April 4, 2019

U.S. Bureau of Reclamation
Mid-Pacific Region
Mr. David van Rijn
Regional Planning Director
2800 Cottage Way, MP-700
Sacramento, California 95825

Dear Mr. van Rijn:

The San Joaquin Valley Water Infrastructure Authority (SJVWIA) is pleased to submit this Letter of Interest for the Water Management Options Pilots (WMOP) and possible funding in connection with an important San Joaquin River Basin watershed restoration study in which our Board of Directors is interested and eager to pursue.

Our Joint Powers Agency was organized in 2015 by the Counties of Fresno, Tulare, Kings, Madera and Merced along with cities and water agencies. The SJVWIA is committed to assisting San Joaquin Valley residents, businesses and industries, including agriculture, with regional and local efforts directed at improving infrastructure to meet present and future water supply and reliability needs. As you are probably aware, the San Joaquin Valley and other California regions have long dealt with, and often suffered from, serious water supply shortages. Such shortages now are considered likely to intensify and become more acute under changing climate, urban growth, and management policies such as the state’s new Sustainable Groundwater Management Act.

SLVWIA board members respectfully request Reclamation, through the Basin Study Program and WMOP, to consider funding for a study on developing a remotely sensing based top-down adaptive forest management tool for assessment and verification of water, forest health, and other related ecosystem services from forest restoration. This study will be based in the San Joaquin River Basin of the central Sierra Nevada, within Fresno and Madera counties. San Joaquin River Basin is among the one of the most severely impacted basin from tree mortality during 2012-2016 California drought. The intended study location is largely within the Sierra National Forest, which is engaged in related forest management efforts such as the
Musick Fuels Reduction and Landscape Restoration Project and other activities involving the University of California, Merced, and other partners.

The SJVWIA currently has a cost-sharing Memorandum of Understanding with Reclamation involving feasibility studies for the proposed Temperance Flat Reservoir Project on the San Joaquin River northeast of Fresno, California. Our Authority served as the lead agency in obtaining state water bond funding under the California Water Commission’s Water Storage Investment Program for the Temperance Flat effort.

Our desire to improve San Joaquin Valley water resources through restoration of source-water areas has led to our interest in WMOP. The SJVWIA intends to work with a number of partners in developing and examining alternative forest-management evaluation and verification techniques, with a focus on enhancing snow and soil moisture storage along with amounts of natural runoff from snow and rain that flow into reservoirs and lower riverine systems. These tools are essential to demonstrate the multiple benefits from watershed restoration, and engage partners in collaboratively developing a financing strategy to work with the Forest Service and other land managers to achieve the urgently needed forest management. We envision that our partners would include UC Merced, Reclamation, the U.S. Forest Service, various state agencies & NGOs, our five counties and San Joaquin Valley water agencies. Our board notes that the Sacramento-San Joaquin Basin Study provides for and encourages this type of further planning refinement.

We have reviewed the Basin Study Technical Report’s adaptation strategy for better watershed and forest management. The SJVWIA believes the planning study we are proposing — with the assistance of our federal and non-federal partners — will provide the scientific foundation and credible projections needed to advance the pace and scale of forest restoration. It is a key missing piece now needed to improve forest and watershed management, yield more water supplies to those we represent, and enhance multiple other benefits for the region.

Recent years of drought, coupled with effects of many decades of intense wildfire suppression, have demonstrated the need to re-evaluate and re-tool Sierra Nevada forest management. Vastly increased forest density has become the rule throughout most mountain areas. This has resulted in hugely increased fuel loads and wildfire severity, along with infestations by pests such as the bark beetle. That pest has destroyed tens of millions of trees within forests throughout the Sierra over the past several years. Impacts have been devastating. Restoring the forests to a sustainable level at the required pace and scale will warrant strong partnership and low-cost reliable verification tools that can help monetized the ecosystem benefits.

The central Sierra Nevada’s western slopes are also the source of much of the water relied upon by the more than two million people who live and work within the SJVWIA’s five member counties. Runoff from rainfall and melting snow, captured in reservoirs on the Sierra’s lower western slopes, is stored and utilized not only by communities, business and industry, but as the basic source of water upon which the San Joaquin Valley’s farm production — the world’s greatest — depends.
It is our belief that the Basin Study’s Adaptation Portfolios support such a study, which will address critical knowledge gaps limiting implementation of forest restoration. The Basin Study’s conclusions state in part, “Healthy Headwaters and Tributaries include adaptation actions that improve environmental and water quality in the Central Valley and upper watershed areas.” A significant contributor toward achieving this objective, and in increasing naturally-occurring runoff, would be lessening of evapo-transpiration (ET) within Sierra forests through reduction of forest densities from common present high-density levels to lesser densities that were historically much more prevalent. The Basin Study itself notes in a finding on Adaptation Portfolio Performance that the “Healthy Headwaters” concept portfolio was among the strategies that “all resulted in consistently fewer months of flows with less than 15,000 c.f.s than the No Action alternative, primarily because these portfolios increase reservoir releases which contribute to increased winter and spring flows.”

Study efforts already undertaken thus demonstrate the value of a study directed at aiding in important forest and watershed management knowledge and planning efforts. This study would complement and advance analysis begun through a Western Watershed Enhancement Partnership Interagency Agreement between the Interior Department and Reclamation, and the U.S. Department of Agriculture and Forest Service.

Cooperative active watershed management to reduce wildfires, preserve forest health and assist in forest thinning to augment snowpack retention and runoff can only benefit the forests themselves, and the San Joaquin Valley people whose lives and livelihoods depend upon natural watershed runoff of water emerging from the forests.

Thank you for considering our Letter of Interest. Please do not hesitate to contact our Executive Director, Mario Santoyo, at (559) 779-7595, with any questions or if you need additional information.

Sincerely,

Buddy Mendes,
President