions should be addressed.

Objective 5.2 Kaweah River

- Too much water is being extracted by greedy landowners. I prefer protecting the 500-year-old flood plain; protect sycamores, willows and alders along rivers.
- Size of proposed ponds should be limited in volume. There is a recreational pond (small lake) being built, seven to eight miles up south, that clearly will adversely impact on the on the river in the summer months. It is patently inconsistent with our day environment.
- This must include riparian vegetation, which is important for biological (e.g. Habitat) and physical (e.g. stream channel roughness/ flow character) reasons. Ideally, the cumulative effects of developments should be addressed and mitigated.
- We must not get overly intrusive into private property rights.

Objective 5.3 Oak Woodlands

The provisions for Oak woodiand should also extend to other native, intact vegetation types.

- Yes, builders should not disturb land around oaks by extensive and unnecessary grading. Don't remove oaks and plant palm trees to attract tourists. It is an affront to the environment.
- Protect more than oaks

Objective 5.4: Native vegetation and habitat

• How about objective for sycamore forest preservation, not just oak woodland? Might be buried in riparian area/ Kaweah River Objective.

Objective 5.5: Visual Resources

- Especially ridgeline development, see Boulder Colorado for example. Poor soil grading has far greater impacts than just visual.
- Yes, I don't want to see trophy homes on ridges instead of live Oaks and Blue Oaks.

Goal 6: High quality Public Facilities and Services

Objective 6.2: Open Space and Recreational Facilities

- Public access restrooms
- Community recreation facilities are important and should include access to surrounding natural environments that people value.

Objective 6.3: Provision of Water and Sewer

• This is the primary limiting factor to all Three River's growth. The Federal/ State and County are broke. Three Rivers is rock, river and hills. Therefore, community water and sewer is financially prohibitive. Large parcels and low densities are a must.

Goal 7: Safe and Accessible Transportation and Circulation

Objective 7.1 Transportation and Circulation System

Left hand turn lane for turning into North Fork Drive when heading upriver on Highway 198.

Objective 7.2 Access to transportation corridors

Address pedestrian traffic in vicinity of existing town center, not just the school (policy 7.1.5).

Objective 8.1 Adequate emergency access

- All roads should require permits from the county to ensure as little erosion as possible and accessibility for emergency vehicles to comply with state response area standards.
- Be heard!
- Policy # 3.1.3 is most important, we must ensure that Tulare County maintains a fire station in Three Rivers.
- Addressing issues used to be considered by the county. If not for present numbering, for future addressing in developments.

General Comments

Land Use

- Emphasize wildlife corridors
- An Urban Area Boundary is not an Urban Development Boundary

- Suggestion: take the Urban Area Boundary up to the park
- Significant development occurs outside of planning area boundary, such as on South Fork
- What does this mean in terms of service delivery (if an Urban Area Boundary is established)?
- Who will manage future development in Three Rivers
- Planning Commission
- County Staff
- Public Notice- 1) CEQA requirements 2) Public Hearings Notice
- Noticing adjacent property owners may not be enough- there are cases where development may affect entire community.
- Which newspaper publishes public notices?
- Notices need to be published in the local paper
- The Kaweah Commonwealth is a community newspaper, and it is delivered free to every home weekly
- Require public notices to be published in the Kaweah Commonwealth
- Commercial and light industry businesses have shut down in the community
- It is difficult to start businesses in the community
- We need to retain our existing commercial development
- Expand areas for Light Industrial development
- There are other needs, such as contractor yards or equipment storage areas that may not be appropriate as Commercial or as Light Industrial.
- Technology has changed industry, it is possible that there are some commercially zoned properties that may be adequate for light industrial development
- Is there adequate land supply in Three Rivers?
- The Community needs somewhere to put air in tires/ change a flat (service station)
- The Lions Roping Arena should be designated as recreational on the land use map
- The community needs to control growth and population
- The County subdivision standards for roads and driveways are often not compatible with community
- How was river floodway defined?
- State maps
- Floodway is too generalized- it needs to be applied at a parcel level
- Ensure site plan review isn't too restrictive
- Site plan review could work in Three Rivers
- Ensure that site plan review isn't too restrictive
- Is there a way to strengthen criteria for rural land use?
- Design guidelines would not work in Three Rivers
- There needs to be a way to standardize the development process, and give the public direction
- Include clustering of development, to provide for more open space

Public Safety

- Ensure consistent road names/numbering
- Need sequential addressing
- People self-assign addresses, and the numbering gets out of order
- The fire department is required to know how to get to every house in the community
- Residents can go to fire department and update the map
- A problem occurs when houses have to share addresses (only one address is provided per ingress/egress)

Transportation

- What are recommendations for improvements at Cherokee Oaks?
- What about bike lanes?
- Consider future connections to the park
- Consider stop lights (part of the Caltrans process)
- How does funding of road improvements occur?
- General tax (example)
- Three Rivers is a gateway community, and bears the burden of being located next to a National Park

Public Facilities

- Provide public access to restrooms
- The Sheriff's Department and the Fire Department are required to provide emergency services, it doesn't matter if development is located outside of an Urban Area Boundary

Natural Environment

- Protect the water as a feature of Kaweah River
- How far are we going to go to protect water quality in the river? This should be a priority.
- Oak Woodlands is a critical feature in Three Rivers
- When the dam is raised, water is going to back up. The Plan needs to recognize this.
- Is Slick Rock going to be removed?
- Where is public going to have access to recreation areas?
- According to the Army Corps of Engineers, there is no recreation money available in the dam project
- Raising the dam affects tourism, recreation, and businesses
- Establish a minimum pool (20,000 AC Feet) above silt level
- Ensure public access to lake (after dam is raised)
- The area has been designated as a pilot project for recreational land
- Intergovernmental Coordination is necessary on this project
- If there isn't adequate public access to the lake, it is very congested and dangerous at the access points

Three Rivers Community Residents Vision: The Village Square Concept

The Village Square Concept is an approach to locate a 10 to 20 acre area that would initially be available to local residents and visitors to enjoy a natural environment with walking trails and picnic areas.

As community needs and resources change, further property development could include outdoor entertainment, learning facilities, public exercise courses, play and lawn game areas.

The particular topography and existing development in the area leave few centralized sites remaining for community purposes.

The early acquisition of a well-suited property is important – some undeveloped properties have already received buyer interest for ventures that may not be compatible with a village center concept.

After a property is secured, the community has an interest in working with the developer and the County, to develop a project that reflects community objectives and has the flexibility to evolve while meeting community needs and interests.

With sufficient space and a good location, other users may be attracted to the property. An Art Center, senior center/housing, or other similar tenants could also provide a cost-sharing resource and begin to form a Village Square Complex.

CSD COMMUNITY PARK and TOWN CENTER CONCEPT 11-7-03

PROJECT GOAL: CREATION OF TOWN CENTER PUBLIC PARK and ART CENTER

PROJECT CONCEPT:

- PUBLIC PARK WITH MULTI-USE ZONING* TO ALLOW FOR CONCURRENT COMMERCIAL/RECREATIONAL/RESIDENTIAL ABILITIES
- EXERCISE PATH
- PROVISION FOR YOUTH/COMMUNITY CENTER ON SITE
- OUTDOOR STAGE FOR CONCERT/THEATER ENTERTAINMENT
- COMMON GROUNDS WITH THE ART INSTITUTES' SCULPTURE GARDENS, NATIVE AMERICAN EXHIBITS, AND NATIVE PLANT GARDENS
- PROVISION FOR SENIOR HOUSING AT PERIPHERY

LEAD AGENCY: THREE RIVERS Community Services District

POTENTIAL PARTICIPANTS AND SUPPORTERS:

- CENTRAL CALIFORNIA ART INSTITUTE
- THREE RIVERS REC COMMISSION
- TULARE COUNTY RESOURCE MANAGEMENT DEPARTMENT
- TULARE COUNTY PARKS DEPARTMENT
- TULARE BOARD OF SUPERVISORS
- CAL TRANS
- TULARE COUNTY OFFICE OF EDUCATION
- IRVINE FOUNDATION
- NATIONAL PARK SERVICE
- DEVIN NUNES, REP, 21ST CONGRESSIONAL DISTRICT
- GEORGE RADANOVICH, REP 19TH CONGRESSIONAL DISTRICT
- ROY ASHBURN, CAL STATE SENATE 18TH DISTRICT
- WILLIAM MAZE, ASSEMBLY 34TH DISTRICT

SITE OF PROJECT:

SOUTH OF HIGHWAY 198, BEHIND THE NEW CDF STATION

- EIGHT INDIVIDUAL PARCELS UNDER CONSIDERATION
- ALL PARCELS CURRENTLY AVAILABLE

POTENTIAL FUNDING SOURCES:

- PROP 40
- WETLANDS RESTORATION FUNDING (KEMP PROPERTY)
- IRVINE FOUNDATION (ART INSTITUTE)
- YOUTH RECREATIONAL FACILLITY RELATED FUNDING
- CAL ENDOWMENTS (HEALTH PROMOTION EXERCISE PATH WITHIN PARK)
- LOCAL ORGANIZATIONS LIONS CLUB, SEQUOIA RIVERLANDS TRUST,
- GATEWAY COMMUNITIES ORGANIZATION (HR 1402)
- FEDERAL HOUSING FUNDING (SENIOR HOUSING)
- CALIFORNIA STATE PARKS

BUDGET CONSIDERATIONS:

- **FUTURE POTENTIAL INCLUSIONS:**
- LAND ACQUISITION COSTS
- SITE PLANNING-CIVIC DESIGNER
- LAND DEVELOPMENT COSTS
- LEGAL FEES
- PERMITTING FEES

- ~ RELOCATE PUBLIC LIBRARY TO TOWN CENTER
- ~ EMERGENCY/DISASTER RELIEF CENTER
- ~ COMMUNITY SWIMMING POOL

2. FSU VILLAGE CENTER AT THREE RIVERS-FEASIBILITY STUDY 2005.

Proposal and Growth Plan

Three Rivers Community Future Growth Recommendations

Prepared by: Craig MBA Team

Carlos Fandino Sanja Kovacevic Hemanta Mungur Huy Nguyen Nancy Pacheco Craig School of Business 5245 North Backer Avenue Fresno, CA 93740 Phone (559) 278-2482 Fax (559) 278-6931

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Executive Summary

The Three Rivers project provides future growth recommendations to the Three Rivers Village Foundation which take into considerations town's existing businesses, community and visitor needs and long term sustainability. The Team specifically looked at whether a Village Center concept that encompasses commercial and residential needs as well as the community activity needs would be a good fit for the town.

The Team's recommendation and analysis are based on the local and visitor surveys, interviews with a number of business owners, residents and other stakeholders, town visits as well as extensive online research. Detail methodologies, survey examples and findings can be found in the body of the report. It is important to note that due to time considerations, survey responses were limited and represent only specific segments of the populations. Thus, though very relevant, we cannot conclude that our survey research is fully representative of each population segment's needs and preferences.

Our findings have lead to a conclusion that Three Rivers would benefit from a Village Center, however to ensure sustainability and community-wide support, we recommend a phased-in approach. Three specific phases are recommended; first one includes acquiring the designated land and construction of restroom facilities, visitors' center, bakery, parking and a community park. A lack of visitors' center is detrimental to local businesses as visitors are unable to easily locate all available services. The second phase of the project would focus on development of a senior housing and appropriate services. The only business consideration is a Laundromat providing that the Assisted Living facility is not able to meet the needs of other town residents. The final phase would sum the needs of the town by introducing additional businesses designed for small communities.

The Sequoia National Park is the main driver of tourism in the area attracting over one million visitors a year spending \$60 per day for day visitors and \$198 per day for overnight visitors, a significant amount of which is spent outside of the park. Our goal was to develop the Village Center in such a way as

to bring the maximum of the spending dollars to Three Rivers. Competent labor and water availability pose a challenge for new businesses to Three Rivers due to the proximity of larger towns such as Fresno and Visalia. In addition, the seasonality of business is a key factor when it comes to attracting investors to the town. Currently Tulare County Resource Management Agency is working on updating the County plan which could help deal with some of the issues such as addressing the needs of a growing population, housing and growth patterns.

Senior Housing as a composite of services is a rapidly growing industry and could become a driving force pioneering the growth of Three Rivers into a prestigious retirement community. Ninety percent of the people surveyed considered the need of assisted living in the near future. The challenging factors to be considered here are funding, marketing, labor, demographics and for the maximum return on investment, the housing development should be based on at least 80-100 units though a higher number of units would be needed to show significant profitability.

To help support our recommendations, we researched similar communities namely Estes Park in Colorado and Kernville located in California allowing us to compare their success factors. In addition, we created resident and visitor surveys, which allowed us to better understand the needs of the residents and visitors. Specifically, the surveys addressed the following issues: housing, businesses, leisure and entertainment, future growth, visitor expectations, services ratings and overall impression of the town. Furthermore the survey generated a very comprehensive supportive statistical data on key issues as well as specific questions detailed in the appendix.

Our final recommendations hinge on the community buy-in. With the town polarized with those that favor change and more conservative residents, it is obvious that additional intervention and community involvement is needed to bring to fruition the recommended plans, controlled growth and the success of the Village Center.

Introduction

This project was undertaken by the Craig MBA Team (Team) to provide the Three Rivers Village Foundation (Foundation) with the recommendations for the future growth of Three Rivers based on the town's needs assessment and to determine whether a Village Center concept would be successful and supported by the town without negatively impacting existing businesses or compromising the small town appeal.

The Foundation is a non-profit community-based organization dedicated to the preservation and enhancement of Three Rivers as an attractive, healthy and secure area to reside, work and visit. The Foundation provides the means to solicit, receive, manage and distribute government and private monies for programs for the betterment of this community. Though the Foundation has no particular plans for the growth of Three Rivers, they strongly believe that due to the attractiveness of the town, the growth will naturally occur. The objective of this group is to somewhat manage this growth in such a way to achieve the most positive outcome for the entirety of the town.

The principle objective is to preserve the rural, village atmosphere that reflects the traditional character of Three Rivers while accommodating future growth and commercial development. To accomplish this objective, the Foundation subscribes to the Smart Growth principles. The Foundation was specifically concerned with getting a broad input on community needs, so that the resulting recommendations provided by our Team take into consideration existing town businesses and their sustainability needs, address expansion concerns felt by many of the town's residents, and provide for the existing unmet needs of both the town's residents and many visitors.

Three Rivers

The town of Three Rivers also known as the "Gateway to the Sequoia & Kings Canyon National Parks" is located in the central valley 30 miles east of

Visalia and 72 miles southeast of Fresno. When first driving thought the town, it is very easy to miss many things within it; the lack of natural girth, the usefulness of highway 198, and the beauty of the Kaweah River have had a major impact on the town's development resulting in a sprawl usually seen in much larger cities. The pockets of business activity are divided by bare stretches of the highway that give an impression of a small, scarcely inhabited town with minimum activities.

In many ways Three Rivers is a small quiet town and it is therefore very hard to imagine that 1.2 million visitors pass though this town each year. In fact, it is hard to imagine that this town has much to offer to visitors; yet, common activities enjoyed by the visitors and locals alike include camping, river rafting, boating, fishing, picnicking, hiking, and horseback riding. The Kaweah River, which runs through the town, is considered the best rafting experience by professional rafters who visit Three Rivers every year for the great rafting pleasure ending in the Kaweah Lake. Due to the lake, rivers and the town's catfish farm, there are many fishing opportunities. The Three Rivers Golf Course with its nine holes along the Kaweah River also provides entertainment opportunities. In addition, visitors can avail themselves of a number of small shops, including the best candy shop in the valley, local galleries and the historical museum.



Demographics

Three Rivers has a population of 2,510 with mostly non-Hispanic white population. Over 80% of the population is above 16 years of age and approximately 50% of those are no longer in the labor force. The table below shows some key demographics.

Subject	Number
Persons	2510
Over 16 Yrs of Age	2054
Median HH Income	\$44,432
Average Household Income	\$54,687
Persons in Households	2503
Poor Persons in Families	155
Families Below Poverty	50
Non Family Households Below Poverty	51
Total Housing Units	1,357
Total Housing Units (100% Count)	1,265
Estimated Occupied Housing Units (100% Count)	1,019
Over 25 Yrs of Age	1,712
Median House Value	\$250,000
Average House Value	\$280,000
Civilian Labor Force	1115
Over 16 Not in Labor Force	934

Problem Statement

Due to its natural beauty and topography, the town of Three Rivers has been growing and is expected to continue to grow at a much faster rate than the neighboring city of Visalia. As Three Rivers is unincorporated, there is no local government entity that has a specific duty to ensure that the town grows in a planned and a strategic manner that will benefit majority of its residents. Though, Tulare County provides overall community planning that includes provisions for the town of Three Rivers, specific community involvement is still necessary so that the needs and wants of the town's residents are represented.

Unfortunately, the needs and wants of the town's residents differ and point in various directions, which have led to unplanned growth and a lack of a uniform voice speaking for the town. In addition, the town's topography has also led to the sprawl growth patterns that have left the town without a natural town's center. The most pertinent question facing this community is how to deal with future growth, and specifically, how to build consensus within the community to agree on the growth approach for the town of Three Rivers and make the town more successful and thriving without taking away its small town country charm. Once these are answered, the next step would be to address the sustainability question on how to make the Three Rivers a destination, not the park, year around to achieve business sustainability.

Recommendations

Based on the research findings, details of which are contained in this report, the Team recommends a slow phased in approach in developing a Village Center. The location under consideration by the Foundation is ideal for the location of the Village Center as it has the immediate freeway access and visibility, existing businesses and sufficient girth to allow for a small park, senior housing and some commercial development. Though the anti-growth sentiment was expected to

be prevalent by the town's residents, our survey findings show that over 70% would support the existence of the Village Center. The Team's final recommendations take into consideration the balance of two issues -- the town's need for additional services and the ability to sustain those services.

The first phase of the Village Center should include purchase of the land, planning and providing services most needed by the community. The initial services / businesses would include: **Restroom facilities, Visitors' Center, Bakery, Parking and a Community Park.**

The biggest challenge in this plan is obtaining funding to purchase the land, develop plans and put in a restroom, parking and a community park, all of which should be undertaken in the first phase. Team understands that the Foundation does not have sufficient funding to initiate this venture. However, the Foundation already has experience with obtaining funding for the community projects. If the town is successful with the current plans to put in a visitors' center, restrooms and parking near the museum, those should be excluded from the Village Center. As these plans have not broken ground, it would be beneficial to move the plan for building to the new location. Putting in a visitor's center, a small park and the restrooms would first ensure that visitors have a rest stop on their way to the park. In addition it would give them an opportunity to "discover" the town of Three Rivers by visiting the information center; one option that should be considered is to turn the visitor's center into a business by offering internet connection, hotel booking as well as the booking of various activities that tourists can avail themselves in the town.

Concurrent to this development should be a plan to add a small town park and a bakery. The town park should provide visitors with ability so sit, enjoy the beauty of the town without being indoors or in the nearby National Park. The park will also benefit the residents, especially the seniors and families with children, who currently do not have a town park. The park does not have to be very large; however, it should be connected by walkways that do not include steps or steep declines to the parking lot and the visitor's center / restroom area. The park should also include trees for shade, benches, picnic tables, and a small playground. In addition adjacent to the visitor's center should be a bakery that has fresh baked goods, desserts, sandwiches, coffee and cold drinks. Other options such as warm sandwiches or crapes would probably be a good addition. Together these services comprise some of the most commonly identified needs by the visitors and the residents of Three Rivers. The visitor's center and restrooms would ensure ongoing traffic for the nearby businesses during the peak season. During the off-season, locals visiting the park with their families would ensure some traffic and patronage for the bakery.

The second phase of the Village Center should include senior housing and a Laundromat, unless the Laundromat is included in the senior housing complex. Senior housing would ensure ongoing patronage of village's businesses and provide basic sustainability throughout the year. The senior housing complex should have a minimum of 80-100 units with a variety of services. The most essential services that would be needed include; meal service, laundromat, activity rooms / halls, and medical services. To ensure utilization, the operators should consider opening services to non-residents. As there is no Laundromat in town, this service would be utilized by other seniors. Should the senior housing complex exclude a Laundromat, the addition of this business to the Village Center is recommended. Based on the research that is provided in the Senior Housing section, it is critical that the Foundation obtain a senior housing consultant to fully explore all options and look at full market analysis essential for this recommendation to work. This consultant should be obtained during the phase one planning and implementation, so that phase two does not lag too much beyond the phase one development.

The third phase of the Village Center should include additional businesses: An all in one hardware / auto part / camping equipment and recreational store, a small bookstore that incorporates a magazine and a newspaper section as well as music or a newsstand type of store that also

includes books and room for growth and movement of existing businesses to this location. The town would not easily support a hardware store, however a combination store that includes, hardware, auto parts, camping, backpacking and fishing equipment as well as potentially a outdoors sports clothing section could be sustained. The companies such as Patagonia, Inc., that are environmentally conscious and community friendly would be a good fit. Though the town of Three Rivers may not be big enough to support the entire store, Patagonia products are sold through other stores; this approach is successfully done by the town of Kernville. Similar all in one approach should be taken with a bookstore / newsstand - though the town may not be able to support a big book store, a small book store that offers a popular selection with magazines and papers and the ability to order books and music, and a reading space for kids and adults could be very successful. Used books should be avoided so that the competition with the Cabin is minimized. Additionally, the Sequoia National Park service is interested in having office headquarters in Three Rivers; this plan is not solidified and is a long term plan whose execution depends on the annual federal budget. However, the need exists and the Foundation should pursue a relationship with the Park to ensure that when these plans are able to come to fruition, Three Rivers is considered as a prime location for the headquarters.

Limitations:

- There is no incentive for the current business to move to the Village Center location or for the new business to locate at the Village Center.
- There is no formal body that can direct the growth to a particular area or prevent further town sprawl.
- Though in concept, the Village Center is supported, many residents could still see it as a step away from a conservative no-growth approach and oppose its creation.
- Based on limited survey responses, additional services may be needed that are currently unidentified.

How to address the limitations mentioned above:

- The Village Foundation should work with the County and provide input, so that the community development provisions for Three Rivers contain the growth provisions that meet the town's needs.
- The Foundation should join efforts with the business association for future planning of the commercial aspects of the Village Center, so that the needs of existing business are taken into consideration and seen as a priority. Also, there should be an active campaign to engage any new potential businesses into this process.
- Community forums are usually a good way to educate residents on benefits and pitfalls of any plans. This method is already utilized and familiar to town's residents. The Foundation should start holding such meetings as well. In our interviews with residents of Three Rivers, we encountered quite a few people that did not know about the Foundation and felt immediately suspicious of our intentions.
- Utilizing the local paper to educate residents about the Foundation's work, future projects and to dispel rumors should also be considered.
- Also, the Foundation should consider setting up a website where information about their work and future plans can be posted as well as where they could solicit input from locals and visitors. One consideration could be to post a copy of the future growth survey or a shortened version of the survey and request for answers to be sent to a specified email address that could then be reviewed by the Foundations members on a monthly or quarterly basis.

All of the suggestions provided above would help with the community buyin and needed support for a planned growth approach for the town of Three Rivers.

In addition to the business selection, the external look of the Village Center will be important. To retain the small town appeal that most Three Rivers residents appear fond of, the outside look of the Village Center should blend as much with its environment; to achieve this, old western store fronts with wooden roofs and storefronts should be considered. Modern architecture should be avoided at all costs. While researching comparable towns, we found a picture of a bookstore in the town of Estes Park; we believe that this specific look would fit well in Three Rivers as well.



<u>Methodology</u>

In order to evaluate the existing town conditions and prepare recommendations, the Team employed the following strategies:

- Interviews: business owners, other residents, external stakeholders and visitors;
- Town visits
- Online Research
- Surveys: short email surveys of existing businesses; future growth resident survey; and visitor survey.

The concept paper and the vision statement prepared by the Village Foundation assisted the team in understanding the existing paradigms of this community. The most essential part of this study was to look at needs of all stakeholders and determine the correct course of action for the growth of Three Rivers. The following groups are the stakeholders in this process: town's residents, business owners, visitors, Sequoia Park management, Tulare County, and future generations. All of these stakeholders have interests, goals and needs, which may align or clash with those of the other groups. The objective of the study is to recommend solutions that maximize the benefit to all or most groups. The specific research strategies for each stakeholder group included:

- Park Review and analysis of the Park's business plan. We conducted interviews with the Park's Public Information Officer to determine unmet needs and future plans that may impact the town of Three Rivers. We also utilized website information on Parks and services available within parks to help us assess potential needs that the town of Three Rivers can address.
- Visitors Review and analyze the Park visitor survey and recommendations completed in 2002. Personal observation and interviews during Jazzafair were also used to develop insights into visitor needs. A survey developed by the group is one of the major tools that was used to evaluate the visitor expectations and unmet needs.
- Business Owners evaluation and review of the existing businesses to prevent recommendations that may cause business cannibalization was conducted via Internet research. In addition, personal interviews, phone and email short surveys as well as the future growth resident surveys were utilized to determine needs, existing concerns and gain insight into the dynamics of the business community in order to determine recommendations that will further the success of the town.
- Residents as this is a very diverse group that would be significantly impacted by development and growth of the town, these stakeholders are subdivided into the following categories:

- Retired residents they are the most active and vocal group in town; they are probably the most affluent as well. Their needs should be significant as the community currently has limited medical services and no provisions for assisted living. However, among this group are also the anti-change and anti-growth voices that may be successful in keeping the town from the planned growth approach. It is highly unlikely that this group can do much to effectively stop growth, however a high level of contentiousness and a lack of cooperation will make a planned approach very difficult to execute.
- Working adults they are a small group with not enough apparent voice probably due to ongoing obligations that are taking precedence over the active community life. We utilized the future growth survey, a limited number of personal interviews and the local newspaper opinion pool on various services to determine the needs of this segment of the population.
- Teens and children this is a group whose opinions are even harder to obtain, but whose needs are important and recognized by both the retired residents and the working adults. We utilized the personal interviews and surveys to specifically ask about the needs of this population segment.

Stakeholder Assessment & Impact: Visitors

Visitors provide a significant support to local businesses and the economic wellbeing of the town. The Sequoia National park is the biggest contributor to the tourism of this area. Based on the information found in the Economic Impact Study of the Sequoia and the Kings Canyon National parks, over one million people per year visit the park which equals to 306,000 party trips or 536,000 party nights. These visits translate to expenditures that benefit the central valley and especially the gateway community of Three Rivers.

Visitor segments are divided based on the length and place of stay; they include: 3% stay overnight in Hotels inside the park, 10% camp inside the park, 7% camp outside the park, 24% are the local one-day visitors from the Fresno and Tulare County areas, 24% are the local day users who have relatives or vacation homes in the nearby areas, such as Three Rivers, and 33% stay outside the park in surrounding towns. Several of these categories are significant to us as they impact tourism and business sustainability of Three Rivers. Based on this research, it is estimated that visits to the park generate 193,000 hotel/ motel night stays and 45,000 camping nights per year in the surrounding areas. These trips are not equally spread thought-out the year; 47% of visits, 45% of overnight stays and 75% of camping trips happen in the high summer season (June though August), thus the need for services by visitors is seasonal and varies significantly thought the year.

Based on the study, day visitors spend \$57 to \$62 per trip and approximately 49% of the spending is outside the park. Most of the funds are spent on gas and food which is split between restaurant spending and grocery / take out. Visitors who stay overnight in establishments outside the park spend approximately \$420 per trip. Their spending is divided between inside the park spending on various purchases (\$94) and outside the park spending on hotels/motels (\$160), restaurants (\$60), grocery (\$21), gas & transportation (\$61) and other purchases (\$19). Per day spending of the overnight visitors averages to approximately \$198. The study assumes that approximately 13% of the spending is utilized on goods that were purchased outside the local area, thus not contributing to the local economy. The overall tourism sales multiplier for the region is 1.61, meaning that an additional \$.61 in sales is generated through secondary effects for every dollar of direct sales.

In addition to the attractions provided by the park, there are several events that are organized by the community on an annual basis that provide spikes in visitors' interest in the town; these include: The Annual Polar Bear Dip, Jazzaffair, Lions Team Roping and the Redbud Festival. Though these attractions last only a few days each, they are important to the town as they generate tourism activities that are related more directly to the town. Three of these events, Jazzaffair, Roping and the Redbud Festival happen during the month of April and May and ensure that town's establishments that cater to visitors are busy. Another significant attraction for the tourists is the Kaweah River; rafting season is from April through June, which contributes to town's tourism.

Based on the interviews with the visitors during the Jazzaffair, tourist needs currently insufficiently addressed by the town include: adequate restroom facilities, river access and the lack of a visitor's center.

Stakeholder Assessment & Impact: Existing Businesses & Business Needs

There are a number of businesses within Three Rivers that meet both local and visitor needs. It is actually surprising how many businesses are thriving within the town's borders. Town's sprawl and a lack of a natural town center are partially responsible for a perception that Three Rivers may lack in businesses. Another reason for this perception is that a visitor may have a harder time finding all of the Three Rivers hidden treasures simply because there is no visitor's information center available in the town.

Hotels, motels, and bed & breakfast options are numerous, which is understandable, as visitor spending and needs in many ways drive the economic health of the town. There are also a number of restaurants that serve mainstream American cuisine, a Mexican restaurant and a pizza factory. To expand on choices available in town, Gateway restaurant serves Chinese food on Wednesdays. As both pizza and sandwich shop also exist, it would be very hard to bring another restaurant in town that would not at least partially cannibalize the existing business during a portion of the year. During summer months, another restaurant, especially if food is low to mid priced, would be an easy and a successful addition. One other successful addition may be a bakery as town seems to have lost the existing one only recently. A bakery that has traditional baked goods, crapes, quiches, and sandwich fare, including a variety of vegetarian options and cold salads as well as boxed lunch and to go snack options for visitors would probably be very successful. Coffee, teas, juice drinks and vitamin water such as Glacier would also be good complimentary choices.

Shopping for visitors is probably among the least important activities while in town; however, groceries, supplies, gas and other necessities are a must. For the locals, bargain priced shopping is available 30 miles away, so necessities and unique Three Rivers items are probably all most need or will utilize. There are sufficient places in Three Rivers for groceries, gas, limited clothing needs, jewelry, plants and movie rentals. Currently, the Cabin and to a limited degree the Tingaree are the only places in town that sell books; though one book store / coffee shop combination is probably sufficient for the Town's needs, we believe that a bookstore that has newer book selection, music and magazine choices may be both well received and successful. A big store such as Borders or Barnes and Nobles would not do well, nor could they be supported by the town, however a smaller unique establishment that could cater to town's needs as well as have pleasure reading materials available for less adventurous tourists such as the Avid Reader in Davis, California would be acceptable.

Based on the interviews with residents and several business owners as well as recommendations gathered from the Kaweah paper survey, Three Rivers would benefit from getting a hardware store that also has camping / backpacking equipment and other general supplies; in addition, an auto part store was also mentioned. Though a full auto part store could not be supported by the town, some car essentials would be fitting in the hardware store, especially if they are designed to also address vehicle needs of the park visitors and employees. Another potential department section in a hardware store could be office supplies, so that the local businesses can obtain office supplies from a local business and not depend on drives to Visalia.

During the interviews while visiting the town, the town's residents / business owners offered advice; the most notable / common comments included:

- Public restrooms should be a high priority.
- A park and nice walkways between shops would benefit the town.
- Access to the river would make the town more appealing.
- If current businesses made some cosmetic changes (paint), the town look would much improve.
- Daycare is needed, but it has to be opened at the beginning of the school year and it needs to be reasonably priced.
- o Existing restaurants are pricy and there is not sufficient variety.
- Additional medical services are needed.
- o Senior housing and a low-income housing are needed.

Businesses in Three Rivers deal with some unique issues that need to be considered. Labor availability is among the most significant issues. Due to seasonality of many businesses, labor needs have peaks and valleys; during the high season, finding sufficient labor force is problematic. Additionally, should the town decide to engage in a search for businesses where a more professional degree is needed, such as for any type of medical services, additional labor availability issues will arise. Though both Visalia and Fresno are relatively close for Three Rivers to use as a labor pool, sufficient incentives have to be offered to entice potential applicants into relocating or commuting. Town's lack of low income housing usually prevents many from considering relocation as a serious option if working in the hospitality business; though we considered recommending an apartment complex to address the need for low income housing, we did not gather sufficient evidence to support this recommendation. We do however recommend that the Foundation have further conversations with the Park's management whose employees may benefit from additional housing options.
Water cost and availability is another significant issue. Residential and business water needs are met by the individual water systems; currently there are 35 separate water systems in Three Rivers. The Tulare County requires monthly and at times daily water testing; the testing fees start at \$36 per month. The water testing and related issues are addressed by the Community Services District, which acts as a liaison between the town's residents and businesses and the County. New businesses would have to consider joining existing water systems when possible and share the water resources or sink new wells to meet their water needs.

Phone / Email Interviews with Current Businesses:

To further drill down the needs of the business community as well as to gather their perception of the overall community and tourist needs, the team conducted phone and short email surveys; the following questions were asked:

- 1- Is there any kind of seasonality in your business?
- 2- Who are your typical customers (Visitors or Locals)?
- 3- Is your business open year around?
- 4- What would help you to improve your business?

The following are the results from the email and phone interviews:

- Businesses such as lodging, retail, and recreation services are highly seasonal. The peak season is usually May through September.
- Most businesses are open 9am to 6pm, Monday through Friday. During the peak season, opening hours extend to weekends as well.
- Majority of the visitors are from southern California. For this reason, some businesses invest in advertising in the Los Angeles Times.
- Although most businesses are seasonal, majority of them are open year around.
- New businesses such as cabin rentals are having a great success due to the high level of demand during the peak season. In order to stay in

business during the slow season, they provide month-to-month cabin rentals for local residents.

- Businesses that offer medical services for local residents such as doctors and clinics are successful and busy.
- Realty mortgage businesses are also fairly seasonal with April through November being the busiest and the winter months the slowest time. Buyers are mainly from out of the area. Currently, there is no waiting list for property in Three Rivers.
- Currently, there is only one apartment complex and one 12-town home complex.

The business owners we spoke with offered the following recommendations:

- Room tax funds that are collected by the county should be used for the marketing purposes to benefit the area.
- There are needs for larger facilities to accommodate customers. Specifically, the health clinic mentioned that sufficient needs exist to expand to a larger facility in order to improve services and serve the existing volume of patients.
- Building and maintaining public restrooms due to the volume of visitors should be a priority.
- Some felt that there was no need for additional businesses due to town's inability to sustain them.

Stakeholder Assessment: Tulare County

Currently Tulare County Resource Management Agency is working on updating the County plan which has provisions for Three Rivers. As the unincorporated area, the town looks to the County for the provision of services and development plans. A number of issues and policy changes considered by the County are pertinent to the town and its future growth; they include:

- Undertaking specific land use and transportation measures to reduce air pollution.
- County measures to reduce groundwater overdraft/depletion and improve groundwater quality.
- Addressing adequate water supply to meet future needs.
- Preventing deterioration of current infrastructure and meeting the needs of new development.
- Promoting economic diversification.
- Addressing the needs of a growing population, while protecting natural resources.
- Housing adequacy for all income levels.
- Growth patterns used by the county to accommodate future development.

The current status and conditions for each of these issues are relevant to decisions the Foundation would make on how to support and steer the future development of the town. Some of the solutions proposed by the County leadership discussed at one of the town meetings include:

- Create niche tourist activities (e.g., commercial bike tours)
- Expand van/bus service between Hanford Amtrak Station and eastside recreation venues and resorts
- Expand/publicize cultural celebrations
- Promote historical sites (e.g. Allensworth)
- Promote agri-tourism, eco-tourism, and outdoor recreation in Tulare County to outside markets
- Expand cooperative marketing efforts with Sequoia National Park

By implementing the solutions that the county is considering, Three Rivers would greatly benefit by getting free advertisement for their recreational activities and the ease of access the community would gain through the van/bus service. Conversely, County benefits from putting resources into Three Rivers. Visitor spending within the town multiplies and the County benefits from the taxes. Also, additional visitor spending encourages job creation and overall economic development. Due to its natural beauty and tourist attractiveness, this area is an important to the wellbeing of the County. Both the town's residents and the County should capitalize on this synergy and work towards solutions that benefit both.

Stakeholder Needs Consideration: Senior Housing

Through our interviews, surveys and other research, we have come to believe that there is a definite need for Senior Housing in the town of Three Rivers. The Team gathered the information below, so that the Foundation can get a glimpse of options, possibilities and potential obstacles when considering the pursuit of this recommendation American Baptist Homes of the West and Combined Affiliates with their San Joaquin Garden branch in Fresno were used as a model and proxy to complete this evaluation. Its financial statements for he year ending September 30, 2003 provides valuable information to developer on the operating expenses once the senior housing project in in full operation.

The first consideration needs to be given to the type of senior housing that could be included in the Village Center project. The key points to consider are the level of support and services needed by the seniors. Needs vary across the spectrum from basic affordable housing to full care facility that could address medical needs, including physical, mental, and emotional health; transportation around the community and other amenities such as food preparation and laundry service. Different types of senior housing include:

- <u>Independent Living</u>: a community of seniors living in an apartment complex or retirement community, with no custodial or medical care.
- <u>Congregate Housing</u>: Independent Living in a senior apartment, with the added services of custodial and medical care.
- <u>Assisted Living Facility:</u> a group home consisting of private rooms or apartments, with assistance in activities of daily living, but little medical care.
- <u>Board-and-Care Home</u>: a small Assisted Living Facility.

- <u>Nursing Home (Skilled Nursing Facility)</u>: a facility with 24-hour medical care available, in addition to custodial care.
- <u>Continuing-Care Retirement Community</u>: a residential community for the remainder of one's life, with a choice of services and living situations, based on changing needs at each point in time.

Additional research is needed to determine the appropriate facility recommendations for the town of Three Rivers. As senior residences and senior care facilities offer different composites of care, the facility choice should be selected to allow for the variety of needs, yet remain cost effective in provision of services.

Labor considerations are critical when performing the feasibility study. A senior housing facility hosts a large number of skilled staffs from medical to management. 24 hour medical on site help is very common in a typical senior home due to the nature of the business.

It is critical that the developer hires a senior housing consultant for an in depth analysis of the senior housing project. Below are some of the key factors that require analysis and understanding:

<u>Market Size</u>: Market Assessment pinpoints the size of the primary and secondary markets. The Primary market consists of the target city. The secondary market is comprised of the area around the primary market that the facility would draw from. In some cases the secondary market is a radius around the primary market. In other cases, competition or larger populations that are in close proximity can skew the secondary market area. It is important to correctly identify the secondary market area to ensure accurate demographic information. Thus when considering a facility in Three Rivers, a complete assessment of need and existing capacity should be conducted including surrounding towns as well as the city of Visalia.

Market Demographics: The market demographics calculate the number of age and income qualified seniors in the primary and secondary markets. This

information is derived from the US Census and cross referenced to ensure accuracy.

<u>Market Competition Analysis</u>: Based on market size, there will be varying amounts of competition in the primary and secondary markets. A complete and comprehensive analysis of all competition is vital in determining market saturation, and projecting market penetration rates. As far as Three Rivers is concern, competition might come from Fresno or Visalia area.

Information drawn from the market assessment is used along with market financial indicators to determine financial feasibility and establish project's total development cost, monthly rents, service income, and operating expenses.

<u>Total Development Cost</u>: The development cost of a senior housing project is unique in that it includes the typical costs of building construction along with the costs of developing a service orientated business that will operate 24 hours a day. A consultant should be able to provide a detailed breakdown that includes construction hard costs, working capital, marketing budget, loan points and fees, and construction interest.

Pricing: Costs for assisted living residences vary from less than \$1,000 to more than \$2,500 per month, but the National Center for Assisted Living reports that in 2000 the average fee--including rent and other fees was \$1,873. Single units range in the 500 square feet and double units 1000 square feet. A typical senior home has around 80 to 100 units serving different purposes. According to The State of Seniors Housing, published by the American Senior Housing Association (ASHA), these facilities "are designed for seniors who pay for some congregate services (such as housekeeping, transportation, meals, etc.) as part of the monthly fee or rental rate, and who require little, if any, assistance with activities of daily living." For the best return on investment, the optimum aggregate size is 101 to 150 living units. Annual resident turnover is about 27 percent, and the average residency is three years. An average of 80-100 units must meet these criteria to be eligible for loans from underwriters:

- Operating expenses average 55% of cost of care.
- Resident income requirement is approximately \$25,000 annually.
- Profit margin is generally 35-40% before debt service coverage.
- Absorption is typically 3 net admissions per month. Fill up is typically 10-12 months for experienced operators.
- Construction costs average \$85 per square foot. (Excluding land acquisition).

Our research showed that Fresno County, a predominantly rural and suburban area, had the least expensive per unit costs for both market rate and affordable projects compared to other regions in California (Los Angeles, San Diego and San Francisco counties). Land is a significant variable between these regions. Fresno is an area where residential development is still relatively inexpensive by California standards. The table below shows the price range for a typical senior housing in the Central Valley.

	INDEPENDENT LIVING
Apartment	Rent From
Studio	\$1,140
One Bedroom	\$1,650
Two Bedroom	\$2,075
	ASSISTED LIVING
Apartment	Rent From
Private Studio	\$1,995
One Bedroom	\$2,595

Living Costs

Source: The Hacienda 2005 Pricing-www.seniorhousing.net

The next consideration is the target market affordability. There is no government financial support for long-term care in a nursing home, in an assisted

living facility, or at home, unless the individual has virtually no income and no assets. Thus, for this project to be feasible, the target senior market must be able to afford to live in the senior housing facility without much governmental assistance. The possible payment options, other than existing private funds, for long-term care are:

- Medicare
- Medigap (private Medicare-supplemental insurance)
- Medicaid
- Supplemental Security Income (SSI)
- Social Security benefits
- Long-term-care insurance
- Reverse mortgage (home-equity conversion)

Project financing is the final consideration. The following options can be considered:

- Commercial Banks: Commercial banks represent the most prevalent source of financing for senior housing. Due to an established background in the acute care business, banks place weight on an operator's experience and put a high premium on this underwriting component. Banks offer term loans and construction loans. As opposed to lending on a project-by-project basis (project specific lenders), banks tend to compete extensively for the business of certain operators. A few disadvantages of commercial banks include the shorter terms that often accompany bank loans; higher interest rates; and the fact that lenders have recourse to borrowers in case of default.
- <u>The U.S. Department of Housing and Urban Development (HUD)</u>: HUD is the dominant government source of capital in financing for senior housing. Senior facilities and communities first began to be acknowledged as socially and economically viable in the 1960s. Since that time, HUD has served as lender for both construction and permanent

loans. HUD is recognized for its favorable lending terms, including 35- or 40-year terms and amortization. Additionally, HUD provides nonrecourse financing, up to 85% or 95% loan-to-value, at favorable interest rates. On April 28, 2005 The Department of Housing and Urban Development announced more than \$20 million in grants to provide predevelopment funding for 104 sponsors of Section 202 Housing Projects in 32 states including California. To be eligible for the grants, the activities must otherwise be eligible for funding under the Section 202 Supportive Housing for the Elderly Program. The maximum grant amount per single application is \$400,000; however no more than \$800,000 could be awarded to a single sponsor or its affiliated organizations.

- Insurance Companies: One of the primary advantages of insurance companies is the long-term financing. Insurance companies provide specific senior long-term take-out financing that is typically non-recourse. However, financing is usually only available to existing developers with an established operating history. The minimum loan requirement for most insurance companies starts at about \$43 million. Insurance companies loan only to a certain niche--aiding in providing capital for assisted living and congregate care facilities or a combination of both types. However, insurance company loans are not given to freestanding nursing homes.
- <u>Credit Companies</u>: As with insurance companies, credit companies have embraced assisted living and congregate care, although their participation is limited. Multiple investment models supply institutional lenders with financing options such as a one-office approach, a regional office approach and a home office approach. Gaining momentum in the early 1990s, successful institutions that developed a significant market share have done so by setting up individual business units.

Securities (Tax-Exempt Bonds): Public entities often are the source of tax-exempt bond financing. If certain requirements are met, public agencies can issue nonprofit 501(c)(3) bonds or for-profit residential rental bonds. Terms may range from one week to thirty years. Rates of tax-exempt bonds vary from 5.5% to 7.5%, including enhancements (a letter of credit from a bank in the event of failure to make debt payments on a timely basis). Although, these offer the lowest interest rates available, there are several disadvantages including rental restrictions, high transaction costs, state limits (for profit), and the necessity for a public issuer.

Comparison Studies: Similar Communities

We conducted an internet search to find towns similar to Three Rivers. The main focus was to look at other gateway communities and their growth patterns, business and determine if similar approaches would work for Three Rivers. Though some similarities were found, there are no towns that we found that are dealing with exact circumstances.

Estes Park is a gateway community to the Rocky Mountain National Park with a population size of about 4,500. Estes Park offers local residents and visitors the Elkhorn Avenue - a shopping district featuring a variety of shops and restaurants for all ages and interests. The businesses and services in Estes Park are similar to those of Three Rivers but there are some differences. For example, Estes Park has public restrooms and showers which is an unmet need expressed by many locals and visitors in Three Rivers. Estes Park also has a Tourist Information booth where tourists can obtain information about local attractions and services; this is yet another service that is lacking in the town of Three Rivers. One of the businesses that is thriving is the Macdonald Book Shop at Estes Park, which offers products such as books, magazines, cards and stationary. This has been a successful business for Estes Park since 1928. The

goal was to "create a shop that would make people want to read, write, and communicate through letters and cards, have a cup of tea or coffee and relax." They offer books on fiction & classics, western American history, nature hiking guides/maps, regional cookbooks, children's books, and Colorado photography. Estes Park also offers Senior Apartments for its residents. Such business does not currently exist in Three Rivers and we believe would be a good addition in the Village Center.

Estes Park also has senior housing. The senior apartment complex features modern one bedroom (670 sq ft), two bedroom (980 sq ft) and two bedroom deluxe (1170 sq ft) apartments, each with private bath, full kitchen and laundry. Apartments are available through either an entry free purchase plan or month-to-month lease and include the following for amenities and services:

- 24-hour emergency response system
- Paid utilities (electricity, cable TV, heating, cooling, water, sewer, garbage)
- Major appliances
- Maintenance of grounds, building and all furnished appliances
- Daily noon meals
- Housekeeping twice monthly
- Social activities
- Scheduled transportation
- Use of spacious common areas, including lounge/living area, library, activity room, dining area, pool/spa and exercise room

The recreational activities that Estes Park offers are hiking, climbing, horseback riding, river rafting, snowshoeing, skiing, swimming, biking, fishing, boating, golf & tennis, and hunting. These activities seem to be very successful and generate significant amount of tourism. Currently, Three Rivers offers most of these activities, but should consider adding others, such as biking tours, which would attract more visitors.

Popular events at Estes Park are Longs Peak Scottish Irish Highlands Festival, Scandinavian Festival, Elk Fest, Rooftop Rodeo, Wool market, Catch the Glow Christmas Parade, Snowshoe Days, Brats and Bands Autumn Festival, and the JazzFest / ArtWalk. Some of these activities are very much like the ones available in Three Rivers. Unfortunately we were not able to find out if advertising, facilities and attendance of some of these events matches that of Three Rivers. We do believe that due to a higher number of activities and events available in Estes Park, direct town tourism is higher and more business are supported compare to Three Rivers.

The Team also looked at the town of Kernville, California as a potential comparable town for services and future growth direction. Kernville is located about 120 miles North of Los Angeles in the Southern Sierra-Nevada Mountains and is known as the Gateway to the Sierras. Kernville and the Lake Isabella community together act as the backbone for infrastructure and resource for visitors to the lake everyday of the year. With the population demographics that are very similar to Three Rivers and the closeness of the Lake Isabella, this town's business paradigms are very similarly to that of Three Rivers. Kern River hosts great rafting, fishing, and swimming, while the Kern River Valley offers many alternatives to the lake or river activities such as rock climbing, golf and bingo. Tourism is a \$905 million a year industry for Kern County with Lake Isabella a driving force for tourism.

The town supports a host of recreational activities such as camping, fishing, golf, horseback riding, motocross, mountain biking, and various water activities. The community of Lake Isabella is considered the commercial hub of the Kern Valley since shopping centers, restaurants, junior high, elementary school, high school and the area's Community College. The shops attract the curiosity of tourists and always busy throughout the year as well as late night dining is also very common. The Kern River Valley Historical society manages the Kern Valley Museum with some of the finest exhibits in California, is located in the heart of Kernville. In association with the Kern River Valley Art Association,

the Museum exhibits works of local artists that could be purchased. Additionally, the Museum features a special exhibit case which is changed monthly. Kernville has most of the amenities needed by its residents and visitors including emergency services, assisted living, banking, entertainment and many others.

The many local clubs and organizations keep busy hosting a variety of events, and the outdoors serve as a magnet for contests and races of all kinds. Some of the popular events in the valley are Whiskey Flat Days, The Sierra Art Show, Keysville Classic Mountain Bike Race, Lake Isabella Fishing Derby, Fourth Of July Celebration, and Personal Watercraft Race. Furthermore the city and businesses have comprehensive and very illustrative websites that allows a prospective visitor to plan ahead of his/her trip to Kernville.

As both of these communities have seasonal tourism driven economies, there are remarkable similarities to Three Rivers. Both of these communities are bigger than Three Rivers and offer a wider variety of services and entertainment. The town of Three Rivers could certainly take that approach to growth, however tempered with the growth should be considerations for Three Rivers residents' dislike for any future growth.

Stakeholder Needs: Community and Visitor Surveys

A. Surveys

Local Survey: First version. Based on the information collected from the meetings with the Foundation representatives and the background research, the first version of the local survey aiming at assessing the opinions and attitudes of Three Rivers community members toward future growth and the possibility of developing a Village Center was crafted.

This version had a total of 43 questions that were divided in five different sections. Section 1 (questions 1 to 14) focused on assessing the business and service needs of the town. Questions 1 to 7 asked respondents opinions about the current restaurants and their dining habits. Questions 8 to 13 were about

retail shops and services. Question 14 asked about weekly spending habits of local people on dining and entertainment.

The main focus of section 2 (questions to 15 to 25) was about the housing needs. The team wanted to find out whether the local residents were interested in living in a Village Center and the type of housing they would be interested in. Additionally, question about community's needs and interest in an assisted living facility was asked.

Section 3 (question 26 to question 32) of the local survey was about having a full time Art Gallery. Section 4 (questions 33 to 37) aimed at business owners to see whether they would be interested in relocating their businesses to the proposed Village Center. Finally, section 5 (questions 38 to 43) included questions about demographic information. (Please see Appendix for a copy of the first version).

Local Survey: Second version. The team modified the local survey after receiving feedback from the representatives of the Foundations as well as a number of respondents. The majority of the questions were kept intact. Question 16 was moved from section 2 to section 1. Questions 4 and 5 in section 1 were reworded to better fit the Team's purpose. One of the major changes was that section 3 was reduced from 7 questions down to only 2 questions. The team also added a section to gauge respondent's awareness about recent proposed legislation to turn sections of highway 198 into a scenic highway, the updates of Tulare County General Plan, and their perception about future growth in Three Rivers. (Please see Appendix for a copy of the second version).

Visitor survey. The visitor survey included a total of 18 questions. Questions 1 to 3 focused on the reasons, the frequency as well as the length of their visits to Three Rivers. Questions 4 to 10 focused on the stores and the services available to the visitors, and what other services would likely enhance their

experiences. Question 11 was about the proposed plan the build a Fine Arts museum in Three Rivers. Question 13 asked if the respondents would like to relocate to Three Rivers in the future. Finally, questions 14 to 18 asked the respondents for their demographic information. (Please see Appendix for a copy of a Visitor survey).

B. Procedures and Samples

Local surveys. The first version of the local survey was administered at the meetings with the Senior Groups and the Women Alliance Group on April 6, 2005. There were 50 respondents from these meetings. The second version of the local survey was passed out three days later (April 9, 2005) at the local Jazzaffair festival, but there were only 27 respondents. The team also left surveys at various businesses and set up email accounts to receive e-surveys.

After tallying up all the surveys (both the first version and the second version), there were only 70 usable surveys. The majority of respondents were women (79.7%) vs. men (20.3%). This is understandable since most of the surveys came from the meeting with the Women Alliance Group. In fact, the percentage of people over 65 years old is remarkably the largest with 44.4% and over 55 is 60%. Likewise, the average amount of people per house is two (48.4%) which matches with the percentage of retired residents (52.4%). In terms of the period of time that residents have been living in Three Rivers, the most significant range was over 10 years (40%) which indicates that respondents certainly know and belong to the area. Finally, the combined annual household income is representative for ranges from \$35,000 to \$49,999 (24.5%) and from \$50,000 to \$74,999 (24.5%).

Visitor surveys. The visitor surveys were administered with the second version of the local survey on April 9, 2005, at the Jazzaffair. The team received a total of 107 usable responds. About 41% of the respondents were males, 58% were

females. Like the sample of the local surveys, almost 45% of the respondents were 65 and older. Only 13% were under 35. Moreover, 62% were retired; and more than two third of the samples has combined annual household income of more than \$50,000. Finally, almost 80% of the respondents came to Three Rivers in a group of two to five persons. (For more on the demographic information of both the local sample and the visitor sample, please consult Appendix).

Findings

Local Surveys Findings

Section 1: Business

In terms of business, the responses show the need for more businesses in the area as shown by the chart. Restaurants, for instance, were considered inadequate by 41% of the respondents for the needs of the community. The type of restaurant that are accepted the most within the community is family dinning with 38.6%, followed by ethnic and bar and grill with 31.4% and 14.3 %, respectively. Fine dining (14.3%) and Pizza (0%) have low demand.

Though there is a trend demanding more businesses in Three Rivers as shown in the chart, within the 18 different choices of the type of retail shops, only two categories were chosen significantly over the rest: Bakery (42.9%), and Hardware (41.4%). In addition, the type of services question indicates that full time emergency is the only highly required service in the area with a 48.6%.



In terms of the type of entertainment "Activities for Children" (61.9%), "Movie Theater" (41.4%), "Bowling Alley" (30%), and "Meeting/Conference Room" (21.4%) were the four types of entertainment that the residents would like to see the most. However, it is also important to emphasize that the community is essentially in opposition to the establishment of national chain stores with over 60% of disagreement.

Finally, the analysis on the spending per person on dinning and entertainment shows that ranges from \$0 to \$25 (31.7%) and from \$26 to \$50 (30%).

Section 2: Housing and Assisted Living

With respect to housing ownership, the results show that 89.6% of all respondents own their own house. This situation justifies that 71.2% of participants were not interested in living at the housing available at the proposed Village Center. However, the 28.8% of residents that were interested in housing also demonstrated some preferences regarding the size of housing they would be interested in. In fact, the arrangement that was more appealing was three bedrooms and two baths with 38.9% followed by two bedrooms and two baths with 22.2%. On the other hand, when selecting a place to live, respondents

considered price to be the most important factor, then number of bedrooms and bathrooms, and finally the proximity to stores and location.

In terms of assisted living, 71.7% of respondents were interested and almost 90% considered the need of assisted living after more than five years from now. Among the amenities that were more appealing to the respondents with respect to the choices given, four choices were ranked more often than the rest- Medical services (34%), Laundromat (31.4%), Library/ reading room (28.6%), and Social meeting facilities (25.7%).

Section 3: Art Gallery and Fine Art Museum

The participants interested in an Art Gallery were 60.7 % whereas participants attracted by a Fine Art Museum were 70%.

Section 4: Business People

Unfortunately, the portion of respondents that own a business in Three Rivers was only 10% of the respondents. Therefore, to make assumptions from this section would be inadequate.

Section 5: Legislation and future growth

With respect to the questions regarding the legislation and the Tulare General Plan, the results indicate that a high portion of the community is not aware of these issues. In fact, 42.1% of the respondents were not aware of the proposed legislation to turn sections of Highway 198 into a scenic highway. Likewise, the news of Tulare General Plan updates and existence of Three Rivers' provisions has not reached the whole community with 36.8% and 42.1% of unawareness, respectively.

In terms of the perceptions toward the future growth in Three Rivers, 21.1% and 36.8% of the respondents strongly agree and agree, respectively, that the Three Rivers community should limit growth, whereas 21.1% of participants were neutral toward it.



However, the respondents showed a remarkable support for the development of the Village Center (73.7%) as indicated by the chart above.

Visitors Survey Findings

Frequency and Length of visits. Forty-one percent of the respondents visit Three Rivers once a year. Another 22% visits more than once a year. More than two third of the respondents would stay at least three days.



How often do you visit Three Rivers?



How long are your visits?

Services Ratings. When asked to rate the services they received at Three Rivers, 50% of the respondents rated them Good or Excellent. Therefore, it was no surprise that more than 70% of them agree that the number of business in

Three Rivers was sufficient. Fifty percent were indifferent about whether adding more services would keep them in Three Rivers longer; and a majority (64%) did not believe that the Village Center would enhance their experience.



Quality of services



There was sufficient services in Three Rivers



If there is a greater variety of services, I would stay longer



Would a Village Center be likely to enhance your experience

Usage of the current services and businesses. Forty six percent of the respondents indicated that they stopped by grocery stores. Almost four fifth of

them went to a restaurant in town. More than half stayed at a hotel or inn. Other services such as an art gallery, movie rental, and meeting/conference room were not used as much.

Potential new services and businesses. When asked about what kind of businesses and services they would like to see in Three Rivers, the majority of the respondents expressed no needs for any new businesses and services. Only bakery was marked by 28% of the respondents. Most other businesses and services were marked by less than 15% of the respondents.

Fine Art Museums. Only 12% of the respondents expressed any interests in having an Art Museum in Three Rivers by marking it as a kind of service they wanted to see in Three Rivers. However, a manner in which the question was structured could be responsible for that result. The team believed that the percentage would be higher if the question about the Museum was split into a separate question instead of being grouped together with other services. Out of these 12%, the majority were more interested in Native American Art (marked by 85%) and Fine Art (marked by 70%). If the whole sample was considered, the result is a little bit different. Almost 54% of the sample marked Native American Art, 33% marked Fine Art, and only 23% marked Modern/Contemporary Art.

Attached in the Appendix are the full results and the copies of the three surveys summarized above.

Sources

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- The Cabin, PO Box 759, Three Rivers CA
- Cal Western Realty, PO Box 215, Three Rivers CA
- Family Health Network, 41651 Sierra Dr, Three Rivers CA
- Kaweah Marina, Lake Kaweah Box 44061, Lemon Cove CA
- Kaweah White Water Adventures, PO Box 1059, Three Rivers CA
- Reimer's Candies Gifts Ice Crème, 42375 Sierra Dr. Box 250, Three Rivers CA (6000 sq feet)
- River Walker Ranch, 44799 Dinely Dr., Three Rivers CA
- Century 21 Three Rivers, 40846 Sierra Dr., Box 565, Three Rivers CA
- Wood 'N' Horse Training Stables, 42846 North Fork Dr, Three Rivers CA
- Alexandra Pickavet, Seqoia National Park Service Public Information
 Officer
- Randy Pares, Community Services District
- Sara Drussel, Economic Development Corporation Tulare County
- Wayne Lance, General Manager, Holiday Inn Express, Three Rivers
- Heather Sadler, BOSS, Fresno County

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- Three Rivers Foundation Vision Statement
- Sequoia and Kings Canyon National Parks Business Plan
- Sequoia and Kings Canyon National Parks Visitor Study Summer 2002 US Department of Interior

3. TOWN CENTER URBAN DESIGN CONCEPT ONE

DRAFT

THREE RIVERS TOWN CENTER



Concept Report





TOWN CENTER CONCEPT REPORT

(1) DESIGN PROGRAM FOR TOWN CENTER

(2) CONCEPTUAL TOWN CENTER GENERAL LOCATION

(3) CONCEPTUAL DIAGRAM OF TOWN CEN-TER

(4) CONCEPTUAL PLAN OF TOWN CENTER

TOWN CENTER CONCEPT REPORT

(2) DESIGN PROGRAM

- → NEED ASSESSMENT
 - ⇒ RIVERSIDE MARKETS & RESTAURANTS
 - \Rightarrow PUBLIC SPACE
 - \Rightarrow PUBLIC PARK
 - ⇒ NEED TO CREATE THE THERE'S THERE
- → PROGRAM
 - ⇒ PUBLIC PARK (5 ACRES 1 PER 500 PER-SONS—PASSIVE RECREATION)
 - \Rightarrow RESTAURANT(S) (10,000 SQ FT)
 - \Rightarrow MARKET (10,000 SQ FT)
 - \Rightarrow SHOPS (2,000 SQ FT)
 - ⇒ SERVICES / POST OFFICE (2,000 SQ FT)
 - \Rightarrow PUBLIC SPACE TOWN CENTER (1 ACRE)
 - \Rightarrow PARKING (2 ACRES)
 - \Rightarrow BUS STOP

TOWN CENTER CONCEPT REPORT

(2) DESIGN PROGRAM

→ PUBLIC SPACE AMENITIES

- ⇒ PUBLIC SEATING
- \Rightarrow PUBLIC EATING AREA
- ⇒ LANDSCAPING
- ⇒ PATIO AND WALKWAYS
- → IMPLEMENTATION (CURRENTLY INFEASIBLE)
 - ⇒ NO CURRENT FUNDING—NEEDS A FUND-ING MECHANISM (MAYBE THROUGH CSD?)
 - ⇒ MIXED COMMUNITY INTEREST
 - ⇒ REQUIRES ANCHOR MARKET & RESTAU-RANT
 - ⇒ REQUIRES INTERESTED LANDOWNER
 - ⇒ REQUIRES COMMUNITY SEPTIC AND COM-MUNITY WELL



Town Center Conceptual Diagram



Park Area, Public Space and Restaurant / Market

TOWN CENTER CONCEPT









Riverside Passive Recreation Park



Eating & Walkways



Landscaped Borders

4. TOWN CENTER URBAN DESIGN CONCEPT TWO





AREA VIII

Existing: The existing commercial strip runs parallel to the highway for approximately one-third of a mile. The strip is located on the north side of the highway and blocks any view of the river. The existing commercial development presents a distracting visual blur to the tourist. The principal objections to the existing commercial strip are as follows:

- 1. No Landscaping
- 2. Non-uniform setbacks
- 3. Poor parking facilities
- Arbitrary vehicular ingress and egress
- 5. No pedestrian walks
- 6. Poor signing
- 7. No berming between highway and commercial buildings
- 8. Poor lighting
- 9. No special use to attract tourists (park, river view, art gallery, etc.)
- 10. Uncoordinated architectural character
- 11. No undergrounding of utility poles

Many people use the Kaweah River for recreational swimming during the summer months. There is one area along the middle fork which is used more frequently than any other section. This is across from the Union School and adjacent to the Standard Station. During the summer months many people use this area for swimming, indicating the need for a permanent recreational facility. Unfortunately, the swimmers must cross private property and make use of parking facilities intended to serve the commercial area. Proposal: The existing commercial strip may remain as the dominant and successful commercial area if it is improved aesthetically and if more variety in service facilities is developed. All of the above-mentioned liabilities of the commercial strip may be improved. As illustrated in the accompanying

Central District Site Plans, if more attention is




District may be able to attract a much greater percentpaid to developing vacant areas between existing buildage of the tourists traveling through Three Rivers ings into usable park and rest stops, the Central along Highway 198.

The site is centrally located and provides access to a deep and relatively safe swimming area erty should be developed to provide parking, rest-The propduring the summer months. The handsome pools are created by carved granite outcroppings, which are needed community sever and water systems, and the water quality of the river returns to acceptable room facilities, and landscaping to enhance the natural beauty of the area. Since the level of river pollution is currently of great concern, limits. Prior to this time, development into recreational area should be phased so that it development of the site into a swimming and can be used subsequent to the completion of not dislodged during times of flooding.

1 - 27

AREA VIII (continued)

would benefit the nearby commercial uses, as well as assure that the land would be available for rest stop with the above-mentioned facilities future development.





5. MIXED USE OVERLAY DISTRICT CONCEPT

A-3 – Mixed Use Overlay District (Zone Change Text) Section 18.9: "MU" Mixed-Use Overlay Combining Zone

The following regulations shall apply in the community of Three Rivers, unless otherwise provided in this Ordinance.

PURPOSE

A. The purpose of this zone is to use can allow for decreased vehicles miles traveled if residential uses are mixed with uses for employment.

APPLICATION

B. This overlay zone applies to the community of Three Rivers to facilitate a Town Center.

USE

- **C.** No building or land shall be used and no building shall be hereafter erected or structurally altered, except for one or more of the following uses allowed in this this overlay zone are outlined in the community plan for Three Rivers.
- Within the Mixed Use Zoning District, all uses outlined in the C-2, C-1, R-1, R-2 and R-3 uses are allowed. Uses and activities that are found by the Planning Director to be similar to and compatible with those specific zoning districts are also allowed. In addition, use and activities determined to be compatible by the Planning Commission and the Board of Supervisors with the above mentioned zoning districts are also allowed.

All conditional uses allowed in these zoning districts shall also be allowed by right with exception of the following combination of uses:

All uses shall not be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood, or to the general welfare of the county. All uses shall limit impacts related to smoke, fumes, dust, gas, noise, odor, vibrations and other hazards to be considered an allowed use without the need for a special use permit. All allowed uses are subject to the determination of appropriateness by the Director of Planning.

The Director of Planning has the option of deferring any land use application allowed in this district to the Planning Commission for review and decision.

DEVELOPMENT

- 1. <u>Height:</u> No building or structure hereafter erected or structurally altered shall exceed thirty five (35) feet to uppermost part of roof.
- 2. Front Yard: 0 Feet
- 3. <u>Side Yard:</u> Where a lot abuts upon the side of a lot in any "R" Zone (R-A, R-O, R-1, R-2 and R-3), there shall be a side yard of not less than five (5) feet. Where a reversed corner lot rears upon a lot in any "R" Zone, the side yard on the street side of the reversed corner lot shall be not less than fifty (50) percent of the front yard required on the lots in the rear of such corner

THREE RIVERS COMMUNITY PLAN UPDATE

lot. In all other cases, a side yard for a commercial building shall not be required.

- 4. <u>Rear Yard</u>: Where a lot abuts upon the reat of a lot in any "R" Zone (R-A, R-O, R-1, R-2 and R-3), there shall be a rear yard of not less than fifteen (15) feet. In all other cases, a rear yard for a commercial building shall not be required.
- 5. <u>Lot Area:</u> The minimum lot area shall be ten thousand (10,000) square feet; provided, however, that where a lot has less area than herein required and was of record at the time this paragraph became effective, said lot may be occupied by not more than one (1) main building subject to the provisions of this Section.
- 6. <u>Floor Area Ratio</u>: The maximum Floor Area Ratio is 2. The Floor Area Ratio is the amount of square feet of all structure allowed on a parcel based on parcel size.
- 7. <u>Distance between structures</u>: The minimum distance between structures is 10 feet.
- 8. <u>Parking</u>: Off-street parking and loading shall be required in conformance with Section 15.
- 9. <u>Fences, Walls, and Screening:</u> Where the side or rear lot line of a site adjoins or is located across an alley from any "R" Zone (R-A, R-O, R-1, R-2, and R-3), there shall be a solid wall, fence or equivalent landscaping screening at least six (6) feet in height located along the common lot line, except in the required front or side yard. Open storage of materials and equipment shall be permitted only within an area surrounded and screened by a solid wall or fence or compact evergreen hedge (with solid gates where necessary), not less than six (6) feet in height, provided that no materials shall be stored to a height greater than that of the wall, fence, or hedge. Fulfillment of the requirement of this paragraph shall not be required for buildings and uses which were established in accordance with all applicable buildings and zoning regulations and which were existing in a commercial or manufacturing zone on the effective date of this paragraph, until such time as a permit or other grant of approval for expansion, alteration or development of property is approved by Tulare County.

All other Development Standards are outlined in the Community Plan for Three Rivers. Conformance to development standards is required for all development; however, the Planning Director, Planning Commission, or Board of Supervisors may provide exemptions to particular development standards when deemed appropriate. 6. MIXED USE OVERLAY DISTRICT CONCEPT DEVELOPMENT STANDARDS

Mixed Use and Town Center Development Standards

Context sensitive design standards shall be utilized by requiring that development respond to its context, be compatible with the traditions and character of the Three Rivers Community, and develop in an orderly fashion which is compatible with the scale of surrounding structures and infrastructure subject to compatibility with the policies and development standards established in the Three Rivers Community Plan.

- 1. <u>Height:</u> No building or structure hereafter erected or structurally altered shall exceed Thirty-five (35) feet to uppermost part of roof.
- 2. Front Yard: 0 Feet
- 3. <u>Side Yard:</u> Where a lot abuts upon the side of a lot in any "R" Zone (R-A, R-O, R-1, R-2 and R-3), there shall be a side yard of not less than five (5) feet. Where a reversed corner lot rears upon a lot in any "R" Zone, the side yard on the street side of the reversed corner lot shall be not less than fifty (50) percent of the front yard required on the lots in the rear of such corner lot. In all other cases, a side yard for a commercial building shall not be required.
- 4. <u>Rear Yard:</u> Where a lot abuts upon the rear of a lot in any "R" Zone (R-A, R-O, R-1, R-2 and R-3), there shall be a rear yard of not less than fifteen (15) feet. In all other cases, a rear yard for a commercial building shall not be required.
- 5. <u>Lot Area</u>: The minimum lot area shall be ten thousand (10,000) square feet; provided, however, that where a lot has less area than herein required and was of record at the time this paragraph became effective, said lot may be occupied by not more than one (1) main building subject to the provisions of this Section.
- 6. <u>Floor Area Ratio</u>: The maximum Floor Area Ratio is 2. The Floor Area Ratio is the amount of square feet of all structure allowed on a parcel based on parcel size.
- 7. Distance between structures: The minimum distance between structures is 10 feet.
- 8. <u>Parking</u>: Off-street parking and loading shall be required in conformance with Section 15 of the Zoning Code.
- 9. <u>Fences, Walls, and Screening</u>: Where the side or rear lot line of a site adjoins or is located across an alley from any "R" Zone (R-A, R-O, R-1, R-2, and R-3), there shall be a solid wall, fence or equivalent native landscaping screening at least six (6) feet in height located along the common lot line, except in the required front or side yard. Open storage of materials and equipment shall be permitted only within an area surrounded and screened by a solid wall or fence or compact native evergreen hedge (with solid gates where necessary), not less than six (6) feet in height, provided that no materials shall be stored to a height greater than that of the wall, fence, or hedge. Fulfillment of the requirement of this paragraph shall not be required for buildings and uses which were established in accordance with all applicable buildings and zoning regulations and which were existing in a commercial or manufacturing zone on the effective date of this paragraph, until such time as a permit or other grant of approval for expansion, alteration or development of property is approved by Tulare County.
- 10. <u>ADA Accessibility</u>: ADA Standards for Accessible Design are required as applicable consistent with the following regulations:

a. The 2010 Standards for State and local governments, which consist of the Title II regulations at 28 CFR 35.151 and the 2004 ADAAG at 36 CFR part 1191, appendices B and D;

b. The 2010 Standards for public accommodations and commercial facilities, which consist of the

Title III regulations at 28 CFR part 36, subpart D, and the 2004 ADAAG at 36 CFR part 1191, appendices B and D.

All other Development Standards are outlined in the Community Plan for Three Rivers. Conformance to development standards is required for all development; however, the Planning Director, Planning Commission, or Board of Supervisors may provide exemptions to particular development standards when deemed appropriate.

To promote Economic Development within the Three Rivers Urban Development Boundary, a Mixed Use Overlay zoning district is being established to allow for flexibility in the allowed uses within Three Rivers. In addition, the use permit restriction is updated to allow for ministerial approval by the Planning Director. Development standards are established to ensure high quality development within this mixed use overlay district.

ARCHITECTURE (A)

A-1 Entries to buildings should be individualized and clearly identifiable.

A-2 Retail spaces should be accessed directly from the sidewalk, rather than through lobbies or other internal spaces.

A-3 Entrances to upper story uses should not be as prominent as the primary entrances to first story uses.

 Λ -4 The height of first floor commercial should have a minimum ceiling height of 12 feet.

A-5 Architecturally distinguish the ground floor from the upper façade, to form a visual base for the building. Create an intimate scale for the pedestrian environment.

A-6 Each building should have a defined base, body, and cap segment.

A-7 Blank walls on ground floor facades adjacent to public sidewalks, public right-of-ways, and public spaces are prohibited to the extent allowed by law.

A-8 Ground floor window openings should range between fifty (50) to eighty (80) percent of the ground floor façade adjacent to sidewalks and private and public plazas, patios, and courtyards. These window openings should consist of transparent "storefront" windows. Second story windows should not exceed fifty (50) percent of the total exterior wall surface.

A-9 Three-dimensional cornice lines, parapet walls, and/or overhanging eaves should be used to enhance the architectural character of the building.

A-10 Wall surfaces should not exceed 250 square feet without including some form of articulation. Acceptable forms of articulation include use of windows, varied reveal patterns, change in material, texture, color, or detail; and a change in wall plane location or direction.

A-11 Openings in the façade should be accentuated with paint, tile, shutters, awnings, planters, and/or other appropriate architectural features in order to create varied shadows and a rich visual

texture.

A-12 Articulation and detailing of the exterior walls at the ground level, should be integrated with landscape features (trees, plants, walls, trellises, and unique land forms) to ensure an appropriate transition from ground to wall plane consistent with the rural character, physical, cultural, and natural context of the community.

A-13 An equal level of architectural detail and native landscaping should be incorporated into all sides of freestanding buildings, because they are generally visible from all sides.

A-14 Architectural details should be fully integrated into the design of the building to avoid the appearance of afterthought elements or elements that are "tacked on" to a building.

A-15 Finish materials that give a feeling of permanence and quality should be used at ground level facades.

A-16 A consistent use of window style, size, trims, and accents should be used to ensure a consistent character along the building façade.

A-17 Exposed structural elements (beams, trusses, frames, rafters, etc.) are acceptable when appropriately designed to complement the over design of the façade.

A-18 Tilt-up buildings should incorporate decorative trim, recessed/projecting panels, recessed windows/doors, accent materials, and varied roof height to increase visual interest.

A-19 New buildings located at the corner of the block may be more massive in scale than adjacent buildings to better define the street intersection.

A-20 Corner buildings should have a strong relationship to the corner of the intersection by incorporating a unique architectural element or detail at the corner; such as a tower or primary building entrance.

A-21 Corner buildings should present equally important facades of similar appearance on both streets.

A-22 Articulate side and rear facades in a manner compatible with the design of the front façade. Avoid large blank wall surfaces on side and rear facades which are visible from public areas. In these locations, display windows, store entrances, and upper windows are encouraged. When this is not feasible, consider the use of ornament, murals, or native landscaping along large blank walls.

A-23 Remove alterations whose design and/or materials are not consistent with the overall character of the building.

A-24 Where off-street parking or an alley is provided behind a building, a secondary entrance to both first floor and upper floor uses should be provided at the rear of the building.

A-25 Locate and design required vents and access doors to minimize their visibility from public

spaces.

A-26 Use high quality detailing for new buildings and replacement elements. For example, new or replacement windows should have sash and frame thicknesses and window depths which are similar to those of original or historic windows. Such level of detailing provides interplay between light and shadow which adds interest and visual depth to the façade.

A-27 Loading docks, storage areas, and service facilities should be located at the rear of the building and screened from the street as necessary.

A-28 Conceal all electrical boxes and conduits from view, and position light sources to prevent glare for pedestrians and vehicles.

ROOFS AND AWNINGS (RA)

RA-1 Awnings should be compatible with other awnings nearby, particularly those on the same building, when these awnings complement the architectural character of the building and the community.

RA-2 Canopies and awnings should be compatible with the style and character of the structure on which they are located.

RA-3 Use matte canvas fabric for awnings; not vinyl, fiberglass, plastic, wood or other unsuitable materials. Glass and metal awnings may be appropriate for some buildings, but must be consistent with the architectural style of the building.

RA-4 Include architectural features such as awnings, canopies, and recessed entries that can protect pedestrians from inclement weather. Design these features as integral parts of the building.

RA-5 Awnings and canopies should not hang below the top of the first floor storefront window. In addition, awnings and canopies should be at least ten (10) feet above the sidewalk.

RA-6 Canopies and awnings should not project more than seven (7) feet from the surface of the building.

RA-7 Awnings and canopies that project into the public right-of-way should not impede pedestrian or vehicular movement.

RA-8 Roof forms, lines, masses, and materials should be continuous and consistent with the overall style, character, scale, and balance of the building and the community.

RA-9 Roof overhangs and exposed structural elements should be designed to be consistent with the overall style and character of the building and the community.

RA-10 Roof mounted HVAC equipment, ducts, vents, and other equipment should be screened from public view.

RA-11 Mansard roofs are prohibited, to the extent allowed by law.

RA-12 All flat roofs should have 90% of the roof area covered by solar panels to the extent feasible. All sloped roofs should have 50% of the roof area covered by solar panels to the extent feasible. Roofs should be painted or colored with a bright white (or similar color) with a reflective glossy finish.

SITE PLANNING (SP)

SP-1 Place entrances to storefronts and other ground floor uses so that they are accessible directly from the public sidewalk, not internal lobbies.

SP-2 On corner sites, a prominent streetscape presence should be established and visual interest should be created by either locating buildings near the intersection to enliven the streetscape or using native landscaping to frame the intersection. Parking areas immediately adjacent to intersections are discouraged.

SP-3 Structures and site improvements should be located and designed to avoid conflict with adjacent uses to maintain consistency with the rural character, physical, cultural, and natural context of the community.

SP-4 Gates to parking areas should be designed with materials and color that are compatible with the site.

SP-5 Multi-story buildings that overlook private or common area open space of adjacent residences should be designed to protect privacy of these spaces.

SP-6 Gates to parking areas should be located to prevent vehicle stacking or queuing on the street.

SP-7 Primary site and building entry points are strongly encouraged to generate visual interest with special design features such as decorative or textured paving, flowering accents, special lighting, monuments, walls, shrubs, water features, and the use of sizeable specimen trees.

SP-8 To the extent feasible and practicable, parcels should share access driveways to minimize curb cuts and traffic congestion.

SP-9 Cul-de-sacs are inappropriate except when a physical barrier prevents connectivity.

SP-10 Block lengths should be short, averaging 200 to 300 feet. Maximum block length is 500 feet.

SP-10 Encourage planned cluster residential and commercial development that groups residential or commercial properties in a proposed development closer together in order to use the rest of the land for open space on suitable sites that can accommodate lot coverage while providing adequate open space to the extent feasible and appropriate given reasonably available and effective mitigation measures.

LANDSCAPING (LA)

The planting of native trees, shrubs, and grasslands are encouraged in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation and wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained (See Appendix _______ for Native Plant List).

The planting of non-native plants and trees adjacent to the Kaweah River and all of its tributaries shall be limited and controlled for the planting of plants and trees in the riparian areas which require review of the County Project Review Committee utilizing the Introduced, Invasive, and Noxious Plants lists from the USDA Natural Resources Conservation Service and California Native Plant Society.

LA-1 Projects should provide, and maintain, landscaped buffers between commercial uses and lowdensity residential uses, and between commercial and other urban uses. Native plant material will be placed in a manner to suggest natural growth as opposed to a rigid barrier.

LA-2 A predominance of native deciduous tree species is encouraged to shade western, southern, and southwestern exposures.

LA-3 The parking lot should not be the dominant visual element of the site as viewed from the street. Locate or place parking lots at the side and rear of buildings or use parking lot screening to soften their appearance. Screen parking lots: Utilize a hedge (recommended height of 36 inches) with a rolling berm to screen parking at the street periphery (Minimum shrub container size should be 5 gallons.)

LA-4 Project sites should be designed so that areas used for outdoor storage, and other potentially unsightly areas are screened from public view. All service yards and outdoor storage areas should be enclosed or screened from view.

LA-5 Loading areas, access and circulation driveways, trash, and storage areas, and rooftop equipment should be adequately screened from the street and adjacent properties, as deemed necessary. To the fullest extent possible, loading areas and vehicle access doors should not be visible from public streets.

LA-6 Loading driveways should not back onto streets or encroach into landscaped setback areas.

LA-7 Loading doors should be integrated into building elevations and given the same architectural treatment where feasible.

LA-8 Utility equipment such as electric and gas meters, electrical panels, and junction boxes should be screened from view or incorporated into the architecture of the building.

LA-9 Utility devices, such as transformers and backflow preventers, should not dominate the front landscape area.

LA-10 All utility lines from the service drop to the site should be located underground.

LA-11 When security fencing is required, it should be a combination of solid walls with pillars and offsets, or short solid wall segments and segments with metal fencing. Chain-link fencing is strongly

discouraged when facing public view and should only be used as interior fencing.

LA-12 Retaining walls at retention basins should utilize a stepped or terraced motif as a visual tool to maintain appropriate human scale.

LA-13 Retention basins visible to public view and common open spaces should be contoured and native landscaped in a creative manner to minimize a harsh utilitarian appearance. When feasible, it is recommended to beneficially use the run-off storm water as supplemental watering for the landscape plants.

LA-14 Parking lot run-off should be routed through turf or other native landscaping.

LA-15 Parking lots located adjacent to the sidewalks or right-of-ways should be screened to a height of thirty six (36) inches above the grade with native landscaping and/or low high quality fencing.

REFUSE AND STORAGE AREAS (R)

R-1 Trash storage must be enclosed within or adjacent to the main structure or located within separate freestanding enclosures.

R-2 Trash enclosures should be unobtrusive and conveniently accessible for trash collection but should not impede circulation during loading operations.

R-3 Trash enclosures should be located away from residential uses to minimize nuisance to adjacent properties.

R-4 Trash and storage enclosures should be architecturally compatible with the project design. Native landscaping should be incorporated into the design of trash enclosures to screen them and deter graffiti.

LIGHTING (LI)

All lighting shall be subject to compatibility with the dark sky policies and development standards established in the Three Rivers Community Plan

LI-1 Provide lighting at building entrances and for security at ground level.

LI-2 Lights should be shielded and point down toward the ground.

LI-3 Parking lot should have uniformly spaced night lighting.

LI-4 Lighted sidewalks and/or pedestrian walkways should be located to provide safe access from the parking lot to the street sidewalk.

LI-5 Exterior architectural lighting should fully compliment a building's design and character. Light fixtures should work in conjunction (size, scale, and color) with the building's wall, roof.

LI-6 Street lighting features should be "pedestrian scale" at twelve (12) to eighteen (18) feet in height above the curb.

WALLS AND FENCES (WF)

WF-1 Wall/fence design should complement the project's architecture. Native landscaping should be used to soften the appearance of wall surfaces.

WF-2 Walls and fences within front and exterior side yards of commercial sites should be avoided.

WF-3 Unless walls are required for screening or security purposes they should be avoided.

WF-4 Security fencing should incorporate solid pilasters, or short solid wall segments and view fencing.

WF-5 Front yard fences should not abut the sidewalk. The fence should be set back from the sidewalk at least 2 to 3 feet to allow room for landscape materials to soften the fence and to ensure pedestrian comfort.

WF-6 Walls and fences should be designed in such a manner as to create an attractive appearance to the street and to complement the architecture of the structure.

WF-7 Gates should be provided in walls or fences where necessary to allow emergency access.

WF-8 High perimeter walls and walls topped with barbed wire, razor wire, or broken glass are strongly discouraged.

WF-9 Inordinately long walls or fences should be broken up by native landscaping, pilasters, offsets in the alignment of the wall or fence, and/or changes in materials and colors.

WF-10 Chain link fences should not be visible from streets.

WF-11 Long expanses of fence or wall surfaces should be offset and architecturally designed to prevent monotony. Landscape pockets (12-feet wide by 3- feet deep) should be provided at 70-foot minimum intervals along the wall.

STREETSCAPE (ST)

ST-1 A consistent context sensitive material of varied texture and color should be applied to all crosswalks to clearly define pedestrian crossings, to slow down traffic.

ST-2 Sidewalks shall consist of context sensitive material of varied texture and color widths, excluding curbs, should be a minimum of five (5) feet.

ST-3 Context sensitive curb and gutters should be constructed with all new development.

ST-4 A planting strip, or tree lawn, 3 to 5 feet wide should be located between the sidewalk and the

curb of the street. Existing tree lawns should be preserved.

ST-5 New street trees should be planted on the curb edge of the sidewalk in front of all new development projects.

SIGNAGE (SI)

SI-1 Sign letter and materials should be professionally designed and fabricated.

SI-2 Each storefront with a ground floor entrance should be allowed two signs that should be attached to the building.

SI-3 All electrical conduits should be concealed from public view.

SI-4 For commercial uses, the primary wall sign should be in the space above a storefront and visibly oriented towards the street.

SI-5 For commercial uses, a secondary sign should be smaller than the primary sign and be oriented towards passing pedestrians. It should extend out perpendicular to the building façade and be mounted or hung from the wall beneath an awning or above a first floor window. The bottom of the wall-mounted sign should be located at least eight (8) feet above the sidewalk. The outer face of the sign should not extend more than four (4) feet from the edge of the building surface, and the maximum area of the sign should have no more than six (6) square feet.

SI-6 Signs should be designed to be compatible with building design in terms of relative scale, overall size, materials, and colors. No sign should dominate the façade. Signage elements should incorporate materials colors, and shapes that appropriately reflect and compliment the building's architecture.

SI-7 Large signs that dominate a building façade or the streetscape should not be permitted.

SI-8 Signage should be constructed of high quality, low maintenance, and long lasting materials. Except for banners, flags, temporary signs, and window signs, all signs should be constructed of permanent materials and should be permanently attached to the ground, a building or another structure by direct attachment to a rigid wall, frame, or structure.

SI-9 No more than twenty (20) percent of window area should be obstructed by signs, posters, advertisements, painted signs, and/or merchandise, and the top one half of the window should be permanently clear and free of obstructions. Awning signage should be of a replaceable-type to accommodate tenant turnover.

SI-10 Wall, canopy, under-canopy, and marquee signs should not exceed three-fourths (3/4) square foot of aggregated display area per lineal foot of frontage.

SI-11 Awning sign should be mounted on the hanging border of the awning and should not protrude beyond the awning surface.

SI-12 Wall signs or advertisements should not project more than twelve (12) inches from the wall face to which they are mounted, should not project beyond building eaves, and should be mounted flat throughout their length and height.

SI-13 Signs for individual tenants within a multiple-tenant, such as offices located above the ground floor, should be grouped together and appropriately scaled to a pedestrian-oriented retail environment.

SI-14 Fin signs or under marquee sign are permitted provided that they are installed with a minimum of eight (8) feet clearance from the lowest point on the sign and support to the top of the walking surface below it.

SI-15 Awning signs and face-mounted signs are permitted provided that the sign should have no more than one line of text and that maximum text height is twelve (12) inches.

SI-16 No signs should be erected in any manner in which the sign, in whole or in part, would create a hazardous condition to pedestrian or automobile traffic alike.

SI-17 Additional business signs should be permitted on windows and on the vertical face of awning valances provided that the signs are permanent in nature and of high quality.

SI-18 The following signs are strictly prohibited, to the extent allowed by law:

- Roof signs, signs located above the roof or parapet lines.
- Permanent banner signs.
- Posters.
- Painted window advertisements.
- Billboards
- Large auto-oriented pole-mounted or "lollipop signs."
- Moving signs and flashing signs.

SI-19 Signs advertising an activity, business product, or service no longer conducted on the premises, and/or signs frames, structural members, or supporting poles remaining unused for a period of six (6) months should be removed from the site or building by the property owner.

SI-20 Address markers should be easily identifiable and readable from the street.

SI-21 Freestanding, ground-mounted and monument signs should be not less than one (1) foot behind a property line or designated right-of-way for vehicular and pedestrian traffic, but in no case should be more than ten (10) feet behind a sidewalk and ten (10) feet from any vehicular entrance or driveway. These signs should not interfere with the safety of vehicular traffic entering or exiting the premises.

SI-22 The maximum height of monument signs should be five (5) feet above the top of concrete curb.

SI-23 One freestanding or monument sign with a maximum of thirty-two (32) square feet of display area should be allowed on each street frontage of more than fifty (50) feet. Where two (2) or more freestanding or monument signs are allowed on a single street frontage, one freestanding or

monument sign with a maximum of fifty (50) square feet of display area may be used in lieu of several signs on the same frontage.

SI-24 All gateway signs should have a consistent character and style.

SI-25 A hierarchy of gateways signs should be established to differentiate between major and minor gateway entrances.

SI-26 Major gateway signs should be designed to maintain consistency with the rural character, physical, cultural, and natural context of the community.

SI-27 Minor gateway signs should be visible to automobile traffic, but also be low enough to be visible to pedestrian traffic.

SERVICE STATIONS AND CAR WASHES (SS)

SS-1 Service and carwash bays should not face residential properties or the public street. The visibility of service bays and carwash opening should be minimized.

SS-2 Gas pump canopies should be ancillary to the main building structure. The retail market/office building segment of the facility should be oriented along the street frontage, whenever possible.

SS-3 All structures on the site (including kiosks, carwash buildings, gas pump columns, etc.) should be architecturally consistent and related to an overall architectural theme to maintain consistency with the rural character, physical, cultural, and natural context of the community.

SS-4 Canopy light fixtures should be recessed into the canopy.

SS-5 Outdoor equipment, such as vent risers and clean air separators, should be screened either with an enclosure or if site configuration topography permits, away from street view, screened with native landscaping or located at a grade differential.

SS-6 Site-specific architectural design contextual to surroundings is strongly encouraged. Designs based solely on corporate or franchise models are strongly discouraged.

AUTO REPAIR SERVICES (AR)

AR-1 Building design should be stylistically consistent, and compatible with surrounding buildings through use off similar scale, materials, colors, and/or detailing.

AR-2 Building materials should have the appearance of substance and permanency; lightweight metal or other temporary appearing structures are discouraged.

AR-3 Vehicle drop-off areas should be provided to prevent vehicle overflow to adjacent streets.

CONTRACTOR, BUILDING SUPPLY, OR LANDSCAPING YARDS (BS)

BS-1 The main office or building should be located along the street frontage to screen outdoor sales and minimize the visibility of storage of materials and vehicles.

BS-2 Customer parking should be provided close to the building and not interspersed in the yard.

BS-3 All outdoor contractor vehicle storage areas should be enclosed with a screen of sufficient height and constructed with durable and high-quality materials that are compatible with the building and site.

CONSUMER STORAGE FACILITIES (SF)

SF-1 The administrative office should be located in a building or building element that is human scale and located in proximity to the street.

SF-2 Parking for visitors should be located near the administrative office, outside of any gated portion of the facility.

SF-3 A storage facility should be consistent with its surrounding area in scale and appearance, through the use of building size transitions, architecture, and native landscaping.

SF-4 Loading doors for individual storage units should not face outward toward streets.

SF-5 In order to break up the mass of larger buildings which containing storage units, provide horizontal and vertical articulation through the use of building offsets, windows, and variations in colors and materials.

SF-6 Any area intended for the storage of automobiles and recreational vehicles should be located towards the rear of the site or screened with an enclosure of adequate height

SPECIAL CONDITIONS (SC)

SC-1 The project should emit no smoke or should reduce the amount of smoke from an existing use.

SC-2 The project should emit no fumes or should reduce the amount of fumes from an existing use.

SC-3 The project should implement dust control measures sufficient to minimize or prevent dust emissions. Measures should be consistent with, or more effective than, those required by the Valley Air District.

SC-4 The project should emit no odors or should reduce the amount of odors from an existing use.

SC-5 The project should not create noticeable vibrations.

SC-6 Sources of noise from the project shall be subject to compatibility with the policies and

development standards established in the Three Rivers Community Plan and Tulare County General Plan.



B. HIGHWAY 198 SCENIC HIGHWAY DESIGNATION

1. CALTRANS SCENIC HIGHWAY GUIDELINES

SCENIC HIGHWAY GUIDELINES

LANDSCAPE ARCHITECTURE PROGRAM Division of Design October 2008

Scenic Highway Guidelines

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SECTION I: INTRODUCTION AND BACKGROUND

The Department of Transportation (Caltrans) manages the State Scenic Highway Program, provides guidance, and assists local government agencies, community organizations, and citizens with the process to officially designate scenic highways. The following information includes background and criteria for the Scenic Highway Program, and describes nomination steps for the official designation of State and County Scenic Highways. In addition, this guidance discusses compliance reviews and the revocation of scenic highway designations.

Scenic Highway Program History

In 1963, the State Legislature established the California Scenic Highway Program through Senate Bill 1467 (Farr). The bill declared:

"The development of scenic highways will not only add to the pleasure of the residents of this State, but will also play an important role in encouraging the growth of the recreation and tourist industries upon which the economy of many areas of this State depend."

Senate Bill 1467 added Sections 260 through 263 to the Streets and Highways Code. In these statutes the State proclaims intent to:

"establish the State's responsibility for the protection and enhancement of California's natural scenic beauty by identifying those portions of the State highway system which, together with adjacent scenic corridors, require special conservation treatment." (Scenic corridors consist of land that is visible from, adjacent to, and outside the highway right-of-way, and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries.)

Existing law provides Caltrans with full possession and control of all State highways. This legislation places the Scenic Highway Program under the stewardship of Caltrans.

The legislation further declares the intent of the State to assign responsibility for the regulation of land use and development along scenic highways to the appropriate State and local governmental agencies. A county highway component was later added to the Scenic Highway Program in Section 154 of the Streets and Highways Code. These and related statutes are located in Appendix A.

Scenic Highway Program Features

The following features characterize the program:

- A State Scenic Highway System list of highways eligible to become, or designated as, official scenic highways. Legislative action establishes and amends this list.
- A process for the designation of official State or County Scenic Highways whereby cities and/or counties (hereafter referred to as local governing bodies) develop and implement a Corridor Protection Program containing five legislatively required elements, generally accepted as land use planning standards.
- State and District Scenic Highway Coordinators who review and recommend eligible highways for official scenic highway designation to the Caltrans Director.

- Caltrans places scenic highway signs with the poppy logo along officially designated scenic routes (the California poppy serves as the logo for the California Scenic Highway Program).
- A process for revoking official State or County Scenic Highway designations that no longer comply with the program requirements.

SECTION II: SCENIC HIGHWAY CRITERIA

The goal of the California Scenic Highway Program is to preserve and enhance the natural beauty of California. California contains several distinct landscape regions and the merits of a particular landscape are considered within the context of its own region. Regardless of landscape region, the highway should traverse an area of outstanding scenic quality, containing striking views, flora, geology, or other unique natural attributes. Therefore, Caltrans evaluates the merits of a nominated highway on how much of the natural landscape a traveler sees and the extent to which visual intrusions impact the "scenic corridor." Visual intrusions may be natural or constructed elements, viewed from the highway, that adversely affect the scenic quality of a corridor. Adverse affects are characterized as minor, moderate, or major. Visual intrusions are evaluated in the following manner:

- The more pristine the natural landscape is and less affected by intrusions, the more likely the nominated highway will qualify as scenic.
- Where intrusions have occurred, the less impact they have on an area's natural beauty, the more likely the nominated highway will qualify as scenic.
- The extent to which intrusions dominate views from the highway will determine the significance of their impact on the scenic corridor.

State highways nominated for scenic designation must first be on the statutory list of highways eligible for scenic designation in the State Scenic Highway System. These highways are identified in Section 263 of the Streets and Highways Code (see Appendix A). A process for adding eligible highways to the statutory list is described in Section III: Obtaining Eligibility. *County* highways nominated for scenic designation that are believed to have outstanding scenic values are considered eligible and do not require any legislative action. Both State and county highway nominations follow the same process and have the same requirements.

Scenic highway nominations are evaluated using the following criteria:

- The State or county highway consists of a scenic corridor that is comprised of a memorable landscape that showcases the natural scenic beauty or agriculture of California (see definition for 'vividness', under Section III: Step 1, Visual Assessment).
- Existing visual intrusions do not significantly impact the scenic corridor (see definitions for 'intactness' and 'unity' below, under Section III. Step 1: Visual Assessment).
- Demonstration of strong local support for the proposed scenic highway designation.
- The length of the proposed scenic highway is not less than a mile and is not segmented.

When Caltrans determines the proposed scenic highway satisfies these qualifications, the local governing body, with citizen support, must adopt a program to protect the scenic corridor. The zoning and land use along the highway must meet the State's legislatively required elements for scenic highway corridor protection as stated in Section IV: Designation Process.

SECTION III: NOMINATION PROCESS

Obtaining Eligibility

A state route must be included on the list of highways eligible for scenic highway designation in Streets and Highways Code Section 263 (see Appendix A). State routes not listed must be added before they can be nominated for official designation. Additions and deletions can only be made through legislative action. Short (less than a mile) or segmented routes are not recommended for inclusion in the State Scenic Highway System. If several suitable routes within a jurisdiction are being considered, they may be incorporated by a single legislative action.

It is advisable for the local governing body to consult with the Caltrans District Scenic Highway Coordinator to determine suitability for scenic designation *before* seeking legislative action. Location and contact information for Caltrans Scenic Highway Coordinators is in Appendix D.

Eligible Scenic Highways

Once a state route is in Streets and Highways Code Section 263, it may be nominated for official designation by the local governing body with jurisdiction over the lands adjacent to the proposed scenic highway. The application to nominate eligible scenic highways for official designation requires the preparation of a visual assessment and Scenic Highway Proposal. The proposal must include a letter of intent from the local governing body, topographic and zoning maps, and a narrative description of the scenic elements in the corridor that includes a discussion of any visual intrusions on scenic views. Steps for completing the application are explained below. A flow chart summarizing the process and procedure is in Appendix B. The local governing body should contact the District Scenic Highway Coordinator before starting this process. See Appendix D for contact information.

STEP 1 Visual Assessment

The local governing body must prepare and submit a brief and concise visual assessment. The visual assessment must identify scenic attributes and visual intrusions, as viewed from the highway, and describe how those characteristics contribute or detract from the overall quality of the corridor's visual environment. The local governing body should consult with the District Scenic Highway Coordinator prior to preparing the visual assessment.

The visual assessment should include the following items for the proposed scenic highway:

- Identification of major landscape segments that represent unique characteristics or that correspond to previously named places or districts.
- An inventory of the natural landscape such as landforms, vegetation, water features.

- A description of visual intrusions and length of impact. Not more then one-quarter of the proposed scenic highway should be impacted by visual intrusions. For a mile segment, "one-quarter" is calculated either as 1/4 of a mile impacted by continuous intrusions on one or both sides of the highway, or intrusions occurring on one or the other side of the highway totaling 1/4 of a mile. Examples of visual intrusions are provided in Appendix E.
- Photo-images or other supporting graphics.

California contains several distinct landscape regions and the merits of a particular landscape are considered within the context of its own region. However, the highway should traverse an area of outstanding scenic quality, containing striking views, flora, geology, and other unique natural attributes.

The visual assessment should use the following terms in discussing visual quality of the proposed scenic highway:

- Vividness The extent to which the landscape is memorable. This is associated with the distinctiveness, diversity and contrast of visual elements. A vivid landscape makes an immediate and lasting impression on the viewer.
- Intactness The integrity of visual order in the landscape and the extent to which the natural landscape is free from visual intrusions.
- Unity The extent to which visual intrusions are sensitive to and in visual harmony with the natural landscape.

STEP 2 Consultation with Caltrans

The local governing body must discuss and field review the visual assessment of the proposed scenic highway with the District Scenic Highway Coordinator before proceeding to Step 3.

STEP 3 Scenic Highway Proposal

The local governing body must prepare a Scenic Highway Proposal that consists of the following:

A. Letter of intent – The local governing body must submit a current letter of intent to seek official scenic highway designation. When more than one governing body is involved, a joint letter of intent may be submitted. The letter should cite the reason(s) (e.g., scenic protection, tourism) for seeking official scenic highway designation.

B. Topographic map and map overlay – A two-part mapping procedure is required to illustrate the visual quality of the proposed scenic highway.

A topographic map (USGS or comparable) should show the proposed scenic corridor boundaries and scenic highway limits. The map should show natural features in the landscape such as landforms, water, and vegetative cover.

The map overlay should be colored to indicate where minor, moderate, and major intrusions (see definitions and colors below) are visible from the highway. These colored intrusions should correspond and be identified by state highway post-mile designations. As an alternative to the map overlay, the topographic map may be colored to indicate the level of intrusions. Examples of intrusions are in Appendix E.

Minor intrusions are those that are somewhat but not entirely compatible with the landscape or are of recognized cultural or historical significance. Color these yellow.

Moderate intrusions are those that are not well integrated into the landscape and yet do not dominate the landscape or obstruct scenic views. Color these orange.

Major intrusions are those that dominate the landscape, degrade or obstruct scenic views. Color these red.

C. Zoning map - A zoning map should delineate the scenic corridor and show existing and allowable land uses.

D. Narrative - A complete description of the elements that makes the route scenic, including natural features, structures of historical significance and other scenic resources that are visible from the highway. The narrative should describe the types of visual intrusions such as buildings, unsightly land uses, and noise barriers, and the percentage for minor, moderate, or major intrusions impacting the highway. In addition, provide a description of present zoning and planned zoning changes for lands in the scenic corridor. Include photo-images and other supporting graphics.

To calculate the percentage of the highway impacted by visual intrusions, determine the highway length impacted by each intrusion and divide it by the total mileage of the proposed scenic highway in one direction. When intrusions occur on both sides of the highway at the same location, measure and select only the more prominent intrusion (e.g., major over moderate, moderate over minor) for calculating length and percentage. As an example, when a 5-mile segment of proposed scenic highway has a 1/2-mile section that is impacted by moderate intrusions on one side and minor intrusions on the other, then it should be noted that approximately ten percent of the roadway is impacted by moderate intrusions.

The Scenic Highway Proposal should be placed on the agenda at a public meeting to allow public input at the beginning of the project. Include letters of support for the proposal from the public and other interested parties.

Examples of Scenic Highway Proposals are available on the Scenic Highways webpage at: <u>http://www.dot.ca.gov/hq/LandArch/scenic/guidelines/sr1_example.pdf</u> <u>http://www.dot.ca.gov/hq/LandArch/scenic/guidelines/sr395_example.pdf</u>

STEP 4

Caltrans Review of Scenic Highway Proposal

- Following completion of the Scenic Highway Proposal, the local governing body submits 1 electronic copy and 3 hard copies to the District Scenic Highway Coordinator.
- The District Scenic Highway Coordinator forwards a copy of the proposal to the State Scenic Highway Coordinator for concurrent review. The proposal is reviewed for

completeness and accuracy, and to ensure it complies with Section II: Scenic Highway Criteria.

- The District Scenic Highway Coordinator provides comments to the local governing body, including those by the State Scenic Highway Coordinator, for incorporating into the proposal.
- After the final package is accepted and the Scenic Highway Coordinators determine the route meets scenic highway criteria, the District Scenic Highway Coordinator directs the local governing body to begin the next step; preparation and adoption of the Corridor Protection Program as described in Section IV: Designation Process.

SECTION IV: DESIGNATION PROCESS

STEP 1 Corridor Protection Program

This step requires the local governing body to develop and adopt protection measures in the form of ordinances, zoning, and/or planning policies that apply to the area of land within the scenic corridor (see definition in Section I: Scenic Highway Program History). When there is more than one governing body involved, each jurisdiction shall jointly submit protection measures. Such ordinances and/or policies may already exist. They should be assembled in an easy-to-read format and arranged under the headings of the five legislatively required elements¹ listed below. They should be written in sufficient detail to avoid broad discretionary interpretation and demonstrate a concise strategy to effectively maintain the scenic character of the corridor. An effective protection program ensures that activities within the scenic corridor are compatible with scenic resource protection and consistent with community values, while still allowing appropriate development.

The five legislatively required elements of corridor protection² are:

1) Regulation of land use and density of development (i.e., density classifications and types of allowable land uses),

2) Detailed land and site planning (i.e., permit or design review authority and regulations for the review of proposed developments),

3) Control of outdoor advertising (i.e., prohibition of off-premise advertising signs³ and control of on-premise advertising signs),

4) Careful attention to and control of earthmoving and landscaping (i.e., grading ordinances, grading permit requirements, design review authority, landscaping and vegetation requirements), and

² For additional requirements on scenic highways see Appendix A, Section 320 of the Public Utilities Code,

¹ See Appendix A, Section 261 of the Streets and Highways Code, Planning and Design Standards.

Undergrounding of Electric and Communication Distribution Facilities near State Scenic Highways.

³ See Appendix A, Section 5440.1 of the Business and Professions Code, Outdoor Advertising Act.

5) The design and appearance of structures and equipment (i.e., design review authority and regulations for the placement of utility structures, microwave receptors, wireless communication towers, etc.).

Examples of Corridor Protection Programs are available on the Scenic Highways webpage at: <u>http://www.dot.ca.gov/hq/LandArch/scenic/guidelines/sr1_example.pdf</u> <u>http://www.dot.ca.gov/hq/LandArch/scenic/guidelines/sr395_example.pdf</u>

STEP 2 Public Participation

Public participation is important for the preparation of a Corridor Protection Program. Affected property owners, local citizens' committees, environmental groups and other stakeholders who might be impacted or interested in the proposed designation should be involved as early as possible to afford ample time for review and comment before official action is taken. Direct notification of affected parties by the local governmental body is strongly suggested. Effective citizen participation results in a protection program that meets local desires and reduces the probability of controversy.

STEP 3

Caltrans Review of Corridor Protection Program

Following adoption of the Corridor Protection Program, the local governing body(s) submits a request for official designation to the District Scenic Highway Coordinator. The submittal must include 1 electronic version and 3 hard copies of each:

- The adopted Corridor Protection Program, arranged under the headings of the five legislatively required elements,
- * A brief description of the process employed for public participation, and
- Evidence of protection program adoption such as official resolution, copy of local ordinances, or planning policies.

The Corridor Protection Program is reviewed as follows:

- The District Scenic Highway Coordinator forwards a copy of the Corridor Protection Program to the State Scenic Highway Coordinator for concurrent review. The coordinators check for compliance with the five legislatively required elements and indicate to the local governing body any deficiencies of the Corridor Protection Program.
- After receiving an acceptable submittal that includes any deficiency corrections, the District Scenic Highway Coordinator submits a recommendation for official designation to the Caltrans District Director for concurrence.
- Upon District Director concurrence, a recommendation to designate the route is submitted to the State Scenic Highway Coordinator. If the State Scenic Highway Coordinator concurs with the District recommendation, then a final recommendation to designate the route is submitted to the Caltrans Director for approval.

STEP 4 Official Designation of Scenic Highways

If the Caltrans Director approves the scenic highway recommendation, the route becomes an official State Scenic Highway. In the case of a recommendation to designate a county highway, the Director authorizes the county to designate the highway as an official County Scenic Highway. State and County Scenic Highways are on the Caltrans scenic highway map and included with other information made available to the public.

SECTION V: SCENIC HIGHWAY SIGNS

Upon official designation, Caltrans places and maintains scenic highway signs on *State* Scenic Highways. For *County* Scenic Highways the District, at its discretion, furnishes scenic highway signs to the county at no cost. The county is responsible for the installation and maintenance of these signs. Standards for scenic highway signing are published in the *Manual of Uniform Traffic Control Devices (MUTCD) California Supplement* and include guidance for:



Posting **G30** scenic highway signs (48" x 26"), when appropriate, with the words "scenic route," to identify routes that have been designated as official State Scenic Highways. The sign is installed on the right at the beginning of the scenic route. A standard sign indicating, "begin" (26" x 12") may be used with this sign.



Posting G30A scenic highway signs (12" x 18" or 18" x 27") at beginning, end and/or intermittent locations on the State Scenic Highway. These signs are posted below and on the same post as the route shields. On conventional highways, these signs will be installed at important urban and rural intersections and at three- to five-mile intervals in rural areas. G30C signs indicating "begin" (26" x 12") and/or G30D signs indicating "end" (18" x 12") may be used in combination with these signs.



Posting G30B five-sided scenic highway signs (18" x 18" or 24"x 24") at beginning and/or intermittent locations on the County Scenic Highway.

All requests for new or replacement signs must be ordered and approved by the Caltrans District Traffic Engineer.

SECTION VI: COMPLIANCE REVIEW

The degree to which a Corridor Protection Program is successful depends on enforcement of the protection measures. This requires that the District Scenic Highway Coordinator remains familiar with the requirements of the protection program and any significant visual changes to the corridor. Caltrans is authorized by statute to revoke an official scenic highway designation if it

determines that the Corridor Protection Program or the scenic quality of the corridor is no longer in compliance.

Caltrans defines non-compliance for a Corridor Protection Program as a program that:

- No longer complies with the five legislatively required elements under Section 261 of the Streets and Highways Code, or
- No longer affords protection because required elements have been amended or changed, or
- No longer is being enforced by the local governing body.

Non-compliance for scenic quality is defined as a route or route segment that has been significantly degraded due to visual intrusions.

To maintain the consistency and integrity of the California Scenic Highway Program, Caltrans conducts a compliance review of each designated scenic highway and its Corridor Protection Program every five years, or more often if the corridor has significant scenic degradation issues. The District Scenic Highway Coordinator initiates this effort and conducts a field review to assess the effectiveness of the route's protection program. At this time the local governing body(s) is asked to provide a copy of the protection program, that includes any amendments or updates, approved variances or exceptions that are relevant. If the local governing body chooses to forego this review it may request, by letter of intent, revocation of the scenic highway designation. For the complete process under this circumstance see Section VII: Revocation Process.

If it is determined that no scenic degradation or protection program infractions exist, or if infractions have been identified and are resolved, the District Scenic Highway Coordinator informs the State Scenic Highway Coordinator and certifies route compliance. When protection program infractions are identified, the District Scenic Highway Coordinator will notify the local governing body(s) to discuss a possible resolution. The local governing body(s) will be given a period of one year from the date of notification to remedy the infraction(s). The District Scenic Highway Coordinator documents the protection program infractions and whether or not they are resolved.

SECTION VII: REVOCATION PROCESS

Initiated by Caltrans

- When significant scenic degradation has occurred or when there are protection program infractions that cannot be resolved, the District Scenic Highway Coordinator informs the State Scenic Highway Coordinator.
- The District Scenic Highway Coordinator prepares the appropriate documentation and, with concurrence from the District Director, notifies the local governing body of the Department's intent to revoke the scenic highway designation.
- Following a meeting between the District and the local governing body to discuss this action, the District Scenic Highway Coordinator submits a recommendation for revocation to the State Scenic Highway Coordinator.

- If the State Scenic Highway Coordinator concurs with the District recommendation, then a final recommendation for revocation is submitted to the Caltrans Director for approval.
- The Director makes the final decision to revoke the scenic highway designation. If the Director approves revocation, the local governing body(s) receives official notification of this action. Caltrans removes scenic highway signs along the route and references in maps and other program materials.
- For County Scenic Highways the Director rescinds authority of the county to designate the highway as scenic and officially requests that the county remove the scenic highway signs along the route. References in maps and other program materials are removed.
- The appropriate portions of these State and county routes are no longer considered eligible and the local governing body (s) is no longer required to maintain its Corridor Protection Program.

Initiated by Local Governing Body

- A local governing body may request that Caltrans revoke a scenic highway designation within its jurisdiction at any time. The revocation proposal should be placed on the agenda at a public meeting to allow public input.
- A letter of intent by the local governing body must be submitted to the District Scenic Highway Coordinator. When more than one governing body is responsible for the scenic highway, a joint letter must be submitted. The letter should cite the reason(s) for the jurisdiction's desire to revoke the scenic highway designation.
- The District Scenic Highway Coordinator informs the Caltrans District Director and forwards the request, including documentation, to the State Scenic Highway Coordinator.
- After receiving the revocation request the State Scenic Highway Coordinator reviews and then forwards it to the Caltrans Director for approval.
- The Director approves the revocation and officially notifies the local governing body(s). Caltrans removes scenic highway signs along the State routes and for county routes requests that the county remove its scenic highway signs. References in maps and other program materials are removed.

SECTION VIII: CONFLICT RESOLUTION PROCESS

The Chief, Division of Design facilitates the resolution of Department or external conflicts regarding scenic highway designation or revocation proposals. Conflicts may arise from opposing recommendations between the District and the Landscape Architecture Program (LAP) for scenic highway designation or revocation proposals. Similarly, a local governing body may not agree with the Department's position on the merits of a designation or revocation proposal. The elevation of a conflict to the Chief, Division of Design, should be done only after both parties have consented to this course of action and all reasonable efforts have been made to reach agreement at the lowest level possible. Elevation of the issue should occur in a timely manner.

Initiated by Caltrans

For internal Department conflicts, issues are documented in memorandum form and forwarded to the Chief, Division of Design for discussion. The District and LAP describe their opposing positions in this memo, and provide the appropriate background, discussion, time factor, and recommendation. The Chief, Division of Design facilitates a meeting between the District and LAP representatives, and ensures that each party make a concerted effort to reach a consensus. If consensus cannot be reached, the Chief Engineer reviews the issue and determines the Department's official position for designation or revocation. The goal is to provide a unified Department response to the local jurisdiction for designation or revocation proposals.

Initiated by Local Governing Body

When the local governing body does not agree with the Department's position regarding scenic highway designation or revocation proposals, it requests a meeting with the Chief, Division of Design. The Chief, Division of Design facilitates a meeting between the local agency and the Department's representatives. Each party presents their case, and after careful consideration of this information, including scenic highway program guidance and statutes, the Chief, Division of Design recommends a resolution. If the local governing body does not agree to the resolution then they may submit an appeal to the Chief Engineer for reconsideration. The Chief Engineer reviews the appeal and makes a final determination on recommending scenic highway designation or revocation to the Director. If a revocation recommendation is forwarded to the Director for approval, full disclosure of any opposition by the local governing body is included.

SECTION IX: MISCELLANEOUS

Route Realignments and Relocation

When a route is realigned from its original location, scenic designation or eligibility status is not automatically carried over to the new location. A route may be eligible for designation when the new alignment is within the same corridor, or when the alignment is outside of the existing corridor and in an area of outstanding scenic quality. Scenic designation may be transferred if the new alignment remains within the protected scenic corridor. The Caltrans District Scenic Highway Coordinator makes these determinations with concurrence from the State Scenic Highway Coordinator.

Undergrounding of Utility Lines

Section 320 of the California Public Utilities Code requires the undergrounding of all new or relocated electric and communication distribution facilities within 1,000 feet of any highway designated an official scenic highway and visible from that highway where feasible. Appendix A provides the full text of Section 320. Copies of the Public Utilities Commission's Order and Court Decisions Relating to Section 320 are available from the Caltrans District Scenic Highway Coordinator, and provide more detail on utility undergrounding. The California Public Utilities Commission makes final determinations regarding exceptions to undergrounding utilities.
Effects of Official Designation on Highway Construction, Emergency Repairs and Maintenance Activities

Highway construction and emergency repairs proposed on designated State Scenic Highways are evaluated for visual impact to scenic views as part of the environmental process. If impacts occur, then appropriate mitigation measures are necessary. Generally, the designation of a route as an official scenic highway does not substantially alter the type of project proposed but it may limit the use of statutory or categorical exemption from the California Environmental Quality Act⁴ (CEQA).

Caltrans works with appropriate agencies to ensure the protection of scenic corridors to the maximum extent feasible. It identifies impacts to scenic corridors such as degradation and obstruction of scenic views as an integral part of its project planning, project development and maintenance operations.

⁴ See Appendix A, Public Resources Code Sections 21080.33 and 21084(b)

APPENDIX A

STATUTES RELATING TO THE CALIFORNIA STATE SCENIC HIGHWAY PROGRAM

STREETS AND HIGHWAY CODE Division 1, Chapter 2, Article 2.5

260. LEGISLATIVE INTENT

It is the intent of the Legislature in designating certain portions of the state highway system as state scenic highways to establish the State's responsibility for the protection and enhancement of California's natural scenic beauty by identifying those portions of the state highway system which, together with the adjacent scenic corridors, require special scenic conservation treatment. It is further declared to be the intent of the Legislature in designating such scenic highways to assign responsibility for the development of such scenic highways and for the establishment and application of specific planning and design standards and procedures appropriate thereto and to indicate, in broad statement terms, the location and extent of routes and areas requiring continuing and careful coordination of planning, design, construction, and regulation of land use and development, by state and local agencies as appropriate, to protect the social and economic values provided by the State's scenic resources.

261. PLANNING AND DESIGN STANDARDS; COMPLETE HIGHWAY

The department shall establish and apply pertinent planning and design standards for development of official scenic highways. In establishing and applying such standards for, and undertaking the development of official scenic highways, the department shall take into consideration the concept of the "complete highway," which is a highway which incorporates not only safety, utility, and economy, but also beauty. The department shall also take into consideration in establishing such standards that, in a "complete highway," pleasing appearance is a consideration in the planning and design process. In the development of official scenic highways, the department shall give special attention both to the impact of the highway on the landscape and to the highway's visual appearance. The standards for official scenic highways shall also require that local governmental agencies have taken such action as may be necessary to protect the scenic appearance of the scenic corridor, the band of land generally adjacent to the highway right-of-way, including, but not limited to, (1) regulation of land use and intensity (density) of development; (2) detailed land and site planning; (3) control of outdoor advertising; (4) careful attention to and control of earthmoving and landscaping; and (5) the design and appearance of structures and equipment.

262. DESIGNATION OF SCENIC HIGHWAYS

Whenever the department determines that the corridor protection program for any state highway in the state scenic highway system established by this article has been implemented by local governmental agencies and a plan and program has been developed by the department for bringing the highway up to the standards for official scenic highways established by the department, including the concept of the "complete highway," as described in Section 261, the department shall designate the highway as an official state scenic highway and shall so indicate the highway in any publications of the department or in any maps which are issued by the department to the public.

The department shall cause appropriate signs to be placed and maintained along the portions of the state scenic highway system which the department has designated as official state scenic highways that indicate that the highways are official state scenic highways.

If at any time the department determines that the corridor protection program of local governmental agencies, with respect to any highway which has been designated as an official state scenic highway, no longer adequately carries out responsibility of the local governmental agencies for the protection of the scenic corridor, it may revoke the designation of the highway as an official state scenic highway and remove the signs which so indicate the highway.

262.1 LOCATION AND CONSTRUCTION OF NEW DISTRICT FACILITY OF LOCAL AGENCY WITHIN SCENIC CORRIDOR; APPROVAL

A local agency as defined in subdivision (c) of Section 65402 of the Government Code, shall coordinate its planning with, and obtain the approval from, the appropriate local planning agency on the location and construction of any new district facility that would be within the scenic corridor of any state scenic highway.

263. SCENIC HIGHWAY SYSTEM; ESTABLISHMENT; COMPOSITION

The state scenic highway system is hereby established and shall be composed of the highways specified in this article. The highways listed in Sections 263.1 to 263.8, inclusive are either eligible for designation as state scenic highways or have been so designated.

263.1 THE STATE SCENIC HIGHWAY SYSTEM SHALL INCLUDE:

Routes 28, 35, 38, 52, 53, 62, 74, 75, 76, 89, 96, 97, 127, 150, 151, 154, 156, 158, 161, 173, 197, 199, 203, 209, 221, 236, 239, 243, 247, 254, and 330 in their entirety.

263.2 ADDITIONAL INCLUSIONS; PORTIONS OF ROUTES 1 TO 4

The state scenic highway system shall also include:

•Route 1 from: (a) Route 5 south of San Juan Capistrano to Route 19 near Long Beach, (b) Route 187 near Santa Monica to Route 101 near El Rio, (c) Route 101 at Las Cruces to Route 246 near Lompoc, (d) Route 227 south of Oceano to Route 101 near Pismo Beach, (e) Route 101 near San Luis Obispo to Route 35 near Daly City, (f) Route 35 in San Francisco to Route 101 near the approach to the Golden Gate Bridge in San Francisco, (g) Route 101 near Marin City to Route 101 near Leggett.

•Route 2 from Route 210 in La Canada Flintridge to Route 138 via Wrightwood.

•Route 3 from: (a) Route 36 near Peanut to Route 299 near Douglas City, (b) Route 299 near Weaverville to Montague.

•Route 4 from: (a) Route 160 near Antioch to Route 84 near Brentwood, (b) Route 49 near Angels Camp to Route 89.

263.3 ADDITIONAL INCLUSIONS; PORTIONS OF ROUTES 5, 8 TO 10, 12, 14 TO 18, 20, 24, 25, 27, 29, 30, 33 AND 36

- The state scenic highway system shall also include:
 - •Route 5 from: (a) The international boundary near Tijuana to Route 75 near the south end of San Diego Bay, (b) San Diego opposite Coronado to Route 74 near San Juan Capistrano, (c) Route 210 near Tunnel Station to Route 126 near Castaic, (d) Route 152 west of Los Banos to Route 580 near Vernalis, (e) Route 44 near Redding to the Shasta Reservoir, (f) Route 89 near Mt. Shasta to Route 97 near Weed, (g) Route 3 near Yreka to the Oregon state line near Hilts.

•Route 8 from Sunset Cliffs Boulevard in San Diego to Route 98 near Coyote Wells.

•Route 9 from: (a) Route 1 near Santa Cruz to Route 2 near Boulder Creek, (b) Route 236 near Boulder Creek to Route 236 near Waterman Gap, (c) Route 236 near Waterman Gap to Route 35, (d) Saratoga to Route 17 near Los Gatos, (e) Blaney Plaza in Saratoga to Route 35.

•Route 10 from Route 38 near Redlands to Route 62 near Whitewater.

•Route 12 from Route 101 near Santa Rosa to Route 121 near Sonoma.

- •Route 14 from Route 58 near Mojave to Route 395 near Little Lake.
- •Route 15 from: (a) Route 76 near the San Luis Rey River to Route 91 near Corona, (b) Route 58 near Barstow to Route 127 near Baker.

•Route 16 from Route 20 to Capay.

- •Route 17 from Route 1 near Santa Cruz to Route 9 near Los Gatos.
- •Route 18 from Route 138 near Mt. Anderson to Route 247 near Lucerne Valley.
- •Route 20 from: (a) Route 1 near Fort Bragg to Route 101 near Willits, (b) Route 101 near Calpella to Route 16, (c) Route 49 near Grass Valley to Route 80 near Emigrant Gap.

•Route 24 from the Alameda-Contra Costa county line to Route 680 in Walnut Creek.

•Route 25 from Route 198 to Route 156 near Hollister.

•Route 27 from Route 1 to Mulholland Drive.

•Route 29 from: (a) Route 37 near Vallejo to Route 221 near Napa, (b) The vicinity of Trancas Street in northwest Napa to Route 20 near Upper Lake.

•Route 30 from Route 330 near Highland to Route 10 near Redlands.

•Route 33 from: (a) Route 101 near Ventura to Route 150, (b) Route 150 to Route 166 in Cuyama Valley, (c) Route 198 near Coalinga to Route 198 near Oilfields.

•Route 36 from: (a) Route 101 near Alton to Route 3 near Peanut, (b) Route 89 near Morgan Summit to Route 89 near Deer Creek Pass.

263.4 ADDITIONAL INCLUSIONS; PORTIONS OF ROUTES 37, 39 TO 41, 44, 46, 49, 50, 57, 58, 68, 70 AND 71

The state scenic highway system shall also include:

- •Route 37 from: (a) Route 251 near Nicasio to Route 101 near Novato, (b) Route 101 near Ignacio to Route 29 near Vallejo.
- •Route 39 from Route 210 near Azusa to Route 2.
- •Route 40 from Barstow to Needles.
- •Route 41 from: (a) Route 1 near Morro Bay to Route 101 near Atascadero, (b) Route 46 near Cholame to Route 33, (c) Route 49 near Oakhurst to Yosemite National Park.
- •Route 44 from Route 5 near Redding to Route 89 near Old Station.
- •Route 46 from: (a) Route 1 near Cambria to Route 101 near Paso Robles, (b) Route 101 near Paso Robles to Route 41 near Cholame.

•Route 49 from: (a) Route 41 near Oakhurst to Route 120 near Moccasin, (b) Route 120 to Route 20 near Grass Valley, (c) Route 20 near Nevada City to Route 89 near Sattley.

•Route 50 from Route 49 near Placerville to the Nevada state line near Lake Tahoe.

•Route 57 from Route 90 to Route 60 near Industry.

•Route 58 from Route 14 near Mojave to Route 15 near Barstow.

•Route 68 from Monterey to Route 101 near Salinas.

•Route 70 from Route 149 near Wicks Corner to Route 83 north of Corona.

•Route 71 from Route 91 near Corona to Route 83 north of Corona.

263.5 ADDITIONAL INCLUSIONS; PORTIONS OF ROUTES 78 TO 80, 84, 88, 91, 92 AND 94

The state scenic highway system shall also include:

•Route 78 from Route 79 near Santa Ysabel to Route 86 passing near Julian.

•Route 79 from: (a) Route 8 near Descanso to Route 78 near Julian, (b) Route 78 near Santa Ysabel to Route 371 near Aguanga.

•Route 80 from: (a) Route 280 near First Street in San Francisco to Route 61 in Oakland, (b) Route 20 near Emigrant Gap to the Nevada state line near Verdi, Nevada.

•Route 84 from Route 238 to Route 680 near Sunol.

•Route 88 from Route 49 in Jackson to the Nevada state line via Pine Grove, Silver Lake, and Kirkwood.

•Route 91 from Route 55 near Santa Ana Canyon to Route 15 near Corona.

•Route 92 from Route 1 near Half Moon Bay to Route 280 near Crystal Springs Lake.

•Route 94 from Route 125 near Spring Valley to Route 8 west of Jacumba.

263.6 ADDITIONAL INCLUSIONS; PORTIONS OF ROUTES 101, 108, 111, 116, 118, 120, 121, 125 AND 126

The state scenic highway system shall also include:

•Route 101 from: (a) Route 27 (Topanga Canyon Road) to Route 46 near Paso Robles, (b) Route 156 near Prunedale northeasterly to Route 156, (c) A point in Marin County opposite San Francisco to Route 1 near Marin City, (d) Route 37 near Ignacio to Route 37 near Novato, (e) Route 20 near Calpella to Route 20 near Willits, (f) Route 1 near Leggett to Route 199 near Crescent City, (g) Route 197 near Fort Dick to the Oregon state line.

•Route 108 from Route 49 near Sonora to Route 395.

•Route 111 from: (a) Bombay Beach in Salton Sea State Park to Route 195 near Mecca, (b) Route 74 near Palm Desert to Route 10 near Whitewater.

•Route 116 from Route 101 near Cotati to Route 1 near Jenner.

•Route 118 from Route 23 to DeSoto Avenue near Browns Canyon.

•Route 120 from: (a) Route 49 near Chinese Camp to Route 49 near Moccasin, (b) The east boundary of Yosemite National Park to Route 395 near Mono Lake.

•Route 121 from: (a) Route 37 near Sears Point to Route 12 near Sonoma, (b) Route 221 near Napa State Hospital to near the vicinity of Trancas Street in northeast Napa.

•Route 125 from Route 94 near Spring Valley to Route 8 near La Mesa.

•Route 126 from Route 150 near Santa Paula to Route 5 near Castaic.

263.7 ADDITIONAL INCLUSIONS; PORTIONS OF ROUTES 138 TO 140, 142, 146, 152, 160, 163, 166, 168, 174, 178, 180, 190 AND 266

The state scenic highway system shall also include:

- •Route 138 from Route 2 near Wrightwood to Route 18 near Mt. Anderson.
- •Route 139 from Route 299 near Canby to the Oregon state line near Hatfield.
- •Route 140 from Route 49 at Mariposa to Yosemite National Park near El Portal.
- •Route 142 from the Orange-San Bernardino county line to Peyton Drive.
- •Route 146 from Pinnacles National Monument to Route 25 in Bear Valley.
- •Route 152 from: (a) Route 1 to the Santa Clara county line at Hecker Pass, (b) Route 156 near San Felipe to Route 5.
- •Route 160 from Route 4 near Antioch to Sacramento.
- •Route 163 from Ash Street in San Diego to Route 8.
- •Route 166 from Route 101 near Santa Maria to Route 33 in Cuyama Valley.
- •Route 168 from: (a) Route 65 near Clovis to Huntington Lake, (b) Camp Sabrina to Route 395, (c) Route 395 at Big Pine to Route 266 at Oasis.
- •Route 174 from the Bear River to the Grass Valley city limits.

•Route 178 from the east boundary of Death Valley National Monument to Route 127 near Shoshone.

•Route 180 from: (a) Route 65 near Minkler to General Grant Grove section of Kings Canyon National Park, (b) General Grant Grove section of Kings Canyon National Park to Kings Canyon National Park boundary near Cedar Grove.

- •Route 190 from Route 65 near Porterville to Route 127 near Death Valley Junction.
- •Route 266 from the Nevada state line easterly of Oasis to Route 168 at Oasis.

263.8 ADDITIONAL INCLUSIONS; PORTIONS OF ROUTES 198, 210, 215, 251, 280, 299, 395, 580 AND 680

- The state scenic highway system shall also include:
 - •Route 198 from: (a) Route 101 near San Lucas to Route 33 near Coalinga, (b) Route 33 near
 - Oilfields to Route 5, (c) Route 99 near Goshen to the Sequoia National Park line.
 - •Route 210 from Route 5 near Tunnel Station to Route 134.
 - •Route 215 from Route 74 near Romoland to Route 74 near Perris.
 - •Route 251 from Route 37 near Nicassio to Route I near Point Reyes Station.
 - •Route 280 from Route 17 in Santa Clara County to Route 80 near First Street in San Francisco.
 - •Route 299 from: (a) Route 101 near Arcata to Route 96 near Willow Creek, (b) Route 3 near Weaverville to Route 5 near Redding, (c) Route 89 near Burney to Route 139 near Canby.
 - •Route 395 from Route 14 near Little Lake to Route 89 near Coleville.
 - •Route 580 from Route 5 southwest of Vernalis to Route 80.
 - •Route 680 from the Santa Clara-Alameda county line to Route 24 in Walnut Creek.

STREETS AND HIGHWAYS CODE Division I, Chapter 1, Article 3

154. COUNTY SCENIC HIGHWAYS; ENCOURAGEMENT; DESIGNATION; REVOCATION OF DESIGNATION

The department shall encourage the construction and development by counties of portions of the county highways as official county scenic highways and may furnish to the counties any information or other assistance which will aid the counties in the construction or development or such scenic highways. Whenever the department determines that any county highway meets the minimum standards prescribed by the department for official scenic highways, including the concept of the "complete highway," as described in Section 261, it may authorize the county in which the highway is located to designate the highway as an official county scenic highway and the department shall so indicate the highway in publications of the department and in any maps which are prepared by the department for distribution to the public which show the highway.

If the department determines that any county highway which has been designated as an official county scenic highway no longer meets the minimum standards prescribed by the department for official scenic highways, it may, after notice to the county and a hearing on the matter, if requested by the county, revoke the authority of the county to designate the highway as an official county scenic highway.

PUBLIC UTILITIES CODE Division 1, Part 1, Chapter 2

320. UNDERGROUNDING OF ELECTRIC AND COMMUNICATION DISTRIBUTION FACILITIES NEAR STATE SCENIC HIGHWAYS

The Legislature hereby declares that it is the policy of this State to achieve, whenever feasible and not inconsistent with sound environmental planning, the undergrounding of all future electric and communication distribution facilities which are proposed to be erected in proximity to any highway designated a state scenic highway pursuant to Article 2.5 (commencing with Section 260) of Chapter 2 of Division 1 of the Streets and Highways Code and which would be visible from such scenic highways if erected above ground. The commission shall prepare and adopt by December 31, 1972, a statewide plan and schedule for the undergrounding of all such utility distribution facilities in accordance with the aforesaid policy and the policy and the rules of the commission relating to the undergrounding of facilities.

The commission shall coordinate its activities regarding the plan with local governments and planning commissions concerned.

The commission shall require compliance with the plan upon its adoption.

This section shall not apply to facilities necessary to the operation of any railroad.

PUBLIC RESOURCES CODE California Environmental Quality Act (CEQA) Chapter 2.6: General

21080.33. EMERGENCY PROJECTS TO MAINTAIN, REPAIR OR RESTORE EXISTING HIGHWAYS; APPLICATION OF DIVISION; EXCEPTIONS (TO CEQA)

This division does not apply to any emergency project undertaken, carried out, or approved by a public agency to maintain, repair, or restore an existing highway, as defined in Section 360 of the Vehicle Code, except for a highway designated as an official state scenic highway pursuant to Section 262 of the Streets and Highways Code, within the existing right-of-way of the highway, damaged as a result of fire, flood, storm, earthquake, land subsidence, gradual earth movement, or landslide, within one year of the damage.

This section does not exempt from this division any project undertaken, carried out, or approved by a public agency to expand or widen a highway damaged by fire, flood, storm, earthquake, land subsistence, gradual movement, or landslide.

21084. LIST OF EXEMPT CLASSES OF PROJECTS; PROJECTS DAMAGING SCENIC RESOURCES

b) No project which may result in damage to scenic resources, including, but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway designated as an official state scenic highways, pursuant to Article 2.5 (commencing with Section 260) of Chapter 2 of Division 1 of the Streets and Highways Code, shall be exempted from this division pursuant to subdivision (a). This subdivision does not apply to improvements as mitigation for a project for which a negative declaration has been approved or an environmental impact report has been certified.

BUSINESS AND PROFESSIONS CODE Outdoor Advertising Act Division 3, Chapter 2. Advertisers Article 8. Landscaped Freeways

5441. Removal of Structures, Signs

Except as provided in Section 5442.5, no advertising display may be placed or maintained along any highway or segment of any interstate highway or primary highway that before, on, or after the effective date of Section 131(s) of Title 23 of the United States Code is an officially designated scenic highway or scenic byway.

Appendix B

Scenic Highway Designation



Appendix C

Scenic Highway Compliance Review and Revocation



APPENDIX D

CALTRANS HEADQUARTERS AND DISTRICT OFFICES

Below are the streets and mailing addresses for the Caltrans District Offices, and phone numbers of the District Scenic Highway Coordinators. Contact the District Scenic Highway Coordinator regarding general questions and prior to initiating the scenic highway nomination process. You may also contact the State Scenic Highway Coordinator at Caltrans Headquarters.



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District 7 120 South Spring Street, Los Angeles CA 90012 Dahlia Persoff (213) 897-0463

District 8 464 West Fourth Street, San Bernardino CA 92401-1400 Ray Desselle (909) 381-4529

District 9 500 South Main Street, Bishop CA 93514 Bart Godett (760) 872-1355

District 10 1976 East Charter Way, Stockton CA 95205 (P.O. Box 2048, 95201) Kathleen McClaflin (209) 948-7647

District 11 4050 Taylor Street, San Diego CA 92110 Tom Ham (619) 688-6719

District 12 3337 Michelson Drive, Suite 380, Irvine CA 92612-8894 Sandy Ankhasirisan (949) 724-2449

APPENDIX E

EXAMPLES OF VISUAL INTRUSIONS ALONG SCENIC CORRIDORS

The following examples do not include all visual intrusions possible within the corridor. These examples illustrate many of the typical built elements, and should be used as a guide when developing the mapping for the Scenic Highway Proposal. Where more than one example is listed, only one example needs to occur for an intrusion to be applicable. The District Scenic Highway Coordinator may be consulted for assistance in defining specific levels of visual intrusions.

LEVEL OF INTRUSION AND COLOR: Minor Moderate Major

BUILDINGS:

Residential Development, Commercial Development, Industrial Development

Minor - Widely dispersed buildings. Natural landscape dominates. Wide setbacks and buildings screened from roadway. Forms, exterior colors and materials are compatible with landscape. Buildings have cultural or historical significance.

Moderate - Increased numbers of buildings, not well integrated into the landscape. Smaller setbacks and lack of roadway screening. Buildings do not dominate the landscape or obstruct scenic view.

Major - Dense and continuous development. Highly reflective surfaces. Buildings poorly maintained. Visible blight. Development along ridgelines. Buildings dominate the landscape or obstruct scenic view.

UNSIGHTLY LAND USES:

Dumps, Quarries, Concrete Plants, Tank Farms, Auto Dismantling



Minor - Screened from view so that most of facility is not visible from the highway.

Moderate - Not screened and visible but programmed/funded for removal and site restoration. Land use is visible but does not dominate the landscape or obstruct scenic view.

Major - Not screened and visible by motorists. Will not be removed or modified. Land use dominates the landscape or obstructs scenic view.

COMMERCIAL RETAIL DEVELOPMENT



Moderate - Neat and well landscaped. Single story. Generally blends with surroundings. Development is visible but does not dominate the landscape or obstruct scenic view.

Major - Not harmonious with surroundings. Poorly maintained or vacant. Blighted. Development dominates the landscape or obstructs scenic view.

PARKING LOTS



Minor - Screened from view so that most of the vehicles and pavement are not visible from the highway.

Moderate - Neat and well landscaped. Generally blends with surroundings. Pavement and/or vehicles visible but do not dominate the landscape or degrade scenic view.

Major - Not screened or landscaped. Pavement and/or vehicles dominate the landscape or degrade scenic view.

OFF-SITE ADVERTISING STRUCTURES



Major - Billboards degrade or obstruct scenic view.

NOISE BARRIERS

Moderate - Noise barriers are well landscaped and complement the natural landscape. Noise barriers do not degrade or obstruct scenic view.

Major - Noise barriers degrade or obstruct scenic view.

POWER LINES AND COMMUNICATION FACILITIES



Minor - Not easily visible from road.

Moderate - Visible, but do not dominate scenic view.

Major - Towers, poles or lines dominate view. Scenic view is degraded.

AGRICULTURE:

Structures, Equipment, Crops



Minor - Generally blends in with scenic view. Is indicative of regional culture.

Moderate - Not compatible with the natural landscape. Scale and appearance of structures and equipment visually competes with natural landscape.

Major - Scale and appearance of structures and equipment are incompatible with and dominates natural landscape. Structures, equipment or crops degrade or obstruct scenic view.

EXOTIC VEGETATION

Minor - Used as screening and landscaping. Generally is compatible with scenic view.

Moderate - Competes with native vegetation for visual dominance.

Major - Incompatible with and dominates natural landscape. Scenic view is degraded.

CLEARCUTTING

Moderate - Clearcutting or deforestation is evident, but is in the distant background.

Major - Clearcutting or deforestation is evident. Scenic view is degraded.

EROSION

Minor - Minor soil erosion. (i.e., rill erosion)

Moderate - Rill erosion starting to form gullies.

Major - Large slip outs and/or gullies with little or no vegetation. Scenic view is degraded.

GRADING

Minor - Grading generally blends with adjacent landforms and topography.

Moderate - Some changes, less engineered appearance and restoration is taking place.

Major - Extensive cut and fill. Unnatural appearance, scarred hillsides or steep slopes with little or no vegetation. Canyons filled in. Scenic view is degraded.

ROAD DESIGN



Minor - Blends in and complements scenic view. Roadway structures are suitable for location and compatible with landscape.

Moderate - Large cut and fill slopes are visible. Scale and appearance of roadway, structures, and appurtenances are incompatible with landscape.

2. TULARE COUNTY BOARD OF SUPERVISORS AGENDA ITEMS APRIL 25, 2006 AND DECEMBER 12, 2006

AGENDA DATE: April 25, 2006



RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD. VISALIA, CR. 93277 PHORE (559) 733-6291 FAX (559) 730-2653
 Britt L. Fussel
 Engineering

 Deborah Kruse
 Development Services

 Jean P. Brou
 Transportation

 George Finney
 Long Range Planning

 Hal Cypert
 Support Services

 Roger Hunt
 Administrative Services

THOMAS W. SHERRY, ASSOCIATE DIRECTOR

HENRY HASH, DIRECTOR

AGENDA ITEM

ITEM NO.

District 1

SUBJECT: Highway 198 State Scenic Highway Designation

REQUEST(S):

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- (1) Receive a presentation regarding a proposal to designate a portion of Highway 198, extending eastward from Road 248, through the gateway community of Three Rivers, ending at the Sequoia National Park boundary, as a California Scenic Highway.
- (2) Adopt a Resolution endorsing the proposal to designate said portion of Highway 198 as a California Scenic Highway, as part of a Scenic Highway Resolution Package, to be submitted to Caltrans for their consideration.

SUMMARY: The Tulare County Resource Management Agency (RMA) has received a request from the Three Rivers Village Foundation and Caltrans to serve as lead agency on a proposal to designate a 16 mile segment of Highway 198, extending eastward from Road 248, through the gateway community of Three Rivers, ending at the Sequoia National Park boundary, as a California Scenic Highway. RMA staff and members of the Three Rivers Village Foundation will give a short presentation describing the attached Scenic Highway Resolution Package and requesting your Board's support for Scenic Highway designation

ANALYSIS: In 1963, the State Legislature established the California State Scenic Highways Program, along with a Scenic Highway Advisory Committee, to recommend criteria for the review and approval of official Scenic Highway designations (SB No. 1467, Farr, 1963). In the same year, the State Master Plan for Scenic Highways identified 6,787 miles of California State highways scenic enough to be determined eligible for Scenic Highway designation. Highway 198 east of Highway 99 to the Sequoia National Park boundary and Highway 190 from Porterville east to Springville were listed as eligible for Scenic Highway designation at that time. It was left to the local communities or counties to request official designation, providing the necessary documentation and a demonstration of public support for the project.

In 1969, in order to encourage local planning for scenic highways, the state legislature amended Section 65302 of the California Government Code to include a Scenic Highways Element as a mandatory element of General Plans of counties and general law cities. In response to this directive, in 1975, Tulare County

adopted the Scenic Highways Element of the General Plan (PC Resolution No. 4461 (August 27, 1975) and BOS Resolution No. 75-2590 (September 16, 1975). In an introductory letter to the Scenic Highways Element, Planning Director Robert L. Wall stated:

"This Scenic Highways Element of the Tulare County General Plan has been prepared as a State of California mandated element.

It is designed...to provide policies and implementation procedures to protect scenic routes in Tulare County. Further, its adoption sets up the necessary process for the State to officially designate portions of Highways 198 and 190 as official scenic highways..." (Wall, Scenic Element, 1975).

The Tulare County Scenic Highways Element (TCSHE) addresses factors affecting preservation of scenic routes; proposed policies and implementation procedures to assure scenic quality and outlines local government's responsibility for adding scenic routes to the California State Master Plan for Scenic Highways (TCSHE 1975, Abstract).

In 1980, the Three Rivers Community Plan was adopted (PC Resolution No. 5424 (March 12, 1980) and the BOS Resolution No. 80-1255 (May 20, 1980). This plan discusses issues related to Scenic Highway designation and includes as a goal of its implementation plan the "[d]esignation and precise delineation of the Scenic Corridor along State Highway 198 (TRCP 1980: 35-36)."

In 1981, Tulare County adopted the Foothill Growth Management Plan (FGMP) (PC Resolutions 5547, 5563 and 5603; BOS Resolutions 80-2731 and No. 81-385). The FGMP includes the goal of providing local protection of scenic highways and roads within the foothills (FGMP 1981:15). This plan also contains policies designed to help meet the goal of scenic preservation, including suggestions for development guidelines to ensure that the visual qualities of scenic roads are maintained:

"Projects located within a scenic corridor shall be designed in a manner which does not detract from the visual amenities of the thoroughfare" (FGMP 1981:15-16).

Also in 1981, Tulare County added a Scenic Corridor Combining Zone to its Zoning Ordinance, with the stated purpose:

"... to preserve and protect the scenic quality of the immediately visible land area adjacent to those scenic highways and scenic roads established by the Tulare County General Plan, and to prevent visual obstructions of the extended view from such scenic highways and roads." (TC Zoning Ordinance Section 14.4).

While public support for Scenic Highways was present in language from the above plans and was also demonstrated by public support for the Scenic Corridor Combining Zone Ordinance, no official request for designation of a State Scenic Highway was undertaken until 2005, as part of a grassroots initiative spearheaded by Three Rivers residents. In the mid 1990s, a core group of civic-minded Three Rivers residents initiated a grassroots effort to establish a Visitors Interpretive Center in the community. During the next few years, an appropriate site was identified for the facility and funding for grants for the project was provided through donations of local residents and Tulare County. In 2000, the project was approved for Intermodal Surface Transportation Efficiency Act (TEA) funding, but the project was delayed by Caltrans requirements for in-depth archaeological study of the proposed site. In 2002, the project received Caltrans allocation of TEA funds for preliminary engineering and environmental work, which was completed in 2004.

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Subsequently, a revised application for TEA funds was submitted to the Tulare County Association of Governments (TCAG) and approved. However, in July 2004, Caltrans notified TCAG that the project would require several new conditions to qualify for funding, including formal designation of Highway 198 as a State Scenic Highway.

In 2005, Assemblyman William Maze promoted legislation to designate segments of State Highway Route 198 as a State Scenic Highway (AB 1281, Maze, 5/24/05). However, it was determined that Highway 198 could not be statutorily designated and must instead follow the formal process for Scenic Highway designation, review and approval through the procedure described in Guidelines for the Caltrans State Scenic Highway designation (Caltrans, Guidelines for the Official Designation of Scenic Highways, March 1996, available online http://www.dot.ca.gov/hq/LandArch/scenic/shpg1.htm).

In January 2006, District 1 Supervisor Allen Ishida sponsored a Three Rivers Town Hall Meeting, attended by members of the Three Rivers Village Foundation, other citizens of Three Rivers, representatives of Caltrans, TCAG, and Tulare County RMA. At that meeting, the steps required by Caltrans for designation were discussed. The steps required by Caltrans for designation include:

- 1) A visual assessment of the route to determine if it meets the current scenic highway criteria;
- 2) Submission of a Resolution of Intent Package to the Departmental Transportation Advisory Committee (DTAC) through the appropriate Caltrans district office; and
- 3) Prepare and adopt a scenic corridor protection program. This will be reviewed by Caltrans staff and DTAC. If they recommend approval, it will be forwarded to the Caltrans Director for final approval (Caltrans Scenic Highways Guidelines (Section III Nomination Process and Section IV Designation Process, available online at http://www.dot.ca.gov/hq/LandArch/ scenic/shpg1.htm)

At the meeting, tasks were assigned and a timeline was proposed to complete steps 1) and 2) above. The Scenic Highway Resolution Package, which will be submitted to Caltrans for review will include the following:

- A) A Narrative (Exhibit A, attached) describing elements that make the route scenic, including natural, historical, or other scenic features visible from the highway. The narrative must also describe present zoning and future plans for lands in the scenic corridor;
- B) **Topographic maps** showing the suggested scenic corridor boundaries, natural features, and visual intrusions;
- C) A Zoning map delineating the scenic corridor and showing existing allowable land uses;
- D) A Video, excerpts from which will be shown at the meeting, displaying both sides of the corridor as a representative sample of the characteristics along the corridor, as viewed by the motorist (excerpts will be shown at the BOS meeting); and
- E) A **Resolution of Intent** enacted by the local governing body, citing the reason for seeking official scenic designation.

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The Resolution of Intent Package containing the above items will be submitted to the Departmental Transportation Advisory Committee (DTAC) through Caltrans District Office 6. The Caltrans District and Headquarters Scenic Highway Coordinators will evaluate it for official designation potential. If the route proposed for designation is determined to meet the legislative intent of the California Scenic Highways Program, the local jurisdiction must next develop and adopt a scenic protection plan in the form of ordinances that apply to the area of land within the scenic corridor. They must include, at a minimum, five legislatively required standards:

- 1) Regulation of land use and density of development;
- 2) Detailed land and site planning;

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- 3) Prohibition of off-site outdoor advertising and control of on-site outdoor advertising;
- 4) Careful attention to and control of earthmoving and landscaping; and
- 5) The design and appearance of structures and equipment.

Many of these requirements are already being met by Tulare County. The Scenic Corridor (SC) Combining Zone (Section 14.4, Tulare County Zoning Ordinance) regulates off-site signage and when combined with the Planned Development-Foothill Zone (PD-F) or the Foothill Agricultural Zone (AF), adds requirements for on-premises outdoor advertising signs. For proposed developments subject to Site Plan Review (Section 16.2, Tulare County Zoning Ordinance) the "SC" overlay includes requirements for underground utility lines and regulates grading and/or cut and fill on sloping lands if such activities have an adverse impact on scenic resources visible from scenic highways and roads. Slopes resulting from grading or cut and fill activity must be stabilized by plantings and existing vegetation and unique land forms such as rock outcrops, shall be retained and protected from any unnecessary grading or other developments. Yard and lot requirements include minimum setbacks for front and side yards and regulate lot widths (Tulare County Zoning Ordinance, Revised September 2005, Section 14.4).

Caltrans will evaluate existing zoning ordinances and help identify areas where improvements are needed. If, after review, Caltrans determines that the proposed portion of Highway 198 qualifies for designation, a Scenic Corridor Protection Plan will also be required. Public participation will be an important component of the preparation and adoption of a scenic protection program. Affected property owners, local citizens' committees, environmental organizations and others who may be impacted or interested will be contacted for review and comment. The Scenic Corridor Protection Plan will then be submitted to the Scenic Byways Coordinator at Caltrans for approval and will then be forwarded to the Director of Caltrans for final approval. If approved, the next step is the adoption of a scenic corridor protection program, reviewed by Caltrans staff and DTAC to determine whether it meets the legislative standards, a recommendation for designation will then be forwarded to the Caltrans Guidelines Section IV Designation Process). If the Director agrees with the DTAC recommendation, the route will be designated an official state or county scenic highway.

After official Scenic Highway designation, the route will be identified through signage with the colorful Caltrans "poppy" sign logo. Descriptions of the route will also be included in relevant departmental publications and travel maps. Other benefits of the program include protection of scenic resources through land use planning, with the potential to enhance the local economy by attracting media attention and tourist dollars to the area. State Scenic Highway Designation will increase eligibility for highway maintenance and improvement funding for certain projects through the Transportation Enhancement Activities (TEA)

Program. State Scenic Highway designation is also the first step in establishing eligibility for federal scenic highway programs such as the National Scenic Byways Program, which can provide additional publicity for the route, as well as eligibility for additional federal funding for planning (Caltrans Guidelines for Scenic Highway Designation, sections VI Designation and V Monitoring; National Scenic Byways Program Online, http://www.byways.org/learn/).

FINANCING: N/A

ALTERNATIVES:

- 1. Deny the request.
- 2. Expand the Scenic Highway designation proposal to include the section of Highway 198 beginning at Road 168, extending east past the Kaweah Oaks Preserve and through Lemon Cove and Three Rivers and ending at the Sequoia National Park boundary.

INVOLVEMENT OF OTHER DEPARTMENTS OR AGENCIES:

Caltrans will evaluate the eligibility request.

SIGNATURE REQUIREMENTS:

County Administrative Officer/Clerk of the Board of Supervisors or authorized Deputy to attest to the resolution.

ADMINISTRATIVE SIGN OFF:

RESOURCE MANAGEMENT AGENCY

George Finney Assistant Director Long Range Planning Branch

ce:

Three Rivers Village Foundation Caltrans Tulare County Planning Commission

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Submittal Date: April 12, 2006

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E.M Henry Hash, Director

Tulare Co. Association of Governments Tulare County RMA Transportation Branch Tulare County RMA Engineering Branch

BEFORE THE BOARD OF SUPERVISORS

COUNTY OF TULARE, STATE OF CALIFORIA

IN THE MATTER OF HIGHWAY 198)	
STATE SCENIC HIGHWAY DESIGNATION)	RESOLUTION NO.

WHEREAS, the Tulare County Resource Management Agency has been supporting initiatives by grassroots individuals and organizations, including the Three Rivers Village Foundation, to promote scenic protection and encourage tourism through support for an official Scenic Highway Designation for State Highway 198 from Road 248 ending at the Sequoia National Park Boundary; and

WHEREAS, the easternmost section of California State Highway 198 in Tulare County includes some of the state's most spectacular scenery along a public highway; stretching from Road 248 past Lake Kaweah, through the gateway community of Three Rivers, to the Sequoia National Park boundary; and

WHEREAS, nearly one million visitors per year (983,395 visitors in 2005) enjoy the exceptional vistas along this sixteen mile stretch of highway as they travel from Visalia to Sequoia National Park; and

WHEREAS, recognizing the economic and aesthetic value of scenic highways, the State Legislature established the California Scenic Highway Program in 1963 (SB No. 1467 (Farr)) to showcase and promote the state's most visually appealing roads; and

WHEREAS, Highway 198 in Tulare County from Highway 99 to the Sequoia National Park boundary has been determined eligible by the state of California for Scenic Highway designation since 1963 (State Master Plan for Scenic Highway, State of California, Business and Transportation Agency, Department of Public Works, 1963); and

WHEREAS, on September 16, 1975 the Tulare County Board of Supervisors by Resolution No. 75-2590, adopted the Scenic Highways Element of the Tulare County General Plan, having the purpose of providing "...policies and implementation procedures to protect scenic routes in Tulare County. Further, its adoption sets up the necessary process for the State to officially designate portions of Highways 198 and 190 as official scenic highways" and

. . .

WHEREAS, The Foothill Growth Management Plan (1981) acknowledged the following goal: "Provide local protection of scenic highways and roads within the foothills," and identified several policies to help meet this goal (FGMP pp.15-16) including the following:

- "Insure that the visual qualities of State Highways 190 and 198 and scenic County roads are maintained and protected against obtrusive development improvements."
- "Require that development along all scenic highways and roads meet the development standards of the FGMP"
- "Projects located within a scenic corridor shall be designed in a manner which does not detract from the visual amenities of that thoroughfare;" and

WHEREAS, a Scenic Corridor Combining Zone was added to the Tulare County Zoning Ordinance (Ord. No. 2282, effective 10-25-79; amended by Ord. No. 2417, effective 5-28-81) with the purpose "to preserve and protect the scenic quality of the immediately visible land area adjacent to those scenic highways and scenic roads established by the Tulare County General Plan, and to prevent visual obstructions of the extended view from such scenic highways and roads." (TC Zoning Ordinance Section 14.4 page 1; and

WHEREAS, The scenic overlay zone has been combined with other existing zones and applied only to those areas in Three Rivers immediately visible from and adjacent to Highway 198); and

WHEREAS, the Tulare County Board of Supervisors wholeheartedly concurs with assessment that Highway 198 has scenic value worthy and deserving of formal recognition, thereby enhancing the continuity of the designation and increasing public awareness of this scenic resource; and

WHEREAS, Scenic Highway status will identify the route through the use of colorful Caltrans "poppy" sign logo, will be identified through travel maps and maps produced by the State Division of Tourism, will protect scenic resources through land use planning, will enhance the local economy by attracting media attention and tourist dollars to the area and will increase eligibility for highway maintenance and improvement funding for certain projects through the Transportation Enhancement Activities (TEA) Program; and

WHEREAS, State Scenic Highway designation is the first step in establishing eligibility for federal scenic highway programs such as the National Scenic Byways Program which include increased publicity and eligibility for additional federal funding for planning;

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NOW, THEREFORE, BE IT RESOLVED, that the County of Tulare Board of Supervisors enthusiastically endorses and supports the County of Tulare official request that Caltrans to extend formal State Scenic Highway designation on the segment of Highway 198 from Road 248 ending at the Sequoia National Park boundary.

Upon motion of Supervisor ______, seconded by Supervisor ______, the following was adopted by the Board of Supervisors, at an official meeting held on the 25th day of April 2006, by the following roll call vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

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ATTEST: C. BRIAN HADDIX COUNTY ADMINISTRATIVE OFFICER CLERK, BOARD OF SUPERVISORS

BY: _____ Deputy Clerk

Exhibit A:

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A Narrative Describing Elements That Make the Route Scenic

<u>D</u> <u>R</u> <u>A</u> <u>F</u> <u>T</u> Kaweah Scenic Highway Visual Assessment

Overview

March 27, 2006

The Kaweah Scenic Highway, the easternmost leg of Highway 198, is 16 miles long, extending from the Highway 248 intersection in the valley citrus groves up to the entrance to Sequoia National Park. The route takes the traveler up Lemon Hill, around Lake Kaweah, through the town of Three Rivers, following the Kaweah River to the Park. The Scenic Highway is best presented and described in three segments: the Lake Kaweah portion, the Three Rivers Town portion and the River Gorge portion.

A significant feature contributing to the enjoyment of the highway is that for its entire length it closely follows around Lake Kaweah and runs alongside the Kaweah River, providing a shared element to the highly diversified landscape. The high visual contrast between the scenes at the start in the citrus groves on the valley floor and those of the foothills and mountains beyond is a particularly memorable feature. Throughout the route the distant views of what's ahead creates curiosity and anticipation. Not to be overlooked is the role of the highway itself. Mostly two-lanes, with an occasional passing lane, the roadway, with its many curves, rise and fall in elevations and shifting directional views provides a wonderful stage from which to experience the scope of the Kaweah Scenic Highway.

The lake, river and landscape show wide diversity with the seasons and the amount of water present. Plant life changes as the elevation or slope aspect increases. The stark white, twisted trunks of the California Sycamore grow on the riverbanks contrasting with shimmering cottonwoods. Further up the bank, along the highway can be seen ancient, towering valley Oaks, grand sentinels marking an earlier era. The steeper slopes at higher elevations are covered by drought tolerant chaparral shrubs such as the Buckeye, Redbud, Lupines, Deerbrush and Manzanita, whose tawny golden summer color is a California characteristic.

Wildlife abounds with migratory birds and mammals often visible at dawn, dusk and after dark. Sightings may include that of Black Bear, Gray Fox, Coyote, Bobcat, Deer, Skunk, Raccoon, Opossum, Tarantula, Quail, Red Shoulder and Red Tail Hawks. Cattle will be seen grazing on the hillsides. The lucky visitor might also see majestic Bald Eagle along migratory corridors around the lake and throughout Three Rivers.

Yokut people centuries ago found many resources here along the Kaweah, rich with Oak acorns, wildlife and fish. Much of the road has its origin in routes used by these Native Americans as well as early explorers, settlers and miners who used this same route to access the big tree groves and high mountain meadows and peaks. And today the town of Three Rivers remains unique in its placement amid the confluence of the multiple river forks of the Kaweah River watershed.

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Segment 1 – Lake Kaweah Portion

Road 248 to Three Rivers Entrance (Mile .00 to 7.2, length 7.2 miles)

Percentage Visual Intrusions: Moderate: Apprx. 2% Minor: Apprx. 5%

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Segment 1 Summary

This segment of the route is defined by its close relationship to the boundaries and character of Lake Kaweah. The lake was created with the construction of the Terminus Dam in 1962. In addition to the beauty and recreational outlet the lake gives the area, the dam protects the valley below from seasonal flooding, stores water for agricultural use during the dry summer season and generates hydro-electric power for regional use. The relative absence of private or commercial development along the lake segment of the route has left the land in an unusually intact and highly scenic state. Expansive vistas across Lake Kaweah and up toward the rugged snow-capped peaks leave a vivid and lasting impression on those who travel this road.

In each season, the views vary profoundly. The annual ebb and flow of water drastically changes the appearance of the lake area. In early summer, with the onset of snowmelt, the reservoir is full and at its recreational peak. Towards the end of summer, as water is released from the dam to irrigate Central Valley crops, the water recedes, replaced by a verdant valley scene. During the winter, when water is held as snow pack on the peaks of the High Sierra, the Kaweah River slows and is seen as a meandering stream in the lake basin.

This segment through its length is relatively free from intrusions, limited to the minor intrusion of some scattered homes on the distant hillsides and the moderate intrusion of occasional structures at lakeside that support recreational use and maintenance.

Segment 1 Route Detail

Mile 0.0 The scenic highway begins at Road 248. To the west, looking out over the valley, perfect rows of citrus orchards dominate the view, with rolling foothills as background. Old farmhouses attest to the historical use of the rich farmland, created by the alluvial deposits of the powerful Kaweah River. Spring brings a perfumed atmosphere as the orange and lemon trees burst into blossom. Bush Lupines along the roadside produce showy purple springtime flowers. Moss-covered boulders and rugged Blue Oaks pepper the hills. To the north is a lovely view of Dry Creek Canyon, renowned for its groves of graceful native California Sycamores. The whimsical painted fish on the rock at roadside generally delights, with its shimmering fish-scale colors and realistic form. Ahead, gently rolling foothills dominate the view, Oaks marching up the ridgelines.

Segment 1 Detail (Cont'd)

The highway climbs and passes through a narrow gorge of fractured rocks, revealing spectacular views of the towering, snow-capped Sierra Nevada. Alta Peak, towering at 11,200 feet, and Moro Rock & Castle Rocks are striking landmarks, visible from across the expansive Lake Kaweah basin. At **Mile 1.2** there is an opportunity here for the traveler to pull off at the Lemon Hill Recreational Area, where there is an excellent lake overview with ample parking and a visitor information center. From this panoramic vantage point there is the best view of the Terminus Dam. Its unique fuse gates are the largest in the world and were part of a recently completed project to raise the water level of the lake. In the cove far below, a boat marina adds an interesting contrast to the Terminus Dam.

Continuing on, rounding the bend, at **Mile 2.0** there is a full panorama view of the lake. Snow-covered Alta Peak and part of the Sierra Nevada mountain range can be seen in the distance. At **Mile 2.5** down by the lakeside a boat ramp and picnic area come into view. Situated at a major curve in the highway it presents a pleasant cove with parking and restrooms. The water tank and power poles provide the necessary utilities to this public area. While these structures are an intrusion, they represent a relatively small portion of the total vistas the traveler experiences from the highway.

Ascending the gently rolling hills surrounding Lake Kaweah, the traveler enjoys Blue Oak savannahs, interspersed with striking seasonal shows of colorful wildflowers. In this area, rocky out-crops of marble occasionally protrude out of granite, supporting unique plant life. Approaching **Mile 3.6** there is one of the most popular vista points on the Lake Segment. This high point on the road provides a composite view looking beyond roadside native plants, across the lake and toward the mouth of the Kaweah River, all framed by graceful oak-covered hills. Occasional buildings on the distant hillsides allow the traveler to gain perspective on the dimensions of the scene. Towering at the far view, through the river canyon, the jagged snow-capped peaks of the Sierra Nevada again beckon.

Less than a mile from this vista point at **Mile 4.4** is the entrance to the Horse Creek Campground. In this area, Oak savannahs prevail and waves of wildflowers occur on nature's schedule from late winter through springtime.

At Mile 5.3 the traveler crosses the Horse Creek Bridge. Sightings of Bobcat, Mountain Lion, Coyote and Gray Fox are common here along this natural wildlife corridor. In late Spring and early Summer, the lake rises and is visible on both sides of the bridge. After the bridge the road rises sharply. High granite fractured rock surfaces enclose the roadway on the sides and directly ahead. As the road bears left a spectacular vista begins to slide into view, as if a giant curtain has been drawn away. At Mile 5.9 this beautiful panorama stretches over the lake 180 degrees from the Kaweah River inlet to the Horse Creek Bridge.

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Segment I Detail (Cont'd)

The dam, far in the distance, now appears small. A pullout area on the right is a welcome convenience and is often used by photographers to capture the sun setting over the lake basin.

This segment ends at **Mile 7.2** at the Slick Rock Recreation Area. This was a popular habitation site for the indigenous people and many bedrock mortar indentations are visible down on the riverbank rock. Today this site is a popular summer swimming spot on the lake with a picnic area and a restroom stop. Fishermen enjoy fishing on the banks here as well as further upstream. There is a nicely contrasted and layered view from the road, looking across the lake, over the river and into the mountains. The area in the springtime is a showplace for flowering trees.

Segment 2 – Three Rivers Town Portion

Town Entrance to Dinely Drive (Mile 7.2 to 12.5, length 5.3 Miles)

Percentage Visual Intrusions

Major: Apprx. 8% Moderate: Apprx. 10% Minor: Apprx. 20%

Segment 2 Summary

The commercial section of Three Rivers stretches ribbon-like along the highway for the next five miles. Wedged among the converging rivers and the enveloping slopes, the town looks to have settled into its available space and is in visual harmony with the natural landscape. Some have likened the effect to that of a small village nestled within the protection of its hillsides. The distinctness is accentuated by the steep slopes and the sharpness of the ridgelines, giving the visual sense of fully formed mountains. And it is apparent the town values the beauty that surrounds it. Much of the town remains naturally wooded. There appears to be little effort given to pretension and any sign of franchised modern growth is largely absent.

The architecture of the town businesses as well as the visible residences most resembles a western mountain town and reminds the visitor of an earlier time. Historical buildings and sites dating back to the earliest settlements are scattered along or not far from the highway. Descendents from the early Three Rivers settlements continue to reside here today.

Intrusions within town, although of varying size, attractiveness, significance or distraction, can generally be considered minor to moderate in the context of the total vistas that envelop the traveler. While major intrusions from structures are present, the surrounding vegetation, river, slopes and uniquely formed small mountain peaks close-by never cease to dominate the overall scene.

Segment 2 Route Detail

At Mile 7.2 the traveler sees Blossom Peak, a short distance east of the highway, with its steep rocky peaks towering over the first glimpses of roadside residences and visitor accommodations. The bungalow-like structures of the first motel are of rustic appearance, set among oaks and seem appropriate to the area. An isolated advertising sign on the right intrudes on an otherwise natural scene. A bit farther on at Mile 8.2, another motel sits low from the road and is protected from lake high water by a surrounding levee system. Majestic white-trunk Sycamores line the river corridor and vivid pink Redbud trees compete with the verdant hillsides.

From here the route passes by a restaurant, an old general store and a large, attractively landscaped, but currently unoccupied resort complex. Portions of this stretch are in transition and construction material is temporarily visible on the right.

The highway crosses the South Fork of the Kaweah at **Mile 8.7** where there are upstream views of the tangled tree-lined river, with water sliding over polished river rocks. To the left, downriver, there are homes partially hidden by numerous ancient picturesque Sycamores.

The route passes the Three Rivers official entrance sign at **Mile 9.1** and enters into the first concentration of structural intrusions, from major to moderate, by the businesses and services in town. The motel on the right, while well maintained, is larger than the other structures in the area. The other buildings in this area are generally single-story with well-kept landscaping. Architectural styling is fairly consistent with rural mountain communities. Across the highway is the new California Department of Forestry Fire Station for which residents, being in a high fire risk area, have a great deal of affection. Through collective community efforts, a fire resistant native plant demonstration garden has recently been placed on the grounds.

Beyond this area structures are less frequent, with a new builders' supply on the right and the entrance to a golf course on the left. The golf course has attractive fairways with majestic heritage Valley Oaks and California Sycamores with the beautiful hillsides in the distance. The roadway climbs to reveal a signature oak on the hilltop ahead, silhouetted against the sky. Cresting over the hill there is the South Fork Drive on the right. This road tracks along the South Fork of the Kaweah and leads back into some of the largest old ranch complexes in the region.

At **Mile 10.0** there is the major intrusion of an auto repair yard with the carcasses of wrecked cars and several old-time tow trucks visible. A stark reminder of the dangers of mountain driving, the yard has, over the years, become somewhat of a community landmark. Next is the bridge to the North Fork road. This road parallels the North Fork and leads to several historic sites including the old Post Office of the Kaweah Colony, founded in 1886, and leads beyond to the site of the first road up to the Park.

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Segment 2 Detail (Cont'd)

The older Three Rivers commercial area begins at **Mile 10.2**, characterized again by the major to moderate intrusion of mostly small, single-story storefront Western style buildings lining the available space between river and hillsides. In addition to the Three Rivers School and a church, an eclectic mix of restaurants, offices, grocery market and gas stations attest to the service orientation of the area.

On the left, nestled in the trees at **Mile 10.6** is a geodesic domed gift shop, followed by a coffee house in a rustic-styled cabin, both reflecting their own earlier times. Locals and travelers alike are often noted at the outside tables, enjoying a riverside repast, sometimes in the company of a flock of wild ducks. Amidst mixed residential and commercial properties, on the right is the Three Rivers Historical Museum. Many artifacts of earlier times in the area are on display here. The large Paul Bunyan statue in front owes its celebrity to having been carved from a single Sequoia log by a local artist. In the Museum parking lot, there is a cross-section cut of a Sequoia Tree, its growth rings showing its existence since pre-biblical times.

The road continues past other commercial buildings including an artfully painted candy and ice cream store, a perennially favorite destination for day visitors from the valley. Landscape plantings along the highway provide cover and soften the feel of pavement and structure. After passing scattered residential buildings and a glimpse of the church on the hill, the traveler reaches the Veterans' Memorial Building, a popular meeting venue for community activities, including the annual Three Rivers' Jazz Festival. The grounds have been recently landscaped to bring the site back into harmony with a native foothill appearance. At **Mile 12.5** the Dinely Bridge on the left offers the second route over the Main Fork that accesses many riverside residences on the north side of the river.

Segment 3- River Gorge Portion

Dinely Drive to Park Entrance (Mile 12.5 to 16.1, length 3.6 Miles)

Percentage Visual Intrusions

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Major Intrusions: Apprx. 2% Moderate Intrusions: Apprx. 5% Minor Intrusions: Apprx. 10%

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Segment 3 Summary

The route now enters a segment highly contrasted from what has come before. The highway, now feeling narrower, more closely borders the river and begins to gain altitude, hugging the hillsides on the right. The highway follows a serpentine path with few structures and the natural landscape becomes even more intact and free from intrusions. In the Spring and early Summer, the Main Fork of the Kaweah noisily surges down the gorge, dominating all in its path as it relieves the mountains of their snow.

Segment 3 Summary (cont'd)

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This segment has popular launching points for more advanced kayakers and rafters who challenge the difficult rapids in the area. The segment and the Kaweah Scenic Highway end at the Ash Mountain entrance to Sequoia National Park.

Intrusions most notable in this segment are the minor and moderate intrusions of residential and commercial structures, a few in need of repair, a major intrusion by a prominent power facility and several areas where communication and power lines border or cross the highway.

Segment 3 Route Detail

Starting at **Mile 12.5** the winding road offers spectacular views of the Kaweah River down on the left. The historic Salt Creek Bridge is crossed at **Mile 12.9**, followed by the side-road leading to the St Anthony's Retreat on the right. Across the canyon, clinging to the hillside, there is one of the historic power station water flumes, still operational today. Rounding a curve at **Mile 13.6**, the Edison Hydroelectric Power Plant appears on the left. Operational since 1879 in what was then called Hammond, it began as the Mount Whitney Power Company and is famous for providing the earliest electric power to farming operations in the distant valley. Looking up to the right there is a fine view of Red Hill.

Reaching Mile 14.0, in the 1920's there was a large county facility here on the river for children's health and recreation (called Kiddie Camp), for the purpose of countering the major tuberculosis threat of that time. At the right is the turnoff to the renowned Mineral King area where hopeful 19th century silver miners staked their claims. Just into the turn is the historic Hammond Station, an early facility serving area fire operations. A trip up the primitive 25 mile-long Mineral King Road provides views of the East Fork river and canyons with many and varied wildflowers during the seasons. Today the Mineral King area attracts backpackers to the trailheads leading to some of the finest alpine meadows, lakes and peaks in the south Sierra Nevada.

Rounding a curve at Mile 14.4 a panoramic view unfolds, beginning with Shepherd Peak to the left, then Ash Peaks Ridge, Moro Rock and Alta Peak. Below, the Main Fork of the Kaweah River descends as rapids through an "S" turn with a steep drop-off into large pools. Here large Sycamores and Cottonwoods border the river and Blue Heron sightings are common occurrences. The curving road has high, sheer cliffs on one side of Highway 198 and unobstructed views of the river as water cascades over large granite boulders with the rugged mountains beyond.

The highway descends at **Mile 14.8** into Shepherd Cove, a small community with a convenience store and some visitor accommodations. To the left is a view of Shepherd Pass. Well-maintained and shielded condominium units are visible farther down the road on the left followed by a small cluster of homes at **Mile 15.2** in an area that was known in earlier times as Pumpkin Hollow.

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Segment 3 Detail (Cont'd)

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At **Mile 15.6** the graceful arches of the historic Pumpkin Hollow Bridge are now in view, straddling the Main Fork of the Kaweah. Constructed in 1922, the bridge gets its name from the summer color of the leaves of the Buckeye trees that are so plentiful here. Crossing the bridge, on the right, there is the memorable scene of the waters tumbling around massive boulders. Looking further upstream, the confluence of the East Fork and Main Fork of the Kaweah is visible.

Immediately beyond the bridge, intrusions in the form of commercial structures closely line the road. A picturesque scene is created by the combination of the bridge, restaurant, and cascading waters. The gorgeous views from this location have made the restaurant a landmark stopover point for both local residents and visitors. The inn on the left, even though positioned close to the road, attractively reflects quality mountain architecture. After this short stretch of commerce, the heavily vegetated roadside narrows even more with a few private parcels partially visible on the right behind wooden fencing.

Approaching the Park entrance the traveler again enjoys a closer view forward of majestic Moro Rock, Alta Peak and the Castle Rocks. Moro Rock gets its name from its color, a Spanish word for the hue of a blue roan mustang. Toward the southeast, up toward East Fork Kaweah River, a narrow canyon rimmed with high peaks is seen. Looking to the east across the river is another hydroelectric facility, dating back to 1913, partially screened by the trees at the river's edge. Abundant and verdant growths of Buckeye trees, Oaks, lots of Redbud, Flowering Ash, Lupines and a bower of flowers and grasses carpet the hillsides, reminding the visitor of the diversity and density of the flora.

At Mile 16.0 at the eastern end of Highway 198, the route comes to an end. The travelers, as they have driven up from the valley, on winding roadways through broad vistas of changing landscapes and rising hills, have enjoyed an ideal prologue for what is now beyond and the park will not disappoint. Sequoia National Park retains the primitive beauty and promise of adventure that existed when it was made the nation's second National Park back in 1890.

AGENDA DATE: December 12, 2006



RESOURCE MANAGEMENT AGENCY

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 Jean P Brou
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 George Finney
 Long Range Plenning

 Hal Cypert
 Support Services

 Roger Hunt
 Administrative Services

HENRY HASH, DIRECTOR

AGENDA ITEM

ITEM NO.____

District 1

SUBJECT: Highway 198 State Scenic Highway Designation

REQUEST(S):

- (1) Receive a status report regarding progress on a proposal submitted to Caltrans to officially designate a portion of Highway 198, extending eastward from Road 248, through the gateway community of Three Rivers, ending at the Sequoia National Park boundary, as a California Scenic Highway.
- (2) Direct staff to complete the remaining steps required for formal designation of the Kaweah Scenic Highway.

SUMMARY:

On April 25, 2006, your Board unanimously adopted Resolution No. 2006-0294 supporting the Three Rivers Village Foundation request that Caltrans formally designate a 16-mile segment of Highway 198, extending from Road 248 east to the Sequoia National Park Boundary, as a State Scenic Highway (Exhibit A). Steps for official designation include 1) the Nomination Process, requiring the preparation and submission of a Resolution of Intent Package to Caltrans; and 2) the Designation Process, requiring the preparation of a Scenic Corridor Protection Program; review of the program by the public; adoption of Zoning Ordinance amendments by the Board of Supervisors; and submission to Caltrans for final consideration. Following Caltrans approval of the Scenic Corridor Protection Program, the segment of Highway 198 would then receive official state scenic highway status.

On June 14, 2006, The Three Rivers Village Foundation forwarded the Resolution of Intent Package to Caltrans, which included: a Visual Assessment Survey, maps and a video of the route; the Resolution of Intent from your Board; and several letters of support.

After review by Caltrans, and revisions, the Resolution of Intent Package was accepted by Caltrans on September 14, 2006. In a letter from Caltrans Scenic Highway Coordinator Dennis Cadd to Tom Sparks dated September 14, 2006 (Exhibit B), Mr. Cadd stated:

A55OCIATE DIRECTOR

"At this time, pursuant to the procedures outlined in the Caltrans Guidelines for the Official Designation of Scenic Highways, you are now approved to proceed with the steps outlined in Section IV-Designation Process [Caltrans Guidelines for the Official Designation of Scenic Highways]). This process involves preparation and adoption of scenic corridor protection by the local jurisdiction. Public participation will also be required at this point in the process..."

In order to complete the designation process, Tulare County must next create a Scenic Corridor Protection Program meeting Caltrans five minimum standards:

- Regulation of land use and density of development;
- Detailed land and site planning;
- Prohibition of off-site outdoor advertising and control of on-site outdoor advertising;
- Careful attention to and control of earthmoving and landscaping; and
- The design and appearance of structures and equipment.

On September 16, 2006, RMA staff submitted a preliminary Draft Scenic Corridor Protection Program to Caltrans (Exhibit C), which included sections of the Tulare County Zoning Ordinance meeting Caltrans five minimum requirements for scenic protection. Analysis of Tulare County Planning documents and ordinances indicated that many of these requirements are already being met by Tulare County. Where gaps in scenic protection existed, RMA staff also included a list of recommended changes to the Zoning Ordinance.

On September 18, 2006, a follow-up meeting was held at RMA with Caltrans officials, who re-iterated their support for the project. In a letter dated September 19, 2006, from Dennis Cadd to Tom Sparks (Exhibit D), additional zoning protections were suggested, including: a determination of the scenic corridor "SC" zone outer boundary (this could be a specific distance from the centerline of the roadway, the distance including the whole view shed, or a combination of both); possible architectural and landscape design review requirements for the corridor; a clarification of off-site outdoor advertising prohibition; and perhaps additional on-site advertising standards for the whole of the corridor.

The remaining steps in completing the Designation Package will include 1) preparation of a Draft Scenic Corridor Protection Program incorporating Caltrans suggestions for additional zoning needed; 2) presentation of the Draft Protection Plan before a Three Rivers Town Hall meeting; 3) Presentation of the Draft Scenic Protection Program to the Board of Supervisors; and 4) adoption of Zoning Ordinance amendments by the County. In total, the process will require 9-12 months to implement. The Designation Package will be submitted to Caltrans for review by the Scenic Highway Coordinator. If the Designation Package meets the necessary criteria, a recommendation will be forwarded to the Caltrans Director, who can then designate the route as an official state or county scenic highway.

After designation, the route will be identified through signage with the colorful Caltrans "poppy" sign logo. Descriptions of the route will also be included in relevant departmental publications and travel maps. Other benefits of the program include protection of scenic resources through land use planning, with the potential to enhance the local economy by attracting media attention and tourist dollars to the area. State Scenic Highway Designation will increase eligibility for highway maintenance and improvement funding for certain projects through the Transportation Enhancement Activities (TEA) Program. State Scenic Highway designation is also the first step in establishing eligibility for federal scenic highway programs such as the National Scenic Byways Program, which can provide additional publicity for the route, as well as eligibility

for additional federal funding for planning (Caltrans Guidelines for Scenic Highway Designation, sections VI Designation and V Monitoring; National Scenic Byways Program Online, http://www.byways.org/learn/).

FINANCING: RMA staff planners will continue to provide professional support to this project. Additional funds (\$20,000) are budgeted under 6110-2150 for consultant assistance, or incidental expenses that might be incurred in carrying out this work.

ALTERNATIVES:

Deny the request.

INVOLVEMENT OF OTHER DEPARTMENTS OR AGENCIES:

The Designation package will be submitted for review by Caltrans staff Dennis Cadd, State Scenic Highway Coordinator, and Michael Mills, District 6 Scenic Highway Coordinator. If Mr. Cadd concurs that the scenic corridor protection program is adequate, he will recommend official designation of the route to the Director of District 6, Malcolm Dougherty.

SIGNATURE REQUIREMENTS:

County Administrative Officer/Clerk of the Board of Supervisors or authorized Deputy to attest to the resolution.

ADMINISTRATIVE SIGN OFF:

RESOURCE MANAGEMENT AGENCY

George Finney Assistant Director Long Range Planning Branch

cc:

Three Rivers Village Foundation Caltrans **Tulare County Planning Commission**

Henry Hask, Director

Tulare Co. Association of Governments Tulare County RMA Transportation Branch **Tulare County RMA Engineering Branch**

BEFORE THE BOARD OF SUPERVISORS

COUNTY OF TULARE, STATE OF CALIFORNIA

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IN THE MATTER OF SEEKING OFFICIAL STATE SCENIC HIGHWAY STATUS FROM CALTRANS FOR THAT SEGMENT OF HIGHWAY 198 STRETCHING FROM ROAD 248 PAST LAKE KAWEAH, THROUGH THE GATEWAY COMMUNITY OF THREE RIVERS, TO THE SEQUOIA NATIONAL PARK BOUNDARY IN DISTRICT ONE.

RESOLUTION NO. 2006-0927

UPON MOTION OF SUPERVISOR <u>ISHIDA</u> SECONDED BY SUPERVISOR <u>CONWAY</u>, THE FOLLOWING WAS ADOPTED BY THE BOARD OF SUPERVISORS, AT AN OFFICIAL MEETING HELD ON THE <u>12th</u> DAY OF <u>DECEMBER</u>, 2006, BY THE FOLLOWING VOTE:

AYES:Supervisors Ishida, Conway, Cox, Worthley and MaplesNOES:NoneABSTAIN:NoneABSENT:None



C. BRIAN HADDIX COUNTY ADMINISTRATIVE OFFICER CLERK, BOARD OF SUPERVISORS

Bush Wanna Deputy Clerk

* * * * * * * * * *

- (1) Received a status report regarding progress on a proposal submitted to Caltrans to officially designate a portion of Highway 198, extending eastward from Road 248, through the gateway community of Three Rivers, ending at the Sequoia National Park boundary, as a California Scenic Highway.
- (2) Directed staff to complete the remaining steps required for formal designation of the Kaweah Scenic Highway.

RMA CAO

12/13/06 WKB


Exuitit A

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY

DEPARTMENT OF TRANSPORTATION DISTRICT 6 2015 EAST SHIELDS AVENUE, SUITE A-100 FRESNO, CA 93726-5428 PHONE (559) 230-3137 FAX (559) 243-3483 TTY (559) 488-4066





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September 14, 2006

Exhibit B

Mr. Tom Sparks Three Rivers Village Foundation P.O. Box 1253 Three Rivers, CA 93271

Dear Mr. Sparks:

Thank you for your revised submittal of the Resolution Package for the designation of Scenic Highway on State Route 198 in and near the town of Three Rivers. Revisions to the package included those in response to the comments of Dennis Cadd dated September 5, 2006 and the subsequent meeting held on September 8, 2006 at the Tulare County Resource Management Agency office in Visalia. Dennis Cadd has reviewed the revised Resolution Package dated September 8, 2006 and now concurs with the contents, presentation, and methodology of that Resolution Package.

At this time, pursuant to the procedures outlined in the Caltrans Guidelines for the Official Designation of Scenic Highways, you are now approved to proceed with the steps outlined in Section IV - Designation Process. This process involves preparation and adoption of scenic corridor protection by the local jurisdiction. Public participation will also be required at this point in the process. Please refer to the guidance manual for further details related to this process. As with the Resolution Package process just completed, l will be available for any assistance or further guidance that you may need.

I look forward to working with you and anticipate the completion of this Scenic Highway designation process to benefit your community.

Sincerely,

Mille Mi

Michael Mills Landscape Architect District 6 Scenic Highway Coordinator

c: file Dennis Cadd

"Colirons improves mobility across Colifornia"

DRAFT: TULARE COUNTY EXISTING SCENIC CORRIDOR ZONING AND PROPOSED ADDITIONAL REQUIREMENTS

The five minimum requirement for the Caltrans Scenic Corridor Protection Plan are as follows: 1) regulation of land use (density and allowable land uses); 2) site planning (review authority for proposed developments; 3) prohibition of off-site outdoor advertising and control of on-site advertising; 4) control of earthmoving and landscaping; and 5) design and appearance of structures and equipment. Following is a summary of existing regulations in Tulare County in each of these categories. Additional information is supplied in Table 1 Scenic Corridor Zoning Categories (Appendix). Copies of the ordinances are also provided.

1. Regulation of Land Use and Density of Development (i.e., density classifications and types of allowable land uses).

Land within the Kaweah Scenic Corridor is included within one of two planning jurisdictions: the Foothill Growth Management Plan (FGMP) or the Three Rivers Community Plan, which have somewhat different zoning requirements affecting density, allowable land uses, and other categories. Zoning categories include agriculture, residential, commercial, light manufacturing, and recreational. In addition to basic zoning categories, there are several overlay districts which add additional restrictions to underlying zoning and allowable land uses. Within the Scenic Corridor, these are: the "SC" Scenic Corridor Combining Zone; a "PD" Planned Development Zone; the Site Review Combining Zone; the Foothill Combining Zone; and Floodplain zoning (primary and secondary). Non-Tulare County regulation of land use applies to some portions of the Scenic Corridor. Within the jurisdiction of the Army Corps of Engineers is the Lake Kaweah floodplain. Major zoning categories are discussed briefly in the following section, and in more detail in Table 1 Tularc County Scenic Corridor Zoning Categories (Appendix). Copies of relevant Tulare County Zoning Ordinances mentioned for each zoning category will also be provided.

The major zoning categories regulating land use in the Kaweah Scenic Corridor are as follows:

a. Agriculture

Over 90% of the land within the scenic corridor is currently zoned for agriculture (intensive or extensive). Minimum parcel sizes vary from 20 acres (AE-20) to 160 acres (AF). Agricultural zoning categories restrict the number and types of residences and other buildings allowed on the property (see Table 1 or the zoning ordinances for specific information.

Within the FGMP area, the AF Zone is designated as an exclusive zone limited to intensive and extensive foothill agricultural uses. The minimum parcel size is generally 160 acres, with one primary residence is allowed per 160 acre parcel (one additional residence per 40 acres allowed with restrictions; additional residences beyond 1 per 40

acres require a Use permit). Allowed AF land uses include growing and harvesting fruit and nut trees, vines, vegetables, horticultural specialties and timber, field crops, grain and hay crops, and grass for pasture and grazing. Within the Three Rivers Community Plan area, other agricultural zones (mainly AE-80) may occur. See Table 1 and the individual ordinances for more detail on density requirements and allowable land uses.

b. Residential

Residential zones within the Scenic Corridor include single family dwellings, and a variety of multiple family zones. Mobilehomes are also allowed in some zones. Parcel sizes and lot requirements vary, ranging from ¼ acre (12,500 sq. ft.) to 5 acres.

c. Commercial

The FGMP and Three Rivers Community Plan areas have different requirements for commercial development. The C-2 General Commercial Zone is found within the Three Rivers Community Plan area, and is intended for a wide range of retail stores and businesses. Within the FGMP, commercial development may be located within the Planned Development Foothill (PD-F-M-1) zone. Light manufacturing is also allowed on one site within M-1 zoning, but only within a Planned Development (PD) zone. Minimum lot sizes and restrictions on allowable business types are found in each zone. An "O" Recreation Zone occurs in some Three Rivers Plan locations, and is intended for commercial uses which are oriented to recreation-related resort-type services.

d. Flood Plains

The "F-1" Primary Flood Plain Zone (Section 14.7) has as its purpose the prevention of loss of life, minimization of property damage, and the maintenance of satisfactory conveyance capacities of waterways through the prevention of encroachments by obstructions in the floodway. This zone is used in concert with flood damage prevention regulations (Chapter 9 of Part VII of the Ordinance Code of Tulare County). The zone may function either as an exclusive zone, or in combination with other zones in the floodway area. In Three Rivers, F-1 is an exclusive zone, permitting only agricultural uses such as growing and harvesting of field crops, vines, vegetables and horticultural specialties, excluding trees. Other allowable uses include apiaries, grazing of some livestock and poultry, wildlife preserves (including parks, campgrounds, RV parks, playgrounds, golf courses, and other recreational uses).

The "F-2" Secondary Flood Plain Combining Zone (Section 14.8) is intended for application to those areas of the County which lie within the fringe area of the flood plain and are subject to less severe inundation during flooding conditions than occur in the F-1 Zone. This zone is intended to be combined with other zones. Allowed uses include single family dwellings and accessory residential and agricultural structures, with some flood protection restrictions.

Additional Requirements Needed for Scenic Corridor Protection Plan: Land Use In order to meet the Caltrans minimum requirements for Land Use, Tulare County will need to add the following measures to its zoning:

1. Amend the Scenic Corridor "SC" Combining Zone to apply FGMP-type standards to additional zones within the Scenic Corridor.

2. The "SC" Combining zone should be amended to extend site plan review for other issues such as: limit development within key identified viewsheds; limit hilltop and steep slope development; and consider architectural or landscape design review for new buildings, fencing, signage, etc.

3. Implement the "SC" Scenic Corridor Combining Zone throughout the 16 mile scenic highway.

2. Detailed Land and Site Planning (i.e., permit or design review authority and regulations for the review of proposed developments).

The Site plan review process for projects proposed within the FGMP and Three Rivers Community Plan areas vary, but following are major categories

a. General Permitting Requirements:

Site plan review is required for any project (one single family residence excluded) in the FGMP Planned Development Foothill Zone (PD-F-M). Special Use permits are also required for all types of projects (agriculture and four or fewer residences excluded) in the PD-F-M zone. Site Plan review is also required for multiple family projects of more than four units in the Multiple Family Zone. The "SR" Site Plan Review Overlay zone can extend site plan review requirements to virtually all types of development (except one single family residence), but has not been applied to date in the Three Rivers Plan area.

b. Site Plan Review

The Site Plan Review Committee serves in an advisory capacity to the Planning Commission, Zoning Administrator, and Board of Supervisors on site plans submitted with Special Use Permits and Planned Unit Developments. It also functions as the final approval body for site plans filed with building permits. In its advisory capacity, the Committee prepares written recommendations and findings, subject to final approval by the Planning Commission or Board of Supervisors. Final review of a Site Plan must be submitted before a final decision is made. The Plan must include a grading and slope stabilization plan, a general development plan, drainage and fire protection plans, specific landscaping and signage, and parking plans for commercial developments. (See Section 16.2 Site Plan Review). Within the FGMP area, regulations enforced through Site Plan Review include on-site signage, setbacks, and height restrictions. The "SC" overlay areas have additional restrictions for signage and setbacks. Projects in the Planned Development Foothill zone are subject to site plan review focusing on height, setbacks, slope, and hilltop development.

Site Plan Review within the Three Rivers Community Plan area is limited mainly to multifamily residential projects and developments proposed in the PD-M-1 zone.

c. Large Developments

The California Environmental Quality Act (CEQA) requires state, county and other agencies to evaluate the environmental implications of development, with a goal of avoiding or reducing, through mitigation measures, significant environmental impacts, where feasible. The first phase of CEQA review requires review of a project to determine whether it is subject to CEQA. If so, an initial study must be made to determine significant environmental impacts. If the project may have significant environmental impacts, an Environmental Impact Report will be prepared. If not, a negative Declaration or Mitigated Negative Declaration (indicating no significant adverse environmental effects) will be prepared (CEQA Deskbook 2001 p.19).

d. General Plan Amendments

General Plan Amendments are usually triggered by development applications. They require comprehensive environmental reports, and have additional requirements including public hearings. General Plan Amendments undergo a rigorous public hearing process, and must be approved by the Tulare County Board of Supervisors.

In addition, California law (SB 18) for Tribal Consultation Guidelines, requires cities and counties to contact, and offer to consult with, California Native American Tribes before adopting or amending a General Plan, a Specific Plan, or when designating land as Open Space, for the purpose of protecting Native American Cultural Places (PRC 5097.9 and 5097.993).

Additional Requirements Needed for Scenic Corridor Protection Plan: Site Plan Review

In order to meet the Caltrans minimum requirements for Land Use, Tulare County may need to add the following measures to site plan review: scenic viewshed protection through site plan review for key vistas (viewsheds can be identified with GIS modeling and confirmed with site visits); for cell tower location and appearance; and screening of large "big box" structures and open storage areas.

4

3. Prohibition of Off-Site Outdoor Advertising and Control of On-Site Advertising.

<u>Prohibition of Off-Site Outdoor Advertising</u>: All 16 miles of the proposed Scenic Highway are subject to the Scenic Corridor "SC" Combining Zone (Section 14.4), or Exclusive Agriculture Zoning (Section 9.5). Both classifications prohibit off-site advertising display signs.

<u>On-Site Advertising</u>: Regulations concerning on-site advertising are administered somewhat differently in the FGMP and the Three Rivers Community Plan areas:

Within FGMP Jurisdiction:

Within the FGMP area only, in combination with PD-F and AF zones, some restrictions apply to on-premise outdoor advertising signs:

a) If the on-premises sign is attached to the primary building façade, requirements for size, shape and lighting of signs will be determined by standards adopted by the Planning Commission, but Site Plan Review is not required. (Section 14.4 D.1.a.).

b) On-site free-standing outdoor advertising display signs require approval by the Site Plan Review Committee, which will evaluate the signage for issues of design, setback, size and architectural compatibility, as well as traffic safety and visibility from scenic highways and roads (Section 14.4.1.b and Section 16.2.G. paragraph 1).

Within Three Rivers Community Plan Jurisdiction:

In the Three Rivers Plan area, the regulations for on-site advertising vary from zone to zone. For example, the C-2 General Commercial zone has no requirements for on-site advertising, while the "O" Recreation zone limits the size of signs based on road frontage, not to exceed 100 sq. ft.

In order to meet the Caltrans minimum requirements for billboards, Tulare County will need to add measures relating to site plan review of on-site signage, regulating location and appearance of signs, corridor-wide.

4. Careful Attention To and Control of Earthmoving and Landscaping (i.e. grading ordinances, grading permit requirements, design review authority, landscaping and vegetation requirements).

The County's Grading Ordinance, section 7-15-1350 et seq., has as its stated purpose "to safeguard the public minimize hazards to property, control erosion and protect against sedimentation of watercourses and protect the safety, use and stability of public rights of way be establishing standards and providing regulations to control excavation, grading and earthwork construction." Within the adopted grading ordinances, section 7-15-1420 is especially pertinent to the Scenic Corridor earthmoving and landscaping requirements, providing standards for the following: a) The area of cuts and fills; b) Creation of building sites - slope limitation; c) Final contours; d) Grading near watercourses; e) Revegetation; f) Preparation for revegetation; g) Methods of revegetation; h) Timing of revegetation measures; and j) Responsibility for maintaining revegetated areas (*Ordinance Code of Tulare County*, Published by Order of the Board of Supervisors, Readopted Effective October 20, 1995).

The Scenic Corridor "SC" Combining Zone provides that any proposed development project in the FGMP which is subject to review by the Site Plan Review Committee has requirements that grading and/or cut and fill on sloping lands shall be kept to a minimum, and shall be prohibited whenever it can be determined that such activities will have an adverse impact on scenic resources visible from scenic highways and roads (Section 14.4.2.b). The Foothill Growth Management Plan states that "Hilltop development shall be designed so as to preserve the skyline and maintain an unobstructed scenic panorama of the foothills for residents and visitors to enjoy (FGMP p.35). Development is generally precluded on slopes 30 percent or greater (FMGP p.38). In addition, any exposed slopes resulting from grading and/or cut and fill activity shall be stabilized by plantings of compatible materials as a condition of approval of the project (Section 14.4.2.c.). Existing vegetation and unique land forms, such as rock outcrops, shall be retained and protected from any unnecessary grading or other development related activities, except where necessary to open up or provide better views of desirable scenic features (Section 14.4.2.d).

Within the Three Rivers Community Plan Area land uses and activities that adversely affect environmental quality are prohibited (Goal IV, Objective 5, TRCP pp.16-17). Alterations in natural drainage courses which cause obstruction, erosion, or sedimentation are also prohibited (Goal IV, Objective 5 policy 6, (TRCP p.17).

Additional Requirements Needed for Scenic Corridor Protection Plan: Earthmoving and Grading

In order to meet the Caltrans minimum requirements, Tulare County will need to extend the following FGMP measures for earthmoving and grading within the entire corridor: hilltop construction prohibited, as well as prohibition of building on slopes over 30%; site plan review for structures built on slopes between 15-30%; underground utilities required for new developments in scenic viewshed areas.

5. The Design and Appearance of Structures and Equipment (utility structures, microwave receptors, etc.)

Within the FGMP area PD-F or AF zones, the "SC" Combining zone requires that All new utility improvements shall be located underground (Section 14.4.2.a.). Yard and Lot Requirements specify 100 foot setbacks for lots that front upon a Scenic Highway, along with restrictions for side yards and lot width (150 feet minimum) (Section 14.4.3.c) Within Three Rivers Community Plan area, however, such requirements are absent, although most utility structures, including towers higher than 75feet tall require a special use permit in any zone.

Additional Requirements Needed for Scenic Corridor Protection Plan:

Earthmoving and Grading

Scenic corridor standards for public utility type structures should be developed in the "SC" Zone and applied during the Use permit process.

7



STATE OF CALIFORNIA-BUSINESS TRANSPORTATION AND HOUSING AGENCY

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DEPARTMENT OF TRANSPORTATION

DISTRICT 6 2015 EAST SHIELDS AVENUE, SUITE A-100 FRESNO. CA 93726-5428 PHONE (559) 230-3137 FAX (559) 243-3483 TTY (559) 488-4066

TOENED CLARE COUNTY

OCT 23 2006

RESOURCE MANAGEMENT AGENCY

October 19, 2006

Mr. Tom Sparks Three Rivers Village Foundation P.O. Box 1253 Three Rivers, CA 93271

Dear Mr. Sparks:

Thank you for your submittal of the draft Corridor Protection Program for scenic highway designation of Route 198 in and near the town of Three Rivers. As was discussed in the meeting held on October 18, 2006 with Dennis Cadd, there were some issues identified with the draft Corridor Protection Program. Those issues are summarized below for your information and use.

General Comments

In designing a protection program and determining its effectiveness the primary concern should be preserving the viewing experience of the traveler.

The County should determine the appropriate area that applies to the "SC" combining zone, whether it is the scenic corridor boundary shown in the resolution package or another justifiable definition. Some communities have used 250 feet from the centerline of the roadway; others have used the whole view shed. Topography and existing vegetation are key in this determination. It may be that a combination of both strategies may be best, with a standard distance identified in conjunction with key view sheds that have been previously identified.

Section 1. Regulation of Land Use and Density of Development

Additional Requirements Needed - We agree with this assessment. Development of architectural and landscape design review standards is appropriate and has been accomplished on other scenic highways.

Section 2. Detailed land and Site Planning

Additional Requirements Needed - We agree with this assessment. See general comments regarding defining SC combining zone.

Section 3. Prohibition of Off-Site Outdoor Advertising and Control of On-Site Advertising

Prohibition of Off-Site Outdoor Advertising: The narrative indicates all 16 miles of the proposed Scenic Highway is subject to zoning regulations that prohibit off-site outdoor advertising signs. Under additional requirements it's mentioned that Tulare County will need to add an off-site

"Coltrans improves mobility ocross California"

Mr. Tom Sparks October 19, 2006 Page 2 of 2

signage prohibition throughout the scenic corridor under site plan review. Isn't this redundant? Current outdoor advertising laws prohibits billboards on scenic highways from 660 feet on either side of the State Right-of-way. The County would not be required to regulated off-site advertising beyond this limit.

On-Site Advertising: The narrative indicates that if on-premise signs are attached to a building facade, requirements of these signs will be determined by standards adopted by the Planning Commission. It's not clear whether these standards exist or are to be developed. The standards should be provided as an attachment If they exist as well as any other standards used to regulate activities in the corridor.

Section 4. Careful Attention To and Control of Earthmoving and Landscaping Additional Requirements Needed - We agree with this assessment.

Section 5. The Design and Appearance of Structures and Equipment Additional Requirements Needed - We agree with this assessment.

If you have additional questions, please feel free to contact me at (559) 230-3137.

Sincerely,

c:

Miche Mo

Michael Mills Landscape Architect District 6 Scenic Highway Coordinator

file Ann Chapman Dennis Cadd Elbert Cox

C. COMMUNITY PARKS, OPEN SPACE, TRAILS, GREENWAY, AND RECREATION CONCEPT

1. THREE RIVERS VILLAGE FOUNDATION REQUEST OF FORMAL CONSULTATION WITH NATIONAL PARK SERVICE, RIVERS AND TRAILS CONSERVATION ASSISTANCE PROGRAM (RTCAP)



Three Rivers Village Foundation P 0 Box 1253 Three Rivers, CA 93257

Barbara Rice, Program Manager Northern California RTCA, National Park Service 333 Bush Street, Suite 500 San Francisco, CA 94104

Dear Ms. Rice,

The Three Rivers Village Foundation (Foundation) respectfully requests a formal consultation with National Park Service, Rivers and Trails Conservation Assistance Program (RTCAP) staff to lay the foundation for a future, comprehensive visioning process for the community of Three Rivers related to conservation, open space, and recreational goals.

About us: The Village Foundation (Foundation) is a non-profit community-based organization dedicated to the preservation and enhancement of Three Rivers as an attractive, healthy and secure area to reside, work and visit. The Foundation provides the means to solicit, receive, manage and distribute government and private monies for programs for the betterment of this community.

About our community: Three Rivers is an unincorporated community located in the foothills of the southern Sierra Nevada, near the south entrance to Sequoia National Park. Three Rivers has a population of just over 2,000 residents, although more than one-million National Park visitors pass through town each year. Three Rivers contains many valuable natural assets, including the Kaweah River, an abundance of open space, and scenic vistas.

There have been, through the years, a number of efforts to work with Three Rivers' residents to identify shared values and goals, including the Three Rivers community planning process and a 2005 consultant-researched report that developed recommendations for future growth in Three Rivers.

Emerging themes in these and other stakeholder surveys include a commitment to retaining the community's rural characteristics, a desire to better retain the tourists (and tourist dollars!) that pass through town, and a need for community open space and visitor facilities to create community cohesiveness, a means to share information with both visitors and residents, and community-based recreation.

Changes within Three Rivers present both a growing need and increased opportunity to identify and implement collaboratively-developed community projects: Visitorship to Sequoia National Park increases annually (14% in 2014 alone); faster and broader communication networks like social media draw visitors to nearby swimming spots in unprecedented numbers; new businesses and monthly community events offer diverse options for visitors and residents alike. Three Rivers is also in the midst of a community planning process: both community planning team participants and the County have expressed a willingness to incorporate place-based community projects into the plan update.

There are, however, impediments to identifying and implementing community projects: Three Rivers is a relatively polarized community, containing a singularly diverse population of small business proprietors, artists, Park Service employees, retirees, and second home owners. There seems to be a general lack of trust between the various resident factions, which has proven to be an obstacle to implementing community projects. Although Three Rivers is home to a number of civic organizations, there is no venue or organization that is perceived by town residents to adequately represent the diversity of community opinion.

The Foundation therefore requests consultation with RTCAP staff on strategies for creating partnerships and developing a forum to reflect the diversity of Three Rivers residents, and generally building the foundation for future engagement in a formal, community goal-setting process, resulting in specific open-space and/or recreational enhancement projects and delineated steps for implementing those projects.

Sincerely,

Tom Sparke

Tom Sparks, President, Three Rivers Village Foundation

2. NATIONAL PARK SERVICE RIVERS, TRAILS AND APPLICATION GUIDELINES CONSERVATION ASSISTANCE PROGRAM

Rivers, Trails and Conservation Assistance Program



Application Guidelines

The National Park Service Rivers, Trails and Conservation Assistance program supports successful partnerships with communities across America in achieving their conservation and outdoor recreation visions.

Project Selection Criteria:

Applications for Rivers, Trails and Conservation Assistance program are competitively evaluated based on how well the applications meet the following criteria:

- 1. The project has specific goals and results for conservation and recreation expected in the near future.
- 2. Roles and contributions of project partners are substantive and well-defined.
- 3. There is evidence of broad community support for the project.
- 4. The anticipated role for the National Park Service (NPS) is clear and fits the National Park Service mission.
- 5. The project advances one or more key National Park Service strategic initiatives (see section 5).

How to Prepare the Application:

1. Project Description:

Concisely identify:

- Your vision and summary statement of the overall project goal;
- Tangible outcomes of the project (i.e. recreational opportunities developed, plan creation, development of ideas and goals, miles, acres);
- Project accomplishments to date;
- Support: governmental/organizational support/recognition; endorsements from elected officials and boards, etc.;
- Community benefits that would result from implementing the proposed project (i.e. recreational opportunities in areas with little to no recreational access);
- Geographic location of your project and characteristics of that location (rural, coastal, wetland, urban, specific areas within a city or county, etc.);
- Important demographic characteristics of your project area that will benefit or be impacted with creation and/or addition of recreational opportunities.

2. Applicant and Partner Roles:

Please identify and explain the roles and commitment/services of the applicant and partners. Commitment letters should be provided by each partner; listed in the application. Commitment letters need to include project partner's role, contributions, and responsibilities in the project.

3. Public Support:

Please explain current or past public support, meetings, outreach, etc. Discuss past and future methods of garnering support as well as any future plans for public outreach, participation, community inclusion, or governmental/organizational support. Provide letters of support from three key stakeholders.

4. National Park Service Assistance:

The NPS can help with many aspects of your project. Provide a short description of the kind of assistance needed by your project; prioritize needs in order of importance. The following are examples of assistance that the NPS has provided to projects in the past:

- Defining project vision and goals—Assistance with focusing ideas and thoughts into a well-defined project vision with tangible goals.
- Identifying and analyzing issues and opportunities— Assistance with clarifying challenges, evaluating choices,

seeking and providing solutions/opportunities and developing action plans.

- Assessing and engaging partners and stakeholders— Assistance with reviewing current partners/stakeholders, reevaluating current engagement strategies, developing new partnerships and engagement strategies, and identifying new/different stakeholders.
- Inventory and mapping of community resources— Assistance with identifying and mapping existing and possible resources and connections to provide a comprehensive inventory for planning and implementation
- Priority setting and consensus building—Assistance with facilitating discussion of partners and communities to set project priorities, ensure all voices are recognized and build consensus among the varied voices.
- Identifying funding sources—Assistance with reviewing current/past funding sources, reviewing grant
 applications, and identifying new grant sources. Please remember that we do not provide funds or fundraise for
 your project but we can help develop a funding strategy to include grant sources, local businesses, and other
 organizations.
- Organizational development— Assistance with developing and organizing a sustainable group, advisory committee, or organization to help implement the project's goals.
- Designing community outreach and participation strategies— Assistance with designing community engagement and outreach strategies to gather and maximize input and to reach all members of the community.
- Planning (trail, park, open space, greenway, water trail, etc.)—Assistance with developing/creating conceptual plans for projects based upon stakeholder and community input. Components include inventorying existing conditions, analyzing options, considering safety issues, and the engaging project partners to create conservation and outdoor recreation opportunities in local communities.

5. National Park Service Strategic Initiatives:

Listed below are the National Park Service strategic initiatives. Projects that contribute to one or more of these strategic initiatives are given emphasis in the project selection process. Please describe how the project will address/implement the initiatives.

- Builds partnerships with health and wellness organizations to promote healthy parks and healthy people;
- Engages youth or youth organizations to promote close-to-home resource conservation, stewardship, and outdoor recreation opportunities;
- Develops and/or improves local connections to parks, rivers, trails, and greenways within urban areas;
- Improves public access to National Park Service sites by enhancing connections to local communities;
- Advances the conservation and stewardship of natural landscapes;
- Expands public access to water resources, such as water trails, portages, and adjacent recreational opportunities.

How to Apply:

Please <u>contact</u> the regional NPS Rivers, Trails and Conservation Assistance program office closest to your project as early as possible before the June 30 application deadline to discuss your proposed project and inform us of your intent to apply. We encourage applicants to consult with National Park Service staff about their proposal at least 30 days prior to the application deadline to ensure that our assistance is appropriate for your proposal and that your application is the best that it can be. Staff can help with application questions and assist with formulating an application. Remember - it's never too early to talk to us about your project.

By June 30 send your completed application package via email or by U.S. mail to your National Park Service Regional Program Manager.

Completed Application Package Includes:

- Completed application form
- Site location map
- Commitment letters from each partner
- Supplementary information that can help us learn more about your project (background documents, examples
 of media coverage, support letters, maps, list of links to resources, project photos, etc.)

3. THREE RIVERS VILLAGE FOUNDATION STATEMENT OF NEED FOR COMMUNITY PARKS AND OPEN SPACE APRIL 4, 2016



Three Rivers Village Foundation PO Box 1253 Three Rivers, CA 93271 Board of Directors

Mignon Gregg, President Trent Coleman, Secretary Dean Stryd Member

Robert Hohne, Treasurer William Haxton, Member

April 4, 2016

Dave Bryant, MPA Chief Planner, Special Projects County of Tulare Resource Management Agency 5961 S. Mooney Blvd, Visalia, CA 93277

Dear Mr. Bryant,

The Three Rivers Village Foundation would like to submit a statement of need in regards to community parks and open space for the community of Three Rivers.

The Village Foundation is a non-profit, community-based organization dedicated to the preservation and enhancement of Three Rivers as an attractive, healthy and secure area to reside, work and visit. The Foundation provides the means to solicit, receive, manage and distribute government and private monies for programs for the betterment of this community.

Three Rivers is a community of over 2,000 residents, although more than one-million National Park visitors pass through town each year, yet there are no community parks, trails, recreational facilities or public open space or beyond a small playground adjacent to the town library.

Past efforts to identify shared values and goals for Three Rivers' residents included a desire and need for community open space and visitor facilities. Furthermore, Three Rivers depends on tourist dollars for economic sustainability; a local park and public facilities would help retain tourists who might otherwise pass through town without stopping. Finally, a local park would help create community cohesiveness and provide a much-needed place for community recreation and events. Trust for Public Land research finds that Parks and open space produce significant economic benefits, as well as improving the health and quality of life for residents.

According to the American Planning Association, most cities recognize a standard of one acre of recreation land per 100 population. Mariposa, a gateway town of comparable size, has multiple picnic areas, playgrounds, and public buildings. The Village Foundation therefore requests the Tulare County, Three Rivers Community Planning team to identify the need for Community open space in the Three Rivers Community Plan Update. produces we can define

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Sincerely,

and a suggest of a state of the MIGNON

Mignon Gregg, President, Three Rivers Village Foundation

4. THREE RIVERS REST STOP VISITOR CENTER CONCEPT PROJECT STUDY

TRANSPORTATION ENHANCEMENT ACTIVITIES APPLICATION FOR THE THREE RIVERS REST STOP PROJECT





Application Submitted by the County of Tulare in conjunction with the Three Rivers Historical Society

BEFORE THE BOARD OF SUPERVISORS

COUNTY OF TULARE, STATE OF CALIFORNIA

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IN THE MATTER OF approving the preparation and submittal of a Transportation Enhancement Activities grand funding application for the construction of a rest stop adjacent to State Highway 198 in the community of Three Rivers

RESOLUTION NO. 95-1297

WHEREAS, improvements to State Highway 198 in the Sequoia National Park have continued to increase the amount of traffic that travels through the community of Three Rivers, and;

WHEREAS, the residents of Three Rivers and the County of Tulare have agreed that the installation of a rest stop would help mitigate the affects of increased traffic while benefiting the community and those traveling on State Highway 198, and;

WHEREAS, the Three Rivers Historic Society will complete a Transportation Enhancement Activities grant application, provide the necessary match, construct and maintain the rest stop;

NOW, THEREFORE, BE IT RESOLVED as follows:

1. The Board of Supervisors authorizes the Chairman of the Board to execute and submit the Transportation Enhancement Activities grant application, with its accompanying documents, exhibits, and assurances as needed to complete the application on behalf of the Three Rivers Historic Society.

THE FOREGOING resolution was adopted upon motion of Supervisor Maples, seconded by Supervisor Harness, at an official meeting of the Board of Supervisors held November 7, 1995, by the following vote:

AYES: Supervisors Sanders, Maze, Harness and Maples NOES: None ABSTAIN: None ABSENT: Supervisor Richmond

> ATTEST: THOMAS F. CAMPANELLA ADMINISTRATIVE OFFICER/CLERK BOARD OF SUPERVISORS

1000 Deputy Clerk



Trans. Ping. Grp. Ping/Dev Pub. Wks. FN 10733

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Transportation Enhancement Activities (TEA) Application Form PART ONE: GENERAL PROJECT INFORMATION

PROJECT ITLE:	Lecislative District Number: 19
intee kivers interpreti	ve Center and Rest Stop VISITOR Conter
ADMINISTERING AGENCY APPLICANT Project Administrator/person with day-to-day responsibility for implementing project (Name, tide, agency, address, phone, fax)	TEA FUNDS REQUESTED \$
County of Tulare Supervisor Bill Sanders 2800 W. Burrel Avenue Visalia, CA 93291 (559) 733-6271	TEA is a stand-alone project. Tulate CKG 505 If Julate TEA is part of a larger project. Total Project Cost 5_693,000 (Round dollars to nearest thousands)
Person who can answer questions about this application (Name, title, phone, fax)	PARTNER(S) (Name, title, agency, address, phone, fax)
Janine Chilcott, Board Member of Three Rivers Historical Society (559) 561-4744 FAX (559) 561-4458	·
PROJECT SCOPE OF PROPOSED TRANSPORTATION E Describe the project's location, limits of work, size, etc. (No	ENHANCEMENT ACTIVITIES of the justification or benefits).
The project would preserve approximatel biological, and historic value by putti adjacent to State Highway 198 in the co	ly 3.4 acres of land which has archaeological, ing in a rest area. The project is located community of Three Rivers in Tulare County.
PROPOSED SCHEDULE:	Quarter and Year
Start Environmental Studies Draft Environmental Document Final Environmental Document Begin Design Engineering Plans, Specifications, and Cost Estimates complete Start Right of Way Acquisition Right of Way Certification Ready to Advertise Award Construction Project Completion (open for use)	July 1999 September 1999 December 1999 January 2000 January 2000 March 2000 March 2000 March 2000 December 2000
WHICH CATEGORY OR CATEGORIES ENCOMPASS THI	E TEA? (May be more than one.) in each of the TEA categories:
List approximate amount of federal TEA funds to be spent i	
List approximate amount of federal TEA funds to be spent i \$1. Pedestrian or bike facilities	\$6. Historic transportation rehabilitation
List approximate amount of federal TEA funds to be spent i \$1. Pedestrian or bike facilities \$_200,0002. Acquisition of sites	\$6. Historic transportation rehabilitation \$7. Rails to trails
List approximate amount of federal TEA funds to be spent i \$1. Pedestrian or bike facilities \$2. Acquisition of sites \$3. Historic highway programs	 \$6. Historic transportation rehabilitation \$7. Rails to trails \$8. Outdoor advertising removal
List approximate amount of federal TEA funds to be spent i \$1. Pedestrian or bike facilities \$2. Acquisition of sites \$3. Historic highway programs \$3. Landscaping/scenic beautification	 \$6. Historic transportation rehabilitation \$7. Rails to trails \$8. Outdoor advertising removal n \$9. Archaeology planning/research

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PART TWO: FUNDING

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Prepared by Janine_Chilcott Title Board Member					
Agency Three Rivers Historical SocietyPhone (550) 561-4744 FAX (559) 561-4458					
PROJECT COMPONENT COSTS PRELIMINARY ENGINEERING PHASE: • Construction Documents \$					
RIGHT OF WAY PHASE (ACCUDISTITION): \$					
CONSTRUCTION PHASE: • Construction contract items \$_378,000 • Contingencies \$_38,000 • Construction engineering \$_38,000 • TOTAL CONSTRUCTION \$_454,000 •					
CASH FLOW CHARTFiscal YearFiscal YearFiscal YearBeyondFiscal YearFiscal YearFiscal Year2001/022001/021998/991999/002000/012001/022001/02					
Preliminary Engineering \$\$_39,000 \$\$\$\$					
Right of Way \$ \$_200,000 \$ \$ \$					
Construction \$5_434,000 \$5_3 TOTAL \$5239,000 \$5454,000 \$5					
LOCAL FUNDING SHARE DETAIL					
Phases A + B ≈ C D* Federal Match TEA Cost Total Cost					
Preliminary Eng \$\$ 39,000 \$_39,000 \$_39,000					
Right of Way \$\$ 200,000 \$_200,000 \$_200,000					
Construction \$_350,000 \$_104,000 \$_454,000 \$_454,000					
TOTAL \$ 350,000 \$ 343,000 \$ 693,000 \$ 693,000					
*Fill in column 'D' only when TEA is part of larger project, not a stand-alone project					
SOURCE(S) OF MATCH Preliminary (Spell out: No acronyms) Engineering Historic Society					
Right of Way Historic Society					
Construction County of Tulare and Historic Society					
MAINTENANCE Who will maintain? Three Rivers Historical Society					
What is the source of maintenance funds? User fees					

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ITEM ESTIMATE - CONSTRUCTION CONTRACT ITEMS							
Item Description	Unit	Quantity	Unit Price	Amount			
Design & Environmental	Lump Sum			, \$ 39,000			
Construction Engineering	Lump Sum			\$ 38,000			
Contingencies	Lump Sum			\$ 38,000			
Property Acquisition	Parcel	3		\$200,000			
Construction							
House Rehabilitation (Interpreti Landscaping Parking and Drainage Rest Stop	ve Center)			\$ 70,000 \$ 80,000 \$150,000 \$ 78,000			
7		TOL	AL .	\$693,000			

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PART TWO: FUNDING (continued)

TEA Application Form - RTPA 2 November 1998

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Page 3

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PART THREE: ASSURANCES

This page must be signed for the projec	tito be considered for funding.
Commitment/Prior Commitment: Has the project Administering Agency certified that it is v	villing and able to maintain and operate the project?
X Yes	□ No
Please describe the best evidence of the certification available	allable. If none is available, when can one be provided?
See the Tulare County Board of Su front of this application packet.	pervisors Resolution NO. 95-1297 in the
Project Administering Agency possesses legal authority acquire, and construct the proposed project, and by form body authorizes the nomination of the transportation enh contained therein, and authorizes the person identified a connection with the nomination and to provide such add	to nominate transportation enhancement activity and to finance, rail action (e.g., a resolution) the Administering Agency's governing ancement activity, including all understanding and assurances s the official representative of the Administering Agency to act in ltipnal information as may be required.
Project Administering Agency will maintain and operate life of the resultant facility(les) or activity. With the appr Administering Agency or its successors in interest in the property.	the property acquired, developed, rehabilitated, or restored for the oval of the California Department of Transportation, the property may transfer the responsibility to maintain and operate the
Project Administering Agency will give the California De examine all records, books, papers, or documents relate	partment of Transportation's representative access to and the right to to the transportation enhancement activity.
Project Administering Agency will cause work on the pro notification from the State that funds have been approve carried to completion with reasonable diligence.	ject to be commenced within a reasonable time after receipt of dby the Federal Highway Administration and that the project will be
Project Administering Agency will comply where applica National Environmental Policy Act, the Americans with f Guidelines for Archaeology and Historic Preservation, ar regulations.	ble with provisions of the California Environmental Quality Act, the Disabilities Act, the Secretary of the Interior's Standards and a any other federal, state, and/or local laws, rules and/or
I certify that the information contained in this transportat attachments, is accurate and that I have read and under form.	ion enhancement activity application, including required stand the important information and agree to the assurances on this
Signad	Date
(TEA Administering Agency Representative as sl	nown in Resolution)
Printed (Name and Title) Jim Maples,	Chairman of the Board of Supervisors
Administering Agency County of Tulare	
	n
kalion Form - RTPA	

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Tulare County Planning and Development Department Tulare County Courthouse Civic Center Room 111 Visalla, CA 93291-4593 209-733-6254 (Planning) 209-733-6282 (Building Permits) 209-730-2604 (FAX) George E. Finney, Director Mary E. Beatie, Assistant Director

November 16, 1995

Holly Smyth Transportation Planning Group 711 N. Court, Suite J Visalia CA 93291

RE: Proposed Rest-Stop Site in Three Rivers

Dear Holly:

In response to your fax dated November 13, 1995, I re-read my previous letter of April 4, 1994, to Gerald Avants. The General Plan designations and zoning have not changed for these properties since that letter was written. However; as I understood the original proposal, the site was to be utilized as a rest-stop, a gift shop (with incidental museum) and a caretaker's residence. Based on our conversations, the gift shop aspect is no longer applicable, the one residence is to become an historical monument, and the second residence is to be used as a museum/interpretive center instead.

Museums are not listed as allowed uses under the C-2 (General Commercial) Zone, but are allowed uses in the P-O (Professional Office) Zone. After reviewing the ordinance, it was determined that a museum use is a less intensive use than many of the uses currently allowed in the C-2 Zone, and should also be allowed in this Zone, making the entire current proposal consistent with zoning. However, if meetings or education classes (assemblages of people for education or entertainment purposes) are to be held regularly at the site, there may be the requirement for approval of a Special Use Permit. Assemblage uses generate more intensive traffic, parking, and occupancy densities, and are thus subject to additional reviews under a Special Use Permit application.

Please note, the Assessor's Parcel Numbers which you included in the fax cover have changed. The APNs are now 067-160-13, 167-160-35 and 067-160-20. Former APN 067-160-14 was split into two parcels, only one of which is owned by the Three Rivers Historical Society. If you wish to obtain precise acreages of the parcels, a survey and computation will be required to be performed by a Licensed Surveyor or Registered Civil Engineer. The <u>estimated</u> acreages of the three APNs in question are as follows:

067-160-13	-	.65	acre <u>+</u>
067-160-35		.72	acre <u>+</u>
067-160-20	-	1.27	acres <u>+</u>

As I mentioned in our telephone conversation of November 13, APNs 067-160-13 and 067-160-35 are not legally separate parcels, but are one single unit being assessed in two portions.

November 16, 1995 Holly Smyth Transportation Planning Group Page 2

Hope this answers your questions. If you have more, please call, write and/or fax.

Sincerely,

Margare Neufeld, AICP, Planner III Project Review Division

mn

xc: George E. Finney, Director Caltrans Three Rivers Historical Society





History • Archaeology

November 8, 1994

Jose Ruano Environmental Planner CALTRANS 4545 N. West Avenue Fresno, CA 93705

RE: Three Rivers Resource Preservation/Roadside Project

Dear Jose:

As a professional, and one who has accomplished a great deal of historical research relating to Three Rivers, I want to commend your efforts in this project. The 4-acre parcel is an outstanding opportunity to enhance a transportation facility and preserve significant cultural resources.

For your information, the Three Rivers Historical Society is currently preparing an official nomination of the property for listing in <u>The National Register of Historic Places</u>. As a part of this process, I accompanied Cherilyn Widell, State Historic Preservation Officer, on a tour of the property on September 28, 1994. Ms. Widell was most impressed by the integrity of the historic resources and the proposed plans for the project.

I might also mention that the parcel was the site of the Bahwell Store and Saloon 1879-1900, a renowned stop on the Mineral King Road (1879). Along with the Bahwell Ditch (1896), the Bequette House (1926), and a wealth of Native American associations, the site is truly a compendium of Three Rivers history.

Thanks for the opportunity to have input in the planning process. If I may be of further assistance, please don't hesitate to call.

Sincerely,

John F. Ellist

John F. Elliott Historian

> Cultural Resource Survey since 1978 p o box 728 three rivers, ca 93271 ph/fax 209/561-4843

Three Rivers, CA November 14, 1994

Jose Ruano Environmental Planner, Cal Trans 4545 N. West Street Fresno, CA 93705

Re: Historical Preservation--Three Rivers, CA

Dear Mr. Ruano,

I am writing to you as a long-time resident of Three Rivers (some 70 years) asking your help in obtaining funds for our area to obtain a rest stop and historical center on Highway 198.

The site in question is one which is of major historical significance. Portions of it were once used as an Indian trail. In time this trail became part of the original road to the Mineral King area where gold was mined.

The home of the granddaughter of the first superintendent of Sequoia National Park is on the property. Remains of an old 1800's saloon can be found.

The rapid growth of the Three Rivers Historical Society clearly shows that people in this area are very interested in the history of this area and feel that it is important that efforts be made for the preservation of this site.

I ask that you do all that you can to enable us to preserve the area which is available to us on Highway 198 in Three Rivers.

Sincerely yours, -E. B. com llaig

Mary E. Bronzan 39044 Sierra Drive Three Rivers, CA. 93271

November 8, 1994

Jose Ruano Environmental Planner CALTRANS 4545 N. West Avenue Fresno, CA 93705

RE: Three Rivers Roadside Rest Area Project

Dear Jose:

As a lifelong resident of Three Rivers and descendant of a pioneer family, I appreciate your efforts in assisting the Three Rivers Historical Society in the Roadside Rest Area project. The preservation of the property will save a valuable historical link with the early settlement of Three Rivers and later, the establishment of Sequoia National Park.

A museum and a roadside park have been on the wish list of this community for as long as I can remember. Through the dedication of planners like yourself, and our local historical society, I am certain that the time for this worthwhile project is now.

I want to encourage you in this endeavor and if I can be of any assistance, please don't hesitate to call me at (209) 561-4205.

Sincerely,

fin Barton Jim

Sequoia Sentinel

P.O. Box 806 Three Rivers, CA 93271 (209) 561-3627 FAX 209-561-0118

November 15, 1994

Jose Ruano Environmental Planner CALTRANS 4545 N. West Avenue Fresno, CA 93705

RE: Three Rivers Rest Area Project

Dear Jose:

As a longtime owner/publisher of the Sequoia Sentinel, I want to express my personal thanks for your efforts with regard to the Rest Area Project. Both a historical museum and rest stop for travelers are two amenities that would greatly enhance the quality of life here in Three Rivers.

In the past several months the *Sentinel* has featured several stories on the project. The use of the property for an interpretive center and rest stop has strong local support among the business and residential communities.

Again, thanks for your help with this timely project. If I may be of assistance, please don't hesitate to call.

Sincerely. Ledbette

Rachelle Ledbetter Publisher, Sequoia Sentinel

Savage Ranch

DECIDUOUS FRUIT, CITRUS

43553 NORTH FORK THREE RIVERS, CAUFORNIA 93271 (209) 561-4232

November 15, 1994

Mr. Jose Ruano, Environmental Planner CALTRANS 4545 N.W. Avenue Fresno, Ca. 93705

Re: Rest Stop and Historical Museum in Three Rivers, Ca.

Dear Mr. Ruano:

I want to express my wholehearted support for a CALTRANS rest stop here in Three Rivers, in conjunction with a historical museum or exhibit. The Three Rivers Historical Society property is ideally suited to such a project, right on Highway 198 close to the center of town. However, there are many trees which would provide shade and cover, so that the rest stop would not be obtrusive.

Members of the Historical Society and the local chapter of the Native Plant Society would undertake to plant and maintain landscaping for the site. It would benefit the local merchants as well as the traveling public.

It would be a constructive and welcome addition to our town and reflect credit upon state government, which is generally pretty much maligned these days.

I hope you will do everything in your power to facilitate this project. Thank you.

Yours very truly,

CHARLES BLAKSLEE

CBpon

PEGGY O'NEIL Three Rivers.CA 93271

November 12, 1994

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CALTRANS Attn: Jose Ruano, Environmental Planner 4545 N.W. Avenue Fresno, Ca. 93705

Re: Rest Stop and Historical Site in Three Rivers, California

Gentlemen:

I want to urge you to approve and start construction as soon as possible on a rest stop and historical site here in Three Rivers.

This property is ideally situated for such a project, which would benefit our local economy and visitors to the Valley. Members of the Historical Society and the local chapter of the Native Plant Society would help landscape and maintain the site.

Everyone that I know here in town is heartily in favor of the project.

Thank you for your help. Lea an O'hell PEGGY O'NEIL




RESOURCE MANAGEMENT AGENCY county of tulare agenda item

BOARD OF SUPERVISORS

ALLEN ISHIDA District One CONNIE CONWAY

Oistrict Two PHILLIP A. COX District Three

J. STEVEN WORTHLEY District Four MIKE ENNIS District Five

AGENDA DATE: December 16, 2008

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SUBJECT: Caltrans Cycle 6 Budget Authority Lapsing Funds Report, June 30, 2009

REQUEST(S):

That the Board of Supervisors:

- Approve the Local Assistance Projects Cooperative Work Agreement (CWA) Cycle 6 Budget Authority Lapsing June 30, 2009 report for road widening projects on Avenue 416 (project number 5946[029]) and Caldwell Avenue (project number 5946[043]) and the Three Rivers Visitor's Center (project number 5946[049]); and
- 2. Authorize the Chairman to sign the Local Assistance Projects CWA Cycle 6 Budget Authority Lapsing June 30, 2009 report.

SUMMARY:

In late November 2008, the Resource Management Agency (RMA) staff received notification from the Caltrans District Local Assistance Engineer that federal funding on three projects will expire or lapse on June 30, 2009 unless the County enters into Cooperative Work Agreements (CWA) for these projects to extend the funding. The three projects and recommended action for each are described as follows:

1. Avenue 416 from the Fresno County Line to Road 88 (Crawford Avenue) near the City of Dinuba, project approval and environmental documents for widening this road to a four-lane divided highway. The approval process of the environmental document under the National Environmental Policy Act (NEPA) will

SUBJECT:Caltrans Cycle 6 Budget Authority Lapsing Funds Report, June 30, 2009DATE:December 16, 2008

continue into Spring 2009 as the County and its consultant, Quincy Engineering, and Caltrans correct noticing issues for air quality impacts, receive comments back from the Department of the Interior regarding affects to the Rose Anne Vuich Park and other cultural issues, and to be consistent in the description of the project limits in the Federal Transportation Improvement Program (FTIP) and environmental documents. The environmental document under NEPA regulations is expected to be completed and approved in late Spring 2009. The remaining federal funds for this project are expected to be expended prior to lapsing, or, the work under this project is expected to be completed prior to lapsing.

2. Caldwell Avenue (Avenue 280) from Santa Fe Street in the city of Visalia to Orange Avenue in the City of Exeter, project approval and environmental documents for widening this road from two lanes to four lanes with improvements. There have been two allocations for funding this project, the first one in Fiscal Year 2002-03 and the second allocation in Fiscal Year 2005-06. Only the federal funding in the first allocation will lapse on June 30, 2009. The funding provided by the first allocation was completely spent and reimbursed by Caltrans prior to July 2008 and no funds from the first allocation are at risk to lapse.

3. Three Rivers Visitors Center in the Community of Three Rivers to develop a visitor's center. After funding was approved for this project and preliminary engineering and environmental documentation work was underway, the County was advised by Caltrans that this project did not meet the eligibility requirements for the program under which it was approved and that further funding for construction would not be approved. The County received reimbursement from Caltrans for the costs the County had incurred working on this project, however the County's work on this project has been terminated for several years and any remaining funding should be allowed to lapse.

The County is not proposing to extend the funding for any of these three projects under a CWA with Caltrans. However, Caltrans requested the County submit a report, signed by the Chairman of the Board of Supervisors, describing the status or proposed action to be taken by the County regarding these funds. Caltrans wants to be ensured that the Board of Supervisors is aware of the potential lapsing of these funds if the County does not request an extension under a CWA.

FISCAL IMPACT/FINANCING:

There is no net County cost to the General Fund. There are no fiscal impacts to signing this report. For two of the projects, Avenue 416 and Caldwell Avenue, the funds will be spent prior to the lapse. For the Three Rivers Visitor Center the project has already been terminated.

LINKAGE TO THE COUNTY OF TULARE STRATEGIC BUSINESS PLAN:

These reports assist in improving and maintaining an adequate transportation infrastructure by demonstrating responsiveness to reporting requirements of the funding sponsor

SUBJECT: Caltrans Cycle 6 Budget Authority Lapsing Funds Report, June 30, 2009 DATE: December 16, 2008

ALTERNATIVES:

Do not sign the report. This is not recommended as this would leave the County's proposed direction on these projects ambiguous, and would not meet requirements set forth by the funding sponsor.

INVOLVEMENT OF OTHER DEPARTMENTS OR AGENCIES:

Once signed by the Chairman, these reports will be sent to the Caltrans District Local Assistance Engineer.

ADMINISTRATIVE SIGN-OFF:

11/15/08

Britt L. Fussel, P.E. Assistant Director - Engineering County Surveyor

Kint

Henry Hash Director

cc: Auditor/Controller County Counsel County Administrative Office (3)

Attachment: Local Assistance Projects CWA Cycle 6 Budget Authority Lapsing June 30, 2009

BEFORE THE BOARD OF SUPERVISORS COUNTY OF TULARE, STATE OF CALIFORNIA

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IN THE MATTER OF CALTRANS CYCLE 6 BUDGET AUTHORITY LAPSING FUNDS REPORT, JUNE 30, 2009

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RESOLUTION NO. 2008-0939

UPON MOTION OF <u>SUPERVISOR WORTHLEY</u>, SECONDED BY <u>SUPERVISOR ENNIS</u>, THE FOLLOWING WAS ADOPTED BY THE BOARD OF SUPERVISORS, AT AN OFFICIAL MEETING HELD <u>DECEMBER 16, 2008</u>, BY THE FOLLOWING VOTE:

AYES: NOES: ABSTAIN: ABSENT:	SUPERV NONE NONE NONE	'ISORS ISHIDA,	COX, WORTHLE	Y AND ENNIS
SOF SUPA	•	ATTEST:	JEAN M. ROUS	
			CLERK, BOARD	OF SUPERVISORS
	SE	BY:	Leure	UBana
			Deputy Clerk	
COUNT	advered by	* * * * * * * * *	* * * * * * *	\bigcirc

- 1. Approved the Local Assistance Projects Cooperative Work Agreement (CWA) Cycle 6 Budget Authority Lapsing June 30, 2009 report for road widening projects on Avenue 416 (project number 5946[029]) and Caldwell Avenue (project number 5946[043]) and the Three Rivers Visitor's Center (project number 5946[049]); and
- 2. Authorized the Chairman to sign the Local Assistance Projects CWA Cycle 6 Budget Authority Lapsing June 30, 2009 report.

RMA Co, Counsel Auditor

DAY 12/17/08 Local Assistance Projects CVA Cref 6 Buoget Authomy Late 6 (As of July 31, 2008) Dat 6-Tulare County

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	None	Funds Expended	Aliow funds ta tapse	
	Persona that	ritt Fussel	rtt Fussel	
	e VX	R K	8 2	+
	Caltrans and federal agency review and approval	Cattrans and federal agency review and approval	Absolute	
	s Completion of the NEPA Process	ha Delay	Project was determined to be inellegable under funding program	
<u> (65.97</u>	v o	°	б 	
	5J	\$ <u>,</u>	2	
12	£	£	2	
	02/01/2000	8007/60/50	NA	
Į.	992,673	\$8,279	\$21,537	\$109,577
	\$141,565	196'6695	\$14,463	\$855,988
i je Zje	5261223	\$708,240	\$36,000	\$965,565
	widen from two anes to four arres corressway	Roadway Widening from 2 lanes to 4 ares with mprovements	Develop Visitor Center	TOTALS
	on Avenue 416 from the Fresno County Line to Road B8 (Crawford Avenue) near the City of Dinuba.	on Caldweil Avenue (Avenue 280) from Santa Fe Avenue to Orange Avenue in the City of Viselia	in the community of Three Rivers.	
	5346(029)	5946(0+3)	5946(049)	
	MI24	1415di	51PLER	
	Tulare County	Tulare County	Tulare County	FEDERAL PROJECTS:
	8	8	8	0.1
CONSTRUCTION OF STRUCT		8 . N. (2013-12) R	ž	101
1997 - 199 7	Feder	Feder	Feder	
	2002-03	2002-03	2002-03	

Signature of Approving Agency's Board of Council:

Print Name:

Date:

Phillip A Cox

December 15, 2008

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December 30, 2015

When appropriate, trees and shrubs, spaced more than 10 feet on center, are to be individually watered.

Overhead irrigation systems, e.g., impact or gear driven sprinklers, should be primarily used for irrigating low shrub masses, ground cover and for establishing native grasses. Trees in overhead irrigated ground cover areas should receive supplemental basin water. Sprinklers should be appropriate for local wind and soil conditions. Sprinklers should be selected and placed to avoid spraying paved surfaces. Sprinklers, other than pop-up systems, subject to being damaged by vehicles, bicyclists, or pedestrians should be relocated or provided with sprinkler protectors, flexible risers, or flow shutoff devices. Fixed risers should not be placed sidewalks and bikeways. adjacent to Sprinkler protectors should be used on pop-up sprinklers and quick coupling valves adjacent to the roadway.

- (3) Controllers. Irrigation controllers are to be easily accessible, located in enclosures, protected from vehicular traffic, and in an area with good lighting and visibility to oncoming traffic. Controllers must not be located near shoulders, in or near dense shrubbery, or in the path of the spray of sprinklers.
- (4) Backflow Preventers. The use of reduced pressure principle backflow devices are required for highway planting projects. Master remote control valves should be used at all pressured water sources directly downstream of the backflow preventers. Backflow preventers should be located in enclosures.
- (5) Booster Pump Systems. When local agency water pressure is insufficient, booster pumps may be included in the irrigation design. Design of a booster pump system should be coordinated with DES-SD. Office of Electrical, Mechanical, Water and Wastewater Engineering (OEMW&W). After the irrigation system has been designed such that all branches have close to equal flowrate requirements, the booster pump system design request should be prepared including flowrate and discharge pressure needed for the pump,

the availability for power distribution, and maintenance access to the pump site. OEMW&W will either design the booster pump system, (including the equipment pad, enclosure, valves and piping, pump equipment, and pump control equipment) or recommend an off-the-shelf booster pump package.

Topic 903 - Safety Roadside Rest Area Standards and Guidelines

903.1 Minimum Standards

The following standards generally represent minimum values. When consistent with sound judgment and in response to valid concerns, variations may be considered. Standards lower than those indicated herein may not be used without approval of the Principal Landscape Architect, Landscape Architecture Program. See Chapter 29 of the Project Development Procedures Manual (PDPM) for process and procedures for approval of deviations from standards.

The Division of Design is responsible for approving nonstandard geometric design as discussed in Topic 82 and Index 901.1. The District Design Liaison and Project Delivery Coordinator should be involved in reviewing the geometric features for the design of the on and off ramps of safety roadside rest areas. Structural sections and drainage should be designed in accordance with the standards contained in this manual.

903.2 General

Safety roadside rest areas should be designed to provide safe places for travelers in automobiles, commercial trucks, recreational vehicles, and bicycles where not prohibited, to stop for a short time, rest and manage their travel needs. Safety roadside rest areas may include vehicle parking, bicycle parking, picnic tables, sanitary facilities, telephones, water, landscape tourist information, traveler service information facilities and vending machines. Safety roadside rest areas should be provided at convenient intervals along the State highway system to accommodate traveler needs.

Safety roadside rest areas should comply with State and Federal codes and regulations that address buildings, electrical work, plumbing, lighting, drinking water, wastewater treatment discharge, grading, storm water discharge, hazardous material containment and disposal, energy conservation, accessibility for persons with disabilities, and environmental protection and mitigation.

Safety roadside rest areas should be designed for cost effective and efficient maintenance. High quality, durable and easily cleanable materials should be used to accommodate the heavy use that rest area facilities receive. Replaceable components, such as mirrors, sinks, signs, and lighting fixtures, should be products that will be readily available during the lifetime of the facility. Crew rooms and storage space for cleaning supplies, tools and equipment should be provided in appropriate locations, away from direct public view. Maintenance access must be provided to plumbing, sewer, electrical, and equipment to facilitate inspection and repair.

The freeway interchange should accommodate, or be improved to accommodate, the volume and geometric movements of anticipated traffic. The safety roadside rest area should be within one-half mile of the freeway.

Auxiliary parking lots include parking areas and restrooms provided by or jointly developed and operated by partners (such as existing or new truck stops, or at other highway oriented commercial development). These are for longer-duration stops and overnight parking, primarily for commercial vehicle operators. These facilities are located outside of freeway right of way, within one-half mile of the freeway.

903.3 Site Selection

(1) Need. New safety roadside rest area and auxiliary truck parking sites should be consistent with the needs identified in the current Safety Roadside Rest Area System Master Plan. Proposed locations identified on the Safety Roadside Rest Area System Master Plan. available from the Landscape Architecture Program website. are approximate only. Actual sites may be located within several miles in either direction from the location indicated on the Safety Roadside Rest Area System Master Plan. More than one alternate site should be

identified and analyzed before selecting a preferred site. When offering potential sites for joint economic development proposals, it is best to allow for as many acceptable alternative sites as possible.

- (2) Spacing. New safety roadside rest area sites should be located per the current Safety Roadside Rest Area System Master Plan.
- (3) Access. Safety roadside rest areas located on a freeway or a highway of four lanes or more, should be planned as a pair of units, each unit serving a separate direction of traffic. Access (ingress/egress) should be by means of direct on and off ramps from the freeway or highway. Required minimum distances should be accommodated between existing and proposed ramps, in accordance with Chapter 500.

Federal law and regulations prohibit direct access from the freeway to commercial activities.

(4) Right of Way Requirements. A safety roadside rest area unit may require 10 to 15 acres of right of way. Potential negative impacts to prime agricultural land, native vegetation, natural terrain, drainage and water features should be considered when identifying potential sites for rest areas. Consider sites where natural vegetation has already been disturbed and where rest area development may facilitate restoration.

Ideally, the Department should own safety roadside rest area right of way in fee simple.

However, it may be necessary or desirable for safety roadside rest areas to be located on land owned by other State, Federal or tribal entities. When seeking right of way agreements or easements, consider possible partnerships with the entity landowners that may facilitate right of way acquisition or project acceptance. The opportunity to cooperate on the development of integrated information, interpretive or welcome centers may be favorable to another entity.

(5) Economic Factors. Right of way cost may be a significant factor in site selection. Advance protection or acquisition of right of way December 30, 2015 -

should be considered when planning and programming future safety roadside rest area projects.

The impact of safety roadside rest areas on local tourism and economic development should be considered, addressed, and discussed. Stakeholders who may consider partnering to develop or operate the safety roadside rest area should be part of this discussion.

903.4 Facility Size and Capacity Analysis

Safety roadside rest area parking and restroom capacity should be designed to accommodate the anticipated demand in the design year (20 years from construction). When feasible, the design may allow the parking area to be expanded by 25 percent beyond the 20-year design period.

If budget prevents the full facility from being constructed initially, a master site plan should be developed that indicates the planned footprint of parking and rest rooms to accommodate anticipated demand. Areas designated for future expansion should be kept free of development, including underground utilities.

Safety roadside rest area expansion should not excessively diminish the scenic and environmental qualities of the existing site. If it is impractical to expand an existing rest area because of cost and site conditions, consider strategies for increasing capacity in the vicinity, such as relocation of the rest area, construction of an auxiliary parking facility, or construction of an additional safety roadside rest area.

(1) Stopping Factor. The process for estimating required parking capacity begins by calculating the percentage of daily traffic that is expected to stop at the safety roadside rest area. The Division of Traffic Operations provides data on annual average daily traffic (AADT) for State highway mainlines and ramps. The average daily ramp count for a safety roadside rest area, when divided by the mainline AADT, provides a percentage stopping factor.

 $\frac{Ramp \ Count}{Mainline \ AADT} = Stopping \ Factor \ (\%)$

The calculated stopping factor for an existing rest area may not indicate the full demand for a facility. Overcrowded conditions at a rest area during weekends and holidays may discourage many travelers from stopping. Nevertheless, this method provides a reasonable estimate of the rough percentage of vehicles that stop at a rest area. Stopping factors typically range from 1 percent on high volume freeways to 35 percent on remote highways.

A stopping factor cannot be directly calculated for a new safety roadside rest area; however, an estimate may be derived from existing safety roadside rest areas of similar size and situation. The type of highway traffic, the remoteness of the site, and the availability of other traveler services should be considered. Stopping factors for new safety roadside rest areas generally range from about 10 percent to 15 percent of mainline traffic.

(2) Number of Visitors. The number of vehicles entering a safety roadside rest area during an average day may be estimated by multiplying the mainline AADT by the stopping factor.

The number of visitors using a safety roadside rest area during an average day then may be estimated by multiplying the number of vehicles per day by an average vehicle occupancy of 2.2 people.

Mainline AADT (Year of Traffic data) × Stopping Factor (%) × 2.2 = Total Visitors Per Day

To determine the 20-year design-need, it is necessary to apply a traffic-growth factor to the results. Generally, 3 percent compounded 20-year growth may be estimated by multiplying the number of visitors by a factor of 1.8.

Mainline AADT × Stopping Factor (%) × 2.2 × 1.8 = Total Visitors Per Day (Year of Traffic Data)

(3) Number of Vehicle Parking Spaces. The total number of parking spaces for all vehicle types may be estimated by multiplying the Peak Hour Traffic (see the Division of Traffic Operations website) by the stopping factor, and dividing the result by the number of times the parking space is expected to turn over in one hour. Multiply by a factor of 1.8 to include the compounded 20-year growth.

Most visitors in automobiles stay about 10 minutes to 20 minutes. Some, however, will nap or sleep for longer periods. The California Code of Regulations allows travelers to stay up to 8 hours at each safety roadside rest area. For design purposes, it is common to assume a 20-minute stay for all types of vehicles (assume up to 6 hours, extended stay, for commercial truck drivers). That equals 3 turnovers of each parking space each hour.

Peak Hour \times Stopping Factor (%) \times 1.8

3 Turnovers per hour = Total Parking Spaces (Design Year)

- (4) Automobile/Long Vehicle Split. Consider the percentage of commercial trucks in the mainline traffic when determining the appropriate ratio of automobile parking spaces to long-vehicle parking spaces. Typically, one third of the total parking is devoted to long vehicles (commercial trucks. transit. automobiles with trailers and recreational vehicles). On certain goods-movement routes. truck traffic can account for half of the vehicular traffic at certain rest areas (consult with District Traffic Operations). For these highly commercial route segments, consider the potential for auxiliary parking facilities to satisfy the long duration stopping needs of commercial drivers at off-line parking locations.
- (5) Bicycle Parking. On highways where bicycling is not prohibited, bicycle parking should be considered at safety roadside rest areas. Consult the District Bicycle Coordinator for information on placement, capacity, and design requirements for bicycle parking.
- (6) Maximum Parking Capacity. The maximum parking capacity for a safety roadside rest area unit should not exceed 120 total vehicular parking spaces. Larger facilities tend to lose pedestrian scale, context sensitivity and

environmental qualities appropriate for a restful experience. If more than 120 vehicular parking spaces are needed, it is advisable to consider the development of additional safety roadside rest areas as identified on the Safety Roadside Rest Area System Master Plan, or development of an auxiliary parking facility. Site conditions may limit the amount of parking that is practical to build. If construction or enlargement of parking areas to meet anticipated demand will significantly diminish the environmental character of the site, the quantity of parking should be reduced as appropriate.

Sites for auxiliary parking facilities should be chosen for their suitability in accommodating large numbers of commercial trucks for longer stays (up to 8 hours). Auxiliary parking facilities are not limited to 120 spaces; however, the amount of parking should be appropriate for the site and its surroundings.

(7)Restroom Capacity and Fixture Counts. Restroom fixture counts (water closets, urinals for men's rooms, and lavatories) are developed by the Division of Engineering Services-Transportation Architecture, and based upon average daily visitor and peak hour visitor data provided by the District. The quantity of fixtures provided for men's rooms should be divided equally among water closets, urinals and lavatories. The quantity of water closets for women's rooms should be 1 to 1.5 times the combined quantity of toilets and urinals provided for men. Restroom facilities should be designed to accommodate visitor use during the cleaning of restrooms. When existing restrooms are replaced as part of rehabilitation projects, it is preferable that the 20-year design need be constructed, even when expansion of parking facilities is deferred. Restroom facilities must be designed and constructed to be accessible to persons with disabilities in accordance with all applicable State and Federal law.

903.5 Site Planning

(1) Ingress and Egress. For safety and convenience, ingress to the safety roadside rest area, circulation within the facility and egress should be simple, direct and obvious to December 30, 2015

the traveler. See Topic 403 regarding the principles of channelization.

Rest areas designed for freeways shall have standard freeway exit and entrance ramps, in accordance with Chapter 500. Projects to rehabilitate or modify existing ramps, roads, and parking lots must address any requirement to upgrade geometrics to current design standards. Safety roadside rest areas on expressways and conventional highways should be designed with standard public road connections and median left-turn lanes, according to Topic 405.

The minimum distance between successive exit ramps on collector-distributor roads into rest areas should be 600 feet. One-way vehicular circulation should be provided through the safety roadside rest area to reduce wrong-way reentry to the freeway. Recirculation of traffic within the parking lot is acceptable if provisions are made to discourage wrong-way traffic. Travelers should be guided towards the proper exit at each decision point along internal roads and parking aisles by the angle of intersection and the placement of curbs, pavement markings, and signs.

If the highway will ultimately be a freeway, the design should accommodate future construction. Two-way ingress/egress roads, if used, should be a minimum 32 feet wide. When a rest area or auxiliary parking facility is developed outside the freeway right of way at an interchange location, the interchange ramps, bridges and general geometric design should be capable of accommodating the volume of traffic anticipated and the turning movements of commercial trucks. Geometric and structural improvements should be completed prior to public use of the safety roadside safety roadside rest area or parking facility.

Whenever possible, ingress maneuvers should utilize simple and direct movements. Egress may be more complex, if necessary, as travelers are more rested and better prepared for a circuitous route to the freeway or highway. Provide clear signage for travelers as they approach and depart the rest area.

Travelers entering a safety roadside rest area must be directed to the proper parking area automobiles (cars, vans. motorcycles), bicycles, or long-vehicles. Where practical, provide ample ramps and transitions, good sight distance, and well-placed signs and pavement markings preceding the point where vehicle types separate. Avoid locating potential distractions (non-traffic-control signs, plantings, vehicle pullouts, dumpsters, artwork, etc.) at or preceding this point.

Within a safety roadside rest area, there are intersections and other points of conflict where design layout, signage, pavement markings and visibility must be carefully considered. One of these points is where long vehicle traffic, bicycle, and automobile traffic merge prior to egress from the safety roadside rest area. Consider the speed and angle at which the traffic types will merge. Avoid configurations where one type of traffic is allowed to gain excessive speed preceding a merge with slow moving traffic. Curvilinear road layout, narrow roads and landscaping can be used to manage traffic so that merging is done at slow and relatively similar speeds.

The angle of intersection should allow good visibility of oncoming traffic. Avoid blocking intersection sight lines with landscaping, signs and other elements.

Assess and improve, as necessary, ramp lengths, radii and superelevation, parking aisle widths, parking stall dimensions, and bicycle parking when rehabilitating a safety roadside rest area. When the scope of work is limited to routine pavement maintenance, such as minor repairs, seal coats and striping, or work on building, sidewalks, utilities and landscaping, upgrading to current design standards may be deferred.

(2) Layout. Roads, parking areas and associated earthwork largely define the layout of a safety roadside rest area. Roads and parking areas should be arranged to fit the terrain, views and site configuration. If the site has few physical constraints, roads and parking areas should be designed with generous curves and curvilinear parking to help avoid circulation conflicts. If the site is heavily wooded, roads and parking should be designed to retain the healthiest and most attractive trees and tree groupings.

Walking distance from the most remote parking space to restrooms should not exceed 350 feet.

Bicycle parking should be located in a safe area.

To maintain visual quality and avoid environmental damage to soils, vegetation and water quality, paved service roads should be provided for maintenance access to service facilities. Service roads should be 10 feet to 12 feet wide.

- (3) Grading and Drainage. Grading should be designed to accommodate and integrate the required development with as little disturbance to the site as practical. Drainage should be designed in accordance with Chapter 800 through 860. Grading and drainage should be harmonious with natural landforms and follow the direction of existing slopes and drainage patterns. Cuts and fills should be shaped and rounded to blend with existing land forms, and the revised terrain should complement the layout of parking areas and sidewalks.
- (4) Parking Areas. Ramps, interior roads and parking areas should be designed to encourage safe and orderly traffic movement and parking. These areas should be well defined and when appropriate include the use of concrete curbs and striping.

The design of all roads, aisles, parking spaces and parking lot islands should ensure that commercial truck maneuvers can be accommodated without damage to curbs, sidewalks, pavement edges or parked vehicles. See Topic 407 for truck and bus turning template guidance.

Provide one dedicated parking space for use by the California Highway Patrol (CHP). The CHP space should be located in an area that provides maximum visibility to the public. If a CHP drop-in office is planned, the CHP space should be visible from the office location. Provide a sign and pavement markings to designate the CHP space. A sign advising "Patrolled by Highway Patrol" should be placed on the freeway exit sign preceding each rest area.

Parking facilities are to be designed accessible to all modes of travel and are to conform to California MUTCD and DIB 82 guidance. Designated accessible parking spaces must be provided for automobiles and vans. As space permits and need requires, one accessible parking space for long vehicles may be provided at each rest area unit. Refer to Chapters 600 through 670 for pavement structure guidance.

(5) Pavement. Pavement for ramps, roads and parking should be designed in accordance with Chapters 600 through 670. Parking lots may be constructed of flexible or rigid pavement. Rigid pavement has the advantage of being resistant to deterioration from dripping fuel and antifreeze.

Table 903.5 Vehicle Parking Stall Standards

Vehicle Type	Min Stall Width (ft)	Aisle Width (ft)	Aisle Location
1 Auto	9	5	Passenger side
2 Autos	9	5	Between stalls
1 Van	9	8	Passenger side
1 Van/ 1 Auto	9	8	Between stalls
1 long vehicle	12	8	Passenger side
2 long vehicles	12	8	Between stalls

(6) Signage. Standard reflectorized signs should be placed along the roadside to inform and

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direct travelers as they approach a safety roadside rest area. A roadside sign should be placed one mile in advance of each safety roadside rest area that indicates the distance to that rest area and to the next rest area beyond. In remote areas an additional sign may be placed in advance of a safety roadside rest area indicating the distance to the facility. Additional panels may be included on or near this sign to inform travelers of the availability of vending machines, recreational vehicle waste disposal stations, traveler information, wireless internet or other special services. A directional sign should be placed at the safety roadside rest area ingress ramp. Standard reflectorized traffic control signs should be used within the rest area for all traffic guidance. These signs may be enhanced with aesthetic backing or frames. Non-traffic signs may be of customized design, provided they are easy to maintain or replace should they be damaged or stolen.

Freestanding signs should be placed in safety roadside rest areas only to provide traveler direction. However, a welcome sign indicating the safety roadside rest area name may be placed within the pedestrian portion of the rest area. Welcome signs should not be placed along ramps or at traffic decision points. Welcome signs must not be placed within the clear recovery zone of the highway or ramps. Informational signs indicating use regulations, anti-litter regulations, reclaimed water use, safety roadside rest area adoptions, maintenance crews presence/hours, proximity/use of agricultural crops, scenic highways designation, environmental features, etc., should be placed in kiosks, display cases, interpretive displays designed or for pedestrian viewing (see DIB 82 for guidance on exhibits).

(7) Walkways. It is important to provide a clearly defined and ADA compliant path of travel for pedestrians. Primary walkways should be located to direct users from automobile, bicycle, and long-vehicle parking areas to core facilities and restroom entrances. See DIB 82 for further information on accessibility requirements. Walkways should be a minimum 10 feet wide. Steps should be avoided. Sidewalks in front of automobile parking spaces should be a minimum of 12 feet wide to compensate for the overhang of automobiles where wheel stops are not provided. Tree wells smaller than 4 feet in dimension should not be placed in sidewalks or pedestrian plazas to avoid displacement of pavement by tree roots. Trees adjacent to walkways are to provide a minimum clearance of 8 feet from pavement to lower foliage.

Accessible paths of travel must be provided to restrooms and other pedestrian facilities, including picnic shelters, picnic tables, benches. drinking fountains, telephones, machines. vending information kiosks. interpretive displays, and viewing areas. The path of travel from designated accessible parking to accessible facilities should be as short and direct as practical, must have an even surface, and must include curb ramps, marked aisles and crosswalks, and other features, as required to facilitate visitors with wheelchairs, walkers and other mobility aids. The Department of General Services, Division of State Architect, as well as the California Department of Transportation enforce the California Building Code (Title 24) for the various on-site improvements. Many of these design requirements are contained in DIB 82 for exterior features, but many other design requirements are not in DIB 82 and still must be followed. The Division of Engineering Services - Transportation Architecture may be consulted for assistance.

(8) Service Facilities. Service facilities including, crew rooms, equipment storage rooms, dumpster enclosures, service yards, and utility equipment, can be distracting and unattractive to rest area users. Service facilities should be aesthetically attractive, separated and oriented away from public-use areas (restrooms, pedestrian core and picnic areas).

903.6 Utility Systems

Utility systems should be designed in conformance with Title 24 Energy Requirements of the California Code of Regulations (State Building Code), and other applicable State and Federal requirements.

(1) Electrical Service. Electrical power systems should be designed to accommodate the demands, as applicable, of outdoor lighting (ramps, parking areas, pedestrian walkways and plazas), water supply systems (pumps, pressure tanks, irrigation controllers), restrooms (lighting, hand dryers), pedestrian facilities (lighting, water chillers, telephones, wireless internet, kiosks), crew room (lighting, conditioning, heating, air refrigerator, microwave), CHP drop-in office (lighting, heating, air conditioning), and vending (lighting, vending machines, change machine, storage-room air conditioning).

Primary electrical power sufficient for basic safety needs should be supplied by conventional power providers. Supplemental power may be provided using innovative technologies such as solar panels or wind generation or conventional means, such as backup generators. Consider security, public safety and environmental protection when considering the type of fuel and fuel storage facilities for electrical generation. Provide vehicular access to fuel storage facilities for refueling, and include fencing and gates as necessary to prevent access by the general public.

Water. Water supply systems should be (2) designed to accommodate the 20-year projected demand and to handle the peak flow required for restroom fixtures and landscape irrigation. Pumps, pressure tanks, chlorinators and associated equipment should be located outside of pedestrian use areas and screened from view. Enclosures should be provided for water supply equipment to discourage vandalism and minimize the appearance of clutter. Water lines beneath parking areas, pedestrian plazas and the highway should be placed in conduits. Maintain appropriate distance between wells and wastewater disposal facilities (applicable laws should be followed). Potable water must be provided to sinks, drinking fountains, exterior faucet assemblies and pet-watering stations. Untreated or non-potable water may be used

for toilets and landscape irrigation. Irrigation systems should be isolated from the general water system using appropriate backflow prevention devices.

- (3) Wastewater Disposal. Wastewater disposal facilities should be designed to handle the peak sewage demand. Waterborne sewage disposal systems should be provided. Structures Design will arrange for soil analysis and percolation tests, and upon completion of testing will obtain approval of the proposed sewage treatment system from the Regional Water Quality Control Board. Recreation vehicle waste disposal stations may be provided at rest areas where there is a recognized need and commercial disposal stations are not available.
- (4) Telephones. Provide locations, conduit and wiring for a minimum of three public pay telephones at each safety roadside rest area unit. To comply with accessibility laws and regulations, at least one telephone must be wheelchair accessible, at least one telephone must allow for audio amplification, and at least one telephone must include text messaging for the hearing impaired. Whenever possible, all telephones should allow for audio amplification.

Telephones should be wall or pedestal mounted, and located in pedestrian areas that are well lighted, and whenever possible, protected from rain, snow and wind. Consider placing telephones, commercial advertising displays and public information displays in close proximity. Information should be placed near telephones indicating local emergency numbers and indicating the rest area name and location. 120-volt power should be provided to operate keyboards and pedestal lighting.

Conduits and pull wires should be provided from the telephone service point to the maintenance crew room and to the California Highway Patrol (CHP) drop-in office. Provide telephone service for maintenance contractors and the CHP.

(5) Call Boxes. Call Boxes generally are not placed in safety roadside rest areas.

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- (6) Telecommunications Equipment and Transmission Towers. The Department seeks revenue from placement of wireless telecommunications facilities on State-owned right of way. Transmission towers and associated equipment, structures and fencing should be located outside of pedestrian use areas and views. Telecommunications equipment and transmission towers should be aesthetically integrated into the site. Consider future safety roadside rest area expansion, and, when possible, locate facilities outside of areas planned for future development.
- (7) Lighting. Site and building lighting are to be designed in conformance with Title 24 Energy Requirements of the California Code of Regulations (State Building Code). Also refer to the Traffic Manual, Chapter 9 for further Highway Lighting guidance. For functionality and safety, rest areas should be lighted for 24hour-a-day use. Lighting should be automatically controlled and include manualshutoff capability. Restroom entrances and the interiors of restrooms, utility corridors, crew rooms, CHP drop-in offices and storage pedestrian buildings. plazas, primary sidewalks, crosswalks, ramps, picnic areas, kiosks, bicycle parking, and interpretive displays should be brightly illuminated. Lighting should illuminate walking surfaces and avoid strong shadows. An average level of 1 foot-candle is generally acceptable for primary pedestrian areas. Peripheral areas of the site should be lighted only where nighttime pedestrian use is anticipated. Nonpedestrian areas of the site do not require lighting.

903.7 Structures

Safety roadside rest area structures include restrooms, storage rooms, equipment rooms, crew rooms, CHP drop-in offices, picnic shelters, utility enclosures, dumpster enclosures, kiosks, arbors and other architectural elements. Safety roadside rest area architecture should be designed for a service life of approximately 20 years. Safety roadside rest areas are high-profile public works projects, which represent the State, Department and local community to millions of visitors each year. Attention to quality architectural design, construction and maintenance is warranted. Building forms, rooflines, construction materials (stone, timber, steel, etc.), colors and detailing should express the local context including history, cultural influences, climate, topography, geology and vegetation. Structures must be designed and constructed to be accessible to persons with disabilities in accordance with all applicable State and Federal law.

(1) Restrooms. Two restrooms should be provided for each gender to allow for uninterrupted public access to facilities during janitorial cleaning operations. Unisex or family restrooms may be provided to facilitate assistance by others to young children, elderly persons and persons with disabilities. These facilities are not considered part of the total capacity used, but may be counted as women's restrooms.

Entrances to restrooms should be visible from the parking area. They should be well lighted and clearly identified with signs and/or graphics. Restroom entrances should not be located in areas of dead-end circulation. Facilities intended for general public use should not be located near restroom entrances. Privacy screens at restroom entrances should allow visibility from the ground to a height of 12 inches to 18 inches above the ground. Lockable steel doors should be provided for entrances to rest rooms, storage rooms, crew rooms and CHP drop-in offices.

To deter vandalism, signs should be made of metal or other durable material and should be recessed into, or securely mounted on a wall. Signs identifying the entrance to each restroom should be clearly visible from the parking area. A sign, in English and Braille, should be placed on the building wall or on the privacy screen at each restroom entrance to identify the gender. Signs may also be provided in other languages as appropriate. A standard sign should be installed near the entrance to each restroom advising that, pursuant to Streets and Highways Code Section 223.5, a person of the opposite sex may accompany a person with a disability into the restroom. A sign should be installed near the restroom doors advising that, State law

prohibits smoking in restrooms and the area within 20 feet of the restroom doors.

- (2) Crew Room. A maintenance crew room, separate from equipment and supply storage, should be provided at each safety roadside rest area. When appropriate, a single crew room may be provided for a pair of safety roadside rest area units. The crew room should be heated and air-conditioned. Conduits or wiring for telephone service, by others, may be provided.
- (3) CHP Drop-in Office. A dedicated office and restroom should be provided for use by the CHP. Consult with the CHP to determine need. The office should be located adjacent to the pedestrian core and near the dedicated CHP parking stall. The restroom may have double entries to allow cleaning by maintenance crews; however, the CHP office should be designed to allow access only by CHP.
- (4) Vending Machine Facilities. Accommodations for vending machines should be considered when designing safety roadside rest areas. Vending machines may be installed with a project or installed at any other time by initiative of the California Department of Rehabilitation, Business Enterprise Program (BEP).

A storage room should be provided within 150 feet of the vending machines for storage of vended products. The safety roadside rest area project should provide conduits from the electrical service panel to the vending storage room for possible installation of air conditioning by the BEP.

(5) Storage Rooms or Buildings. Storage rooms or buildings should be provided to house maintenance equipment, tools and supplies. Janitorial cleaning supplies and tools should be located in the vicinity of the restrooms, reasonably close to parking for maintenance service vehicles. Grounds-maintenance equipment and supplies should be located outside of public-use areas and views. Shelving for paper goods, cleaning supplies and other materials must be provided.

- (6) Caretakers/Managers. Residential facilities or offices for caretakers or managers may be included with a safety roadside rest area when prior provisions have been made for the use and staffing of such facilities. Caretakers and managers may be employed or otherwise compensated, sponsored by others, or work as volunteers.
- (7) Public Information Facilities. At least 96 square feet of lighted display space should be provided at each safety roadside rest area for display of public information, such as rest area regulations, maps, road conditions, rest area closures, safety tips, and missing children posters. Space should consist of wallmounted cases or freestanding kiosks.

903.8 Security and Pedestrian Amenities

Proper safety roadside rest area design will help ensure user safety with the installation of adequate lighting, providing accessible walking surfaces and allowing open visibility through the site. Vegetation, walls, recesses and other areas that allow concealment should not be located near restroom entrances. Site security may also include the presence of a CHP office and the use of surveillance cameras. Fences should be provided only for access control, traffic control, or safety purposes. Fencing should be designed to be as unobtrusive as practical. A 4-foot high fence must be provided between the highway and the safety roadside rest area. Perimeter fencing should be of the minimum height and design necessary. Where adjacent property is developed, more substantial fencing or screening may be required. Fencing in rural or natural areas may be required to control or protect wildlife or livestock.

Pedestrian amenities include trash and recycling facilities, pedestrian signs, pet areas and drinking fountains. Landscape architectural elements such as shade structures, kiosks, benches, seat walls, picnic tables, and other miscellaneous features should be included. Landscaping should be provided and may include areas for monuments, artwork, interpretive facilities, and informal exercise and play facilities. Newspaper and traveler coupon booklet vending machines are owned by others and placed in safety roadside rest areas by encroachment permit. Pedestrian amenities must be designed and constructed to be December 30, 2015

accessible to persons with disabilities in accordance with all applicable State and Federal law.

Wireless internet facilities may be installed in safety roadside rest areas with funding borne by the provider or others.

Coin operated binocular viewing as authorized by law is provided privately through a competitively awarded revenue-generating agreement.

Topic 904 - Vista Point Standards and Guidelines

904.1 General

New vista points should be considered during planning and design of new alignments for inclusion with the highway contract (see Index 109.3). Vista points may also be provided on existing routes. Existing vista points should be periodically inspected for needed restoration or upgrading.

The District Landscape Architect is responsible for approving site selection, concept, and design for all areas to be signed as vista points. Pavement structure and drainage should be designed in accordance with the standards contained in this manual.

Vista points should be designed to be accessible to all travelers and conform to the Americans with Disabilities Act and DIB 82.

904.2 Site Selection

Site selection is based on the following criteria:

- (1) Quality. A site should have views and scenery of outstanding merit or beauty. Locations on designated State scenic highways or in areas of historical or environmental significance should be given special emphasis. A site should provide the best viewing opportunities compared to other potential locations within the vicinity.
- (2) Compatibility. A site should be located on State highway right of way or on right of way secured by easement or agreement with another public agency. A site should be obtainable without condemnation. Sites on or adjacent to developed property or property

where development is anticipated should be avoided.

- (3) Access. A site must be accessible from a State highway or intersecting road. A site must have adequate sight distance for safe access.
- (4) Adequate Space. A site must be of adequate size to accommodate the necessary features and facilities. However, development of a site can not detract from the scenic quality of the area. Adequate space should be available for earth mounding and planting to minimize the visual impact of larger facilities. Adequate space for future expansion is desirable.

904.3 Design Features and Facilities

- Road Connections. <u>The design of connections</u> to vista points should be in accordance with <u>Index 107.1</u>. Vista points designed for freeways shall have standard freeway exit and entrance ramps (see Chapter 500).
- (2) Parking. Parking areas should be inclusive of all user modes. Parking capacity should be based on an analysis of current traffic data. However, at least five vehicle spaces should be provided. Parking should not exceed 0.025 times the DHV or 50 spaces, whichever is less. This number may be exceeded at high Parking stalls should be use trailheads. delineated by striping. Approximately onequarter to one-third of the spaces should be allocated to long vehicles (cars with trailers, recreational vehicles, and buses). Geometrics should be such that all types of vehicles entering the vista point can safely negotiate and exit the facility. Accessible parking should be provided as discussed in Index 903.5(4) and DIB 82.

Consult the District Bicycle Coordinator for guidance on bicycle parking.

- (3) Pedestrian Areas. Vista points should provide a safe place where motorists can observe the view from outside their vehicles and bicyclists off their bicycles. Accessible walkways that exclude vehicles may be provided within the viewing area.
- (4) Interpretive Displays. An interpretive display should be provided within the pedestrian area of each vista point. The display should be

appropriate to the site, both in design and content and accessible; see DIB 82 for exhibit guidance. Display structures should not overwhelm or dominate the site, and they should be placed at the proper location for viewing the attraction.

Information should pertain to local environmental, ecological, and historical features. It should interpret the features being viewed to inform and educate the public.

Historical plaques, monuments, vicinity maps, and directions to other public facilities are examples of other appropriate informational items.

- (5) Vending Machines and Public Information Displays. Designers should be familiar with the provisions of the California Streets and Highways Code, Section 225-225.5. The designer should adequately consider and plan for uses and facilities that may reasonably be anticipated.
- (6) Sanitary Facilities. Comfort stations are usually not provided. Exceptions must be approved by the Principal Landscape Architect, Landscape Architecture Program.
- (7) *Water*. Potable water may be provided at a reasonable cost. Nonpotable water should not be provided in a vista point.
- (8) Trash Receptacles. Trash receptacles should be provided in each vista point. As a guide, one receptacle should be provided for every four cars, but a minimum of two receptacles should be provided per vista point. Dumpsters should not be located at a vista point.
- (9) Signs. Directional, regulatory, and warning signs must conform to the California MUTCD.
- (10) Planting. Existing vegetation, rock outcroppings, and other natural features should be conserved and highlighted. Removal or pruning of existing plants to frame the view should be held to a minimum and be directed by the District Landscape Architect. Earth mounding and contour grading may be employed to restore and naturalize the site. Planting, including erosion control, should be provided to revegetate

graded areas. Plants requiring permanent irrigation should be avoided.

(11) Barriers. Railings, bollards, or other appropriate barriers should be used to protect pedestrians, and discourage entry into sensitive or hazardous areas.

The design of such barriers should be sensitive to pedestrian scale and reflect the scenic character of the site.

(12) Other Features. Benches, telephones, and viewing machines are optional items. Picnic tables are not to be included in vista points.

In general, the inclusion of items which do not either facilitate the viewing of the scenic attraction, or blend the vista point into its surroundings, should be avoided.

Topic 905 - Park and Ride Standards and Guidelines

905.1 General

Park and Ride facilities must be considered for inclusion on all major transportation projects that include, but are not limited to, new freeways, interchange modifications, lane additions, transit facilities, and HOV lanes. See Chapter 8, Section 7 of the Project Development Procedures Manual for additional information.

The District Park and Ride Coordinator is responsible for approving site selection. The concept and general design for Park and Ride facilities must be coordinated by the District Landscape Architect. Additional information on Park and Ride facilities can be obtained from the Headquarters Park and Ride Coordinator in the Office of System Management Operations in the Division of Traffic Operations. Additional guidance on Park and Ride facilities can be found in the AASHTO Publication "Guide for Park and Ride Facilities" (2004).

Park and Ride facilities must accommodate all modes of travel and conform to the American with Disabilities Act and DIB 82.

905.2 Site Selection

Park and Ride facilities are typically placed to enhance corridor efforts to reduce congestion, and December 30, 2015

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to improve air quality usually associated with other transportation opportunities such as HOV lanes and transit. The specific choice as to location and design should be supported by a detailed analysis of demand and the impact of a Park and Ride facility based upon these parameters:

- Corridor congestion
- Community Values
- Air Quality
- Transit Operations
- Overall Safety
- Multi-modal Opportunities

Full involvement of the project development team should be engaged in the evaluation and recommendation of Park and Ride type, classification, site and appurtenant facilities.

905.3 Design Features and Facilities

Park and Ride facilities are to be designed as multimodal facilities. Provisions for pedestrians, bicyclists, transit, single-occupancy vehicles, and multi-occupancy vehicles are to be provided as appropriate. The local transit provider should be consulted to determine if the facility should provide connections to transit. In general, the function of the facility is to take precedent over the form of the facility; however, special consideration for the safety and security of all users is fundamental to the success of the facility.

The design of a Park and Ride facility should take into account the operations and maintenance of the facility, both in terms of effort as well as safety. Appurtenant facilities as allowed by law should be carefully evaluated and included as appropriate. Any necessary funding and agreements need to allow appurtenant facilities on site and should be in place early in the project development process.

D. NOISE ORDINANCE CONCEPT

1. TULARE COUNTY GENERAL PLAN HEALTH AND SAFETY ELEMENT IMPLEMENTATION MEASURES NUMBERS 20, 21, AND 22

10.10 Work Plan/Implementation Measures

The following table documents the Implementation Measures included with the General Plan to implement the goals and policies included in this Element.

Implementation	Implements what Policy	Who is Responsible	2012- 2015	2015- 2020	2020- 2030	On- Going
20. The County shall develop and implement procedures for acoustical analysis of development proposals.	HS-8.5	RMA				
21. The County shall adopt the Tulare County Noise Ordinance to incorporate standards set forth in the Health and Safety Element.	HS-8.3	RMA				
22. The County should develop and adopt a peak noise standards ordinance to regulate the operation and use of peak noise generating uses throughout the County and ensure residents and visitors are not subject to excessive peak noise nuisances.	HS-8.11	RMA				

2. EPA MODEL NOISE ORDINANCE

The Environmental Protection Agency's Model Community Noise Control Ordinance

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ARTICLE I Short Title

This ordinance may be cited as the "Noise Control Ordinance of the (City/County) of ______"

ARTICLE II Declarations of Findings and Policy & Scope

2.1 Declaration of Findings and Policy

- WHEREAS excessive sound and vibration are a serious hazard to the public health and welfare, safety, and the quality of life: and WHEREAS a substantial body of science and technology exists by which excessive sound and vibration may be substantially abated: and, WHEREAS the people have a right to and should be ensured an environment free from excessive sound and vibration that may jeopardize their health or welfare or safely or degrade the quality of life: and NOW, THEREFORE, it is the policy of the (City/County) of to prevent excessive sound and vibration which may jeopardize the health and welfare or safety of its citizens or degrade the quality of life.
- 2.2 Scope This ordinance shall apply to the control of all sound and vibration originating within the limits of the (City/County) of _____

ARTICLE III Definitions

3.1 Terminology

All terminology used in this ordinance not defined below, shall be in conformance with applicable publications of the American National Standards institute (ANSI) or its successor body.

3.2.1 "A-Weighted Sound Level" Means The sound pressure level in decibels as measured on a sound level meter using the A-weighting network. The level so read is designated dB(A) or dBA.

3.2.2 "Commercial Area" Means

[(As defined in the community (comprehensive plan)/ (zoning ordinance)].

3.2.3 "Construction" Means

Any site preparation, assembly, erection, substantial repair, alteration, or similar action, but excluding demolition, for or of public or private rights-of-way, structures, utilities or similar property.

3.2.4 "Day-Night Average Sound Level (L_{dn})" Means The 24-hour energy average of the A-weighted sound pressure level, with the levels during the period 10:00 p.m. to 7:00 a.m. the following day increased by 10 dBA before averaging.

3.2.5 "Decibel (dB)" Means

A unit for measuring the volume of a sound, equal to 20 times (the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

3.2.6 "Demolition" Means

Any dismantling, intentional destruction or removal of structures, utilities, public or private right-of-way surfaces, or similar property.

3.2.7 "Emergency" Means

Any occurrence or set or circumstances involving actual or imminent physical trauma or property damage which demands immediate action.

3.2.8 "Emergency Work" Means

Any work performed for the purpose of preventing or alleviating the physical trauma or property damage threatened or caused by an emergency.

3.2.9 "Noise Control Officer" Means The municipal agency or department having lead responsibility for this ordinance. (If no such agency is designated, the term shall mean the municipal official having lead responsibility for this ordinance.)

3.2.10 "Equivalent A-Weighted Sound Level (L_{eq}) " Means

The constant sound level that in a given situation and time period, conveys the same sound energy as the actual time-varying A-weighted sound. [For the purposes of this ordinance, a time period of 24 hours shall be used, unless otherwise specified.]

3.2.11 "Gross Vehicle Weight Rating (GVWR) Means The value specified by the manufacturer as the recommended maximum loaded weight of a single motor vehicle. In cases where trailers and tractors are separable, the gross combination weight rating (GCWH), which is the value specified by the manufacturer as the recommended maximum loaded weight of the combination vehicle shall be used.

3.2.12 "Impulsive Sound" Means Sound of short duration, usually less than one second, with an abrupt onset and rapid decay. Examples of sources of impulsive sound include

Examples of sources of impulsive sound include explosions, drop forge impacts, and the discharge of firearms.

3.2.13 "Industrial Area" Means

[(As defined in the community (comprehensive plan)/ (zoning ordinance)].

3.2.14 "Motor Carrier Vehicle Engaged in Interstate Commerce" Means

Any **** for which regulations **** pursuant to Section 18 of the Federal Noise Control Act of 1972(P.L. 72-***), as amended, pertaining to motor carriers engaged in interstate commerce.

3.2.15 "Motor Vehicle" Means

As defined in the motor vehicle code of this state. [Any vehicle which is propelled or drawn on land by a motor, such is, but not limited to, passenger cars, trucks, truck-trailers, semi-trailers, campers, go-carts, amphibious craft on land, **** ****, or racing vehicles, but **** **** motorcycles.]

3.2.16 "Motorboat" Means

Any vessel which operates on water and **** is propelled by a motor, including but not limited to, boats, barges, amphibious craft, water ski **** devices and hover craft.

3.2.17 "Motorcycle" Means

As defined in the motor vehicle code of this state. [An unenclosed motor vehicle having a saddle for the use of the operator and two or three wheels in contact with the ground, including but not limited to, motor scooters and mini-bikes.]

3.2.18 "Muffler or Sound Dissipative Device" Means A device for abating sound of escaping gases of an internal combustion engine.

3.2.19 "Noise" Means

Any sound which annoys or disturbs humans or which causes or tends to cause an adverse psychological or physiological effect on humans.

3.2.20 "Noise Disturbance" Means

Any sound which (a) endangers or ******** the safety or health of humans or animals; or (b) annoys or disturbs a reasonable person of normal sensitivities; or (c) endangers or injures personal or real property.

3.2.21 "Noise Sensitive Zone" Means

Any area designated pursuant to Section **** of this ordinance for the purpose of ensuring exceptional quiet.

3.2.22 "Person" Means

Any individual, association, partnership, or corporation, and includes any officer, employee, department, agency or instrumentality of a State or any political subdivision of a State.

3.2.23 "Powered Model Vebicle" Means

Any self-propelled airborne, waterborne, or land borne plane, vessel, or vehicle, which is not designed to carry persons, including, but not limited to any model airplane, boat, car, or rocket.

3.2.24 "Public Right-of-Way" Means

Any street, avenue, boulevard, highway, sidewalk or alley or similar place which is owned or controlled by a governmental entity.

3.2.25 "Public Space" Means

Any real property or structures thereon which are owned or controlled by a governmental entity.

3.2.26 "Pure Tone" Means

Any sound which can be distinctly heard as a single pitch or a set of single pitches. For the purposes of this ordinance, a pure tone shall exist if the one-third octave band sound pressure level in the band with the tone exceeds the arithmetic average of the sound pressure levels of the two contiguous one-third octave bands by 5 dB for center frequencies of 500 Hz and above and by 8 dB for center frequencies between 160 and 400 Hz and by 15 dB for center frequencies less than or equal to 125 Hz.

3.2.27 "Real Property Boundary" Means

An imaginary line along the ground surface, and its vertical extension, which separates the real property owned by one person from that owned by another person, but not including intra-building real property divisions.

3.2.28 "Residential Area" Means

[(As defined in the community (comprehensive plan)/ (zoning ordinance)].

3.2.29 "RMS Sound Pressure" Means

The square root of the time averaged square of the sound pressure, denoted $\ensuremath{P_{rms}}$

3.2.30 "Sound" Means

An oscillation in pressure, particle displacement, particle velocity or other physical parameter, in a medium with internal forces that causes compression and rarefaction of that medium. The description of sound may include any characteristic of such sound, including duration, intensity and frequency.

3.2.31 "Sound Level" Means

The weighted sound pressure level obtained by the use of a sound level meter and frequency-weighting

network, such as A or C, as specified in the American National Standards Institute specifications for sound level meters (ANSI S1.4-1971), or the latest approved revision thereof. If the frequency weighting employed is not indicated, the A-weighting shall apply.

3.2.32 "Sound Level Meter" Means

An instrument which includes a microphone, amplifier, RMS detector, integrator or time averaging device, output meter, and weighting networks used to measure sound pressure levels.

3.2.33 "Sound Pressure" Means

The instantaneous difference between the actual pressure and the average or barometric pressure of a given point in space, as produced by sound energy.

3.2.34 "Sound Pressure Level" Means

20 times the logarithm to the base 10 of the ratio of the RMS sound pressure to the reference pressure of 20 micropascals ($20x10\mu N/m$). The sound pressure level is denoted L_p , or SPL and is expressed in decibels.

3.2.35 "Vibration" Means

An oscillatory motion of solid bodies of deterministic or random nature described by displacement, velocity, or acceleration with respect to a given reference point.

3.2.36 "Weekday" Means

Any day Monday through Friday which is not a legal holiday.

ARTICLE IV Powers and Duties of the Noise Control Officer (NCO)

4.1 Lead (Agency/Official) The noise control program established by this

ordinance shall be administered by (title of municipal agency or lead official).

4.2 Powers of the Noise Control Officer (NCO) In order to implement and enforce this ordinance and for the general purpose of sound and vibration abatement and control, the NCO shall have, in addition to any other authority vested in it, the power to:

4.2.1 Studies

Conduct, or cause to be conducted, research, monitoring, and other studies related to sound and vibration.

4.2.2 Education

(a) Conduct programs of public education regarding:

 (1) the causes, effects and general methods of abatement and control of noise and vibration; and,
 (2) the actions prohibited by this ordinance and the procedures for reporting violations; and
 (b) encourage the participation of public interest groups in related public information efforts.

4.2.3 Coordination and Cooperation

(a) Coordinate the noise and vibration control activities of all municipal departments;
(b) Cooperate to the extent practicable with all appropriate State and Federal agencies;
(c) Cooperate or combine to the extent practicable with appropriate county and municipal agencies; and,

(d) Enter into contracts [with the approval of the (appropriate authority)] for the provision of technical and enforcement services.

4.2.4 Review of Actions of Other Departments

Request any other department or agency responsible for any proposed or final standard, regulation or similar action to consult on the advisability of revising the action, if there is reason to believe that the action is not consistent with this ordinance.

4.2.5 Review of Public and Private Protects

Review public and private projects, subject to mandatory review or approval by other departments, for compliance with this ordinance, if such projects are likely to cause sound or vibration in violation of this ordinance.

4.2.6 Inspections

(a) Upon presentation of proper credentials, enter and inspect any private property or place, and inspect any report or records at any reasonable time when granted permission by the owner, or by some other person with apparent authority to act for the owner. When permission is refused or cannot be obtained, a search warrant may be obtained from a court of competent jurisdiction upon showing of probable cause to believe that a violation of this ordinance may exist. Such inspection may include administration of any necessary tests. ((b) Stop any motor vehicle, motorcycle, or motorboat operated on a public right-of-way, public space, or public waterway reasonably suspected of violating any provision of this ordinance, and issue a notice of violation or abatement order which may require the motor vehicle, motorcycle or motorboat to be inspected or tested as the Noise Control Officer may reasonably require.]

4.2.7 Records

Require the owner or operator of any commercial or industrial activity to establish and maintain records and make such reports as the NCO may reasonably prescribe.

4.2.8 Measurements by the Owner or Operator Require the owner or operator of any commercial or industrial activity to measure the sound level of or the vibration from any source in accordance with the [published] methods and procedures and at such locations and times as the NCO may reasonably prescribe and to furnish reports of the results of such measurements to the NCO. The NCO may require the measurements to be conducted in the presence of its enforcement officials.

4.2.9 Product Performance Standard Recommendations

(a) Develop and recommend for promulgation (to the appropriate authority) provisions regulating the use and operation of any product, including the specification of maximum allowable sound emission levels of such product.
((b) Develop and recommend for promulgation (to the appropriate authority) provisions prohibiting the sale of products which do not meet specified sound emission levels, where the sound level of the product is not regulated by the United States Environmental Protection Agency under Section 6 of the Noise Control Act of 1972.]

- 4.2.10 Noise Sensitive Zone Recommendations Prepare recommendations, to be approved by (the appropriate authority), for the designation of noise sensitive zones which contain noise sensitive activities. Existing quiet zones shall be considered noise sensitive zones until otherwise designated. Noise sensitive activities include, but are not limited to, operations of schools, libraries open to the public, churches, hospitals, and nursing homes.
- 4.3 Duties of Noise Control Officer (NCO) In order to implement and enforce this ordinance effectively, the NCO shall within a reasonable time after the effective date of the ordinance:
- **4.3.1** Standards, Testing Methods, and Procedures Develop, [recommend to the appropriate authority.] and promulgate standards, testing methods and procedures.
- **4.3.2** Investigate and Pursue Violations In consonance with Section 4.2.6, Article XI, and other provisions of this ordinance, investigate and pursue possible violations of this ordinance.
- **4.3.3 Delegation of Authority** Delegate functions, where appropriate under this ordinance, to personnel within the NCO and to other agencies or departments, (subject to approval of).
- 4.3.4 Truck Routes and Transportation Planning

 (a) Study the existing transportation systems, such as truck routes within the community; determine areas with sensitivity to sound and vibration caused by transportation; recommend changes or modifications to transportation systems to minimize the sound and vibration impact on residential areas and noise sensitive zones
 (b) Assist in or review the total transportation

(b) Assist in or review the total transportation planning of the community, including planning for new roads and highways, bus routes, airports, and other systems for public transportation, to ensure that the impact of sound and vibration receives adequate consideration.

4.3.5 Capital Improvement Guidelines Establish noise assessment guidelines for the evaluation of proposed improvements for the capital

improvements budget and program pursuant to Section 5.5. These guidelines shall assist in the

determination of the relative priority of each improvement in terms of noise impact.

- 4.3.6 State and Federal Laws and Regulations

 (a) Prepare and publish [with the approval of
 ] a list of those products manufactured to meet specified noise emission limits under Federal, State, or community law for which "tampering" enforcement will be conducted; and.
 (b) Make recommendations for modifications or amendments to this ordinance to ensure consistency with all Stale and Federal law; and regulations.
- **4.3.7** Planning to Achieve Long Term Noise Goals [Develop a generalized sound level map of the (city/county), a long term plan for achieving quiet in the (city/county), and [with the approval of] integrate this plan into the planning process of the (city/county).]

4.3.8 Administer Grants. Funds and Gifts Administer noise program grams and other funds and gifts from public and private sources, including the State and Federal governments.

4.3.9 Periodic Report

[Evaluate and report, every year(s) following the effective date of this ordinance, on the effectiveness of the (city/county) noise control program and make recommendations for any legislative or budgetary changes necessary to improve the program. This report shall be made to the (Noise Control Advisory Board)/ (appropriate authority) which may amend it after consultation with the NCO, and then submit it to the (appropriate authority), for approval.]

ARTICLE V Duties and Responsibilities of Other Departments

5.1 Departmental Actions

All departments and agencies shall, to the fullest extent consistent with other law, carry out their programs in such a manner as to further the policy of this ordinance.

5.2 Departmental Cooperation

All departments and agencies shall cooperate with the NCO to the fullest extent in enforcing this ordinance.

5.3 Departmental Compliance with Other Laws All departments and agencies shall comply with Federal and Stale laws and regulations and the provisions and intent of this ordinance respecting the control and abatement of noise to the same extent that any person is subject to such laws and regulations.

5.4 Project Approval

All departments whose duty it is to review and approve new projects or changes to existing projects that result, or may result, in the production of sound or vibration shall consult with the NCO prior to any such approval.

5.5 Contracts

Any written contract, agreement, purchase order, or other instrument whereby the (city/county) a committed to the expenditure of dollars or more in return for goods or services shall contain provisions requiring compliance with this ordinance.

5.6 Low Noise Emission Products

Any product which has been certified by the Administrator of the United States Environmental Protection Agency pursuant to Section 15 of the Noise Control Act as a low noise emission product and which he determines is suitable for use as a substitute, shall be procured by the city/county and used in preference to any other product, provided that such certified product is reasonably available and has a procurement cost which is not more than (125) percent of the least expensive type of product for which it is certified as a substitute.

5.7 Capital Improvement Program

All departments responsible for a capital improvements budget and program shall prepare an analysis of the noise impact of any proposed improvements in accordance with noise assessment guidelines established by the NCO pursuant to Section 4.3.5. Proposed capital improvements include land acquisition, building construction, highway improvements, and utilities and fixed equipment installation.

ARTICLE VI Prohibited Acts

6.1 Noise Disturbances Prohibited

No person shall unreasonably make, continue, or cause to be made, or continued, any noise disturbance. Non-commercial public speaking and public assembly activities conducted on any public space or public right-of-way shall be exempt from the operation of this Section.

6.2 Specific Prohibitions

The following acts, and the causing thereof, are declared to be in violation of this ordinance:

6.2.1 Radios, Television Sets, Musical Instruments and, Similar Devices

Operating, playing or permitting the operation or playing of any radio, television, phonograph, drum, musical instrument, sound amplifier, or similar device which produces, reproduces, or amplifies sound:

(a) Between the hours ofp.m. and a.m. the following day in such a manner as to create a noise disturbance across a real property boundary or within a noise sensitive zone. [Except for activities open to the public and for which a permit has been issued by (appropriate authority) according to criteria set forth in];

(b) In such a manner as to create a noise disturbance at 50 feet (15 meters) from such device, when operated in or on a motor vehicle on a public rightof-way or public space, or in a boat on public waters, or;

(c) In such a manner as to create a noise disturbance to any person other than the operator of the device, when operated by any passenger on a common carrier;

(d) This section shall not apply to non-commercial spoken language covered under Section 6.2.2.

6.2.2 Loudspeakers/Public Address Systems

(a) Using or operating for any non-commercial purpose any loudspeaker public address system, or similar device between the hours of 10:00 p.m. and 8:00 a.m. the following day, such that the sound there from creates a noise disturbance across a residential real property boundary or within a noise sensitive zone.

(b) Using or operating for any commercial purpose any loudspeaker, public address system, or similar device **** such that the sound there from creates a noise disturbance across a real property boundary or within a noise sensitive zone: or (2) between the hours of, p.m. and a.m. the following day on a public right-of-way or public space.

6.2.3 Street Sales

Offering for sale or selling anything by shouting or outcry within any residential or commercial area of the **** county (except by permit issued by (appropriate authority) according to criteria set forth in and/or except between the hours ofa.m. and p-m.].

6.2.4 Animals and Birds

Owning possessing or harboring any animal or bird which frequently or for continued duration, howls, barks, **** squawks, or makes other sounds which ereate a noise disturbance across a residential real property boundary or within a noise sensitive zone. [This provision shall not apply to public zoos.]

6.2.5 Loading and Unloading

Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects between the hours of p.m. and a.m. the following day in such a manner as to cause a noise disturbance across a residential real property boundary or within a noise sensitive zone.

6.2.6 Construction

Operating or permitting the operation of any tools or equipment used in construction, drilling, or demolition work:

(a) Between the hours of, p.m. and a.m. the following day on weekdays or at any time on (Sundays/weekends) or holidays, such that the sound there from creates a noise disturbance across a residential real property boundary or within a noise sensitive zone, except for emergency work of public service utilities or by special variance issued pursuant to Section 7.2;

(b) At any other time such that the sound level at or across a real property boundary exceeds an L_{eq} , of dBA for the daily period of operation.

(c) This section shall not apply to the use of domestic power tools subject to Section 6.2.17.

6.2.7 Vehicle or Motorboat Repairs and Testing Repairing, rebuilding, modifying, or testing any motor vehicle, motorcycle, or motorboat in such a manner as to cause a noise disturbance across a residential real property boundary or within a noise sensitive zone.

6.2.8 Airport and Aircraft Operations

(a) The NCO shall consult with the airport proprietor to recommend changes in airport operations to minimize any noise disturbance which the airport owner may have authority to control in its capacity as proprietor.

(b) Nothing in this section shall be construed to prohibit, restrict, penalize, enjoin or in any manner regulate the movement of aircraft which are in all respects, conducted in accordance with, or pursuant to applicable Federal Laws or regulations.

6.2.9 Places of Public Entertainment

Operating, playing or permitting the operation or playing of any radio, television, phonograph, drum, musical instrument, sound amplifier, or similar device which produces, reproduces, or amplifies sound in any place of public entertainment at a sound level greater than dBA as read by the slow response on a sound level meter at any point that is normally occupied by a customer, unless a conspicuous and legible sign is located outside such place, near each public entrance, slating "WARNING: SOUND LEVELS WITHIN MAY CAUSE PERMANENT HEARING IMPAIRMENT."

6.2.10 Explosives, Firearms, and Similar Devices

The use or firing of explosives, firearms, or similar devices which create impulsive sound so as to cause a noise disturbance across a real property boundary or on a public space or right-of-way, without first obtaining a special variance issued pursuant to Section 7.2. [Such permit need not be obtained for licensed game-hunting activities on property where such activities are authorized.]

6.2.11 Powered Model Vehicles

Operating or permitting the operation of powered model vehicles so as to create a noise disturbance across a residential real property boundary, in a public space or within a noise sensitive zone between the hours of, p.m. and, a.m. the following day. Maximum sound levels in a public space during the permitted period of operation shall conform to those set forth for residential land use in Table 1 of Section 8.1 and shall be measured at a distance of feet (meters) from any point on the path of the vehicle. Maximum sound levels for residential property and noise sensitive zones, during the permitted period of operation, shall be governed by Section 8.1 and Section 6.2.16, respectively.

6.2.12 Vibration

Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of an individual at or beyond the property of the source if on private property or at feet (meters) from the source if on a public space or public right-of-way. For the purposes of this section, "vibration perception threshold" means the minimum ground or structure-borne vibratory motion necessary to cause a normal person to be aware of the vibration by such direct means as, but not limited to sensation by touch or usual observation of moving objects.

6.2.13 Stationary Non-Emergency Signaling Devices

(a) Sounding or permitting the sounding of any [electronically-amplified] signal from any stationary bell, chime, siren, whistle, or similar device, intended primarily for non-emergency purposes, from any place, (for more than minutes in any hourly period.]

[(b) Devices used in conjunction with places of religious worship shall be exempt from the operation of this provision.]

[(c) Sound sources covered by this provision and not exempted under subsection (b) shall be exempted by (appropriate authority) using criteria set forth in Section 7.2.]

6.2.14 Emergency Signaling Devices

(a) The intentional sounding or permitting the sounding outdoors of any fire, burglar, or civil defense alarm, siren, whistle or similar stationary emergency signaling device, except for emergency purposes or for testing, as provided in Subsection (b).

(b)(i) Testing of a stationary emergency signaling device shall occur at the same time of day each time such a test is performed, but not before a.m. or after p.m. Any such testing shall use only the minimum eycle test time. In no case shall such test time exceed seconds,

(b)(ii) Testing of the complete emergency signaling system, including the functioning of the signaling device and the personnel response to the signaling device, shall not occur more than once in each calendar month. Such testing shall not occur before a.m. or after, p.m. The time limit specified in subsection (i) shall not apply to such complete system testing.

[(c) Sounding or permitting the sounding of any exterior burglar [or fire] alarm or any motor vehicle burglar alarm unless such alarm is automatically terminated within minutes of activation. [This action shall not be interpreted to apply to alarms.]]

6.2.15 Motorboats

Operating or permitting the operation of any motorboat in any lake, river, stream, or other waterway in such manner as to exceed a sound level of dBA at 50 feet (15 meters) or the nearest shoreline, whichever distance is less.

6.2.16 Noise Sensitive Zones

(a) Creating or causing the creation of any sound within any noise sensitive zone designated pursuant to Section 4.2.10, so as to disrupt the activities normally conducted within the zone, provided that conspicuous signs are displayed indicating the

presence of the zone; or

(b) Creating or causing the creation of any sound within any noise sensitive zone, designated pursuant to Section 4.2.10, containing a hospital, nursing home. or similar activity, so as to interfere with the functions of such activity or disturb or annoy the patients in the activity, provided that conspicuous signs are displayed indicating the presence of the zone.

6.2.17 Domestic Power Tools

Operating or permitting the operation of any mechanically powered saw, sander, drill, grinder, lawn or garden tool, snow blower, or similar device used outdoors in residential areas between the hours or p.m. and a.m. the following day so as to cause a noise disturbance across a residential real property boundary.

6.2.18 Tampering

The following acts or the causing thereof are prohibited:

(a) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement, of any noise control device or element of design or noise label of any product identified under Section 4.3.6. The NCO may, by regulation, list those acts which constitute violation of this provision.

[(b) The (intentional) moving or rendering inaccurate or inoperative of any sound monitoring instrument or device positioned by or for the NCO, provided such device or the immediate area is clearly labeled, in accordance with NCO regulations, to warn of the potential illegality.]
(c) The use of a product, identified under Section 4.3.6, which has had a noise control device or element of design or noise label removed or rendered inoperative, with knowledge that such action has occurred.

ARTICLE VII Exceptions and Variances

7.1 Emergency Exception

The provisions of this ordinance shall not apply to; (a) the emission of sound for the purpose of alerting persons to the existence of an emergency, or (b) the emission of sound in the performance of emergency work

7.2 Special Variances

(a) The (NCO)/(Hearing Board) shall have the authority, consistent with this section, to grant special variances which may be requested pursuant to Sections 6.2.6 (Construction) and 6.2.10 (Explosives, Firearms, and Similar Devices).
(b) Any person seeking a special variance pursuant to this section shall file an application with the (NCO)/(Hearing Board). The application shall contain information which demonstrates that bringing the source of sound or activity for which the special variance is sought into compliance with this ordinance would constitute an unreasonable hardship on the applicant, on the community, or on other persons. [Notice of an application for a special

variance shall be published according to (Jurisdictional procedure).] Any individual who claims to be adversely affected by allowance of the special variance may file a statement with the (NCO)/(Hearing Board) containing any information to support his claim. If the (NCO)/(Hearing Board) finds that a sufficient controversy exists regarding an application, a public hearing may be held. (c) In determining whether to grant or deny the application, the (NCO)/(Hearing Board) shall balance the hardship to the applicant, the community, and other persons of not granting the special variance against the adverse impact on the health, safety, and welfare of persons affected, the adverse impact on property affected, and any other adverse impacts of granting the special variance. Applicants for special variances and persons contesting special variances may be required to submit any information the (NCO)/(Hearing board) may reasonably require. In granting or denying an application, the (NCO)/(Hearing Board) shall place on public file a copy of the decision and the reasons for denying or granting the special variance. (d) Special variances shall be granted by notice to the applicant containing all necessary conditions, including a time limit on the permitted activity. The special variance shall not become effective until all conditions are agreed to by the applicant. Noncompliance with any condition of the special variance shall terminate it and subject the person holding it to those provisions of this ordinance regulating the source of sound or activity for which the special variance was granted, including enforcement actions.

(e) Application for extension of time limit specified in special variances or for modification of other substantial conditions shall be treated like applications for initial special variances under subsection (b).

(f) The (NCO)/(Hearing Board) may issue guidelines [approved by] defining the procedures to be followed in applying for a special variance and the criteria to be considered in deciding whether to grant a special variance.

7.3 Variances for Time to Comply

(a) Within days following the effective date of this ordinance, the owner of any commercial or industrial source of sound may apply to the (NCO)/(Hearing Board) for a variance in time to comply with Section 6.2.12 (Vibration) or Article VIII. The (NCO)/(Hearing Board) shall have the authority, consistent with this section, to grant a variance, not to exceed days from the effective date of this ordinance. (b) Any person seeking a variance in time to comply shall file an application with the (NCO)/(Hearing Board). The application shall contain information which demonstrates that bringing the source of sound or activity for which the variance is sought into compliance with this ordinance prior to the date requested in the application would constitute an unreasonable hardship on the applicant, on the community, or on other persons. [Notice of an application for a variance in time to comply shall be published

according to (jurisdictional procedure).] Any individual who claims to be adversely affected by allowance of the variance in time to comply may file a statement with the (NCO)/(Hearing Board) containing any information to support their claim. If the (NCO)/(Hearing Board) finds that a sufficient controversy exists regarding an application, a public hearing may be held.

(c) In determining whether to grant or deny the application, the (NCO)/(Hearing Board) shall balance the hardship to the applicant, the community, and other persons of not granting the variance in time to comply, against the adverse impact on health, safety, and welfare of persons affected, the adverse impact on property affected, and any other adverse impacts of granting the variance. Applicants for variances in time to comply and persons contesting variances may be required to submit any information the (NCO)/(Hearing Board) may reasonably require. In granting or denying an application, the (NCO)/(Hearing Board) shall place on public file a copy of the decision and the reasons for denying or granting the variance in time to comply.

(d) Variances in time to comply shall be granted to the applicant containing all necessary conditions, including a schedule for achieving compliance. The variance in time to comply shall not become effective until all conditions are agreed to by the applicant. Noncompliance with any condition of the variance shall terminate the variance and subject the person holding it to those provisions of this ordinance for which the variance was granted, (c) Application for extension of time limits specified in variances in time to comply or for modification of other substantial conditions shall be treated like applications for initial variances under subsection (b), except that the (NCO)/(Hearing Board) must find that the need for the extension or modification clearly outweighs any adverse impacts of granting the extension or modification. (f) The (NCO)/(Hearing Board) may issue guidelines [approved by] defining the procedures to be followed in applying for a variance in time to comply and the criteria to be considered in deciding whether to grant a variance.

7.4 Appeals

Appeals of an adverse decision of the (NCO)/(Hearing Board) shall be made to the (appropriate court of law). Review of the court shall be (de novo)/ (limited to whether the decision is supported by substantial evidence)/(as specified by the).

ARTICLE VIII Sound Levels by Receiving Land Use

8.1 Maximum Permissible Sound Levels No person shall operate or cause to be operated on private property any source of sound in such a manner as to create a sound level which exceeds the limits set forth for the receiving land use category in Table 1 when measured at or within the property boundary of the receiving land use.

TABLE 1 SOUND LEVELS BY RECEIVING LAND USE

Receiving Land Use Category	Time	Sound Level Limit (dBA)
R-I, R-2, etc.	(A) a.m. to (B) p.m	. L _{eq}
(Residential, Public Space, Open Space, Agricultural o Institutional)	(A) a.m. to or (B) p.m.	L_{eq}
C-l, C-2, etc. B-l, B-2, etc. (Commercial or Business)	At All Times	L _{eq}
M-1, M-2,etc. (Industrial)	At All Times	L_{eq}

8.2 Correction for Character of Sound For any source of sound which emits a pure tone or

8.3 Exemptions

The provisions of this article shall not apply to: (a) Activities covered by the following Sections: 6.2.6 (Construction), 6.2.8 (Aircraft and Airport Operations), 6.2.10 (Explosives, Firearms, and Similar Devices), 6.2.13 (Stationary Non-emergency Signaling Devices), 6.2.14 (Emergency Signaling Devices), 6.2.15 (Motorboats), 6.2.17 (Domestic Power Tools), 9.1.3 (Refuse Collection Vehicles), 9.2 (Recreational Motorized Vehicles Operating Off Public Rights-ofway);

(b) the un-amplified human voice;

(c) interstate railway locomotives and cars; and [(d) (non-stationary farming equipment)/(all agricultural activities)]

ARTICLE IX Motor Vehicle Maximum Sound Levels

9.1 Motor Vehicles and Motorcycles on Public Rights-of-way

No person shall operate or cause to be operated a public or private motor vehicle or motorcycle on a public right-of-way at any time in such a manner that the sound level emitted by the motor vehicle or motorcycle exceeds the level set forth in Table 2.

TABLE 2 MOTOR VEHICLE AND MOTORCYCLE SOUND LIMITS (MEASURED AT 50 FEET OR 15 METERS)

	Sound Level Limit in dBA Speed Limit		
	35 mph	Over	Stationary
Vehicle Class	or Less	35 mph	Run-up
Motor Carrier Vehicle engaged in interstate commerce of GVWR or GCWR of 10,000 lbs or more	86	90	88
All other motor vehicles of GVWR or GCWR of 10,000 lbs or more	A	В	-
Any Motorcycle	С	D	-
Any other motor vehicle or any combination of vehicles towed by any motor vehicle	E	ŕ	-

- 9.1.1 Adequate Mufflers or Sound Dissipative Devices

 (a) No person shall operate or cause to be operated any motor vehicle or motorcycle not equipped with a muffler or other sound dissipative device in good working order and in constant operation:
 (b) No person shall remove or render inoperative, or cause to be removed or rendered inoperative, other than for purposes of maintenance, repair, or replacement, any muffler or sound dissipative device on a motor vebicle or motorcycle;
 (c) The NCO may, by (guidelines) (regulations subject to approval by), list those acts which constitute violation of this section.
- 9.1.2 Motor Vehicle Horns and Signaling Devices The following acts and the causing thereof are declared to be in violation of this ordinance:
 (a) The sounding of any horn or other auditory signaling device on or in any motor vehicle on any public right-of-way or public space, except (as a warning of danger)/(as provided in the vehicle code).

[(b) The sounding of any horn or other auditory signaling device which produces a sound level in excess of dBA at feet (meters).]

9.1.3 Refuse Collection Vehicles

No person shall;

(a) On or after (2 years) following the effective date of this ordinance, operate or permit the operation of the compacting mechanism of any motor vehicle which compacts refuse and which creates, during the compacting cycle, a sound level in excess of dBA when measured at feet (meters) from any point on the vehicle: or

(b) Operate or permit the operation of the compacting mechanism of any motor vehicle which compacts refuse, between the hours of p.m. and

..... a.m. the following day in a residential area or noise sensitive zone: or

(c) Collect refuse with a refuse collection vehicle between the hours of p.m. and, a.m. the following day in a residential area or noise sensitive zone.

9.1.4 Standing Motor Vehicles

No person shall operate or permit the operation of any motor vehicle with a gross vehicle weight rating (GVWR) in excess of ten thousand (10,000) pounds, or any auxiliary equipment attached to such a vehicle, for a period longer than, minutes in any hour while the vehicle is stationary, for reasons other than traffic congestion, on a public right-of-way or public space within 150 feet (46 meters) of a residential area or designated noise sensitive zone. between the hours of p.m. and a.m. the following day.

9.2 Recreation Motorized Vehicles Operating Off Public Rights-of-way

(a) [Except as permitted in subsection (b) or (c),] no person shall operate or cause to be operated any recreational motorized vehicle off a public right-ofway in such a manner that the sound level emitted there from exceeds the limits set forth in Table 3 at a distance of 50 feel (15 meters) or more from the path of the vehicle when operated on a public space or at or across the boundary of private property when operated on private property This section shall apply to all recreational motorized vehicles, whether or not duly licensed and registered, including, but not limited to, commercial or non-commercial racing vehicles, motorcycles, go-carts, snowmobiles, amphibious craft, campers and dune buggies, but not including motorboats. (b) Permits for new vehicle racing events may be obtained from the (appropriate authority) according [(c) Special variances for may be obtained from. (appropriate authority) according to procedure and criteria set forth in]

TABLE 3

RECREATIONAL MOTORIZED VEHICLE SOUND LIMITS (MEASURED AT 50 FEET OR 15 METERS)

Vehicle Type	Sound Level, dBA
Snowmobile	А
Motorcycle	В
Any Other Vehicle	С

ARTICLE X Land Use

10.1 General Provisions

(a) No owner of any land shall commence or cause to be commenced the construction of any structure covered by Sections 10.2. 10.3. 10.5 or 10.6 unless approved by the NCO as provided in this Article.
(b) Any application for approval required by this Article shall be submitted in writing to the NCO,

with a copy to the (Building Department)/ (Appropriate Department), by the owner of the land on which the Structure is proposed to be constructed and shall contain the following information: (1) identification of the land on which the construction is proposed:

(2) the section of this Article under which approval is requested;

(3) information and data supporting the claim that the appropriate requirements will be met; and,(4) any other information which the NCO may reasonably require.

10.2 Construction Restrictions for Habitable and Institutional Structures

(a) Except as provided in subsection (c), no new single family residential structure shall be approved for construction (excluding substantial repair or alteration) if the exterior day-night average sound level (L_{dn}) anywhere on the site of the proposed structure is projected to be in excess of dBA within years following the estimated completion date of the structure.

(b) Except as provided in subsection (c), no new multiple-family residence, dormitory, mobile home park, transient lodging, school, hospital, nursing home or similar structure, or substantial modification of such existing structure, shall be approved for construction if the exterior day-night average sound level (Ldn) anywhere on the site of the proposed structure is projected to be in excess of dBA within years following the estimated completion date of the structure or modification. (c) Construction otherwise prohibited pursuant to subsections (a) or (b) shall be allowed if the exterior day-night average sound level (Ldn) on the site of the proposed structure is projected not to be in excess of dBA for years following construction, provided that there is incorporated into the design and construction of the structure such sound attenuation measures as are necessary to reduce the maximum interior day-night average sound level (L_{dn}) to dBA. Subsections (a) and (b) shall not apply to any site development plan or its equivalent on which four or fewer dwelling units are to be constructed.

(d) Prior to issuance of any occupancy permit for any structure regulated pursuant to subsection (c), the owner of the structure shall submit for NCO review the report of an independent testing agency [approved by the NCO] certifying that sound attenuation measures have been property incorporated into the design and construction of the structure and that the interior Ldn meets the criterion specified in subsection (c). Such report shall contain the results of simultaneous measurements of the exterior and interior day-night average sound levels for a representative sample of locations. (c) The NCO may conduct such inspections and measurements as are necessary to ensure the accuracy of any report submitted pursuant to subsection (d) and to ascertain compliance with this section. These may include on-site inspections by a certified independent testing agency during specified periods of construction.

10.3 Recreational Area Restrictions

(a) Except as provided in subsections (b), (c), and (d) no land shall be designated or approved for construction or use as a public or private exterior recreational area, including, but not limited to, child playgrounds, outdoor theaters and amphitheaters, picnic grounds, tennis courts and swimming pools, if the exterior day-night average sound level (L_{dn}) anywhere on the site of the proposed recreational area is projected to be in the excess of dBA within years following the construction or designation of the site.

(b) This section shall not apply to the designation or approval of any green belt or open space in any area in which the L_{dn} exceeds the level specified in subsection (a) regardless of whether such green belt or open space is open to public use, provided that no recreational improvement or facility is constructed thereon.

(c) Designation or approval of exterior recreational areas otherwise prohibited under subsection (a) shall be allowed if the L_{dn} specified in that subsection can be achieved by appropriate means of sound attenuation, such as berns, barriers, or buildings, at the perimeter of or elsewhere on the site.

(d) No new interior recreational facility, including, but not limited to, gymnasiums, ice or roller skating rinks, indoor swimming pools, and tennis courts, shall be approved for construction if the exterior day-night average sound level anywhere on the site is projected to be in excess of dBA within years following the estimated date of completion of the structure unless there is incorporated into the design and construction of the structure such sound attenuation measures as are necessary to reduce the maximum interior day-night average sound level (L_{dn}) to dBA.

10.4 Site Study Requirement

(a) If the NCO has reason to believe that a full report is necessary to determine whether a proposed project is prohibited under Section 10.1 such report shall be made by the applicant prior to approval of any subdivision, zoning, or building permit application. (If a full report has not been made and the applicant believes the project was wrongfully prohibited under Section 10.1, he may file a full report within days of the NCO decision and request reconsideration by the NCO. A full report shall contain the following information and any other information which the NCO may reasonably require:

(1) the existing day-night average sound levels L_{dn} , including identification of the major sources of sound, for a representative sample of locations measured in accordance with guidelines published by the NCO;

(2) any projected or proposed new or expanded sources of sound which may affect exposure of the site during, years following completion of the project and the projected future L_{dn} , at the site resulting from these new or expanded sources; and. (3) where applicable, plans for sound attenuation measures on the site and/or of the structure proposed to be built and the amount of sound attenuation anticipated as a result of these measures. (b) In determining whether an applicant should be required to submit a full report pursuant to subsection (a), the EPO/NCO shall consider Circular 1390.2 (None Abatement and Control) and other publications of the U.S. Department of Housing and Urban Development.

10.5 Commercial and Industrial Construction No new or substantially modified structure on land used or zoned as commercial or industrial shall be approved for construction unless the owner or developer of such land has demonstrated, in accordance with guidelines published by the NCO, that the completed structure and the activities associated with and on the same property as the structure, will comply with the provisions of Article VIII at the time for initial full-scale operation of such activities.

10.6 Sound From New Transportation Systems in Residential Areas or Noise Sensitive Zones No plans for construction of new transportation systems or expansion of the capacity of existing transportation systems will be approved for location in or near residential areas or noise sensitive zones, regardless of the source of project funds, unless such plan includes all control measures necessary to ensure that the projected day-night average sound level (L_{dn}) due to the operation of the transportation system does not exceed dBA at any point on residential property within years after the expected completion of the project.

10.7 Equivalent Measurement Systems

For the purposes of this Article, all measurements and designations of sound levels shall be expressed in day-night average sound levels (L_{dn}) or in any other equivalent measurement system the NCO may reasonably approve.

10.8 Zoning Ordinance or Comprehensive Plan (a) No proposed zoning ordinance or comprehensive plan shall be approved unless such plan includes a sound analysis which; (1) identifies existing and projected noise sources and associated sound levels for years in and around the area under consideration, and (2) ensures usage of adequate measures to avoid violation of any provision of this ordinance. (b) No zoning change application shall be approved unless the site feasibility study submitted as required by the (Zoning Board of Appeals)/ (Planning Commission), contains an analysis which shows: (1) the impact of existing and projected noise sources for years on the intended use, and

(2) the projected noise impact of the intended use, when completed, on surrounding areas. Such sites study shall ensure the use of adequate measures to avoid violation of any provision of this ordinance.

10.9 Truth in Selling or Renting

No person shall sell or rent, or eause to be sold or rented, any structure or property to be used for human habitation, where the structure or property is exposed to sound levels regularly in excess of (an L_{eq} in any hour of dBA)/(an L_{dn} of dBA), without making full written disclosure to all potential buyers or renters of the existence of such sound levels and of the nature of the sources. The NCO shall develop a standard format for written disclosures, which shall include information on the effects of noise on human health and welfare.

10.10 Appeal

Any applicant may appeal an adverse decision by the NCO under the Article, in the (appropriate court of law), on the grounds that the NCO disapproval was arbitrary, capricious, or unreasonable.

Article XI Enforcement

11.1 Penalties

(a) Any person who violates any provision of this ordinance shall be fined for each offense not more than dollars.

(b) Any person who willfully or knowingly violates any provision of this ordinance shall be fined for each offense a sum of not less than dollars and not more than dollars.

(c) Each day of violation of any provision of this ordinance shall constitute a separate offense.

11.2 Abatement Orders

[(a) Except as provided in subsection (b) in lieu of issuing a notice of violation as provided for in Section 11.3, the NCO or other (agency/official) responsible for enforcement of any provision of this ordinance may issue an order requiring abatement of any source of sound or vibration alleged to be in violation of this ordinance within a reasonable time period and according to guidelines [to be approved by appropriate authority] which the NCO may prescribe.

(b) An abatement order shall not be issued:
(1) for any violation covered by Section 11.1 (b);
(2) for any violation of, or
(3) when the NCO or other enforcement (agency) / (official) has reason to believe that there will not be compliance with the abatement order.]

11.3 Notice of Violation

[Except where a person is acting in good faith to comply with an abatement order issued pursuant to Section 11.2 (a)], violation of any provision of this ordinance shall be cause for a (notice of violation)/ (summons)/(complaint)/(information or indictment) to be issued by the NCO or other responsible enforcement (agency official) according to procedures (which the NCO may prescribe)/ (set forth in).

11.4 Immediate Threats to Health and Welfare (a) The NCO shall order an immediate halt to any

(a) The NCO shall order all infine order has to any sound which exposes any person, except those excluded pursuant to subsection (b), to continuous sound levels in excess of those shown in Table 4 or to impulsive sound levels in excess of those shown in Table 5. Within days following issuance of such an order, the NCO shall apply to the appropriate court for an injunction to replace the order

(b) No order pursuant to subsection (a) shall be issued if the only persons exposed to sound levels in excess of those listed in Tables IV and V are exposed as a result of;

trespass;

(2) invitation upon private property by the person eausing or permitting the sound, or

(3) employment by the person or a contractor of the person causing or permitting the sound.

(c) Any person subject to an order issued pursuant to subsection (a) shall comply with such order until; (1) the sound is brought into compliance with the order, as determined by the NCO, or

(2) a Judicial order has superseded the NCO order.
(d) Any person who violates an order issued pursuant to this section shall, for each day of violation, be fined not less than dollars nor more than dollars.

TABLE 4

CONTINUOUS SOUND LEVELS WHICH POSE AN IMMEDIATE THREAT TO HEALTH AND WELFARE (Measured at 50 Feet or 15 Meters)¹

Sound Level Limit (dBA)	Duration	
90	24 hours	
93	12 hours	
96	6 hours	
99	3 hours	
102	1.5 hours	
103	45 minutes	
108	22 minutes	

¹ Use equal energy time-intensity trade-off if level varies; find energy equivalent over 24 hours.

TABLE 5

IMPULSIVE SOUND LEVELS WHICH POSE AN IMMEDIATE THREAT TO HEALTH AND WELFARE (Measured at 50 Feet or 15 Meters)

Sound Level Limit (dBA)	Number of Repetitions per 24 Hour Period
145	1
135	10
125	100

11.5 Citizen Suits

(a) Any person, other than persons responsible for enforcement of this ordinance, may commence a civil action on his own behalf against:
(1) any person who is alleged to be in violation of

any provision of this ordinance set forth in Table 6 below or

(2) the NCO where there is alleged a failure of the NCO to perform any act under this ordinance which is not discretionary. The court shall have Jurisdiction, without regard to the amount in

controversy, to grant such relief as it deems necessary.

- (b) No action may be commenced:
- (1) under Subsection (a)(l)

(A) prior to days after the plaintiff has given notice of the alleged violation to the NCO [and to the alleged violator] of such violation, or
(B) if the NCO has commenced and is diligently prosecuting an action against the alleged violator with respect to such violation, [but in such action any affected person may intervenc as a matter of right], or

(2) under Subsection (a)(2), prior to days after the plaintiff has given notice to the NCO that he will commence such action. Notice under this subsection shall be given in a manner prescribed by the NCO.

(c) In any action under this section, the NCO, if not a party, may intervene as a matter of right.

(d) The court, in issuing any final order in any action brought pursuant to subsection (a), may at its discretion award the costs of litigation to any party.

TABLE 6 Provisions Under Which Civil Actions May Be Commenced

6.2.1(a)	(Radios, Television Sets, Musical
	Instruments and Similar Devices)
6.2.2	(Loudspeakers/Public Address
	Systems)
6.2.3	(Street Sales)
6.2.5	(Loading and Unloading)
6.2.6	(Construction)
6.2.7	Vehicle or Motorboat Repairs and
	Testing)
6.2.9	(Places of Public Entertainment)
6210	(Explosives Firearms and Similar
	Devices)
6.2.11	(Powered Model Vehicles)
6212	(Vibration)
[6 2 13	(Stationary Non-Emergency Signaling
[0.2.10	Devices)
6214	(Emergency Signaling Devices)
6715	(Motorboate)
6 2 17	(Demestic Bower Tools)
0.2.17	(Domestic Fower 1001s)
0.2.18	(Tampering)
8.1	(Maximum Permissible Sound Levels
	by Receiving Land Use)
9.1.3	(Refuse Collection Vehicles)
9.1.4	(Standing Motor Vchicles)
9.2(b)	(Motor Vehicle Racing Events)
9.2.1(b)	(Motor Vehicle Horns and Signaling
	Devices)
10.9	(Truth-in Selling or Renting)
	-

11.6 Other Remedies

No provision of this ordinance shall be construed to impair any common law or statutory cause of action, or legal remedy there from, of any person for injury or damage arising from any violation of this ordinance or from other law.
11.7 Severability If any provision of this ordinance is held to be unconstitutional or otherwise invalid by any court of competent jurisdiction, the remaining provisions of the ordinance shall not be invalidated.

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Effective Date 11.8

This law/ordinance shall take the effect on -----

E. EMERGENCY ACCESS AND EVACUATION CONCEPT

1. CONCEPT EMERGENCY ACCESS AND EVACUATION ROUTES

DRAFT THREE RIVERS COMMUNITY PLAN UPDATE



F. DARK SKY CONCEPT

1. INTERNATIONAL DARK-SKY ASSOCIATION MODEL LIGHTING ORDINANCE AND USER GUIDE JUNE 15, 2011



The User Notes

The User Notes are intended to clarify the sections of the MLO for the various audiences who will use it: lighting designers, city officials, engineers, citizen groups, and others. Every effort has been made to keep the language technically accurate and clear, but since different disciplines may use the same term in different ways, or have different interpretations, some guidance may be helpful. While these Notes can not be a full tutorial on modern lighting design, it is hoped that the Notes will help facilitate the dialogue necessary to adopt the MLO.

Background

The problems of light pollution first became an issue in the 1970s when astronomers identified the degradation of the night sky due to the increase in lighting associated with development and growth. As more impacts to the environment by lighting have been identified, an international "dark sky" movement is advocating for the precautionary approach to outdoor lighting design. Many communities have passed anti-light-pollution laws and ordinances. However, there is little or no agreement among these laws, and they vary considerably in language, technical quality, and stringency. This is confusing for designers, engineers, and code officials. The lack of a common basis prevents the development of standards, educational programs, and other means of achieving the goal of effective lighting control.

This MLO will allow communities to drastically reduce light pollution and glare and lower excessive light levels. The recommended practices of the IES can be met using readily available, reasonably priced lighting equipment. However, many conventional lighting practices will no longer be permitted, or will require special permits.

This Model Lighting Ordinance (MLO) is the result of extensive efforts by the International Dark Sky Association (IDA) and the Illuminating

USER'S GUIDE - Page 2

And the control of th	MODEL LIGHTING ORDINANCE - USER'S GUIDE eering Society of North America (IES). Among its features is the	MODEL LIGHTING ORDINANCE - TEXT Inint IDA-IFSMA
And The Nuclean Componences the Backlight-Uplight. A met 15, 2011 A met 15, 2011 C met 15, 2011 C met 15, 2011 P met 15, 201 P	hting zones (LZO-4) which allow each governing body to vary gency of lighting restrictions according to the sensitivity of as well as accommodating community intent. In this way, ities can fine-tune the impact of the MLO without having to	Model Outdoor Lighting Ordinance (MLO)
CONTENTS 1. Pramble	e the MLO. The MLO also incorporates the Backlight-Uplight- JG) rating system for luminaires, which provides more control of unwanted light.	June 15, 2011
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		XI. (Optional) Street Lighting Ordinance

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MLO Development and Task For	ed development, ity. If no suchThis Model Lighting Ordinance has been developed as taking by the Illuminating Engineering Society and the Dark-Sky Association.	Ig" ordinance. The Joint Task Force responsible for developing the MI	use zoning. It IDA IDA IES or codes and Co-Chair: Jim Benya Naomi cos such as the Co-Chair: Nancy Clanton Cheryl	Leslie Lipstein Denis I Leo Smith Eric Gi	John Walter representing the electric utility industry als	icross large as a member of the Joint Task Force. provincial aged. Light uting light
General Notes in Adopting this Model Ordinance	Adoption of this ordinance should follow the establisl review, and approval processes of the adopting autho processes are in place, this ordinance may be adopted independent section of the Municipal Code.	The MLO is probably best adopted as an "overlay zoni	This means that it overlays, but is different from, land can be added to or integrated into existing ordinances cross-referenced to other applicable codes and ordina	electrical code, the sign code, planning ordinances, et	Ine ivito may best be managed by assigning it to plan and using existing administrative structures.	Because of the diverse community and lighting needs areas, this MLO is not intended for adoption as a state or national ordinance. Regional coordination is encou pollution knows no boundaries, and the effects of pol nersist as far as 200 kilometers (shout 120 miles) from

MODEL LIGHTING ORDINANCE - TEXT

MODEL LIGHTING ORDINANCE - USER'S GUIDE

Adopting agencies should also consider that the MLO, like all other modern codes, is designed to evolve over time. Lighting technology will change, and MLO changes will be needed every few years. On-going renewal cycles are strongly recommended as any part of an adopting ordinance.

One large city could adopt the MLO and dramatically affect a region, but adoption in suburbs and small towns must be part of a regional

effort to achieve significant improvements in the overall quality of

the night sky.

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I. PREAMBLE - User's Guide		I. PREAMBLE - Ordinance Text
In general, the preamble is part of part of the code. It establishes the	the ordinance but is typically not reasons why the municipality is	The purpose of this Ordinance is to provide regulations for outdoor lighting that will:
Local governments may add other established local government envi	purposes to the Preamble including ironmental or energy goals that	a. Permit the use of outdoor lighting that does not exceed the minimum levels specified in IES recommended practices for night-time safety, utility, security, productivity, enjoyment, and commerce.
support the model lighting ordinar outdoor lighting fall into two categ used in the life of a lighting produc	nce. The environmental impacts of gories: carbon footprint (energy ct) and obtrusive light.	b. Minimize adverse offsite impacts of lighting such as light trespass, and obtrusive light.
CARBON FOOTPRINT	OBTRUSIVE LIGHT	c. Curtail light pollution, reduce skyglow and improve the nighttime
Cost & Impact of Mining the Materials Used	Impact on Humans	environment tor astronomy. d. Heln protect the natural environment from the adverse effects
Energy Used in Production	Impact on the Environment	of night lighting from gas or electric sources.
Energy Used during Product Life		e. Conserve energy and resources to the prestect extent mossible
Disposal/Recylcing Costs		or control to attack and tabout an air grands avenue bossion.
II. LIGHTING ZONES - User's Gu	lide	
idhting rouge rofloct the hore (or a	mbionel liche louds dociment huse	II. LIGHTING ZONES - Ordinance Text
community. The use of lighting zone the International Commission on Illu	es (LZ) was originally developed by umination (CIE) and appeared first	The Lighting Zone shall determine the limitations for lighting as specified in this ordinance. The Lighting Zones shall be as follows:
in the US in IES Recommended Prac Lighting, RP-33-99.	tice for Exterior Environmental	LZ0: No ambient lighting
t is recommended that lower lightines establishing zoning criteria. Selectio based not on existing conditions but	ng zone(s) be given preference when on of lighting zone or zones should be it rather on the type of lighting	Areas where the natural environment will be seriously and adversely affected by lighting. Impacts include disturbing the biological cycles of flora and fauna and/or detracting from human enjoyment and appreciation of the natural environ-
development on previously rural or	undeveloped land may be zoned as	The vision of human residents and users is adapted to the
-4-1. Using lighting zones allows a gr customization without the burden o	reat deal of flexibility and of excessive regulation. For example,	uarkness, and mey expect to see nume or no ngnung. When not needed, lighting should be extinguished.
a jurisdiction may choose to establi: lighting zone at street level at a high	sh vertical lighting zones with the her zone than the residential	

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housing on upper levels.

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II. LIGHTING ZONES (cont.) - User's Guide

However, if an adjacent use could be adversely impacted by allowable lighting, the adopting authority may require that a particular site meet the requirements for a lower lighting zone. For example, the authority could specify Lighting Zone 1 or 2 requirements if a commercial development were adjacent to a residence, hospital or open space, or to any land assigned to a lower zone.

Lighting zones are best implemented as an overlay to the established zoning especially in communities where a variety of zone districts exists within a defined area or along an arterial street. Where zone districts are cohesive, it may be possible to assign lighting zones to established land use zoning. It is recommended that the lighting zone includes churches, schools, parks, and other uses embedded within residential communities.

Zone	Recommended Uses or Areas	Zoning Considerations
ILZ-0	Lighting Zone O should be applied to areas in which permanent lighting is not expected and when used, is limited in the amount of lighting and the period of operation. LZ-O typically includes undeveloped areas of open space, wilderness parks and preserves, areas near astronomical observatories, or any other area where the protection of a dark environment is critical. Special review should be required for any permanent lighting in this zone. Some rural communities may choose to adopt LZ-O for residential areas.	Recommended default zone for wilderness areas, parks and preserves, and undevel- oped rural areas. Includes protected wildlife areas and corridors.
1-2-1	Lighting Zone 1 pertains to areas that desire low ambient lighting levels. These typically include single and two family residential communities, rural town centers, business parks, and other commercial or industrial/ storage areas typically with limited nighttime activity. May also include the developed areas in parks and other natural settings.	Recommended default zone for rural and low density residential areas. Includes residential single or two family; agricultural zone districts; rural residential zone districts; business parks; open space include preserves in developed areas.

MODEL LIGHTING ORDINANCE - TEXT

II. LIGHTING ZONES (cont.) - Ordinance Text

LZ1: Low ambient lighting

Areas where lighting might adversely affect flora and fauna or disturb the character of the area. The vision of human residents and users is adapted to low light levels. Lighting may be used for safety and convenience but it is not necessarily uniform or continuous. After curfew, most lighting should be extinguished or reduced as activity levels decline.

LZ2: Moderate ambient lighting

Areas of human activity where the vision of human residents and users is adapted to moderate light levels. Lighting may typically be used for safety and convenience but it is not necessarily uniform or continuous. After curfew, lighting may be extinguished or reduced as activity levels decline.

LZ3: Moderately high ambient lighting

Areas of human activity where the vision of human residents and users is adapted to moderately high light levels. Lighting is generally desired for safety, security and/or convenience and it is often uniform and/or continuous. After curfew, lighting may be extinguished or reduced in most areas as activity levels decline.

LZ4: High ambient lighting

Areas of human activity where the vision of human residents and users is adapted to high light levels. Lighting is generally considered necessary for safety, security and/or convenience and it is mostly uniform and/or continuous. After curfew, lighting may be extinguished or reduced in some areas as activity levels decline.

II. LIGHTING ZONES (cont.) - User's Guide

Zone	Recommended Uses or Areas	Zoning Considerations
LZ-2	Lighting Zone 2 pertains to areas with moder- ate ambient lighting levels. These typically include multifamily residential uses, institu- tional residential uses, schools, churches, hospitals, hotels/motels, commercial and/or businesses areas with evening activities embedded in predominately residential areas, neighborhood serving recreational and playing fields and/or mixed use development with a predominance of residential uses. Can be used to accommodate a district of outdoor sales or industry in an area otherwise zoned LZ-1.	Recommended default zone for light commercial business districts and high density or mixed use residentialdistricts. Includes neighborhood business districts; churches, schools and neighborhood recreation facilities; and light industrial zoning with modest nightime uses or lighting requirements.
LZ-3	Lighting Zone 3 pertains to areas with moder- ately high lighting levels. These typically in- clude commercial corridors, high intensity suburban commercial areas, town centers, mixed use areas, industrial uses and shipping and rail yards with high night time activity, high use recreational and playing fields, regional shopping malls, car dealerships, gas stations, and other nighttime active exterior retail areas.	Recommended default zone for large cities' business district. Includes business zone districts; commercial mixed use; and heavy industrial and/or manufacturing zone districts.
LZ-4	Lighting zone 4 pertains to areas of very high ambient lighting levels. LZ-4 should only be used for special cases and is not appropriate for most cities. LZ-4 may be used for extremely unusual installations such as high density entertainment districts, and heavy industrial uses.	Not a default zone. Includes high intensity business or industrial zone districts.

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MODEL LIGHTING ORDINANCE - TEXT	III. GENERAL REQUIREMENTS - Ordinance Text	A. Conformance with All Applicable Codes All outdoor lighting shall be installed in conformance with the provisions of this Ordinance, applicable Electrical and Energy Codes, and applicable sections of the Building Code.	B. Applicability Except as described below, all outdoor lighting installed after the date of effect of this Ordinance shall comply with these requirements. This includes, but is not limited to, new lighting, replacement lighting, or any other lighting whether attached to structures, poles, the earth, or any other location, including lighting installed by any third party.	<i>Exemptions from III.(B.)</i> The following are not regulated by this Ordinance a. Lighting within public right-of-way or easement for the principal	purpose of illuminating streets or roads. No exemption shall apply	to any lighting within the public right of way or easement when the purpose of the luminaire is to illuminate areas outside the public right of way or easement, unless regulated with a streetlighting ordinance.	Note to adopting agency: if using the street lighting ordinance (Section XI), this exemption should read as follows: Lighting within the public right-of-way or easement for the principal	purpose of illuminating roads and highways. No exemption shall apply to any street lighting and to any lighting within the public right of way or easement when the purpose of the luminaire is to illuminate areas outside of the public right of way or easement.	b. Lighting for public monuments and statuary.	c. Lighting solely for signs (lighting for signs is regulated by the	Sign Ordinance). d. Repairs to existing luminaires not exceeding 25% of total installed luminaires.
MODEL LIGHTING ORDINANCE - USER'S GUIDE	III. GENERAL REQUIREMENTS - User's Guide	This Section sets out the requirements that apply to all lighting, both residential and non-residential. Each adopting iurisdiction should incorporate their existing standards	as to when compliance with new regulations is required, when repair or remodeling triggers compliance and if the new ordinance will be retroactive to existing development. The Applicability section of this model ordinance should serve as a guide if the adopting juris- diction does not have standards or policies in place. Likewise, the adopting jurisdiction should use their existing policies and definitions	or what constructs public monuments, and temporary and/or emergency lighting. Community attitudes and precedents should be taken into account in deciding to regulate seasonal holiday lighting.	EXEMPTIONS - User's Guide	This is standard language intended to prevent conflict of laws and to give the community the ability to set specific lighting requirements in special plans and under use permits. It can be amended to conform to similar language in other ordinances. For example, while public mon-	uments, statuary, and flags should be lighted, the lighting also should be limited to avoid excess.	Lighting for streets, roads, and highways is usually regulated by a street lighting ordinance, and is not covered by this model ordinance. However, since street lighting can affect nearby areas, some recognition of its effect is appropriate. (See Section XI)		SIGN LIGHTING - User's Guide	A sign lighting ordinance is strongly recommended if not already in place. It should carefully limit lighting to prevent over-lighted signs from being used to circumvent lighting ordinances.

	III. GENERAL REQUIREMENTS (cont.) - Ordinance Text
	e. Temporary lighting for theatrical, television, performance areas and construction sites;
	f. Underwater lighting in swimming pools and other water features
	g. Temporary lighting and seasonal lighting provided that individual lamps are less than 10 watts and 70 lumens.
	h. Lighting that is only used under emergency conditions.
	i. In lighting zones 2, 3 and 4, low voltage landscape lighting controlled by an automatic device that is set to turn the lights off at one hour after the site is closed to the public or at a time established by the authority.
	<i>Exceptions to III.</i> (<i>B.</i>) All lighting shall follow provisions in this ordinance; however, any special requirements for lighting listed in a) and b) below shall take precedence.
	a. Lighting specified or identified in a specific use permit.
	b. Lighting required by federal, state, territorial, commonwealth or provincial laws or regulations.
LIGHTING CONTROLS - User's Guide	C. Lighting Control Requirements
This section requires all outdoor lighting to have lighting controls that prohibit operation when sufficient daylight is available, and to include the capability, either through circuiting, dimming or alternating sources, to be able to reduce lighting without necessarily turning all lighting off.	1. Automatic Switching Requirements Controls shall be provided that automatically extinguish all outdoor lighting when sufficient daylight is available using a control device or system such as a photoelectric switch, astronomic time switch or equivalent functions from a program- mable lighting controller, building automation system or light- ing energy management system, all with battery or similar backup power or device.

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MODEL LIGHTING ORDINANCE - USER'S GUIDE	MODEL LIGHTING ORDINANCE - TEXT
	III. GENERAL REQUIREMENTS (cont.) - Ordinance Text
	<i>Exceptions to III.(C.) 1.</i> Automatic lighting controls are not required for the following:
	a. Lighting under canopies.
	b. Lighting for tunnels, parking garages, garage entrances, and similar conditions.
CURFEW REQUIREMENTS - User's Guide	2. Automatic Lighting Reduction Requirements
The intent is to reduce or eliminate lighting after a given time. Benefits include reduced environmental impact. Jonger hours of improved	The Authority shall establish curfew time(s) after which total outdoor lighting lumens shall be reduced by at least 30% or extinguished.
astronomy, energy savings, and improved sleeping conditions for residents. Additionally, some police departments have indicated that	<i>Exceptions to III.(C.)</i> 2. Lighting reductions are not required for any of the following:
post-turiew right reductions make arrive-by parroning easier pecause it allows them to see further into and through a site.	a. With the exception of landscape lighting, lighting for residential numerties including multiple residential
The authority should determine the time of curfew and the amount of	properties not having common areas.
insuring reduction based on the character, norms and values of the community.	b. When the outdoor lighting consists of only one luminaire.
Typically, curfews go into effect one hour after the close of business. Restaurants have and major entertainment facilities such as such	 Code required lighting for steps, stairs, walkways, and building entrances.
stadiums, may require the curfew go into effect two hours after the close of business. The authority may elect to have no curfew for facilities	d. When in the opinion of the Authority, lighting levels must be maintained.
with shift workers and 24 hour operations, or to extend the curfew time to meet specific needs. The MLO can be modified to address those	e. Motion activated lighting.
concerns. Areas without street lights or with very low ambient light levels should	f. Lighting governed by special use permit in which times of operation are specifically identified.
consider turning off all non-emergency lighting at curfew while commercial areas or urban areas may prefer a reduction in lighting levels. A reduction of at least 30% is recommended for most uses	g. Businesses that operate on a 24 hour basis.

IV. NON-RESIDENTIAL LIGHTING - User's Guide

This section addresses non-residential lighting and multiple-family residences having common spaces, such as lobbies, interior corridors or parking. Its intent is to:

- Limit the amount of light that can be used
- Minimize glare by controlling the amount of light that tends to create glare
- Minimize sky glow by controlling the amount of uplight
- Minimize the amount of off-site impacts or light trespass

This MLO provides two methods for determining compliance. The *prescriptive method* contains precise and easily verifiable requirements for luminaire light output and fixture design that limit glare, uplight, light trespass and the amount of light that can be used. The *performance method* allows greater flexibility and creativity in meeting the intent of the ordinance. Note that both the prescriptive and the performance method limit the *amount* of light that can be used, but do not control *how* the lighting is to be used.

Most outdoor lighting projects that do not involve a lighting professional will use the prescriptive method, because it is simple and does not require engineering expertise. For the prescriptive method, the initial luminaire lumen allowances defined in Table A (Parking Space Method) or B (Hardscape Area Method) will provide basic lighting (parking lot and lighting at doors and/or sensitive security areas) that is consistent with the selected lighting zone. The prescriptive method is intended to provide a safe lighting environment while reducing sky glow and other adverse offsite impacts. The Per Parking Space Method is applicable in small rural towns and is a simple method for small retail "mom and pop" operations without drive lane access and where the parking lot is immediately adjacent to the road. A jurisdiction may

IV. NON-RESIDENTIAL LIGHTING - Ordinance Text

For all non-residential properties, and for multiple residential properties of seven domiciles or more and having common outdoor areas, all outdoor lighting shall comply either with Part A or Part B of this section.

PRESCRIPTIVE METHOD - User's Guide	IV. NON-RESIDENTIAL LIGHTING (cont.) - Ordinance Text
also allow a prescriptive method for classes of sites, such as car dealerships, gas stations, or other common use areas.	A. Prescriptive Method An outdoor lighting installation complies with this section if it meets the requirements of subsections 1 and 2, below.
Note that the values are for initial luminaire lumens, not footcandles on the target (parking lot, sidewalk, etc). Variables such as the efficiency of the luminaire, dispersion, and lamp wear can affect the actual amount of light so the lumens per square foot allowance is not equal to footcandles on the site. By specifying initial luminaire lumen values, it is easier for officials to verify that the requirement is being met. Initial luminaire lumens are available from photometric data. Each initial luminaire lumens calculation should be supplied on the submittal form.	 Total Site Lumen Limit The total installed initial luminaire lumens of all outdoor lighting shall not exceed the total site lumen limit. The total site lumen limit shall be determined using either the Parking Space Method (Table A) or the Hardscape Area Method (Table B). Only one method shall be used per permit application, and for sites with existing lighting, existing lighting shall be included in the calculation of total installed lumens.
Solid state luminaires, such as LEDs, do not have initial lamp lumens, only initial luminaire lumens (absolute photometry). Other luminaires tested with relative photometry will have initial luminaire lumens which can be calculated by multiplying initial lamp lumens by the luminaire efficiency. In this example, three types of luminaires are used to light a parking area and building entry in a light commercial area. Two of these three luminaires use metal halide lamps: 70 watt wall mounted area lights and 150 watt pole mounted area lights. For these, the Initial Luminaire efficiency. These values are entered into the compliance chart. The lumen value for the building mounted LED luminaires is equal to the lumens exiting the luminaire. Therefore, the value already represents the Initial Luminaire Lumens and mounted LED luminaires is equal to the lumens exiting the luminaire. Therefore, the value already represents the Initial Luminaire Lumens and no luminaire efficiency is needed. The total Luminaire Lumens for the site is equal to 247,840.	The total installed initial luminaire lumens is calculated as the sum of the initial luminaire lumens for all luminaires.
The allowable lumens are based on the lighting zone and the total hard- scape area. Referencing Table B, the allowed lumens are 2.5/SF for LZ2. Multiplying this by the total hardscape square footage gives a value of 250,000 lumens allowed. Because this value is greater than the value	

MODEL LIGHTING ORDINANCE - TEXT

MODEL LIGHTING ORDINANCE - USER'S GUIDE

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calculated for the site, the project complies. Listed below is an example

on a typical compliance worksheet for the Prescriptive Method.

IV. NON-RESIDENTIAL LIGHTING (cont.) - User's Guide

In this example, three types of luminaires are used to light a parking area and building entry in a light commercial area. Two of these three luminaires use metal halide lamps: 70 watt wall mounted area lights and 150 watt pole mounted area lights. For these, the Initial Luminaire Lumens is equal to the initial lamp lumens multiplied by the luminaire efficiency. These values are entered into the compliance chart. The lumen value for the building mounted LED luminaires is equal to the lumens exiting the luminaire. Therefore, the value already represents the Initial Luminaire Lumens and no luminaire efficiency is needed. The total Luminaire Lumens for the site is equal to 247,840. The allowable lumens are based on the lighting zone and the total hardscape area. Referencing Table B, the allowed lumens are 2.5/SF for LZ2. Multiplying this by the total hardscape square footage gives a value of 250,000 lumens allowed. Because this value is greater than the value calculated for the site, the project complies.

PRESCRIPTIVE	METH	OD EXAMPLE - COMPLIANC	E CHART
Lamp Descriptions	QTY	Initial Luminaire Lumens	Total
70 W Metal Halide	8	3,920	31,360
150 W Metal Halide	20	9,600	192,000
18 W LED	24	1,020	24,480
TOT	AL INIT	IAL LUMINAIRE LUMENS	247,840
SITE AI	TOWE	D TOTAL INITIAL LUMENS*	250,000
		PROJECT IS COMPLIANT?	YES

* Listed below is the method of determining the allowed total initial lumen for non-residential outdoor lighting using the hardscape areamethod. (Table B).

NITIAL LUMENS	Light Commercia	LZ-2	100,000	2.5	250,000	
SITE ALLOWED TOTAL II	Site Description	Lighting Zone	Hardscape Area (SF)	Allowed Lumens per SF of Hardscape (Table B)	Site Allowed Total Initial Lumens (lumens per SF X hardscape area	

IV. NON-RESIDENTIAL LIGHTING (cont.) - Ordinance Text

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PRESCRIPTIVE METHOD (cont.) - User's Guide	IV. NON-RESIDENTIAL LIGHTING (cont.) - Ordinance Text
LIMITS TO OFFSITE IMPACTS	PRESCRIPTIVE METHOD
The prescriptive method of the MLO restricts uplighting, including upward light emitted by decorative luminaires. A jurisdiction may	2. Limits to Off Site Impacts
mouse to preserve some types of ingrung, including ingrung or monuments or historic structures. In this case, the adopting jurisdiction should exempt or otherwise regulate these types of lighting carefully so that it does not inadvertently allow glaring or offensive lighting systems.	3. Light Shielding for Parking Lot Illumination All parking lot lighting shall have no light emitted above 90 degrees.
Offsite effects of light pollution include glare, light trespass, sky glow, and impacts on the nocturnal environment . All of these are functions of the fixture or luminaire design and installation. This document replaces the previous luminaire classification terminology of full cut-off, semi cut-off, and cut-off because those classifications were not as effective in controlling offsite impacts as with the new IESNA luminaire classification system as described in TM-15-07.	Exception: a) Ornamental parking lighting shall be permitted by special permit only, and shall meet the requirements of Table C-1 for Backlight, Table C-2 for Uplight, and Table C-3 for Glare, without the need for external field-added modifications.
A traditional method of defining light trespass is to identify a maximum light level at or near the property line. However, this method does not address offensive light that is not directed toward the ground, or the intensity of glaring light shining into adjacent windows. The require- ments defined in Table C limit the amount of light in all quadrants that is directed toward or above the property line. The Backlight/Uplight/ Glare (BUG) rating will help limit both light trespass and glare. (A detailed explanation of the BUG system is provided in the section on Table C.)	
The limits for light distribution established in Table C (for the BUG rating system) prevent or severely limit all direct upward light. A small amount of uplight reflected by snow, light-colored pavement or a luminaire's supporting arms is inevitable and is not limited by the prescriptive method of this ordinance.	

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MODEL LIGHTING ORDINANCE - USER'S GUIDE

PRESCRIPTIVE METHOD (cont.) - User's Guide

LIMITS TO OFFSITE IMPACTS

acorn luminaire, may in certain cases meet the BUG ratings, as long A seemingly non-compliant fixture, such as a post-top translucent as it has proper interior baffling within the acorn globe. However, the BUG ratings in Table C will limit the use of the following types of luminaires in all lighting zones:







Non-Shielded Wall Packs

Barn Lights

lights not aimed downward

MODEL LIGHTING ORDINANCE - TEXT

IV. NON-RESIDENTIAL LIGHTING (cont.) - Ordinance Text

PERFORMANCE METHOD - User's Guide	IV. NON-RESIDENTIAL LIGHTING (cont.) - Ordinance Text
The performance method is best for projects with complex lighting	B. Performance Method
requirements or when the applicant wants or needs more flexibility in lighting design. The performance method is also used when any lighting	1. Total Site Lumen Limit
designer plans to aim or direct any light fixture upward (above 90 degrees). An engineer or lighting professional generally will be required to design within the performance method. An adopting jurisdiction may also wish to hire an engineer or lighting professional to review and approve projects using this method and/or incorporate review of the performance method into special review procedures.	The total installed initial luminaire lumens of all lighting systems on the site shall not exceed the allowed total initial site lumens. The allowed total initial site lumens shall be determined using Tables D and E. For sites with existing lighting, existing lighting shall be included in the calculation of total installed lumens.
The Performance Method is also best for projects where higher lighting levels are required compared to typical area lighting. An example might be a car sales lot where more light might be required on the new cars than would be needed for a standard parking lot. Another example is a gas station canopy requiring more light than a building entrance canopy.	The total installed initial luminaire lumens of all is calculated as the sum of the initial luminaire lumens for all luminaires.
The first step in the Performance Method regulates overlighting by establishing the Total Initial Site Lumens (Table D) that are allowed.	
Allowances include the summation of the following (Table D): 1) Initial lumen allowance per site	

MODEL LIGHTING ORDINANCE - TEXT

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Table E allows additional lumens for unique site conditions. Examples of allowances include:

2)Per area (SF) of hardscape

1)Per building entrance/exit

2)Per length (linear feet) of Outdoor Sales Frontage Perimeter 3)Per area (SF) of Vehicle Service Station Canopy

our area (or) or venicle service station cano 4) Plus more ...

The Site Total Initial Site Lumens allowed are a combination of allowances from Table D and Table E.

IV. NON-RESIDENTIAL LIGHTING (cont.) - User's Guide	IV. NON-RESIDENTIAL LIGHTING (cont.) - Ordinance Text
LIMITS TO OFFSITE IMPACTS (cont.)	PERFORMANCE METHOD
The second step in the Performance Method is to determine if the proposed luminaires are producing off site impacts such as glare, sky glow and light trespass. One may either use Option A which are the Maximum Allowable BUG Ratings in Table C, or Option B through computer lighting	2. Limits to Off Site Impacts All luminaires shall be rated and installed using either Option A or Option B. Only one option may be used per permit application.
calculations show compliance with Maximum Vertical Illuminance at any point in the plane of the property line in Table F. Option B will be required for all non-residential luminaires that A) do not have BUG ratings, or B) exceed the BUG ratings,	Option A: All luminaires shall be rated and installed according to Table C. Option B: The entire outdoor lighting design shall be analyzed using industry standard lighting software including inter-
C) are not fully shielded, or D) have adjustable mountings.	1) Input data shall describe the lighting system including
For the performance method, Option B (2) requires photometric calcu- lations for the site perimeter, to a height of no less than 33 feet (10 meters) above the tallest luminaire. Vertical illuminances at eye height (5 feet above grade) will give values that can be used to verify	and employing photometric data tested in accordance with IES guidelines. Buildings or other physical objects on the site within three object heights of the property line must be included in the calculations.
compliance by comparing actual site conditions to the photometric plan submitted during review. Note that the MLO specifies 'total initial luminaire lumens' as a measurement in addition to footcandles/lux. The footcandle (lux) is equal to one lumen per square meter. Lux is the metric unit and is equal to one lumen per square meter.	2) Analysis shall utilize an enclosure comprised of calculation planes with zero reflectance values around the perimeter of the site. The top of the enclosure shall be no less than 33 feet (10 meters) above the tallest luminaire. Calculations shall include total lumens upon the inside surfaces of the box top and vertical sides and maximum vertical illuminance (footcandles and/or lux) on the sides of the enclosure.
	The design complies if:
	a) The total lumens on the inside surfaces of the virtual enclosure are less than 15% of the total site lumen limit; and
	b) The maximum vertical illuminance on any vertical surface is less than the allowed maximum illuminance per Table F.

MODEL LIGHTING ORDINANCE - TEXT

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DESIGN COMPLIANCE - User's Guide

The application form will require information about the number of luminaires, the number of lamps in each luminaire, the initial luminaire lumens for each luminaire and the initial lumen output for each lamp (based on the wattage and type of lamp selected) as well as plans showing the site area measurements. This will allow the reviewer to verify that the lumen output of all the luminaires does not exceed the allowance.

Field verification can be achieved by asking the applicant and/or owner to verify that the luminaire type, lamp type and wattages specified have been used. Also ask the applicant for photometric data for each luminaire, since the initial luminaire lumens and B-U-G ratings are stated on the photometric report.

However, if a jurisdiction requires additional on-site verification, it may also request a point-by-point photometric plan. While this will not be a true measure of compliance with the criteria of this Ordinance, comparing the actual measured levels on site to the photometric plan can be an indication whether or not the installed lighting varies from the approved design.

MODEL LIGHTING ORDINANCE - USER'S GUIDE	MODEL LIGHTING ORDINANCE - TEXT
V. RESIDENTIAL LIGHTING - User's Guide	V. RESIDENTIAL LIGHTING - Ordinance Text
This section applies to single family home, duplexes, row houses, and low rise multi-family buildings of 6 dwelling units or less.	A. General Requirements For residential properties including multiple residential properties not having common areas, all outdoor luminaires shall be fully
RESIDENTIAL LIGHTING EXCEPTIONS	shielded and shall not exceed the allowed lumen output in Table G,
The exceptions allow for typical lighting that might exceed the specified limits.	Exceptions
<u>Landscape Lighting</u> - While not common in residential areas, it can cause light pollution and light trespass if it is not controlled.	 One partly shielded or unshielded luminaire at the main entry, not exceeding the allowed lumen output in Table G row 1.
<u>Lighting controlled by Vacancy (Motion) Sensor</u> - Reduces light pollution and light trespass and should be encouraged.	2. Any other partly shielded or unshielded luminaires not exceeding the allowed lumen output in Table G row 3. 3. Low voltage landscape lighting aimed away from adjacent
RESIDENTIAL LIGHTING EXAMPLE	properties and not exceeding the allowed lumen output in Table G row 4.
In this example on the following page, five different luminaires are used on a residential property. Each luminaire must comply to meet the requirements.	4. Shielded directional flood lighting aimed so that direct glare is not visible from adjacent properties and not exceeding the
The site plan following shows luminaire types followed by a tabulation of each uminaire, whether or not it is fully shielded, lamp type, and initial luminaire	allowed lumen output in Table G row 5. 5. Open flame gas lamps. 6. Lighting installed with a vacancy sensor where the sensor
lumens. If the luminaire lumens are not known, multiply the initial lamp lumens by the luminaire efficiency. If the efficiency is not known, multiply the	extinguishes the lights no more than 15 minutes after the area is vacated.
initial lamp lumens by 0.7 as a reasonable assumption. The maximum allowable lumen values come from Table G, based on the shielding	7. Lighting exempt per Section III (B.).
classification and location on the site. In this case, each luminaire complies with the requirements of Table G.	B. Requirements for Residential Landscape Lighting
Comparison of efficacy by power (120 Volt Incandescent lamps)	1.Shall comply with Table G. 2.Shall not be aimed onto adjacent properties.
Output Power (Watt) (Lumens)Incarl CEI I ED	
500 40 8 - 10 9	
850 60 13-18 12-15 1.200 75 18-22 15	
1,700 100 23 - 28 18	

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4

- WALL SCONCE 4
- POST TOP LUMINAIRE
- OCCUPANCY SENSOR **\$** 8

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Luminaire Luminaire Type Location Lexcription A Front Entry Description B Garage Door Fully shielded C Back Entry Description C Back Entry sconce Fully shielded Fully shielded	Fully					
A Front Entry sconce B Garage Door Fully shielded B Garage Door wall pack Decorative wall Pack Entry sconce Fully shielded	Shielded	lamp Type	Initial Luminiare Lumens*	Maximum Allowed initial Luminaire Lumens (Table G)	Controls	Complian
B Garage Door wall pack Garage Door wall pack Decorative wall C Back Entry sconce Fully shielded	No	9W CFL	420	420	None	Yes
C Back Entry sconce Fully shielded	d Yes	23W CFL	1050	1260	Occupancy Sensor	Vac
Fully shielded	No	7W CFL	280	315	Occupancy Sensor	Yes
D Shed Entry wall pack	d Yes	40W INC	343	1260	Occupancy Sensor	Yes
E Driveway post top	d Yes	13W CFL	1260	1260	None	Yes

If the luminaire edition of is not known, assume an efficiency of 70% and multiply the lamp lumer value by 0.7.

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MODEL LIGHTING ORDINANCE - USER'S GUIDE	MODEL LIGHTING ORDINANCE - TEXT
VI. LIGHTING BY SPECIAL PERMIT ONLY - User's Guide	VI. LIGHTING BY SPECIAL PERMIT ONLY - Ordinance Text
This section addresses types of lighting that are intrusive or complex in their impacts and need a higher level of scrutiny and/or site sensitivity.	A. High Intensity and Special Purpose Lighting The following lighting systems are prohibited from being installed or used except by special use permit:
It should be noted that safety could be compromised if lighting conforming to this ordinance is located adjacent to excessively bright and/or glaring lighting.	1. Temporary lighting in which any single luminaire exceeds 20,000 initial luminaire lumens or the total lighting load exceeds 160,000 lumens.
It is important that the authority set clear and reasonable guidelines for applying for a special lighting use permit, and establish rules and procedures for granting or refusing them. They may differ from existing special use policies, in which case one or the other may be changed to achieve the overall goal of effective lighting without glare,	 Aerial Lasers. Searchlights. Other very intense lighting defined as having a light source exceeding 200,000 initial luminaire lumens or an intensity in any direction of more than 2,000,000 candelas.
sky glow, or light trespass. SPORTS FIELD LIGHTING For athletic and sports fields, the appropriate level of lighting will depend on the Class of Play and Facilities. Class of Play is divided into 4 categories, depending on the number of fixed spectator seats. (Competition play	B. <i>Complex and Non-Conforming Uses</i> Upon special permit issued by the Authority, lighting not complying with the technical requirements of this ordinance but consistent with its intent may be installed for complex sites or uses or special uses including, but not limited to, the following applications:
intended for nighttime TV broadcast may require higher lighting levels). CLASS I: Competition play at facilities with 5 000 or more fixed spectator cents	1. Sports facilities, including but not limited to unconditioned rinks, open courts, fields, and stadiums.
 Charles of the second of the se	 Lighting for industrial sites having special requirements, such as petrochemical manufacturing or storage, shipping piers, etc. Parking structures.
Universities and Colleges, some Semi-pro, large amateur leagues and high schools with large spectator facilities) CLASS III: Games at facilities with over 500 fixed spectator seats. (Sports Clubs and amateur leagues, some high schools and large training professional training facilities with spectator sections)	 Urban parks Ornamental and architectural lighting of bridges, public monuments, statuary and public buildings. Theme and amusement parks. Correctional facilities.
CLASS IV: Competition or recreational play at facilities with 500 fixed spectator seats or less. Class IV Class of Play applies to games at which family and close friends of the players and staff are usually the majority of spectators. (Smaller amateur leagues, park and recreation department facilities, most Little Leagues smaller high schools, elementary and middle schools, and social events)	To obtain such a permit, applicants shall demonstrate that the proposed lighting installation: a. Has sustained every reasonable effort to mitigate the effects of light on the environment and surrounding properties, supported by a signed statement describing the mitigation measures. Such statement shall be accompanied by the calculations required for the Performance Method.

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MODEL LIGHTING ORDINANCE - USER'S GUIDE	MODEL LIGHTING ORDINANCE - TEXT
SPORTS FIELD LIGHTING	VI. LIGHTING BY SPECIAL PERMIT ONLY (cont.) - Ordinance Text
When Class of Play is above Class IV, a dual control should be installed to limit illumination to Class IV levels during practices where spectators are fewer than 500.	b. Employs lighting controls to reduce lighting at a Project Specific Curfew ("Curfew") time to be established in the Permit.c. Complies with the Performance Method after Curfew.
(See IES Recommended Practice for Sports and Recreational Area Lighting RP-6)	The Authority shall review each such application. A permit may be granted if, upon review, the Authority believes that the proposed lighting will not create unwarranted glare, sky glow, or light trespass.
VII. EXISTING LIGHTING - User's Guide	VII. EXISTING LIGHTING - Ordinance Text
Adoption of this section on existing lighting is strongly encouraged.	Lighting installed prior to the effective date of this ordinance shall comply with the following.
If the adopting jurisdiction has criteria in place that require a property to come into compliance with the current zoning ordinance, it is recommended that the criteria also be applied to bringing existing lighting into compliance. If there are no established criteria, this	A. Amortization On or before [amortization date], all outdoor lighting shall comply with this Code.
section of the MLO is recommended.	B. New Uses or Structures, or Change of Use Whenever there is a new use of a moment, (roning or variance
Amortization allows existing lighting to gradually and gracefully come into compliance. Substantial changes or additions to existing properties are considered the same as new construction, and must comply.	change) or the use on the property is changed, all outdoor lighting on the property shall be brought into compliance with this Ordinance before the new or changed use commences.
Most outdoor lighting can be fully depreciated once it is fully	C. Additions or Alterations
amortized, usually no longer than 10 years, if not sooner, from the date of initial installation. Some jurisdictions may prefer to require phase-out in a substantially shorter period. The Authority may also wish to require compliance much sooner for "easy fixes" such as re-aiming or lowering lumen output of lamps. Where lighting is judged to be a safety hazard, immediate compliance can be required.	1. Major Additions. If a major addition occurs on a property, lighting for the entire property shall comply with the requirements of this Code. For purposes of this section, the following are considered to be major additions:

(Reserved)	Enforcement and penalties will vary by jurisdiction. There are, however, certain practices that will promote compliance with lighting regulations. Education is a key tool in promoting compliance. Proactive enforcement procedures can include providing a copy of the lighting regulations to every contractor at the time they visit to obtain a building permit. Another effective tool is a requirement that the builder or developer acknowledge in writing that the he or she is familiar with the lighting requirements and will submit a lighting plan for approval.
VIII. ENFORCEMENT & PENALTIES - Ordinance Text	VIII. ENFORCEMENT AND PENALTIES - User's Guide
3. Resumption of Use after Abandonment If a property with non-conforming lighting is abandoned for a period of six months or more, then all outdoor lighting shall be brought into compliance with this Ordinance before any further use of the property occurs.	
Any new lighting shall meet the requirements of this Ordinance.	
2. Minor Modifications, Additions, or New Lighting Fixtures for Non-residential and Multiple Dwellings For non-residential and multiple dwellings, all additions, modifi- cations, or replacement of more than 25 percent of outdoor lighting fixtures existing as of the effective date of this Ordinance shall require the submission of a complete inventory and site plan detailing all existing and any proposed new outdoor lighting.	
Single or cumulative additions, modification or replacement of 25 percent or more of installed outdoor lighting luminaires existing as of the effective date of this Ordinance.	
Additions of 25 percent or more in terms of additional dwelling units, gross floor area, seating capacity, or parking spaces, either with a single addition or with cumulative additions after the effective date of this Ordinance.	
VII. EXISTING LIGHTING (cont.) - Ordinance Text	

MODEL LIGHTING ORDINANCE - TEXT

MODEL LIGHTING ORDINANCE - USER'S GUIDE

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VIII. ENFORCEMENT AND PENALTIES (cont.) - User's Guide

Submission of the Lighting Plan should be required as a precondition to any approvals. The Lighting Plan should include the location and BUG rating for each luminaire, specify whether compliance is by the performance or prescriptive method, and a worksheet to show that the luminaires and their BUG ratings are compliant.

IX. TABLES - User's Guide

The tables are to be reviewed periodically by a joint committee of the IES and IDA, and adjusted as standards and technology permit. If more research on the impacts of outdoor lighting shows the effects of light pollution to be a significant concern, then the values in the tables may be modified. Such changes will have no significant impact to the balance of the language of the Ordinance or Code.

VIII. ENFORCEMENT & PENALTIES - Ordinance Text

IX. TABLES - Ordinance Text

 Table A - Allowed Total Initial Luminaire Lumens per Site for

 Non-residential Outdoor Lighting, Per Parking Space Method

 May only be applied to properties up to 10 parking spaces (including handicapped accessible spaces).

LZ-0	LZ-1	LZ-2	LZ-3	LZ-4
350	490	630	840	1,050
Ims/space	Ims/space	Ims/space	Ims/space	lms/space

 Table B - Allowed Total Initial Lumens per Site for Nonresidential Outdoor Lighting, Hardscape Area Method

May be used for any project. When lighting intersections of site drives and public streets or road, a total of 600 square feet for each intersection may be added to the actual site hardscape area to provide for intersection lighting.

LZ-0	LZ-1	LZ-2	LZ-3	LZ-4
Base Alle	owance			
0.5 lumens	1.25 lumens	2.5 lumens	5.0 lumens	7.5 lumens
per SF of	per SF of	per SF of	per SF of	per SF of
Hardscape	Hardscape	Hardscape	Hardscape	Hardscape

MODEL LIGHTING ORDINANCE - TEXT

IX. TABLES - Ordinance Text

Table B - Lumen Allowances, in Addition to Base Allowance

LZ 4	se it.	16 lumens per square foot	2,000 per LF	8,000 lumens per drive-up window	24,000 lumens per pump (based on 20 fc horiz)
LZ 3	cilities.	16 lumens per square foot	1,500 per LF	8,000 lumens per drive-up window	16,000 lumens per pump (based on 20 fc
LZ 2	site, Use	8 lumens per square foot	1,000 per LF	4,000 lumens per drive-up window	8,000 lumens per pump (based on 10 fc horiz)
LZ1	es and se	4 lumens per square foot	0	2,000 lumens per drive-up window	4,000 lumens per pump (based on 5 fc horiz)
TZ 0	s for sale I allowa	0	0	0	0
	Additional allowance No more than two additiona	Outdoor Sales Lots . This allow- ance is lumens per square foot of un- covered sales lots used exclusively for the display of vehicles or other merchandise for sale, and may not include driveways, parking or other non sales areas. To use this allow- ance, luminaires must be within 2 mounting heights of sales lot area.	Outdoor Sales Frontage. This allowance is for lineal feet of sales frontage immediately adjacent to the principal viewing location(s) and unobstructed for its viewing length. A corner sales lot may include two adjacent sides provided that a differ- ent principal viewing location exists for each side. In order to use this al- lowance, luminaires must be located between the principal viewing loca- tion and the frontage outdoor sales area	Drive Up Windows. In order to use this allowance, luminaires must be within 20 feet horizontal distance of the center of the window.	Vehicle Service Station. This allowance is lumens per installed fuel pump.

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IX. TABLES - TABLE C BUG RATING - User's Guide

Work on the BUG system started in 2005 when the IES upgraded the roadway cutoff classification system. The original system, which included the ratings full cutoff, cutoff, semi-cutoff and non cutoff, had been designed as a rating system focused on brightness and glare control. However, with increasing demand for control of uplight and light trespass in addition to glare, IES realized that a more comprehensive system was needed. IES developed TM-15 *Luminaire Classification System for Outdoor Luminaires*.

As this is a relatively new rating system, and many people may not be familiar with it, more explanation of how the rating system works is provided here. For example, some people are familiar with terms such as "full cutoff" and they may expect the MLO to include those terms. It will be very important that all groups recognize that older terms and concepts are inadequate for the complex tasks of controlling light pollution. It is recommended that the new rating system adopted in TM-15, as followed herein by the MLO, be used intact and exclusively. BUG requires downlight only with low glare (better than full cut off) in lighting zones 0, 1 and 2, but allows a minor amount of uplight in lighting zones 3 and 4. In lighting zones 3 and 4, the amount of allowed uplight is enough to permit the use of very well shielded luminaires that have a decorative drop lens or chimney so that dark sky friendly lighting can be installed in places that traditional-appearing luminaires are required. BUG typically cannot be used for residential luminaires unless they have been photometrically tested. For non-photometrically tested residential luminaires, shielding description is used instead. The lumen limits established for each lighting zone apply to all types of lighting within that zone. This includes, but is not limited to, specialty lighting, façade lighting, security lighting and the front row lighting for auto dealerships. BUG rating limits are defined for each luminaire and

IX. TABLES (cont.) - Ordinance Text

Table C - Maximum Allowable Backlight, Uplight and Glare (BUG) Ratings

May be used for any project. A luminaire may be used if it is rated for the lighting zone of the site or lower in number for all ratings B, U and G. Luminaires equipped with adjustable mounting devices permitting alteration of luminaire aiming in the field shall not be permitted.

TABLE C-1	Lighting Zone 0	Lighting Zone 1	Lighting Zone 2	Lighting Zone 3	Lighting Zone 4
Allowed Backlight Rating*					
Greater than 2 mounting heights from property line	B1	B3	B4	BS	B5
1 to less than 2 mounting heights from property line and ideally oriented**	B1	B 2	B3	B4	B4
0.5 to 1 mounting heights from property line and ideally oriented**	BO	B1	B2	B3	B3
Less than 0.5 mounting height to property line and properly oriented**	B0	BO	BO	B1	B2

*For property lines that abut public walkways, bikeways, plazas, and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section. NOTE: This adjustment is relative to Table C-1 and C-3 only and shall not be used to increase the lighting area of the site.

****** To be considered 'ideally oriented', the luminaire must be mounted with the backlight portion of the light output oriented perpendicular and towards the property line of concern.

IX. TABLES - TABLE C BUG RATING (cont.) - User's Guide

are based on the internal and external design of the luminaire, its aiming, and the initial luminaire lumens of the specified luminaires. The BUG rating limits also take into consideration the distance the luminaire is installed from the property line in multiples of the mounting height (See Table C).

180°



80°

.09

30°

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30°

°06

Uplight, which causes artificial sky glow. Lower uplight (zone UL) causes the most sky glow and negatively affects

professional and academic astronomy. Upper uplight (UH) not reflected off a surface is mostly energy waste. The U rating defines the amount of light into the upper hemisphere with greater concern for the light at or near the horizontal angles (UL). **Glare.** which can be annoying or visually disabling. The G rating takes into account the amount of frontlight in the FH and FVH zones as well as BH and BVH zones.

BUG ratings apply to the Lighting Zone of the property under consideration.

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IX. TABLES (cont.) - Ordinance Text

IX. TABLES - TABLE C BUG RATING (cont.) - User's Guide

(Key: UH=Uplight High, UL=Uplight Low, BVH=Backlight Very High, BH=Backlight High, BM=Backlight Medium, BL=Backlight Low, FVH=Forward Light Very High, FH=Forward Light High, FM=Forward Light Medium, FL=Forward Light Low.) In general, a higher BUG rating means more light is allowed in solid angles, and the rating increases with the lighting zone. However, a higher B (backlight) rating simply indicates that the luminaire directs a significant portion of light behind the pole, so B ratings are designated based on the location of the luminaire with respect to the property line. A high B rating luminaire maximizes the spread of light, and is effective and efficient when used far from the property line. When luminaires are located near the property line, a lower B rating will prevent unwanted light from interfering with neighboring properties.

At the 90-180 degree ranges:

- Zone 0 allows no light above 90 degrees.
- Zone 1 allows only 10 lumens in the UH and UL zones, 20 lumens total in the complete upper hemisphere. (This is roughly equivalent to a 5 W incandescent lamp).
- Zone 2 allows only 50 lumens in the UH and UL zones, 100 lumens total (less than a 25W incandescent lamp).
- Zone 3 allows only 500 lumens in the UH and UL zones, 1000 lumens total (about the output of a 75W incandescent bulb).
- Zone 4 allows only 1,000 lumens in the UH and UL zones, 2000 lumens total (about the output of a 100W incandescent bulb).

IX. TABLES (cont.) - Ordinance Text

Table C - 2Maximum Allowable Uplight(BUG) Ratings - Continued

TABLE C-2	Lighting Zone 0	Lighting Zone 1	Lighting Zone 2	Lighting Zone 3	Lighting Zone 4
Allowed Uplight Rating	00	UI	U2	U3	U4
Allowed % light emission above 90° for street or Area lighting	0%0	%0	%0	0%0	0%0

Table C - 3 Maximum Allowable Glare(BUG) Ratings - Continued

			No. No. No. No.		
TABLE C-3	Lighting Zone 0	Lighting Zone 1	Lighting Zone 2	Lighting Zone 3	Lighting Zone 4
Allowed Glare Rating	GO	GI	G2	G3	G4
Any luminaire not ideally oriented*** with 1 to less than 2 mounting heights to any property line of concern	G0	G0	GI	G1	G2
Any luminaire not ideally oriented*** with 0.5 to 1 mounting heights to any property line of concern	G0	G0	G0	GI	G1
Any luminaire not ideally oriented*** with less than 0.5 mounting heights to any property line of concern	GO	G0	GO	GO	G1

******* Any luminaire that cannot be mounted with its backlight perpendicular to any property line within 2X the mounting heights of the luminaire location shall meet the reduced Allowed Glare Rating in Table C-3.

TABLE D EXAMPLE - PERFORMANCE METHOD - User's Guide

The first step in the Performance Method is to establish the Site Total Initial Site Lumens which regulates overlighting. The performance method allows layers of light depending on the complexity of the site.

Table D establishes the basic total initial site lumens allowed. These lumen allowances are added together for a total initial site lumen allowance. Allowances include:

1) Initial lumen allowance per site

2) Per area (SF) of hardscape

MODEL LIGHTING ORDINANCE - TEXT

IX. TABLES (cont.) - Ordinance Text

Table D Performance Method Allowed Total Initial Site Lumens

May be used on any project.

Lighting Zone	LZ 0	LZ 1	LZ 2	LZ 3	LZ 4
Allowed Lumens Per SF	0.5	1.25	2.5	5.0	7.5
Allowed Base Lumens Per Site	0	3,500	7,000	14,000	21,000

Table E Performance Method Additional Initial Luminaire LumenAllowances. All of the following are "use it or lose it" allowances.All area and distance measurements in plan view unless otherwise noted.

Lighting Application	LZ 0	LZ1	LZ 2	LZ 3	LZ 4
Additional Lumens Allowances outdoor sales facilities. A MAXI PERMITTED. THESE ALLOW	for All Bu MUM OF	ildings er THREE ARE "US	xcept ser (3) ALL (E IT OR	vice static OWANC LOSE I7	ons and ES ARE [7".
uilding Entrances or Exits. This owance is per door. In order to e this allowance, luminaires must within 20 feet of the door.	400	1,000	2,000	4,000	6,000
uilding Facades. This allowance lumens per unit area of building çade that are illuminated. To use is allowance, luminaires must be med at the façade and capable of uminating it without obstruction.	0	0	8/SF	16/SF	24/SF

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TABLE E PERFORMANCE METHOD - User's Guide

The allowable light levels for these uses defined in Table E may be used to set a prescriptive lighting allowance for these uses in each lighting zone. It should be noted that the lighting allowance defined in Table E is only applicable for the area defined for that use and cannot be transferred to another area of the site. For some uses, such as outdoor sales, the jurisdiction is encourages to define a percentage of the total hardscape area that is eligible for the additional lighting allowance. For example, a set percentage of a car dealership's lot may be considered a display area and receive the additional lighting allowance where the remainder of the lot would be considered storage, visitor parking, etc. and cannot exceed the base light levels defined in Table A.

TABLE E EXAMPLE - PERFORMANCE METHOD - User's Guide

IX. TABLES (cont.) - Ordinance Text

Table E - Performance Method Additional Initial Lumen Allowances (cont.)

 -						
LZ 4	18/SF	36/SF	15/SF	8,000 lumens per drive-up window	ces.	24/SF
LZ 3	12/SF	24/SF	10/SF	8,000 lumens per drive-up window	ons only. I allowan	16/SF
LZ 2	6/SF	12/SF	5/SF	4,000 lumens per drive-up window	ice Static	8/SF
LZ 1	3/SF	6/SF	1/SF	2,000 lumens per drive-up window	for Serv y other a	4/SF
LZ 0	0	0	0	0	ances use an	0
Lighting Application	Sales or Non-sales Canopies. This allowance is lumens per unit area for the total area within the drip line of the canopy. In order to qualify for this allowance, luminaires must be located under the canopy.	Guard Stations. This allowance is humens per unit area of guardhouse plus 2000 sf per vehicle lane. In order to use this allowance, luminaires must be within 2 mounting heights of a vehicle lane or the guardhouse.	Outdoor Dining. This allowance is lumens per unit area for the total il- luminated hardscape of outdoor dining. In order to use this allowance, luminaires must be within 2 mounting heights of the hardscape area of outdoor dining	Drive Up Windows. This allowance is lumens per window. In order to use this allowance, luminaires must be within 20 feet of the center of the window.	Additional Lumens Allow Service stations may not 1	Vehicle Service Station Hardscape. This allowance is lumens per unit area for the total illuminated hardscape area less area of buildings, area under canopies, area off property, or areas obstructed by signs or structures. In order to use this allowance, luminaires must be illuminating the hardscape area and must not be within a building below a canopy, beyond property lines, or obstructed by a sign or other structure.

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MODEL LIGHTING ORDINANCE - TEXT

IX. TABLES (cont.) - Ordinance Text

Table E - Performance Method Additional Initial Lumen Allowances (cont.)

	Z0 LZ1 LZ2 LZ3 LZ4	0 8/SF 16/SF 32/SF 32/SF	es for Outdoor Sales facilities only. t use any other additional allowances. ese allowances shall employ controls ex- ex time to be determined by the Authority.	0 4/SF 8/SF 12/SF 18/SF	0 0 1,000/ 1,500/ 2,000/ LF LF LF
Allowances (cont.)	Lighting Application	Vehicle Service Station Canopie. This allowance is lumens per unit area for the total area within the di ine of the canopy. In order to use his allowance, luminaires must be ocated under the canopy.	Additional Lumens Allov Outdoor Sales facilities ma NOTICE: lighting permitted tinguishing this lighting after a	Dutdoor Sales Lots. This allowar s lumens per square foot of uncov red sales lots used exclusively for he display of vehicles or other me chandise for sale, and may not in- clude driveways, parking or other non sales areas and shall not excee 5% of the total hardscape area. To use this allowance, Luminaires nust be within 2 mounting height of the sales lot area.	Dutdoor Sales Frontage. This al- owance is for lineal feet of sales rontage immediately adjacent to t vrincipal viewing location(s) and u obstructed for its viewing length. A corner sales lot may include two a accent sides provided that a differe vrincipal viewing location exists fo acch side. In order to use this allow nee, luminaires must be located oetween the principal viewing oretion and the frontage outdoor

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MODEL LIGHTING ORDINANCE - TEXT

IX. TABLES (cont.) - Ordinance Text

 Table F Maximum Vertical Illuminance at any point in the plane of the property line

Lighting	Lighting	Lighting	Lighting	Lighting
Zone 0	Zone 1	Zone 2	Zone 3	Zone 4
.05 FC or	0.1 FC or	0.3 FC or	0.8 FC or	1.5 FC or
.5 LUX	1.0 LUX	3.0 LUX	8.0 LUX	15.0 LUX

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MODEL LIGHTING ORDINANCE - TEXT

- Ordinance Text IX. TABLES (cont.)

Decidential I inhting I imite Table C

TADIO - INCOLUCIAN FIGH	mr Sum	COTT			
Lighting Application	LZ 0	LZ 1	LZ 2	LZ 3	LZ 4
Row 1 Maximum Allowed Luminaire Lumens* for Unshield ed Luminaires at one entry only	Not allowed	420 lumens	630 lumens	630 lumens	630 lumens
Row 2 Maximum Allowed Luminaire Lumens* for each Fully Shielded Luminaire	630 lumens	1,260 lumens	1,260 lumens	1,260 lumens	1,260 lumens
Row 3 Maximum Allowed Luminaire Lumens* for each Unshielded Luminaire excluding main entry	Not allowed	315 lumens	315 lumens	315 lumens	315 lumens
Row 4 Maximum Allowed Luminaire Lumens* for each Landscape Lighting	Not allowed	Not allowed	1,050 lumens	2,100 lumens	2,100 lumens
Row 5 Maximum Allowed Lunninaire Lumens* for each Shielded Directional Flood Lighting	Not allowed	Not allowed	1,260 lumens	2,100 lumens	2,100 lumens
Row 6 Maximum Allowed Luminaire Lumens* for each Low Voltage Landscape Lighting	Not allowed	Not allowed	525 lumens	525 lumens	525 lumens

TABLE G RESIDENTIAL LIGHTING - User's Guide

* Luminaire lumens equals Initial Lamp Lumens for a lamp, multiplied by the number of lamps in the luminaire

Residential Light Levels

which are identified by their wattage. However, since new technologies provide more light for fewer watts, it is no longer possible to regulate residential lighting solely by providing a maximum wattage. Table G, Most residential lighting has traditionally used incandescent lamps therefore, lists maximum initial luminaire lumens only.

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X. DEFINITIONS - User's Guide

Definitions are typically generally added to any code when new code sections are added. The definitions are legally required and play a significant role in the interpretation of the ordinance and code.

Most city attorneys will not accept references to outside sources regardless of credibility, such as the IES Handbook. Thus as a general rule, a definition for an unfamiliar term (e.g. lumens) must be added by the adopting ordinance. When adopting or integrating the MLO definitions, be sure to retire conflicting technical terminology. In particular, the latest IES Luminaire Classification System as defined in IES TM-15-07 is likely to need attention.

MODEL LIGHTING ORDINANCE - TEXT

	X. DEFINITIONS - Ordinance Text
Absolute Photometry	Photometric measurements (usually of a solid-state luminaire) that directly measures the footprint of the luminaire. Reference Standard IES LM-79
Architectural Lighting	Lighting designed to reveal architectural beauty, shape and/or form and for which lighting for any other purpose is incidental.
Authority	The adopting municipality, agency or other governing body.
Astronomic Time Switch	An automatic lighting control device that switches outdoor lighting relative to time of solar day with time of year correction.
Backlight	For an exterior luminaire, lumens emitted in the quarter sphere below horizontal and in the opposite direction of the intended orientation of the luminaire. For luminaires with symmetric distribution, backlight will be the same as front light.
BUG	A luminaire classification system that classifies backlight (B), uplight (U) and glare (G).
Canopy	A covered, unconditioned structure with at least one side open for pedestrian and/or vehicular access. (An unconditioned structure is one that may be open to the elements and has no heat or air conditioning.)
Common Outdoor Areas	One or more of the following: a parking lot; a parking structure or covered vehicular entrance; a common entrance or public space shared by all occupants of the domiciles.
Curfew	A time defined by the authority when outdoor lighting is reduced or extinguished.

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X. DEFINITIONS - Ordinance Text

MODEL LIGHTING ORDINANCE - TEXT

Emergency conditions	Generally, lighting that is only energized dur- ing an emergency; lighting fed from a backup power source; or lighting for illuminating the path of egress solely during a fire or other emergency situation; or, lighting for security purposes used solely during an alarm.
Footcandle	The unit of measure expressing the quantity offight received on a surface. One footcandle is the illuminance produced by a candle on a surface one foot square from a distance of one foot.
Forward Light	For an exterior luminaire, lumens emitted in the quarter sphere below horizontal and in the direction of the intended orientation of the luminaire.
Fully Shielded Luminaire	A luminaire constructed and installed in such a manner that all light emitted by the lumin- aire, either directly from the lamp or a diffus- ing element, or indirectly by reflection or re- fraction from any part of the luminaire, is pro- jected below the horizontal plane through the luminaire's lowest light-emitting part.
Glare	Lighting entering the eye directly from lumin- aires or indirectly from reflective surfaces that causes visual discomfort or reduced visibility.
Hardscape	Permanent hardscape improvements to the site including parking lots, drives, entrances, curbs, ramps, stairs, steps, medians, walkways and non-vegetated landscaping that is 10 feet or less in width. Materials may include concrete, asphalt, stone, gravel, etc.
Hardscape Area	The area measured in square feet of all hard- scape. It is used to calculate the Total Site Lumen Limit in both the Prescriptive Method and Performance Methods. Refer to Hardscape definition.
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MODEL LIGHTING ORDINANCE - TEXT

X. DEFINITIONS - Ordinance Text

Hardscape Perimeter	The perimeter measured in linear feet is used to calculate the Total Site Lumen Limit in the Performance Method. Refer to Hardscape definition.
ША	International Dark-Sky Association.
IESNA	Illuminating Engineering Society of North America.
Impervious Material	Sealed to severely restrict water entry and movement
Industry Standard Lighting Software	Lighting software that calculates point-by- point illuminance that includes reflected light using either ray-tracing or radiosity methods.
Lamp	A generic term for a source of optical radia- tion (i.e. "light"), often called a "bulb" or "tube". Examples include incandescent, fluor- escent, high-intensity discharge (HID) lamps, and low pressure sodium (LPS) lamps, as well as light-emitting diode (LED) modules and arrays.
Landscape Lighting	Lighting of trees, shrubs, or other plant material as well as ponds and other landscape features.
LED	Light Emitting Diode.
Light Pollution	Any adverse effect of artificial light including but not limited to, glare, light trespass, sky- glow, energy waste, compromised safety and security, and impacts on the nocturnal environment.

MODEL LIGHTING ORDINANCE - TEXT

X. DEFINITIONS - Ordinance Text

Light Trespass	Light that falls beyond the property it is intended to illuminate.
Lighting	"Electric" or "man-made" or "artificial" lighting. See "lighting equipment".
Lighting Equipment	Equipment specifically intended to provide gas or electric illumination, including but not limited to, lamp(s), luminaire(s), ballast(s), poles, posts, lens(s), and related structures, electrical wiring, and other necessary or auxiliary components.
Lighting Zone	An overlay zoning system establishing legal limits for lighting for particular parcels, areas, or districts in a community.
Lighting Equipment	Equipment specifically intended to provide gas or electric illumination, including but not limited to, lamp(s), luminaire(s), ballast(s), poles, posts, lens(s), and related structures, electrical wiring, and other necessary or auxiliary components.
Low Voltage Landscape Lighting	Landscape lighting powered at less than 15 volts and limited to luminaires having a rated initial luminaire lumen output of 525 lumens or less.
Lumen	The unit of measure used to quantify the amount of light produced by a lamp or emitted from a luminaire (as distinct from "watt," a measure of power consumption).
Luminaire	The complete lighting unit (fixture), consisting of a lamp, or lamps and ballast(s) (when ap- plicable), together with the parts designed to distribute the light (reflector, lens, diffuser), to position and protect the lamps, and to connect the lamps to the power supply.
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MODEL LIGHTING ORDINANCE - TEXT

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<u>Mounting Height</u>: The horizontal spacing of poles is often measured in units of "mounting height". Example: "The luminaires can be spaced up to 4 mounting heights apart."

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MODEL LIGHTING ORDINANCE - YEXT

X. DEFINITIONS - Ordinance Text

	A luminaire intended for illuminating streets that serves a decorative function in addition to
	providing optics that effectively deliver street
	lighting. It has a historical period appearance
	or decorative appearance, and has the follow-
	 designed to mount on a pole using an
Ornamental Street	arm, pendant, or vertical tenon;
Sunusir	· opaque or translucent top and/or sides;
	· an optical aperture that is either open
	or enclosed with a flat, sag or drop lens;
	· mounted in a fixed position; and
	· with its photometric output measured
	using Type C photometry per
	IESNA LM-75-01.
Outdoor Lighting	Lighting equipment installed within the prop-
	erty line and outside the building envelopes,
	whether attached to poles, building structures,
	the earth, or any other location; and any
والموادع الموادين الموادي والموادق والموادق والموادق والموادعة والموادية والموادية والموادية والموادية والمواد	associated lighting control equipment.
Partiv shielded	A luminaire with opaque top and translucent
luminaire	or perforated sides, designed to emit most
	light downward.
Pedestrian	Stone, brick, concrete, asphalt or other similar
Hardscape	finished surfaces intended primarily for
	walking, such as sidewalks and pathways.
	A control device employing a photocell or
Photoelectric Switch	photodiode to detect daylight and automatical-
	Iy switch lights off when sufficient daylight is
a biy vo or y lie Array or or or an a bir of the state of the	available.
Ductor duty line	The edges of the legally-defined extent of
rrupeny me	privately owned property.

MODEL UGHTING ORDINANCE - TEXT

X. DEFINITIONS - Ordinance Text

Relative photometry	Photometric measurements made of the lamp plus luminaire, and adjusted to allow for light loss due to reflection or absorption within the luminaire. Reference standard: IES LM-63.
Repair(s)	The reconstruction or renewal of any part of an existing luminaire for the purpose of its on- going operation, other than relamping or replacement of components including capaci- tor, ballast or photocell. Note that retrofitting a luminaire with new lamp and/or ballast tech- nology is not considered a repair and for the purposes of this ordinance the luminaire shall be treated as if new. "Repair" does not include normal relamping or replacement of components including capacitor, ballast or photocell.
Replacement Lighting	Lighting installed specifically to replace exist- ing lighting that is sufficiently broken to be beyond repair.
Sales area	Uncovered area used for sales of retail goods and materials, including but not limited to automobiles, boats, tractors and other farm equipment, building supplies, and gardening and nursery products.
Seasonal lighting	Temporary lighting installed and operated in connection with holidays or traditions.
Shielded Directional Luminaire	A luminaire that includes an adjustable mount- ing device allowing aiming in any direction and contains a shield, louver, or baffle to reduce direct view of the lamp.
Sign	Advertising, directional or other outdoor promotional display of art, words and/or pictures.

MODEL LIGHTING ORDINANCE - TEXT

X. DEFINITIONS - Ordinance Text

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Sky Glow	results from scattering and reflection of artifi-
	cial light by moisture and dust particles in the
	atmosphere. Skyglow is caused by light
	directed or reflected upwards or sideways
	and reduces one's ability to view the night sky
Temporary liphting	Lighting installed and operated for periods not
00	to exceed 60 days, completely removed and
	not operated again for at least 30 days.
Third Party	A party contracted to provide lighting,
Аз <i>и</i> р т н <i>1</i> 977 т	such as a utility company.
Time Cuitch	An automatic lighting control device that
nume amu	switches lights according to time of day.
	Allowing light to pass through, diffusing it so
Translucent	that objects beyond cannot be seen clearly
33 EE-2004 - 440 - 440 - 440 - 440 - 440 - 440 - 440 - 440 - 440 - 440 - 440 - 440 - 440 - 440 - 440 - 440 - 440	(not transparent or clear).
Unshielded	A luminaire capable of emitting light in any
Luminaire	direction including downwards.
Luliaht	For an exterior luminaire, flux radiated in the
Upugnu	hemisphere at or above the horizontal plane.
17	Illuminance measured or calculated in a plane
Verucui Illuminance	perpendicular to the site boundary or property

MODEL LIGHTING ORDINANCE - TEXT	XI. OPTIONAL STREETLIGHT ORDINANCE - Ordinance Text	med to Note to the adopting authority: the intent of this section is that it only adard applies to streets and not to roadways or highways.	A. Preamblees ofA. PreambleThe purpose of this Ordinance is to control the light pollution of streettheIighting, including all collectors, local streets, alleys, sidewalks and bike- ways, as defined by ANSI/IES RP-8 Standard Practice for Roadway and Street Lighting and in a manner consistent with the Model Lighting s more	iet B. Definitions Roadwav or Hichting is defined as lighting provided for freevar	sht of cyclists, and parked vehicles are generally not present. The primary purp of roadway or highway lighting is to help the motorist remain on the road and help with the detection of obstacles within and beyond the range of th tors.	 Street lighting is defined as lighting provided for major, collector, and loc roads where pedestrians and cyclists are generally present. The primary purpose of street lighting is to help the motorist identify obstacles, provide adequate visibility of pedestrians and cyclists, and assist in visual search tasks, both on and adjacent to the roadway. 	Ornamental Street Lighting is defined as a luminaire intended for illumin ing streets that serves a decorative function in addition to providing optic that effectively deliver street lighting. It has a historical period appearance or decorative appearance, and has the following design characteristics:	ucesigned to intolute of a pole using an arm, pendant, or vertical tenor • opaque or translucent top and/or sides; • an optical aperture that is either open or enclosed with a flat say or
MODEL LIGHTING ORDINANCE - USER'S GUIDE	XI. OPTIONAL STREETLIGHT ORDINANCE - User's Guide	This section was added since the first public review. It is desig work closely with the proposed revision to ANSI/IES RP-8 Star Practice for Roadway and Street Lighting.	Street and roadway lighting is one of the world's largest cause artificial skyglow. Many adopting agencies will recognize that MLO will make privately owned lighting more efficient and environmentally responsible than their street lighting system because the process of designing street lighting often require	precise lighting calculations, applying the MLO directly to stre ighting is not advised. Using existing standards of street light recommended, particularly IES RP-8 and AASHTO standards.	Until a new recommended practice for street lighting can be developed, this section can serve to prevent most of the uplig street lighting systems without setting specific requirements amount of light, uniformity of light, or other performance fac	Adopting agencies should include these basic improvements istreet lighting along with regulations to private lighting. Lighting streets with "period" ornamental luminaires that evc ook of a time when the light source was a gas flame can caus	not exceed a BUG rating of G1. If additional illuminance and/ uniformity is desired, the ornamental fixtures should be supp mented by higher mounted fully shielded luminaires, as illust n RP-33-99.	ew street lighting warranting processes exist. The adopting a

Examples of a current street lighting warranting system are included in the Transportation Association of Canada's Guide for the Design other practical considerations is sufficient. of Roadway Lighting 2006.

· with its photometric output measured using Type C photometry per

· mounted in a fixed position; and

IESNA LM-75-01.

WODEL LIGHTING ORDINANCE - USER'S GUIDE	MODEL LIGHTING ORDINANCE - TEXT
	XI. OPTIONAL STREETLIGHT ORDINANCE - Ordinance Text
	C. Scope All street lighting not governed by regulations of federal, state or other superceding jurisdiction.
	EXCEPTION : lighting systems mounted less than 10.5 feet above street level and having less than 1000 initial lumens each.
	D. Master Lighting Plan The Authority shall develop a Master Lighting Plan based on the American Association of State Highway and Transportation Officials (AASHTO) Roadway Lighting Design Guide GL-6, October 2005, Chapter 2. Such plan shall include, but not be limited to, the Adoption of Lighting Zones and:
	1. Goals of street lighting in the jurisdiction by Lighting Zone
	2. Assessment of the safety and security issues in the jurisdiction by Lighting Zone
	3. Environmentally judicious use of resources by Lighting Zone
	4. Energy use and efficiency by Lighting Zone
	5. Curfews to reduce or extinguish lighting when no longer needed by Lighting Zone
	<i>E. Warranting</i> The Authority shall establish a warranting process to determine whether lighting is required. Such warranting process shall not assume the need for any lighting nor for continuous lighting unless conditions warrant the need. Lighting shall only be installed where warranted.

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MODEL LIGHTING ORDINANCE - USER'S GUIDE	MODEL LIGHTING ORDINANCE - TEXT XI. OPTIONAL STREETLIGHT ORDINANCE - Ordinance Text
	F. Light Shielding and Distribution All street lighting shall have no light emitted above 90 degrees.
	Exception: Ornamental street lighting for specific districts or projects shall be permitted by special permit only, and shall meet the requirements of Table H below without the need for external field-added modifications.
	Table H - Uplight Control Requirements for Ornamental Street Lights - by Special Permit Only
	Lighting Zone Maximum Uplight Rating LZ-0 U-0
	LZ-1 U-1 LZ-2 U-2
	LZ-4 U-3 LZ-4 U-4

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2. SIMPLIFIED DARK SKY STRATEGY

OBJECTIVES:

1. Evaluate the feasibility of developing a dark sky ordinance in the community of three rivers UDB pertaining to outdoor lighting for public right-of-ways and all new construction including subdivisions and street additions.

2. The purpose of a dark sky ordinance is to protect and preserve the quality of life, health, and safety of the citizens of the Community of Three Rivers by providing adequate lighting for safety purposes, enacting a street light plan, and installing outdoor lighting that prevents and reduces unnecessary light pollution.

3. Determine whether it is feasible and in the best interests of the Community of Three Rivers to meet the minimum requirements in order to be classified as a "Dark Skies Community" by the International Dark-Sky Association.

DEFINITIONS:

<u>Footcandle</u>: The Unit of measure expressing the quantity of light received on a surface. One footcandle is the illuminance produced by a candle on a surface one foot square from a distance of one foot.

<u>Fully Shielded</u>: A lighting fixture constructed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal plane.

<u>Light Pollution</u>: Any and all nuisances caused by adverse effect of manmade light, including but not limited to glare, light trespass, sky glow, visual clutter, and wasted energy due to excessive or unnecessary lighting; or artificial light that unnecessarily diminishes the ability to view the night sky or is disruptive to flora and fauna.

Light Trespass: Light projected across property lines or into the public right-ofway when it is not required or permitted to do so.

Lumen: A unit used to measure the amount of light that is produced by a light source. The lumen qualifies the amount of light energy produced by a lamp at the

lamp, not by the energy input, which is indicated by the wattage. One foot-candle means one lumen per square foot of area illuminated.

<u>Unshielded Fixture</u>: A fixture which, as designed or installed, emits all or part of the light above the lowest part of the light source.

CONCEPT STANDARDS FOR OUTDOOR LIGHTING:

The purpose of these lighting standards and the policy of the Community of Three Rivers is to minimize glare and light trespass by limiting outdoor lighting that is misdirected, excessive, or unnecessary. The density of outdoor lighting, whether, shielded or unshielded, shall not exceed in aggregate 50,000 lumens per acre in all zones.

a) Highway, neighborhood street, and property lighting shall conform to the dark sky ordinance of the Community of Three Rivers as set forth below, and meet the minimum requirements recommended by the international Dark-Sky Association conformities.

b) All outdoor lighting shall be shielded so that direct light from the fixture does not trespass on neighboring property. Figure A shows examples of fixtures that are generally Unacceptable or Acceptable in meeting this section. A practical way to determine if a light fixture will conform to this provision is to not allow light to escape above a horizontal plane running through the lowest point of the luminous elements: the lamp or tube, any reflective surface or lens cover (clear or prismatic) must not be visible when viewed from above or the side.

c) Street lighting and associated underground street lighting supply circuits shall be installed. The minimum requirement shall be .4 foot candles on the street. All street lights shall be fully shielded such that they produce no light higher than the horizontal plane of the light source. The street lighting plan specifying the number and approximate location of street lights must be included in the final site plan. The style of fixture shall be the standard, Communityapproved style for the street and parking lot lights within the Community.

d) The installation of any mercury vapor fixture or lamp for use as outdoor lighting is prohibited. Only high pressure sodium (HIPS), low pressure sodium (LPS), LED or

incandescent fixtures shall be permitted in commercial and multifamily residential parking areas. In addition, the level of illumination shall not exceed the maximum lumens as stated in this ordinance.

e) Lighting shall be placed as to prevent the light rays or illumination there from being cast beyond property lines.

f) Height of the light pole is set to provide the most efficient lighting for the area with safety of the Community as priority, and the photometrics (cone of light) set by limiting the height of the light source. The maximum height of the poles from the top to the ground will not exceed 30 feet.

g) All metal halide and fluorescent fixtures shall be filtered with glass, acrylic or translucent enclosures.

h) Incandescent Lights 100 watts and less per fixture, fluorescent lights 40 watts and less per fixture, gas fired fixtures, and lights used for holiday decorations are exempt from the requirements of this ordinance.

i) Dark Sky Association Regulations as of February 23, 2015 and Recommendations for lighting fixtures, wattage output, Kelvins, Lumens, and Photometrics are incorporated in this ordinance to maintain certification as an International Dark Sky Community and participant.

FIGURE A: EXAMPLES OF SHIELDED LIGHTING FIXTURES: NEXT PAGE



Designed / Mustrated by Bob Crein @2005 (Examples of Fully-Shielded Lights)

G. LAFCO INCORPORATION REQUIREMENTS

1. LAFCO INCORPORATION REQUIREMENTS

Policies and Procedures

Tulare County Local Agency Formation Commission

Policy Number: C-7

Effective Date: October 6, 2004

Authority: Government Code §56000 et seq., LAFCO Resolutions 96-005, 04-036

Title: Incorporations

- **Policy:** It is the intent of Tulare County LAFCO that all proposals for incorporation be processed, reviewed and finalized according the requirements of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, the State Incorporation Guidelines and Tulare County LAFCO policy and procedures.
- **Purpose:** To provide the guidelines necessary for the processing, review and finalization of incorporation proposals submitted to Tulare County LAFCO.
- **Scope:** This policy applies to all incorporation proposals processed by Tulare County LAFCO.

Procedure:

7.1. Definition

A. "Incorporation" means the incorporation, formation, creation, and establishment of a city with corporate powers. Any area proposed for incorporation as a new city shall have at least 500 registered voters residing within the affected area at the time commission proceedings are initiated (GC §56043).

7.2. Initiation of Proceedings

A. Incorporation proceedings may be initiated either by a resolution of an affected local agency or by petition. A petition must be signed by not less that 25% of the registered voters residing in the area to be incorporated, or by not less than 25% of the land owners who also own not less than 25% of the assessed value of land within the territory to be incorporated (GC §56764).

7.3. Application

A. An application for incorporation must be accompanied by a feasibility study. This study is to be provided in addition to all other information listed in the "Application Checklist." An incorporation feasibility study should include the following information:

- 1. A brief discussion of the relevant history and characteristics of the study area;
- II. A description of the local agencies which presently serve the community, with discussions of the range and level of services currently provides;
- III. A rationale for the boundaries proposed for incorporation, and a description of possible boundary alternatives;
- IV. At a minimum a forecast of revenues including estimate of property tax distribution and expenditures for the new city during the three fiscal years following incorporation;
- V. The effects on the costs and revenues of any affected local agency during the first three fiscal years of incorporation;
- VI. A discussion of the negative fiscal impacts of the incorporation on affected local agencies and measures proposed to mitigate the negative impacts;
- VII. A discussion of the range and level of services potentially available to the community after incorporation; and
- VIII. A discussion of the effects of the incorporation upon adjacent communities, special districts, and the county.
- B. Other elements may be necessary (for example, a discussion of commercial/industrial land use potential), based on the circumstances of the community in question.
- C. Five copies of the draft version of the feasibility study should be submitted to the LAFCO office as soon as they are available. Upon formal initiation of the proposal, additional copies of the final version of the report will be required.

7.4. Comprehensive Fiscal Analysis

- A. For any proposal, which includes incorporation, the executive officer shall prepare, or cause to be prepared by contract, a comprehensive fiscal analysis. This analysis shall become part of the report required pursuant to GC §56665. Data used for the analysis shall be from the most recent fiscal year for which data are available, provided that the data are not more than one fiscal year old. When data from the most recent fiscal year are unavailable, the executive officer may request supplemental data. The analysis shall review and document each of the following:
 - I. The costs to the proposed city of providing public services and facilities during the three fiscal years following incorporation.

- II. The revenues of the proposed city during the three fiscal years following incorporation.
- III. The effects on the costs and revenues of any affected local agency during the three fiscal years of incorporation.
- IV. Any other information and analysis needed to make the findings required by GC §56720. (GC §56800)
- B. A Certificate of Filing shall not be issued until a Comprehensive Fiscal Analysis acceptable to the Executive Officer has been completed and an environmental finding pursuant to CEQA has been prepared.

7.5. Review of Comprehensive Fiscal Analysis

A. Upon completion of the Comprehensive Fiscal Analysis for any incorporation or reorganization including an incorporation, the Executive Officer shall publish a notice in a newspaper of general circulation in accordance with GC §56133. The notice shall include a description of the proposal and shall include the date of the time period for submitting a request for review by the State Controller. That time period shall be no less than thirty (30) days and no more than sixty (60) days following the date of publication. The request for review by the State Controller must be in writing and must be accompanied by a deposit of the estimated cost of the State Controller's review as may be required by LAFCO policy (Adopted by Resolution 96-05 effective April 3, 1996). (GC §56801)

7.6. <u>Revenue Neutrality</u>

- A. It is the intent of the Legislature that any proposal that includes an incorporation should result in a similar exchange of both revenue and responsibility for service delivery among the county, the proposed city, and other subject agencies. It is the further intent of the Legislature that an incorporation should not occur primarily for financial reasons.
- B. The commission shall not approve a proposal that includes an incorporation unless it finds that the following two quantities are substantially equal:
 - I. Revenues currently received by the local agency transferring the affected territory which, but for the operation of this section, would accrue to the local agency receiving the affected territory.
 - II. Expenditures currently made by the local agency transferring the affected territory for those services that will be assumed by the local agency receiving the affected territory.
- C. However, the commission may approve a proposal that includes an incorporation if it finds either of the following:

- I. The county and all of the subject agencies agree to the proposed transfer.
- The negative fiscal effect has been adequately mitigated by tax sharing agreements, lump-sum payments, payments over a fixed period of time, or any other terms and conditions pursuant to GC §56886. (GC §56815)
- D. Any terms and conditions that mitigate the negative fiscal effect of a proposal that contains an incorporation shall be included in the commission resolution making determinations.

7.7. Commission Proceedings

- A. Upon receiving a complete application, the following actions will be taken:
 - I. LAFCo staff conducts an analysis of the proposal.
 - II. Any interested party may request the State Controller's Office to review LAFCo's fiscal analysis prior to issuance of the executive officer's report and recommendation. (GC §56833.3) The party requesting the review will be required to pay for all costs associated with the review.
 - III. The Commission conducts a public hearing to review the LAFCo staff analysis and receive oral or written testimony. (GC §56666)
 - IV. The Commission then adopts a resolution making determinations approving or disapproving the proposal, with or without conditions. (GC §56880)
 - V. If the incorporation is approved, the Commission determines the final boundaries, the effective date, government structure, the base property tax, and the provisional appropriations limit for the proposed city (GC §56810), and any terms and conditions of approval.
 - VI. At the time the Tulare County LAFCO approves an incorporation, or a reorganization that includes an incorporation, it may also determine the sphere of influence for the proposed new city. The Commission shall, in any event, determine the sphere of influence for any newly incorporated city within one year of the effective date of incorporation. (GC §56426.5)
- B. If the Commission disapproves a proposal, no new proposal involving the same or substantially the same territory shall be initiated for one year after the date of the Commission's resolution unless this provision is waived by the Commission. (GC §56884)

7.8. Conducting Authority Proceedings

- A. The Tulare County Local Agency Formation Commission is designated as the conducting authority. Not more than 30 days after the conclusion of the hearing, the Commission shall make a finding regarding the value of written protest filed and not withdrawn, and take one of the following actions:
 - 1. Terminate the proceedings if more than 50% of the registered voters residing in the incorporation area submit written protest; or
 - II. Call an election on the question of incorporation if written protest is submitted by less than 50% of registered voters residing in the incorporation area.

7.9. Election

A. An election is held, usually at the next general election. If the majority of votes is cast for incorporation, the Commission as the conducting authority shall pass a resolution confirming the order of incorporation. An incorporation election also provides for the election of city council members and other officers; whether the city council in future elections shall be elected by district or at large; if the petition so requests, the question as to whether or not the city shall operate under the city manager form of government; and, if the petition so requests, state that the voters may express their preference between names for the new city.

7.10. Completion

A. Following a successful incorporation election, the County Board of Supervisors will certify the election results by adoption of a resolution and forward a copy to LAFCo. LAFCo staff will prepare a "Certificate of Completion" (the document which signals the end of the incorporation process) and a "Statement of Boundary Change." The effective date of the new city will be clearly shown on these documents. LAFCo staff will assemble documents to accompany the Certificate of Completion for recordation by the County Recorder's office.

LAFCO staff is also responsible for filing incorporation completion documents with a variety of State agencies and affected departments of the county government.

H. MANAGEMENT OF URBAN WILDLIFE CONFLICTS

1. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE INCIDENT REPORTING AND PUBLIC SAFETY GUIDELINES

Gov FISH and WILDLIFE

WILDLIFE INCIDENT REPORTING Data Portal ->> Wildlife ->> Wildlife Incident Reporting

Wildlife - Wildlife Incident Reporting

About

The Wildlife Incident Reporting Tool gives the user the ability to:

Report an observation involving species of interest to the Department of Fish and Game

Report nuisance activity and/or property damage involving wildlife, which may result in the issuance of a depredation permit (permit to capture and relocate, or kill, animals creating property damage and/or a public safety hazard) for species requiring them by California Codes and Regulations

Download depredation permits approved by DFG biologists or game wardens for printing

Report carcass information for animals taken/killed by depredation permit as required by permit rules of use

All reports may be entered, viewed and/or updated, and printed. To submit an incident you must have an account and be logged in.

Login with existing account

Create a new account

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GOV FISH and WILDLIFE

M

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Format Password		μητ	*******			
Create Account	INSTRUCTION	S				
Activate Account	In order to create :	In order to create an account with the Department of Fish and Wildlife, you must committee a two step process				
	Step One: Comple email will be sent t	ele this form by entering all of the required information. When you cl to you with information needed to complete step two.	ick the create button, an			
	Step Two: In step Once your accoun	two, you will activate your account using the information provided in t is activated, you will be able to login.	i lhe email from slep one.			
	Note: Fish and Wi account with a CD have a network log	Idilife employees already have access using their network account. A FW email address will fail. Use your network usemame and passwo In, have your supervisor contact the Help Desk.	Atlempting to create an rd to login. If you do not			
		Personal Information				
	Age of	1 certify that I am at least 18 years old				
	Consent:	State law restricts the collection of personal information from minor minor, please have your parents create an account instead. For mo refer to our <u>conditions of use</u> .	s. If you are a are information,			
	First Name:					
	Middle Initial:		(optional)			
	Last Name:	Provide a second s				
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	State (If US):	California				
	State (if US): Province (if not US):	California				
	State (if US): Province (if not US): ZIP (Postal) Code:	California				

Password · Passwords must have from 8 to 20 characters. Requirements: . Passwords must have at least one upper case letter, one lower case letter and one number. · Passwords may only contain ASCII letters, numbers, symbols and punctuation. Space or

	tab characters are not allowed.	-		
New Password:		······	 	

Email:

Confirm Password:

Password Question:	Select Question
Password Answer:	
Confirm Password Answer:	
	Create

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Home (/) i Regions (https://www.wildlife.ca.gov/Regions) i 4 (https://www.wildlife.ca.gov/Regions/4) i Phone (#)

Phone Directory (Fresno Office)

Main Building

(559) 243-4005

Conservation Building (559) 243-4014 or (559) 243-4017

MENU SELECTIONS:

Licensing: press 1

Administration or Accounting: press 2

Fishery Programs or Permits: press 3

Wildlife Management or Hunting Programs: press 4

Environmental Planning or Review: press 5, or you may call (559) 243-4017

Law Enforcement, Regulations or Hunter Safety: press 6

MENU SELECTIONS:

Streambed Alteration Program: Ext 230

Water Rights Program: Ext 231

Federal Energy Regulatory Commission (FERC) Relicensing: Ext 242

Education Program: Ext 253

CESA / CEQA: Ext 227

Timber Harvest Plan Review: Ext 236 or 246

Conservation Planning: Ext 222, Ext 234 or Ext 247

Wild Trout Program: Ext 248

San Joaquin Restoration Program: Ext 249 or Ext 259

Fisheries Management: Ext 235 or Ext 257

Caltrans Permitting Liaison: Ext 225

Ecological Reserves: Ext 219 or Ext 223

CDFW Central Region (Region 4) (https://www.wildlife.ca.gov/Regions/4) Regional Manager: Dr. Jeffrey R. Single

Main Office: 1234 E. Shaw Avenue Fresno, CA 93710 | Phone Directory (https://www.wildlife.ca.gov/Regions/4/Phone) Email the Central Region (mailto:reg4sec@wildlife.ca.gov) | (559) 243-4005 ext. 151 | Fax: (559) 243-4022

Login

FISH and WILDLIFE

CDFW Public Safety Wildlife Guidelines 2072 (Excluding mountain lions)

(For mountain lions, see policy updated February 28, 2013)

Consistent with Section 1801 of the Fish and Game Code, these Public Safety Wildlife Guidelines provide procedures to address public safety wildlife problems. Black bears, deer, coyotes, and large exotic carnivores which have threatened or attacked humans are wildlife classified as public safety problems.

Department employees may deploy less-than-lethal ammunition or devices to assist in alleviating a wildlife incident as determined by the employee. If a Department law enforcement officer deploys such methods it is the officer's responsibility to ensure any firearm used is unloaded with the less-than-lethal ammunition, checked and reloaded with the proper ammunition for that firearm. When there are multiple officers on an incident, at least one other officer if readily available, should assist the primary officer in ensuring firearms are checked and loaded with the proper ammunition.

Public safety wildlife incidents are classified into three types:

A. Type Green (sighting)

A report (confirmed or unconfirmed) of an observation that is perceived by the public to be a public safety wildlife problem. The mere presence of the wildlife species does not in itself constitute a threat.

B. Type Yellow (threat)

A report where the presence of the public safety wildlife is confirmed by a field investigation and the responding person (law enforcement officer or Department employee) perceives the animal to be an imminent threat to public health or safety. Imminent threat means there is a likelihood of human injury based on the totality of the circumstances.

C. Type Red (attack)

An attack by a public safety wildlife species on a human resulting in physical contact, injury, or death.

These guidelines are not intended to address orphaned, injured, or sick wildlife which have not threatened public safety. To achieve the intent of these guidelines, the following procedures shall be used.

I. Wildlife Incident Report Form

Fill out a Wildlife Incident Report Form (WMD-2) for all reports of public safety wildlife incidents. The nature of the report will determine the response or investigative action to the public safety problem. For those reports which require a follow-up field investigation, the Wildlife Incident Report Form will be completed by the field investigator. All completed Wildlife Incident Report Forms shall be forwarded through the regional offices to the Chief, Wildlife Branch (WB) and the Chief of Enforcement.

II. Response to Public Safety Wildlife Problems

The steps in responding to a public safety wildlife incident are diagramed below:



Any reported imminent threats or attacks on humans by wildlife will require a follow-up field investigation. If a public safety wildlife species is outside its natural habitat or in an area where it could become a public safety problem, and if approved by the Deputy Director for the Wildlife and Fisheries Division (WFD), it may be captured using restraint techniques approved by the Wildlife Investigations Laboratory (WIL). The disposition of the captured wildlife may be coordinated with WIL. Public safety wildlife species confirmed by Department field staff to pose an imminent threat to public safety shall not be relocated for release. CDFW will utilize reasonable means to take a public safety animal. However, when reasonable means to take the animal have been attempted, and the imminent threat no longer exists, the Department shall reassess the public safety status of the animal.

A. Type Green (sighting)

If the investigator determines that no imminent threat to public safety exists, the incident is considered a Type Green. The appropriate action may include providing wildlife behavior information and mailing public educational materials to the reporting party.

8. Type Yellow (threat)

Once the field investigator finds evidence of the public safety wildlife and perceives the animal to be an imminent threat to public health or safety, the incident is considered a Type Yellow. In the event of threat to public safety, any Department employee responding to a reported public safety incident may take whatever action is deemed necessary within the scope of the employee's authority to protect public safety. When evidence shows that a wild animal is an imminent threat to public safety, that wild animal shall be humanely euthanized (shot, killed, dispatched, destroyed, etc.).

For Type Yellow incidents the following steps should be taken:

- Initiate the Incident Command System. The Incident Commander (IC) consults with the regional manager, assistant chief or designee to decide on the notification process on a case-by-case basis. Full notification includes: the field investigator's supervisor, the appropriate regional manager and assistant chief, the Deputy Director, WFD, Chief, of Enforcement, Chief, WB, WIL, Wildlife Forensics Lab (WFL), the designated regional information officer, and the local law enforcement agency.
- 2. Notify the appropriate Dispatch Center. Dispatch shall notify the above-mentioned personnel.
- 3. Secure the scene as appropriate. Take all practical steps to preserve potential evidence. The IC holds initial responsibility and authority over the scene, locating the animal, its resultant carcass, and any other physical evidence from the attack. The IC will ensure proper transfer and disposition of all physical evidence.
- 4. In most situations, it is important to locate the offending animal as soon as practical. WL may be of assistance. The services of USDA, Wildlife Services (WS) can be arranged by the regional manager, assistant chief or designee contacting the local WS District Supervisor. If possible, avoid shooting the animal in the head to preserve evidence.

 If an animal is killed, the IC will decide on the notification process and notify Sacramento Dispatch if appropriate. Use clean protective gloves while handling the carcass. Place the carcass inside a protective durable body bag (avoid dragging the carcass, if possible).

C. Type Red (attack)

In the event of an attack, the responding Department employee may take any action necessary that is within the scope of the employee's authority to protect public safety. When evidence shows that a wild animal has made an unprovoked attack on a human, that wild animal shall be humanely euthanized (shot, killed, dispatched, destroyed, etc.).

For Type Red incidents the following steps should be taken:

- 1. Ensure proper medical aid for the victim. Identify the victim (obtain the following, but not limited to: name, address, phone number).
- Notify the appropriate Dispatch Center. Dispatch shall notify the field investigator's supervisor, the appropriate regional manager and assistant chief, the Deputy Director, WFD, Chief of Enforcement, Chief, WB, WIL, WFL, the designated regional information officer, and the local law enforcement agency.
- 3. Initiate the Incident Command System. If a human death has occurred, an Enforcement Branch supervisor or specialist will respond to the Incident Command Post and assume the IC responsibilities. The IC holds initial responsibility and authority over the scene, locating the animal, its resultant carcass, and any other physical evidence from the attack. The IC will ensure proper transfer and disposition of all physical evidence.
- 4. Secure the area as needed. Treat the area as a crime scene. In order to expedite the capture of the offending animal and preserve as much on-scene evidence as possible, the area of the incident must be secured immediately by the initial responding officer. The area should be excluded from public access by use of flagging tape or similar tape (e.g., "Do Not Enter") utilized at crime scenes by local law enforcement agencies. One entry and exit port should be established. Only essential authorized personnel should be established as the excluded area. A second area outside the area of the incident should be established as the command post.
- 5. In cases involving a human death, WFL personnel will direct the gathering of evidence. Secure items such as clothing, tents, sleeping bags, objects used for defense during the attack, objects chewed on by the animal, or any other materials which may possess the attacking animal's saliva, hair, or blood.
- 6. If the victim is alive, advise the attending medical personnel about the Camivore Attack-Victim Sampling Kit for collecting possible animal saliva stains or hair that might still be on the victim. If the victim is dead, advise the medical examiner of this evidence need. This sampling kit may be obtained from the WFL.
- It is essential to locate the offending animal as soon as practical. WIL may be of assistance. The services of WS can be arranged by the regional manager, assistant chief or designee contacting the local WS District Supervisor. If possible, avoid shooting the animal in the head to preserve evidence.
- 8. If an animal is killed, the IC will notify the appropriate Dispatch Center. Treat the carcass as evidence. Use clean protective gloves and (if possible) a face mask while handling the carcass. Be guided by the need to protect the animal's external body from: loss of bloodstains or other such physical evidence originating from the victim; contamination by the animal's own blood; and contamination by the human handler's hair, sweat, saliva, skin cells, etc. Tape paper bags over the head and paws, then tape plastic bags over the paper bags. Plug wounds with tight gauze to minimize contamination of the animal with its own blood. Place the carcass inside a protective durable body bag (avoid dragging the carcass, if possible).
- 9. WFL will receive from the IC and/or directly obtain all pertinent physical evidence concerning the primary questions of authenticity of the attack and identity of the offending animal. WFL has first access and authority over the carcass after the IC. WFL will

immediately contact and coordinate with the county health department the acquisition of appropriate samples for rables testing. Once WFL has secured the necessary forensic samples, they will then release authority over the carcass to WIL for disease studies.

10. An independent diagnostic laboratory approved by WIL will conduct necropsy and disease studies on the carcass. The WIL will retain primary authority over this aspect of the carcass.

D. Responsibilities of WIL

WIL investigates wildlife disease problems statewide and provides information on the occurrence of both enzootic and epizootic disease in wildlife populations. Specimens involved in suspected disease problems are submitted to WIL for necropsy and disease studies. Most animals killed for public safety reasons will be necropsied to assess the status of health and whether the presence of disease may have caused the aggressive and/or unusual behavior.

Type Yellow public safety animals killed may be necropsied by WIL or an independent diagnostic laboratory approved by WIL. Contact WIL immediately after a public safety animal is killed to determine where it will be necropsied. Arrangements are to be made directly with WIL prior to submission of the carcass to any laboratory.

Type Red public safety animals killed will be necropsied by an independent diagnostic laboratory approved by WIL. Contact WIL prior to submission of the carcass to any laboratory to allow the Department veterinarian to discuss the disease testing requirements with the attending pathologist. A disease testing protocol has been developed for use with Type Red public safety wildlife.

E. Responsibilities of WFL

WFL has the statewide responsibility to receive, collect, examine and analyze physical evidence, issue reports on evidence findings, and testify in court as to those results. WFL's primary function in public safety incidents is to verify or refute the authenticity of the purported attack and to corroborate or refute the involvement of the suspected offending animal.

Type Yellow public safety animals killed may be examined by WFL personnel. The examination of the carcass will be coordinated with WIL.

All Type Red public safety animals killed must be examined by WFL personnel or a qualified person approved by WFL supervisor using specific procedures established by WFL.

If a human death occurs, coordination of the autopsy between the proper officials and WFL is important so that WFL personnel can be present during the autopsy for appropriate sampling and examination. In the event of human injury, it is important for WFL to gather any relevant physical evidence that may corroborate the authenticity of a wildlife attack, prior to the treatment of injuries, if practical. If not practical, directions for sampling may be given over the telephone to the emergency room doctor by WFL

F. Media Contact

Public safety wildlife incidents attract significant media attention. Issues regarding site access, information dissemination, the public's safety, carcass viewing and requests to survey the scene can be handled by a designated employee. Each region and the Chief of Enforcement shall designate an employee with necessary ICS training to respond as a regional information officer to public safety wildlife incidents.

Type Yellow public safety wildlife incidents may require the notification of a designated employee previously approved by the regional manager, assistant chief or designee to assist the IC in responding to the media and disseminating information. The IC has the authority to decide if the designated employee should be dispatched to the site.

All Type Red public safety wildlife incidents require that a designated employee, previously approved by the regional manager, assistant chief or designee, shall be called to the scene to assist the IC in responding to the media and disseminating information, is called to the scene.
The Department will develop and provide training for designated employees to serve as information officers for public safety wildlife incidents.

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FISH AND GAME CODE SECTION 1801-1802

1801. It is hereby declared to be the policy of the state to encourage the preservation, conservation, and maintenance of wildlife resources under the jurisdiction and influence of the state. This policy shall include the following objectives:

(a) To maintain sufficient populations of all species of wildlife and the habitat necessary to achieve the objectives stated in subdivisions (b), (c), and (d).

(b) To provide for the beneficial use and enjoyment of wildlife by all citizens of the state.

(c) To perpetuate all species of wildlife for their intrinsic and ecological values, as well as for their direct benefits to all persons.

(d) To provide for aesthetic, educational, and nonappropriative uses of the various wildlife species.

(e) To maintain diversified recreational uses of wildlife, including the sport of hunting, as proper uses of certain designated species of wildlife, subject to regulations consistent with the maintenance of healthy, viable wildlife resources, the public safety, and a quality outdoor experience.

(f) To provide for economic contributions to the citizens of the state, through the recognition that wildlife is a renewable resource of the land by which economic return can accrue to the citizens of the state, individually and collectively, through regulated management. Such management shall be consistent with the maintenance of healthy and thriving wildlife resources and the public ownership status of the wildlife resources.

(g) To alleviate economic losses or public health or safety problems caused by wildlife to the people of the state either individually or collectively. Such resolution shall be in a manner designed to bring the problem within tolerable limits consistent with economic and public health considerations and the objectives stated in subdivisions (a), (b) and (c).

(h) It is not intended that this policy shall provide any power to regulate natural resources or commercial or other activities connected therewith, except as specifically provided by the Legislature.

1802. The department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. The department, as trustee for fish and wildlife resources, shall consult with lead and responsible agencies and shall provide, as available, the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities, as those terms are used in the California Environmental Protection Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

2. BEAR RESISTANT CONTAINERS SAMPLE ORDINANCE

1	ORDINANCE NO. 7962		
2	AN ORDINANCE AMENDING CHAPTER 6-3, "TRASH,		
3	A NEW SECTION 6-3-12 REQUIRING BEAR RESISTANT		
4	CONTAINERS IN A DESIGNATED AREA OF THE CITY; AMENDING SECTION 6-3-2, BY ADDING NEW DEFINITIONS;		
5	ADDING ADMINISTRATIVE PENALTIES FOR VIOLATIONS, AMENDING SECTION 6-12-5, "CONTAINERS FOR RECYCLING OR		
6	COMPOSTING COLLECTION," AND SETTING FORTH RELATED DETAILS.		
7	BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER,		
8	COLORADO:		
9			
10	Section 1. Section 6-3-2, B.R.C. 1981, is amended to read:		
11	6-3-2 Definitions.		
12	The definitions in chapter 1-2, "Definitions," B.R.C. 1981, shall apply to this chapter, including, without limitation, the definitions of "Compostables," "Hauler," "Recyclable		
13	materials," "Trash," "Trash container," "Visible to the public" and "Wildlife-resistant container."		
14 15	The following terms used in this chapter have the following meanings unless the context clearly indicates otherwise:		
16	"Bear Resistant Container" shall mean a container that meets the requirements for		
17	such a container established by the city manager in a rule adopted pursuant to section 6-3-11 "City Manager Authorized to Issue Rules," B.R.C. 1981		
18	"Bear Resistant Dumpster" shall mean a dumpster that meets the requirements for		
19	section 6-3-11 "City Manager Authorized to Issue Rules," B.R.C. 1981		
20	"Bear Resistant Enclosure" shall mean a fully enclosed structure meets the		
21	requirements for such a container established by the city manager in a rule adopted pursuant to section 6-3-11 "City Manager Authorized to Issue Rules," B.R.C. 1981		
22	"Person" shall have the meaning set forth in chapter 1-2, "Definitions," B.R.C., and		
23	snatt also include, without limitation, owner of any property or vacant land; occupant, owner, operator or manager of any single unit dwelling, multi unit		
24	dwelling, mobile home, mobile home park, private club or other similar property; or owner, operator, manager or employee of any business or business property.		
25			

1		<u>"Refi</u>	ise Attractant" shall mean any trash or other substance which could		
2		reason limite	hably be expected to attract wildlife or does attract wildlife, including, but not d to, soiled diapers, sanitary pads, food products, pet food, feed, kitchen		
3		organ seaso	ic waste, food, food packaging, toothpaste, deodorant, cosmetics, spices, nings or grease. Attractants do not include recyclable materials properly		
4		enclos trash	sed in a recycling container, or materials that do not meet the definition of in section 1-2-1, "Definitions," B.R.C. 1981 and is fruit associated with a		
5		<u>fruit t</u>	ree or bush, produce associated with a garden, or a bird feeder.		
6	<u>Section 2</u> . Chapter 6-3, "Trash, Recyclables and Compostables," B.R.C. 1981 i amended by the addition of a new section 6-3-12 to read:				
7	6-3-12 Bear Resistant Containers Required.				
8 9	(a)	No pr Requi	ivate owner, agent appointed pursuant to section 10-3-14, "Local Agent ired," B.R.C. 1981, or manager of any property, lessee leasing the entire scs. or adult occupant of a single-family dwelling, a dupley, a tripley, or a		
10		fourpl resista	ex shall fail to keep all refuse attractants in bear resistant enclosures, in bear ant containers, bear resistant dumpsters or securely stored within a house,		
11		garage times,	e, shed or other structure at least as secure as a bear resistant enclosure at all except when being transported from a house, garage or bear resistant		
12		enclos resista	re for pickup. Refuse attractants transported for pickup not in a bear it container shall be attended, by a person remaining within 15 feet of the ar at all times		
14	(L)	This			
14	(0)	This section shall apply to the area bounded by Broadway Street, the Cit southern boundary, the city's western boundary and a line extended from Avenue due west through Wonderland Lake Park – Browided that the city			
16		may e Autho	xtend the area by rule adopted pursuant to section 6-3-11 "City Manager prized to Issue Rules," B.R.C. 1981.		
17	(c)	If a co	ntainer or enclosure is damaged, allowing access by wildlife, repairs must be		
18		made within 72 hours after written notification by any city official, or such time designated in the notice by the city official.			
19	(d)	If the	city manager finds that a violation of any provision of this section, the		
20 21		manag prescri	er, after notice and an opportunity for hearing under the procedures ibed by chapter 1-3, "Quasi-Judicial Hearings," B.R.C. 1981, may impose a genalty according to the following schedule:		
21		(1)	For the first violation of the provision \$250.00:		
22		(2)	For the second violation of the same provision, \$500.00;		
23		(3)	For the third violation of the same provision, \$1,000,00, and		
24			To the find violation of the same provision, \$1,000.00; and		
25		(4)	The Hearing Officer may adjust the penalty, based on evidence presented at a hearing.		

KAPLEEIo-7962 Bear Trash Ordinance 3rd Reading-docx

1 2	(e)	The city manager's authority under this section is in addition to any other authority the manager has to enforce this chapter, including but not limited to section 5-2-4, General Penalties, and election of one remedy by the manager shall not preclude			
3		resorting to any other remedy as well.			
4	(f)	The city manager may, in addition to taking other collection remedies, certify due and unpaid charges to the Boulder County Treasurer for collection as provided by			
5		scction 2-2-12, "City Manager May Certify Taxes, Charges and Assessments to County Treasurer for Collection," B.R.C. 1981.			
6 7	(g)	Notice under this subsection is sufficient if hand delivered, emailed, mailed or telephoned to such person, or by posting on the premises.			
8		Section 3. Section 6-12-5, B.R.C. 1981, is amended to read:			
9	6-12-5 Containers for Recycling or Composting Collection.				
10	a)	Haulers providing trash collection service to multifamily customers through centralized collection areas shall provide containers for recyclable materials at no			
11		additional charge. Containers shall be of a sufficient size to accommodate the regular accumulation of recyclables from that customer, but at a minimum, such			
12		containers shall be of a volume equal to one-half of the volume of the trash collection service. If the city manager requires the collection of compostables			
13		haulers shall provide containers for that service of a sufficient size to accommodate the regular accumulation of compostables from that customer.			
14	(b)	Haulers providing trash collection service to residential customers are not required			
15		to provide recyclables or compostables containers. However, if the hauler requires a specific type of container, then the hauler shall deliver such container at no cost			
16		to the residential customer. This provision does not apply to any container required by the give nursuant to section 6.3.12 "Rest Resistant Container" R. P. C.			
17		1981,			
18		Section 4. This ordinance is necessary to protect the public health, safety, and			
19	welfare	e of the residents of the city, and covers matters of local concern.			
20					
21		Section 5. The City Council deems it appropriate that this ordinance be published			
22	by title	only and orders that copies of this ordinance be made available in the office of the			
23	city clerk for public inspection and acquisition.				
24					
25					

KAPLEEvo-7962 Bear Trash Ordinance 3rd Reading-.docx

1	INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED
2	BY TITLE ONLY this 18 th day of February, 2014.
3	
4	Watter Que.
5	Attest
6	
7	City Clerk
8	READ ON SECOND READING AMENDED AND ORDERED RURUSHED
9	NEAD ON SECOND READING, AMENDED, AND ORDERED FUBLISHED
0	BY IIILE ONLY this 5th day of March, 2014.
1	
2	Maur gast
3	Attest:
4	11- 2 4
5	City Clerk
6	
7	READ ON THIRD READING, PASSED, ADOPTED, AND ORDERED
8	PUBLISHED BY TITLE ONLY this 18th day of March, 2014.
9	
)	- MAHIL O
L	Mayor
2	Attest:
3	Alica D. Lewin
4	City Clerk
;	

3. BEAR-RESISTANT WASTE CONTAINER ENCLOSURE GUIDELINES

6-3-12.A(14)

STANDARD (NON-EMERGENCY) RULE

Rule Establishing Requirements for Bear Resistant Containers, Dumpsters and Enclosures

This rule establishes requirements for Bear Resistant Containers, Dumpsters and Enclosures

- (a) A "Bear Resistant Container" shall be a fully enclosed container that meets the standards of testing and a "passing" rating by the Interagency Grizzly Bear Committee (IGBC) as bear resistant.
- (b) A "Bear Resistant Dumpster" shall be an enclosed structure, made of metal, consisting of five (5) sides and a secure door or cover, which shall have a latching device of sufficient design and strength to prevent access by bears. A Bear Resistant Dumpster must include a door, chute or other similar access point for use that self-latches and is secure from bears in the closed position.
- (c) A "Bear Resistant Enclosure" shall be an enclosed structure, made of metal, wood, stone, brick, concrete or the equivalently sturdy material, consisting of five (5) sides and a secure door or cover, which shall have a latching device of sufficient design and strength to prevent access by bears. A garage or other building that meets the foregoing criteria can be a "Bear Resistant Enclosure."

STANDARD (NON-EMERGENCY) RULE

The Adopting Authority establishes this rule to set requirements for bear resistant containers, dumpsters and enclosures and inform the public of those requirements.

Legal Authority: Title 1, Chapter 4, "Rulemaking," and Section 6-3-11, "City Manager Authorized to Issue Rules," B.R.C. 1981

Approved as to form and legality for adoption on Quil 25 2012 (date). (signature), (Assistant Beputy) City Attorney. Approved before publication by City Manager or delegate on april 25. 2014 (date). Jone 5 Brankinga (signature), City Manag (title), Adopting Authority. Three copies of the rule filed with City Clerk on (date). Notice publication date (15-day comment period) in the Daily Camera: 2019 (date).

Rule approved and adopted with without change after considering public comment by City Manager or delegate on Marcy 19, 204 (date) Janes Buryann (signature), <u>City Manager</u> (title),

Adopting Authority.

Adopted rule re-filed with City Clerk and effective on <u>May 20, 14</u> (date)

4. BEAR RESISTANT CONTAINERS

Constructing Bear-resistant Waste Enclosures

Bears are incredibly strong, powerful animals. Their massive shoulders give them the ability to bend and pry metal, and break into structures and cars. Storing waste in an enclosed, sturdy structure is usually more of a deterrent to bears than storing waste outdoors in a plastic bear-resistant cart; however, building an enclosure that is impenetrable by a bear is difficult. Sturdy structures that have minimal gaps and openings are harder for bears to get into, making it less likely that a bear will expend the energy to break into and damage the structure.



Photo provided by Canshed

Bear-resistant Waste Enclosure Requirements for the Secure Trash Regulation Zone

One option for securing waste from bears is to store your trash and compost in a bear-resistant enclosure until it is collected directly from the enclosure by your waste hauler. Not all waste haulers that serve Boulder may offer this service, so please contact your waste hauler for information about the services offered.

The definition and criteria for a bear-resistant enclosure, as described in Rule 6-3-12.A(14), is:

A "Bear Resistant Enclosure" shall be an enclosed structure, made of metal, wood, stone, brick, concrete or the equivalently sturdy material, consisting of five (5) sides and a secure door or cover, which shall have a latching device of sufficient design and strength to prevent access by bears. A garage or other building that meets the foregoing criteria can be a "Bear Resistant Enclosure."

Waste enclosures may not require a city permit to install, but enclosures that are designed to be fixed in place need to satisfy all applicable regulations of Title 9 of the Boulder Revised Code (B.R.C.) 1981. Examples of these regulations include: minimum setbacks, building separation, maximum building coverage, site triangles, etc.

In most residential zones, depending on the specific design of the trash enclosure, it may also contribute "floor area" toward the maximum allowed floor area ratio if the floor-to-ceiling height within the trash enclosure is greater than six feet. For more information about code regulations and requirements, contact a Project Specialist in Planning and Development Services with the specifications of your proposed enclosures so they can provide information specific to your property. Email <u>plandevelop@bouldercolorado.gov</u> or call 303-441-1880.

Bear-Resistant Enclosure Design Guidelines

The city ordinance does not specify design or hardware requirements; however, the following guidelines are based on structures that have been successful in deterring bears in other communities.

The sides of the structure should extend to the ground and the door should not have more than a two-inch gap along the bottom. The door must have a latching device of sufficient design and strength to prevent access by wildlife. Ventilation openings should be covered with a heavy gauge steel mesh or other material of sufficient strength to prevent access. Other features include:

- Metal crossbars to latch the doors;
- Metal-framed wood doors for strength;
- Minimal gaps (ideally 3/8" or less); and/or
- Ventilation openings covered with metal mesh or material of sufficient strength to prevent wildlife access;

Examples of Enclosures

Not Recommended

The large gaps at the top and bottom allow bears to enter.



Recommended

Waste enclosures are not *required to* be bear-resistant certified, but this *Canshed* enclosure is produced in Boulder, has been tested with grizzly bears, and is certified bear-resistant.

Visit www.canshed.us.com for more information.





Recommended

An enclosed wood structure with minimal gaps around the doors and between the door and the ground. This structure has not certified as bear-resistant but meets the ordinance criteria.



I. URBAN FORESTRY

1. GUIDELINES FOR DEVELOPING URBAN FOREST PRACTICE ORDINANCES

Guidelines For Developing Urban Forest Practice Ordinances



"STEWARDSHIP IN FORESTRY"

Oregon Department of Forestry Forest Practices Program Urban and Community Forestry Program



Oregon Department of Land Conservation and Development

November 1999

Acknowledgments

We greatly appreciate the offens of the Urban Growth Boundary Committee formed to address urban forest practices in Oregon. Input and review by the members of this committee have groatly improved the content and cohestveness of this publication. Members of the committee are: Jun Jacks, Planning Director, City of Tualatin: Welt Knapp, private consultant; Jon Jinings and Jeffery Weber, Oregon Department of Land Conservation and Development. Dame! Splesschamt, Dan Christensen, Gary Schulz, Kevin Birch, and Paul Ries. Oregon Department of Forestry.



Western White Pine Pinus monticola

Paul C. Bell, Forest Practice Policy Analyst, ODF Scott Plamondon, Urban and Community Forestry Program Manager, ODF Michael Rupp, Rural Planning Coordinator, DLCD

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Trees are an important part of Oregon's economy, its environment and its identity. Trees provide a myriad of benefits such as lumber, helping to protect our air and water, and shade for our homes in the summer. Trees are even found on our car license plates. The importance of trees and the need to effectively manage our forests was recognized by the Oregon Legislature, which passed the nation's first Forest Practices Act (FPA) in 1971. This law provided unprecedented levels of environmental protection and, for the first time, required reforestation after harvest. The FPA has been amended over the years to include protection for sensitive nesting sites for wildlife, stream and riparian area protection, and protection for a variety of other resource needs.

Since the FPA's adoption 28 years ago, issues regarding the application of the FPA within urban areas have increased. As parcels closer to and within urban areas have been harvested, citizens have voiced a desire for greater levels and different types of forest protection than provided by administration of the FPA.

The FPA was designed to promote the proper management of Oregon's forests. Its mandates for reforestation and resource protection have ensured that forestland remains healthy and productive. The FPA was not designed to regulate forest practices to meet individual community goals within urban settings. This publication has been developed to help cities and counties decide whether the level and type of protection offered by the FPA within urban growth boundaries (UGBs) and city limits as administered by the Oregon Department of Forestry (ODF) is appropriate for their needs. Where the FPA does not meet the goals and objectives of local government within UGBs and city limits, this publication can also help in the preparation of locally administered forest regulations.

The Oregon Legislature has given cities and counties the authority to regulate forest practices within UGBs in place of having ODF administer the FPA. This "local option" has been used by many cities in Oregon. The law is designed to have either ODF or the local government regulating forest operations in the designated area, but not both. If local governments regulate, the FPA no longer applies. Some cities have unknowingly invoked this provision by passing ordinances that regulate the harvesting of trees while creating unintended consequences such as the failure to address other resource protection issues covered by the FPA.

1.1 This Publication

The Oregon Department of Forestry, in cooperation with the Oregon Department of Land Conservation and Development, offers this publication as a guide for cities and counties to use in the development of urban forest practice regulations. This publication is designed to assist local governments in balancing community objectives with economic and environmental concerns as they relate to forest regulations. It outlines a process by which cities or counties can develop regulations that meet

their particular goals while meeting state and federal legislative mandates to protect soil, air, water, and fish and wildlife resources.

These guidelines provide several model ordinance clauses that may address local objectives in an urban forest practices program. However, it is not advisable for any city to merely adopt these model clauses and expect the regulations to be useful. The most successful local regulations are those that meet community goals and objectives while addressing applicable statewide land use planning goals that protect specific natural resources and provide for orderly development.

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While most local governments are aware the state has a Forest Practices Act, they do not know how it works or to what extent it may apply to timber harvesting and other forest practices within their jurisdiction. This section provides a brief overview of the FPA and examples of how various resources are protected. As a city or county considers developing local forest practice regulations, it is important to evaluate current forest practice regulations against what may be proposed.

Specific resources that receive protection under the FPA include environmentally sensitive sites, riparian areas and stream corridors, air, soil, and water quality, and fish and wildlife habitat. The FPA, adopted by the Oregon Legislative Assembly and administered by the Oregon State Board of Forestry through the Oregon Department of Forestry (ODF), applies to all commercial forest operations on non-federal forestlands in Oregon.

The FPA establishes standards for forest practices, including timber harvesting, road building and maintenance, slash disposal, reforestation and use of pesticides and fertilizer. Monitoring by ODF staff shows a high degree of compliance by landowners and operators with the law, assuring that trees are being planted for tomorrow's forests and that other forest resources are being protected.

The FPA has evolved over the years. Protection measures have been strengthened as more scientific data has become available and as social values and federal requirements have changed. The Oregon Forest Practice Rules, which interpret and establish specific standards under the FPA, are administered and enforced in the field by ODF Forest Practices Foresters (FPFs), FPFs operate out of local field offices, with each FPF responsible for a specific geographic area.

Oregon law (ORS 527.670) requires that the operator, timber owner or landowner notify ODF before commencing any forest operation activity. The FPF then reviews operation notifications filed in their area. Notifications are prioritized for field inspections according to type of operation and the resources involved. Depending on the nature of the activity and resources involved, a written plan may be required which describes how the operator will conduct an operation while protecting certain resources as required by the FPA. For example, harvesting timber within 100 feet of a fish-bearing stream requires special attention to protect the stream's temperature, water quality and the riparian area's habitat values.

2.1 Examples of FPA Resource Protection

Some resource protection standards, required by the FPA, are provided below as examples to convey how and what resources are protected by the FPA. As local governments consider developing their own forest practices regulations which would replace the FPA, the following examples show types of regulations that could be developed and adopted to protect soil, air and water quality, and fish and wildlife.

2.1.1 Water Protection Rules

The FPA's water protection rules set standards for vegetation retention within riparian management areas (RMAs). RMAs are areas along each side of specified waters of the state within which vegetation retention and special management practices are required to protect water quality, hydrologic functions, and fish and wildlife habitat. The rules require that trees and understory vegetation be retained within RMAs, and that written plans describe how resource protection will be accomplished during the operation. Standards for tree retention vary by stream size (large, medium, or small) and beneficial uses of water (fish or domestic uses). For example, a large stream used by fish requires the following standards:

- Riparian management area 100 feet wide on each side of the stream.
- All understory vegetation within 10 feet of the high water level.
- All trees within 20 feet of the high water level.
- All trees leaning over the channel.
- Additional trees as needed to meet rule required targets (minimum of 50 to maximum 250 per 1000 ft).
- Retention of all downed wood and snags that are not safety or fire hazards within the RMA.

2.1.2 Significant Wetland Protection

Significant wetlands include wetlands larger than eight acres, estuaries, bogs and important springs in eastern Oregon. Operators are required to submit written plans describing how they will prevent adverse effects to wetland vegetation required to be retained, and on water quality, hydrologic functions or soil productivity. Significant wetland protection standards include;

- Retention of approximately 50 percent of the live trees, by species and diameter class.
- Minimizing disturbances to soil and hydrologic functions.
- Retention of understory vegetation.
- Retention of all snags and downed trees within the wetlands and the applicable riparian management areas.

2.1.3 Chemical Application

Statewide, the application of chemicals on all land uses is regulated by the Oregon Department of Agriculture. However, to ensure protection of forest resources, the FPA contains additional rules regulating the application of forest chemicals. Some of these include:

- F Aerial applications of chemicals may not be directly applied within 60 feet of:
- Significant wetlands.
- The aquatic areas of fish and domestic use streams,
- the aquatic areas of large lakes, or any lakes with fish use.
- F Ground applications of chemicals may not be directly

applied within 10 feet of the above resources.

F Daily records of chemical applications must be maintained.

2.1.4 Road Construction and Maintenance

The FPA provides standards for the construction and maintenance of roads that provide the maximum practical protection to maintain forest productivity, water quality, and fish and wildlife habitat.

These standards require prior approval for road construction:

- Where a risk exists for road materials to enter waters of the state;
- Where use of machine activity is planned in fish-bearing and domestic use streams, lakes and significant wetlands;
- In riparian management areas;
- On high risk sites prone to landslides; and
- Before constructing streamcrossing fills over 15 feet deep.

2.1.5 Harvesting

The FPA rules set standards for harvesting that maintain the productivity of the land, minimize soil and debris entering waters of the state, and protect fish and wildlife habitat. These standards apply to:

- Log skidding and yarding practices;
- Landing construction;
- Drainage systems for landings, skid trails and fire trails;

- Treatment of waste materials;
- Harvesting on high risk sites;
- Slash treatment; and
- Reforestation.

2.2 Where The FPA Applies and Where it Does Not

Under the FPA, "forest practices" refers to the way in which "commercial" forest "operations" are conducted on "forestland." These operations can involve a number of different activities including but not limited to:

- Harvesting of forest tree species;
- Reforestation;
- Road construction and maintenance;
- Application of chemicals; and
- Disposal of slash.

The key words within this definition are "operation", "commercial" and "forestland":

- "Operation" means any commercial activity relating to the growing or harvesting of forest tree species.
- "Commercial" means engaged in work designed for the market: the exchange or buying and selling of commodities or services.
- "Forestland" means land used for the growing and harvesting of forest tree species, regardless of how the land is zoned, taxed or how any state statutes or local ordinances, rules or regulations are applied.

The FPA rules apply to all nonfederal forestland, including private, state-owned and local government-owned forestlands. However, the Oregon Forest Practices Act does not prevent the conversion of forestland to another use. Where a landowner is actively converting forestland to a land use not compatible with forestry, the land is considered forestland until the trees are cleared and one of two things happen:

1. Forest practices related to stabilizing the site, such as water barring skid trails and revegetating soils, are completed; or

2. Non-forest related development activities begin.

Also, in the event of a land use change in conjunction with a harvest operation, the department may modify its procedures for protecting significant resources. For example, the FPA requires the retention of trees, understory vegetation and other attributes within riparian management areas (RMA) adjacent to fishbearing streams. The width of the RMA, the number of trees retained and the harvest activities that could occur within the RMA is dependent on the size classification of the stream (small, medium or large). Landowners invoking a land use change (i.e., proving the new use to be incompatible with these FPA protection requirements) could be exempt from applying some forest practice regulations. Such exemptions require prior approval by ODF.

However, in such cases the landowner is still responsible for meeting other state regulations normally met by applying the FPA. Such regulations would likely include the Division of State Lands removal and fill regulations, the Department of Environmental Quality water quality standards, and local comprehensive and zoning code requirements.

2.3 Local Government Option

In 1987, the Legislature enacted a law (ORS 527.722) affecting local government's ability to regulate forest operations. Prior to 1987, local governments were thought to be prohibited from regulating forest operations except within a city's boundaries (city limits). However, with the change in statute local governments (generally cities) could choose to regulate all forest operations in any way or choose not to regulate them within UGBs and city limits.

In 1991, the Legislature amended ORS 527.722 to clarify ODF's role in applying the forest practice rules to forest operations conducted within UGBs. This amendment established that the Oregon Forest Practices Act applied to forestland within UGBs unless local governments adopted their own regulations governing forest practices. Existence or adoption of acknowledged local government forest practice regulations within UGBs relieves the State Forester of the responsibility to administer the Forest Practices Act within the affected areas. As a result of the 1991 legislative changes, ODF is responsible for administering the Oregon Forest Practices Action forestland within UGBs except where acknowledged local forest practice regulations have been applied.

ODF worked closely with the Legislature in the development of these 1991 amendments to ORS 527.722. The clear intent of the bill was to ensure that all forest operations within the state are regulated to protect soil, air; water, and fish and wildlife resources. However, if a local government desires different regulation than provided by the FPA, then the local government may regulate forest practices within all or a portion of an acknowledged UGB, *Also,* legislative intent was very clear that forest practices were to be regulated by either the FPA or local government regulation, not both.

2.4 When Will ODF Not Administer the FPA?

It is ODF's interpretation that any acknowledged local ordinance that regulates harvesting, such as how or which trees may be harvested within a UGB,¹ constitutes local forest practices regulations under ORS 527.722. Where such regulations apply, ODF is relieved from administering the FPA.

For example, a local jurisdiction may choose to adopt an ordinance indicating that only selective harvesting (i.e., only so many trees per acre maybe harvested) may occur on forestland within their UGB. In this case, ODF would not administer the FPA within this jurisdiction's UGB.

Another example is a jurisdiction addressing the requirements of Statewide Planning Goal 5 by adopting the "safe harbor" provisions² or other ordinances for protecting riparian vegetation along stream corridors and applying those ordinances or provisions to forest practices. In this case, the jurisdiction would administer its regulations within its riparian corridors, and the ODF would administer the FPA for those forestlands within the UGB not included within the riparian buffer.





2 Currently, the Goal 5 rule safe harbor for streams with average stream flows greater than 1,000 cubic feet per second (cfs) is a 75 foot corridor on both sides of the stream; streams with an average flow of 1,000 cfs or less protect a 50 foot corridor on both sides.

Vine Maple Acer circinatum Pursh

3.0 URBAN FOREST PRACTICES OBJECTIVES

As stated, Oregon law provides cities and counties the opportunity to regulate forest practices within UGBs¹. However, local governments that choose to regulate forest practices need to ensure that forest operations are conducted in a manner that protect soil, air, water, and fish and wildlife habitat. Local forest practice regulations that do not provide adequate protection for those resources could be regarded as deficient in meeting other state laws (e.g., the Department of Environmental Quality's water quality standards).

The scope of a forest practices program (determining exactly what trees and sites a local program should cover) is an important consideration since the type of standards and the extent of their application will depend upon this decision. Regulations designed to protect a limited number of specific trees (e.g., mature trees, heritage trees, or landscape trees) are completely different than regulations designed to regulate the removal of trees from managed forestland or trees growing on lands designated for development.

As with all regulations, programs designed to regulate forest operations within UGBs and/or city limits need to address specific objectives, as they do place limitations on private property. Programs that regulate individual private properties need broad community support and a demonstrated need in order to survive both politically and legally.

Protecting trees can be a useful complement to regulations already existing within a city's development code. In Oregon, cities already govern development through planning and zoning laws designed to provide for orderly development. Adding forest practices to the list of development standards may help a city maintain or improve its livability and the area's environment as well as ensure that aesthetically pleasing development occurs. To ensure that trees are not removed before a parcel is ready to be developed, cities should apply forest practice regulations to lands designated for future development.

For local forest regulations to be successful, trees need to be viewed from both the

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community and individual property owners' perspectives. From the community perspective, trees need to be viewed not only as part of the overall landscape, but also as an important contributor to the overall environmental health of the community. For example, established trees within riparian corridors are critical for the conservation of fish and wildlife and maintaining water quality. Trees help in reducing both stream turbidity and higher water temperatures during the summer, and they provide a source of future large woody debris for fish habitat.

When developing a forest practices program specifically designed to transition from commercial timber land to a residential neighborhood, it is important to ensure that the development fits the site rather than clearing and grading the site to fit a preconceived development plan. Successful urban forest regulations do not attempt to save every tree. Instead, they protect the most valuable trees; those with the most potential to become assets to the site. Conversely, planners and landowners must be cognizant of stand age, topography and wind firmness when deciding which trees to retain.

Although this document does not address the issue of wildfire in the urban interface, communities within wildfire prone areas which are

developing forest practice regulations should be cognizant of the need to maintain defensible space and nonflammable vegetation around structures. Included in Appendix 8.3 are reference materials which can be helpful in addressing these issues.

In preparing plan policies and implementing land use regulations to retain forestlands primarily to benefit other resource or community values, a local government may need to follow the procedures established by the Land Conservation and Development Commission (LCDC) in their Oregon Administrative Rules (OARs). Specifically, OAR 660, Division which implements Goal 5, specifies a process for protecting riparian areas, wetlands, and fish and wildlife habitats. In addition, ordinance provisions developed to regulate forest practices may also need to include requirements addressing other statewide planning goals¹, as well as those of the Division of State Lands and the Department of Environmental Quality.

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3.1

City and County Intergovernmental Agreement

Generally, city land use policies are found in the comprehensive land use plan and apply within the city limits and possibly to lands within the urban growth area (the area outside the city limits and inside the UGB). A county's tree-cutting land use regulations would only apply within the urban growth area unless the city and the county adopt the same regulations for lands inside the UGB. If a city wants its or the county's forest practices regulations to apply inside the UGB, it may be necessary for the city and county to amend their intergovernmental agreement (sometimes referred to as an Urban Growth Agreement or Urban Growth Management Agreement).

3.2 Preparing an Urban Forest Practices Program

The first step in developing a local urban forest practice program is to answer the following questions: Why does our community need an urban forest practices program? What problems are we trying to address? What can we gain in addition to what the Oregon Forest Practices Act already provides? Or what do we not want that the Forest Practices Act requires? Examples of issues addressed by urban forest practice programs may include:

- Maintaining forest canopy.
- Reducing tree loss during development.
- Retaining trees as a buffer between residential and industrial uses.
- Retaining trees within riparian corridors.
- Reducing damage to existing trees during construction.
- Strategically retaining trees while allowing harvests for solar access.
- · Shade retention.
- Street/bikeway/pedestrian path beautification.
- Scenic view preservation.
- Strategically retaining trees or allowing harvests for view enhancement.

4 Goals 5 (Open Spaces, Scenic and Historic Areas, and Natural Resources). 15 (Willamette Greenway) and 17 (Coastal Shorelands).

Once reasons for developing forest practice regulations has been determined, specific goal or objective statements should be developed. For example, one goal maybe to have newer residential neighborhoods blend with older established neighborhoods. To meet this goal, not only would street patterns need to be coordinated, but also older trees would have to be retained on new lots, in street rights-of-way, and in future park and school locations. Such a goal may read as follows: Ensure that new development near older neighborhoods is designed to blend with and compliment the attributes found in our older neighborhoods. This goal could then lead to the development of specific plan policies specifying the need to leave trees on undeveloped forestlands located near existing residential neighborhoods.

For example, the following policy provides specific directions for retaining trees to achieve the previously stated goal:

It is the policy of the city to retain trees between 20 and 70 years old so that new developments can safely provide the following benefits: (1) Shade for future homes, schools, parks and streams; (2) An aesthetic buffer between automobiles and pedestrians and homes; and (3) Habitat for wildlife.

After a community determines precisely why they want to regulate forest practices, an **inventory or assessment** of the forestland resource should occur next. This inventory should identify the quantity, quality and location of the type or types of forestland the community wants to protect. This may be accomplished a number of ways, including "windshield" surveys, tree inventories, aerial photography, or the use of geographic information systems (GIS). Based on this inventory, the community has a number of decisions to make regarding what type of regulations to adopt, if any, and where to apply them.

After the community completes the inventory, it may be useful to examine alternatives to achieving the community's identified goals. For example, teaching landowners about the need to protect a certain type or number of trees in a given area may achieve the community's goal without having to prepare and apply regulations. In some cases, acquisition, covenants, deed restrictions, open space tax incentives or land trades can be used to achieve the same results. Involving the news media in the community's effort to achieve its goals and objectives may be useful in drawing attention to the need to protect certain trees or specific forestlands, thus rendering the need for an urban forest practice ordinance unnecessary.

A jurisdiction may choose to rely on the FPA to achieve its goals and objectives for certain types of inventoried forestlands while developing local regulations for other types of forestlands within the UGB. Under this scenario, **detailed mapping** of the properties subject to the FPA is necessary so that ODF knows which forestlands are still under its administration.

When a decision has been made that forest practices regulations may be appropriate and necessary, the next step should be to involve the public. In as much as the goals of a program reflect community values and opinions, an open and public process is an important element. Successful regulations have broad community and political support. If the citizens of a community do not agree with the need to develop and apply urban forest regulations, independent of the FPA, they will be even less willing to approve the funding necessary to see that the regulations are enforced.

As a forest practices program is developed, a process for evaluating the success of the regulations should also be developed. This step serves two purposes. First, most new programs need more than one revision before they successfully implement the stated polices. Second, by stating "up-front" that the community will reevaluate specific provisions of the program at a specific time (e.g., 2 years), it reinforces the attitude that the regulations are not "cast in stone." Thus, regulations that do not work, can be changed.

Once a need for local forest practice regulation is identified, determine if meeting the need will involve any Statewide Planning Goals, such as Goal 5. Some cities have adopted "tree protection regulations" without going through the postacknowledgment plan amendment process (ORS 197.610). They have simply adopted a stand-alone ordinance to regulate tree cutting that requires, for example, a tree-cutting permit be obtained prior to cutting trees. It is strongly recommended that the city attorney or county counsel be consulted as to the need to go through post-acknowledgment plan amendment process or to adopt a stand-alone ordinance.

4.0 DEVELOPING AN URBAN FOREST PRACTICES ORDINANCE

Urban forest practice regulations should be tailored specifically to the needs of the community. A model ordinance does not exist that would meet the goals and expectations of every community. However, there are examples of regulatory language that can be tailored to address certain issues.

The following examples of regulatory language with accompanying descriptions are provided to help jurisdictions construct regulations that might meet local needs. These suggestions will need to be edited to fit the needs of the particular situation. Each clause is listed by title, includes a brief description, and is followed by sample language that addresses the specific issues.

4.1 Title

The title should be a brief description of the program:

This program shall be known as the [jurisdiction's name]Forest Practices Ordinance.

4.2 Purpose or Preamble

The purpose or preamble should clearly state the reasons or need for the program and should relate directly to the community's stated goals.

The city desires to provide for the orderly transition from open space and forestland to residential neighborhoods. The city recognizes the need to preserve some open space and maintain certain forest lands for their environmental and aesthetic values, which include wildlife habitat and clean water. This ordinance is intended to implement the goals and policies found in the "Urban Forest Program" section of the comprehensive plan. Upon application of this ordinance to the lands identified in the plan's "Urban Forest" section, the city assumes the responsibility of regulating forest practices on those lands under the authonity granted the city by ORS 527.722.

The purpose or preamble of an urban forest practices ordinance is the place where the city or county "makes its case" for applying the ordinance (also known as the "nexus" between the ordinance and the goals and policies to be implemented). Statements regarding the economic, social and environmental benefits of the forestlands in question can be included. Clearly stating the purpose of an ordinance is an important step in avoiding future legal misunderstandings.

4.3 Definitions

Definitions are important to clarify the meaning of certain words, phases or terms used in the ordinance. Some of the more common terms needing definitions may include: forest practice, developable land, certified arborist, forest operation, etc.

For the purposes of this program, the following words and phrases shall have the following meanings: "Certified Arborist" means an individual who has passed certification exams and holds current status as a Certified Arborist through the International Society of Arboriculture. "Tree" means. . .

The definitions section should clearly define words or terms that embody concepts that can be misinterpreted. Terms like "cut" or "damage" may have different meanings depending upon the circumstances. In some cases, an urban forest practices program may need to use the same term to implement different regulations. If that case arises, the jurisdiction may need to define the same term differently in specific sections of the ordinance. Such precision may be important in providing flexibility.



4.4 Scope and Application

Based on the policies in the comprehensive plan, the ordinance should clearly identify the types of forest practices to be regulated and the forestlands on which the particular program provisions will apply. For example, regulations contained within an urban forest practices ordinance could apply to one or more of the following situations:

- Forestland designated for development - any forested parcel or lot that can be subdivided and developed.
- Private trees trees over a certain diameter size or of a particular species growing on private property.
- Historic Trees trees with some historical significance.
- Tax-deferred lands and dedicated forestland - land currently under tax deferral through state and county programs to defer property taxes and encourage forest productivity.
- Riparian confidors lands adjacent to wetlands, creeks, streams and rivers.
- Trees separating residential from industrial lands.
- Forestlands associated with identified scenic values.
- Trees valued for their proximity to certain streets, bike and pedestrian paths.

In some cases, communities may not want the same regulations to apply everywhere. For example, a community may want to regulate forestlands that are being harvested for the purpose of converting the land for development while not wanting the same regulations to apply to other forestland that continues to be used for growing and harvesting commercial timber. This may be done using a statement like the one that follows:

This forest practices ordinance applies to all forested parcels within the urban growth boundary that are designated in the comprehensive plan for residential, commercial or industrial development except for those forested parcels currently managed as forestland which are receiving a forest tax deferral.

It should be noted that regulations must be consistent with other state and local laws, and city policies or procedures. For example, some forested parcels within urban growth boundaries may be in a forest tax deferral status. In this situation, the county is allowing a landowner to pay a reduced level of taxes with the expectation that at the time of harvest, the county will recoup those revenues. Forestland receiving a tax deferral should be made part of the initial inventory so that an assessment can be made to determine whether or not an urban forest ordinance should be applied to those lands.

Another factor to consider is whether or not there is a need to apply an urban forest practices ordinance to all lands within the UGB or city limits to ensure adequate tree retention on forested lands designated for development. If a program is designed to regulate only forestlands involved in the development process, a landowner may clear the land of trees valued by the community before an application to develop is submitted, thus, circumventing the urban forest ordinance.

4.5 Operating Procedures

Below are examples of provisions a jurisdiction may want to include within an urban forest ordinance. These example address the application process, the application review procedure, notifications, permit requirements, fees, and the appeal procedure. Some cities may want to add provisions or develop more than one permit procedure (e.g., one for individual lots and another for reviewing subdivision proposals), depending on local circumstances.

Before any trees over____ inches in diameter are removed, a permit shall be obtained from — -(e.g., the Planning Department). Before a permit can be issued, the following must be obtained by the owner and submitted as part of the permit application: A survey of all trees over____ inches in diameter, a report by a Certified Arborist identifying those trees that can safely be retained as: (1) shade trees for home or water bodies that provide fish and wildlife habitat; and (2) a buffer between cars and proposed pedestrian walkways

Ordinance Standards- The standards by which applications must be judged are crucial to the success of an urban forest practice program. Such standards could address:

- Tree retention the number and types of trees that must be left on the site.
- Tree replacement the number and types of trees that must be replanted.
- Air, water, soil, fish and wildlife habitat protection.

Examples of possible standards are as follows:

- Subdivisions and planned unit development applications shall include findings which show how the proposed development will be consistent with urban forest policies of the comprehensive plan.
- Trees smaller than _____ inches in diameter may be removed.
- Where necessary, certain trees of _____ inches in diameter, consistent with the Arborist's report, may also be removed to facilitate the construction of home sites and roads, provided no feasible alternative exists.
- Trees identified as diseased or structurally unsafe may also be removed.
- Proposed developments are required to maintain _____ percent of the existing tree canopy. Where a development is not able to maintain this standard, a mitigation requirement of three trees of ______ inches in diameter will be planted for every tree removed below the _____ percent standard.
- Trees within _____ feet of a stream or water body must be left (see also LCDC Goal 5 rules - OAR Chapter 660, Division 23).
- ANSI A300 Standards for Tree Maintenance and ANSI Z60.1 Standards for Nursery Stock will be required for all trees covered by this section.

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To protect soil, air, water, and fish and wildlife resources, the ODF highly recommends communities adopt standards consistent with those in the FPA and the Forest Practices Rules. For example, a local jurisdiction developing tree retention standards along streams could adopt tree retention and understory vegetation requirements similar to those required by the FPA. FPA vegetation retention requirements are based on beneficial use of the water (fish or domestic) and stream size (large, medium or small). ODF has stream classification maps developed for the FPA that could be made available to local jurisdictions for the development of their ordinance. The benefits of having consistent statewide standards are: (1) at least an acceptable level of protection for these resources is provided; and (2) landowner/operator confusion is reduced when operations occur across jurisdictional boundaries.

Standards for tree retention and replacement will vary based on the community's objectives, the type of trees that grow within the region, the types of resources receiving some form of protection, and the types of land uses to be proposed. While ORS 527.722 dictates that cities must provide protection for air, water, soil, and fish and wildlife resources, it does not stipulate what level of protection is required. Cities must ensure that these resources are protected and that they satisfy other regulations such as the Clean Water Act (normally met by administering the FPA). Development of a local program will need to consider and ultimately decide on the levels of protection.

Enforcement - The local agency responsible for enforcement, the penalties for violating the

program regulations, and the method of enforcement should be included in the urban forest practices program. The following is an example addressing these points:

The planning department is charged with the responsibility of enforcing the regulations of the forest practices program. Parties proposing developments will not be issued permits until proof is provided that the proposal complies with the urban forest practices program.

Where development permits have been issued and a violation has occurred, fines of \$250 a day for every day not in compliance with these regulations will be assessed.

Penalties for unauthorized tree removal shall be assessed per offense.

Fines collected under this program shall be deposited into a special account to be used for enforcing this program. Any money collected beyond that shall be deposited into a special account to be used for tree planting within the city.

Fees - The city will need to adopt a fee schedule that reflects the cost of administering the program. Funding an enforcement mechanism is often accomplished by application fees. The use of consultants may be neces sary where a community's size does not allow for the hiring of a code enforcement officer. Incentives and education should also be a part of the implementation strategy. Mitigation measures and penalties for violating program regulations should be clear and should be strong enough to dissuade violators.

5.0 ADOPTION OF A NEW URBAN FOREST PRACTICES PROGRAM

Appeals Process - The standard appeals process found in the existing development code or zoning ordinance should be referenced in the local jurisdiction's urban forest practices program.

As a result of the passage of Ballot Measure 56 by the Oregon voters in 1998, adoption of any new local regulations will likely require notification of those property owners affected. According to the law, such notices must be sent at least 20 (but not more than 40 days) days before the date of the first hearing. The law requires that the notice **describe in detail** how the proposed ordinance would affect the use of the property. The law also requires that the notice "contain substantially" the following language in boldfaced type extending from the left-hand margin to the right-hand margin across the face page of the notice:

THIS IS TO NOTIFY YOU THAT THE (jurisdiction name goes here) HAS PROPOSED A LAND USE REGULATION THAT WILL AFFECT THE PERMISSIBLE USES OF YOUR LAND

The body of the notice must also contain substantially the following language:

On (date of public hearing), (jurisdiction name) will hold a public hearing regarding the adoption of Ordinance Number _____. The (jurisdiction name) has determined that adoption of this ordinance will affect the permissible uses of your property and may reduce the value of your property.

Ordinance Number _____ is available for inspection at (identify place) located at (list address here). A copy of Ordinance Number _____ also is available for purchase at a cost of (price here).

For additional information concerning Ordinance Number _____, you may call the (identify staff person or office to call) at (______.

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If you need further assistance regarding notice obligations under the law, please seek assistance from your legal counsel.

6.0 ADMINISTERING THE URBAN FOREST PRACTICES PROGRAM

Perhaps the greatest challenge facing local government is how to administer an urban forest practices program. While the Oregon Department of Forestry can provide technical guidance to help with the development of forest practices programs, the Department cannot be involved in the enforcement of local forest regulations. Most counties and cities do not have technical forestry expertise, so such expertise must either be acquired or contracted.

Local governments lacking forestry expertise may want to consider contracting with a consulting forester or arborist to handle inspections of projects. Consultants could also be used to monitor technical compliance and to enforce program standards as well as to review technical specifications. In order to avoid "reinventing the wheel," cities should consider reviewing and, where feasible, borrowing existing technical standards and adapting them to address local issues and need.

With any regulations, there are bound to be inconsistencies or unintended consequences that must be addressed. Anticipating the loopholes is a challenge all cities face while developing an urban forest practice ordinance.



The Oregon Department of Forestry encourages cities and counties, where possible, to regulate forest practices inside Urban Growth Boundaries. As local governments evaluate the need for local forest practices regulations, ODF's Forest Practices and Urban Community Forestry Programs can provide technical assistance and review in the development and draft of ordinances. Local governments that want to replace state administration of the forest practices act are encouraged to contact their local ODF field office. In order to provide smooth transition, ODF will provide information about active or planned operations within areas that will fall under local regulation.

The appendices contain a list of publications and documents which may be helpful in developing local forest regulations.

8.0 APPENDICES

- 8.1 List of Acronyms
- **FPA** Forest Practices Act
- ODF Oregon Department of Forestry
- 13 UGB Urban Growth Boundary
 - FPF Forest Practice Forester
 - ORS Oregon Revised Statute
 - RMA Riparian Management Area

- HB House Bill
- SB Senate Bill
- OAR Oregon Administrative Rule
- LCDC Land Conservation and Development Commission
- GIS Geographic Information System
- ANSI American National Standards Institute

8.2 Sources of Assistance

For more information about the Oregon Forest Practices Act or the Forest Practice Rules, please contact your local Oregon Department of Forestry district office listed below or the headquarters office at 2600 State Street, Salem, Oregon 97310, 503-945-7470. For information related to urban forestry and community assistance contact, the above address, phone number 503-945-7391.

Eastern Oregon	
3501 E 3rd, Prineville 97754	541-447-5658
3701 W 13th, The Dalles 97058	541-296-4626
400 NW 9th, John Day 97845	541-575-1139
3200 DeLap Road, Klamath Falls 97601	541-883-5681
2290 4th Street, Lakeview 97630	541-947-3311
611 20th Street, La Grande 98750	541-963-3168
1055 Airport Road, Pendleton 97801	541-276-3491
802 West Hwy 82, Wallowa 97885	541-886-2881
Northwest Oregon	
801 Gales Creek Road, Forest Grove 97116	503-357-2191
Route 1, Box 950, Astoria 97103	503-325-5451
405 E Street, Columbia City 97108	503-397-2636
4907 East 3rd Street, Tillamook 97141	503-842-2545
14995 South Hwy 211, Molalla 97038	503-829-2216
22965 North Fork Road SE, Lyons 97358	541-859-2151
24533 Alsea Highway, Philomath 97370	541-929-3266
825 Oak Villa, Dallas 97338	503-623-8146
763 Forestry Road, Toledo 97391	541-336-2273
Southern Oregon	
1758 NE Airport Road, Roseburg 97470	541-440-3412
300 5th Street, Bay Park, Coos Bay 97420	541-267-4136
4690 Highway 20, Sweet Home 97386	541-367-6108
3150 Main Street, Springfield 97478	541-726-3588
87950 Territorial Highway, Veneta 97487	541-935-2283
5286 Table Rock, Central Point 97502	541-664-3328
5375 Monument Drive, Grants Pass 97526	541-474-3152

For current Oregon forest practice rule information, connect to the Oregon Department of Forestry's Forest Practices Program world wide web page at: http://www.odf.state.or.us/forprac.htm For Urban Forestry and Community assistance: http://www.odf.state.or.us/urban.htm

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8.3 References

"Oregon Forest Practices Act". ORS 527.610 to 527.992. Oregon Department of Forestry, Forest Practices Program, 2600 State Street, Salem, Oregon 97310.

"Oregon Forest Practice Administrative Rules". Division 600 to Division 665. Oregon Department of Forestry, Forest Practices Program, 2600 State Street, Salem, Oregon 97310.

"Stream Classification Maps". Oregon Department of Forestry, Forest Practices Program, 2600 State Street, Salem, Oregon 97310.

"Criteria For Determination of Wildfire Zones". OAR 629-044-0200 to 629-044-0260. These rules must be applied to activate the provisions of ORS 93.270(4) and portions of the Oregon One and Two Family Dwelling Specialty Code. Oregon Department of Forestry, 2600 State Street, Salem, Oregon 97310.

Division 23, Procedures and Requirements For Complying With Goal 5, OAR 660-023-000 to 660-023-0250. Oregon Department of Land Conservation and Development. Salem, Oregon.

Bernhardt, E. A.; Swiecki, T.J. 1991. Guidelines for Developing and Evaluating Tree Ordinances. California Department of Forestry and Fire Protection Urban Forestry Program. 76p.

Duerksen, C. J.; Richman, S. 1993. Tree Conservation Ordinances. PAS Report Number 446. American Planning Association and Scenic America. Washington, DC. 107p.

Fazio, J. R., ed 1993. "Tree Protection Ordinances". Tree City USA Bulletin No. 30. The National Arbor Day Foundation. Nebraska City, Nebraska. 8p.

Minnesota Department of Natural Resources. 1995. "A Guide to Developing a Community Tree Preservation Ordinance" Department of Natural Resources Division of Forestry. St. Paul, Minnesota. 13p.

 Oregon Department of Forestry. 1991. "Recommended Fire Siting Standards for Dwellings and Structures and Fire Safety Design Standards for Roads." Land Use Planning Notes. Salem, Oregon. 8p.

Washington State Department of Natural Resources. 1990." Home Protection Guide." Olympia, Washington. 32p.



J. COMMUNITY INFORMATION (WELCOME WAGON CONCEPT)
1. SEQUOIA FOOTHILLS CHAMBER OF COMMERCE WEBSITE

SFCC - Home







Attachment 9: A-9 Three Rivers Voluntary Oak Woodland Plan

DRAFT THREE RIVERS 2017 VOLUNTARY OAK WOODLAND MANAGEMENT PLAN



County of Tulare Resource Management Agency





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DRAFT Three Rivers Voluntary Oak Woodland Management Plan 2017

December 2017



County of Tulare Resource Management Agency 5961 S Mooney Boulevard Visalia, CA 93277-9394 (559) 624-7000 {This Page Intentionally Left Blank}

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TULARE COUNTY BOARD OF SUPERVISORS

Kuyler Crocker – District 1 Pete Vander Poel – District 2 (Chairman) Amy Shuklian – District 3 Steve Worthley – District 4 (Vice Chairman) Mike Ennis – District 5

TULARE COUNTY PLANNING COMMISSION

John F. Elliott – District 1 (Chair) Nancy Pitigliano – District 2 Bill Whitlatch – District 3 Melvin K. Gong – District 4 Vacant – District 5 Wayne O. Millies – At Large Ed Dias – At Large Gil Aguilar – District 2 (Alternate) (Vice Chair) {This Page Intentionally Left Blank}

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County Administrative Office

Michael C. Spata, CAO

Tulare County Resource Management Agency

Reed Schenke, Director Michael Washam, Associate Director Aaron Bock, Chief Planner, Project Processing Dave Bryant, Chief Planner, Special Projects Susan Simon, Planner III Johnson Vang, Engineer I

Information Communications and Technology

Mark Clark, Geographic Information Systems Coordinator

Peer Review and Oak Woodland Assessment

Bobby Kamansky Principal Biologist Kamansky's Ecological Consulting {This Page Intentionally Left Blank}

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10

I. INTRODUCTION AND BACKGROUND

INTRODUCTION

The California Oak Woodlands Conservation Program, enacted by Chapter 588, Statutes of 2001 (Thomson AB 242) was implemented in response to concerns regarding the continuing loss of oak woodlands. The Act recognizes the importance of California's oak woodlands, how they enhance the natural and scenic beauty of this great State, the critical role of the private landowner and the importance of private land stewardship. The Act further acknowledges how oak woodlands increase the monetary and ecological value of real property and promote ecological balance.

The management of our natural resources is a complex and challenging endeavor; conservation of oak woodlands is no exception. Currently there are about 10 million acres of oak woodlands found in 54 of California's 58 counties, 80 percent of which are located on privately owned property. As the population of California continues to increase and more and more Californian's are leaving the metropolitan areas in favor of a more rural lifestyle, the debate over how best to protect and conserve oak trees and oak woodlands is becoming more controversial.

The Act specifically recognizes the importance of oak woodlands and how oak trees enhance the natural and scenic beauty of this State. Further, the Act acknowledges the important role oak woodlands play in the economic, social, environmental and ecological matters of this State. More importantly, the Act is designed to serve a segment of California's population that is directly associated with the preservation of oak woodlands, the private landowner.

The Act mandates the Wildlife Conservation Board to establish a grant program designed to protect and restore oak woodlands using conservation easements, cost-share and long-term agreements, technical assistance and public education and outreach. The Program provides incentives designed to foster the conservation of oak woodlands in a manner that promotes local priorities while sustaining the economic viability of farming and ranching operations.

Developing partnerships and working with private landowners, city and county entities, nonprofit organizations and other state departments, the Oak Woodlands Conservation Act provides an opportunity to reward landowners that have implemented good stewardship practices. Further, an opportunity exists to provide financial rewards to landowners who continue to integrate oak woodland conservation into their farming and ranching operations.

The Oak Woodlands Conservation Act requires that to qualify for a grant, the county or city in which the grant money would be spent, shall prepare or demonstrate that it has already prepared an oak woodlands management plan. Once the city or county has prepared or demonstrated that an Oak Woodland Management Plan exists, a landowner would then be eligible to participate in the program.

To participate in the Oak Woodlands Conservation Program, a county or city shall adopt an Oak Woodlands Management Plan in the form of a Resolution. The Resolution does not have to be part of the General Plan. If a county or city currently has a plan in place that meets the minimum requirements of the Oak Woodlands Management Plan, a resolution by the governing body certifying such compliance is sufficient.

A Resolution shall be adopted that contains at least the following elements:

1. The county or city agrees to adopt a Resolution to offer private landowners the opportunity to participate in the Oak Woodlands Conservation Program. The Oak Woodlands Management Plan and Resolution is adopted pursuant to the requirements of California Fish and Game Code Section 1366 (a). Previously adopted resolutions are acceptable if they meet the minimum requirements of the Resolution.

Please see Section XII Draft Board of Supervisors Resolution.

2. The county or city shall prepare statements that describe the status of oak woodlands in their jurisdiction. Such statements shall include a description of all native oak species, estimates of the current and historical distribution of oak woodlands, existing threats, status of natural regeneration and growth trends. To the extent possible, local jurisdictions shall prepare maps displaying the current distribution of oak woodlands.

Please see Chapter V. Oak Woodland Habitats in Three Rivers UDB.

3. The county or city shall prepare statements recognizing the economic value of oak woodlands to landowners and the community at large. These statements shall encourage and support farming, ranching and grazing operations that are compatible with oak woodland conservation.

Please see Chapter IV Natural Resource Values of Oak Woodland Habitats subsections A. (Grazing) and F. (Economic Values).

4. The county or city shall prepare statements recognizing the natural resource values of oak woodlands including the critical role oak woodlands play relative to the health and function of local watersheds, soil and water retention, wildlife habitat, open space and the reproduction or reduction of fuel loads.

Please see Chapter IV Natural Resource Values of Oak Woodland Habitats subsections B. (Wildlife and Plant Habitat), C. (Special Species Habitats), E. (Effects on Habitat from Loss of Oak Woodland Habitats, Biological Resources and Physical and Natural Resources), J. (Soil and Water Retention through green infrastructure and flood protection, and improved Water Quality), and X. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future Consideration, subsection A. 1. Program should be Incentive Based (Compensation/Incentives, Incentives to encourage the long term preservation of oak woodland communities).

5. The county or city shall prepare statements recognizing that the loss of oak woodlands has serious effects on wildlife habitat, retention of soil and water and that planning decisions for oak woodlands should take into account potential effects of fragmentation of oak woodlands.

Please see Chapter IV Natural Resource Values of Oak Woodland Habitats subsections B. (Wildlife and Plant Habitat), C. (Special Species Habitats), E. (Effects on Habitat from Loss of Oak Woodland Habitats, Biological Resources and Physical and Natural Resources), J. (Soil and Water Retention through green infrastructure and flood protection, and improved Water Quality), and Chapter V. Oak Woodland Habitats in the Three Rivers UDB subsection D. (Threats to Oak Woodland Communities, including, Fire, Disease, Climate Change, Urban Development including infrastructure, and tree harvesting).

6. The county or city shall prepare statements expressing support for landowners that participate in the Oak Woodlands Conservation Program. To qualify for funding consideration by the Wildlife Conservation Board, the county or city agree, pursuant to Section 1366 (f) of the Act to certify that individual proposals are consistent with the county or city Oak Woodlands Management Plan.

Please see Chapter VI. County Participation in Oak Woodland Habitats Conservation Program. Subsections A. (Support for Private Landowner Participation in the OWMP) and B. (Support for Landowners).

7. The county or city shall prepare statements that support and encourage education and outreach efforts designed to demonstrate the economic, social and ecological values associated with oak woodlands.

Please see Chapter VI. County Participation in Oak Woodland Habitats Conservation Program. Subsection C. 1. 2. (Education and Outreach).

8. The county or city shall review and update as necessary, the Oak Woodlands Management Plan. ¹

Please see Chapter X. Monitoring and Reporting Subsection A. 1. (Continue to assess and report the status of oak woodland canopy cover).

The County of Tulare has elected to prepare the Three Rivers Voluntary Oak Woodland Management Plan (OWMP) in order to develop voluntary oak protection guidelines established for conservation and use of oak woodland habitats within the Three Rivers Urban Development Boundary. The OWMP would be utilized to qualify for grant funding to support and encourage voluntary long term private stewardship and conservation of California's oak woodlands.

The plan is intended to be developed and implemented at a smaller scale within the UDB of Three Rivers in order to determine whether a similar approach could successfully be developed and implemented in other areas within the County or at the Countywide level. The plan is also expected to provide information to ranchers, landowners, the County of Tulare, and developers regarding the benefits and care of Oak Woodland Management.

The adoption of this OWMP by a resolution of the Tulare County Board of Supervisors would also give the County the opportunity to obtain funding through the California Oak Woodlands Conservation Act of 2001. The Act provides funding for projects designed to conserve and restore oak woodlands, provide oak education, and landowner assistance. It would also provide an opportunity that brings together ranchers, conservation interests and landowners who share similar values regarding oak woodlands.

¹ Oak Woodlands Conservation Act of 2001 California Wildlife Conservation Board Program Application and Guidelines.

The conservation of oak woodlands in Tulare County is dependent on the voluntary actions of residents and landowners who value the scenic, ecological, and economic benefits of these oak woodlands and habitats. Landowner participation in the OWMP is entirely voluntary and is designed to promote voluntary long term private stewardship and conservation of California's oak woodlands. The programs, strategies, references to regulations, or the contents of this document outlining guidelines for participation does not have a regulatory component or role (please note, however, that certain discretionary actions contemplated outside of this voluntary plan may be subject to the policies, procedures, or requirements of the Tulare County General Plan, Zoning Ordinance, Ordinance Code or other applicable regulations).

BACKGROUND

During the preparation of the Tulare County General Plan 2030 Update project, communication was received from interested parties such as the Sequoia Riverlands Trust, Wildplaces, and local residents who encouraged the County to pursue the development of an Oak Woodland Management Plan. In July 2009 the Tulare County Board of Supervisors received and accepted a report from the Tulare County Resource Management Agency regarding Oak Woodland Management. The Tulare County General Plan 2030 Update was adopted by the Tulare County Board of Supervisors in August 2012 and included the following policy and implementation measure directed at the evaluation and feasibility of adopting an Oak Woodland Management Plan:

ERM-1.12 Management of Oak Woodland Communities

The County shall support the conservation and management of oak woodland communities and their habitats.

Implementation Measure	Policy	Who is Responsible
On-Going		
14. The County shall ensure	ERM-1.12	RMA,
that the provisions of Public		Planning
Resources Code § 21083.4 are		
followed when evaluating		
projects in areas containing		
oak woodlands.		
20-15-2020		
15. The County shall work	ERM-1.12	RMA,
with stakeholders to determine		Planning
the feasibility of adopting an		
oak woodlands management		
plan pursuant to the Oak		
Woodlands Conservation Act		
of 2001. The purpose will be		
to qualify for grant funding to		
support and encourage		
voluntary long term private		
stewardship and conservation		
of California's oak woodlands.		
2012-2020		
16. The County shall establish	ERM-1.12	RMA,
a program to require the		Planning
replacement planting of native		
oaks where oak woodlands are		
proposed for alteration by		
development projects. ²		

Table 1 - ERM 1.12 Management of Oak Woodland Communities

During the Three Rivers Community Plan Update community meeting public outreach process (2014-2016), interest was expressed by a number of the Three Rivers residents who were interested in developing an Oak Woodland Management Plan. Between May 2015 and November 2015 a series of community plan update meetings were primarily directed at soliciting community input and feedback to determine the feasibility of preparing an Oak Woodland Management Plan for the Three Rivers area in conjunction with the Three Rivers Community Plan Update project. After careful consideration and review of a detailed OWMP outline, it was determined that preparation of an OWMP for the Three Rivers Area would be feasible. As indicted in the previous discussion, the County of Tulare has elected to prepare the OWMP in order to develop a voluntary oak protection guidelines established for conservation and use of oak woodland habitats within the Three Rivers Urban Development Boundary.

² County of Tulare General Plan Part I Chapter 8 Environmental Resources Management Element 2012.

Location

Three Rivers is a rural community located in the unincorporated portion of Tulare County, in the foothills of the Sierra Nevada Mountain Range and at the gateway to the Sequoia National Park. Three Rivers is a unique community with many valuable natural assets, including the Kaweah River, open space, and steep terrain. (See Figure 1).

The community of Three Rivers is generally located approximately 52 miles southeast of Fresno in the north central area of Tulare County. It Three Rivers is situated adjacent to State Route 198, which connects it with Visalia, the County Seat, located 30 miles southwest of Three Rivers. The community is five miles south of the entrance to Sequoia National Park. It lies in a natural valley area created by the convergence of the North Fork, Middle Fork and South Fork of the Kaweah River near the western edge of the Sierra Nevada Mountains.

The community, is irregular in shape as the pattern of existing development is influenced by the location of the Kaweah River and slope associated with the natural terrain. is bisected in a northeast-southwesterly direction by State Route 198 and the Kaweah River, which divides the community into two areas of unequal size, the larger area being situated east of the Highway and River. Three Rivers is a rural service and residential/recreation area The Planning Area is surrounded on the north and east by agricultural grazing lands and the Sequoia National Park, and on the south and west by agricultural grazing lands. The majority of the existing development in the community lies immediately adjacent to the north, south and middle fork of the Kaweah River.

THREE RIVERS HISTORICAL PERSPECTIVE

The community was named Three Rivers because the three branches of the Kaweah River joined at this particular location. The first known white settler in the area was Hale Tharp, who built his log cabin in 1856 at the confluence of Horse Creek and the Kaweah River - now covered by the Kaweah River Reservoir. It is estimated that 2,000 Native American Indians were living in the general vicinity when Tharp built his home.

Settlement in the Three Rivers area grew very slowly, until 1872, when Mr. Harry O'Farrell discovered silver in the Mineral King area. In July 1873, James A. Crabtree filed the discovery claim for what he called the "White Chief Mine" and after recruiting several assistants word spread that silver had been discovered and the rush began. It was during this period when Joe Palmer introduced apple trees in the Three Rivers area, thus the start of the apple industry.

The first road, known as the Mineral King Road, was nothing more than a crude wagon trail. The first school opened on September 9, 1873, and the first Post Office opened December 23, 1879. Between 1884 and 1891, the area along the North Fork of the Kaweah River, referred to as Kaweah Colony, was settled. The first colony settlement was called Arcady and later called Haskell's Bluff. The colony's first undertaking was to build a road to the timber claims so pine and redwood lumber could be brought from a sawmill in the timberlands to a planing mill for processing as furniture and other wood products. The 1888 Business Directory listed Three Rivers as having 39 adults, 23 farmers, 8 stockmen, 2 fruit growers, 1 lumberman, 1 carpenter, 1 surveyor, 1 supervisor, 1 laborer, and 1 teamster. About this time Congress formed the Sequoia National Park and further hopes of securing timber claims were lost. Colony leaders were arrested for cutting timber inside the park and in the Spring of 1891 colonists were ordered out of the timberlands and timber claims were found to be invalid. By 1892, the colonists had disbanded.

The creation of the Sequoia National Park and General Grant Park furthered Three Rivers growth - summer cabins were constructed along the river as well as camping sites and summer resorts.

By 1897, the first general merchandise store, Britten Brothers, opened. In 1899, the Mt. Whitney Power Company constructed a power plant and then installed a second one in 1905 with two more under construction. Around 1903, the first telephone came to Three Rivers with power lines being draped over trees, fence posts and on bridges. About In approximately 1910, the Three Rivers Branch Library (deposit station) was established at the River Inn. It burned down in September 1911 and was subsequently moved to the Britten Ranch. The Kaweah Branch Library, located next to the Kaweah Post Office on the North Fork Road, had a circulation of 1,031 while the Three Rivers Library had a circulation of 1,299.

By 1913, Three Rivers had a population of 615 and by 1966, the population reached approximately 1,016. Currently, it is estimated at 1,422, an increase of 131 percent in 66 years, which approximates to an annual growth rate of 1.28 percent. The population in 1980 was approximately 1645, the population in 1990 was approximately 3306, and the 2000 population was estimated at 3287. According to Census data, Three Rivers experienced a slight decrease in population between 1990 and 2000 and the population has remained essentially static since the turn of the century.

Between 1970 and 2000, the Three Rivers population grew at an annual growth rate of 3.7%. The community experienced a large growth between 1980 and 1990, with a 7% annual growth rate during that decade. However, during 1990 and 2000, the Community did not experience growth, and actually experienced a very small decline in population. According to Planning Department figures, the Three Rivers Population increased 29.2 percent over the years 1970 to 1979.

The 2000 Census was the first Census to designate the Three Rivers Community as a Census Designated Place, or CDP. The Census counts for the previous years included Tulare County Census Tract 1, Block Groups 3-6. This was a larger geographic area than the CDP. Thus, due to the recalculation of the Three Rivers Census area, the more accurate figure for the 2000 population was the CDP population, which was 2,248 people at the time. As of 2014, the population of Three Rivers was approximately 2,200.

PLANNING AREA

The Three Rivers Planning Area is comprised of approximately 21,000 acres, or 32.5 square miles. This is considerably larger than the area of the Three Rivers Community Services District, which totals approximately 5,400 5,354 acres, or 8.4 square miles (please see Figure 2 Three Rivers Study Area and UDB).

OAK WOODLAND SETTING

In November of 2006, the California Oak Foundation produced a research report (Oaks 2040): The Status end Future of Oaks in California-designed to provide planners with information on oaks statewide and in their region. The Oaks 2040 report describes the location and extent of oak woodlands throughout California, and identifies oak woodlands most at risk. According to the Oaks 2040 report, California has approximately 8.5 million acres of oak woodland and another 4.5 million acres of oak forest. These categories are based on the *Calveg* classification system used by the California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP) maps, which classifies

wildland oak habitat as either oak woodland (hardwood) in which oaks are the dominant tree type, or oak forests (oak/conifer mix), in which oaks comprise a smaller percentage of the tree types in the mix. Oak forests generally occur at higher elevations than oak woodlands (Oaks 2040 Report).

The Sacramento and San Joaquin regions are home to more than half of California's oak woodland. Statewide, blue oaks are the dominant species (over 1/3 of total, statewide). More than 1 million acres of California's oak woodlands have already been developed. Statewide, about 80% of the remaining oak woodlands are privately owned, and only about 4% are protected from conversion. Approximately 750,000 acres of California's remaining oak woodlands are at risk of development before 2040. Of the oak woodlands at risk, 80% are located in the Sacramento and San Joaquin regions, with the oak woodlands of the Central Valley and Sierra Foothills facing the most immediate threats (Oaks 2040 Report).

Statewide, the single largest threat to oak woodlands is from development. Other threats include conversion of oak woodlands to intensive agricultural {e.g. orchards and vineyards), and a lack of oak regeneration in many areas (including Tulare County). Because most remaining oak woodlands are on privately owned property, protection strategies should be designed to accommodate the needs of the private landowner while fostering protection. (Oaks 2040 Report, Guisti, "Conservation of Oak Woodlands-Recognizing the Values").

The San Joaquin Region

The Oaks 2040 Report divided California into six regions. The San Joaquin region encompasses 15 counties, including Tulare County. 27% of the state's oak woodland (over 450 million oak trees on 2.3 million acres) falls in this region. Oak woodlands are predominantly in private ownership (73% of the total). Other major landowners include The US Forest Service, Bureau of Land Management, and the National Park Service. The San Joaquin Region includes one third of the state's oak woodland at risk, with the South Yosemite area at highest risk. Only the Sacramento region contains more oak woodlands at risk (Oaks 2040 Report).

Tulare County Oak Woodlands

Tulare County has over 300,000 acres of oak woodland, one third of which are federally owned. **Table 2** and Figure 3 (below) shows the distribution of Tulare County oak woodland species. Tulare County has more than half of the region's valley oak woodlands, as well as considerable blue oak woodland, the dominant oak woodland component of Tulare County foothills.

SPECIES/CLASS	ACRES	% TOTAL
Black oak	43,406	12.5%
Blue oak	157,740	45.6%
CANYON LIVE	43,210	12.5%
OAK		
INTERIOR LIVE	67,799	19.6%
OAK		
MIXED OAK	33,504	9.7%
VALLEY OAK	256	0.0007%
TOTAL ACRES :	345,915	100%

 Table 2 - Tulare County Oak Woodland Species

*DATA FROM OAKS 2040 REPORT

The Oaks 2040 Report has identified approximately 30,000 acres of Tulare County oak woodlands at risk for development by 2040. Specific development pressures identified in the report include expansion of valley towns into the foothills, along with pressures from recreation and tourism.³

In May 2007 the Donald Bren School of Environmental Science & Management UC Santa Barbara, completed a study of Tulare County Blue Oak populations: "A Dynamic Strategy for Conserving Southern Sierra Blue Oak Woodland," making recommendations to the Nature Conservancy on strategies for conserving blue oak woodland in Tulare County. Areas of high ecological importance are identified, and a spatial and temporal analysis of climate change and development threats are discussed. The study also notes that Blue Oak Woodland as one of the most diverse communities in North America, supporting more than 1,400 species of flowering plants, 29 species of amphibians and reptiles, 57 species of birds, and 10 species of mammals. Specific challenges to blue oak woodland identified by the UC Santa Barbara study include potential oak woodland fragmentation, which can affect tree regeneration rates, lower biodiversity and may result in extinction of sensitive species. Climate change will be another challenge for blue oak woodlands. Projected temperature increases statewide over the next 100 years may drive the oak range northwards and to higher elevations. If so, the blue oak woodlands range may be reduced to less than 60% of its current range statewide.⁴

³ California Oak Foundation (Oaks 2040): The Status end Future of Oaks in California 2006.

⁴ Tulare County Blue Oak populations: "A Dynamic Strategy for Conserving Southern Sierra Blue Oak Woodland" Donald Bren School of Environmental Science & Management UC Santa Barbara, May 2007.





Figure 2 - Three Rivers Study Area and UDB



⁵ Tulare County Oak Woodlands, Sequoia Riverlands Trust, July 2005

II. PURPOSE OF THE OAK WOODLAND MANAGEMENT PLAN

A. PURPOSE – VOLUNTARY PLAN.

The purpose of OWMP is to develop voluntary oak protection guidelines established for conservation and use of oak woodland habitats within the Three Rivers Urban Development Boundary. In essence, the OWMP would be utilized to qualify for grant funding to support and encourage voluntary long term private stewardship and conservation of California's oak woodlands. The OWMP is intended to be developed and implemented at a smaller scale within the UDB of Three Rivers in order to determine whether a similar approach could successfully be developed and implemented in other areas within the County or at the Countywide level. The plan is expected to provide information to ranchers to help address oak woodland conservation intended to support farming, ranching and grazing operations on lands that support oak woodlands. In addition, the plan would inform landowners, the County of Tulare, and developers regarding the benefits of Oak Woodland Management. Please note, however, that certain discretionary actions contemplated outside of this voluntary plan may be subject to the policies, procedures, or requirements of the Tulare County General Plan, Zoning Ordinance, Ordinance Code or other applicable regulations.

The adoption of this Oak Woodland Management Plan by a resolution of the Tulare County Board of Supervisors would enable partnerships of landowners and qualified non-profits, local governments and resource districts, to conserve oak woodlands through projects, including, but not limited to easements that may be eligible for grant funding through the California Oak Woodlands Conservation Act of 2001. The Act provides funding for projects designed to conserve and restore oak woodlands, provide oak education, and landowner assistance. It would also provide an opportunity that brings together ranchers, conservation interests and landowners who share similar values regarding oak woodlands. As indicated in the introduction, the programs, strategies, references to regulations, or the contents of this document outlining guidelines for participation does not have a regulatory component or role.

CONSISTENCY WITH THE CALIFORNIA OAK WOODLANDS CONSERVATION ACT OF 2001 (AB 242 CHAPTER 588), (SB 1334)

In response to the continuing loss of oak woodlands, Chapter 588, Statutes of 2001, was signed into law by the Governor to enact the Oak Woodlands Conservation Act. The Act specifically recognizes the importance of oak woodlands and how oak trees enhance the natural and scenic beauty of this State. Further, the Act acknowledges the important role oak woodlands play in the economic, social, environmental and ecological matters of this State. More importantly, the Act is designed to serve a segment of California's population that is directly associated with the preservation of oak woodlands, the private landowner.

The Act mandates the Wildlife Conservation Board to establish a grant program designed to protect and restore oak woodlands using conservation easements, cost-share and long-term agreements, technical assistance and public education and outreach. The Program provides incentives designed to foster the conservation of oak woodlands in a manner that promotes local priorities while sustaining the economic viability of farming and ranching operations.

Recognizing the importance of oak woodlands and the critical role private landowners have in the conservation of oaks, the Legislature created the Oak Woodlands Program with the expressed intent the

Program accomplish the following:

- 1. Support and encourage voluntary, long-term private stewardship and conservation of California oak woodlands by offering landowners financial incentives to protect and promote biologically functional oak woodlands;
- 2. Provide incentives to protect and encourage farming and ranching operations that are operated in a manner that protect and promote healthy oak woodlands;
- 3. Provide incentives for the protection of oak trees providing superior wildlife values on private land, and;
- 4. Encourage planning that is consistent with oak woodlands preservation.

To participate in the Oak Woodlands Conservation Program, a county or city shall adopt an Oak Woodlands Management Plan in the form of a Resolution. The Resolution does not have to be part of the General Plan. The following contain the minimum elements required to be included in the Oak Woodland Management Plan:

A Resolution shall be adopted that contains at least the following elements:

 The county or city agrees to adopt a Resolution to offer private landowners the opportunity to participate in the Oak Woodlands Conservation Program. The Oak Woodlands Management Plan and Resolution is adopted pursuant to the requirements of California Fish and Game Code Section 1366 (a). Previously adopted resolutions are acceptable if they meet the minimum requirements of the Resolution.

Please see Section XII Draft Board of Supervisors Resolution.

2. The county or city shall prepare statements that describe the status of oak woodlands in their jurisdiction. Such statements shall include a description of all native oak species, estimates of the current and historical distribution of oak woodlands, existing threats, status of natural regeneration and growth trends. To the extent possible, local jurisdictions shall prepare maps displaying the current distribution of oak woodlands.

Please see Chapter V. Oak Woodland Habitats in Three Rivers UDB.

3. The county or city shall prepare statements recognizing the economic value of oak woodlands to landowners and the community at large. These statements shall encourage and support farming, ranching and grazing operations that are compatible with oak woodland conservation.

Please see Chapter IV Natural Resource Values of Oak Woodland Habitats subsections A. (Grazing) and F. (Economic Values).

4. The county or city shall prepare statements recognizing the natural resource values of oak woodlands including the critical role oak woodlands play relative to the health and function of local watersheds, soil and water retention, wildlife habitat, open space and the reproduction or reduction of fuel loads.

Please see Chapter IV Natural Resource Values of Oak Woodland Habitats subsections B. (Wildlife and Plant Habitat), C. (Special Species Habitats), E. (Effects on Habitat from Loss of Oak Woodland Habitats, Biological Resources and Physical and Natural Resources), J. (Soil and Water Retention through green infrastructure and flood protection, and improved Water Quality), and X. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future should Consideration, subsection A. 1. Program be Incentive Based (Compensation/Incentives, Incentives to encourage the long term preservation of oak woodland communities).

5. The county or city shall prepare statements recognizing that the loss of oak woodlands has serious effects on wildlife habitat, retention of soil and water and that planning decisions for oak woodlands should take into account potential effects of fragmentation of oak woodlands.

Please see Chapter IV Natural Resource Values of Oak Woodland Habitats subsections B. (Wildlife and Plant Habitat), C. (Special Species Habitats), E. (Effects on Habitat from Loss of Oak Woodland Habitats, Biological Resources and Physical and Natural Resources), J. (Soil and Water Retention through green infrastructure and flood protection, and improved Water Quality), and Chapter V. Oak Woodland Habitats in the Three Rivers UDB subsection D. (Threats to Oak Woodland Communities, including, Fire, Disease, Climate Change, Urban Development including infrastructure, and tree harvesting).

6. The county or city shall prepare statements expressing support for landowners that participate in the Oak Woodlands Conservation Program. To qualify for funding consideration by the Wildlife Conservation Board, the county or city agree, pursuant to Section 1366 (f) of the Act to certify that individual proposals are consistent with the county or city Oak Woodlands Management Plan.

Please see Chapter VI. County Participation in Oak Woodland Habitats Conservation Program. Subsections A. (Support for Private Landowner Participation in the OWMP) and B. (Support for Landowners).

7. The county or city shall prepare statements that support and encourage education and outreach efforts designed to demonstrate the economic, social and ecological values associated with oak woodlands.

Please see Chapter VI. County Participation in Oak Woodland Habitats Conservation Program. Subsection C. 1. 2. (Education and Outreach).

8. The county or city shall review and update as necessary, the Oak Woodlands Management Plan. $_{6}$

Please see Chapter X. Monitoring and Reporting Subsection A. 1. (Continue to assess and report the status of oak woodland canopy cover).

PUBLIC RESOURCES CODE (PRC) SECTION 21083.4 AND PRC §4793(E)

In 2004 the California Environmental Quality Act (CEQA) was amended with the passage of SB 1334 (Kuehl), (Chapter 732, and Statutes of 2004). As amended, CEQA now requires a county to determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. According to the law (PRC 21083.4) if a county determines that a project will result in a significant effect to oak woodlands, the county shall require one or more oak woodland mitigation alternatives to mitigate for the significant effect associated with the conversion of oak woodlands:

- (1) Conserve oak woodlands, through the use of conservation easements. (Voluntary)
- (2) (A) Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees. (B) The requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted. (C) Mitigation pursuant to this paragraph shall not fulfill more than one-half of the mitigation requirement for the project. (D) The requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands. (Compulsory)
- (3) Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the Fish and Game Code, for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board. A project applicant that contributes funds under this paragraph shall not receive a grant from the Oak Woodland Woodlands Conservation Fund as part of the mitigation for the project.
- (4) Other mitigation measures developed by the county. (d) The following are exempt from this section: (3) Conversion of oak woodlands on agricultural land that includes land that is used to produce or process plant and animal products for commercial purposes. (g) This section, and the regulations adopted pursuant to this section, shall not be construed as a limitation on the power of a public agency to comply with this division or any other provision of law.

THREE RIVERS COMMUNITY PLAN AND VISION, AND TO COMPLY WITH 2012 COUNTY GENERAL PLAN REQUIREMENTS.

The Three Rivers OWMP is being prepared contemporaneously with the Three Rivers Community Plan Update project. It is the intent of the Three Rivers OWMP to consider in the guidelines, the community vision, policies, and mitigation and monitoring identified in the Three Rivers Community Plan Update/EIR to the extent feasible. In addition, the Three Rivers OWMP guidelines are intended to be complementary with the applicable policies contained in the Tulare County General Plan and Three

⁶ Oak Woodlands Conservation Act of 2001 California Wildlife Conservation Board Program Application and Guidelines.

Rivers Community Plan Update as follows:

Tulare County General Plan Policies:

Land Use Element

LU-2.3 Open Space Character

The County shall require that all new development requiring a County discretionary approval, including parcel and subdivision maps, be planned and designed to maintain the scenic open space character of open space resources including, but not limited to, agricultural areas, rangeland, riparian areas, etc., within the view corridors of highways. New development shall utilize natural landforms and vegetation in the least visually disruptive way possible and use design, construction and maintenance techniques that minimize the visibility of structures on hilltops, hillsides, ridgelines, steep slopes, and canyons.

Environmental Resource Management Element

ERM-1.12 Management of Oak Woodland Communities

The County shall support the conservation and management of oak woodland communities and their habitats.

ERM-1.4 Protect Riparian Areas

The County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls.

ERM-1.8 Open Space Buffers

The County shall require buffer areas between development projects and significant watercourses, riparian vegetation, wetlands, and other sensitive habitats and natural communities. These buffers should be sufficient to assure the continued existence of the waterways and riparian habitat in their natural state.

Health And Safety Element

HS-5.4 Multi-Purpose Flood Control Measures

The County shall encourage multipurpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of the County's streams, creeks, and lakes. Where appropriate, the County shall also encourage the use of flood and/or stormwater retention facilities for use as groundwater recharge facilities.

HS-5.9 Floodplain Development Restrictions

The County shall ensure that riparian areas and drainage areas within 100-year floodplains are free from development that may adversely impact floodway capacity or characteristics of natural/riparian areas or natural groundwater recharge areas.

Scenic Landscapes Element

SL-2.3 Historic and Cultural Landscapes

The County shall use the County's scenic routes and highways to connect cultural landscapes, historic landmarks and communities, and points of interest including:

1. Historic travel routes and trails,

- 2. Historic settlements,
- 3. Historic places, events, sites, buildings and structures,
- 4. Prehistoric and archeological features, and
- 5. Majestic trees, streetscapes, and parks.

Foothill Growth Management Plan

FGMP-8.1 Riparian Area Development

The County shall discourage the location of development and improvements that are in close proximity to watercourse areas and riparian habitat, and prevent actual encroachment into those habitats.

FGMP-8.12 Vegetation Removal

The County shall prohibit unnecessary removal of native trees on development sites prior to approval of development plans to control erosion, preserve wildlife habitat, and maintain the natural character of developing areas.

FGMP-8.19 Preservation of Unique Features

The County shall encourage maintenance and protection of unique open space areas such as riparian woodlands, oak woodlands, interesting rock formations, and scenic vistas.

Three Rivers Community Plan Policies:

4.2.7 In accordance with CEQA, protect the riparian areas along the Kaweah River and all of its tributaries.

a. Discourage the removal of riparian native species, such as sycamores, and native oaks including but not limited to blue oaks, live oaks, and valley oaks.

4.3.1 Removal or grading around native trees (6" or larger in diameter at breast height (measured at 1.4 m above ground)) which may disturb the root system shall not be allowed during the construction process unless the County deems it is necessary because of road alignment or infrastructure improvements. In the event that mitigation is required resulting from such improvements, it shall be mitigated to the extent feasible.

4.3.2 Removal of native trees in designated open space areas or on private property shall not be allowed unless the health, safety or welfare of residents associated with the adjacent development is endangered. In the event that mitigation is required resulting from such removal, it shall be mitigated to the extent feasible. a. Any trees proposed for removal must be indicated on the submitted site plan with accompanying information stating the reason for tree removal.

4.3.3 County Project Review Committee may be utilized for residential development proposals to ensure the preservation of oak woodlands and significant native trees on the site.

5.3.4 Establish a replacement standard of 1:1 to the extent feasible and appropriate for the removal and replacement of significant native trees and oak woodlands. A replacement standard of 2:1 or 3:1 may be required to the extent feasible and appropriate based on but not limited to soil, slope, and applicable biological considerations.

4.3.5 Implement an educational program for community residents regarding oak woodlands, and encourage community participation in preservation efforts. Oak Tree Care Guidelines are included in Chapter VII C. 1, (Also see UC Davis and California Oak Foundation Materials).

4.3.6 Limit and control to the extent feasible and appropriate non-native plant species that threaten native oak woodlands.

4.3.7 ERM-1.12 Management of Oak Woodland Communities

The County shall support the conservation and management of oak woodland communities and their habitats.

4.3.8 ERM-1.4 Protect Riparian Areas

The County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls.

4.3.9 ERM-1.8 Open Space Buffers

The County shall require buffer areas between development projects and significant watercourses, riparian vegetation, wetlands, and other sensitive habitats and natural communities. These buffers should be sufficient to assure the continued existence of the waterways and riparian habitat in their natural state.

4.5.2 New development proposals may be subject to County Project Review Committee to ensure minimal impacts to visual resources including but not limited to significant native trees and oak woodlands, erosion, and night sky protection. Projects subject to Project Review Committee review requirements shall be determined by the project review checklist.

8.1.3 FGMP-8.19 Preservation of Unique Features

The County shall encourage maintenance and protection of unique open space areas such as riparian woodlands, oak woodlands, interesting rock formations, and scenic vistas.

III. CONSERVATION GOALS OF THE OAK WOODLAND MANAGEMENT PLAN

A. ADVANCE AND ENCOURAGE THE STEWARDSHIP AND CONSERVATION OF OAK WOODLANDS BY INFORMING LANDOWNERS OF THEIR VALUE AND VOLUNTARY INCENTIVES TO PROTECT THEM.

Please see Chapter IV. Natural Resource Values of Oak Woodland Habitats, and Chapter IX. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future Consideration, Subsection A. (Program should be Incentive Based Compensation/Incentives).

B. ADVANCE AND ENCOURAGE SUSTAINABLE COMMUNITY DEVELOPMENT AND RANCHING PRACTICES THAT MAINTAIN WILDLIFE HABITAT, CLEAN WATER AND AIR, AND PROVIDE A HIGH QUALITY OF LIFE.

Please see Chapter IV. Natural Resource Values of Oak Woodland Habitats, and Chapter IX. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future Consideration, Subsection A. (Program should be Incentive Based Compensation/Incentives), and Chapter IX. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future Consideration, subsection C. (Design Guidelines, Educational Programs, and General Plan Policies), and Chapter VIII.

Mitigation for Loss of Oak Woodland Habitats.

C. ADVANCE AND ENCOURAGE PLANNING THAT IS CONSISTENT WITH OAK WOODLAND CONSERVATION.

Please see Chapter IX. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future Consideration, subsections B. (Identify future funding for implementation programs, Consider Grants, Conservation Banks, Conservation Easements, Per Acre Impact Fees, Consolidating of Small Parcels (lot merger), and Transfer of Development Rights), and C. (Design Guidelines, Educational Programs, and General Plan Policies).

D. PROVIDE A PROGRAM OR MECHANISM TO PROVIDE PUBLIC EDUCATION AND OUTREACH REGARDING OAK WOODLANDS THROUGH THE AVAILABILITY OF INFORMATION AND PUBLISHED MATERIALS.

Please see Chapter VI. County Participation in Oak Woodland Habitats Conservation Program, subsection C. 1. and 2. (Education and Outreach), Chapter IX. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future Consideration, subsection C. (Design Guidelines, Educational Programs, and General Plan Policies).

E. LONG TERM VIABILITY, SUSTAINABILITY, AND ADAPTABILITY.

Please see Chapter IX. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future Consideration, and Chapter X Monitoring and Reporting, and Chapter VIII. Mitigation for Loss of Oak Woodland Habitats.

Within the Three Rivers UDB, Valley oak trees dense woodlands with other large trees along the river corridors and near streams. Blue oaks and interior live oaks form sparsely-vegetated woodlands on west and south-facing slopes and denser woodlands on east and north-facing slopes. Extensive Valley oak woodlands occur in the UDB and reach the greatest density, size and extent along the South Fork, where little development and cutting have occurred thus far. Development impacts already modified many areas along the Middle Fork and especially in commercial areas on small parcels. In some small patches along the Middle and North forks, the woodland is narrow to discontinuous, possibly owing to development impacts, site maintenance and ecological disturbances such as floods.

Interior live oaks in subdivisions and near houses are disproportionately removed because the trees exhibit visible signs of rot or poor health and are first to be cut or removed by landowners. In some areas of denser development, interior live oaks are entirely absent and no recruitment is evident.

While the Oaks 2040 report indicated zero reproduction in Valley oak stands, UDB surveys detected Valley oak reproduction in nearly every Valley oak stand. Blue and interior live oak trees exhibit contrasting patterns depending on slope, aspect and soils. However, most south and west-facing blue oak stands appear to have very few seedlings and saplings in the understory while north and east-facing slopes appear to be continuously regenerating.

While many stands appear to be reproducing, on average, at least 10% of blue oaks appear to have died from drought-induced mortality. This pattern could continue in the years to come from continued or

subsequent droughts and secondary attacks and pathogens. This mortality will likely have greatest impacts on blue oak trees on west and south-facing slopes where little current regeneration leaves demographic gaps in the stands when old trees die. These stands are also among the most sparsely-wooded. Because the hottest, steepest and most exposed slopes already lack woodlands at the lowest elevations in the UDB, the pattern of sparse or no woodland on west and south-facing slopes appears likely to continue higher in the watershed and UDB decreasing blue oak woodland canopy and extent.

Climate change modeling indicates that, based on temperature and precipitation, oak persistence will be increasingly challenged, particularly Valley oaks at lowest elevations (Kuypers et al). However, the Kaweah River is undammed through the UDB, providing abundant, critical water supply in the summer for Valley oaks. This, and the oak woodland's width, may protect the woodland against temperature and climate extremes. Nevertheless, impacts creating gaps, narrowing the woodland extent and tree removal or health impacts decrease the likelihood of woodland persistence in the UDB.

Because not all oak trees on even the most dry, exposed slopes are dead and some appear to be vigorous even after several years of exceptional drought, it appears the oaks in the UDB possess some climate adaptability and resilience. Natural genetic variation may include some drought-adapted and some drought-sensitive trees. It is likely the recent exceptional drought removed the most sensitive ecotypes in the population.

Because of the configuration of the oak woodlands in the UDB, the potential for climate and droughtinduced mortality and stress, the past impacts and potential future development impacts, oak woodlands in the UDB area face multiple, potentially interacting stressors. The combined impacts from these stressors could result in dramatic changes in oak abundance and health in the UDB. Valley oaks are particularly vulnerable because of the narrow, linear configuration of the woodland along the River corridors and because the configuration of the smallest, most desirable parcels is in the same area, development impacts will have the greatest and disproportionate impact on Valley oak woodlands. From the North Fork Bridge and north along the Middle Fork, the woodland is narrow and forms a thin string of old trees, with little regeneration or pole-sized trees to form a woodland when the large, old trees die. Areas in this zone should be restored and protected as oak refugia to

ensure persistence in this area. Drought-adapted local ecotypes should be cultivated and planted to ensure drought adaptability and woodland persistence in this area.

IV. CONSERVATION OBJECTIVES OF THE OAK WOODLAND MANAGEMENT PLAN.

A. OBJECTIVES

1. VOLUNTARY PLAN. TO DEVELOP A SET OF VOLUNTARY OAK PROTECTION GUIDELINES FOR OAK CONSERVATION PLANNING AND THE USE OF OAK WOODLAND HABITATS IN THE THREE RIVERS URBAN DEVELOPMENT BOUNDARY. THE PLAN IS ALSO EXPECTED TO PROVIDE INFORMATION AND GUIDANCE TO LANDOWNERS, THE COUNTY, AND DEVELOPERS REGARDING ACTIVITIES THAT HAVE THE POTENTIAL TO ADVERSELY IMPACT OAKS AND OAK WOODLAND HABITATS. Please see Chapter VII. Best Management Practices for Oak Woodland Habitats, Chapter VIII. Mitigation for Loss of Oak Woodland Habitats, Program Options for Future Consideration, and Chapter V. Oak Woodland Habitats in the Three Rivers UDB, subsection D. (Threats to Oak Woodland Communities, including, Fire, Disease, Climate Change, Urban Development including infrastructure, and tree harvesting). (Please note, that certain discretionary actions contemplated outside of this voluntary plan may be subject to the policies, procedures, or requirements of the Tulare County General Plan, Zoning Ordinance, Ordinance Code or other applicable regulations).

2. FULFILL REQUIREMENTS OF CALIFORNIA OAK WOODLANDS CONSERVATION ACT. (MEET OAK WOODLANDS MANAGEMENT PLAN (OWMP) MINIMUM ELEMENTS AS IDENTIFIED IN THE WILDLIFE CONSERVATION BOARD, "THE OAK WOODLAND CONSERVATION ACT OF 2001. PROGRAM APPLICATION AND GUIDELINES"), AND (SB 1334) (PUBLIC RESOURCES CODE (PRC) SECTION 21083.4) AND PRC §4793(E).

 The county or city agrees to adopt a Resolution to offer private landowners the opportunity to participate in the Oak Woodlands Conservation Program. The Oak Woodlands Management Plan and Resolution is adopted pursuant to the requirements of California Fish and Game Code Section 1366 (a). Previously adopted resolutions are acceptable if they meet the minimum requirements of the Resolution.

Please see Section XII Draft Board of Supervisors Resolution.

2. The county or city shall prepare statements that describe the status of oak woodlands in their jurisdiction. Such statements shall include a description of all native oak species, estimates of the current and historical distribution of oak woodlands, existing threats, status of natural regeneration and growth trends. To the extent possible, local jurisdictions shall prepare maps displaying the current distribution of oak woodlands.

Please see Chapter V. Oak Woodland Habitats in Three Rivers UDB.

3. The county or city shall prepare statements recognizing the economic value of oak woodlands to landowners and the community at large. These statements shall encourage and support farming, ranching and grazing operations that are compatible with oak woodland conservation.

Please see Chapter IV Natural Resource Values of Oak Woodland Habitats subsections A. (Grazing) and F. (Economic Values).

4. The county or city shall prepare statements recognizing the natural resource values of oak woodlands including the critical role oak woodlands play relative to the health and function of local watersheds, soil and water retention, wildlife habitat, open space and the reproduction or reduction of fuel loads.

Please see Chapter IV Natural Resource Values of Oak Woodland Habitats subsections B. (Wildlife and Plant Habitat), C. (Special Species Habitats), E. (Effects on Habitat from Loss of Oak Woodland Habitats, Biological Resources and Physical and Natural Resources), J. (Soil and Water Retention through green infrastructure and flood protection, and improved Water Quality), and X. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future

Consideration, subsection A. 1. Program should be Incentive Based (Compensation/Incentives, Incentives to encourage the long term preservation of oak woodland communities).

5. The county or city shall prepare statements recognizing that the loss of oak woodlands has serious effects on wildlife habitat, retention of soil and water and that planning decisions for oak woodlands should take into account potential effects of fragmentation of oak woodlands.

Please see Chapter IV Natural Resource Values of Oak Woodland Habitats subsections B. (Wildlife and Plant Habitat), C. (Special Species Habitats), E. (Effects on Habitat from Loss of Oak Woodland Habitats, Biological Resources and Physical and Natural Resources), J. (Soil and Water Retention through green infrastructure and flood protection, and improved Water Quality), and Chapter V. Oak Woodland Habitats in the Three Rivers UDB subsection D. (Threats to Oak Woodland Communities, including, Fire, Disease, Climate Change, Urban Development including infrastructure, and tree harvesting).

6. The county or city shall prepare statements expressing support for landowners that participate in the Oak Woodlands Conservation Program. To qualify for funding consideration by the Wildlife Conservation Board, the county or city agree, pursuant to Section 1366 (f) of the Act to certify that individual proposals are consistent with the county or city Oak Woodlands Management Plan.

Please see Chapter VI. County Participation in Oak Woodland Habitats Conservation Program. Subsections A. (Support for Private Landowner Participation in the OWMP) and B. (Support for Landowners).

7. The county or city shall prepare statements that support and encourage education and outreach efforts designed to demonstrate the economic, social and ecological values associated with oak woodlands.

Please see Chapter VI. County Participation in Oak Woodland Habitats Conservation Program. Subsection C. 1. 2. (Education and Outreach).

8. The county or city shall review and update as necessary, the Oak Woodlands Management Plan.

Please see Chapter X. Monitoring and Reporting Subsection A. 1. (Continue to assess and report the status of oak woodland canopy cover).

3. PROVIDE GUIDANCE TO LANDOWNERS, DEVELOPERS, AND COUNTY PLANNERS.

Please see Chapter VI. County Participation in Oak Woodland Habitats Conservation Program, subsection C. 1. and 2. (Education and Outreach), Chapter IX. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future Consideration, subsection C. (Design Guidelines, Educational Programs, and General Plan Policies), and Chapter VII. Best Management Practices for Oak Woodland Habitats.

4. QUALIFY FOR FUNDING FROM WILDLIFE CONSERVATION BOARD OR OTHER
GRANTS.

Please see Chapter VI. County Participation in Oak Woodland Habitats Conservation Program, subsection C. 1. and 2. (Education and Outreach), Chapter IX. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future Consideration, subsection C. (Design Guidelines, Educational Programs, and General Plan Policies), and Chapter VII. Best Management Practices for Oak Woodland Habitats.

5. CONSISTENCY WITH THE COUNTY GENERAL PLAN, AND THREE RIVERS COMMUNITY PLAN VISION, GOALS, OBJECTIVES, AND POLICIES.

Please see Chapter I. Purpose of the Oak Woodland Management Plan, subsection A. (Purpose – Voluntary Plan. Consistency with the California Oak Woodlands Conservation Act of 2001 (AB 242 Chapter 588), (SB 1334) (Public Resources Code (PRC) section 21083.4) and PRC §4793(e), Three Rivers Community Plan and Vision, and to Comply with 2012 County General Plan Requirements).

6. PLAN STRATEGY (DESCRIBE THE RELATIONSHIP OF THE OWMP TO THE THREE RIVERS COMMUNITY PLAN AND DEIR).

Please see Chapter I. Purpose of the Oak Woodland Management Plan, subsection A. (Purpose – Voluntary Plan. Consistency with the California Oak Woodlands Conservation Act of 2001 (AB 242 Chapter 588), (SB 1334) (Public Resources Code (PRC) section 21083.4) and PRC §4793(e), Three Rivers Community Plan and Vision, and to Comply with 2012 County General Plan Requirements).

V. NATURAL RESOURCE VALUES OF OAK WOODLAND HABITATS

A. GRAZING.

Oak woodlands are valuable to ranching operations because the amount and quality of forage tend to be higher than in rangelands without oaks. Oak trees utilize their root structure, bringing up deep groundwater and making it available to forage plants. These area of grassland around oak trees increase soil fertility under oak canopy and produce better forage. Countywide, pastureland and rangeland ranching produced an income of over \$27,516 million in 2014 according to the Tulare County Annual Crop and Livestock Report.

Well-managed ranches provide many benefits including wildlife habitat, open-space, fire control, weed management, recreational opportunities, and watersheds that produce abundant clean water. Ranching is a vital and integral part of the economy and culture of Tulare County, and oak woodlands are an essential part of the cattle industry.

B. WILDLIFE AND PLANT HABITAT.

Habitat components found in oak woodlands are distributed both horizontally and vertically across the landscape. For instance, across the countryside, varying proportions of rock outcrops, shrubs, trees, and watercourses create a horizontal landscape mosaic of habitat patches of varying sizes, referred to as

horizontal structure. Within an oak woodland patch, several vertical layers of vegetation—canopy, shrub, and herb ground layers—are referred to as vertical structure. Horizontal and vertical structure influences the kinds and numbers of animals that occur in oak woodlands. Generally, an oak woodland habitat with complex or well-developed horizontal and vertical structure supports a greater diversity of wildlife. Complex habitat structure increases the options available to animals. The wrentit (*Chamaea fasciata*), for example, feeds and nests in the shrub layer, and a woodland without a shrub layer will not support wrentits.⁷

Habitat offers resident wildlife food, cover, water, and living space. California's oak woodlands are some of the richest wildlife habitat in the state. Of the 632 terrestrial vertebrates (amphibians, reptiles, birds, and mammals) native to California, over 300 species use oak woodlands for food, cover, and reproduction, including at least 120 species of mammals, 147 species of birds, and approximately 60 species of amphibians and reptiles. Each species of wildlife has different habitat requirements. For example, the band-tailed pigeon (*Columba fasciata*) consumes acorns and leaf buds, while the blue-gray gnatcatcher (*Polioptila caerulea*) gleans insects from oak twigs and foliage. The mule deer (*Odocoileus hemionus*) requires about a thousand acres of oak habitat to satisfy all its food, water, and cover needs, but the California mouse (*Peromyscus californicus*) uses less than an acre. Habitat needs of wildlife may also change with the seasons. The acorn woodpecker (*Melanerpes formicivorus*) eats acorns during fall and winter, but must forage for insects in spring to feed its nestlings. Similarly, the cover needed by wildlife during the summer may be much different than that required to survive in winter. ⁸

C. SPECIAL-STATUS SPECIES.

Several species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. State and federal laws have provided DFW and the USFWS with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. Many native plant and animal species have been formally designated as Threatened or Endangered under state and federal endangered species legislation. Others have been designated as "Species of Special Concern" by DFW. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened or endangered (CNPS 2001). Collectively, these plants and animals are referred to as "Special Status Species".

Species and the habitats listed in the CNDDB are considered Special Status Species and are often treated as if they were listed under Federal or State Endangered Species Acts. During oak surveys in spring, 2016, additional species and records were added from field notes and documented during surveys. The likelihood of the species occurring on the site is categorized as present, absent, possible or unlikely, based on whether they were detected, are known to exist on the site or immediately adjacent (present), were not detected and not expected, owing to lack of habitat (absent), possibly occurring with suitable or suboptimal habitat present but not detected (possible), not likely to occur with no habitat or suboptimal habitat present and not detected (unlikely).

⁷ Giusti, Gregory A.; McCreary, Douglas D.; Standiford, Richard B., editors. 2005. A Planner's Guide for Oak Woodlands, Second Edition. University of California, Division of Agriculture and Natural Resources, Publication 3491: 116 pp.

⁸ Giusti, Gregory A.; McCreary, Douglas D.; Standiford, Richard B., editors. 2005. A Planner's Guide for Oak

Woodlands, Second Edition. University of California, Division of Agriculture and Natural Resources, Publication 3491: 116 pp.

As documented in the CNDDB report, seventy-two (72) Special Status Species and two habitats are known to occur in the vicinity. Forty-five (43) Special Status animal species are known to occur in the general vicinity of the study area.

Twenty-seven (27) Special Status plant species were included in the CNDDB printout for the nine relevant quadrangles.

The following were listed in the California Natural Diversity Database, 18 species/habitats noted with an asterisk (*) were in the record for the Kaweah Quadrangle:

- 1. Spiny-sepaled button-celery (Eryngium spinosepalum) CNPS 1B.2 *
- 2. Pierpoint Springs dudleya (Dudleya cymosa ssp. Costafolia) CNPS 1B.2
- 3. Aromatic canyon gooseberry (Ribes menziesii var. ixoderme) CNPS 1B.2
- 4. Sequoia gooseberry (Ribes tularense) CNPS 1B.3
- 5. Springville clarkia (Clarkia springvillensis) Fed Threatened, State Endangered CNPS 1B.2
- 6. Mouse buckwheat (Eriogonum nudum var. murinum) CNPS 1B.2 *
- 7. Kaweah monkeyflower (Mimulus norrisii) CNPS 1B.3 *
- 8. Shirley Meadows star-tulip (Calochortus westonii) CNPS 1B.2
- 9. Kaweah brodiaea (Brodiaea insignis) State Endangered CNPS 1B.2 *
- 10. Striped adobe-lily (Fritillaria striata) State Threatened
- 11. Berry's morning-glory (Calystegia malacophylla var. berryi) CNPS 3.3
- 12. Elongate copper moss (Mielichhoferia elongate) CNPS 2.2
- 13. Madera leptosiphon (Leptosiphon serrulatus) CNPS 1B.2 *
- 14. San Joaquin adobe sunburst (Pseudobahia peirsonii) Fed Threatened, State Endangered, DNPS 1B.1
- 15. Recurved larkspur (Delphinium recurvatum) CNPS 1B.2
- 16. Rose-flowered larkspur (Delphinium purpusii) CNPS 1B.3
- 17. Calico monkeyflower (Mimulus pictus) CNPS 1B.2
- 18. San Joaquin Valley Orcutt grass (Orcuttia inaequalis) Fed Threatened, State Endangered, CNPS 1B.1
- 19. Greene's tuctoria (Tuctoria greenei) Fed Endangered, State Rare, CNPS 1B.1
- 20. Call's angelica (Angelica callii) CNPS 4.3
- 21. Marsh claytonia (Claytonia palustris) CNPS 4.3

- 22. Streambank spring beauty (Claytonia parviflora ssp. grandiflora CNPS 4.2
- 23. Abrams' onion (Allium abramsii) CNPS 1B.2
- 24. American manna grass (Glyceria grandis) CNPS 2B.3
- 25. Bolander's woodreed (Cinna bolanderi) CNPS 1B.2
- 26. Munz's iris (Iris munzii) CNPS 1B.3
- 27. Tulare County bleeding heart (Dicentra nevadensis) CNPS 4.3
- 28. Moestan blister beetle (Lytta moesta) *
- 29. Morrison's blister beetle (Lytta morrisoni) *
- 30. Denning's cryptic caddisfly (Cryptochia denningi)
- 31. Tulare cuckoo wasp (Chrysis tularensis)
- 32. Clough Cave harvestman (Calicina cloughensis)
- 33. Moody's gnaphosid spider (Talanites moodyae)
- 34. Vernal pool fairy shrimp (Branchinecta lynchi) Fed Threatened
- 35. Sequoia cave isopod (Bowmanasellus sequoiae)
- 36. California linderiella (Linderiella occidentalis)
- 37. California condor (Gymnogyps californianus) Fed and state Endangered *
- 38. Northern goshawk (Accipiter gentilis) DFW SSC
- 39. Black swift (Cypseloides niger) DFW SSC
- 40. Great blue heron (Ardea herodias)
- 41. Bald eagle (Haliaeetus leucocephalus) State Endangered *
- 42. Burrowing owl (Athene cunicularia)
- 43. California spotted owl (Strix occidentalis occidentalis)
- 44. Golden eagle (Aquila chrysaetos) *
- 45. Greater sage-grouse (Centrocercus urophasianus) Fed Proposed Threatened *
- 46. Lewis' woodpecker (Melanerpes lewis) *
- 47. Red-breasted sapsucker (Sphyrapicus rubber) *

- 48. Tricolored blackbird (Agelaius tricolor)
- 49. Yellow-billed magpie (Pica nuttalli) *
- 50. California tiger salamander (Ambystoma californiense) Fed, State threatened, DFW SSC
- 51. Kings River slender salamander Batrachoseps regius
- 52. Gregarious slender salamander (Batrachoseps gregarious)
- 53. Sequoia slender salamander (Batrachoseps kawia)
- 54. Foothill yellow-legged frog (Rana boylii) DFW SSC *
- 55. Sierra Nevada yellow-legged frog (Rana sierrae) Fed Endangered, State Threatened DFW SSC *
- 56. Southern mountain yellow-legged frog (Rana muscosa) Fed Endangered, State Threatened DFW SSC
- 57. Western pond turtle (Emys marmorata) DFW SSC *
- 58. Western spadefoot (Spea hammondii) DFW SSC
- 59. Silvery legless lizard (Anniella pulchra pulchra) DFW SSC
- 60. Long-eared myotis (Myotis evotis)
- 61. Fringed myotis (Myotis thysanodes)
- 62. Western small-footed myotis (Myotis ciliolabrum)
- 63. Western mastiff bat (Eumops perotis californicus) DFW SSC *
- 64. Pallid bat (Antrozous pallidus) DFW SSC
- 65. Spotted bat (Euderma maculatum) DFW SSC
- 66. Townsend's big eared bat (Corynorhinus townsendii) State candidate threatened DFW SSC
- 67. Pacific fisher (Pekania pennanti) Fed Candidate, State Candidate threatened, DFW SSC
- 68. Pacific marten (Martes caurina)
- 69. California wolverine (Gulo gulo) State Threatened, DFW FP
- 70. Sierra Nevada red fox (Vulpes necator) State Threatened
- 71. San Joaquin kit fox (Vulpes macrotis mutica) Fed Endangered State Threatened.
- 72. Central Valley Drainage Hardhead/Squawfish Stream. *
- D. RECREATION.

Oak woodlands are important to Tulare County as they provide a number of ecological, aesthetic, and economic benefits, including plant and wildlife habitat, erosion control, and water quality, flood, and air quality protection. They also are enjoyed by County residents and visitors for their beauty, as observed while driving or enjoyed through hiking, running, rafting, picnicking, fishing, birdwatching, equestrian, hunting, or other recreational opportunities. These activities contribute significantly to the quality of life in the county as well as providing economic benefits generated by visitors enjoying this important resource.

Finally, oak woodlands are valued for their historic and cultural significance. Native Americans once relied on oaks for food and shelter. The earliest European settlers sought refuge from the hot valley sun for themselves and their livestock under oaks and benefited economically from the use of oaks for building material and firewood.

E. EFFECTS ON HABITAT FROM LOSS OF OAK WOODLAND HABITATS (BIOLOGICAL RESOURCES AND PHYSICAL AND NATURAL RESOURCES)⁹.

In the Southern Sierra Nevada (Fresno, Tulare, and Kern County Region), several canopy species occur as oak woodlands and forests or as components of pine/fir dominated forests. These include (from lowest to highest elevation): blue oak, valley oak, canyon live oak, and California black oak. The canyon live oak, and California black oak may only be present on the fringes of the upper elevations of the UDB or may be located entirely outside of the UDB. Other species are present in smaller amounts. Since oaks are often subdominant species, their full distribution is usually not accurately mapped. Areas dominated by oaks comprise about 7,000 km2 (4,400 mi2) while areas that include oaks as a subdominant species comprise about 5,000 km2 (3,100 mi2), together, about 21% of the total area. Oak woodlands support the highest animal biodiversity out of all habitats in California, with over 330 species of birds, mammals, reptiles, and amphibians.

Perhaps the most significant historic and present disturbance or stressor has been the conversion to agriculture and urbanization which have significantly reduced the extent of oak woodlands in the state. Thorne et al. examined vegetation changes between 1936 and 1996 in the northern Sierra Nevada and found that the distribution of low elevation oak woodlands and forests (particularly blue oak and valley oak) shrank 50% while upper elevation hardwoods (primarily California black oak and canyon live oak) increased almost 300%. Changes in extents were likely driven by land use changes, successional forces, and climate change. Urbanization (and associated habitat conversion) is sometimes cited as the biggest driver of oak woodland loss in the state. Most of the distribution of oaks in California and the Sierra Nevada is on private lands. For example, only 11% of the blue oak state distribution is under public agency ownership though higher elevation species such as black oak have a larger percentage within public lands.

Throughout much of the current distribution of oaks, the suppression of new tree recruitment may be the largest issue facing oak woodlands today, with many possible factors hypothesized including overbrowsing, altered fire regimes, competition with non-native grasses, changing climate, and others. The following table identifies current stressors, potential climate change impacts, and characteristics affecting oak woodland adaptive capacity Stressors are loosely ranked in terms of impact to oak woodlands – VH=very high, H=high, M=medium, L=low, P = potential.

⁹ Oak Woodlands A Southern Sierra Adaptation Workshop Information Brief, Bill Kuhn (NPS) and Katy Cummings (NPS), with review and contributions from Susan Antenen (Conservation Biology Institute), Koren Nydick (NPS), and Eric Winford (NPS), Visalia, California February 20-22, 2013.

Stressor	Mechanism	Effect on Oak Woodlands							
_	Habitat loss (H)	Mortality, fragmentation							
in the second	Energy and transmission line development (H)	Erosion and alteration of soil nutrients; introduction of invasive							
Development (VH) ^{4,6,7}	Roads (M)	plants; fragmentation							
	Conversion of native habitat to intensive agriculture (L)	Mortality, fragmentation; exposure to pesticides and herbicides							
Predation & Overbrowsing by stock and deer (VH)	Predation of leaves, acoms, seedlings, and saplings	Mortality of oak seedlings; low recruitment							
	Preference for native grasses	Increase in invasive plants; changes in native plant diversity							
	Soil compaction from hooves – decrease permeability	Decreased recruitment success							
Predator Control/	Hunting of predators led to increased herbivore (deer, rodents) populations	Increased oak seedling mortality							
rophic Dynamics (H)	Displacement of mammal predators ¹⁶	Increased oak seedling mortality							
Invasive Plants (M)	Extremely dense groundcover of invasive grasses	Competition with oak seedlings for resources							
	Altered fire regime due to dense groundcover	Possible increased adult and sapling mortality							
Air Pollution (M)	Increased ozone levels and nitrogen deposition ²⁰	Foliar injury; lower recruitment success; increase in invasive plan							
1. A	Understory contains dense growth of exotics	Decreased recruitment; change in fire regime							
Fire Suppression (P)	Lack of stimulation for fast vertical growth of oak sprouts	Oak saplings remain within reach of browsing herbivores							
	Lack of nutrient release in soil	Soil not as favorable for oak germination							
Pathogens/Pests (P)	Sudden oak death (Phytophthora ramorum)	Potential Increased adult oak mortality (for black oak, canyon liv oak, tanoak)							
	Gold spotted oak borer (GSOB); canyon live oak and black oak are hosts	Mortality - loss of trees and woodlands							
Other (M)	Timber management, intentional prevention of threatened and endangered spp occurrences; non-native animal introduction ²⁵	Altered species composition and dominance; decreased recruitment; changes in soil chemistry ²⁵							
Potential Climate Impacts	Potential Results	Potential Impact to Oak Woodlands							
"Much Warmer/Much Drier" Scenario	Earlier snowmelt ^{20,30,31} ; decrease in snow pack ^{20,22} ; changes in hydrology; increased soil evaporation rate in summer	Increased oak seedling mortality/decreased recruitment							
	Drought conditions during growing season								
	Warmer temperatures during wet season	Increased populations of invasive plants							
	Earlier and longer fire seasons; more severe fires and larger areas of high fire intensity, increased fire probability at all elevations except lowest foothills ³⁶	Increased mortality of adults and seedlings; stimulation of regeneration							
	Change in invasive plant populations	Decreased recruitment; change in fire regime							
	Shift in plant species composition	Unknown impacts							
	Shift in range to track required climate conditions	Oaks may move higher in elevation, but dispersal, browsing, ar soil conditions are factors							
	Reduced recruitment & shift in population structure	Eventual thinning and loss of woodlands							
Moderately Warmer/ Similar Precip" Scenario	Increased fire probability at almost all elevations ³⁶	Increased mortality of adults and seedlings; stimulation of regeneration							
Sensitivies and Vulnerabilities	Explanation	Potential Impact to Oak Woodlands							
Limits on Reproduction	Current low recruitment with many suspected drivers, including overbrowsing, fire suppression, invasive plant densities, grazing, etc.	Continued decline of oak populations; may not be able to shift range in response to climate change							
Synergistic Effects	Already weakened oaks may become more vulnerable to new stressors and new combinations of stressors brought on by climate change								

In the future, the biggest stressors or threats to oak woodlands include land use change, (urbanization) and overbrowsing (cattle and deer), though changing climate also has the potential to drive significant changes. Although predicting future climates is extremely complex, the three main IPCC emission scenarios agree that temperature in the southern Sierra Nevada will warm, with predictions between +2.6 to 3.9°C by 210029. Less certain is the change in precipitation of the 18 general circulation models

that include California, about half predict decreases and half predict increases for the Sierra region. Even with little changes in precipitation, the increased temperatures would increase drought stress (higher rates of evapotranspiration), could cause changes in wildfire regimes, snowmelt patterns, and more. Longer dry seasons may compromise oak recruitment, as seedling survival is dependent on sufficient rainfall.

Lower elevation oaks, such as blue oak, are predicted to experience high climate stress at the lower edge of their range, which may lead to loss of oak habitat at these elevations, especially dryer south facing slopes. Expansion upslope beyond the current range is predicted if soils are suitable and if they can successfully disperse upslope and establish new individuals.

Climate change also may affect oak woodlands by altering fire regimes. Different climate change scenarios produce divergent projections of future fire probability for the lower elevations of oak woodlands, but agree on generally higher fire probabilities for their upper elevations. Higher fire probability could be beneficial or detrimental for oak woodlands and research on the subject is mixed. Some study suggests that more fire will favor oaks while increased fire frequency and severity may have no effect on new recruitment. The regions of higher fire probability coincide with areas that are predicted to be oak climate refugia or expansion zones, which illustrates the potential importance of interactions among direct and indirect climate change effects.

F. ECONOMIC. (BLUE OAK DOMINANT HABITAT).

A new report researched by the U.S. Geological Survey and the National Park Service says that nearly 1.5 million visitors to Sequoia and Kings Canyon National Parks in 2013 injected more than \$111 million into the local economy. Their spending, the reports says, supported nearly 1,400 jobs in the area. "National park tourism is a significant driver in the national economy — returning \$10 for every \$1 invested in the National Park Service — and it's a big factor in our local economy as well," Superintendent Woody Smeck said in a press release. On a national level, the report shows \$14.6 billion of direct spending by nearly 274 million park visitors in communities within 60 miles of a park. The spending supported 237,000 jobs nationally, with 197,000 of the jobs found in gateway communities, like those in Tulare County.

Economists examine environmental values from several different perspectives. A few believe that environmental amenities can and should be valued in exactly the same way as any other goods (Baerenklau 2009). However, others such as Salzman (2005) suggests that it is the role of government to pay for achieving ecosystem service protection, because these services cannot be bought or sold and thus function outside of the traditional market system. Others feel that markets reflect individual, rather than community property values in the context of human use only, are volatile and reflect current ideas of value, but don't reflect enduring or intrinsic values. Typically, the benefits provided by functional oak woodlands have not been incorporated into the cost-benefit equation because they are difficult to assess.

As a result of extensive research and discussion, a variety of strategies were explored for quantifying the economic values of oak woodlands by the Los Angeles County Oak Woodlands Habitat Conservation Strategic Alliance 2011 (OWCMP). Models employed by U.S. Fish and Wildlife Service, National Park Service, the Environmental Protection Agency, the Nature Conservancy and other land trusts were all reviewed. It became clear that oak woodland values are never absolute; they are governed by the situation wherein they occur and the motivations of the persons involved. In the past, these values have been calculated to: (A) estimate compensation for damage; (B) appraise land value in real estate transactions; or (C) estimate non-market values and cost/benefit of management options.

In the first case, oak woodlands are assigned a dollar value to calculate the cost of settlements in tort cases, CEQA mitigation, or *post facto* penalties/fines when oak trees or woodlands are damaged. In the second case, oak woodlands have a market value in real estate transactions, either as an amenity, because they enhance the landowner's quality of life; or as a resource attached to the land (firewood, edible mushrooms). In the third case, values present in oak woodlands become independent of the land where they occur, and are used to estimate the relative costs and benefits of management actions or relative value of ecosystem services (wildlife habitat, carbon sequestration, watershed protection).

One of the most direct means of establishing the value of oak woodlands is to calculate the cost of recreating these values after they are lost. Pincetl (2009) suggests that only by examining the costs of restoring impaired or damaged oak woodland, can we determine how much a functional oak woodland is worth. In theory, replacement or restoration costs bypass the need for estimation of abstract or non-market values, by assuming that all these values are restored once the mitigation is carried out. Regulatory agencies and landowners could then forego the complicated process of identifying stakeholders and calculating the values for each instance where an oak tree or oak woodland is damaged. The disadvantage is that the replacement value becomes a general solution to the specific values that are lost when an oak woodland is damaged. There are five models of replacement value: (1) acquisition of oak woodlands that are equivalent to the oak woodlands converted to other land-uses; (2) complete restoration (or creation) of oak woodlands; (3) partial restoration of oak woodland values; (4) planting of oak saplings to replace oak trees removed from the landscape, and; (5) transplanting oak trees that would be lost in a project.

The OWCMP distilled all this information and identified three categories of values: use, non-use and ecosystem services. These were integrated using all of the above considerations into an equation that provides flexibility for users to incorporate whatever tools are most appropriate and applicable to any given situation. Thus the OWCMP quantifies the total oak woodland value as the sum of the use value plus the non-use value plus the ecosystem services values.

Use Values

The most fundamental use value is the market value of the land upon which the oak woodland resides. Properties with functional oak woodlands offer higher real estate benefits (amenity values) than comparable lands without oaks (Diamond and others 1987, Standiford 1999, Standiford and Scott 2001). Extractive uses such as timber harvesting, firewood production and other uses such as hunting, fishing, providing mast for wildlife, beehives and other harvesting activities also provide a market driven value for a particular oak woodland. Therefore, the market values are more easily compared between the baseline condition of a parcel and any proposed development activity.

Another commonly used tool for valuing individual oak and other landscape trees is the Guide for Plant Appraisal (Guide; Council of Tree and Landscape Appraisers 2000). With a long history of use in calculating the value of tree damage in tort cases, the Guide provides an accepted tool for calculating the value of a tree based on its species, condition, and location. These factors are evaluated either using a Replacement Cost Method, which is applied to smaller trees that could realistically be purchased at a nursery; the Trunk Formula Method, which is used to estimate the value of trees considered too large to be readily available; or the Cost of Cure Method, which is used to identify cost to replace/repair a property to near its natural condition, and takes into account the cost of maintenance and time needed for reestablishment of the damaged landscape. Each factor can be depreciated by the appraiser if the species is not locally native, is in poor condition, or located where it does not contribute substantially to the overall woodland landscape (Council of Tree and Landscape Appraisers 2000).

However, we recognize that oak woodlands are different from developed landscapes and that the Guide may not be adequate to develop realistic restoration or replacement costs for an oak woodland. The advantage of the CTLA system is that the damaged party is paid at the time of damage, and is not left with a promissory mitigation, which may or may not materialize. A recurring disadvantage with this method is that it is possible to generate a value for the trees that is greater than the real estate value of the land the trees occupy. Another problem is that this method fails to incorporate any ecosystem service values, and instead focuses primarily on the anthropogenic values.

Ecologists include the spatial distribution of oaks when discussing the functional value of an oak woodland (Standiford and Scott 2001). This value resembles the monopolistic value of land, in that the aggregate resources in an oak woodland at one location can never be replicated anywhere else. From a pragmatic perspective, parcels containing oak woodlands in Los Angeles County are as similar or dissimilar as we choose to view them. Nevertheless, the complex climate, geology, soils, and biogeography of the County tend to enhance the unique features of individual oak woodlands.

The value of these woodlands is linked to their scarcity, which in turn is affected by the rate and extent of oak woodland conversions. Location can become critical even when oak woodlands are still abundant: if a linear woodland is permanently severed, then the movement of wildlife along that woodland cannot be restored at a different location. In this sense, the spatial structure and context of a particular oak woodland are integral parts of its value.

Non-use values

Economists define non-use values as those that do not derive from *in-situ* consumption of the resources (Kopp and Smith 1993). These benefits are described as *non-market values*, and include those elements of oak woodlands that have no commodity, consumptive or dollar equivalency. Examples would be passive uses such as recreation, open space, watershed protection, or landowner amenity values. Recreational opportunities provided by oak woodlands (hiking, bird watching, and others) result in dollar benefits to local businesses, increase real estate value of adjoining properties, and are considered valuable by both local and long distance stakeholders. Travel costs to access an oak woodland open space, and willingness-to pay for protecting oak woodlands are examples of methods used to identify how important these resources are in a contingency valuation setting (Baerenklau 2009).

The quantification of these values is an evolving field with multiple procedures that can be utilized, each having a best fit for specific circumstances. The OWCMP provides flexibility for use of the most appropriate model for each circumstance, rather than requiring that any particular tool be employed to calculate the non-use value for the baseline existing condition of a property and compare that to the value post proposed development.

Ecosystem service values

Oak woodlands are critical components of healthy terrestrial and aquatic ecosystems, providing habitat, preventing erosion, moderating water quantity and supporting water infiltration, sequestering carbon, filtering out air and water pollutants, moderating temperatures, and supporting watershed function. These are but a few of the potential ecosystem service values that can be quantified using a variety of tools.

In addition to the quantification of various services provided by oak woodlands, it is important to recognize the role of ecosystem processes and how strongly that influences their value. For example, oak trees survive summer drought because of hydrologic processes that move water through the soils and substrates where oaks occur, and symbiotic processes allow oaks to move water into their roots. However, if the pathway of this process is disrupted, then woodlands are unlikely to remain intact. Recognizing and calculating the cost of replacing this critical landscape scale processes should be incorporated into the valuation effort. It is important to note that landscape scale processes like the hydrologic cycle extend far beyond the canopy of oak trees. The relationship between the woodland and its watershed must be considered in defining an oak woodland and hence are important in estimating oak woodland values.

The life history of oaks provides another example of woodland processes that are difficult to detect and quantify in standing trees. Stands of oaks appear remarkably stable; however, individual oak trees eventually succumb to diseases, insect pests, and competition for water, nutrients and light. The process of tree replacement is not necessarily visible in the patterns of trees across a landscape. For instance, coast live oaks have a remarkable ability to expand when conditions are good, and to survive when conditions degrade. In a good year, oaks can rapidly produce thousands of acorns and seedlings, and an established seedling can become trees in a relative short time (25 years). The process however, is dependent on suitable conditions for seedlings to germinate and thrive. The values associated with the individual oak trees can be intact, but the values associated with the ability of the oak woodland to thrive over time can be altered.

The California Air Resources Board (2008) and the California Forest Protocol (SB 812 2002) have designated the conversion of oak woodlands to non-forest use as a biological emission of carbon dioxide that is subject to CEQA analysis and mitigation. The air quality criteria established requires the measurement of oak woodland biological emission by documenting the live tree biomass (including roots), standing dead tree biomass, and wood lying on the ground. With this information in hand, the protocol requires that the potential carbon sequestration over the next 100 years be calculated for all trees over 7.6 cm (3 inches) or greater diameter at breast height, as well as to determine how much sequestered carbon would be released if the live trees, standing dead trees and woody debris were burned. Comparison of the existing condition to the proposed condition following the land use change would then be used to identify the level of significance for this impact.

Additionally, there are several methodologies that are used to document the amount of water run-off reduction, air pollution filtration, temperature moderation (energy use) and erosion control benefits provided by a tree or group of trees. Most are designed for use primarily within the urban forest context, rather than natural landscapes, however, given the proximity of most oak woodlands in Los Angeles County to the urban edge, these may be applicable.

Existing models that may have applicability for oak woodland service estimation include:

Urban Forest Effects (UFORE) is a computer model designed to characterize forest structure (species composition, number of trees, size, density, health, leaf area, biomass, diversity) and use these variables to evaluate primarily air quality parameters like removal of particulate matter, carbon sequestration and storage, temperature effects resulting in energy use benefits and pollen impacts (Nowak and Crane 2000).

STRATUM is the street tree management and analysis tool used by many local cities. Using

commonly collected inventory data on tree species, size, health and location, the computer model calculates the dollar value of aesthetics, energy conservation, air quality improvement, carbon dioxide reduction, stormwater control and property value increases. The applicability of this model to oak woodland land use conversion is dependent on the location of the proposed development in relation to a more urbanized environment (USDA Forest Service 2009).

□ InVEST (Integrated Valuation for Ecosystem Services and Tradeoffs) is another computer program designed to "help land managers and government workers assess this wide array of services" (ESA Press Release).¹⁰

G. CULTURAL.

Artifacts of the Native American people who historically lived in the County tend to be coterminous with oak woodlands and adjacent riparian areas, which provided the acorns they relied up on for food. Present day oak stands or individual trees may have historical significance due to past events or structures that were associated with them. Many historical accounts mention the trees and the use of specific trees as landmarks or as boundary markers.

As an example, California Historical Landmark 410, Charter Oak, Charter Oak Drive, 600 Yards West of Road 180 Visalia was the location on July 10, 1852, that a party commanded by Major James D. Savage conducted the election by which Tulare County was organized. Woodville, site of Wood's cabin, and the first county seat, was located about one-half mile south of this marker. This general area, the delta of the Kaweah River, was also known as the Four Creeks County.¹¹

H. SCENIC, AESTHETIC AND UNIQUE VALUES (THREE RIVERS COMMUNITY PLAN VISION AND VALUES AND COUNTY GENERAL PLAN SCENIC LANDSCAPES ELEMENT).

Tulare County has a complex structure of scenic natural landscapes, agricultural landscapes, and urban and rural communities. It possesses many of California's most unspoiled places and is experiencing rapid population growth and the need to diversify its economy. Tulare County's natural and working landscapes include growing communities and cities with expanding urban edges.

Scenic landscapes include agricultural lands, woodlands, forestlands, watercourses, mountains, meadows, structures, communities, and other types of scenery that contribute to the visual beauty of Tulare County.

Tulare County's natural and working landscapes include, but are not limited to:

□ Viewshed. An area of land, water, or other environmental features that is visible from a fixed vantage point. Viewsheds tend to be areas of particular scenic or historic value that are deemed worthy of preservation against development or other change. The preservation of viewsheds is typically the goal in the designation of open space areas, green belts, and urban separators.

¹⁰ Economic Incentives for Oak Woodland Preservation and Conservation, general technical report psw-gtr-251,

Proceedings of the 7th California Oak Symposium: Managing Oak Woodlands in a Dynamic World.

¹¹ California Office of Historic Preservation.

- Urban Separators. Urban separators maintain natural and working landscapes between urban areas. They are used to enhance definition of individual communities, hamlets and cities and maintain their identity.
- □ Working Landscapes. These are landscapes shaped by human activities that produce economic commodities such as agricultural lands, ranch lands, and timber lands. They may also include picturesque commercial districts in communities, crops, orchards, agricultural structures, stands of timber, and canals.

The purpose of the Scenic Landscapes Element of the Tulare County General Plan is to protect and feature the beauty of Tulare County's views of working and natural landscapes, to protect the scenic views for travelers along the County's roads and highways, to provide distinctive communities, rural development patterns and character that is compatible with the best features of Tulare County's traditional community centers and agricultural landscapes, and to design infrastructure to visually enhance the built environment while minimizing visual impact on rural and natural places.¹²

The Three Rivers Community Plan includes is a statement regarding fundamental community values including a shared vision for the future of the Three Rivers Community. Three Rivers is a unique rural residential community located in the unincorporated portion of Tulare County, in the foothills of the Sierra Nevada Mountain Range with many valuable natural assets, including the Kaweah River, open space, steep terrain, natural blue oak woodland and riparian communities, and is the gateway to the Sequoia National Park. The natural resources and diverse landscape of Three Rivers contribute to the beauty, character, and recreational opportunities enjoyed and valued by the community.

Three Rivers Community Plan Vision Statements

Protect and Preserve Oak, Sycamore and Cottonwood Woodlands.

Preserve Visual Resources, Including Viewsheds and Ridgelines.

Preserve Historical, Cultural and Archaeological Resources Including the Kaweah Post Office, Historical Bridges, and Cultural Native American Resources.

Provide Land Uses Consistent Community Character including an Urban Development Boundary (UDB) that is contiguous with the existing Planning Area Boundary.

Create a Town Center or centers with a Concentration of Commercial, Retail and Social Uses to Help Strengthen Three Rivers as a Livable Community.

Ensure adequate land use supplies for residential, commercial, industrial and public uses to accommodate future growth and ensure the community's economic viability.

Manage growth.

Ensure compatibility between land use types and intensities.

Encourage a diversity of housing options for all Three Rivers residents, including affordable housing for

¹² Tulare County General Plan, Scenic Landscapes Element, Part I, Chapter 7, 2012

families, seniors, and National Park Service employees.

Ensure that future development is compatible with existing development and the natural environment.

Establish rural compatibility standards.

Establish Standards for signage which balances practical business considerations with community design standards.

Development of Noise Standards Reflective of a Foothill and Canyon Community Environment.

Vegetation standards.

Establish Setback standards for residential development.

Establish Streetscape guidelines for roadways, paths and sidewalks.

Establish Standards for fences.

Apply Rural Compatibility Standards through the County Project Review Committee process.

Develop a Traffic Circulation Plan with management strategies and improvements to increase safety and community access.

Establish Lighting Standards for Night Sky Conservation and Protection.

Development of a Community Park.

I. ENVIRONMENTAL VALUES GHG (SEQUESTRATION).

Oaks and other plants directly reduce ozone pollution by absorbing and destroying ozone within their leaves. The leaves also intercept airborne particulates, helping to lower ground level concentration of these pollutants. Oaks, as well as other trees, also sequester carbon in their mass as they grow. Large trees with longevity such as oaks convert large quantities of carbon dioxide to various organic compounds that make up wood. Oak woodlands therefore provide a means for helping to offset the increase in atmospheric carbon dioxide levels related to the use of fossil fuels. Soils can also sequester carbon, and soils with high organic content such as those found under oak canopies can hold larger amounts of carbon, thereby reducing the amount of greenhouse gasses that contribute to global warming. Oak canopies also mitigate the effects of global warming by reducing ground surface temperatures. In urban/ developed areas oak trees provide protective shading for houses and people, lowering the need for air conditioning and aiding in the maintenance of air quality. Shading provided by trees can also reduce the amount of volatile organic compounds (VOCs) released from vehicles. Because VOCs are precursors to photochemical smog, lower VOC levels result in lower levels of ground -level ozone.¹³

J. SOIL AND WATER RETENTION THROUGH GREEN INFRASTRUCTURE AND FLOOD

¹³ Napa County Voluntary Oak Woodlands Management Plan – October. 26, 2010

PROTECTION, AND IMPROVED WATER QUALITY.

Oaks help minimize soil erosion in several ways: a) Oak woodland canopies capture 20-30% more rainfall than do grasslands, and, reducing their potential to erode soil; b) Dead leaves and twigs that accumulate on the soil surface under oaks provide further protection against the erosive action of rainfall; and c) Tree roots and their associated mycorrhizal fungi also help to reinforce and stabilize soil, reducing both the risk of landslides and erosion caused by running surface water gully erosion and scour along creeks. Oak woodlands located in areas prone to erosion help prevent degradation in water quality and overall land resource value that are associated with erosion. Planting oaks in historically wooded areas showing accelerated erosion from lack of tree cover can help stabilize and prevent further erosion in these areas.

Oak trees also capture and transpire moisture from the soil during the growing season. Compared to annual vegetation, oaks can extract water from the soil profile to a greater depth. Consequently, soils in oak woodland areas are able to absorb and hold greater amounts of rainfall than equivalent soils with only annual grassland cover. This extra storage capacity further reduces the potential for flooding during the rainy season and promotes groundwater recharge.

Oak woodlands located on both slopes and level lands near streams play an important role in protecting water quality. By minimizing soil erosion as noted above, oak woodlands can help reduce the amount of sediment washing into local waterways. High levels of sediment in waterways can negatively impact the aquatic food supply by reducing habitat available for fish, aquatic invertebrates and other organisms important to the diets of fish and birds. The contribution of oaks and other vegetation to erosion prevention near waterways is especially important if soils contain toxic material, such as mercury or other heavy metals. Oaks and other vegetation also help reduce soil contamination by absorbing heavy metals, fertilizer nutrients, and pesticides from the soil and intercepting sediments containing these pollutants, thereby preventing these materials from reaching surface waters. Oaks and associated permanent vegetation along waterways also can reduce potential contamination of waterways from airborne pesticide drift, since oak foliage can intercept airborne pesticides.¹⁴

K. IMPROVED AIR QUALITY THAT BENEFITS PUBLIC HEALTH.

Urban vegetation can directly and indirectly affect local and regional air quality by altering the urban atmospheric environment. The four main ways that urban trees affect air quality area:

- Temperature reduction and other microclimatic effects
- Removal of air pollutants
- Emission of volatile organic compounds and tree maintenance emissions
- Energy effects on buildings

Temperature Reduction

Tree transpiration and tree canopies affect air temperature, radiation absorption and heat storage, wind speed, relative humidity, turbulence, surface albedo, surface roughness and consequently the evolution of the mixing-layer height. These changes in local meteorology can alter pollution concentrations in urban areas. Although trees usually contribute to cooler summer air temperatures, their presence can increase air temperatures in some instances. In areas with scattered tree canopies, radiation can reach

¹⁴ USDA Forest Service, Pacific Southwest Research Station, Center for Urban Forest Research, Davis CA. ht1p://www.fs.fed.us/psw/programs/cufr/

and heat ground surfaces; at the same time, the canopy may reduce atmospheric mixing such that cooler air is prevented from reaching the area. In this case, tree shade and transpiration may not compensate for the increased air temperatures due to reduced mixing. Maximum mid-day air temperature reductions due to trees are in the range of 0.04oC to 0.2oC per percent canopy cover increase. Below individual and small groups of trees over grass, mid-day air temperatures at 1.5 m above ground are 0.7oC to 1.3oC cooler than in an open area. Reduced air temperature due to trees can improve air quality because the emission of many pollutants and/or ozone-forming chemicals are temperature dependent. Decreased air temperature can also reduce ozone formation.

Removal of Air Pollutants

Trees remove gaseous air pollution primarily by uptake via leaf stomata, though some gases are removed by the plant surface. Once inside the leaf, gases diffuse into intercellular spaces and may be absorbed by water films to form acids or react with inner-leaf surfaces. Trees also remove pollution by intercepting airborne particles. Some particles can be absorbed into the tree, though most particles that are intercepted are retained on the plant surface.

The intercepted particle often is suspended to the atmosphere, washed off by rain, or dropped to the ground with leaf and twig fall. Consequently, vegetation is only a temporary retention site for many atmospheric particles.

In 1994, trees in New York City removed an estimated 1,821 metric tons of air pollution at an estimated value to society of \$9.5 million. Air pollution removal by urban forests in New York was greater than in Atlanta (1,196 t; \$6.5 million) and Baltimore (499 t; \$2.7 million), but pollution removal per m2 of canopy cover was fairly similar among these cities (New York: 13.7 g/m2/yr; Baltimore: 12.2 g/m2/yr; Atlanta: 10.6 g/m2/yr)h. These standardized pollution removal rates differ among cities according to the amount of air pollution, length of in-leaf season, precipitation, and other meteorological variables. Large healthy trees greater than 77 cm in diameter remove approximately 70 times more air pollution annually (1.4 kg/yr) than small healthy trees less than 8 cm in diameter (0.02 kg/yr)k.

Air quality improvement in New York City due to pollution removal by trees during daytime of the inleaf season averaged 0.47% for particulate matter, 0.45% for ozone, 0.43% for sulfur dioxide, 0.30% for nitrogen dioxide, and 0.002% for carbon monoxide. Air quality improves with increased percent tree cover and decreased mixing-layer heights. In urban areas with 100% tree cover (i.e., contiguous forest stands), short-term improvements in air quality (one hour) from pollution removal by trees were as high as 15% for ozone, 14% for sulfur dioxide, 13% for particulate matter, 8% for nitrogen dioxide, and 0.05% for carbon monoxide.

Emission of Volatile Organic Compounds (VOCs)

Emissions of volatile organic compounds by trees can contribute to the formation of ozone and carbon monoxide. However, in atmospheres with low nitrogen oxide concentrations (e.g., some rural environments), VOCs may actually remove ozone, because VOC emissions are temperature dependent and trees generally lower air temperatures, increased tree cover can lower overall VOC emissions and, consequently, ozone levels in urban areas. VOC emission rates also vary by species. Nine genera that have the highest standardized isoprene emission rate, and therefore the greatest relative effect among genera on increasing ozone, are: beefwood (*Casuarina* spp.), *Eucalyptus* spp., sweetgum (*Liquidambar* spp.), black gum (*Nyssa* spp.), sycamore (*Platanus* spp.), poplar (*Populus* spp.), oak (*Quercus* spp.), black locust (*Robinia* spp.), and willow (*Salix* spp.). However, due to the high degree of uncertainty in atmospheric modeling, results are currently inconclusive as to whether these genera will contribute to an overall net formation of ozone in cities (i.e., ozone formation from VOC emissions are greater than ozone

removal). Some common genera in Brooklyn, NY, with the greatest relative effect on lowering ozone were mulberry (*Morus* spp.), cherry (*Prunus* spp.), linden (*Tilia* spp.) and honey locust (*Gleditsia* sp.).

Because urban trees often receive relatively large inputs of energy, primarily from fossil fuels, to maintain vegetation structure, the emissions from these maintenance activities need to be considered in determining the ultimate net effect of urban forests on air quality. Various types of equipment are used to plant, maintain, and remove vegetation in cities. These equipment include various vehicles for transport or maintenance, chain saws, back hoes, leaf blowers, chippers, and shredders. The use and combustion of fossil fuels to power this equipment leads to the emission of carbon dioxide (approximately 0.7 kg/l of gasoline, including manufacturing emissions) and other chemicals such as VOCs, carbon monoxide, nitrogen and sulfur oxides, and particulate matter. Trees in parking lots can also affect evaporative emissions from vehicles, particularly through tree shade. Increasing parking lot tree cover from 8% to 50% could reduce Sacramento County, CA, light duty vehicle VOC evaporative emission rates by 2% and nitrogen oxide start emissions by less than 1%.

Trees reduce building energy use by lowering temperatures and shading buildings during the summer, and blocking winds in winter. However, they also can increase energy use by shading buildings in winter, and may increase or decrease energy use by blocking summer breezes. Thus, proper tree placement near buildings is critical to achieve maximum building energy conservation benefits.

When building energy use is lowered, pollutant emissions from power plants are also lowered. While lower pollutant emissions generally improve air quality, lower nitrogen oxide emissions, particularly ground-level emissions, may lead to a local increase in ozone concentrations under certain conditions due to nitrogen oxide scavenging of ozone.

The cumulative and interactive effects of trees on meteorology, pollution removal, and VOC and power plant emissions determine the overall impact of trees on air pollution.

Combined Effects

Changes in urban microclimate can affect pollution emission and formation, particularly the formation of ozone. A model simulation of a 20 percent loss in the Atlanta area forest due to urbanization led to a 14 percent increase in ozone concentrations for a modeled day. Although there were fewer trees to emit VOCs, an increase in Atlanta's air temperatures due to the urban heat island, which occurred concomitantly with tree loss, increased VOC emissions from the remaining trees and anthropogenic sources, and altered ozone chemistry such that concentrations of ozone increased.

A model simulation of California's South Coast Air Basin suggests that the air quality impacts of increased urban tree cover may be locally positive or negative with respect to ozone. The net basin-wide effect of increased urban vegetation is a decrease in ozone concentrations if the additional trees are low VOC emitters. Modeling the effects of increased urban tree cover on ozone concentrations from Washington, DC to central Massachusetts reveals that urban trees generally reduce ozone concentrations in cities, but tend to slightly increase average ozone concentrations in the overall modeling domain. Interactions of the effects of trees on the physical and chemical environment demonstrate that trees can cause changes in pollution removal rates and meteorology, particularly air temperatures, wind fields, and mixing-layer heights, which, in turn, affect ozone concentrations.

Urban Forest Management:

Urban forest management strategies to help improve air quality include:

- Increase the number of healthy trees (increases pollution removal).
- Sustain existing tree cover (maintains pollution removal levels).
- Maximize use of low VOC emitting trees (reduces ozone and carbon monoxide formation).
- Sustain large, healthy trees (large trees have greatest per tree effects).
- Use long-lived trees (reduces long-term pollutant emissions from planting and removal).
- Use low maintenance trees (reduces pollutants emissions from maintenance activities).
- Reduce fossil fuel use in maintaining vegetation (reduces pollutant emissions).
- Plant trees in energy conserving locations (reduces pollutant emissions from power plants).
- Plant trees to shade parked cars (reduces vehicular VOC emissions).
- Supply ample water to vegetation (enhances pollution removal and temperature reduction).
- Plant trees in polluted areas or heavily populated areas (maximizes tree air quality benefits).
- Avoid pollutant sensitive species (increases tree health).
- Utilize evergreen trees for particulate matter reduction (year-round removal of particles).¹⁵

L. TAX ADVANTAGES ASSOCIATED WITH OAK WOODLAND CONSERVATION EASEMENTS

An oak woodland conservation easement is a voluntary tool for landowners to protect their land while retaining ownership. A conservation easement is a legal restriction that a landowner places on his or her property to define and limit the type of development that may take place there. When land is protected by an easement, the landowner continues to own the land while role of the entity that holds the easements is to ensure that the resource values are protected over time. Generally, conservation easements are purchased by or donated to a nonprofit conservation organization, such as a qualified Land Trust, which carries the responsibility to enforce the restrictions in perpetuity.

The following are tax advantages associated with conservation easement:

1. Federal and state income tax deductions.

If a property owner is donating an easement, they may receive a federal and state income tax deduction for the difference in the value of the property before the easement is granted and its after-easement value (often the difference between the current fair market value of the land and the fair market value of the land with fewer allowed home sites).

2. Possible reduction in property taxes.

It may, depending upon how recently the property was purchased, the purchase price, and the value of the land after the conservation easement is placed. There may be an opportunity, especially for recent buyers, to get a reduced assessment (and reduced taxes) based on the diminished value of the land after the placing of the conservation easement on the land.

¹⁵ The effects of urban trees on air quality, David J. Nowak, USDA Forest Service, Syracuse, NY

VI. OAK WOODLAND HABITATS IN THE THREE RIVERS UDB (INVENTORY)

(see Attachment 1)

1.0 Introduction

The oak woodland Assessment characterized oak woodland communities present within the Three Rivers Urban Development Boundary (UDB, Appendix C) subject to regulation under PRC 21083.4 (Senate Bill 1334) and to determine the significance of oak woodland impacts associated with the Community Plan Update (in the UDB Footprint) based upon observed conditions within the UDB Area during the site assessment visits conducted in January-April, 2016.

The UDB Area is comprised of approximately 21,000 acres, or 32.5 square miles. This is considerably larger than the area of the Three Rivers Community Services District, which totals approximately 5,354 acres, or 8.4 square miles acres of rural residential, limited commercial facilities interspersed along the Kaweah River and oak woodlands and surrounding undeveloped land. The UDB contains mixed chaparral, oak woodland, and riparian habitats, including a portion of the Kaweah River, which occupies more than 78 acres in the UDB (the mapping polygon is smaller than the actual River reach). Land use surrounding the UDB Area is private cattle grazing land, Bureau of Land Management and National Park lands among others. Elevations within the UDB range from approximately 3,500 feet in the South Fork Kaweah watershed to 900 feet, near Lake Kaweah (See Appendix C). The UDB contains mixed chaparral, oak woodland, and riparian habitats, including a portion of the Kaweah River. Land use surrounding the UDB Area is private cattle grazing land, Bureau of Land Management and National Park lands. Elevations within the UDB range from approximately 3,500 feet in the South Fork Kaweah watershed to 900 feet, near Lake Kaweah (See Appendix C). The UDB contains mixed chaparral, oak woodland, and riparian habitats, including a portion of the Kaweah River. Land use surrounding the UDB Area is private cattle grazing land, Bureau of Land Management and National Park lands. Elevations within the UDB range from approximately 3,500 feet in the South Fork Kaweah watershed to 900 feet near Lake Kaweah.

The land in and around Three Rivers supports largely undisturbed (uncultivated) vegetation and native plant communities. According to the natural community classification scheme used by Holland (1986), the proposed Three Rivers site is located in a part of the southern San Joaquin Valley that originally contained components of at least four natural communities prior to development. Three upland communities include Valley Oak Riparian Forest, Willow-Cottonwood Riparian Forest, Valley Grassland and Blue Oak Woodland. The area in the UDB is characterized by open blue oak (*Quercus douglasii*) stands with forbs and grasses in the understory, California buckeye (*Asculus californica*) and interior live oak (*Q. wizlizenii*) on slopes and uplands while riparian-associated communities are clustered along the Kaweah River and tributaries. Shrubs comprise a major or minor component of the understory depending on the site.

Blue Oak Woodlands

Blue oaks are often the dominant tree in the woodlands where they occur, and can be the only tree in large areas of these woodlands. These occupy most areas outside of wetlands and exposed south-facing slopes, where only a few or no trees persist. Approximately 157,540 acres of blue oak woodland occur in Tulare County and approximately 17,000 acres of blue oak woodland occur in the UDB. Patches of blue oak can extend from a few trees to several miles in extent. Very old trees (300-800 yr.) with very few sapling or seedlings dominate many blue oak woodlands in Tulare County. However, reproduction and recruitment do not appear to be entirely absent as is often claimed of oak woodlands. Foothill pine is generally absent from this watershed, in contrast to many watersheds in the southern Sierra. California

buckeye, Valley oak, interior live oak, and individual canyon live oak and California black oak may also be present, although these species are typically present above 4000 feet. These woodlands are generally associated with steep, hot, dry, often west-facing or south-facing hillsides. Blue oak woodlands are likely to occur in small patches on steep ground and as large blocks with variable canopy cover on gentle slopes. Its understory consists of dominant, non-native annual grassland with patches of native grasses such as needle grass (*Stipa lepida*), and California melic (*Melica californica*).

Interior Live Oak Woodlands

Live oaks remain green all year, with a gradual replacement of very prickly, cupped leaves throughout the year. In most areas, this species is associated with blue oak, California bay, buckeye, and Valley oak and western sycamore and rarely occurs in pure stands. Approximately 68,000 acres of interior live oak woodlands occur in Tulare County and approximately two thousand in the UDB. During the recent drought, this species appears to have been disproportionately impacted. Residential development impacts this species is disproportionately because it susceptible to rots which may compromise stem integrity.

Valley Oak Woodlands

Valley oaks remain in small pockets of relatively undisturbed valley floors and along the Kaweah River and other, smaller streams. They occupy approximately 2,500 acres in the UDB and over 250 acres elsewhere in in Tulare County. In Tulare County and throughout the state, Valley oak woodlands have clearly been reduced more than any other oak woodland (Pavlik et al. 1991).

1.2 Brief Survey Area Description

The oak woodland assessment was conducted contemporaneously with the Three Rivers Community Plan Update Project and associated environmental documents and process. The subject Site is in an unincorporated area located in Section 25 Township 17 South, Range 28 East, within the Three Rivers Urban Development Boundary located south of Sequoia and Kings Canyon National Parks and north the Kaweah Lake and the Terminus Dam. The parcels within the UDB include a total of over 21,000 acres of which approximately 11,200 acres are potentially buildable based on a slope gradient of less than 30 percent. Based on zoning, approximately 5,300 acres are available in the vacant category and could be developed (see Appendix C) and existing developed parcels could be expanded or impacts increased.

1.3 Survey Summary

Approximately 17,000 acres of oak tree-dominated plant communities were observed in the DBA (Appendix C). Of the 17,000 acres, approximately 5,300 acres of oak-tree dominated communities are located in the DBA Development Footprint (vacant parcels, <30% slope). The majority of observed trees were blue oak (*Quercus douglasii*), a native oak. Other tree species observed during surveys were interior live oak (*Q. nizlizeni*), buckeye (*Aesculus californica*) in the uplands, and Valley oak (*Q. lobata*), California bay (*Umbullaria californica*), sycamore (*Plantanus racemosa*), cottonwood (*Populus fremontii*), Alder (*Alnus* sp.) and willow (*Salix* sp.) in the riparian areas. The density of trees measured in 21 sample plots averaged 110 trees per acre (range: 20-290 per acre), which, extrapolated over the entire 17,000 acres, results in an estimate of 1,870,000 trees in total (or approximately 340,000-4,930,000 oak trees) within the DBA Footprint. Generally, oak trees are in fair condition with sporadic understory regeneration. However, an average of 11 oak trees (10%, range: 6 trees/acre for Valley oak and 15.6 trees/acre for

blue oak and interior live oak) per acre appear dead from recent drought. All plot data collected during this assessment are presented in Appendix A.

2.0 METHODS

Oak woodland mapping within the DBA commenced in January, 2016 using a three-step process: preliminary mapping was performed using aerial image recognition software and manual editing in the ArcGIS environment; then a field visit was conducted to ground-truth the preliminary map and collect detailed tree plot data; finally the data was analyzed and the oak woodland map was finalized based on field observations. The assessment of tree size, distribution, species composition, and health and condition within the UDB Area was performed using a sampling scheme based on the preliminary oak woodland map. A sampling scheme was used (as opposed to a complete inventory) due to the difficulty associated with surveying across the steep terrain and through the dense vegetation of the DBA. Sample plots were established throughout the wooded areas within the DBA, and all trees within the plots were measured for the various attributes. Data collected at each of the tree plots are presented in Appendix A. Data collected in tree plots were analyzed to create relevant estimates of overall site woodland characteristics including tree density, size, and species composition. A detailed description of the methods used to map woodlands, measure trees, and analyze tree data are presented below. Plant names follow those given in The Jepson Manual: Vascular Plants of California, 2nd Edition (Baldwin et al. 2012).

2.1 Preliminary Oak Woodland Mapping from Aerial Imagery

Tree-dominated areas within the DBA were delineated on aerial images in the ArcGIS environment. The publicly available National Aerial Image Program (NAIP) full-color aerial images (one meter resolution, 2010) were used as the basis for this image interpretation. Areas outside oak woodland polygons were identified as shrub or herb cover through a supervised editing process. The final delineation of oak woodlands within the DBA is presented in Appendix C.

2.2 Literature Review

A review of literature was conducted to provide additional information about oak woodlands, biological studies and the local oak woodlands compared to other woodlands statewide, including the National Park Service, California Department of Fish and Wildlife, academic studies, California Native Plant Society, Caltrans, Bureau of Land Management, California Oak Foundation, etc.

Definition of Oak Woodlands. (Oak Woodlands Conservation Act of 2001) and (SB 1334) (Public Resources Code (PRC) section 21083.4) and PRC §4793(e).

Consultation with Experts and Agencies on Oak Woodlands.

Several biologists were consulted on this study to provide additional 8

information. Agencies with adopted oak woodland management plans will be consulted as will consultants who have scoped and prepared the plans.

Prior to and during field work, GIS specialists will map and identify oak woodland biological elements with the following starting points:

- 1. High-resolution aerial map of the UDB, including elevations, rivers, creeks, parcels (this already exists);
- 2. LANDSAT or other aerial imagery or with refractive indices;
- 3. Aerial map with zoning with panels with higher magnification of small parcels;
- 4. Zoning and development map (may be same as (3);
- 5. Survey plot location maps.

These data will be analyzed to produce synthetic maps of the UDB oak woodlands and layer specific geographic information to provide additional analyses.

2.3 Field Data Collection

Tree-dominated plant communities (>10% tree cover) within the DBA were mapped based on aerial photography utilizing aerial image interpretation software. This tree-dominated plant communities map served as the basis for the field sampling design. A sampling design was utilized (as opposed to a 100% survey) to facilitate characterization of the tree-dominated areas over the densely vegetated and steeply sloped terrain of the DBA.

Biologists investigated select survey plot sites and investigated all possible, accessible areas. Oak woodlands of all types were documented with photopoints, general landscape photographs and specific oak woodland inventory stand data. The data was collected in 1/10- acre standardized inventory plots scattered throughout the UDB. Oak average stand height, density, volume, canopy cover, understory components, biological diversity, riparian and wetland communities were also mapped and stand reproductive status (Status of natural regeneration and recruitment trends) was also assessed. The oak census includes notes about demographics and current development impacts, (Threats to Oak Woodland Communities, including, Fire, Disease, Climate Change, Urban Development including infrastructure, and tree harvesting).

The oak tree inventory was performed from March 1 to April 30, 2016 by Bobby Kamansky (B.S. Forestry, M.S. Biology) and Assistant Biologist, Steven Standlee. 22 circular sample plots of radius 37.2 feet, each 435 square feet (0.1 acres) in size, were established in a stratified random nature within the mapped oak woodland polygons. This resulted in 2.2 acres of sampled oak habitat, or a small percentage of the UDB planning area. Sampling was of sufficient frequency to reliably predict the density, species composition, and size of trees subject to relevant regulations with a precision level of 80 percent. Data was collected on standard data forms. All trees larger than five inches diameter at breast height (DBH) were assessed for DBH, species, canopy radius (defined as the average of three measurements in opposing directions of the longest lateral branch of the crown), health, structure, and overall condition. Narratives for tree ratings are presented in Appendix A. Ratings of poor, fair, and good were translated into scores of 1, 2, and 3 respectively for use in data analysis. Additional plot data collected at each tree plot included notes on special habitat features (nests, tree regeneration, water features, rock outcrops, etc.) and shrub layer percent cover and species composition.

2.4 Data Analysis and Woodland Map Finalization

Plot data were entered into a spreadsheet format and summary statistics were calculated for all of the parameters measured. Data were averaged by plot and are presented in Appendix A. For multi-stemmed trees, the sum of all stems' DBH was used. Field notes were compared with the preliminary oak woodland map which was found to sufficiently predict the presence and canopy cover of oak woodland habitat types within the DBA.

3.0 RESULTS

Approximately 17,000 acres of oak woodlands were identified within the DBA (Appendix C). - The density of trees measured in the 22 sample plots averaged 109 trees per acre (range 20-250). The average diameter at breast height of trees across the site was 18 inches, ranging from an average of 12 to 27 inches in sample plots. Generally, oak trees within the DBA are moderate to large in size with little obvious understory regeneration. Trees were assessed for health, structural condition, and overall

condition and found to range from good to poor across the site averaging fair in all categories assessed. Tree ratings as well as all plot data collected during this assessment are presented in Appendix A. Appendix C shows the location of all mapped oak woodland resources within the DBA.

3.1 Oak Woodland Characteristics

Blue oak woodland and forest was found in the bottom of ravines and on north-facing slopes in the DBA. Canopy cover of oak woodland polygons ranged from 25 percent to 80 percent with an average of 59 percent over the entire site. Blue oak woodlands within the DBA are completely dominated by blue oak trees with interior live oak. Common understory shrubs include poison oak (*Toxicodendron diversilobum*), buck brush (*Ceanothus cuneatus*), elderberry (*Sambucus mexicana*), and coffeeberry (*Frangula tomentosa*). Common understory herbs include common bedstraw (*Galium aparine*), coffee fern (*Pellaea andromedifolia*), wild cucumber (*Marah fabacea*), and various annual grasses and forbs.

Some understory regeneration of both interior live oak and blue oak were observed throughout the DBA but were not measured, except for seedling densities. Oaks within the DBA (within the tree plots surveyed) were found on average to be in fair condition. The most common causes for oak decline observed during this assessment included root and trunk rot by various fungi and structural defects related to the steep slopes and apparent drough-caused mortality, which is significant 2015-16 seasons. Rating narratives and results of the assessment are presented in Appendix A.

3.2 Tree Plot Data

Tree density and species composition.

Tree density in each tree plot ranged from 20 to 290 trees per acre, resulting in a site average of 109 trees per acre. Extrapolated over the entire approximately 17,000 acres of oak woodlands within the DBA, this data estimates that approximately 1,870,000 oak trees larger than five inches DBH grow in the DBA. Of these 1.8 million trees, development is estimated to directly and indirectly impact approximately 28,885 oak trees on 5,300 acres (assuming an average of 5% of trees are impacted on each parcel, an average of 109 stems per acre over the 5,300 acres totals 577,700 trees) could potentially be directly or indirectly impacted through development and other activities, depending on avoidance and specific woodland characteristics on developed sites at full build out. Ten of the tree plots contained only blue oak trees.

Tree size.

The average of the diameters of all trunks was used in this analysis. Average tree DBH in plots ranged from 12 to 27 with an average of 18 inches. Average canopy cover in plots ranged from 25% to 83% with an average of 63%. Tree health, structure, and condition Tree plot average rating for overall health of trees ranged from zero to three dead trees in the plots. The site average for tree health was 11 dead trees per acre indicating that most trees are generally of fair health, but that up to approximately 10% of the trees may be dead owing to drought impacts. The range of tree plot average structural ratings and overall condition ratings were zero to one with a site average of 0.4 key structures per plot (or approximately four snags or downed logs per acre), indicating that trees are generally of fair structure and overall condition, but drought impacts have reduced density and few key structures such as logs and snags exist in the woodlands.

Understory shrub species richness and percent cover.

The percent cover of shrubs in the understory of tree plots ranged from zero to 55 percent with a site

average of 17 percent. The species richness of the shrub layer ranged from two to seven species observed, with a site average of 2.3 shrubs species per plot.

Species observed included poison oak, buck brush, coffeeberry, chamise (*Adenostoma fasciculatum*) which are all common shrub species in the area. Summary data are presented in **Table 2**.

Туре	Large Trees /Acre	Elevation	Tree Species Richness per 1/10- acre plot	Plant Species Richness per 1/10- acre plot	Average DBH	Average Crown Cover	Seedlings and Saplings/ acre	Average Health (# Dead/acre)	Key Structures (# logs and snags/acre)	Condition	Shrub Cover	Shrub Species Richness
All	109	1080	.3.3	15.7	18.1	63%	235.8	11.1	3.7	2.9	17.1%	1.6
Blue Oak	114	1136	3.4	14.3	15.6	57%	116.7	15.6	5.1	2.4	17.0%	1.7
Valley Oak	105	916	2.6	18.2	18.9	69%	353.0	6.0	7.3	2.6	15.5%	1.0

Table 3 - Summary Statistics for Oak Woodlands within the DBA Range Site Average

3. STATUS OF NATURAL REGENERATION AND RECRUITMENT TRENDS.

The Three Rivers OWMP is being prepared contemporaneously with the Three Rivers Community Plan Update project.

Interior live oaks in subdivisions and near houses are disproportionately removed because the trees exhibit visible signs of rot or poor health and are first to be cut or removed by landowners. In some areas of denser development, interior live oaks are entirely absent and no recruitment is evident.

While the Oaks 2040 report indicated zero reproduction in Valley oak stands, UDB surveys detected Valley oak reproduction in nearly every Valley oak stand. Blue and interior live oak trees exhibit contrasting patterns depending on slope, aspect and soils. However, most south and west-facing blue oak stands appear to have very few seedlings and saplings in the understory while north and east-facing slopes appear to be continuously regenerating.

While many stands appear to be reproducing, on average, at least 10% of blue oaks appear to have died from drought-induced mortality. This pattern could continue in the years to come from continued or subsequent droughts and secondary attacks and pathogens. This mortality will likely have greatest impacts on blue oak trees on west and south-facing slopes where little current regeneration leaves demographic gaps in the stands when old trees die. These stands are also among the most sparsely-wooded. Because the hottest, steepest and most exposed slopes already lack woodlands at the lowest elevations in the UDB, the pattern of sparse or no woodland on west and south-facing slopes appears likely to continue higher in the watershed and UDB decreasing blue oak woodland canopy and extent.

Climate change modeling indicates that, based on temperature and precipitation, oak persistence will be increasingly challenged, particularly Valley oaks at lowest elevations (Kuypers et al). However, the Kaweah River is undammed through the UDB, providing abundant, critical water supply in the summer for Valley oaks. This, and the oak woodland's width, may protect the woodland against temperature and climate extremes. Nevertheless, impacts creating gaps, narrowing the woodland extent and tree removal or health impacts decrease the likelihood of woodland persistence in the UDB.

Because not all oak trees on even the most dry, exposed slopes are dead and some appear to be vigorous even after several years of exceptional drought, it appears the oaks in the UDB possess some climate adaptability and resilience.

Natural genetic variation may include some drought-adapted and some drought-sensitive trees. It is likely the recent exceptional drought removed the most sensitive ecotypes in the population.

4. CURRENT DISTRIBUTION AND HISTORICAL ESTIMATES OF THE DISTRIBUTION OF OAK WOODLANDS.

Oak woodland mapped within the DBA were found to contain a common assemblage of species, tree size, and density distribution common to oak woodlands of this type throughout Central California.

5. CURRENT CONDITIONS. DETERMINE BASELINE/EXISTING CONDITIONS AND HISTORICAL TRENDS AND PATTERNS IF POSSIBLE. IDENTIFY WILLIAMSON ACT LANDS AND FRAGMENTED AREAS.

The UDB Area is comprised of approximately 21,000 acres, or 32.5 square miles. This is considerably larger than the area of the Three Rivers Community Services District, which totals approximately 5,354 acres, or 8.4 square miles acres of rural residential, limited commercial facilities interspersed along the Kaweah River and oak woodlands and surrounding undeveloped land. The UDB contains mixed chaparral, oak woodland, and riparian habitats, including a portion of the Kaweah River, which occupies 78 acres in the UDB. Land use surrounding the UDB Area is private cattle grazing land, Bureau of Land Management and National Park lands. Elevations within the UDB range from approximately 3,500 feet in the South Fork Kaweah watershed to 900 feet near Lake Kaweah (See Maps in Appendix C).

The land in and around Three Rivers supports largely undisturbed (uncultivated) vegetation and native plant communities. According to the natural community classification scheme used by Holland (1986), the proposed Three Rivers site is located in a part of the southern San Joaquin Valley that originally contained components of at least four natural communities prior to development. Three upland communities include Valley Oak Riparian Forest, Willow-Cottonwood Riparian Forest, Valley Grassland and Blue Oak Woodland. The area in the UDB is characterized by open blue oak (*Quercus douglasii*) stands with forbs and grasses in the understory, California buckeye (*Asculus californica*) and interior live oak (*Q. mizlizenii*) on slopes and uplands while riparian-associated communities are clustered along the Kaweah River and tributaries. Shrubs comprise a major or minor component of the understory depending on the site. The UDB includes approximately 10,300 acres with land use designations for agricultural/grazing purposes. The majority of the areas are in agriculture preserves under the Williamson Act or under the jurisdiction of the Bureau of Land Management (BLM).

Blue Oak Woodlands

Blue oaks are often the dominant tree in the woodlands where they occur, and can be the only tree in large areas of these woodlands. These occupy most areas outside of wetlands and exposed south-facing slopes, where only a few or no trees persist. Approximately 157,740 acres of blue oak woodland occur in Tulare County and 17,000 acres of blue oak woodland occur in the UDB. Patches of blue oak can extend from a few trees to several miles in extent. Very old trees (300-800 yr.) with very few sapling or seedlings dominate many blue oak woodlands in Tulare County. However, reproduction and recruitment do not appear to be entirely absent as is often claimed of oak woodlands. Foothill pine is generally

absent from this watershed, in contrast to many watersheds in the southern Sierra. California buckeye, Valley oak, interior live oak, and individual canyon live oak and California black oak may also be present, although these species are typically present above 4000 feet. These woodlands are generally associated with steep, hot, dry, often west-facing or south-facing hillsides. Blue oak woodlands are likely to occur in small patches on steep ground and as large blocks with variable canopy cover on gentle slopes. Its understory consists of dominant, non-native annual grassland with patches of native grasses such as needle grass (*Stipa lepida*), and California melic (*Melica californica*).

Interior Live Oak Woodlands

Live oaks remain green all year, with a gradual replacement of very prickly, cupped leaves throughout the year. In most areas, this species is associated with blue oak, California bay, buckeye, and Valley oak and western sycamore and rarely occurs in pure stands. Approximately 68,000 acres of interior live oak woodlands occur in Tulare County and approximately 2,000 in the UDB. During the recent drought, this species appears to have been disproportionately impacted. Residential development impacts this species is disproportionately because it susceptible to rots which may compromise stem integrity.

Valley Oak Woodlands

Valley oaks remain in small pockets of relatively undisturbed valley floors and along the Kaweah River and other, smaller streams. They are shown as on the map and occupy approximately 2,500 acres in the UDB and over 250 acres elsewhere in in Tulare County. In Tulare County and throughout the state, Valley oak woodlands have clearly been reduced more than any other oak woodland (Pavlik et al. 1991).

Because of the configuration of the oak woodlands in the UDB, the potential for climate and droughtinduced mortality and stress, the past impacts and potential future development impacts, oak woodlands in the UDB area face multiple, potentially interacting stressors. The combined impacts from these stressors could result in dramatic changes in oak abundance and health in the UDB. Valley oaks are particularly vulnerable because of the narrow, linear configuration of the woodland along the River corridors and because the configuration of the smallest, most desirable parcels is in the same area, development impacts will have the greatest and disproportionate impact on Valley oak woodlands. From the North Fork Bridge and north along the Middle Fork, the woodland is narrow and forms a thin string of old trees, with little regeneration or pole-sized trees to form a woodland when the large, old trees die. Areas in this zone should be restored and protected as oak refugia to ensure persistence in this area. Drought-adapted local ecotypes should be cultivated and planted to ensure drought adaptability and woodland persistence in this area

[See tree-level and plot-level oak data]

6. THREATS TO OAK WOODLAND COMMUNITIES, INCLUDING, FIRE, DISEASE, CLIMATE CHANGE, URBAN DEVELOPMENT INCLUDING INFRASTRUCTURE, AND TREE HARVESTING. IDENTIFY AREAS WHERE THREATS ARE THE MOST PRESSING.

Some of these threats include: lack of regeneration, conversion to agricultural land (primarily vineyards), fragmentation of oak communities, sudden oak death, reduced access to groundwater, increased suppression of fire and risk of catastrophic fire damage both human and natural caused. A summary of current potential threats to oak woodlands are provided below:

Lack of Regeneration

Throughout California, the lack of regeneration in various native oaks has raised serious concern for landowners and managers, public trust agencies, policy makers and the public in general. Several statewide surveys have shown that some native oak species, including blue and valley oak, have inadequate levels of regeneration to sustain their populations over the long term.

To be sustainable, oak woodlands need to produce enough new trees to offset the loss of mature trees due to natural mortality as well as human caused factors. The regeneration process relies on the successful establishment and growth of new seedlings and eventual recruitment of these seedlings to the sapling and tree stages. Without adequate regeneration, oak stands thin out over time and eventually disappear as the last remaining oaks die. Acorn production varies widely from year to year.

Most oaks regenerate from a bank of persistent seedlings beneath the canopy, or a —seedling bank. Some species germinate in the winter after they have dropped and do not persist as a seed bank in the soil from year to year. Since most acorns land under or near the canopy of the parent tree, most of the seedling bank is in a very localized area. The shading and buildup of organic mulch beneath oak canopies favors acorn germination and early seedling growth.

Although oak canopy enhances seedling establishment, it suppresses the transition of seedlings to saplings. Persistent oak seedlings, which may be no taller than 6 inches in species such as blue oak, may survive for years in the understory. These seedlings can produce a strong root system but show little shoot growth. In fact, shoots of persistent seedlings may periodically die back to the ground, and resprout from the seedling base in the following growing season. Understory seedlings typically remain suppressed until competition is removed or eliminated by the decline, death, or removal of overstory trees. Seedlings released from overstory suppression can respond with relatively rapid shoot growth and can grow into saplings that eventually refill the canopy gap. Although a lack of sapling-sized oaks has been used to suggest that oak regeneration is inadequate, oak saplings are not likely to be found in well-stocked woodlands.

A lack of saplings in and near recent canopy gaps, however, is clear evidence of inadequate regeneration. In woodlands with stable canopy cover, low populations of persistent seedlings in the understory are the primary indicators of inadequate regeneration. Although most oak regeneration occurs through this near-canopy pattern, some acorns are planted beyond the oak canopy by seed-eating animals, especially scrub jays. If these acorns are placed in a favorable seedbed, in areas that have good levels of soil moisture, minimal amounts of plant competition, and little or no impact from herbivores, the acorns can produce vigorous seedlings.

Pioneer colonization of this type is seen in gardens, landscape beds, and sometimes along roadsides beyond pasture fences where browsing is minimal and road runoff provides additional soil moisture.

Artificial methods for establishing oaks from seed are based on creating favorable germination and growth conditions through weed control and protective enclosures. These conditions are uncommon in open grasslands used for ranging livestock, so oaks do not typically colonize active pastures even if they have historically supported oak woodlands. Some or all of the following factors may constrain oak regeneration at a given site. Alleviating only one constraint may or may not be adequate to ensure successful regeneration.

Low Acorn Production

Most California oaks that have been studied appear to require cross pollination to produce adequate acorn crops. Because oak pollen is dispersed by wind, adequate pollination will not occur in oaks that are far from others of the same species. Hence, isolated trees may produce few if any acorns.

Poor Seedbed Conditions

Healthy mature acorns normally fall from trees between September and October, often well before the soil has been wetted by fall rains. Natural mulch composed of leaf litter provides protection for acorns. Mulch prevents acorns from being overheated and desiccated and also protects at least some from being eaten. In areas that lack natural mulch and have been compacted by livestock, few acorns may be able to survive and germinate.

Herbivory

Animals that eat acorns and seedlings can substantially impact the growth and survival of oak seedlings and saplings. Rodents, deer, wild turkeys and pigs, and livestock all have the potential to limit or eliminate oak reproduction, but the relative importance of each herbivore varies by location. Gophers, ground squirrels, and voles can kill juvenile oaks by chewing and girdling stems. Livestock eat and trample understory seedlings, depleting or eliminating understory advance regeneration. Heavy browsing of released seedlings by livestock or deer can indefinitely suppress their growth and inhibit recruitment to sapling and tree size classes. Interior live oak is less palatable to livestock than valley and blue oak, so grazing impacts these species differently.

Water Stress and Groundwater

Due to California's Mediterranean climate, water stress associated with summer drought is an important factor limiting oak seedling survival and growth. Water stress is increased by the presence of non-native annual grasses and forbs in the understory that deplete soil moisture rapidly in the late spring. Shading provided by the oak canopy reduces impacts from temperature and wind speed, thereby reducing water stress. However, overstory oaks ultimately compete with seedlings for soil moisture, suppressing their growth. In riparian areas where soil moisture is less limited, valley oak regeneration can advance to the sapling size class even in the presence of overstory canopy.

Changes in groundwater tables/ levels resulting from overdraft conditions or —losingl streams and waterways can be particularly problematic for valley oak survivorship. Valley oaks often produce deep sinker roots that can reach the ground water. This allows the tree to access a constant supply of moisture throughout the summer and permits fast growth of the canopy. Because the tree canopy is dependent on this permanent source of water, a substantial drop in the depth of the water table puts the tree under severe water stress. Although root growth can keep pace with minor fluctuations in the groundwater table, roots cannot grow fast enough to compensate for a rapid drop of several feet or more.

Furthermore, once the tree becomes severely water stressed, root growth is adversely affected, which can cause a spiraling cycle of increasing water stress that can severely debilitate or kill mature trees. Large, mature valley oaks are more susceptible to rapid reductions in water table depth than are younger trees that may be able to adapt more rapidly to changing conditions. At any given site, a number of factors may be constraining seedling establishment and growth. Restoring regeneration potential may require changes in management practices to alleviate those factors that completely inhibit oak seedling

establishment and sapling recruitment. Management changes can have both positive and negative impacts, however. In some areas, complete cessation of grazing can lead to greater competition from non-native grasses and increased vole populations, leading to more seedling damage and reduced oak seedling establishment. Site-specific assessments are generally needed to assess the status of oak regeneration, identify factors that may be limiting regeneration, and develop management strategies that can promote natural regeneration. These same principles apply in areas where attempts are being made to restore oak woodlands.

Fire Frequency and Severity

Most of the tree oak species in California are adapted to tolerate fire in varying degrees. Mature oaks can survive frequent, low intensity fires, while younger trees regenerate after low-intensity fires by resprouting. However, studies indicate that while oak seedlings and saplings resprout readily after topkill, many juvenile oaks are killed by fire. After resprouting oak saplings require several to many years to recover their aboveground biomass. Repeated destruction of oak shoots in successive years depletes seedling energy reserves and increases the likelihood of disease and mortality. The combination of repeated fire and grazing is especially damaging to oak regeneration, and was historically used to convert woodlands to grasslands. Native Americans used fire as a tool to manage oak woodlands, although the frequency of anthropogenic burning during the Native American period is unknown. European ranchers used fire to keep rangeland open and to stimulate forage production, probably burning every 8– 15 years (Sandiford 1994). Fire suppression beginning in the 1950s has changed the fire regime in oak woodlands from frequent, low-intensity fires to infrequent, high intensity, fires. Such high-intensity fires can lead to the loss of oak woodlands. Approximately 52% of Napa County's oak woodlands are at high or very high risk for fire.

Land Use and Habitat Conversion

Oak woodlands in the County are being lost through conversion to agriculture, urban and rural residential development and to a lesser extent commercial development and infrastructure. Rural residential and urban development may result in the conversion of oak woodlands to other uses if the development occurs in areas where oak woodlands exist today. However, Tulare County has historically directed growth to the incorporated cities and unincorporated communities and to a limited number of designated hamlets areas as managed through the Tulare County General Plan Planning Framework Element.

Agricultural Conversion

While current market conditions have the potential to slow the rate of conversion of oak woodlands to intensive agriculture, oak woodlands that are located on potentially productive agricultural soils remain at risk, primarily along alluvial soils on valley bottoms and streams.

Infrastructure Development

Local and regional growth in tourism, jobs, and housing increases demand for new infrastructure, including highway and road expansion, as well as electrical, water and wastewater services. The end result of this demand is often the expansion of infrastructure projects which can temporarily or permanently impact existing oak woodlands. On a more regional level, large roadway expansion projects will likely continue to threaten California's oak woodland resources.

Sudden Oak Death

Sudden Oak Death (SOD), a fungal disease caused by the pathogen Phyophthora ramorum. First detected in the mid - 1990's, the disease is responsible for widespread tree mortality in the central coast region of California. It is now known to infect over 70 ornamental and wildland plant species and genera and that number has been dramatically increasing every year. SOD is usually recognized as a forest phenomenon and it is not typically seen in true landscape settings, although more recent findings at numerous retail nurseries and wholesale growing grounds may alter that picture. While the term —sudden refers to the relatively rapid browning of the foliage, a tree showing these symptoms has in actuality already been infected for months or years with the pathogen. Because the pathogen requires a moist environment to germinate and disperse, most infestations are found in fog -belt or densely wooded, riparian areas primarily in coastal areas of California generally ranging from Humboldt to Monterey Counties. Comprehensive state, federal, and international quarantine measures have been instituted to minimize the likelihood of the artificial (i.e.-human) spread of SOD. The movement of host plant material, such as nursery stock, firewood, and green waste out of infected areas is tightly restricted.

Climate Change and Ecotone/Species Migration

Native plants and animals are increasingly at risk as temperatures rise and scientists are reporting more species moving to higher elevations or more northerly latitudes in response. Increased temperatures also provide a foothold for invasive species of weeds, insects and other threats to native species. The increased salinity and flow of water resources could adversely affect the food supply and spawning conditions for native fish, and the natural cycle of plant flowering and pollination could be affected.

Natural disasters such as drought, wildfires, and flooding can be instigated by temperature and precipitation changes. Scientists at U.C. Santa Cruz are concerned that rising temperatures and decreasing rainfall associated with global climate change will cause almost half of California's oaks to die out by 2090.

Climate change modeling indicates that, based on temperature and precipitation, oak persistence will be increasingly challenged, particularly Valley oaks at lowest elevations (Kuypers et al). However, the Kaweah River is undammed through the UDB, providing abundant, critical water supply in the summer for Valley oaks. This, and the oak woodland's width, may protect the woodland against temperature and climate extremes. Nevertheless, impacts creating gaps, narrowing the woodland extent and tree removal or health impacts decrease the likelihood of woodland persistence in the UDB.

Because not all oak trees on even the most dry, exposed slopes are dead and some appear to be vigorous even after several years of exceptional drought, it appears the oaks in the UDB possess some climate adaptability and resilience. Natural genetic variation may include some drought-adapted and some drought-sensitive trees. It is likely the recent exceptional drought removed the most sensitive ecotypes in the population.

Woodcutting for Firewood Production

Woodcutting is likely to occur for firewood production. Further studies and field surveys are necessary to determine at what rate wood could be harvested while maintaining sustainable woodland management planning practices that balances sustainable yield harvesting with habitat protection and agricultural use. However, indiscriminate cutting without regard for habitat continuity, lack of replanting or protection of saplings, removal of nest or wildlife trees, and thinning to produce a monoculture can all contribute to reduction of overall quality of the woodland habitat and eventual loss of the woodland resources. From

an economic (and recreational) perspective, removal of oak trees or damage to the viability of the woodland may also decrease the habitat potential for game species.

7. INVENTORY SHOULD CONSIDER AVERAGE GEOGRAPHICAL RAINFALL.

The average annual rainfall in the Three Rivers Region ranges from 14 inches at the base of the watershed to 55 inches along the crest of the Sierras.¹⁶

4. MAPPING TO INCLUDE THE CURRENT DISTRIBUTION OF OAK WOODLANDS. IDENTIFY AREAS WHERE PRESERVATION EFFORTS WOULD SERVE THE GREATEST PUBLIC GOOD.

The Three Rivers OWMP is being prepared contemporaneously with the Three Rivers Community Plan Update project.

Oak woodland mapping within the DBA commenced in January, 2016 using a three-step process: preliminary mapping was performed using aerial image recognition software and manual editing in the ArcGIS environment; then a field visit was conducted to ground-truth the preliminary map and collect detailed tree plot data; finally the data was analyzed and the oak woodland map was finalized based on field observations. The assessment of tree size, distribution, species composition, and health and condition within the UDB Area was performed using a sampling scheme based on the preliminary oak woodland map. A sampling scheme was used (as opposed to a complete inventory) due to the difficulty associated with surveying across the steep terrain and through the dense vegetation of the DBA. Sample plots were established throughout the wooded areas within the DBA where landowner permission or ease of survey allowed, and all trees within the plots were measured for the various attributes. Data collected at each of the tree plots are presented in Appendix A. Data collected in tree plots were analyzed to create relevant estimates of overall site woodland characteristics including tree density, size, and species composition. A detailed description of the methods used to map woodlands, measure trees, and analyze tree data are presented below. Plant names follow those given in The Jepson Manual: Vascular Plants of California, 2nd Edition (Baldwin et al. 2012).

Preliminary Oak Woodland Mapping from Aerial Imagery

Tree-dominated areas within the DBA were delineated on aerial images in the ArcGIS environment. The publicly available National Aerial Image Program (NAIP) full-color aerial images (one meter resolution, 2010) were used as the basis for this image interpretation. Areas outside oak woodland polygons were identified as shrub or herb cover through a supervised editing process. The final delineation of oak woodlands within the DBA is presented in Appendix C.

Preliminary results of the assessment were included in a watershed-level oak studies in cooperation with a local college and presented at the Sequoia-Kings Canyon Research Symposium, November, 2016 and

August 15, 2014, Southern sierra Integrated regional water management group Department of Water Resources Special Investigations and Planning Branch, John Kirk

¹⁶ Preliminary evaluation of water resources demand and availability three rivers, ca, area

at the College of Sequoias SURGE Symposium, August, 2016. The research discussed watershed-scale climate-induced mortality patterns and restoration potential.

Field Data Collection

Prior to and during field work, KEC Ecologist and Tulare County GIS specialists mapped and identified oak woodland biological elements with the following starting points:

- 1. High-resolution aerial maps of the UDB, including elevations, rivers, creeks, parcels;
- 2. LANDSAT or other aerial imagery or with refractive indices;
- 3. Aerial map with zoning with panels with higher magnification of small parcels;
- 4. Zoning and development maps;
- 5. Survey plot location maps.

These data were analyzed to produce synthetic maps of the UDB oak woodlands and layer specific geographic information to provide additional analyses, such as the vacant parcels and slope data for the associated maps.

Tree-dominated plant communities (>10% tree cover) within the DBA were mapped based on aerial photography utilizing aerial image interpretation software and ground-truthed with field visits and plot surveys. This tree-dominated plant communities map served as the basis for the field sampling design. A sampling design was utilized (as opposed to a 100% survey) to facilitate characterization of the tree-dominated areas over the densely vegetated and steeply sloped terrain of the DBA.

Biologists investigated select survey plot sites and investigated all possible, accessible areas with vehicles and pedestrian access. Oak woodlands of all types were documented with photo points (see Appendix), general landscape photographs and specific oak woodland inventory stand data. The data was collected in 1/10- acre standardized inventory plots scattered throughout the UDB, but stratified based on access permission and timeframe. Oak average stand height, diameter, mortality, density, canopy cover, understory components, biological diversity, riparian and wetland communities were also mapped and stand reproductive status (natural regeneration and recruitment trends) was also assessed. The oak census includes notes about age, where available, demographics and current development impacts, as well as threats to oak woodland communities, including, fire, disease, climate change, urban development including infrastructure, and tree harvesting and identify areas where threats are the most pressing as well as identifying Williamson Act lands and fragmented areas.

Preservation efforts would serve the greatest public good is where oak woodland areas are under removal pressures and where restoration efforts should be focused. There are several areas within the UDB where potential preservation efforts should focus, including, but not limited to areas along all of the major forks where private lands lend continuity to existing protected lands such as national parks and BLM or private conservation lands. In addition, the areas from north of the Post Office along the River nearly to the Sequoia National Park Boundary may require restoration because there has been historical clearing, cutting or other disturbances in this zone. In particular, areas near the Golf Course and north of the North Fork Bridge lack riparian woodland, regeneration or large trees, or all of these items (see Appendix C).

VII. COUNTY PARTICIPATION IN OAK WOODLAND HABITATS CONSERVATION PROGRAM

A. SUPPORT FOR PRIVATE LANDOWNER PARTICIPATION IN THE OWCP.

Because of the social, economic, agricultural, and biological benefits of conserving oak woodlands, Tulare County residents are encouraged to participate in the California Oak Woodland Conservation Program (OWCP) a voluntary program designed to protect and enhance oak woodland resources by providing grants in support of:

Education, Outreach, Easements, Agreements, Restoration and Technical Assistance Grants

Grants to fund public education, easements, agreements restoration outreach and technical assistance projects that promote oak woodland conservation.

The Oak Woodlands Conservation Act requires that 80% of funds be used for the purchase of conservation easements, restoration and long-term landowner agreements. Twenty percent of the funds can be used for public education, outreach and technical assistance projects. The Oak Woodlands Conservation program promotes the conservation of privately owned oak woodlands; however, the easement acquisition part of the program is not designed to accept applications directly from private landowners.

Conservation easements must be held by entities authorized under California Civil Code section 815.3, which includes governmental entities or nonprofit land conservation organizations such a land trust.

Oak woodland conservation easements.

Conservation easements are legal agreements, entered into voluntarily, between a landowner and a nonprofit organization or government agency that limits certain uses of the land in order to protect specific conservation values. Each conservation easement is individually tailored to the site and is negotiated with the owner and private nonprofit organization or public agency that will hold and monitor the easement. The terms, allowed uses. maintenance, and specific conservation values to be protected will be determined in collaboration with the landowner, partner organizations and resource specialists, including State Fish and Game biologists, Federal Fish and Wildlife Service in order to protect conservation values in perpetuity.

Both the County and local Land Trusts are able to accept dedication of conservation easements. These easements allow the landowner to retain title for the land, but the County or Land Trust would obtain any development rights. Dedication of a conservation easement "runs with the land", resulting in development restrictions that will continue in perpetuity, even if the land is sold. The easement must be donated for one of the following conservation purposes:

- 1. Preserving land areas for outdoor recreation by, or the education of, the general public. This includes preserving a water area for boating of fishing, or preserving a nature or hiking trail. The public recreation or education use must be substantial and regular.
- 2. Protecting a significant natural habitat of fish, wildlife, plants or a similar ecosystem. Public access may be restricted, e.g., to protect the habitat, or other justifiable reasons.

- 3. Preserving open space (including farmland and forest land) for the general public's scenic enjoyment or under a governmental policy. The public must receive a significant benefit.
- 3. Preserving and restoring historically important land areas or a certified historic structure. In this case, an easement on a private residence may qualify, Oak woodlands are likely to fall under any of the first three categories, though choosing the second option may result in significantly more continued privacy than the others.

Conservation easements provide a landowner an opportunity to protect a family's oak woodlands permanently, while still using existing structures or other uses.

There are several mechanisms for a landowner to benefit from dedicating an Oak Woodlands Conservation Easement, including both income and estate tax benefits.

Income and Property Tax Credit

Landowners who donate oak woodland conservation easements may be able to receive a tax receipt for the full value of their ecological gift. Landowners should consult with their tax or financial advisors to understand all of the potential local, state, and federal incentives that may be available.

As feasible, the County will work to make general information available about these potential incentives to members of the public and professional planners.

Estate Planning

Landowners who donate oak woodland conservation easements may receive estate tax benefits, provided that they exceed the federal estate tax exclusion, which is currently \$3.5 million per person. The maximum for the exclusion is \$500,000 or up to 40% of the assessed land value, whichever is less value. NOTE: The County Assessor's Office should be consulted to determine the impact of a proposed conservation easement to the property owner's property taxes.¹⁷

Before the WCB can evaluate a project for funding under the OWCP, the city or county in which the project occurs must prepare an oak woodlands management plan, pursuant Section 1366 of the California Fish and Game Code. The Board of Supervisors of the County must adopt the plan by resolution.

After the OWMP is adopted by the Tulare County Board of Supervisors, grant proposals submitted to the Wildlife Conservation Board for funding under the OWCP must be certified by the County to be consistent with the criteria below. These criteria mirror those established by the Wildlife Conservation Board for the OWCP designed to encourage the long-term conservation of oak woodlands. To qualify for a grant, the applicant must certify that the proposed project is not required to satisfy a condition imposed upon the landowner by any lease, permit, or other entitlement issued by a public agency, including a mitigation under the California Environmental Quality Act. The OWCP application packet is available on the WCB website: www.wcb.ca.gov, outlining the OWCP application process.

¹⁷ Los Angeles County Oak Woodlands Conservation Management Plan May 2011

To qualify for funding consideration for restoration, enhancement, purchase of an oak conservation easement, or long-term agreement, projects must meet one or more of the following criteria, must contain an appropriate management plan to assure project goals are maintained, and the oak stand that is the subject of the proposal must have greater than 10 percent canopy.

- The project is of sufficient size to promote biological integrity and provide superior wildlife values.
- The project area contains a diverse size-class structure of oak woodlands and/or a diversity of oak species that will promote the sustainability and perpetuation of oak woodlands.
- The property is adjacent to other protected areas or will contribute toward ease of wildlife movement across ownerships (wildlife corridors).
- The project contributes to regional and/or or community goals, provides scenic open-space, protects historic or archeological values, or contains unique geologic features.
- The property is a working landscape. The landowners have implemented or agree to implement stewardship practices that recognize and incorporate the ecological requirements of oak woodlands and associated habitats, thus promoting economic and resource sustainability of the farming and ranching operation.
- The property removes or reduces the threat of habitat conversion from oak woodlands to some other use.
- The project has the potential to serve as a stewardship model for other landowners.
- To qualify for funding consideration for a public education and outreach and technical assistance proposal, the project must satisfy the following criteria:
- The project shall be designed to identify and communicate the social, economic, agricultural and biological benefits of conserving oak woodlands.
- The project shall be designed and targeted to reach the maximum number of local landowners that could benefit from public education and outreach efforts.
- The project shall be designed and implemented as a collective effort or partnership that, where appropriate, includes local entities such as: landowners, the Resource Conservation District, the California Fish and Game biologist, University of California Cooperative Extension (UCCE) Farm Advisor, representatives from farming or ranching organizations; California Department of Forestry and Fire Protection (Cal Fire) or local fire authority; and the county.
- The project shall be designed to promote and encourage oak woodland conservation through voluntary approaches.
- The project shall provide sources of available financial and/or technical information to assist landowners conserve their oak woodlands.

- The project will identify measurable goals and objectives to evaluate the success of the project. For projects not completed within one year of the approval date, the proposal shall include specific interim deliverables or benchmarks and a timeline for completion.
- If requested by the WCB, project sponsors must be willing to make project information available online so that other project proponents may benefit from the education and outreach effort. Such information should not include private or proprietary information about private landowners or their operations.

B. SUPPORT FOR LANDOWNERS.

The following are some specific examples of support programs that would accomplish support for landowners.

- Educate county landowners on the long-term economic benefits of maintaining and restoring oak woodlands.
- Refer to resources such as University of California Cooperative Extension practices regarding harvesting, which currently include: maintaining an average leaf canopy of at least 30%, retaining trees of all sizes and species at the site, maintaining old hollow trees for nesting, roosting, and feeding wildlife, piling brush to provide wildlife cover, and seeking professional advice before conducting harvesting. Hundreds of publications have been produced aimed at helping individual homeowners, ranching families and large agricultural operations to conserve and steward their oak woodlands, including conservation-based fire-wise vegetation management practices.
- •Audubon California Landowner Stewardship Program. The Landowner Stewardship Program works with private landowners to conserve and restore wildlife habitat on farms and ranches in a manner compatible with existing agricultural operations. Typical projects include the restoration of riparian areas and swales, erosion control, and hedgerow plantings as well as applied research on various species and habitat related to restoration work. Typical projects involve planting oak seedlings, establishing cattle fences around plantings and important riparian areas, planting native perennial grasses and controlling non-native invasive weed species to promote seedling survival.
- Caltrans Adopt-A-Highway Program. The Adopt-A-Highway program provides an avenue for individuals, organizations or businesses to help maintain sections of roadside within California's State Route System. Participants can remove litter, plant trees or wildflowers, remove graffiti and/or control vegetation. Planting trees, including oaks: along highways requires participants to submit a management plan prior to planting. Caltrans has outlined specific guidelines for planting trees.
- California Fire Safe Council. The Fire Safe Council provides resources for establishing and maintaining local Fire Safe Councils, such as the FSC Handbook, nonprofit and funding information. The California fire Safe Council's mission is to preserve and enhance California's manmade and natural resources by providing leadership and support that mobilizes all Californians to protect their homes, communities and environment from wildfires. Since its formation in April 1993, the Council has united its diverse membership to speak with one voice about tire safety. The Council has distributed fire prevention education materials to industry leaders and their constituents, evaluated legislation pertaining to fire safety and empowered grassroots organizations to spearhead fire safety programs.
- The Tulare County Resource Conservation District (RCD) works with a broad spectrum of agencies at the state and Federal level. Federal agencies include NRCS, US Fish and Wildlife Service and the US Forest Service. State agencies include the Department of Conservation, the California Fire Safe Council, the Sierra Nevada Conservancy, California Integrated Water Management Board, California Association of Resource Conservation Districts and the Department of Fish and Game. Local agencies include the Integrated Regional Water Management Project and the Tule River Indian Reservation. The RCD regularly has agreements with NRCS to provide rangeland management services as part of EQIP program, and is currently providing technology accessibility services to provide equipment to the yellow star thistle eradication program through the UC County Extension office.
- California Council of Land Trusts. The California Council of Land Trusts program for policy advocacy and governmental relations addresses a variety of topics, activities and legislation that impact land trusts and the conservation of land and water. In service to our members and partners, CCLT monitors issues, performs legal/bill analysis, develops solutions, provides information and takes action as appropriate in administrative, legislative and legal arenas. CCLT gathers information, conducts research and undertakes analysis to generate thoughtful information for land trusts and partners to understand the issues confronting conservation. This information may be in a variety of forms from written reports and monthly newsletters to geographic-spatial data. Conservation Currents delivers breaking and ongoing news to California land trusts and their partners. It contains news items related to funding opportunities and guidelines; educational workshops; administrative, legal or policy developments; new research or information; meetings and events; and job opportunities. It is issued monthly via email for regular news and on an occasional basis with breaking news.
- Articulate the importance of landscape variables (size, shape, connectivity to other woodlands and important habitats, etc.) that support rich, sustainable wildlife populations associated with oak woodlands.
- Encourage landscape design and development that can enhance property values and retain intact oak woodlands
- Provide technical assistance to reduce impacts of construction practices, roads, hard surface runoff, and utilities on the long-term survivorship of oaks.
- Describe how homes can be clustered to help protect wildlife corridors and maintain more wildlife habitat.
- Assist private landowners with information on the values of using oaks in the urban landscapes and at the urban-wildland interface.
- Promote conservation-based, fire-wise, vegetation management in woodlands in consultation with fire control agencies and other resource specialists to avoid conversion to other vegetation and habitat types, reduced regeneration, and susceptibility to severe fires that can also have negative consequences to other ecosystem functions.

- Promote the important role of land management programs using low intensity fires to manage and maintain oak woodlands, particular on federal lands.
- Restore areas where oaks have been removed and/or are not regenerating, particularly for valley oak woodlands on deep, level soils.
- Promote voluntary tree planting programs that provide protection of oak seedlings from rodents, browsing by deer and domestic animals, and weeds, and incorporate long-term monitoring.

C. EDUCATION AND OUTREACH.

Programs available to assist landowners seeking to voluntarily protect and manage oak woodlands.

- Describe techniques to restore degraded oak woodlands, including tree planting programs or mechanisms to protect oak seedlings from herbivory by deer, rodents, and domestic animals, and from competition from non-native plants or other weeds.
- Identify state and federal cost share programs and grants for restoration projects.
- Describe planting guidelines for oak woodland restoration, which include planting the appropriate species of oak and using native plants in the understory. In general, the species of oak to be replaced should be the same species as was removed.
- Describe methods to control invasive, non-native weeds in oak woodlands, particularly along county road rights-of-way that link agricultural lands to oak woodlands and provide a corridor for weed movement.
- Promote control of invasive, non-native weeds in oak woodlands. This can be particularly effective along county rights-of-way on roads that go from agricultural lands where invasive weeds are largely controlled to sites along roads where the weeds are establishing pioneer populations.
- Study and educate how prescribed fire can be safely used as a management tool for invasive species and potentially to promote oak regeneration.
- Promote and encourage conservation-based, fire-wise, vegetation management in woodlands in consultation with fire control agencies and other resources specialists, in areas of Tulare County at the wildland-urban interface.
- Encourage county ranching and farming operations that support large stands of oak woodlands.
- Encourage continuation and initiation of Williamson Act contracts to maintain large parcels in agricultural and grazing uses.
- Build partnerships between local government, the development community and non-profits for targeted and meaningful conservation efforts.
- Encourage conservation easements and other forms of land conservation action.
- Assess and track progress of voluntary conservation and stewardship programs.

• Study and document the rate of loss/gain of woodlands in Tulare County. Modern remote sensing could be used to assess the areas of various categories of oak woodlands. These need to be backed up with ground surveys. Consider repeated surveys, at perhaps 5-10 year intervals to provide the information on the certainty and urgency of the problem.

1. Public Education information component regarding tree health and safety (checklist oriented component).¹⁸

The Oak Tree evaluation checklist is intended to further help the property owner understand tree defects and how they may be interpreted by an arborist. Many tree defects are not readily apparent because decay or structural damage may be internal. Also, poor tree health may not reflect poor tree structure. Hazardous trees must be carefully evaluated. The following checklist of criteria that is typically used by professionals may indicate potential or current tree hazards. The checklist is not meant to be a comprehensive guide, however, it is an outline of indicators that may alert a property owner to potential hazards and suggest action to avert a tree failure and liability. If you answer 'yes' to one or more of the checklist items, you should contact an arborist to discuss how to reduce the potential hazard.

A. Hazard Evaluation Questionnaire Target: If the tree or branch falls will it hit cars, houses, structures, power lines or people? If so, immediate action may be necessary. Dead Branches: Are there dead tops or branches? Is the tree dead?

Cracks: Are there deep, open cracks in the trunk or branches? These are major starting points for trunk and branch failure.

Crotch Cracks: Are there deep, open cracks below joining trunks or stems?

Tree Architecture: Has the tree grown beyond its species specific shape into a hazardous form? Is the tree leaning?

History: Has the tree recently lost large branches?

Edge Tree: Were neighboring trees recently removed, leaving tall trees exposed at the edge that may be subject to unexpected wind dynamics and blow-over?

Living Branches: Do live branches bend abruptly upward or downward where tips of large branches were cut off? These may pull out of trunks that are weakened by rot or cracks. Beware of large branches on rotten or cracked trunks.

Topping: Are large branches growing rapidly from topping cuts? These sprouts have weak attachments and may weaken further as they grow. Is there decay below topping cuts?

Storm injury: Are there broken branches, split trunks, or injured roots? Are branches close to power lines?

¹⁸ City of Palo Alto Tree Technical Manual June, 2001 First Edition Department of Planning and Community Environment.

Root Rot: Are there fungus fruit bodies (mushrooms) on roots or near the trunk? Were roots injured by construction?

Rots and Cankers: Are there hollows or cankers (dead spots) in the trunk or major branches, some with fungus fruit bodies?

Construction injury: Have roots, trunk, or branches been injured?

Is there a new lawn or garden over injured roots? The added fertilizer may stimulate the growth of fungi that will rot the supporting roots while the top gets heavier. A moderate storm could cause the tree to fall.

Guying of trees. Staking and guying of small to medium size trees may benefit from the additional support. Discretion must be exercised that the guying does not hide weaknesses, such as toppling over, that result from poor quality nursery stock or girdling root.

B. Hazard Reduction and Prevention:

Review the following list to reduce hazardous conditions:

Plant trees that are not problematic and that fit the site The International Society of Arboriculture (ISA) has developed a list to assist you to avoid planting a tree that may become a problem.

A healthy, vigorous tree that receives regular care is less likely to become hazardous than one that is ignored. Prevention is the best solution to the tree hazard problem.

The risk of a hazard tree may be reduced by removing dead and broken branches, reducing branch end weights, by mechanically supporting weak branches from below, or by cabling and bracings. In some cases, targets may be removed such as by moving picnic tables or other items beneath a precarious tree, fencing to prevent access to such trees, or rerouting pedestrian or vehicular traffic.

If there are no other options to abate the hazard, the tree may need to be removed entirely.

The following checklist will help property owners avoid future problems:

Inspect your trees carefully at least once each season every year. Annually, have a Certified Arborist inspect your trees and provide you with a written report. ‰ Avoid planting brittle species where falling limbs could injure people or property.

Prune trees when they are young and regularly thereafter.

Use correct pruning methods, always making the pruning cut outside the branch collar. This will allow only the minimum of decay infection.

Do not allow topping.

Always plant the right tree in the right place. Select trees based upon their mature height and shape, and make sure the species selected matches the soil and other site characteristics. For example, avoid planting tall-growing trees such as redwoods near power lines or too close to your house.

Water thoroughly (generally, until saturation is reached) during dry periods, slowly applying at least 2inches of water per week (Excepting Live Oaks and Blue Oaks 10-15 years of age). It is important to note that oaks are drought-adapted and do not need regular summer water when established.

Erect barriers around or slightly beyond the root protection zone of trees during construction. Insist that these root protection zones be honored by construction workers.

Consider cabling or bracing weak forks of branches in larger trees of high value.

Do not plant trees with a narrowly-forked stem v-crotch, imbedded bark or girdling root ball.

Where a valuable specimen tree may be suspected of developing into a hazardous tree, use landscaping to keep people at a safe distance. This may require techniques such as rerouting walks, moving patio furniture, or planting shrubs and hedges to function as barriers to keep foot traffic at a safe distance.

B. Tree Maintenance Guidelines:

The following standards of care are set forth for pruning (including utility, fire and traffic encroachment), planting, watering, soil and nutrient requirements, insect, disease and fruit control. Guidelines for selecting an arborist are also given. These standards and guidelines are based on sound arboricultural principles and are applicable to trees, shrubs and woody plants.

Pruning Mature Trees:

There are six types of pruning that may be required for use on mature Regulated Trees (see ISA Tree Pruning Guidelines). Prior to entering the tree, the tree worker is required to be familiar with these types of pruning as stated in the Performance Standards, ANSI, A300-1995. 'Species-specific' pruning promotes the natural shape of the tree (i.e. excurrent, decurrent, vase-shaped, fast growing, etc.).

Types of Pruning

Crown Cleaning Crown Thinning Crown Raising Crown Restoration Crown Reduction Utility Pruning

Tree Injury

Climbing and pruning practices shall not injure the tree except for the pruning cuts. Timing of Pruning To reduce the probability of insect infestation, disease or infection, the following seasonal restrictions apply, except when public safety is a concern.

All species: Do not prune during the flush of spring shoot growth.

Trees with thin bark: Do not prune in summer when sun scald injury may be a factor.

Deciduous trees (leafless in winter): Best pruned November thru February.

Hazardous trees of any species may be pruned any time of the year for abatement reasons.

Pruning Distressed Trees

Distressed trees require as much leaf area as possible to overcome stressed conditions. To avoid additional injury, the following measures shall be followed for these trees.

Injury or Disturbance

If a tree has been damaged by injury or disturbance, delay pruning until deadwood becomes evident (typically 1-3 years after injury). Crown cleaning is then recommended.

Neglect

Trees that have received little or no care or maintenance may need moderate crown thinning, reduction of end weights or entire crown restoration.

Pruning Young Trees

By pruning trees early, it will improve life expectancy and is a proven, cost-effective measure. Added benefits are also reflected in safer trees with fewer branch failures. For trees that serve as a replacement for a protected or designated trees, they shall be pruned in the following way:

Young trees should be pruned during the second year after planting to improve their structure, and only minor crown cleaning every 3-7 years thereafter. Refer to ISA Tree Pruning Guidelines.

Do not top the main leader except to position the lowest main branch. Other main branches should be spaced at least 18-inches apart to alleviate a tight grouping branches.

Select permanent branching and allow temporary low branching on the lowest part of the trunk to remain.

Fertilizing Standards

This section outlines performance standards for fertilizing and apply only if fertilizing is specified. Fertilizing mature trees is generally not necessary. Fertilizing may be specified for trees that will be impacted by upcoming disturbance, grade changes or a modified environment. Benefits gained from the increase stored resources may aid the tree to overcome the stress caused by disturbance.

Fertilizing, if specified, should be performed to the following standards:

Method of application: The method shall be subsurface injection, on approximate 3-foot centers (within the root ball on young trees; 2-feet out on older trees) and out to the approximate dripline perimeter. Specific situations may justify other variations such as vertical mulch, soil-fracture or surface-broadcast methods.

Material and Rates: Unless specified otherwise, fertilizer formula shall be a slow-release, complete fertilizer with chelate trace elements (e.g. 22-14-14 or 20-20-20) and mixed at label rates not to exceed 4-pounds nitrogen per 100-gallons of water. Extraordinary cases may require soil and tissue sampling to correct target deficiencies.

Amount:

Unless specified otherwise, volume shall be determined by mixing 10-gallons of water per inch of trunk diameter when measured at 54-inches above natural grade.

Timing:

Timing should not be detrimental to tree health. Best results are derived from applications made during the prior growing season. Apply fertilizer between May through September for best results.

Watering Schedule

Newly installed trees planted, including drought tolerant species, are dependent upon supplemental irrigation until established, typically for two years. Periods of extreme heat, wind or drought may require more or less water than recommended in these specifications. The method and amount that is applied may vary depending upon soil composition, heat, wind, planted in turf or ground cover, periods of abnormal rainfall or in poorly drained soils. The watering of protected or designated trees or their replacements shall follow these standards:

New Trees

During the establishment period (1-2 years) trees should be watered thoroughly to their root depth as frequently as needed. A watering schedule is to be submitted at the preconstruction meeting. The schedule is to include watering frequency and quantity. The minimum standards shall be as follows:

1-3 months in the ground: 4 times per month or as necessary.

4-6 months in the ground: 2 times per month or as necessary.

7-12 months in the ground: 1 time per month or as necessary.

Mature trees

Most species: 1 time per month during irrigation season (usually March through September)

Coast Live Oak, Valley Oak and Blue Oak: deep water in May and September (Excepting Live Oaks and Blue Oaks 10-15 years of age). As previously mentioned, oaks are drought-adapted and do not need regular summer water when established. — do not water during other months. For oaks already in the

vicinity of irrigated conditions, automatic sprinklers or regular watering shall not be allowed to spray on or within three feet of the trunk. The water should not be allowed to pool or drain towards the trunk.

Watering Methods

One or more of the following may be utilized dependent upon unique circumstances.

Automated Watering Systems. All tree irrigation automatic watering systems should be consistent with current Model Water Efficiency Landscape Standards.

Bubbler heads (Preferred). One or two bubbler heads mounted on notes: flexible tubing are to be placed adjacent to or on top of the root ball. The placement of bubbler within an aeration tube is not allowed.

Drip Loop system. A continuous loop of drip tubing circling around the trunk at a point two-thirds out from the trunk to the edge of the root ball (for new trees 36-inch box size and greater, a second loop of drip tubing is required at a point just beyond the root ball on native soil).

Hand watering systems. Recommended for trees that are part of a development project that must be watered to insure tree survival during the course of construction until automatic irrigation is installed.

Subsurface injections using a hydraulic spray pump (practical for use in hard, compacted soils or steep hillsides).

Soaker hose. Slow, deep watering using a garden type soaker hose.

Wetting agent. A root ball that has been allowed to dry out beyond the wilting point shall require the addition of a wetting agent to the water (such as Aqua-grow or equivalent).

Amount

Unless otherwise specified, the volume of water applied at each irrigation should be in the range of 10gallons per inch of trunk diameter when measured at 54-inches above natural grade. The final decision of whether to water or not should be based on accurate soil probe samples that are taken from the root ball.

Soil Improvement

During development, compaction of the soil is the largest single factor responsible for the decline of oaks and older trees. Ninety percent of the damage to the upper eighteen inches of soil occurs during the first pass of heavy equipment - and cannot be reversed. Every effort to avoid compaction of soil porosity within the tree protection zone shall be taken at all times (see Soil Compaction, Section 1.29). When required by the conditions of Discretionary Development Approval for a project or as mitigation for injury or a prohibited action, the following performance standards for improvement of compacted or damaged soil shall be implemented: Aeration

Soil that is damaged or compacted within the dripline of protected or designated trees shall be loosened or aerated to promote root growth and enhance tree vitality. One of the following aeration methods shall be specified an in effort to correct compacted soil conditions:

Vertical Mulching: auger holes 2 to 4-inch diameter, 2 to 3-feet deep, on 4-foot centers and backfilled with porous material such as perlite, vermiculite or volcanic rock.

Radial Trenching: with an air excavator, excavate a soil trench 3 to 6-inches wide and a minimum of 12inches deep from (approximately) 3-feet from the trunk out to the dripline area. The trenches shall radiate out from one foot apart at the closest point.

Soil-fracturing with a pneumatic air-driven device (see Definitions, Section 1.30)

Subsurface injections under moderate hydraulic pressure using a three foot probe and applied on 3-foot centers under the dripline.

Drainage

Adequate drainage must be provided to the surrounding soil for the planting of new trees. If the trees are to be planted in impermeable or infertile soil, and water infiltration rates are less than 2-inches an hour, then one of the following drainage systems or other measures should be implemented:

French drain, a minimum of three feet in depth.

Drain tiles or lines beneath the trees.

Auger six drain holes at the bottom perimeter of the planting pit, a minimum of 4-inches in diameter, 24-inches deep and filled with medium sand or fine gravel.

Insect Disease and Control:

Generally, insect populations do not threaten tree health to the point of mortality. More often, when their populations become too great they create a nuisance. For example, scale on tulips or aphids feeding on purple leaf plums produce sticky honeydew that may be a nuisance if dripping on cars or at a storefront entry. Occasionally, however, pests such as Oak or Tussock Moth larvae can defoliate and severely damage a tree. If action is warranted, Integrated Pest Management (I.P.M.) suggests that the pest source be identified and targeted with a specific and timely treatment. If insects or disease can lead to the death of a tree, then the condition of the tree should be evaluated according to the following guidelines and treat the problem in a timely fashion to prevent further deterioration of the tree.

Insects

For treatment, consult a pest control operator that is licensed by the California Department of Pesticide Regulation. Accurate timing is critical for success.

Nontoxic materials should be used whenever possible to control leaf-chewing insects.

Disease and Decay above ground.

Disease such as heart-rot decay that erodes the health or weakens the structure of a tree may compromise the safety of people or property.

Consult with a certified arborist for remedy possibilities, for example, pruning out infected branches, thinning, or the spray application of a chemical treatment.

Disease below ground

Soilborne diseases, such as Oak Root Fungus (Armillaria mellea) or Root Rot (Phytophthora sp.), are present in Palo Alto soils. Often, a poor landscape design surrounding old trees encourages harmful, and often lethal diseases. The following conditions that favor a disease environment must be avoided.

Conditions to avoid: Compacting of the soil within the tree's dripline, adding fill dirt, rototilling, trenching, removing soil from the tree root area, and excessive or regular watering on or near the tree trunk area and planting incompatible water-loving plants within the tree's dripline. Combined with poorly-drained soil, these factors often activate normally dormant fungi to become opportunistic and infect the tree to cause the decline and eventual death of the tree. This decline can be slow and may not be evident for many years.

Landscape Design When planning landscaping around a protected or designated tree, an evaluation of the tree and soil must be performed to determine if there is a disease present. If the tree is diseased and landscaping will contribute to decline, permanent damage or render it hazardous, it is the obligation of the property owner to take reasonable measures to reduce or eliminate the conditions that may cause the decline of the protected or designated tree.

To identify cultural conditions that may lead to diseases such as Oak Root Fungus, Verticillium, Phytophthora or other soilborne fungi, review the Sunset Western Garden Book or consult with a Certified Arborist.

Use plants under oaks that have low to moderate water needs. Refer to a list of these plants (see Plant List Sunset Western Garden Guide)

Plants selected for use under an oak should not need water more than once a month. Use a drip system to irrigate around an oak so that runoff does not flood the area.

Foliar Disease

Leaf spot or galls may be chronic or reoccur with specific seasons. Though many of these diseases destroy leaf tissue and become unsightly, they may not significantly reduce the trees health and therefore need not be treated.

Fruit Control:

While all trees produce flowers or fruit of some kind, some trees can be considered a nuisance if the use area is not compatible with the litter generated by the tree. For example, the dropping fruit of the European Olive (Olea europaea), American Sweet Gum (Liquidamber styraciflua), or acorn drip of a Holly Oak (Quercus ilex) may be a safety hazard if it is in the proximity of a handicap ramp or other high pedestrian area and will thus justify control measures. Control can only be successful if materials are applied carefully at optimum timing. For treatment to control the situation, consult a pest control operator that is licensed by the California Department of Pesticide Regulation.

Fire Protection: Keeping Open Space, Parks & Community Safe:

The following measures are recommended that may help avoid a catastrophic and irreplaceable fire loss to persons, houses, hillsides and mature trees that are centuries old.

Keep dry grass mowed below 6-inches.

A 30-foot defensible space should be obtained.

No vegetation growing or combustible storage under decking.

No tree canopy within 10-feet of chimney spark arrester.

Break up solid areas of continuous plant growth which create a 'fire-ladder'.

Ask nursery professionals about fire-resistant shrubs to use in landscaping.

Keep trees watered, regularly pruned and in healthy condition.

Prevent build-up of leaves and old branches.

No firewood storage within 10-feet of structures.

Make sure your driveway, road and bridges allow access for fire equipment (13-foot vehicle clearance needed).

Homes adjacent to slopes over 30% will need additional clearing of vegetation from the structure 100-200 feet to protect against radiant and convective heat currents and flame reach.

2. TECHNICAL ASSISTANCE REFERENCES.

The Oak Woodlands Conservation Program, implemented by the Wildlife Conservation Board (WCB) offers landowners, conservation organizations, cities and counties, an opportunity to obtain funding for projects designed to conserve and restore California's oak woodlands. While the Program is statewide in nature, it provides opportunities to address oak woodland issues on a regional priority basis.

This voluntary State Program is designed to provide incentives for local efforts to achieve oak woodland protection. More importantly, this Program provides a mechanism to bring farmers, ranchers and conservationists together in a manner that allows both to achieve that which is so valued -sustainable ranch and farming operations and healthy oak woodlands.

The program is not designed to accept applications directly from private property owners. Proposals developed in partnership with landowners, nonprofit organizations, and local, regional and state resource specialists bring a diversity of skills, expertise, ideas, and often the ability to leverage funds not otherwise available for a project. Please refer to the References and Resources section of the Voluntary Oak Woodlands Stewardship Guidelines for additional information on oak woodlands. Contact the WCB for an Oak Woodlands Conservation Program application package: Wildlife Conservation Board 1416 9th Street, Room 1266

Sacramento, California 95814 Phone (916) 322-9461 Before completing an application package contact (916) 445-8448. <u>https://www.wcb.ca.gov/Programs/Oaks</u>

<u>Applications for public education and outreach and technical assistance</u> should be designed and implemented as a partnership with local entities such as: landowners, Resource Conservation District, California Fish and Wildlife Department, University of California Cooperative Extension Farm Advisor, representatives from farming and ranching organizations, the County Resource Management Agency, and others.

Contact information for these partnership public agencies:

Kamansky's Ecological Consulting

P.O. Box 731 Three Rivers, CA 93271 www.kamanskysecological.com Phone: (559) 287-3311

California State Department of Fish and Wildlife Central Region (Region 4)

Main Office: 1234 East Shaw Avenue Fresno, CA 93710 https://www.wildlife.ca.gov/Regions/4Central Region Phone (559)-243-4005 Fax: (559) 243-4022

Cal Fire Southern Region

1234 East Shaw Avenue Fresno, CA 93710 <u>http://www.calfire.ca.gov/contacts/region?RID=11</u> Phone (559) 222-3714 (ask for the Southern Region Forestry Assistance Specialist)

University of California Cooperative Extension Tulare County Cooperative Extension

4437-B S. Laspina St. Tulare, CA 93274 http://cetulare.ucanr.edu/ Phone (559) 684-3300 Fax (559) 685-3319

Sierra Nevada Conservancy

Tulare County Area Representative: Sarah Campe Area Representative Address: c/o SEKI, 47050 Generals Highway, Three Rivers, CA, 93271 <u>http://www.sierranevada.ca.gov/</u> Phone: (559)-565-3727 Manager: Randi Jorgensen

Natural Resources Conservation Service/Tulare County Resource Conservation District Visalia Service Center

Visalia Service Center 3530 W Orchard Ct Visalia, CA 93277-7055 <u>http://offices.sc.egov.usda.gov/locator/app?service=page/ServiceCenterSummary&stateCode=06&cnt</u> <u>y=107</u> Phone (559) 734-8732 Fax (844) 206-7065

Contact information for Land Trusts:

Sequoia Riverlands Trust Founded in 2000

Mission Statement: Our mission is to protect working landscapes, wildlife habitat and scenic open spaces, while ensuring that economic growth in our communities remains vibrant and sustainable.

Areas Covered: Tulare, Kings, Kern, Fresno & Madera Counties.

Protected: 6,301 fee title acres and 6,921 conservation easement acres

Website:<u>www.sequoiariverlands.org</u>

Address:427 South Garden Street Visalia, CA 93277 Phone: (559) 738-0211 Email: info@sequoiariverlands.org

California Rangeland Trust Founded in 1998

Mission Statement: To conserve California's working ranches that provide stewardship, open space and natural habitat for future generations.

Areas Covered: Statewide.

Protected: 442 fee title acres and 277,503 conservation easement acres

Website: <u>www.rangelandtrust.org</u>

Address:1225 H Street Sacramento, CA 95814 Phone: (916)444-2096 Email: <u>agiannini@rangelandtrust.org</u>

Center for Natural Lands Management Founded in 1990

Mission Statement: The mission of the Center for Natural Lands Management is:

a) To conserve native species, their habitats and functioning ecosystems in perpetuity

b) To own and/or manage lands in an ecologically beneficial manner consistent with local, state and federal environmental laws with science-based stewardship

c) To promote the conservation values of such lands through education

d) To promote and facilitate uses of lands by the public that preserve the conservation values

Areas Covered: Statewide.

Protected: 15,000 fee title acres and 15,000 conservation easement acres.

Website:<u>www.cnlm.org</u>

Address:27258 Via Industrial, Suite B Temecula, CA 92590 Phone: (760) 731-7700 Email:Info@cnlm.org

The Nature Conservancy Founded in 1951

Mission Statement: The Mission of The Nature Conservancy is to conserve the lands and waters on which all life depends. Areas Covered: Statewide.

Protected: 158,089 fee title acres and 300,625 conservation easement acres.

Website: www.nature.org

Address: 555 Capital Mall, Suite 1290 Sacramento, CA 95814 Phone: (916) 449-2857 Email: jay_ziegler@tnc.org

The Trust for Public Land Founded in 1972

Mission Statement: The Trust for Public Land conserves land for people to enjoy as parks, gardens, and other natural places, ensuring livable communities for generations to come.

Areas Covered: Statewide.

Protected: 409,203 fee title acres and 0 conservation easement acres.

Website: <u>www.tpl.org</u>

Address:101 Montgomery Street San Francisco, CA 94104 Phone: (415) 495-4014 Email: <u>rachel.dinno@tpl.org</u>

Wildlife Heritage Foundation Founded in 2000

Mission Statement: To protect, enhance, and restore wildlife habitat on lands conserved for the benefit of future generations. Areas Covered: Statewide.

Protected: 2,000 fee title acres and 32,000 conservation easement acres.

Website: www.wildlifeheritage.org

Address: 536 Second Street Lincoln, CA 95648 Phone: (916) 434-2759 Email: <u>pshea@wildlifeheritage.org</u>

VIII. BEST MANAGEMENT PRACTICES FOR OAK WOODLAND HABITATS

A. BEST PRACTICES GUIDELINES FOR OAK TREE CARE AND PRESERVATION TECHNIQUES FROM THE CITY OF VISALIA, FRESNO COUNTY, AND LOS ANGELES COUNTY.

The following sections provides sample information regarding Best Practices Guidelines for oak tree care and preservation techniques from the City of Visalia, Fresno County, and Yolo County.

City of Visalia Oak Tree Care (Care of California's Native Oaks)

Young native oaks trees are very tolerant of their environment and make excellent, adaptable, landscape assets. The mature native oak is an invaluable part of our environment but does not tolerate many changes once established.

Architects. builders, homeowners, and others should be very careful in fitting their plans with these magnificent giants. Any substantial change in the mature oak's environment can weaken or kill an oak, even a healthy specimen.

A good rule of thumb is to leave the tree's root protection zone (RPZ) undisturbed. This area, which is half again as large as the area from the trunk to the drip line, is the most critical to the oak. Many problems for oaks are initiated by disturbing the roots within this zone.

A Word About Roots

Our native oaks have developed survival adaptations to the long, dry summers of most of California. Primary to this survival is the development and characteristics of its root system. When an acorn first sprouts, there is rapid root development and very little growth above ground.

This initial root is a taproot extending deep underground for dependable moisture. In fact. the tree's first few years are focused on establishing a deep sustaining root system. Once this has happened, greater foliage and aboveground growth takes place.

As the oak grows, the tap root is outgrown by an extensive lateral root system that spreads horizontally out from the trunk to and well beyond the drip line, sometimes as much as 90 feet. For a mature oak, this horizontal root system is the primary supporter of the tree for the rest of its life. It includes the important fine roots, which absorb moisture and nutrients. Most of the root system occurs within the top three feet of soil. In shallower soil, the root system is concentrated in an even shallower zone. typically one to two feet below the surface. As the oak matures, particularly in areas naturally dry in summer, deep-growing vertical roots form off the laterals. usually within ten feet of the trunk. These sinker roots exploit deeper soil moisture and add stability to an increasingly massive tree.

By the time a mature oak has established its elaborate root system -so well designed for its environment and particular site conditions -it has lost the vigor of youth. It is less tolerant of change and can less easily recover to support a fully developed living structure.

To protect a mature oak, pay particular attention to drainage, and avoid filling, trenching, or paving near its root zone.

Fill Around Oaks

Soil and other materials placed on top of the natural soil level, called fill, are usually compacted. They make the soilless permeable, thereby restricting or prohibiting the exchange of gases and movement of water. Excessive moisture trapped by fill can also cause root and crown rot. Because there is no guarantee that fill can be safely added around an oak tree, it is best to avoid tampering with the natural grade, or to leave the natural grade within the root zone alone and use retaining walls.

Drainage

Poor drainage is a common cause of oak tree deaths. since adequate drainage is critical to ensure a proper balance of moisture, air, and nutrient to grow and survive. Particularly in the warm months when natural conditions are dry, too much moisture can smother the roots and encourage the proliferation of crown and root rot fungi.

Another moisture threat to oak roots is presented by barriers such as concrete foundations and footings, streets. and swimming pools downhill of oaks. These structures can dam underground water, causing water to back up into a tree's root zone and drown it.

Trenching

Trenching is an often-overlooked cause of tree death. Trenching usually occurs when underground utilities are installed. Digging a trench for utilities within the RPZ of an oak can sever a significant portion of a tree's roots.

Often, several trenches are opened by separate utilities. This multitrenching is particularly destructive since it impacts a greater portion of the root system.

If utilities must impinge on the root protection zone of a native oak, the trench should be dug by hand, avoiding roots, or utilities bored through the ground at least three feet below the surface. Paving

Paving can cause the same problems associated with soil compaction. Paving, such as asphalt and concrete, prevents water from soaking into the soil and impedes the exchange of gases between roots, soil, and the atmosphere. In addition, paving usually requires excavation to create a stable base and to allow for depth of paving material. This process compacts the soil and damages roots.

Decking placed on piers is much more compatible with mature oaks than paving. Care of Established.

Oaks on Home Grounds

Oaks on home grounds require certain conditions to survive and prosper. Activities of concern to the homeowner are planting near oaks, irrigation and feeding, pruning, installation of home improvements, and disease and insect infestations.

Most native oaks in California evolved and prospered in an environment typified by a cool, moist winter and a hot, dry summer. Under natural conditions, surface soils are wet during the cooler months and become dry by summer. Natural vegetation growing beneath oaks flourishes during the winter and spring and dies by early summer, creating the well-known golden-brown landscape of California's valleys and foothills.

Native oaks, however, remain green because their thick, leathery leaves and other adaptive features reduce their water use. The homeowner should attempt to approximate the natural environment in which these magnificent trees are originally found.

Planting Near Oaks

Only drought-tolerant plants that require no summer water should be planted around old established oaks, and they should be planted no closer than six feet from the base of the tree. Do not plant exotic grasses, ivy, azaleas, rhododendrons, or any other vegetation that needs summer irrigation. Such plants develop thick mats of roots and thus inhibit the exchange of air and water the established oak has grown used to.

There are a number of plants, some of which are native to California that can be grown beneath oaks. For an extensive listing of compatible plants useful for landscaping around oaks, contact the California Oak Foundation.

In place of plants, other types of ground cover can be used to landscape beneath oaks. When installed properly, cobbles, gravel, and wood chips are good examples of ground covers that do not interfere with the roots' ability to obtain oxygen and appropriate moisture.

Irrigating and Fertilizing

Native oaks usually do not require irrigation, as they are well adapted to dry summer conditions. Healthy oaks are even able to survive the excessively dry summers sometimes brought on by California's variable climate.

However, if an oak has been compromised, as when imperious surfaces have been placed in the RPZ, occasional water may be helpful if done properly.

Oaks should be irrigated only outside of the RPZ. Under no circumstances should the ground near the base of a native oak be allowed to become moist during warm weather periods. Moist, warm soil near the base of a mature oak promotes crown and root rot.

Irrigation, if done, should be by the" deep watering method," which consists of a slow, all-day soaking only once or twice during the summer dry period. Frequent, shallow watering not only encourages crown and root rot, it also results in the growth of ineffective shallow roots near the surface, a needless waste of the tree's energy.

If oaks need supplemental watering, it is best to apply the water at times that lengthen the normal rainy season, so the normal dry period in the middle to the end of summer is preserved. For example, additional irrigation would be appropriate in May and September, while leaving the area under the tree dry in July and August.

Mature oaks usually need little or no supplemental fertilization. Light fertilization may be appropriate in landscaped situations to replace nutrients supplied by leaves and other litter that normally accumulates under an oak in its native environment. If leaves are allowed to remain under trees, they eventually break down and supply nutrients.

Fertilization should only be done if growth is poor. Fertilizers should be applied to the entire RPZ, ideally in late winter or early spring. Trees that have recently undergone severe pruning or root damage should not be fertilized for at least six months.

Often, when an oak tree shows yellowing leaves, one thinks it lacks nutrients. Generally, this is not the case. More likely, the tree is suffering from root or crown rot. When an oak appears unhealthy, consult a certified arborist to determine the cause.

Pruning

Excessive pruning or thinning of limbs may expose interior branches to sun damage, may stimulate the tree to produce succulent new growth that is subject to mildew, and in some cases; may cause a decline in vigor or may kill a tree. Only dead, weakened, diseased, or dangerous branches should be removed. Necessary pruning should be done during the winter dormant period for deciduous species and during July and August for evergreen species. Recent research has shown that tree paint, wound dressings, and sealing compounds do more harm than good.

Pruning should be performed by a certified arborist according to the pruning standards of the Western Chapter of the International Society of Arboriculture.

Home Improvement

The installation of home improvements should be done with caution when oaks are located nearby. Trenching severs roots, and impervious surfaces placed over roots may result in the death of the oak. A swimming pool placed downhill of oaks can act as a dam and cause an oak to drown in saturated soil

Great caution should be taken and a certified arborist consulted before proceeding with improvements that impact on the root protection zone of any valued native oak.

Diseases

When growing under natural conditions, native California oaks are relatively tolerant of most diseases. However, they are subject to several problems when disturbed or hampered by frequent summer watering.

The two oak diseases most often encountered in irrigating settings are crown rot and oak root fungus. Both attack trees weakened by disturbance or improper care.

Crown Rot

This is one of the most common and serious diseases of oaks in home plantings. Infected trees decline slowly over a period of years. The disease caused by a microscopic fungus, is made worse by saturated soil and poor soil aeration.

Symptoms of this disease are a general decrease in tree vigor, twig dieback and wilting, abnormally yellow leaves, and formation of lesions on the bark accompanied by oozing of dark-colored fluid.

In most cases, people notice crown rot too late for successful treatment. However, if the disease is caught in the early stages a tree can be saved. Comprehensive treatment is best left to a qualified expert. The following measures usually benefit the tree:

1) Remove lawn and other plants that require summer irrigation from within the RPZ.

2) Remove soil and all other debris that has accumulated against the trunk.

3) Do not water within the RPZ during the summer except under unusual conditions when advised by a certified arborist.

4) Improve drainage around the tree, and make sure all water drains away from the trunk.

Oak Root Fungus

This oak fungus, also known as *Armillaria* root rot, is found in the root systems of most oaks in California. Our oaks experience little damage from this fungus under natural, dry summer conditions. However, when oaks are watered in the summer or weakened by other impacts, the tree can suffer damage from the fungus.

Symptoms shown by an infected oak include dieback of branches and yellowing and thinning of foliage. The fungus itself may appear as a white, fan-like growth with rhizomorphs and mushrooms.

Prevention of damaging conditions is the only sure action that can be taken against this disease. Avoid summer irrigation near oaks. Prevent mechanical damage to major roots or root crown. As with crown rot and other tree diseases, it is recommended that a certified arborist be consulted.

Mistletoe

This parasitic plant grows on the branches of many oaks and can cause structural weaknesses that make branches more vulnerable to breakage. Its sticky seeds are spread from one tree to another by birds. The seeds germinate under favorable conditions, and root-like structures find their way through the bark; ultimately becoming attached to the oak and tapping into the water-and-mineral- conducting tissues of the tree.

Small infestations can be controlled by removing the mistletoe and cutting back the oak's bark around the spot where the mistletoe stem entered the oak branch. Major infestations are difficult to control, however, and an arborist specializing in oaks should be consulted.

Other diseases

The health and vigor of oaks can also be compromised by a number of other afflictions that are not discussed here. Since 1980, for example, dieback and decline, particularly among the coast live oak *(Quercus agrifoJia),* has been observed in widespread areas of California. Several fungi may be involved in this condition, and treatments are still experimental. Seek professional advice whenever you notice serious, unexplained decline in your oaks. Insects

Innumerable insects find their livelihoods in the branches and leaves of oaks, usually without much consequence to the healthy tree. The oak gall, for example, is a harmless swelling of leaves and twigs in reaction to enzymes released where a wasp lays its eggs. Some galls are large and round. Others resemble small wads of fuzz, stars, or tops. One type of gall, which looks like a tiny seed, falls from leaves in the late summer and occasionally jumps into the air like a Mexican jumping bean.

Some infestations, however, can cause serious damage. Insects such as pit scales (which appear as pinhead- sized scales on the bark of twigs), oak moth, and other leaf-eaters can weaken oaks, making them susceptible to disease.

Whenever an insect infestation causes substantial leaf loss, changes in leaf color, twig dieback, sticky or sooty foliage, and branches, or other significant changes in appearance, intervention may be required. Consult a certified arborist for assistance.

Edited by Sharon G. Johnson and Sarah S. Gustafson California Oak Foundation- <u>hito:llwww.californiaoaks.org</u>

Fresno County Oak Woodland Management Guidelines

The following recommendations are being presented to landowners to assist them in determining how they can best manage their oak woodlands. We emphasize that these guidelines are voluntary. The recommendations are not in any particular order of importance. All recommendations should be considered when reviewing a specific piece of property. Landowners are encouraged to create an Oak Management Plan for their property using the Integrated Hardwood Management Program information and the other listed resources for specific assistance.

1. When Building within Oak Woodlands:

Develop an Oak Woodland Management Plan to retain existing oaks, preserve agriculture, retain wildlife corridors and enhance soil and water conservation practices.

Avoid tree root compaction during construction by limiting heavy equipment in root zones. Carefully plan roads, cuts and fills, building foundations and septic systems to avoid damage to tree roots. Design roads and consolidate utility services to minimize erosion and sedimentation to down stream sources. Also consider reseeding any disturbed ground.

Avoid landscaping which requires irrigation within ten (10) feet of the trunk of an existing oak tree to prevent root rot.

Consider replacing trees whose removal during construction was unavoidable.

Use fire-inhibiting and drought tolerant and oak compatible landscaping wherever possible.

2. Take Steps to Increase Fire Safety on Wooded Parcels:

Recognize fire as a natural feature of the oak woodland landscape and plan accordingly.

Set up a continuous management program as a part of your Oak Woodland Management Plan to maintain a fire-safe property environment.

Identify and manage trees to be fire-safe.

Recognize the impact of steep slopes on fire safety.

Develop a fire-safe and oak-friendly landscape plan for your home or business.

Create "Defensible Space" around buildings. Defensible space is that area which lies between a structure and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and which provides an opportunity for firefighters to safely defend a structure.

3. When Implementing Range Improvement Practices in Oak Woodlands:

When using prescribed fire as a range improvement practice, obtain professional assistance to maximize benefits and minimize risk.

When converting oak woodlands to other agricultural uses, consider incorporating an oak retention component or a conservation easement in your Oak Woodland Management Plan.

Develop water sources -ponds, troughs, seeps and springs for livestock and wildlife.

When Harvesting Oaks for Fuel or Range Improvement, Plan Your Harvest to:

Maintain an average canopy cover of 10% to 30% depending on site, elevation and precipitation.

Retain some oak trees of all sizes and species represented at the site, in clusters where possible. When safety permits, leave old hollow trees and those actively being used for nesting, roosting or feeding.

Where low fire risk and aesthetics allow, pile limbs and brush to provide wildlife cover.

Where commercial or extensive harvest is being contemplated, seek professional advice.

Los Angeles County

Before Construction –

- Baseline documentation of the oak woodland characteristics completed.
- Identify any potential impacts and recommend mitigation measures. Fencing should be installed around the designated protected zone.
- Required bonds should be posted.

- All project personnel should understand the goals, guidelines and restrictions associated with the project.
- Identify enforcement options and consequences.

During Construction -

- On-site monitoring should be required during all activities that might impact the oak woodlands.
- Maintain records of activities and decisions regarding oak woodlands.
- Work with construction personnel to protect the resources.
- Evaluate tree response to site activity and recommend appropriate action.
- Provide guidance on temporary irrigation if needed.
- Treat any tree injuries appropriately.

Following Construction -

- Develop and implement a Monitoring Plan
- Provide recommendations for managing remnant oak woodlands
- Oversee implementation of a management program to preserve woodland function.
- Oversee fuel modification procedures and hazard tree management.

IX. MITIGATION FOR LOSS OF OAK WOODLAND HABITATS, PROGRAM OPTIONS FOR FUTURE CONSIDERATION

A. VOLUNTARY OWMP (ANY REGULATORY POLICIES, PROCEDURES OR PROGRAMS THAT REQUIRE SPECIFIED DISCRETIONARY ACTIONS (IMPLEMENTATION AND MITIGATION PROGRAM CONSIDERATIONS) WOULD BE IDENTIFIED AS OPTIONS FOR FUTURE CONSIDERATION AS PART OF THE OWMP IMPLEMENTATION PROGRAM). DEGREE OF ANY PROPOSED (REGULATIONS) SHOULD BE CONSISTENT WITH THE THREAT OF HARM.

The proposed development will impact approximately 5,300 acres of oak woodland. Public Resources Code section 21083.4 requires the County to determine whether these impacts constitute a significant effect on oak woodlands, and if so, to require mitigation using conservation easements, replanting oaks, contributing to an oak woodland conservation fund, or other methods developed by the County. Appropriate mitigation for these impacts will be determined in consultation with the County during the application review process. There is opportunity for onsite oak woodland preservation and enhancement on adjacent parcels in the event that mitigation is called for. Appendix C depicts the suitable potential oak restoration and preservation areas within the reclaimed DBA Footprint.

Opportunity for onsite oak woodland preservation and enhancement within adjacent parcels exists if mitigation is called for. Appendix C depicts existing oak woodlands and potential suitable oak woodland planting areas within these parcels. Suitable oak planting areas are those not within existing oak woodland, on slopes less than 35 percent. Potential suitable planting areas were determined though ArcGIS analysis as described above. The planting suitability analysis is depicted graphically in Appendix C.

5.0 DISCUSSION AND CONCLUSION

General plans, area plans, and specific projects are subject to the provisions of the California Environmental Quality Act (CEQA) to assess the impacts of proposed projects on the environment before they are constructed. For example, site development may require the removal of some or all of a site's existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Plants and animals adapted to humans, roads, buildings, pets, etc. may replace those species which formerly occurred on the site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. These impacts may be considered significant or not. According to Guide to the California Environmental Quality Act (Remy et al. 1999), "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest.

Specific project impacts to biological resources may be considered "significant" if they will:

- ☐ have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species (including threatened and endangered species) in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- □ have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- ☐ have a substantial adverse effect on federally protected wetlands as defined by Section 404 of The Clean Water Act (including, but not limited to, navigable waters, marsh, vernal pool, coastal, etc. None of these appear to be present on the project site.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- □ conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan (Remy et al. 1999).

Furthermore, CEQA Guidelines Section 15065 states that a project may trigger the requirement to make a "mandatory findings of significance" if "the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory."

If the County can demonstrate that potential impacts to biological resources will be avoided then these impacts should be considered less-than-significant for the purpose of a CEQA review.

Project-related Mitigation Guidelines

USFWS and DFW work to avoid land use decisions that might restrict the range or reduce the numbers of rare or endangered species. Under the Endangered Species Act, if it is determined that listed species will be adversely affected (or if a project impact is likely to have an adverse effect on listed species), such impacts can must be mitigated.

Under CEQA, once a threshold for significance has been established (e.g. significant impacts to a natural community, to special status species, or to common wildlife species), applicant can address a range of mitigation options. In view of CEQA guidelines, DFW has traditionally encouraged project proponents (such as Applicant) to take the following hierarchical approach to mitigate for any human impacts on natural communities and wildlife:

- 1) Ideally, any proposed project should be designed to avoid impacts to high quality habitat and sensitive species (e.g. San Joaquin kit fox, Western burrowing owl, or Valley elderberry longhorn beetle).
- 2) If avoidance is not possible, DFW encourages project proponent to minimize loss of natural habitat and habitat quality. Habitat improvements, including revegetation with native species or enhancement of degraded habitat (including removal of non-native species), either on-site or off-site may be used as mitigation.
- 3) Another important component of effective mitigation includes efforts aimed at reducing human disturbance by controlling access to sensitive areas or devising plans for coexistence.
- 4) Short-term mitigation may be recommended during construction. Construction and maintenance personnel are instructed on "take" avoidance. Native vegetation may be replanted, and protection recommended on the project site for habitat features critical to endangered and threatened species. Individual plants or animals may be relocated off-site by a qualified biologist.
- 5) Long-term mitigation may include control of alien and wild predators and invasive plant species, or encouraging growth of forage plants for native animal species.

Extensive blue oak woodlands occupy the site. At least seven old growth oak trees with diameter at breast height greater than 15 inches were identified as potentially impacted by the proposed community. Several oak woodland conservation plans have been approved by other counties in California (see Tuolumne County and the California Oak Woodland Foundation's conservation plans).

Determination of Impact Significance in State Law

Indirect Impacts

A land development project is considered to have a significant indirect impact on oak woodland if it will result in human occupancy and use of oak woodland. The planned use for the UDB is, in part, human occupancy, however, much of the site will be unaffected by human occupancy.

Direct Impacts

1. A land development project is considered to have a significant direct impact on oak woodland if the project will result in more than a 10 percent decrease in native oak canopy within oak woodland on the project site. For example, if an oak woodland contained 50 percent oak canopy cover, removal of more than five percent canopy cover would be considered significant.

- 2. Impacts to any Valley oak. Valley oaks should be retained on the project sites and avoided during the development process. Where avoidance is impossible, impacts to such trees is subject to mitigation measures in addition to those for other oaks as provided herein due to the rarity of these trees and woodlands.
- 3. Impacts to any old growth oak. Old growth oaks should be retained on the project sites and avoided during the development process. Where avoidance is impossible, impacts to such trees is subject to mitigation measures in addition to those for other oaks as provided herein due to the high-biological value of these trees and woodlands.

In consultation with Tulare County and DFW, the applicants can propose mitigation measures to compensate for oak woodland impacts and determine the adequacy of those impacts. An oak woodland evaluation plan may be required as part of determining the need and adequacy of the mitigation measures. The vast majority of the oaks in the UDB will be unaffected by site development.

Mitigation

Riparian habitat occurs in the UDB, along creeks and rivers and blue oak woodland occurs on the slopes. Mitigation measures are warranted if impacts to old growth blue oak and Valley oak woodlands occur.

The oak woodland guidelines state:

Old Growth Oak Mitigation (>15 inches diameter)

Projects that impact old growth oak (OGO) trees shall comply with all of the following mitigation measures:

- 1. Avoid OGO trees to the maximum extent feasible. No more than 25 percent of the OGO trees on a project site may be impacted.
- 2. For each impacted OGO tree, except valley oak, ten replacement trees of the same species shall be planted on land conserved through a conservation easement or fee title dedication to a land conservation group approved by the County and Department of Fish and Game.
- For each impacted OGO Valley oak tree, 15 replacement trees shall be planted on land conserved through a conservation easement or fee title dedication to a land conservation group approved by the County and the Department of Fish and Game.
- 3. Payment of a fee to the California Wildlife Conservation Board's Oak Woodlands Conservation Fund or other mitigation fund established by the County using the following formulas:

Fee = number of OGO trees impacted x 0.5 x current land value; For OGO valley oak trees:

Fee = number of OGO valley oak trees impacted x 0.75 x current land value. An administration fee equal to five percent of the mitigation fee shall also be required to reimburse the County for its expenses associated with this mitigation measure.

Developing several parcels in the UDB will impact small numbers of oaks, but may significantly impact large blue and Valley oaks.

The County has the option of permanently protecting areas to mitigate development impacts. Mitigation sites would remain unaffected by human activities and development in the UDB and will have the express purpose of mitigating and compensating for impacts on the site through onsite resources or revegetation/restoration.

Examples from other Counties

The following is excerpted from the Fresno County Oak Woodland Management Guidelines:

The following recommendations are presented to landowners to assist them in determining how they can best manage their oak woodlands. We emphasize that these guidelines are voluntary. The recommendations are not in any particular order of importance. All recommendations should be considered when reviewing a specific piece of property. Landowners are encouraged to create an Oak Management Plan for their property using the Integrated Hardwood Management Program information and the other listed resources for specific assistance. 1. When Building Within Oak Woodlands:

Develop an Oak Woodland Management Plan to retain existing oaks, preserve agriculture, retain wildlife corridors and enhance soil and water conservation practices.

- Avoid tree root compaction during construction by limiting heavy equipment in root zones. Carefully plan roads, cuts and fills, building foundations and septic systems to avoid damage to tree roots. Design roads and consolidate utility services to minimize erosion and sedimentation to downstream sources. Also consider reseeding any disturbed ground.
- Avoid landscaping which requires irrigation within ten (10) feet of the trunk of an existing oak tree to prevent root rot.
- Consider replacing trees whose removal during construction was unavoidable.
- Use fire-inhibiting and drought tolerant and oak compatible landscaping wherever possible.
- 2. Take Steps to Increase Fire Safety on Wooded Parcels:
 - Recognize fire as a natural feature of the oak woodland landscape and plan accordingly.
 - Set up a continuous management program as a part of your Oak Woodland Management Plan to maintain a fire-safe property environment.
 - Identify and manage trees to be fire-safe.
 - Recognize the impact of steep slopes on fire safety.
 - Develop a fire-safe and oak-friendly landscape plan for your home or business.
 - Create "Defensible Space" around buildings. Defensible space is that area which lies between a structure and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and which provides an opportunity for firefighters to safely defend a structure.

- 3. When Implementing Range Improvement Practices in Oak Woodlands:
 - When using prescribed fire as a range improvement practice, obtain professional assistance to maximize benefits and minimize risk.
 - When converting oak woodlands to other agricultural uses, consider incorporating an oak retention component or a conservation easement in your Oak Woodland Management Plan.
 - Develop water sources -ponds, troughs, seeps and springs for livestock and wildlife.
 - When Harvesting Oaks for Fuel or Range Improvement, Plan Your Harvest to:
 - Maintain an average canopy cover of 10% to 30% depending on site, elevation and precipitation.
 - Retain some oak trees of all sizes and species represented at the site, in clusters where possible.
 - When safety permits, leave old hollow trees and those actively being used for nesting, roosting or feeding.
 - Where low fire risk and aesthetics allow, pile limbs and brush to provide wildlife cover.

The following is excerpted from the Los Angeles County Oak Woodland Management Guidelines:

Before Construction:

- Baseline documentation of the oak woodland
- characteristics completed.
- Identify any potential impacts and recommend mitigation measures.
- Fencing should be installed around the designated protected zone.
- Required bonds should be posted.
- All project personnel should understand the goals, guidelines and restrictions associated with the project.
- Identify enforcement options and consequences.

During Construction:

- On-site monitoring should be required during all activities that might impact the oak woodlands.
- Maintain records of activities and decisions regarding oak woodlands.
- Work with construction personnel to protect the resources.
- Evaluate tree response to site activity and recommend appropriate action.
- Provide guidance on temporary irrigation if needed.
- Treat any tree injuries appropriately.

Following Construction:

- Develop and implement a Monitoring Plan
- Provide recommendations for managing remnant oak woodlands
- Oversee implementation of a management program to preserve woodland function.
- Oversee fuel modification procedures and hazard tree management.

The following is from Title 22 of the San Luis Obispo County Code, Chapter 22.56:

Tree Preservation (San Luis Obispo County 1980) requires a tree permit for the removal of any tree greater than 8 inches diameter at breast height (DBH) within any urban or village reserve lines, or other specific areas identified in the planning area standards. The Voluntary Oak Woodlands Management Plan for San Luis Obispo County (Native Tree Committee 2003) implements the voluntary guidelines in the Native Tree Resolution, as adopted by the County Board of Supervisors. The Plan suggests a number of conservation measures including designing projects around existing oak woodlands, clustering development, encouraging landscaping with native oaks, and purchase of conservation easements. However, this plan is voluntary and does not constitute a binding mandate on private landowners or abridge the private property rights of a landowner.

X. GUIDELINES FOR MAINTENANCE, RESTORATION, AND REHABILITATION OF OAK WOODLANDS, PROGRAM OPTIONS FOR FUTURE CONSIDERATION

A. PROGRAM SHOULD BE INCENTIVE BASED (COMPENSATION/INCENTIVES).

1. INCENTIVES TO ENCOURAGE THE LONG TERM PRESERVATION OF OAK WOODLAND COMMUNITIES.

A major objective of the OWMP is to prevent impacts to existing oak woodlands and provide incentives to private landowners who take voluntary actions to preserve and restore these resources. It is hoped that additional incentives will be developed and added to further encourage conservation of oak woodlands. While the priority is to enhance preservation and restoration of oak woodlands within areas that may be identified in the future as Potential Oak Woodlands Conservation Areas, any property located within a mapped oak woodland, or that can demonstrate suitability for the existence of an oak woodland on the parcel, could qualify. To that end, the following incentive ideas are identified for consideration.

Dedications or Donations of Land

Dedication of conservation easements or donation of oak woodlands to a public trust is one way to achieve the goals of the OWMP. While this option typically applies more to larger developments, it also has implications for single family residences as well.

Conservation Easements

Both the County and local Land Trusts are able to accept dedication of conservation easements. These

easements allow the landowner to retain title for the land, but the County or Land Trust would obtain any development rights. By not exercising those rights, development of that land is prevented. Dedication of a conservation easement "runs with the land", resulting in development restrictions will continue in perpetuity, even if the land is sold.

As indicated earlier in the plan, There are several mechanisms for a landowner to benefit from dedicating an Oak Woodlands Conservation Easement, including both income and estate tax benefits.

Income and Property Tax Credit

Landowners who donate oak woodland conservation easements may be able to receive a tax receipt for the full value of their ecological gift. Landowners should consult with their tax or financial advisors to understand all of the potential local, state, and federal incentives that may be available. As feasible, the County will work to make general information available about these potential incentives to members of the public and professional planners.

Estate Planning

Landowners who donate oak woodland conservation easements may receive estate tax benefits, provided that they exceed the federal estate tax exclusion, which is currently \$3.5 million per person. The maximum for the exclusion is \$500,000 or up to 40% of the assessed land value, whichever is less value.

The above strategies can result in significant income and property tax benefits, as well as provide estateplanning opportunities for landowners that want to protect their property in perpetuity. By pro-actively preserving oak woodlands, a property owner may receive tax relief for up to the full value of their ecological gift, based on the assessed land value per acre.

Avoided permitting, mitigation and monitoring costs streamlining permit process.

Project designs that avoid impacts to oak trees or woodlands typically face less opposition by the community, avoid costly mitigation and monitoring requirements and can obtain permits much faster. In fact, they may avoid the need for permits from California Department of Fish and Wildlife, US Fish and Wildlife Service, US Army Corps of Engineers and the Regional Water Quality Control Board. This can result in significant project cost savings.

Fuel modification benefits

Each year County residents in High Fire Danger areas incur significant costs in order to meet fuel modification requirements. Clearing up to 200 feet from all structures can be very costly. The presence of oak woodlands significantly reduces clearance costs because: the native understory of oak woodlands typically contains less flammable vegetation; oak trees are harder to ignite and not as prone to rapid combustion, which means they require less pruning and thinning; and oak stands that are well maintained (deadwood removed, retaining native leaf litter and perennial native shrubs and forbs) prevent slope failure, reduce erosion and can slow down a wildfire.

Use Values

Properties having functional oak woodlands offer higher real estate benefits (amenity values) than comparable lands without oaks (Standiford 1999). Real estate development costs are usually considered here. The "soft" costs of design, permitting, marketing and sales are added to the "hard" costs of grading, construction, infrastructure and utility establishment, mitigation and monitoring. These costs vary, but are typically passed on to the consumer.

B. FUTURE FUNDING AND IMPLEMENTATION PROGRAMS, CONSIDER GRANTS, CONSERVATION BANKS, CONSERVATION EASEMENTS, PER ACRE IMPACT FEES, CONSOLIDATING OF SMALL PARCELS (LOT MERGER), AND TRANSFER OF DEVELOPMENT RIGHTS.¹⁹

The preservation and protection of grazing and range land is crucial for both its agricultural value and its ability to provide high value habitat to a wide range of species, many of which are listed as threatened or endangered. The following approaches and mitigation practices are typically utilized for mitigation strategies applied to irrigated prime farmland, farmland of statewide importance, or unique farmland, but are also relevant for grazing and rangeland mitigation as well.

Conservation Easement

A conservation easement is a voluntary, legally binding agreement that limits certain types of uses or prevents development from taking place on a piece of property now and in the future, while protecting the property's resources such as habitat, open space or, as in the case of agricultural conservation easements, farmland. A conservation easement is recorded in the chain of title of the property and it "runs with the land" so that the restrictions also apply to future owners of that land. Conservation easements are provided for in California Civil Code 815 et seq. Appendix 1. Conservation easements, as defined by California Civil Code 815.1, are perpetual (California Civil Code 815.2b). Any easement used for mitigation purposes is specifically required to be perpetual per CA Government Code 65966(a): "Any conservation easement created as a component of satisfying a local or state mitigation requirement shall be perpetual in duration, whether created pursuant to Chapter 6.6 (commencing with Section 51070) of Part 1 of Division 1 of Title 5 of this code or Chapter 4 (commencing with Section 815) of Title 2 of Part 2 of the Civil Code."

Agricultural conservation easements are a specific type of conservation easement and are typically used to fulfill farmland mitigation requirements in California. Agricultural conservation easements are designed to protect farmland so that it may remain in agricultural use by removing the development pressures from the land. Agricultural conservation easements prohibit activities and uses that would damage or interfere with the agricultural use of the land. The easement remains in effect even when the land changes ownership. The project proponent may either locate and facilitate the acquisition of the conservation easement or may provide funds for the conservation easement acquisition, including associated costs, to the land trust or local government.

Agricultural conservation easements are held by land trusts, governmental agencies including Resource Conservation Districts, and California Native American tribes. The easement holders are responsible for ensuring that the terms of the easement are upheld. The terms of each agricultural conservation easement are negotiated between the landowner, the easement holder, and, in the case of mitigation

¹⁹ California Council of Land Trusts, Conserving California's Harvest, 2014

easements, the land use authority or CEQA and/or NEPA lead agency. The easement holder will conduct monitoring visits, not less than annually, to the property to verify that the uses of the property are consistent with the terms of the individual easement. It is the responsibility of the CEQA lead agency to ensure that easement holders are fulfilling their monitoring and stewardship responsibilities. Easement holders are frequently required to provide reports to the CEQA lead agency summarizing their monitoring activities.

Restrictive Covenants or Deeds

Some project proponents and organizations have occasionally suggested that a deed restriction or covenant that does not qualify as a conservation easement is nevertheless a reasonable alternative to a conservation easement as a means of mitigating for the loss of farmland. This is not recommended. Deed restrictions, including covenants or other servitudes, are typically held by a benefitted landowner rather than by a third-party entity with the authority to enforce the restriction. As a result, no independent entity is responsible for monitoring the property to ensure compliance with the restrictions. It is unrealistic to rely on the project proponent, project operator or landowner to enforce the terms of the deed restriction or restrictive covenant. Monitoring and enforcement of deed restrictions and covenants by local agencies very rarely happens. By contrast, conservation easements are held by an entity typically with a conservation purpose who is distinct from the landowner and who is responsible for regularly, not less than annually, monitoring the easement to ensure that there are no violations of its terms. If a violation does occur, the easement holder has the authority to enforce the terms of the conservation easement.

Deed restrictions may be of limited duration; they "run with the land" and bind future owners of the restricted property only if the restrictions benefit a specific c, separate parcel of real property. By contrast, conservation easements need not benefit a specific parcel in order to remain enforceable in perpetuity. Conservation easements can address the wide range of other issues that must be considered if agricultural productivity is to continue on a property, such as protecting and enhancing water supply, prohibiting any use or activity that is likely to cause soil degradation or erosion, restricting uses that are inconsistent with the agricultural purpose of the property, and restricting development of the property to specific locations.

Further, there has been intensive investment in developing the legal language and stewardship framework for conservation easements. Conservation easements are the superior tool for assuring that a property remains available for and capable of agricultural productivity. Fee Title

In some instances impacts to farmland from development may be mitigated through the acquisition of the land (fee title) instead of or in addition to a conservation easement on the agricultural land. The purchase of the land is funded by the project proponent and it is held by a land trust or local government. The project proponent may either do the actual land acquisition and transfer the title to the land trust or local agency or may provide funds for the land acquisition, including associated costs, to the land trust or local government. A conservation easement is typically also placed over the land to provide assurance that the agricultural values of the land will be protected in perpetuity.

In Lieu Fees

In lieu fees are another approach to fulfilling farmland mitigation requirements. "In lieu" of the project proponent acquiring mitigation property, the project proponent pays a specified fee to the lead agency

or other designated agency. The in lieu fee is intended to be used by a third party such as a land trust or government agency to acquire the required mitigation property. A nexus study should be prepared to defensibly establish an in lieu fee and the fee should be updated regularly so it is responsive to changes in real estate values.

The in lieu fee should include all costs associated with providing the required mitigation including:

- Cost of the land or conservation easement
- All transaction costs including:
- Identifying and negotiating for the mitigation land or easement
- Surveys, appraisals, title research
- Legal review
- Preparation of transaction documents
- Other due diligence including environmental
- Site assessment and mineral remoteness evaluation
- Preparation of baseline condition reports for the mitigation site
- Escrow costs and title insurance
- Staff time
- Funding for long term stewardship and monitoring of the mitigation site.

The use of in lieu fees shifts the mitigation responsibility from the project proponent to another party such as a governmental agency or qualified land trust. Because of this transfer of responsibility it is essential to correctly calculate the entire cost of fulfilling the mitigation requirement to ensure that the acreage required for mitigation is actually protected and the mitigation project is sufficiently funded for the long term. Any in lieu program should have a mechanism for assessing costs and adjusting the fee as needed on an annual basis. In lieu fee programs must not exceed the reasonable costs of providing the required mitigation and must meet the requirements of the CA Gov. Code 65965—65968.

Mitigation Banks

In a few instances agricultural mitigation banks have been created by for-profit conservation businesses, land trusts, or project proponents to provide mitigation for multiple projects. A mitigation bank is simply the acquisition and protection of land by fee title or conservation easement in excess of what is currently required and the excess is available for future use as mitigation. There are two basic scenarios:

1. A third party, such as a qualified land trust, joint powers authority, or governmental agency acquires land or a conservation easement, which is suitable for farmland mitigation by the nature of its location, soil and water resources, and size. The third party who establishes the bank pays all the costs of establishing the bank and recaptures those costs when they sell mitigation "credits" for the acres of land needed by a project proponent. The actual land or conservation easement remains in the ownership of the third party. The credits sold are deducted from the credits available at the bank until all credits have been "sold" and the bank has been fully utilized.

2. A project proponent acquires land or establishes a conservation easement on acreage that exceeds their mitigation needs. The project proponent transfers the land and/or the conservation easement to a qualified conservation holder, such as a land trust, joint powers authority, or governmental agency, to be held and managed for the conservation purposes. The excess acres are then available for the project proponent to utilize for their future projects or to make available to other project proponents for their mitigation needs. The project proponent who establishes the bank finances all the costs of establishing

the bank. If other project proponents utilize the bank to meet their mitigation needs, they typically compensate the project proponent who established the bank.

Conservation Banks

A conservation bank is a parcel of land containing natural resource values that are conserved and managed in perpetuity, through a conservation easement held by an entity responsible for enforcing the terms of the easement, for specified listed species and used to offset impacts occurring elsewhere to the same resource values on non-bank lands. Bank parcels are typically large enough to accommodate the mitigation of multiple projects. A project proponent will secure a certain amount of natural resource values within the bank to offset the impacts to those same values offsite. The bank is specifically managed and protected by the banker or designee for the natural resource values. The values of the natural resources are translated into quantified "credits." Typically, the credit price will include funding for the long-term natural resource management and protection of those values. Project proponents are, therefore, able to complete their conservation needs through a one time purchase of credits from the conservation bank. This allows "one-stop-shopping" for the project proponent, providing conservation and management for listed species in one simplified transaction.

A bank can be created in a number of different ways: (1) acquisition of existing habitat; (2) protection of existing habitat through conservation easements; (3) restoration or enhancements of disturbed habitat; (4) creation of new habitat in some situations; and (5) prescriptive management of habitats for specified biological characteristics. Banks can be created in association with specific projects, or can proceed from a circumstance where the a project proponent sets aside more area than is needed for the immediate project, or where the specific project and is willing to protect the remaining area and thus generate credits, or where the specific project is implemented over a longer period of time. A conservation bank also can also be created as an entrepreneurial effort in anticipation of an independent customer base with a number of different potential projects.

Once conservation banks are established, conservation banks each credit they sell are is considered to be part of the environmental baseline. As a result, future project evaluations and listing or delisting decisions can be made in a more stable ecological context. This stability is one of conservation banking's greatest assets, both from an ecological and economic standpoint. For this reason, it is particularly important that conservation banks be established in perpetuity, regardless of the future status of the species for which the bank was initially established.²⁰

Transfer of Development Rights

The Transfer of Development Rights is a strategy to direct new urban growth to appropriate areas and further the environmental, economic and community goals of stakeholders in a particular jurisdiction. Transfer of development rights, otherwise known as TDR, is a regulatory strategy used to manage growth. Voluntary and incentive-based, TDR capitalizes on market forces to direct development away from sensitive lands into more desirable areas such as urbanized areas and town centers. TDR is based on the designation of standard sending and receiving areas, as well as the distinction between land ownership and the rights necessary to develop a parcel.

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United States Department of the Interior Fish And Wildlife Service, Guidance for the Establishment, Use, and Operation of Conservation Banks, May 2003.

Sending areas are typically lands that have been identified for preservation or deemed environmentally sensitive and therefore may not be suitable for development. Receiving lands on the other hand are areas in which additional growth is desirable and beneficial. Development rights, or commodities as they are sometimes called, serve to quantify development and act as the building blocks for growth management. By transferring the rights from a sending to a receiving parcel, TDR works to implement programs designed to increase affordable housing as well as other desirable development and restore of sensitive lands and achieve the following:

- 1. Help direct growth away from sensitive areas, facilitating achievement of environmental goals.
- 2. Contribute to more compact development patterns thus making downtown areas more walkable, reducing the need for vehicle trips and reducing greenhouse gas emissions (GHG).
- 3. Allow property owners to realize value through sales of rights from their parcels.

Lot Line Adjustment/Lot Consolidation

A Lot Line Adjustment is the *adjustment of lines between four or fewer existing adjoining parcels*, where the land taken from one parcel is added to an adjoining parcel, and where a greater number of parcels than originally existed is not created. A Lot Consolidation is the *consolidation of any number of existing contiguous parcels into one parcel* provided that no new street is created and no existing street or public service easement is extinguished. Conservation benefits may enhanced and more feasible with larger parcel sizes under a single ownership.

C. DESIGN GUIDELINES, EDUCATIONAL PROGRAMS, AND GENERAL PLAN POLICIES.

City of Visalia Standard Specifications for Building Around Valley Oaks²¹

The citizens of Visalia are fortunate to live among the largest remaining stand of native Valley Oaks in the Central Valley. These magnificent trees need to be protected during development, so that they will survive for the next generation. By following these standard specification we can ensure that all will enjoy the beauty of the Valley Oaks for generations to come.

- 1. The developer shall submit a Valley Oak management plan to the City of Visalia at the entitlement phase of a project. The management plan shall contain a protective fencing detail including the date to be installed, a watering schedule including frequency and volume of water applied at each application, and the name of the contractor who will be watering the Valley Oak tree(s) through the construction process.
- 2. The protection zone of all Valley Oaks shall be drawn to scale on plans; this includes accurately locating the trunk and depicting the crown drip-line. There shall be no earthwork around the crown drip-line without the consent of the City Arborist.
- 3. All utility locations shall be included in all development plans involving Valley Oak(s).
- 4. Protective tree fencing shall be added prior to any earth work, at least 3 ft. minimum in height, installed at outer most end of the drip-line surrounding the trunk of a Valley Oak. The temporary

²¹ Standard Specifications For Building Around Valley Oaks, City Of Visalia Parks & Recreation Department Urban Forestry Division, August 2007

fencing shall be: safety orange color, plastic webbing, temporary construction type fencing. (Snow fencing) Fencing shall be supported by steel T-bar stakes. This fence is to remain until construction is complete and the City Arborist approves its removal. Nothing may be stored inside the protective fence. See detail 1.

- 5. There shall be no back tilling within 10 ft. of the trunk of a Valley Oak and a maximum of 6 inches of backfill within the crown drip-line. Any deviation from this requires City Arborist approval. Backfill will be of a high quality soil and clean of any debris.
- 6. There shall be no trenching within the crown drip-line of the Valley Oak, or at a distance to be determined by the City Arborist. Utilities to be installed within the crown drip-line shall be bored at a minimum depth of 36". See detail 4.
- 7. There shall be no soil compaction, paving or structures placed within the crown of a Valley Oaks without the written consent of the City Arborist.
- 8. Valley Oak trees shall be irrigated prior to construction starting and through construction starting in May and stopping at the end of September. Irrigation shall consist of 35 gallons of water applied per one inch measured at breast height. Trees shall be watered once every three weeks. Example 36" DBH Valley Oak shall receive 2,205 gallons of water at each application. The City of Visalia can require more water if needed. This will help ensure that the tree can better withstand the stress of construction. Irrigation is extremely important during spring and summer when the environment around a mature Valley Oak is changed by construction. Irrigation shall water all of the area under the crown drip-line. See detail 3.
- 9. Permanent irrigation systems shall be overhead spray, bubbler, drip, flood or sub-terrain only. No sprinkler systems allowed within 6 ft. of tree. If an irrigation system is to be added it must be approved by the City Arborist.
- 10. Landscaping under Valley Oaks shall consist of drought tolerant plants or California native plants that are drought tolerant in nature. There is to be no landscaping within 6 ft. of the trunk. Chipped bark and mulch are suitable for this area. No lawns shall be planted within 10 ft. of the trunk. We recommend that there be no lawn placed within the crown drip-line.

Please contact the City Arborist at 559-713-4295 to answer questions or provide assistance.

Detail 1. Proper Protective Tree Fencing: Protecting the root system under the crown drip-line is critical for the health, longevity and stability of a tree. Mature trees including Valley Oaks typically lack taproots as commonly thought. 80% of a mature trees root system is often within the top 18" of the soil surface. Protective fencing shall in place before any earth work begins on the site.

Crown Dripline






Detail 3. Irrigation: An eight inch tall by eight inch wide earth berm can be added direct outside the protective fence surrounding the crown dripline to direct water into the root zone. The area inside the earth berm under the crown dripline shall be flood irrigated.



Detail 4. Boring under the crown: Mechanical boring using a horizontal directional bore shall be required when tunneling under the crown dripline. The boring shall be at a minimum depth of 36".



Educational Programs²²

For more than 25 years, the University of California has collaborated with the California Department of Fish and Game, CalFire and other agencies to conduct research and outreach focused on conserving California's native oaks. In order to continue these efforts, UC has organized the Oak Woodland Conservation Workgroup (OWCW), which seeks to maintain, and where possible, increase acreage of California's hardwood range resources to provide wildlife habitat, recreational opportunities, wood and livestock, high quality water supply, and aesthetic value. Please see the following website: http://ucanr.edu/sites/oak_range.

Beginning in 1986 UC was a key player in the establishment of the Integrated Hardwood Range Management Program (IHRMP), a statewide Program whose stated goal was to *maintain, and where possible, increase acreage of California's hardwood range resources to provide wildlife habitat, recreational opportunities, wood and livestock products, high quality water supply, and aesthetic value.* Two other state agencies -- the California Department of Fish and Game and Cal Fire -- were also official collaborators on this Program. The IHRMP officially ended in 2009, but the University of California Oak Woodland Conservation Workgroup (OWCW) continues to address the basic mission of oak conservation within the UC system. Workgroups are designed to foster collaboration on specific issues across the continuum of academics within UC. They bring together campus-based faculty, specialists and county advisors so that research needs can be identified and research-based information can quickly be delivered to local clientele.

As Californians move from urban and suburban centers into lands that have historically been hardwood forests, the expansion is impacting the biodiversity and ecological integrity of the state's oak woodlands. The shifting demographics are increasing the need for sound decision making if the ecological integrity of oak woodlands is to be maintained. The UC Integrated Hardwood and Range Management Program (IHRMP) has directed its efforts at planners for the past 15 years in recognition of the importance this dedicated group of professionals have in conserving California's wild spaces.

In 2004, the state passed legislation requiring all non-agricultural projects affecting oak woodlands be subject to evaluation under the California Environmental Quality Act (CEQA). Terms of the legislation required that planners must determine the project's "significance" and the impacts must be mitigated. At the time of the enactment, no existing documentation or precedent had been established to assist counties in making such determinations. The IHRMP undertook the task of articulating the complex issue of "significance" and developed a decision matrix designed to assist planners, developers and conservationists address the nuances of the new statute.

The following topics are available on the University of California Oak Woodland Management website:

http://ucanr.edu/sites/oak_range.

California's Oak Woodland Species

There are over 20 species of native California oaks. Several of these are endemic and grow naturally nowhere outside of California, while others are more wide ranging and grow from Canada to Mexico. There are both shrubby oak species that never grow more than a few feet tall, as well as oaks that attain a tree form. By clicking on the species listed you can view descriptions of eight California tree oak

²² http://ucanr.edu/sites/oak_range/Conifer_Encroachment/

species, including information about what the bark, leaves and acorns look like. There are also pictures and line drawings of each of these species, as well as range distribution maps and other species-specific information. In addition, there are links to information about the values of hardwood rangeland stands and wildlife habitats in oak woodlands.

Description of County Oak Conservation Policies

For 25 years the California State Board of Forestry oak conservation policy supported a statewide program of research and education known as the Integrated Hardwood Range Management Program (IHRMP). This included providing strong encouragement to local governments to develop their own policies responsive to ecological, economic, and political issues impacting hardwood rangelands in their particular county. Shown below is a table of counties with significant hardwood rangeland acreage, and the current policy approaches being used. This information was assembled about six years ago so may be out-of-date for some counties. UC is working on updating this information.

Conifer Encroachment

The loss of deciduous oak woodlands to native conifer encroachment is a major conservation concern in northwestern California and across much of the Pacific Northwest, resulting in associated losses of wildlife habitat, cultural uses, biodiversity, and other ecosystem services. These losses have drawn increasing attention in recent years, and oak woodland conservation and restoration efforts have gained momentum throughout the ranges of Oregon white oak (*Quercus garryana*) and California black oak (*Quercus kelloggii*), the two species most afflicted by encroachment.

Deciduous oak woodlands have long been central to the ecology and culture of northern California. Oak woodlands support high levels of biodiversity and provide essential habitat for wildlife, and they are also deeply rooted in the human history of the region, as they have both sustained and been sustained by Native Americans, ranchers, and other local groups throughout recent history. However, management changes over the last century have altered these ecosystems, and both *Q. garryana* and *kelloggii*woodlands are in decline throughout their ranges.



CA black oak stretching for light among young, encroaching Douglas-fir.

One of the primary concerns in *Q. garryana* and *Q. kelloggii* woodlands is the change in disturbance regimes that historically shaped and maintained these ecosystems. Oak woodlands are fire-adapted, depending on frequent, low- to moderate-intensity fires to prevent establishment of invading fire-sensitive vegetation and supply conditions suitable for regeneration. Fire exclusion over the last century has resulted in direct and indirect impacts to oak woodlands, affecting recruitment and persistence, stand structure and fire regimes, and overall capacity to persist on the landscape.

Though minimally studied, native conifer encroachment is widely recognized as one of the most widespread, direct outcomes of fire exclusion in North Coast oak woodlands. Conifer encroachment has been documented in a range of oak woodland types in northwestern California, and is commonly implicated in widespread decreases of woodland extent throughout the region. In their 1987 analysis of the Bald Hills of Redwood National Park, Sugihara and Reed documented a loss of almost 30% of white oak woodland area to encroachment by Douglas-fir (*Pseudotsuga menziesii*) since 1850, and further losses have occurred since. Throughout the region, encroachment is visible from all major highways that pass through areas where oaks and Douglas-fir overlap; the magnitude of these landscape-level changes is staggering.

Gold Spotted Oak Borer

The Gold Spotted Oak Borer (GSOB) is a recently discovered insect that has been decimating some coast live oak (*Quercus agrifolia*) and California black oak (*Quercus kelloggii*) stands in Southern California, so far exclusively in San Diego County. It is believed that this non-native insect arrived in California during the last two decades, likely from firewood transported to the state from Arizona or Mexico where GSOB is known to live. The University is currently involved in a large educational effort to make the state's residents understand the threat this insect poses and to advise them on how they can help contain this outbreak. One critical factor in containing the spead of GSOB is to NOT MOVE FIREWOOD from infected areas so UC and others are embarking on a large education effort to get this message out. The website offers some links to information about upcoming GSOB Workshops, publications related to this new, but potentially devastating pest, as well as several web sites that contain additional informa tion about GSOB.

Livestock Management on Rangelands

Unlike much of the land at higher elevations which is publicly owned, 80% of the oak woodlands in California are privately held. The majority is used for grazing, primarily for beef cattle. It is therefore essential that these property owners understand the importance of oak woodland conservation and be made aware of the latest management recommendations. Since its inception, UC's oak conservation programs have worked closely with ranchers and the professional organizations that represent them, including the California Cattlemen's Association, the Woolgrowers, and the Farm Bureau. We have also been actively involved in the California Rangeland Conservation Coalition. Our experience is that the vast majority of rangeland owners are good stewards of the land and want to ensure that their properties are passed along to future generations with their conservation values intact. Maintaining large acreages as ranches provides myriad public benefits in terms of high quality water, critical wildlife habitat, and iconic landscapes at little or no cost to the general public.

Oaks in the Urban Landscape

While the main focus of the IHRMP was to address oak and oak woodland conservation in wildlands, it became apparent right away that many people were also very interested in how to manage their oak trees in their backyards. We believe this reflected the fact that oaks are extremely important to many people (with majestic individual trees often evoking emotions of near reverence), as well as the recognition that historically, many oaks around homes have been inadvertently damaged or killed by mismanagement. People therefore wanted to make sure they knew how to maintain their oaks in as healthy a condition as possible.

One of the most popular IHRMP publications has been a glossy 8-page color brochure that, among other things, contains specific information about how to manage native California oaks in an urban setting. This publication (which has recently been revised and will be available online for free very soon) contains helpful tips about how to prevent damage to oak roots, where and when to irrigate around oaks, what plants are best to plant near oaks, and what to do if a tree has been damaged by fire. Click on the title (*Living Among the Oaks*) at the right to download this publication.

Another valuable resource regarding oaks has just been published. This is a book titled *Oaks in the Urban Landscape: Selection, Care, and Preservation.* It was written by UC Environmental Horticulture Advisor Larry Costello, CalFire Urban Forester Bruce Hagen, and Katherine Jones, the UC California Tree Failure Report Database Manager. It has eleven chapters and contains a wealth of specific information about keeping oak trees healthy and prosperous.

Finally, to the right are also listed several web sites where you can obtain additional information about taking care of your urban oaks.

Oak Regeneration

There has been widespread concern that some native California oaks were not regenerating adequately. Three California oak species (blue oak, valley oak and Engelmann oak) have been repeatedly identified as species that have inadequate regeneration to maintain current stand densities. There has been considerable research during the past several decades on where and why oak regeneration is problematic and how to successfully artificially regenerate oaks. In addition, the University of California has hosted numerous trainings where the latest information on oak regeneration has been disseminated. Below are links to several publications on oak regeneration.

Planning in Oak Woodlands

There are many threats to oaks, but one of the most significant today is the impact from residential and commercial development. Local planning plays a key role in oak woodland conservation. The University of California has worked extensively on planning issues during the last several decades to help identify planning strategies consistent with woodland conservation and to make this information available to local planners. Shown below are several useful resources.

<u>UC Oak Planner's Portal</u> <u>A Planner's Guide to Oak Woodlands</u> <u>Oak Woodland Conservation in California's Changing Landscape</u> <u>Description of County Oak Conservation Policies</u>

Sudden Oak Death

Sudden Oak Death, or SOD, was first observed in California in 1995. In 2000 UC researchers identified the causal agent as *Phytophthora ramorum*, a pest new to science that had never been identified before. UC provided initial seed money to assist in studying this new disease, and to establish the California Oak Mortality Task Force (COMTF), a multi-agency collaborative team focused on understanding this new pest and educating the public about how to manage infected stands and curtail the spread of this damaging disease. Below is a link to the COMTF web site that includes a wide range of SOD information, including what plants are confirmed hosts, where the disease is currently found, regulations about the movement of host material, and recommended management practices for limiting damage.

Woodland Fires

As the population of California continues to increase, the threat of wildfires also increases. This is because most wildfires are started by humans. It is also generally accepted that the treat of *catastrophic* fires is higher today than it has ever been. The primary reason for this is that after a 100 years of very successful fire suppression, the amount of fuels in the landscape is much higher than it was when periodic, low intensity fires regularly burned. In the past decade, some of California's largest fires on record have occurred, including some in oak woodlands. As a result, the University has produced a number of publications on fire including a white paper titled *Fires in California's Oak Woodlands*. Links to this and other fire-related publications and websites.

Woodland Wildlife

Oak woodlands are one of the richest broad habitats in the state with well over 300 terrestrial vertebrates utilizing woodlands at some time during the year. They are also extremely important for a wide range of insect life. How they are managed can therefore have a significant impact on the populations of a great number of animal species. When the IHRMP began in 1986, however, there was relatively little specific information about how woodland management activities including oak tree removal or thinning, intensive grazing, or prescribed burning might impact wildlife populations. Considerable research has therefore been done in the wildlife area.

Oak Symposium Series

Beginning in 1979, there have been a series of symposia held every 5 to 7 years addressing the state of our knowledge about science, policy and management factors affecting California's oak resource. The most recent symposium was held on November 3-6, 2014 in Visalia, California. Shown below is a link to download the Proceedings of each of the 7 oak symposiums.

- June 26-28, 1979; Claremont, CA; Proceedings of the symposium on the ecology, management, and utilization of California oaks <u>USDA Forest Service PSW-GTR 44</u>
- November 12-14, 1986; San Luis Obispo, CA; Proceedings of the Symposium on Multiple-Use Management of California's Hardwood Resources <u>USDA Forest Service PSW-GTR 100</u>
- October 31 November 2, 1990; Davis, CA; Proceedings of the symposium on oak woodlands and hardwood rangeland management <u>USDA Forest Service PSW-GTR 126</u>
- March 19-22 1996; San Luis Obispo, CA; Proceedings of a symposium on oak woodlands: ecology, management, and urban interface issues <u>USDA Forest Service PSW-GTR 160</u>
- October 22-25, 2001; San Diego, CA; Proceedings of the fifth symposium on oak woodlands: oaks in California's changing landscape <u>USDA Forest Service PSW-GTR 184</u>

- October 9-12, 2006; Rohnert Park, CA; Proceedings of the sixth California oak symposium: today's challenges, tomorrow's opportunities <u>USDA Forest Service PSW-GTR 217</u>
- November 3-6, 2014; Visalia, CA; Proceedings of the seventh California oak symposium: managing oak woodlands in a dynamic world <u>USDA Forest Service PSW-GTR 251</u>

Links

There are many groups and organizations within California and elsewhere that have an interest in oaks or related resources. Some of these, such as the California Native Plant Society, are non-profits that have a larger over-arching emphasis, but include California's oaks in the native plants they seek to promote and sustain. Others, such as the International Oak Society, have a narrower focus, but a much wide geographic area of interest (the world!). In addition to these environmental groups, there are a variety of government agencies or organizations, including other University of California units or programs, whose purview includes oaks. These include the two California agencies mentioned above in the Purpose section, as well as local entities such as Resource Conservation Districts, that include oaks among the resources they work on. Links to these various groups are listed below.

California Oak Mortality Task Force (COMTF) Center for Forestry - University of California Forest Research and Outreach - University of California Cooperative Extension Hastings Natural History Reserve - University of California Hopland Research and Extension Center - University of California Information Center for the Environment (ICE) - University of California Integrated Pest Management Program (IPM) - University of California Natural Reserve System - University of California Rangelands Research and Information Center - University of California Sierra Foothill Research and Extension Center - University of California UC Master Naturalist Program

Oak Articles On Line

A series of short articles archived from the IHRMP Newsletter Oaks 'n Folks is available on-line on various topics.

- Oak Regeneration/Restoration
- Oak Pest Management
- Oaks and Climatic Factors
- Oaks and Fire
- Oak Woodland Products/Range Management/Livestock
- Oak Woodland Ecology and Monitoring
- Oak Woodland Wildlife
- <u>Policy Issues</u>
- Oaks and Landscaping/urban forestry

Publications

In addition to the Newsletter Oaks 'n Folks, UC's Integrated Hardwood Range Management Program produced a wide range of publications during the 24 years it was in existence. These included Proceedings of Oak Symposia that were held every 5-6 years, refereed research publications resulting

from scientific studies, and an assortment of targeted brochures, pamphlets and books that addressed some particular aspect oak woodland management or ecology. Some of these latter publications are available for purchase from UC Communication Services. Others can be downloaded for free by clicking on the title.

The following publications are available on the UC Rangelands website:

http://rangelands.ucdavis.edu/

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D. DETERMINE AND INCLUDE AN APPROACH REGARDING ADJACENT AND CONTIGUOUS OAK WOODLAND AREAS OUTSIDE OF THE THREE RIVERS UDB (UTILIZE FOOTHILL GROWTH MANAGEMENT PLAN). The Tulare County General Plan provides support of the conservation and management of oak woodland communities and their habitats.

Tulare County General Plan Policies:

Land Use Element

LU-2.3 Open Space Character

The County shall require that all new development requiring a County discretionary approval, including parcel and subdivision maps, be planned and designed to maintain the scenic open space character of open space resources including, but not limited to, agricultural areas, rangeland, riparian areas, etc., within the view corridors of highways. New development shall utilize natural landforms and vegetation in the least visually disruptive way possible and use design, construction and maintenance techniques that minimize the visibility of structures on hilltops, hillsides, ridgelines, steep slopes, and canyons.

Environmental Resource Management Element

ERM-1.12 Management of Oak Woodland Communities

The County shall support the conservation and management of oak woodland communities and their habitats.

ERM-1.4 Protect Riparian Areas

The County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls.

ERM-1.8 Open Space Buffers

The County shall require buffer areas between development projects and significant watercourses, riparian vegetation, wetlands, and other sensitive habitats and natural communities. These buffers should be sufficient to assure the continued existence of the waterways and riparian habitat in their natural state.

Health And Safety Element

HS-5.4 Multi-Purpose Flood Control Measures

The County shall encourage multipurpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of the County's streams, creeks, and lakes. Where appropriate, the County shall also encourage the use of flood and/or stormwater retention facilities for use as groundwater recharge facilities.

HS-5.9 Floodplain Development Restrictions

The County shall ensure that riparian areas and drainage areas within 100-year floodplains are free from development that may adversely impact floodway capacity or characteristics of natural/riparian areas or natural groundwater recharge areas.

Scenic Landscapes Element

SL-2.3 Historic and Cultural Landscapes

The County shall use the County's scenic routes and highways to connect cultural landscapes, historic landmarks and communities, and points of interest including:

- 1. Historic travel routes and trails,
- 2. Historic settlements,
- 3. Historic places, events, sites, buildings and structures,
- 4. Prehistoric and archeological features, and
- 5. Majestic trees, streetscapes, and parks.

Foothill Growth Management Plan

FGMP-8.1 Riparian Area Development

The County shall discourage the location of development and improvements that are in close proximity to watercourse areas and riparian habitat, and prevent actual encroachment into those habitats.

FGMP-8.12 Vegetation Removal

The County shall prohibit unnecessary removal of native trees on development sites prior to approval of development plans to control erosion, preserve wildlife habitat, and maintain the natural character of developing areas.

FGMP-8.19 Preservation of Unique Features

The County shall encourage maintenance and protection of unique open space areas such as riparian woodlands, oak woodlands, interesting rock formations, and scenic vistas.

8.1.3 FGMP-8.19 Preservation of Unique Features

The County shall encourage maintenance and protection of unique open space areas such as riparian woodlands, oak woodlands, interesting rock formations, and scenic vistas.

E. INCLUDE URBAN FORESTRY PRACTICES.²³

Urban Forestry Best Management Practices

Introduction

Trees on streets and on other publicly owned properties managed by public works agencies provide a multitude of aesthetic and environmental benefits to citizens, businesses and visitors alike. Beyond shade and beauty, trees also have practical benefits and a real monetary value that cities sometimes are unaware of—your urban forest provides valuable public services and could be worth over a million dollars. Unlike other public infrastructure components, properly planted and maintained trees increase in value over time. An urban forest management plan, based on recent tree inventory data and analysis of available staff, equipment, and budget resources, is an essential tool for protecting this valuable resource. An urban forest management plan is an action plan; it gives public works agencies detailed information, recommendations, and resources needed to effectively and proactively manage public trees. The purpose of having an urban forest management plan is to ensure that a community will enjoy the benefits of trees

²³ Urban Forestry Best Management Practices for Public Works Managers, Urban Forest Management Plan, https://www2.apwa.net/Documents/About/CoopAgreements/UrbanForestry/UrbanForestry-4.pdf

through proper arboricultural techniques and management practices. The goal of the plan is to state what is needed to manage the urban forest and to describe activities and services required to execute these responsibilities. If a management plan is based on analysis from an accurate tree inventory and developed with input from public works staff, arboricultural experts, and the citizens, then the public works agency responsible for the urban forest will realize many benefits:

Increased Public Safety

All public works agencies know that a large part of their primary mission is to assure safety and manage risk related to public infrastructure. A tree inventory and management plan will provide lists of trees requiring priority removal and pruning that a manager can carry out within the limits of budget and time. The inventory can be used subsequently to monitor trees for safety risks on a continual basis. By implementing recommendations made in the management plan, storm damage risks will also decline.

Increased Efficiency

Once an inventory has identified the work to be done and a management plan has prescribed a maintenance program, a manager can execute that work in a much more efficient manner than before. By scheduling all work in a given area to be done at the same time (rather than by reacting to single requests) the savings in travel and setup time are substantial, with historical examples showing about a 50 percent reduction in cost—especially when a system of rotational work and/or preventative maintenance is adopted. There is also increased efficiency in the office created by using an electronic inventory to locate and manipulate records and select and schedule work. The efficient response to citizen requests and questions also improves customer service.

Facilitate Short- And Long-Term Planning

Planning can be made much easier by using the results of the tree inventory and the analysis of an urban forest management plan. Since maintenance and planting needs have been assessed, and other issues such as hardscape conflicts and right-of-way clearances, personnel levels and training, and even public relations are addressed in the plan, short and long-term planning for the forest is made easier.

Justify Budgets

An urban forest management plan provides the data and analysis needed to determine specific levels of funding for tree maintenance and tree planting projected over a multi-year period. With accurate data, a manager can establish, prioritize, and justify annual budget requests. The tasks and associated costs are clearly spelled out in the plan, and can be supported by detailed lists. Many public works managers have found that they have much greater success with budget requests that are based on the analysis of high-quality data. Also, a good inventory provides a solid basis for grant applications.

Documentation

For many reasons, public works managers are frequently asked to provide documentation of their actions. This documentation can range from annual work accomplishments to a contractor's costs per tree, from a removal list to a specific service request. Some requests may be routine, while others may have strong budgetary or even legal implications. The urban forest management plan and most tree inventory software programs make such documentation very easy through reports that are included in the plan or that can be generated from the inventory database. Software packages come with standard reports, and there is usually a mechanism for creating special reports.

Management Plan Components

The components and variations of urban forest management plans are many, depending on the developmental stage of the urban forestry program within a public works agency. Generally, these elements are included or addressed in the plan:

- 1. Tree inventory data and analysis
- 2. Tree inventory and mapping data management software
- 3. Tree risk reduction/emergency storm response plan
- 4. Tree board or advisory council development
- 5. Public relations and education
- 6. Urban forest cost/benefit analysis In the following sections, these six basic components of a plan will be discussed in more detail. They will be prioritized for the benefit of managers who are just beginning a program and for managers who have an established program and are looking to improve it.

Tree Inventories

What Is a Tree Inventory? Public tree inventories are a statistically reliable survey of publicly owned and managed trees, used to determine the location and the exact or estimated measurements of quantity, quality, health, and trends of the urban forest, as well as a description of other urban forest attributes, such as potential planting sites, utilities present, and hardscape features.

Data commonly collected during an inventory includes:

- Location
- Species
- Diameter
- Condition
- Maintenance need and priority
- Proximity to utility lines, traffic signs and signals
- Sidewalk and other hardscape damage
- Insect and disease problems

Potential planting sites Inventories are generally completed by trained Certified Arborists or experienced inventory arborists. The tree attribute and location data are generally collected using handheld computers, geographic information systems (GIS) data, and/or geographic positioning systems (GPS) equipment. Types of Inventories - Depending on the size of your community and your resources, there are different types of inventories that can be accomplished to provide you with an accurate accounting of public trees.

• "Windshield" Surveys – A windshield survey is a simple method of evaluating public trees, and may be a good first step for a new or developing urban forestry program. To perform a windshield survey, an arborist or someone knowledgeable about trees, drives along a community's roads recording certain tree characteristics. Windshield surveys are most efficient

when the arborist is looking for only a few particular tree characteristics, such as species, size, maintenance needs, or safety risk level. Windshield surveys have been and continue to be used in many cities and towns throughout the United States. The data collected during such a survey can be kept in written format on simple data forms, or entered into simple spreadsheet programs.

- Statistical Sample Inventories A statistically sound, random sample of an urban forest is a costeffective way of obtaining an overall picture of the state of the trees. Usually, obtaining data from between 3 to 6 percent of street miles and/or public property acreage will produce results that are accurate to within 10 percent of what a complete inventory would produce.
- Partial Inventories Partial inventories collect tree data on 100 percent of the right-of-way miles or acres, but only in specific areas of a community. When budgets are limited, this approach can be effective and affordable. The public works agency decides which defined areas of the city or county are inventoried: particular wards, neighborhoods, districts, historic areas, etc. Using partial inventories allows the agency to spread the inventory process over a period of time depending on available funds and resources.
- Complete Inventories A 100 percent, or complete, inventory is the best method if the public works agency wants a highly accurate accounting of the urban forest on a citywide basis. All trees and potential planting sites on all public rights-of-way and public property under the management of public works are located and assessed during a complete inventory.
- Using and Managing the Inventory Data Using commercially available tree management GIS-based asset management software programs,

simple computer spreadsheet programs, or other database programs, public works agencies can use the inventory data to create work reports, schedule tree maintenance and planting tasks, track costs, and efficiently respond to citizen requests.

Managing and updating inventory data and work orders can entail a significant investment of time and money, so public works managers need to carefully consider who will be performing this task, and what outputs are desired, and then select a system that is compatible with current agency capabilities and procedures. When the right tree inventory data management system is selected, public works managers are able to use the data for long-range, proactive planning to ensure the continued beauty, vitality, safety, and survival of all public trees.

- Inventory Data Analysis A significant component of an urban forest management plan is a professional analysis of the tree inventory data. Generally, statistical analysis is performed resulting in a number of tables and graphs depicting the tree population's characteristics. Then, based on that analysis and the results, maintenance and planting priorities are developed and overall management recommendations are made for a multi-year period. Following is a description of the inventory data analysis part of a management plan.
- Population Characteristics The public urban forest is a complex, inter-related system of trees, site conditions, and other infrastructure components. Understanding this dynamic system is important for proper decision making regarding appropriate tree care practices, planting decisions, and urban forest management. The public tree population characteristics section of a management plan provides insight into the current composition and condition of an inventoried tree population. The characteristics of the urban forest include species, size, condition, and other related tree and site factors. By identifying the species, size, and condition of trees in the urban

forest, much is revealed about the forest's composition, relative age, and health. It is important for public works managers to know the kinds of trees as well as the number of trees present. Species composition data are essential because tree species vary considerably in life expectancy and maintenance needs. The types of trees present in a community greatly affect tree maintenance activities and budgets. Similarly, tree diameter and size class data help to define the general age and size distribution of the total tree population. By analyzing and using this information, public works and urban forest managers can forecast trends, anticipate maintenance needs, budget for treerelated expenditures, and develop a basis for long-range planning. Knowing urban forest population characteristics facilitates decision making, which then allows proper and timely action to be taken for safety risk-reduction on the public rightsof-way, preventive maintenance to reduce storm damage and planning for needed tree planting operations. This ensures a stable and diverse tree population for the future.

- Maintenance and Planting Programs One objective of an urban forest management plan is to determine the current appropriate maintenance recommendations for the tree population and to prioritize these tasks. Typical maintenance recommendations are: removal, pruning, stump grinding, green waste disposal, fertilization, insect and disease treatment, grate and guard repair, mulching, and watering. The highest priority maintenance recommendations of removal and pruning pertain primarily to protecting public safety and are based on the existence of potential risks to the right-of-way, public property, and the citizens and their property at the time of the inventory. Rather than being priority safety pruning and removal activities, other maintenancerecommendations are practices directed at improving the overall health, longevity, and aesthetics of the urban forest. Often, the plan will provide additional resources and information regarding current industry standards and specifications for performing tree maintenance tasks. The plan can make recommendations for in-house staffing levels and equipment and/or determine if contractors can more efficiently perform a task or function. Operational reviews are commonly incorporated into the urban forest management plan. The urban forest management plan looks at all inventory data and recommends an implementation schedule and prioritization scheme that allows public works agencies to develop cost-effective strategies for urban forest maintenance programs based on an accurate evaluation of current tree population characteristics and on future tree-related expenditures.
- Planting Programs Urban forest management plans address planting needs also and can use inventory data to develop and guide public tree planting programs. Tree species selection and planting location designations are significant components of an urban forestry program. Decisions of what kind of tree to plant and where to plant it are critical due to the long-term impact of these decisions. The tree inventory reveals the number of vacant planting sites, the size and types of these locations, the current species distribution, and other pertinent data. The urban forest management plan looks at this data to develop an overall planting strategy and address many issues related to new tree planting and care. The plan identifies the areas with the greatest need for improvement, recommends species appropriate for the available planting spaces, discusses specific maintenance plans for newly establishing trees, and provides technical information about proper tree planting techniques. Using the urban forest management plan with its accurate data and professional interpretation and planning, a public works agency can plant trees that will ultimately be healthier, safer, have greater life expectancies, have fewer conflicts with utilities and other infrastructure, be less expensive to maintain, and maximize the benefits to the community provided by public trees.

- Insect and Disease Threats and Control American cities and counties have dealt with insect and disease threats to public forests for more than a hundred years. Historically, many communities have suffered significant tree loss and damage from such threats as the chestnut blight, Dutch elm disease, and the gypsy moth. The twenty-first century and the new global economy bring new threats to our urban forests, such as the Emerald Ash Borer, Asian Longhorned Beetle, and Sudden Oak Death. Through careful analysis of local conditions and species composition, provisions in the management plan can be included to attempt to mitigate the disruption to its urban forest caused by the existing or potential insect and disease infestations. Taking a proactive approach to these kinds of threats enable the public works agency to address public and private needs in an efficient and effective manner. With the urban forest management plan as a guide, public works managers can endeavor to distribute the costs associated with significant tree loss and damage from insects, disease and natural disasters over a manageable time period, as well as lessen the social and economic impact that such an extensive loss will have on the quality of life in our community.
- Budgets Urban forest management plans generally include a multi-year, prioritized program for all basic urban forestry activities and provide relative costs that could be incurred by the recommended activities. These budget figures are usually based on local contractual charges for maintenance and planting tasks and on in-house costs for performing the needed services. Urban forestry program budgets in management plans typically are presented on an annual basis for a period of five to ten years. The budget is recommended to address the highest priority removal and maintenance.

Tree Inventory and Mapping Data Management Software

Computerized facility and asset inventories, location information, and work order systems are common tools used by public works managers every day. Managing tree inventory information is not that different than managing any other public infrastructure component and there are a variety of computerized systems and software programs to help in this task. On the most basic level, tree inventory data can be entered and maintained in any simple spreadsheet or database software program. These programs are inexpensive, easy to use, and usually already exist on most office computers. Simple data sorting and querying can quickly provide information on urban forest conditions and tasks. More commonly, tree inventory data and mapped location information are best maintained and managed using commercially available software programs specifically designed for urban forest management. These programs are customized for the public works agency to facilitate updating and editing, and are capable of instantly providing useful information and producing reports such as:

- Work histories and costs for each tree
- Citizen service and information requests
- Work orders Available planting sites
- Tree valuation
- Maps

As a management tool, a computerized tree inventory and data management software program promotes efficient allocation of work crews and equipment; expedites responses to service requests; identifies

safety risks; facilitates accurate cost analysis; provides data for communicating with the public, elected officials, and other departments; can provide information needed for grant applications; tracks permits; and projects future work programs and required budgets. The management plan will generally assess the needs, capabilities, and responsibilities of the public works agency and make an appropriate recommendation of what individual or combination of software programs and data management systems is right for the agency. There are a number of commercially available tree management software programs from arboricultural consulting companies. There is also free, public-domain software, such as the U.S. Forest Service's Mobile Community Tree Inventory (MCTI) program that can be run on personal digital assistants or desktop computers.

Tree Risk Reduction Plan/Emergency Storm Response Plan

The urban forest management plan can and should have sections devoted to urban forest risk reduction and an emergency response and recovery plan that provides information about general tree risk reduction and gives directions to the public works agency during an extreme storm emergency.

When developing an emergency management plan, dealing with serious public safety and health issues is an obvious component, but including trees and woody debris in mitigation efforts must not be overlooked. When catastrophic disasters, such as tornadoes, ice storms, hurricanes, and severe straightline winds strike a metropolitan center, thousands of cubic yards of debris are produced. Trees and vegetation can account for approximately 30 percent of this debris volume.

Beyond the task of collecting and disposing of this debris, additional management considerations include increased threat to life from hanging limbs and uprooted trees, hindrance to life-saving efforts by blocked streets and driveways, power outages and power restoration efforts, and personal and public property damage. The impact of these additional tree-related considerations is not always quantifiable but can overwhelm public services and slow down the short and longterm recovery process.

A comprehensive urban forest management program greatly reduces storm hazards through proper planting, preventive maintenance, and systematic risk reduction. However, when disasters occur, an emergency plan as an addendum to this plan can provide solid data, facts, and protocols to assure service continuity and timely recovery and restoration. The overall objective is to create an emergency preparedness program that details improved policies and procedures, increasing the efficiency and productivity of emergency storm response operations.

Risk reduction plans can also address threats to public safety, health and public works operational responsibilities and issues that are non-storm emergencies, such as:

- Clearing leaves and woody debris from gutters and storm drains
- Sidewalk, street, and building clearance standards
- Line-of-sight conflicts for street and safety signage
- Blockage of street lamps and traffic lights
- Conflicts with overhead and underground utilities

Both the emergency response plan and risk reduction plans should be created as a collaborative effort between all key agencies and stakeholder in the community. With the public works department as the lead, information and input from police and fire, parks, purchasing, city or county administration, controlling utility companies, local and state emergency management agencies, and contractors should be obtained and considered when developing these plans.

Tree Board or Advisory Council Development

Greening and maintaining a community's urban forest is a long-term commitment dependent on not only the professional management and expertise of public works staff but also on the support and involvement of the citizens. Unlike fire hydrants and sidewalks, an urban forest is a public asset that can generate both positive and negative emotional responses. An important step in dealing with this unique characteristic of an infrastructure component is forming and supporting a group of local citizens who are dedicated to the care and maintenance of the community trees while assisting the public works agency in its mission.

This group is often called a tree board or an urban forestry advisory council and can provide a number of services to public works agencies. They can educate the citizens at large on the importance of trees, interact directly with elected officials in support of the program, assist in maintenance tasks like small tree maintenance, mulching, planting, and watering, and apply for grants and generate private financial donations.

Their singular mission, however, is to recommend unbiased, citizen-based direction and alternatives regarding community tree management to public works managers. They serve in an advisory capacity only, and depend on public works personnel to actually implement most of their recommendations. Still, the ultimate responsibility for the community's urban forestry program rests with the public works agency.

The urban forest management plan should include information on creating a local community forestry program in areas that do not already have one, and for sustaining one that already exists.

Public Relations and Education

On a basic and general level, having a computerized tree inventory and urban forest management plan facilitates and improves public relations and education. For instance, most citizen callers are pleased when they have reached someone who knows their tree and can answer general questions or respond directly to their request because of quick access to information such as tree attributes and scheduled work. Computerized tree inventories are also useful tools for public education. The inventory data, maps or summary reports can be distributed in print or on a website so the public can access them. In this way, the public can gain a better understanding of the work of urban forestry and become more willing to support its program.

Through years of experience, urban forest managers across the country have found that public education is the true key to reaching the goals of an urban forestry program in a community. A public works agency will be able to effectively achieve urban forest management goals only by educating citizens, elected officials, and other public agencies working within the community. Ordinances, management plans, guidelines, policies and procedures alone will not guarantee success. An urban forest management plan will recommend specific actions to increase and support public relations and education about trees and the urban forestry program. Such recommendations may include:

• Holding a seminar or public meeting to discuss the tree inventory project, its results, and its importance for the community.

- Developing monthly evening or weekend seminars directed at residents related to tree care and landscaping. Bring in local guest experts from various disciplines in the green industry.
- Writing a monthly tree-related article for local newspapers and community websites, or preparing a press release for each new project.
- Sending letters to residents in areas where tree maintenance or planting projects will be conducted each year.
- Developing a tree care door hanger or brochure to go to each residence where new trees are planted to encourage them to help maintain the tree and not damage it during mowing.

Urban Forest Cost/Benefit Analysis

The public trees growing in any community are valuable municipal resources. They provide tangible and intangible benefits for diverse services such as pollution control, energy reduction, storm water management, property values, wildlife habitat, education, and aesthetics. Previously, the services and benefits trees provided in the urban and suburban setting were considered to be unquantifiable. However, by using extensive scientific studies and practical research, these benefits can now be confidently calculated using models contained in i-Tree software and current tree inventory information.

The i-Tree suite of free software tools was recently released by the U. S. Forest Service and can be used to assess and manage community forests. With these tools, public works and urban forest managers can accurately quantify the benefits of urban forests and understand and balance the costs of managing an urban forest.

Using the tree inventory data and applying i-Tree's STRATUM (street tree resource analysis tool for urban forest managers) an urban forest management plan can assess and quantify the functions of the public tree resource and place a dollar value on the annual environmental benefits they provide. However, enhancing, protecting, and maintaining this municipal resource has costs; public works agencies annually allocate public funds for planting, removal, pruning, emergency cleanup, inspection, and administration of the urban forestry program. The STRATUM model accounts for costs of managing an urban forest and provides results in terms of net benefits.

An urban forest management plan that includes such a cost-benefit analysis will help the public works manager: • Obtain economic evaluations of street trees using annual budget and expenditure data to assess the management program.

- Justify funding and perform strategic planning for the urban forest.
- Gain more public support for the value of trees to economic development, environmental health, and quality of life issues in the community.
- Determine the annual amount of pollution removed by the urban forest, the percent of air quality improvement, the amount of carbon sequestered, the amount of energy consumption reductions, and estimated increases in property values and aesthetics. This kind of cost/benefit analysis may provide public works managers with the justification for more attention and funding for urban forestry planning, design, management, and maintenance. The science behind these models and type of analysis is sound and has been published in peer-reviewed journals.

The challenge now is to apply the science to enhance the quality of life in our communities by improving the condition and extent of the urban forest.

Urban Forest Management Plan Summary

The urban forest management plan should be considered a "living," working document. The work programs recommended in it should be reviewed annually and adjustments made appropriately for the following year. The entire document itself should be reviewed on a five or ten year basis to determine if management and urban forest conditions have changed significantly.

The management of public trees is challenging, to say the least. Public works managers have the daunting task of balancing the recommendations of experts, the wishes of council members and other elected officials, the needs of citizens, the pressures of local economics, the concerns for liability issues, the physical aspects of trees, the forces of nature and severe weather events, and the desire for all of these factors to be met simultaneously.

Without a management plan, the governments and individuals responsible for taking care of an urban forest will not be effective in meeting the true needs of the trees and the community. A management plan establishes a clear set of priorities and objectives related to the goal of maintaining a productive and beneficial community forest. You've heard the riddle, "How do you eat an elephant?" The answer is, "One bite at a time." This is also good advice for creating or improving an urban forest management plan. If you are just beginning an urban forest management plan project, try to accomplish these tasks first:

- Conduct a windshield survey or sample tree inventory that is managed and updated on paper or in a computerized spreadsheet program.
- Based on the data you collect, create a management plan with sections that address the highest priority maintenance and planting tasks with estimated budgets for this work. If you already have an existing, basic tree management plan, consider improving it by accomplishing these tasks:
- Complete a 100 percent public tree inventory with GIS or GPS tree location mapping, if it doesn't already exist.
- Obtain a customized tree inventory data management software program to help you carry out the plan's recommendations and record your work accomplishments.
- Create or update your management plan to include analysis and recommendations for preventive maintenance cycles; a community-wide planting program; expanded public relations and education; and risk reduction programs.
- If you have an existing comprehensive urban forest management plan, the next time it is reviewed, consider addressing and including these components:
- Comprehensive risk reduction and emergency storm response plans.
- Operational review with recommendations for improved work procedures, equipment inventory, budget level, and administrative efficiencies.

- Ordinance, policies, and procedures review and recommended revisions
- Tree cost-benefit analysis.

Whatever level your urban forestry program is at currently, and depending on where you want to go with it in the future, an urban forest management plan can help guide you to achieving your goals. There are many sources of information and assistance at your disposal just for the asking. The existence of an urban forest management plan in a community indicates a high level of commitment to protecting trees, and it indicates a higher level of education and knowledge about natural resource issues in general. The benefits of trees can be maximized when both professional management resources and an educated public coexist.

With a tree inventory and urban forest management plan, a public works agency can objectively consider each specific issue and balance these pressures with a knowledgeable understanding of trees and their needs. If balance is achieved, the community's beauty will flourish and the health and safety of its trees and citizens will be maintained.

XI. MONITORING AND REPORTING.

A. CONTINUE TO ASSESS AND REPORT THE STATUS OF OAK WOODLAND CANOPY COVER.

1. Record changes and effects of changes to evaluate the status of OAK woodlands.

Monitoring is an essential tool for successful management of hardwood rangelands. Over time, it allows landowners and managers to measure the impacts of their management activities on the condition of natural resources under their stewardship and then use that information to better manage those resources. As such, monitoring is key to managing livestock and maintaining healthy oak populations. In order for monitoring to provide useful information to the manager, a monitoring plan should be thoughtfully crafted and complete. A complete plan contains at least seven elements:

- goals
- questions
- sampling design
- measurement methods
- personnel assignments
- data-management protocols
- methods of data evaluation

An effective monitoring plan takes time to design—often 6 to 18 months, depending on the scope of the plan's objectives—and external review can be particularly beneficial. Landowners and managers can obtain help designing a monitoring plan from their County UC Cooperative Extension office, local Resource Conservation Districts, the Natural Resource Conservation Service, the Bureau of Land Management, and the US Forest Service.

An effective monitoring program begins with explicit **goals**, which are broad statements of the monitoring project's purpose that indicate clearly how data to be collected will facilitate informed decision-making by the landowner or manager.

From the stated goals, specific **questions** to be addressed by the monitoring project can be derived. For clarity, each question should focus on one, and only one, parameter to be monitored. A parameter is a measure that describes some characteristic or indicator of interest for purposes of monitoring (e.g. average cover of bare soil). Monitoring is designed to estimate changes in the values of parameters over time. For example, one might examine whether a decrease in the amount of bare soil results in a corresponding decrease in soil erosion. Questions stated in the monitoring plan should be as specific as possible and should include the spatial location and time period of each parameter to be monitored (e.g. What is the total acreage of yellow starthistle in East Pasture in late spring of 2002?).

Because it is usually too costly or otherwise undesirable to take exhaustive measurements, monitoring is often based on sampling. With sampling, measurements are made on a subset rather than a complete census of all units that could possibly be measured. For instance, one would measure height on a sampling of oak trees rather than on each and every oak tree in a large watershed. If a sample is to provide an accurate characterization of the parameter of interest, the sample must be a representative subset of all units that could possibly be measured. This is why statisticians typically recommend selection of a random sample.

The monitoring plan's **sampling design** should provide the following: 1) description of the basic sampling unit (e.g. size and shape of a quadrat); 2) number of sampling units to be included in the sample (i.e., sample size); 3) location in space where sampling will occur (e.g. every 10m along a 100m transect); and 4) time schedule for measurements on each sampling unit. Decisions on these four design features are shaped by the parameter to be estimated.

The **measurement design** describes how measurements are to be made for each sampling unit. In a project designed to monitor maximum water depth in vernal pools through the wet season on a ranch, the sample may consist of a random sampling of vernal pools. While the sampling design describes which pools to include in the sample and when they are to be measured, the measurement design describes how to measure maximum water depth within each selected vernal pool (e.g., with a meter stick).

Assignment of personnel is an often overlooked but crucial element in most monitoring plans. Though some small monitoring projects may be managed and implemented by a single person, most monitoring projects are group efforts. For a group effort to be effective, each participant should have clearly defined roles and responsibilities.

Data-management protocols encompass 1) data recording, 2) data-quality control, 3) data storage, and 4) data flows. Clear rules should be established for recording data. These rules can cover issues such as conventions for recording dates, missing values, questionable measurements, miscellaneous observational notes, etc. Data-quality controls are procedures implemented throughout the process of data handling for the purpose of minimizing data loss and error. The monitoring plan should detail quality-control procedures for data collection, data entry, data analysis, and data storage. Quality control is particularly important during data collection because errors made during this stage may not be detectable or correctable later in the process. Finally, a data-flow design shows how data are moved, and by which personnel, from data collection, to data entry and processing, and finally to storage.

The last essential element in monitoring plans is a description of **methods of data evaluation**. Because most monitoring is based on sampling, most analyses focus on parameter estimation. The plan's questions dictate which parameters are to be estimated. Each estimated parameter should be reported

with an estimate of its error. A measure of error provides information about the reliability of the estimates made. Reporting a parameter's estimate without reporting a measure of its error can give the false impression that the estimate is without error. Standard errors are often reported but confidence bounds are more informative because they account for the sampling distribution of the parameter's estimator.²⁴

Oak woodland conservation goals could be assessed by the County by acreage being conserved through conservation easements, public land designations, or other means and acreage restored to a minimum standard. Performance Guidelines are presented in Table 4.²⁵

Conservation	Replacement
1. Cumulative acreage of	1. Cumulative acreage
woodland conserved through	planted by density and
conservation easements,	maintenance level of
acquisition, or other means	planting compared with
compared with cumulative	cumulative acreage removed
acreage to be mitigated through	by projects and cumulative
conservation.	acreage to be mitigated
	through restoration.
2. Acreage within the County in	2. Acreage meeting
each oak woodland category.	minimum goals.
	3. Acreage requiring
	replanting
	4. Acreage of replanted areas
	meeting minimum goals.

Table 4 - Performance Guidelines Assessment

Monitoring Reports to Board of Supervisors

Ultimately, the assessment of oak woodland conservation goals will be determined by the acreage and extent of fragmentation of oak woodland habitat remaining in the County upon build-out of the General Plan. Oak woodland acreage will need to be tracked by total acreage and by oak woodland habitat type. Sensitive oak woodland habitat acreage should not decrease and should be given priority for conservation consistent with OWMP objectives.

The County's annual monitoring report could include:

- Total acreage of oak woodland removed and by habitat type for each year and cumulatively
- Total and incremental acreages of oak woodland conserved in County through December 31st of the reporting period
- Acreage conserved by each method (e.g., conservation easement, acquisition, on-site preservation, or other method)

²⁴http://ucanr.edu/sites/oak_range/Oak_Articles_On_Line/Oak_Woodland_Ecology_and_Monitoring/Blueprint_for_Mon itoring_Plans/

²⁵ El Dorado County Oak Woodland Management Plan Public Review Draft, August 21, 2007

- Acreage conserved by oak woodland habitat type.
- Acreage of oak woodland habitats under restoration (by restoration activity) in the County
- Acreage of oak woodland habitat under restoration (by restoration activity)

Map showing the locations of the above activities

The annual monitoring report could also include the following additional information, which would assist implementing adaptive management strategies as needed:

- Acreage requiring replanting
- Acreage with replacement planting following replanting
- Acreage under fully executed conservation easement
- Acreage pending conservation easement or other form of acquisition
- Acreage still requiring mitigation through restoration

Using the database maintained by the County and annual monitoring reports, the County would be able to answer the following questions. The answers would allow the County to implement adaptive management as presented below.

Assessment Questions

- To what extent have oak woodlands placed under conservation easements or other mitigation methods been maintained to the standard of the agreements?
- Has the overall acreage of oak woodlands increased, decreased, or remained the same? By
- oak woodland habitat type?
- What percentage of lands with replacement plantings has achieved the minimum 10% oak canopy cover or other restoration goals?
- Have adequate lands (i.e., quantity and quality) been located to meet the off-site mitigation goals for conservation?
- Are the funds available from mitigation fees adequate to achieve the mitigation goals for conservation?

Adaptive Management

The success of the OWMP in meeting goals and objectives of the General Plan and Three Rivers Community Plan could be measured through a Monitoring and Reporting program as included above. The answers to the questions presented above would allow the County to implement adaptive management by: 1) revising guidelines for projects as necessary, and 2) revising the OWMP. If the Goals and Objectives of the OWMP are not being met, then the County could review and revise the OWMP as necessary.

XII. IMPLEMENTATION STRATEGY

A. COUNTY PARTICIPATION IN OAK WOODLAND HABITATS CONSERVATION PROGRAM.

Please see Chapter VI. County Participation in Oak Woodland Habitats Conservation Program. Subsections A. (Support for Private Landowner Participation in the OWMP) B. (Support for Landowners), and C. (Education and Outreach).

B. BEST MANAGEMENT PRACTICES FOR OAK WOODLAND HABITATS.

Please see Chapter VII. VII. Best Management Practices for Oak Woodland Habitats. Subsection A.

Best Practices Guidelines for oak tree care and preservation techniques from the City of Visalia, Fresno County, and Los Angeles County.

C. MITIGATION FOR LOSS OF OAK WOODLAND HABITATS, PROGRAM OPTIONS FOR FUTURE CONSIDERATION.

Please see Chapter VIII. Mitigation for Loss of Oak Woodland Habitats, Program Options for Future Consideration. Subsections A. (Support for Private Landowner Participation in the OWMP) B. (Support for Landowners), and C. (Education and Outreach), and D. (Mitigation should consider the Mitigation Options identified in SB 1334 (Public Resources Code (PRC) section 21083.4).

D. GUIDELINES FOR MAINTENANCE, RESTORATION, AND REHABILITATION OF OAK WOODLANDS, PROGRAM OPTIONS FOR FUTURE CONSIDERATION.

Please see Chapter IX. Guidelines for Maintenance, Restoration, and Rehabilitation of Oak Woodlands, Program Options for Future Consideration. Subsections A. (Program should be Incentive Based) B. (Identify future funding for implementation programs), and C. (Design Guidelines and Educational Programs), and D. (Determine and include an approach regarding adjacent and contiguous Oak Woodland areas outside of the Three Rivers UDB), and E. (Urban Forestry practices).

E. MONITORING AND REPORTING.

Please see Chapter X. Monitoring and Reporting. Subsections A. (Continue to assess and report the status of oak woodland canopy cover).

Attachment 1 Three Rivers Oak Woodland Assessment Tulare County, California

Three Rivers Oak Woodland Assessment Tulare County, California

Prepared for:

County of Tulare Resource Management Agency

Prepared by:

Bobby Kamansky



Revised December 30, 2016

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EXECUTIVE SUMMARY

This assessment describes the oak woodlands, their health, ecology, development and community impacts and potential future conditions as well as mitigation and compensation measures to protect and conserve the community character and comply with federal and state laws in the Three Rivers Urban Development Boundary (UDB). Tulare County contracted with Kamansky's Ecological Consulting to perform oak woodland and biological assessments in the Three Rivers UDB. This Oak Woodland Assessment will form a foundation for the Three Rivers Oak Woodland Management Plan, the first in Tulare County.

California has approximately 8.5 million acres of oak woodland and 4.5 million acres of oak forest. These 13 million acres comprise more than one-eighth of the state's area. The San Joaquin region (from Kern to Amador counties) has more than 2.3 million acres of oak woodlands and 500,000 acres of oak forests. The foothills of Tulare County include 345,915 acres of oak woodlands. This estimate includes 157,740 acres of blue oak woodlands, 67,799 acres of interior live oak woodlands, 33,504 acres of mixed oak woodland, and 256 acres of Valley oak woodlands (this latter estimate is clearly under the total acreage). Oak woodlands in this assessment include blue oak and interior live oak woodlands form along the bottoms of canyons and along streams with other riparian-associated species. At the upper elevations in the UDB, canyon live oak and black oak may occur in small stands or individual trees, but are not the focus of this assessment.

The results of this oak woodland assessment report are based upon observed conditions within the UDB Area during the site assessment visits conducted in January-May, 2016. Potential impacts associated with the project and available mitigation options are also discussed.

1.0 Introduction

The purpose of this report is to characterize oak woodland communities present within the Three Rivers Urban Development Boundary (UDB, Figure 1) subject to regulation under PRC 21083.4 (Senate Bill 1334) and to determine the significance of oak woodland impacts associated with the Community Plan Update (in the UDB Footprint). The results of this oak woodland assessment report are based upon observed conditions within the UDB Area during the site assessment visits conducted in January-May, 2016. Potential impacts associated with the project and available mitigation options are also discussed.

California has approximately 8.5 million acres of oak woodland and 4.5 million acres of oak forest. These 13 million acres comprise more than one-eighth of the state's area. The San Joaquin region (from Kern to Amador counties) has more than 2.3 million acres of oak woodlands and 500,000 acres of oak forests. Oaks are present on only 10 percent of the region's land; however, certain portions of the region have far greater oak woodland density than others. Twenty-seven percent of the state's oak woodland fall within these 15 counties. The San Joaquin region currently has 113 million oaks larger than 5 inches DBH. More than half of the region's oak woodlands are blue oak and another 25 percent are interior live oak. Associated species include gray pine and California buckeye (Aesculus californica), as well as valley oak, blue oak and canyon and interior live oaks. The San Joaquin region has more blue oak woodlands and interior live oak woodlands than any other region. In blue oak woodlands, oaks account for 70 percent of the trees, 80 percent of the basal area, and trees greater than 5 inches DBH. In interior live oak woodlands, oaks provide 70 percent of the tree basal area and more than 80 percent of the trees. In canyon live oak woodlands, oaks comprise 55 percent of the basal area, 62 percent of all trees, and 67 percent of trees greater than 5 inches DBH. Canyon live oak and California black oak comprise almost 90 percent of the oak forests. Associated species in San Joaquin oak forests include incense cedar, ponderosa pine, sugar pine and white fir. In canyon live oak forests, oaks provide one-third of the basal area and nearly one-half of the trees. In black oak forest, oaks comprise more than half of the trees, but only one-third of the trees greater than 5 inches DBH and only one-quarter of the tree basal area.

Oak woodlands total 345,915 acres in Tulare County. This estimate includes 157,740 acres of blue oak woodlands, 67,799 acres of interior live oak woodlands, 33,504 acres of mixed oak woodland, and 256 acres of Valley oak woodlands (see Table 1).
Table 1. Oak woodland acres and percentage in Tulare County. Note that the Valley oak numbers are well below those documented as part of this assessment.

Species/class	ACRES	% Total
Black oak	43,406	12.5%
Blue oak	157,740	45.6%
CANYON LIVE OAK	43,210	12.5%
INTERIOR LIVE OAK	67,799	19.6%
MIXED OAK	33,504	9.7%
VALLEY OAK	256	0.0007%
TOTAL ACRES :	345,915	100%

1.1 <u>UDB Description</u>

The UDB Area is comprised of approximately 20,924 acres, or 32.5 square miles. This is considerably larger than the area of the Three Rivers Community Services District, which totals approximately 5,354 acres, or 8.4 square miles acres of rural residential, limited commercial facilities interspersed along the Kaweah River and oak woodlands and surrounding undeveloped land. The UDB contains mixed chaparral, oak woodland, and riparian habitats, including a portion of the Kaweah River, which occupies more than 78 acres in the UDB (the mapping polygon is smaller than the actual River reach). Land use surrounding the UDB Area is private cattle grazing land, Bureau of Land Management and National Park lands among others. Elevations within the UDB range from approximately 3,500 feet in the South Fork Kaweah watershed to 900 feet, near Lake Kaweah (See Figure 1).

Associations of plant species that grow in assemblages under similar ecological conditions are called plant communities (also known as natural communities or biotic communities). Generally, they are named for the dominant species found in the association. Definition of plant communities is important not only because it identifies types of plants that are present, but also because it indicates habitat types and animal species which may be found in the community. In this section, common names and scientific (Latin binomial) names of plants will both be given the first time they are mentioned; thereafter only common names will be used.

The land in and around Three Rivers supports largely undisturbed (uncultivated) vegetation and native plant communities. According to the natural community classification scheme used by Holland (1986), the proposed Three Rivers site is located in a part of the southern San Joaquin Valley that originally contained components of at least four natural communities prior to development. Three upland communities include Valley Oak Riparian Forest, , Valley Grassland and Blue Oak Woodland. The area in the UDB is characterized by open blue oak (*Quercus douglasii*) stands with forbs and grasses in the understory, California buckeye (*Asculus californica*) and interior live oak (*Q. wizlizenii*) on slopes and uplands while Willow-Cottonwood Riparian Forest, Valley Oak Woodlands and riparian-associated communities and wetlands are clustered along the Kaweah River and tributaries. Shrubs comprise a major or minor component of the understory depending on the site.

Blue Oak Woodlands

Blue oaks are often the dominant tree in the woodlands where they occur, and can be the only tree in large areas of these woodlands. Woodlands occupy most areas outside of wetlands and exposed south-facing slopes, where only a few or no trees persist. Approximately 157,540 acres of blue oak woodland occur in Tulare County and approximately 17,000 acres of blue oak woodland occur in the UDB. Patches of blue oak can extend from a few trees to several miles in extent. Very old trees (300-800 yr.) with very few sapling or seedlings dominate many blue oak woodlands in Tulare County. However, reproduction and recruitment do not appear to be entirely absent as is often claimed of oak woodlands. Foothill pine is generally absent from the Kaweah Watershed, in contrast to many watersheds in the southern Sierra, and this may be caused by steep, fire-prone slopes in the watershed. California buckeye, Valley oak, interior live oak, and individual canyon live oak and California black oak may also be present, although these species are typically present above 4000 feet, or in riparian areas. These woodlands are generally associated with steep, hot, dry, often west-facing or south-facing hillsides. Blue oak woodlands are likely to occur in small patches on steep ground and as large blocks with variable canopy cover on gentle slopes. Its understory consists of dominant, non-native annual grassland with patches of native grasses such as needle grass (Stipa lepida), and California melic (Melica californica) and many species of wildflower, blooming particularly in the spring. The endemic Kaweah brodiaea (Brodiaea insignis) is among them.



Figure 1. Three Rivers UDB Study Area and location map

Interior Live Oak Woodlands

Live oaks remain green all year, with a gradual replacement of very prickly, cupped leaves throughout the year. In most areas, this species is associated with blue oak, California bay, buckeye, and Valley oak and western sycamore and rarely occurs in pure stands. Approximately 67,799 acres of interior live oak woodlands occur in Tulare County and approximately two thousand in the UDB. During the recent drought, this species appears to have been disproportionately impacted. Residential development impacts this species is disproportionately because it is susceptible to rots which may compromise stem integrity. Landowners often remove, or are required to remove by fire control agencies, downed logs and hazard trees.

Valley Oak Woodlands

Valley oaks remain in pockets of relatively undisturbed valley floors in deeper alluvial materials and floodplains and along the Kaweah River and other, smaller tributary streams. They are shown as a green polygon on the map in Appendix C and occupy approximately 2,500 acres in the UDB but only approximately 200 acres in Tulare County were documented in the past (see Table 1). In Tulare County and throughout the state, Valley oak woodlands have clearly been reduced more than any other oak woodland (Pavlik et al. 1991).

1.2 Brief Project Description

The proposed project is the Three Rivers Community Plan Project and the associated environmental documents and process. The County of Tulare contacted Bobby Kamansky, Principal Biologist, Kamansky's Ecological Consulting (KEC) to provide this assessment to lay the foundation for the Three Rivers Oak Woodland Management Plan and the Environmental Impact Report in Three Rivers, Tulare County, California. The subject Site is in an unincorporated area located in Section 25 Township 17 South, Range 28 East, within the Three Rivers Urban Development Boundary located south of Sequoia and Kings Canyon National Parks and north the Kaweah Lake and the Terminus Dam. The parcels within the UDB include a total of over 20,000 acres of which approximately 11,200 acres are potentially buildable based on a slope gradient of less than 30 percent. Based on zoning, 5,300 acres are available in the vacant category and could be developed (see Figure 2) and existing developed parcels could be expanded or impacts increased.



Figure 2. Map of areas greater than 30% slope and vacant parcels.

The UDB Area is comprised of approximately 20,924 acres, or 32.5 square miles. This is considerably larger than the area of the Three Rivers Community Services District, which totals approximately 5,354 acres, or 8.4 square miles acres of rural residential, limited commercial facilities interspersed along the Kaweah River and oak woodlands and surrounding undeveloped land. At the time of the survey, the land within the UDB area comprises annual grassland, riparian woodlands of varying density and composition, wetlands and open water, agricultural areas, suburban development, limited commercial development and oak woodlands. Highway 198 bisects the community and there are numerous dirt roads within the UDB. Most of the land in the project impact area supports undisturbed vegetation and natural plant communities.

The UDB contains mixed chaparral, oak woodland, and riparian habitats, including a portion of the Kaweah River, which occupies over 200 acres in the UDB and the sensitive river habitat tracked by the California Natural Diversity Database (78 acres). Land use surrounding the UDB Area is private cattle grazing land, Bureau of Land Management and National Park lands. Elevations within the UDB range from approximately 3,500 feet in the South Fork Kaweah watershed to 900 feet near Lake Kaweah.

The land in and around Three Rivers supports largely undisturbed (uncultivated) vegetation and native plant communities. According to the natural community classification scheme used by Holland (1986), the proposed Three Rivers site is located in a part of the southern San Joaquin Valley that originally contained components of at least four natural communities prior to development. Communities include Valley Oak Riparian Forest, Willow-Cottonwood Riparian Forest, Valley Grassland and Blue Oak Woodland. The area in the UDB is characterized by open blue oak (*Quercus douglasii*) stands with forbs and grasses in the understory, California buckeye (*Asculus californica*) and interior live oak (*Q. wizlizenii*) on slopes and uplands while riparian-associated communities are clustered along the Kaweah River and tributaries. Shrubs comprise a major or minor component of the understory depending on the site, soils and aspect.

1.3 <u>Regulatory Background</u>

Article 9. California PRC 21083.4 requires each county in California to implement an oak woodland protection policy to mitigate for the loss of oak woodlands resultant from approved projects within their jurisdiction. In this policy, oak trees are defined as all native species of oaks larger than five inches DBH (diameter at breast height, or 4.5 feet above grade). At least one of

four mitigation alternatives for significant conversions of oak woodlands are required in this regulation: 1) conserve oak woodlands through the use of a conservation easement, 2) plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees (planting maintenance must last for seven years, and mitigation plantings shall not fulfill more than one-half the mitigation requirement for the project; this alternative may also be used to restore former oak woodlands), 3) contribute funds to the Oak Woodlands Conservation Fund, as established under Section 1363 (a) of the Fish and Game Code, and 4) other mitigation measures developed by the County.

Tulare County also includes guidance regarding trees in the General Plan:

Final Site Plans

2. In addition to the requirements of Section 16.2 of this ordinance, any final site plan filed for property within the F Zone shall be accompanied by the following additional statements and plans:

a. A grading and slope stabilization plan prepared by a licensed civil engineer for that portion of the site which is to be disturbed. The grading and slope stabilization plan shall contain the following information:

(I) A contour map showing proposed property lines, if applicable, and existing and proposed ground elevations and natural drainage channels.

(2) A plan for slope stabilization. If the plan includes landscaping, the types of landscaping materials to be used shall be provided.

(3) The location of all native trees in the area to be disturbed which have a trunk diameter of six (6) inches or more at a point measured at three (3) feet above ground surface. (Chapter 3, Section 18.7, Page 25.)

Land Alteration

... Vegetation removal requirements:

(I) Removal or grading around native trees with a trunk of six (6) inches or more in diameter measured at three (3) feet above ground surface shall not be permitted during construction unless the agency which is making the final decision on the development project finds that such tree removal or grading is necessary due to desirable circulation alignments or infrastructure requirements.

(2) Removal of any native tree as defined in this paragraph which is

located within areas restricted to open space under paragraph 2 of this subsection shall not be permitted unless the retention of such native trees would endanger the safety of residents within the development site. (3) Any native tree as defined in this paragraph which is proposed for removal must be indicated on or with the Site Plan and a statement shall accompany such site plan explaining why said tree or trees must be removed. (Chapter 3, Section 18.7, Page 28)

1.4 <u>Survey Summary</u>

Approximately 17,000 acres of oak tree-dominated plant communities were observed in the DBA (Figure 3). Of the 17,000 acres, approximately 5,300 acres of oak-tree dominated communities are located in the DBA Development Footprint (vacant parcels, <30% slope). The majority of observed trees were blue oak (Quercus douglasii), a native oak. Other tree species observed during surveys were interior live oak (Q. wizlizeni), buckeye (Aesculus californica) in the uplands, and Valley oak (Q. lobata), California bay (Umbullaria californica), sycamore (Plantanus racemosa), cottonwood (Populus fremontii), Alder (Alnus sp.) and willow (Salix sp.) in the riparian areas. The density of trees measured in 22 sample plots averaged 109 trees per acre (range: 20-290 per acre), which, extrapolated over the entire 17,000 acres, results in an estimate of 1,870,000 trees in total (or approximately 340,000-4,930,000 oak trees) within the DBA Planning Area. Generally, oak trees are in fair condition with sporadic understory regeneration. However, an average of 11 oak trees (10%, range: 6 trees/acre for Valley oak and 15.6 trees/acre for blue oak and interior live oak) per acre appear dead from recent drought. All plot data collected during this assessment are presented in Appendix A.

2.0 METHODS

Oak woodland mapping within the DBA commenced in January, 2016 using a three-step process: preliminary mapping was performed using aerial image recognition software and manual editing in the ArcGIS environment; then a field visit was conducted to ground-truth the preliminary map and collect detailed tree plot data; finally the data was analyzed and the oak woodland map was finalized based on field observations. The assessment of tree size, distribution, species composition, and health and condition within the UDB Area was performed using a sampling scheme based on the preliminary oak woodland map. A sampling scheme was used (as opposed to a complete inventory) due to the difficulty associated with surveying across the steep terrain and through the dense vegetation of the DBA. Sample plots were established throughout the wooded areas within the DBA where landowner permission or ease of survey allowed, and all trees within the plots were measured for the various attributes. Data collected at each of the tree plots are presented in Appendix A. Data collected in tree plots were analyzed to create relevant estimates of overall site woodland characteristics including tree density, size, and species composition. A detailed description of the methods used to map woodlands, measure trees, and analyze tree data are presented below. Plant names follow those given in The Jepson Manual: Vascular Plants of California, 2nd Edition (Baldwin et al. 2012).

2.1 Preliminary Oak Woodland Mapping from Aerial Imagery

Tree-dominated areas within the DBA were delineated on aerial images in the ArcGIS environment. The publicly available National Aerial Image Program (NAIP) full-color aerial images (one-meter resolution, 2010) were used as the basis for this image interpretation. Areas outside oak woodland polygons were identified as shrub or herb cover through a supervised editing process. The final delineation of oak woodlands within the DBA is presented in Figure 2.

2.2 <u>Literature Review</u>

A review of literature was conducted to provide additional information about oak woodlands, biological studies and the local oak woodlands compared to other woodlands statewide, including the National Park Service, California Department of Fish and Wildlife, academic studies, California Native Plant Society, Caltrans, Bureau of Land Management, California Oak Foundation, etc.

2.3 Definition of Oak Woodlands

Oak woodlands are defined in various legal descriptions (Oak Woodlands Conservation Act of 2001) and (SB 1334) (Public Resources Code (PRC) section 21083.4) and PRC §4793(e). Typically, woodlands have higher tree canopy coverage and greater understorey diversity. Individual, isolated groves and heritage trees may contribute significantly to scenic and biological values as well.

2.4 <u>Consultation with Experts and Agencies</u>

Several biologists were consulted on this study to provide additional information. Agencies with adopted oak woodland management plans will be consulted as will consultants who have scoped and prepared the plans.

Preliminary results of this assessment were included in a watershed-level oak studies in cooperation with a local college and presented at the Sequoia-Kings Canyon Research Symposium, November, 2016 and at the College of Sequoias SURGE Symposium, August, 2016. The research discussed watershed-scale climate-induced mortality patterns and restoration potential.

2.5 Field Data Collection

Prior to and during field work, KEC Ecologist and Tulare County GIS specialists mapped and identified oak woodland biological elements with the following starting points:

- 1. High-resolution aerial maps of the UDB, including elevations, rivers, creeks, parcels;
- 2. LANDSAT or other aerial imagery or with refractive indices;
- 3. Aerial map with zoning with panels with higher magnification of small parcels;
- 4. Zoning and development maps;
- 5. Survey plot location maps.

These data were analyzed to produce synthetic maps of the UDB oak woodlands and layer specific geographic information to provide additional analyses, such as the vacant parcels and slope data for the associated maps.

Tree-dominated plant communities (>10% tree cover) within the DBA were mapped based on aerial photography utilizing aerial image interpretation software and ground-truthed with field visits and plot surveys. This treedominated plant communities map served as the basis for the field sampling design. A sampling design was utilized (as opposed to a 100% survey) to facilitate characterization of the tree-dominated areas over the densely vegetated and steeply sloped terrain of the DBA.

Biologists investigated select survey plot sites and investigated all possible, accessible areas with vehicles and pedestrian access. Oak woodlands of all types were documented with photo points (see Appendix), general landscape photographs and specific oak woodland inventory stand data. The data was collected in 1/10- acre standardized inventory plots scattered throughout the UDB, but stratified based on access permission and timeframe. Oak average stand height, diameter, mortality, density, canopy cover, understory components, biological diversity, riparian and wetland communities were also

mapped and stand reproductive status (natural regeneration and recruitment trends) was also assessed. The oak census includes notes about age, where available, demographics and current development impacts, as well as threats to oak woodland communities, including, fire, disease, climate change, urban development including infrastructure, and tree harvesting and identify areas where threats are the most pressing as well as identifying Williamson Act lands and fragmented areas.

The oak tree inventory was performed from March 1 to May 20, 2016 by Bobby Kamansky (B.S. Forestry, M.S. Biology/Ecology) and Assistant Biologist, Steven Standlee. Nineteen circular 1/10-acre sample plots were established in a stratified, random fashion within the accessible mapped oak woodland polygons in the UDB. Data was collected on standard data forms. All trees larger than five inches in diameter at breast height (DBH) were assessed for DBH, species, canopy cover (defined as the reading from spherical densiometers), health, structure, and overall condition. Stand height was calculated using the average of the two tallest trees. Ratings of poor, fair, and good were translated into scores of 1, 2, and 3 respectively for use in data analysis. Additional plot data collected at each tree plot included notes on special habitat features (nests, tree regeneration, water features, rock outcrops, snags, logs and dead trees, etc.) and shrub layer percent cover and species composition.

2.6 Data Analysis and Woodland Map Finalization

Plot data were entered into a spreadsheet format and summary statistics were calculated for all of the parameters measured. Data were averaged by plot and are presented in Appendix A and in Table 2. For multi-stemmed trees, the sum of all stems' DBH was used. Field notes were compared with the preliminary oak woodland map and, once refined, was found to sufficiently predict the presence and canopy cover of oak woodland habitat types within the DBA. A woodland cover map was reviewed to estimate blue oak/interior live oak distribution and map with an aerial photograph layer was finalized for the assessment.

3.0 RESULTS

Approximately 17,000 acres of oak woodlands were identified within the DBA (Figure 3, Appendix). The majority of observed oak trees were blue oak. The density of trees measured in the 19 sample plots averaged 110 trees per acre (See Figure 3, range 20-290). The average diameter at breast height of trees

across the site was 18 inches, ranging from an average of 12 to 27 inches in sample plots. Generally, oak trees within the DBA are moderate to large in size with little obvious understory regeneration in many areas.

Understorey shrubs, grasses and forbs form an important aspect of woodland, with an average of 15 species of understory plants. Trees' health, structural condition, and overall condition and found to range from good to poor across the site averaging fair across the UDB. Plot data collected during this assessment are presented in the Appendix. Figure 3 and the oak woodland map in the Appendix depict the location of all mapped oak woodland resources within the DBA.



Figure 3. Oak woodland sampling plots and the distribution of Valley oak woodlands in the DBA.

3.1 Oak Woodland Characteristics

Blue oak woodland and forest was found in the bottom of ravines and on most aspects and slopes in the DBA. Some south aspects at the lower end of the UDB do not have trees or have individual, sparse trees. Canopy cover of oak woodland polygons ranged from 25 to 80 percent with an average of 59 percent over all the plots. Blue oak woodlands within the DBA are completely dominated by blue oak trees with interior live oak. Common understory shrubs include poison oak (Toxicodendron diversilobum), buck brush (Ceanothus cuneatus), elderberry (Sambucus mexicana), and coffeeberry (Frangula tomentosa). Common understory herbs include common bedstraw (Galium aparine), coffee fern (Pellaea andromedifolia), wild cucumber (Marah fabacea), and various annual, and a few perennial, grasses and forbs. Understorey flowering plant richness can be quite high, and especially evident in the spring beginning with fiddleneck (Amsinkia sp.), popcorn flower (Plagiobothrys sp.), phacelia (Phacelia sp.), fiesta flower (Pholistoma sp.), Exotic, annual grasses dominate some areas and invasive thistles (Centaurea solsitialisis, Silibum marinum, Carduus pycnocephalus) exclude other more desireable species and reduce rangeland quality and quantity.

Some understory regeneration of both interior live oak and blue oak were observed throughout the DBA but were not measured, except for seedling densities. Oaks within the DBA (within the tree plots surveyed) were found on average to be in fair condition. The most common causes for oak decline observed during this assessment included root and trunk rot by various fungi and structural defects related to the steep slopes and apparent drought-caused mortality, which is significant 2014-16 seasons, at a minimum. In developed areas, live oaks are less common because they are removed when rot causes limbs and trunks to fall.

Overall, the majority of trees surveyed had a fair-good rating but blue oak stands were poorer in health or more often in fair condition (score of two, or lower, average, 2.4) while Valley oaks on average were 2.6. Rating narratives and results of the assessment are presented in Appendix A.

3.2 <u>Tree Plot Data</u>

Tree density and species composition. Tree density in each tree plot ranged from 20 to 290 trees per acre, resulting in a site average of 109 trees per acre. Extrapolated over the entire approximately 17,000 acres of oak woodlands within the DBA, this data estimates that approximately 1,870,000 oak trees larger than five inches DBH grow in the DBA. Of these 1.8 million trees, development is estimated to directly and indirectly impact approximately 28,885 oak trees on 5,300 acres (assuming an average of 5% of trees are impacted on each parcel, an average of 109 stems per acre over the 5,300 acres totals 577,700 trees) could potentially be directly or indirectly impacted through development and other activities, depending on avoidance and specific woodland characteristics on developed sites at full build out. Ten of the tree plots contained only blue oak trees.

Tree size.

The average of the diameters of all trunks was used in this analysis. Average tree DBH in plots ranged from 12 to 27 with an average of 18 inches. Average canopy cover in plots ranged from 25% to 83% with an average of 63%. Tree health, structure, and condition Tree plot average rating for overall health of trees ranged from zero to three dead trees in the plots. The site average for tree health was 11 dead trees per acre indicating that most trees are generally of fair health, but that up to approximately 10% of the trees may be dead owing to drought impacts. The range of tree plot average structural ratings and overall condition ratings were zero to one with a site average of 0.4 key structures per plot (or approximately four snags or downed logs per acre), indicating that trees are generally of fair structure and overall condition, but drought impacts have reduced density and few key structures such as logs and snags exist in the woodlands.

Understory shrub species richness and percent cover.

The percent cover of shrubs in the understory of tree plots ranged from zero to 55 percent with a site average of 17 percent. The species richness of the shrub layer ranged from two to seven species observed, with a site average of 2.3 shrubs species per plot. Species observed included poison oak, buck brush, coffeeberry, chamise (*Adenostoma fasciculatum*) which are all common shrub species in the area. Summary data are presented in Table 1.

Түре	Large Trees /Acre	Elevation	Tree Species Richness per 1/10- acre plot	Plant Species Richness per 1/10- acre plot	Average DBH	Average Crown Cover	Seedlings and Saplings/ acre	Average Health (# Dead/acre)	Key Structures (# logs and snags/acre)	Condition	Shrub Cover	Shrub Species Richness
All	109	1080	3.3	15.7	18.1	63%	235.8	11.1	3.7	2.9	17.1%	1,6
Blue Oak	114	1136	3.4	14.3	15.6	57%	116.7	15.6	5.1	2.4	17.0%	1.7
Valley Oak	105	916	2.6	18.2	18.9	69%	353.0	6.0	7.3	2.6	15.5%	1.0

Table 2. Summary statistics for oak woodlands within the UDB.

4.0 IMPACTS AND MITIGATION

The proposed development will directly or indirectly impact approximately 5,300 acres of oak woodland at full build out. Public Resources Code section 21083.4 requires the County to determine whether these impacts constitute a significant effect on oak woodlands, and if so, to require mitigation using conservation easements, replanting oaks, contributing to an oak woodland conservation fund, or other methods developed by the County. The precise mitigation methods for these impacts shall be determined in consultation with the County during the application review process based on suitability and feasibility. At a minimum, there is opportunity for onsite oak woodland preservation and enhancement on adjacent parcels in the event that mitigation is called for. Figure 4 (Appendix) depicts the suitable oak restoration and preservation areas within the DBA Footprint. Suitable oak planting areas are those not within existing, intact oak woodland, on slopes less than 35 percent. Potential suitable planting areas were determined though GIS analysis as described above.

Oak woodland mapped within the DBA were found to contain a common assemblage of species, tree size, and density distribution common to oak woodlands of this type throughout Central California. Oak trees within the DBA were determined to be in fair-good condition on average, generally suffering from fungal infections and structural defects associated with the steep and relatively unstable slopes on which they grow and stands display extensive drought-induced mortality. The development associated with the proposed Three Rivers Community Plan Update could remove many oak trees present within the DBA Footprint. Assuming the zoning across the developable parcels (5,300 acres total below the slope threshold and vacant parcels) is a minimum 20-acre parcel size and the impacts total approximately one acre on each 20-acre parcel (5% of the parcel's trees impacted; 265 parcels), development is estimated to directly and indirectly impact approximately 28,885 oak trees on 5,300 acres (an average of 109 stems per acre over the 5,300 acres totals 577,700 trees). Revegetation of disturbed areas will be required to mitigate impacts on the parcels, where feasible. Where not feasible, the County shall plan and execute additional mitigation options, including easements, preserves, where oaks can be preserved and restoration and reclamation can occur. Additionally, California PRC 21083.4 requires each county in California to implement an oak woodland protection policy to mitigate for the loss of oak woodlands resultant from approved projects within their jurisdiction.

4.1 Thresholds of Significance

Under CEQA, once a threshold for significance has been established (e.g. significant impacts to a natural community, to special status species, or to common wildlife species), applicant can address a range of mitigation options. In view of CEQA guidelines, DFW has traditionally encouraged project proponents (such as the County) to take the following hierarchical approach to mitigate for any human impacts on natural communities and wildlife:

- 1. Ideally, any proposed project should be designed to <u>avoid</u> impacts to high quality habitat and sensitive species (e.g. San Joaquin kit fox, Western burrowing owl, or Valley elderberry longhorn beetle);
- 2. If avoidance is not possible, DFW encourages project proponent to minimize loss of natural habitat and habitat quality. Habitat improvements, including revegetation with native species or enhancement of degraded habitat (including removal of non-native species), either on-site or off-site may be used as mitigation;
- 3. Another important component of effective mitigation includes efforts aimed at reducing human disturbance by controlling access to sensitive areas or devising plans for coexistence.
- 4. Short-term mitigation may be recommended during construction. Construction and maintenance personnel are instructed on "take" avoidance. Native vegetation may be replanted, and protection recommended on the project site for habitat features critical to endangered and threatened species. Individual plants or animals may be relocated off-site by a qualified biologist;
- 5. Long-term mitigation may include control of alien and wild predators and invasive plant species, or encouraging growth of forage plants for native animal species.

The following items provide guidance and rationale for the determination of a potentially significant environmental impact in the Three Rivers UDB:

1. Include as applicable, California Environmental Quality Act (CEQA) thresholds of significance regarding oak woodlands. (SB 1334 (Public Resources Code (PRC) section 21083).

This assessment assumes compliance with applicable laws which require mitigation and compensation for impacts to reduce the level of impact below the threshold of significance. During the public meetings for the community plan since 2009, residents charted a vision for the community which includes natural resource focal points and values which shall be retained as part of the community. Oaks, other trees and woodlands and the Kaweah River were determined to be essential components of the community and must be restored and maintained as part of the community character.

2. Evaluation of potential impacts of a project should be considered at three scales: (1) landscape, (2) site and (3) individual trees or groves.a. Mitigation Trigger Level 10% Coverage per acre standard Canopy. 10% Canopy cover per acre is the minimum standard for Oak Woodland definition.

b. Heritage Trees and Individual Trees (where those trees may represent a significant portion of the population of that species, and removal impacts the recruitment and restoration potential for that species (Exceedance of 15" DBH standard).

All three scales noted above were considered as part of this assessment. Mitigation and compensation are prescribed at each scale and maintaining the character and integrity of natural resources were considered as part of the analysis. At the site scale, landowners and project applicants shall be required to perform oak and biological surveys to determine if oaks on the site trigger the 10% canopy coverage threshold and if not, if the individual trees constitute a significant biological resource (the 15" diameter is the threshold for this automatic threshold exceedance, beyond which compensation is required) requiring mitigation. This assessment considers landscape-level and cumulative impacts and prescribes on-site compensation and reserve and conservation area design to protect, enhance oak woodlands throughout the UDB and ensure landscape-level connectivity and contiguity.

3. Establishing Site Condition (CEQA guidelines on establishing site condition §15125 and §15126): Site condition should evaluate either the oaks as individual trees, or the condition of the oaks as a component of a larger forest. A qualified biologist must ascertain if the site represents an oak woodland whose ecological functions are still relatively "intact," "moderately degraded," or "severely degraded".

a. Intact refers mainly to being free from urban type land use practices that inhibit or limit the oak woodland to naturally sustain itself and its associated flora and fauna. b. Moderately Degraded woodlands, the canopy or understory may have been reduced or eliminated over all or part of the site; past grazing or soil disturbance may have impaired regeneration in some areas or it may be a situation due to urban type development.

c. Severely Degraded, it should be highly altered, fragmented or in such a state as to make it virtually unrecognizable as ever having been an oak woodland.

This assessment identifies oak woodland trends and prescribes surveys to determine on-site conditions and impacts associated with site development and parcelization. Establishing site condition is an essential part of the surveys.

4. Determination of Impacts.

a. Low Impact - minimal disturbance to stand structure and composition and habitat features resulting in no increased edge habitat or fragmentation.

b. Moderate Impact - detectable change or reduction in canopy, structure or composition; loss of some habitat features, subtle impacts increasing fragmentation, edge creation or loss of connectivity (roads, fences, other introduced artificial barriers or buffers).

c. High Impact, Obvious change or reduction or loss in canopy, structure or composition loss of most of the existing habitat features and services; fragmentation and or parcelization of contiguous ownerships; introduction of roads or stream crossings; creation of edge habitats previously absent; construction of barriers (fences).

Because of the rural and suburban development nature of the Project, the majority of the development will fall into the (b) and (c) categories, above. To the extent that site checklists are implemented and consultation occurs with the County and qualified biologist and engineers, many impacts associated with road construction and grading can be reduced to the (a) category, above.

5. Development Standards to promote and preserve Oak Woodlands.

A. Development Checklist to determine the potential impacts of proposed development projects or the need for further study;B. Develop appropriate policies and procedures including consideration to prepare a canopy study and consideration of including a sensitive species list;

C. Planning decisions for oak woodlands should take into account potential effects of fragmentation of oak woodlands.

During the community planning process, residents and the County indicated a need to provide information to landowners about the community, values, visions and site development standards which would enable the County to evaluate whether further study, mitigation and compensation and provide educational materials about protecting and conserving oaks on their properties.

6. Mitigation should consider the Mitigation Options identified in SB 1334 (Public Resources Code (PRC) section 21083.4 (b) which provides that CEQA requires "feasible" and "proportional" mitigation for significant oak woodland habitat impacts.

A. Conserve oak woodlands, through the use of conservation easements.

B. Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees. (Determine Appropriate Replacement Ratios).

i. The requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted and survivorship exceeds 60% for three years.

ii. Mitigation pursuant to this paragraph shall not fulfill more than one-half of the mitigation requirement for the project.

iii. The requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands.

This assessment prescribes mitigation ratios to compensate for impacts to oak woodlands and individual trees. Mitigation is based on the size of the trees and the nature of the impacts.

3. Contribute funds to the Oak Woodlands Conservation Fund (OWCF), as established under subdivision (a) of Section 1363 of the Fish and Game Code, for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board. A project applicant that contributes funds under this paragraph shall not receive a grant from the Oak Woodlands Conservation Fund as part of the mitigation for the project.

Where on-site mitigation is not feasible, project applicants who are

required to mitigate impacts may contribute to the OWCF.

4. Other mitigation measures developed by the county.

4.2 Project-related Specific Mitigation Guidelines

Extensive blue oak woodlands occupy the UDB and Valley oak woodlands occupy areas near streams. Many old-growth oak trees with diameter at breast height greater than 6 inches were identified as potentially impacted by the proposed community and thousands of trees exceed the six-inch protection requirement the County includes in the General Plan.

Several oak woodland conservation plans have been approved by other counties in California (see Tuolumne County and the California Oak Woodland Foundation's conservation plans) and state law, as well as local ordinances provide guidance (see section below on other plans).

Determination of Impact Significance in State Law

Indirect Impacts

A land development project is considered to have a significant indirect impact on oak woodland if it will result in human occupancy and use of oak woodland. *The planned use for the site is human occupancy, however, much of the UDB will continue to be unaffected by human occupancy.*

Direct Impacts

1. A land development project is considered to have a significant direct impact on oak woodland if the project will result in more than a 10 percent decrease in native oak canopy within oak woodland on the project site. For example, if an oak woodland contained 50 percent oak canopy cover, removal of more than five percent canopy cover would be considered significant.

2. Impacts to any Valley oak. Valley oaks should be retained on the project site and avoided during the development process. Where avoidance is impossible, impacts to such trees is subject to mitigation measures in addition to those for other oaks as provided herein due to the rarity of these trees and woodlands.

3. Impacts to any old growth oak. Old growth oaks should be retained on the project site and avoided during the development process. Where avoidance is impossible, impacts to such trees is subject to mitigation measures in addition to those for other oaks as provided herein due to the high-biological value of these trees and woodlands.

In consultation with Tulare County and DFW, developers and project applicants can propose mitigation measures to compensate for oak woodland impacts. An oak woodland evaluation/study shall be required as part of determining the need and adequacy of the mitigation measures. The vast majority of the oaks in the UDB will be unaffected by site development, however, large numbers of old growth trees and Valley oaks will be disproportionately impacted by development in small parcels, primarily along the River, but also in other areas currently developed or on currently vacant parcels.

Mitigation Zones

Because of the disproportionate geographic and species impacts, KEC recommends the County pursue mitigation according to the following geographically-specific plan (see Appendix):

- a. A mitigation plan for the Community shall be constructed;
- b. Small parcel owners along River and in commercial or high-density development potential areas will be required to revegetate on site, where feasible to compensate for oak loss;
- c. Large parcels and those away from high-density and commercial zoning areas may purchase credits for oak loss or revegetate on site credit funding will go towards purchasing property in the UDB in strategic areas to maintain oak woodlands in high-density development or commercial areas.
- d. Another available option is for the County to purchase and protect, with easement, parcels in the UDB to pre-mitigate impacts.

These zones specifically are designed to promote continued woodland existence in the UBD on small parcels at full build-out.

The California oak woodland guidelines state mitigation shall be in accordance with the following standards:

Old Growth Oak Mitigation (>15 inches diameter)

Projects that impact old growth oak (OGO) trees shall comply with all of the following mitigation measures:

1. Avoid OGO trees to the maximum extent feasible. No more than 25 percent of the OGO trees on a project site may be impacted.

2. For each impacted OGO tree, except valley oak, ten replacement trees of the same species shall be planted on land conserved through a

conservation easement or fee title dedication to a land conservation group approved by the County and Department of Fish and Game.

For each impacted OGO Valley oak tree, 15 replacement trees shall be planted on land conserved through a conservation easement or fee title dedication to a land conservation group approved by the County and the Department of Fish and Game.

3. Payment of a fee to the California Wildlife Conservation Board's Oak Woodlands Conservation Fund or other mitigation fund established by the County using the following formulas:

Fee = number of OGO trees impacted x 0.5 x current land value;

For OGO valley oak trees:

Fee = number of OGO valley oak trees impacted x 0.75 x current land value. An administration fee equal to five percent of the mitigation fee shall also be required to reimburse the County for its expenses associated with this mitigation measure.

Developing several parcels in the UDB will impact small numbers of oaks, but may significantly impact large blue and Valley oaks.

The County has the option of permanently protecting areas to mitigate development impacts. Mitigation sites would remain unaffected by human activities and development in the UDB and will have the express purpose of mitigating and compensating for impacts on the site through onsite resources or revegetation/restoration.

4.3 Examples from other Counties

The following is excerpted from the Fresno County Oak Woodland Management Guidelines:

The following recommendations are presented to landowners to assist them in determining how they can best manage their oak woodlands. We emphasize that these guidelines are voluntary. The recommendations are not in any particular order of importance. All recommendations should be considered when reviewing a specific piece of property. Landowners are encouraged to create an Oak Management Plan for their property using the Integrated Hardwood Management Program information and the other listed resources for specific assistance.

1. When Building Within Oak Woodlands:

Develop an Oak Woodland Management Plan to retain existing oaks, preserve agriculture, retain wildlife corridors and enhance soil and water conservation practices.

- Avoid tree root compaction during construction by limiting heavy equipment in root zones. Carefully plan roads, cuts and fills, building foundations and septic systems to avoid damage to tree roots. Design roads and consolidate utility services to minimize erosion and sedimentation to downstream sources. Also consider reseeding any disturbed ground.
- Avoid landscaping which requires irrigation within ten (10) feet of the trunk of an existing oak tree to prevent root rot.
- Consider replacing trees whose removal during construction was unavoidable.
- Use fire-inhibiting and drought tolerant and oak compatible landscaping wherever possible.
- 2. Take Steps to Increase Fire Safety on Wooded Parcels:
 - Recognize fire as a natural feature of the oak woodland landscape and plan accordingly.
 - Set up a continuous management program as a part of your Oak Woodland Management Plan to maintain a fire-safe property environment.
 - Identify and manage trees to be fire-safe.
 - Recognize the impact of steep slopes on fire safety.
 - Develop a fire-safe and oak-friendly landscape plan for your home or business.
 - Create "Defensible Space" around buildings. Defensible space is that area which lies between a structure and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and which provides an opportunity for firefighters to safely defend a structure.
- 3. When Implementing Range Improvement Practices in Oak Woodlands:
 - When using prescribed fire as a range improvement practice, obtain professional assistance to maximize benefits and minimize risk.
 - When converting oak woodlands to other agricultural uses, consider incorporating an oak retention component or a conservation easement in your Oak Woodland Management Plan.

- Develop water sources -ponds, troughs, seeps and springs for livestock and wildlife.
- When Harvesting Oaks for Fuel or Range Improvement, Plan Your Harvest to:
 - Maintain an average canopy cover of 10% to 30% depending on site, elevation and precipitation.
 - Retain some oak trees of all sizes and species represented at the site, in clusters where possible.
 - When safety permits, leave old hollow trees and those actively being used for nesting, roosting or feeding.
 - Where low fire risk and aesthetics allow, pile limbs and brush to provide wildlife cover.

The following is excerpted from the Los Angeles County Oak Woodland Management Guidelines:

Before Construction:

- Baseline documentation of the oak woodland
- characteristics completed.
- Identify any potential impacts and recommend mitigation measures.
- Fencing should be installed around the designated protected zone.
- Required bonds should be posted.
- All project personnel should understand the goals, guidelines and restrictions associated with the project.
- Identify enforcement options and consequences.

During Construction:

- On-site monitoring should be required during all activities that might impact the oak woodlands.
- Maintain records of activities and decisions regarding oak woodlands.
- Work with construction personnel to protect the resources.
- Evaluate tree response to site activity and recommend appropriate action.
- Provide guidance on temporary irrigation if needed.
- Treat any tree injuries appropriately.

Following Construction:

- Develop and implement a Monitoring Plan
- Provide recommendations for managing remnant oak woodlands
- Oversee implementation of a management program to preserve woodland function.
- Oversee fuel modification procedures and hazard tree management.

The following is from Title 22 of the San Luis Obispo County Code, Chapter 22.56:

Tree Preservation (San Luis Obispo County 1980) requires a tree permit for the removal of any tree greater than 8 inches diameter at breast height (DBH) within any urban or village reserve lines, or other specific areas identified in the planning area standards. The Voluntary Oak Woodlands Management Plan for San Luis Obispo County (Native Tree Committee 2003) implements the voluntary guidelines in the Native Tree Resolution, as adopted by the County Board of Supervisors. The Plan suggests a number of conservation measures including designing projects around existing oak woodlands, clustering development, encouraging landscaping with native oaks, and purchase of conservation easements. However, this plan is voluntary and does not constitute a binding mandate on private landowners or abridge the private property rights of a landowner.

5.0 DISCUSSION AND CONCLUSION

In the San Joaquin Region Seventy-three percent of the San Joaquin region's oak woodlands are privately owned. The U.S. Forest Service owns 18 percent and the Bureau of Land Management owns 5 percent. A total of 10 percent of the oak woodlands in the region have already been developed, and 10 percent are at high risk of development by 2040. Eighty percent are currently stable; however, targeted planning could ensure that a greater number of acres are conserved for the long-term. Nearly 250,000 acres of oak woodlands in the San Joaquin region are at risk of development by 2040. Only the Sacramento region contains more oak woodlands at risk. In Madera, Amador, and Calaveras counties combined, more than one-third of all oak woodland may be developed before 2040.

Blue oak, Valley oak and, to a lesser extent, interior live oak, appear to be regenerating poorly, or only sporadically reproduce in specific events. Oak regeneration detected as part of the present assessment found far larger reproduction present in stands than is often found in the literature.

Within the Three Rivers UDB, Valley oak trees dense woodlands with other large trees along the river corridors and near streams. Blue oaks and interior live oaks form sparsely-vegetated woodlands on west and south-facing slopes and denser woodlands on east and north-facing slopes. Extensive Valley oak woodlands occur in the UDB and reach the greatest density, size and extent along the South Fork, where little development and cutting have occurred thus far. Development impacts already modified many areas along the Middle Fork and especially in commercial areas on small parcels. In some small patches along the Middle and North forks, the woodland is narrow to discontinuous, possibly owing to development impacts, site maintenance and ecological disturbances such as floods.

Interior live oaks in subdivisions and near houses are disproportionately removed because the trees exhibit visible signs of rot or poor health and are first to be cut or removed by landowners. In some areas of denser development, interior live oaks are entirely absent and no recruitment is evident.

While the Oaks 2040 report indicated zero reproduction in Valley oak stands, UDB surveys detected Valley oak reproduction in nearly every Valley oak stand. Blue and interior live oak trees exhibit contrasting patterns depending on slope, aspect and soils. However, most south and west-facing blue oak stands appear to have very few seedlings and saplings in the understory while north and east-facing slopes appear to be continuously regenerating.

While many stands appear to be reproducing, on average, at least 10% of blue oaks appear to have died from drought-induced mortality. This pattern could continue in the years to come from continued or subsequent droughts and secondary attacks and pathogens. This mortality will likely have greatest impacts on blue oak trees on west and south-facing slopes at or near ridgelines, where little current regeneration leaves demographic gaps in the stands when old trees die. These stands are also among the most sparselywooded. Because the hottest, steepest and most exposed slopes already lack woodlands at the lowest elevations in the UDB, the pattern of sparse or no woodland on west and south-facing slopes appears likely to continue higher in the watershed and UDB decreasing blue oak woodland canopy and extent.

Climate change modeling indicates that, based on temperature and precipitation, oak persistence will be increasingly challenged, particularly Valley oaks at lowest elevations (Kuypers et al). However, the Kaweah River is undammed through the UDB, providing abundant, critical water supply in the summer for Valley oaks. This, and the oak woodland's width, may protect the woodland against temperature and climate extremes. Nevertheless, impacts creating gaps, narrowing the woodland extent and tree removal or health impacts decrease the likelihood of woodland persistence in the UDB.

Because not all oak trees on even the driest, most exposed slopes are dead and some appear to be vigorous even after several years of exceptional drought, it appears the oaks in the UDB possess some climate adaptability and resilience. Natural genetic variation may include some drought-adapted and some drought-sensitive trees. It is likely the recent exceptional drought removed the most sensitive ecotypes in the population. Conservation of the oak trees should include collecting and propagating trees with genetic drought and climateresilience.

Because of the configuration of the oak woodlands in the UDB, the potential for climate and drought-induced mortality and stress, the past impacts and potential future development impacts, oak woodlands in the UDB area face multiple, potentially interacting stressors. The combined impacts from these stressors could result in dramatic changes in oak abundance and health in the UDB. Valley oaks are particularly vulnerable because of the narrow, linear configuration of the woodland along the River corridors and because the configuration of the smallest, most desirable parcels is in the same area, development impacts will have the greatest and disproportionate impact on Valley oak woodlands. From the North Fork Bridge and north along the Middle Fork, the woodland is narrow and forms a thin string of old trees, with little regeneration or pole-sized trees to form a woodland when the large, old trees die. Areas in this zone should be restored and protected as oak refugia to ensure persistence in this area. Drought-adapted local ecotypes should be cultivated and planted to ensure drought adaptability and woodland persistence in this area to maintain the community character and avoid fragmentation and oak woodland decline. Mitigation on site and together with landscape-scale reserves and conservation areas are essential to maintaining the integrity and character Three Rivers enjoys today.

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Plot ID	Туре	Large Trees /Acre	Elevatio n	Tree Species Richness per 1/10- acre plot	Plant Species Richness per 1/10- acre plot	Averag e DBH	Averag e Canopy Cover	Seedlin gs and Saplings /acre	Average Health (# Dead)	Key Structures (logs and snags)	Conditio n	Shrub Cover	Shrub Species Richnes s	Shrubs Present
	QUDO/Q													Honey suckle,
NF 1	UWI	30	1,400	2	15	23	68%	10	2	1	3	15%	2	yerba santa
	0/00/0													Honey suckle, chamise, poison
NF 2	UWI	80	1,400	3	28	24	50%	20	2	1	2	20%	5	nettle
NF 3 (Combs)	QULO/P LRA	40	1,252	4	9	24	68%	150	0	0	3	10%	7	Grape, Redberry, spicebush, native blackberry, himalayan blackberry
NF 4 (Lions Arena)	QULO/P LRA	100	1,000	5	14	27	83%		0		3	18%	7	Grape, Redberry, spicebush, native blackberry, himalayan blackberry
NF 5	QULO/P LRA	50	1,000	4	12		74%				2	22%		
MF 1 ('Ol Buck)	QULO/P LRA	40	900	5	27	21.7	68%		2	1	2		2	Buttonbush, nettle
MF 2 (Chamber)	ULO	40	950	3	19	16.5	48%	80	2	0	2	0%	0	
MF 3 Dinely #1	QUDO/Q UWI	110	1050	2	17	15 5	55%	2	3	0	3	20%	1	Manzanita
	QUDO/Q	110	1000			10.0	5570				5	2070	-	manzanita
MF 4 Dinely #2	UWI	140	1050	1	10	16	42%	2	3	0	2	0%	0	Buckeye,
MF 5 Gateway	QUDO/Q UWI QUWI/Q	270	1,400	4	14	16.5	75%	20	3	0	3	15%	3	poison oak, redberry
EF 1 Lowe	ULO	200	1,400	4	13	14	65%	60	2	1	3			
Salt Creek #1 Skyline	QUWI/Q ULO	150	1,700	3	12	13.5	63%	10	1	1	2	28%	0	Durchause
Salt Creek #2	QUWI/Q UDO	120	1,800	2	8	12	53%	20	0	0	2	30%	3	poison oak, redberry
	QUWI/Q													Buckeye, poison oak, redberry, honey
Salt Creek #3	UDO	140	1,800	2	12	14.5	68%	20	0	0	3	40%	4	suckle
SF 1 South Fork Bridge #1	QULO/P LRA	60	950	5	20	21	67%	20	0	1	3	20%	2	Buttonbush, poison oak
SE 2 South Fork														Manzanita, spice bush, poison oak, native blackberry, wild
Brudge #2	LRA	80	950	9	24	24.5	70%	10	0	1	3	30%	5	grape
SF 3 - Austin Residence	QUDO/Q UWI	20	1,000	1	3	23	25%	0	0	0	2	2%	1	redbud
SF 3 - 40869	QUDO/Q UWI	120	1,000	2	10	11.5	65%	1	1	0	2	0%	0	
SF 5 - Schwaller	QULO/P	200	1.000	-	22	26.7	0.00/	22	0		2	F F 0/	2	Wild grape,
SF 6 -	LKA	290	1,000	5	32	20.7	80%	23	0	0	2	55%	2	spicebush
Walkabout Ranch											2			
SF 7 - Mosley	UWI			3			68%				3			
Averages	<u>All</u> Blue	109.5	1211	3.45	15.7	18.1	63%	235.8	11.1	3.7	2.9	17.1%	2.3	
	Oak Valley	114	1360	2.2	14.3	15.6	57.0%	116.7	15.6	5.1	2.4	0.2	1.9	
	Uak	102	940.2	4.4	10.2	19.2	%/.60	333.0	0.U	1.3	Z.0	0.2	2.5	

Rating narratives for tree assessment

General Condition

good	Tree shows condition of foliage, bark, and overall structure characteristic of the species and lacking obvious defect or disease
fair	Tree shows condition of foliage, bark, and overall structure characteristic of the species with some evidence of stress, defect, or disease
poor	Tree shows condition of foliage, bark, and overall structure uncharacteristic of the species with obvious evidence of stress, defect, or disease
Health	
good	Tree is free from symptoms of disease and stress
fair	Tree shows some symptoms of disease or stress including twig and small branch dieback, evidence of fungal / parasitic infection, thinning of crown, or poor
poor	Tree shows symptoms of severe decline
Structure	
good	Tree is free from major structural defects
fair	Tree shows some structural defects in branches but overall structure is stable
poor	Tree shows structural failure of a major branch or codominant trunk



Photograph 1. Looking south over the UDB to Lake Kaweah from near Blossom Peak, including the wooded north-facing slopes.



Photograph 2. View of the riparian/floodplain woodland with willow-cottonwood and Valley oak near the North Fork Bridge. This is a suitable restoration area.



Photograph 3. View of the Middle Fork of the Kaweah River, looking south from the North Fork Bridge.



Photograph 4. Degraded riparian woodland, Middle Fork Kaweah River from 'Ol Buckaroo, just north of the North Fork Bridge.



Photograph 5. Riparian woodland along the Middle Fork Kaweah River.




Photograph 6, and 7. Blue oak and interior live oak woodland along the Middle Fork Kaweah River at the Chamber of Commerce.



Photograph 8. Riparian woodland and wetland. Yellow flowers are invasive broom plants.

Photograph 8. Blue oak woodland near the bottom of Skyline Drive, Middle Fork, Kaweah River Watershed looking south. Note the two dead oak trees on the right.



Photograph 9. North-facing blue oak woodland stand at the Salt Creek Trailhead at the end of Skyline Drive. Note the dead oak in the left background.



Photograph 10. Blue oak woodland at the bottom of the Salt Creek Trail.



Photograph 11. Middle Fork Kaweah River, Valley oak riparian and blue oak woodland (background). Yellow flowers are invasive broom plants. Also visible are residences and the fragmented canopy.



Photograph 12. Residential blue oak/interior live oak woodland, Cherokee Oaks. Note exotic trees and landscaping plants.



Photograph 13. Blue oak/interior live oak woodland maintained for fire control. Note lack of small trees.



Photograph 14. Blue oak/interior live oak woodland, Cherokee Oaks.



Photograph 15. Dense Sycamore-Valley oak woodland along the South Fork Kaweah River.



Photograph 16. Closed Canopy Sycamore-Valley oak woodland, South Fork Kaweah River.



Photograph 17. Riparian, Valley oak woodland at the first bridge over the South Fork Kaweah River. Note the dense, intact woodland canopy and tree density.



Photograph 18. Riparian, Valley oak woodland at the second bridge over the South Fork Kaweah River.



Photograph 19. View east near the Urban Development Boundary to Dennison Mountain in Sequoia National Park along the South Fork Kaweah River. Note the dense, intact woodlands.



Photograph 20 and 21. Dense north-facing blue oak woodland and riparian, Valley oak and sycamore alluvial woodland along the South Fork Kaweah River, near the Urban Development Boundary.



Photograph 22. Riparian, Valley oak woodland looking south at the Airport Bridge, south of the Lions Arena over the North Fork Kaweah River.



Photograph 23. Riparian, Valley oak woodland looking north at the Airport Bridge.



Photograph 24. Citrus agriculture along North Fork Drive, the North Fork Kaweah River.



Photograph 25. Riparian, Valley oak woodland looking north along the North Fork Kaweah River



Photograph 26. Floodplain and riparian forest with Valley oak, sycamore and live oaks, along the North Fork Kaweah River.



Photograph 27. North Fork Kaweah River, riparian woodland (foreground), live oak woodland (middle ground), blue oak woodland (slopes and ridges).



Photograph 28. Oak log, a key structure to retain soil moisture, reduce erosion and provide food and cover for animals.



Photograph 29. View north along North Fork Drive at the Urban Development Boundary.



Photograph 30. View west from North Fork Drive near the Urban Development Boundary. Note the blue oak woodland in the foreground and the oak mortality.

APPENDIX C - MAPS

- I. UDB Zoning
- II. UDB Adopted Land Use
- III. UDB Floodways and Intermittent Streams
- IV. Location and Extent of the oak woodlands in and around the UDB
- V. Landownership and Conservation Lands in the UDB
- VI. Conservation Plan, Suitable Oak Woodland Restoration and Protection Sites



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LIST OF APPENDICES

Appendix A. Tree Plot and Survey Data Appendix B. Representative Photographs APPENDIX C: Maps **Resolutions** Planning Commission Resolution Board of Supervisors Resolution

APPENDICES

Appendix A: Planning Commission Resolutions Appendix B: Board of Supervisors Resolution Appendix A - Planning Commission Resolutions

DRAFT THREE RIVERS COMMUNITY PLAN UPDATE

Appendix B - Board of Supervisors Resolutions