5.2.5 Rancho de Kaweah Water Management & Banking Project

The following describes the Rancho de Kaweah Water Management & Banking Project, which will manage available CVP and/or Kaweah River supplies from project participants and capture excess water in high flow years to recharge the aquifer, store, bank, or re-regulate supplies to help achieve sustainability in the Kaweah Subbasin and potentially benefit others based on participation. The project area is shown in **Figure 5-5**.



Figure 5-5 Rancho de Kaweah Project Area

Project Title: Rancho de Kaweah Water Management & Banking Project Project ID: EK4

Project Type

Recharge (basin), Banking, Recovery, and Re-regulation

Project Location

The project site is located near Exeter Blvd. and the Lower Kaweah River in Tulare County – Portion of Sections 11, 14, 15, 22, and 23 T18S, R26E.

Implementing Agency

Lindsay-Strathmore Irrigation District (LSID)

Project Title: Rancho de Kaweah Water Management & Banking Project **Project ID: EK4** Project Description - 354.44(a) The Rancho de Kaweah Water Management & Banking Project will entail constructing recharge and recovery facilities on approximately 1,200 acres. It will provide water management including recharge, storage, re-regulation, and recovery of project participant's CVP and/or Kaweah River water supplies. A conveyance system will be constructed to the project site. Measurable Objective(s) Addressed - 354.44(b)(1) The project will primarily help stabilize groundwater levels and increase the amount of groundwater in storage. The project may also re-regulate high flow supplies that would have been potentially underutilized and reduce groundwater pumping by delivering captured water during the irrigation season. Indirectly there could be secondary benefits of some groundwater quality improvement and reduction in land subsidence. Chronic Lowering of Groundwater Levels Reduction of Groundwater Storage Seawater Intrusion – *not applicable* Degraded Water Quality ☑ Land Subsidence Depletion of Interconnected Surface Water Circumstances and Criteria for Implementation - 354.44(b)(1)(A) The project is in the conceptual stage and no feasibility study work has begun. Infiltration is expected based on general knowledge of the soil characteristics in the immediate project area-the sandy soils

present have a high capacity for percolation. Construction of the project would depend upon successful outcome of a feasibility study including a geotechnical investigation. Environmental clearance would be necessary under CEQA and/or NEPA depending upon the ultimate funding source. This is a high priority project because of the large potential recharge and will address several of the measurable objectives. It is an integral piece of the EKGSA's overall effort to reach sustainability and provide partnering ability within the Kaweah Subbasin.

Process to Provide Notice of Implementation - 354.44(b)(1)(B)

The EKGSA will have ongoing efforts to engage stakeholders and the general public in the sustainability process, communicating the statutory requirement, the objectives of the GSP, and progress toward each identified measurable objective. Neighboring landowners will be notified about the project prior to implementation and environmental documents will be available for public review.

Estimated Annual Project Benefits (AF/yr) - 354.44(b)(2)

The actual recharge rate of the proposed project will be determined by the on-site soils and size of basin, but it is expected to be approximately 1 ft/day, which would result in approximately 300 AF/day if at least 300 acres of basin area is constructed. This would yield an average annual recharge volume of approximately 9,000 AF/year when Kaweah River water and/or CVP water is available (currently estimated at 30 days per year. Potential storage, recovery, and re-regulation volumes will be determined in the future during further project feasibility and design analysis.

Permitting and Regulatory Requirements - 354.44(b)(3)

The project will require CEQA and/or NEPA documentation, permits through the U.S. Army Corps of Engineers and California Department of Fish & Wildlife (CDFW), and construction permits (DCP and SWPPP). The project will likely utilize CVP and Kaweah River water when available. The project shall complete all necessary permitting and regulatory requirements.

Project Schedule - 354.44(b)(4) Anticipated Start & Completion, Timeframe to accrue benefits

No project schedule has been determined, and a project feasibility study and analysis need to be completed. Once a source of project funding is secured, a comprehensive schedule including environmental review, design, permitting and construction will be developed. Project construction and Project Title: Rancho de Kaweah Water Management & Banking Project Project ID: EK4

implementation is anticipated to occur within 5 to 10 years of GSP submittal. Basin recharge can occur after project construction whenever water is available from potential sources.

Evaluation of Benefits - 354.44(b)(5)

The volume of water delivered for recharge will be measured daily and summarized monthly. The rate of accrual of benefits will depend on the frequency of water availability and the percolation capacity of the soil. The water level of groundwater wells in the area is measured and water quality in the vicinity of the project is monitored. This data will be used to determine project impacts and benefits.

How will project be accomplished, and what is the water source? - 354.44(b)(6)

The project will be accomplished by LSID with the support of EKGSA and cooperation of GKGSA. The water source will be Kaweah River water and/or CVP water that may be available.

Legal Authority - 354.44(b)(7)

LSID, as the property owner, has the legal authority to construct the project upon receipt of applicable permits and has the authority to deliver Kaweah River water to the basin as well as CVP water since the area is within the CVP Place of Use.

Project Cost - 354.44(b)(8) Estimated Capital Cost Estimated annual cost/AF

The estimated project capital cost is approximately \$12,000,000 and the annual cost over a 20-year return period is estimated to be \$100 to \$150/AF, including operational and capital costs.

Funding Source - 354.44(b)(8)

The funding source will likely be a combination of grant funding, LSID, and/or EKGSA.

Management of Groundwater Extractions and Recharge - 354.44(b)(9)

The project would be managed by LSID under the oversight of the EKGSA and GKGSA. Recharge volumes will be measured and reported by LSID. Groundwater extraction will be by landowners who partner on the project within the Kaweah Subbasin. Performance of the project would be a necessary part of the EKGSA's reporting requirements as well as evaluations of measurable objectives.

Level of Uncertainty - 354.44(d)

The level of uncertainty primarily involves funding availability as this project is at the higher end of projected project costs.