California WATER COMMISSION

Water Storage Investment Program Concept Paper Form

Please complete the questions below and return your completed concept paper by email to cwc@water.ca.gov by 5:00 p.m. on March 31, 2016. Completed concept papers should not exceed four pages.

Contact Information

Contact Name: Michael Brinton	
Email: Michael.Brinton@ci.ceres.ca.us	
Phone Number: (209) 538-5758	
Agency/Organization Name: Stanislaus Regional Water Authority	
Agency Type (select one):	☐ Public Agency ☐ Nonprofit Organization ☐ Public Utility ☐ Tribe ☐ Mutual Water Company ☒ Local Joint Powers Authority ☐ Other:

Project Information

Project Name: Regional Surface Water Supply Project	
Project Type:	☐ CALFED Surface Storage ☒ Groundwater Storage ☐ Groundwater Contamination Prevention or Remediation ☒ Conjunctive Use ☐ Reservoir Reoperation ☐ Local Surface Storage ☐ Regional Surface Storage ☐Other:
Estimated Project Cost: $200M	
Estimated WSIP Funding Request: $100M	

Please describe your project, including location, water source, facilities, and operations:

The Regional Surface Water Supply Project (RSWSP) and associated downstream improvements (i.e. river intake pump station, water treatment plant, transmission pipelines, and local system improvements), will pump water from the Tuolumne River via an already installed infiltration gallery beneath the river, treat it to drinking water standards, and then deliver it to the service area boundaries of the cities of Turlock and Ceres (Cities), and other potential project partners for municipal and industrial uses.

The RSWSP will provide these regional partners with a long-term, sustainable water solution through the conjunctive use of surface water and groundwater. The use of surface water will avoid further over-drafting of the groundwater supply and will allow for the replenishment and storage of groundwater for use during emergencies and periods of drought.

The RSWSP provides the additional benefits of improved drinking water quality, eliminating low system pressures during peak operating conditions, increased system reliability, and improved operational flexibility for the project partners.

Per Water Code section 79753, the Commission may only fund the public benefits of water storage projects. Further, ecosystem improvements must make up 50% of the funded public benefits (Water Code section 79756(b)). What public benefits does your project provide? (select all that apply):

☒ Ecosystem Improvements ☒ Water Quality Improvements ☐ Flood Control
☒ Emergency Response ☐ Recreation

Please describe the magnitude of the public benefits and how the project will be operated to provide the public benefits:

The water quality of existing aging drinking water supply wells is steadily declining. Nitrate, total dissolved solids, and other contaminates impact drinking water quality and wastewater treatment plant discharges. The Cities' wastewater treatment effluent discharges to the San Joaquin River. The San Joaquin River is designated an impaired water body under the authority of the Clean Water Act, Section 303(d), and discharges to the Delta.

Ecosystem improvements: Increased use of treated surface water will allow the cities to be less dependent on native groundwater wells which will replenish the groundwater basin. Surface water will provide a superior water quality to the residents of Ceres and Turlock, which will in turn result in improved water quality discharges from the wastewater treatment plants to the San Joaquin River.

Emergency response: The project boosts each city's available water supply and allows for groundwater to be stored for reliable use during emergencies and periods of drought.

Water Code section 79752 requires that funded projects provide measurable improvements to the Delta ecosystem or to the tributaries of the Delta. Please describe how your project provides ecosystem improvements in the Delta or tributaries to the Delta:

Using treated surface water for domestic and industrial water supply will result in a higher quality wastewater discharges. Measurable improved wastewater discharges will eventually flow into the San Joaquin River, thus improving tributary and Delta ecosystems.

Surface water will be supplied through a new diversion on the Tuolumne River that will utilize an already constructed infiltration gallery beneath the river. The infiltration gallery will benefit aquatic resources within the river between La Grange Dam and the gallery. Water that would otherwise be diverted at La Grange Dam by Turlock Irrigation District will now be withdrawn through the infiltration gallery, keeping more water in the river for the 26 miles between La Grange and the gallery. This will benefit fisheries and other aquatic resources in the Tuolumne River by increasing flows in the river in drier years. Also, the infiltration gallery is designed to fully protect fish during diversions.

Water Code sections 79755 and 79757 require the Commission to make a finding that a project will advance the long-term objectives of restoring ecological health and improving water management for beneficial uses in the Delta prior to allocating funding for a project. Please describe how your project could help advance the long-term objectives of restoring ecological health and improving water management for beneficial uses in the Delta: Using treated surface water will reduce the amount of groundwater extracted by the Cities from local aquifers, thus supporting groundwater basin recovery and storage. Additionally, increasing the quantity of high quality treated surface water used by city residents and industry will also improve wastewater treatment plant discharges and thus help advance the long-term objectives of restoring ecological health and improving water management for beneficial uses in the Delta.
Please describe any other benefits provided by your project, such as water supply reliability benefits, and the potential beneficiaries: The RSWP will provide for the storage of groundwater, increase emergency water supplies, increase water system reliability and pressures during peak periods, and improve drinking water quality for the residents of Ceres and Turlock.