Potential Sierra Valley Implementation Grant Components

Project/Component	Description	Grant Eligibility Category+	Rough Cost Estimate
Grant Administration	Contracting, reports, invoices, grant amendments, etc.	N/A (It's allowed)	(= 10% of<br grant) \$275,000
Updates/modifications to GSP	Responses to DWR comments on initial GSP (if any) GSP Updates Annual Reports Data Management Model Updates Address data gaps - The monitoring network will be optimized per data gaps section of GSP, including monitoring of GDEs, and better characterization of springs and surface water contribution to address questions regarding opportunities for water diversion for groundwater recharge	4 & 5	\$600,000 (\$200k/year)
Stakeholder outreach	TAC meetings (if any), Board meetings, public workshops. Public workshops to engage stakeholders regarding proposed projects, well maintenance (e.g., domestic well mgmt., reporting dry wells, etc.)	(Scoring emphasizes)	\$225,000* (\$75k/year) *this can be partially covered by FFS funding
Water use efficiency	Consultation with UCCE to develop individualized conservation plans with irrigators + pilot implementation (see note on Grant use for private owners). Possible tactics: Install soil moisture sensors in all ranches where these are not yet used Fix leaking irrigation pipes, improve surface water distribution Convert to low-profile (near ground-level) sprinkler applicators, as appropriate VFD Manage irrigation time of day to reduce evap/wind drift losses Reduce use of end guns on center pivots	3	TBD based on results of the current effort \$600,000?

	 Convert flood irrigation to sprinkler Convert wheel lines to center pivot systems Maximize use of surface water in conjunctive use applications Compare other strategies and equipment to reduce water demand with the current pilot project on MESA-LESA-LEPA 		
Groundwater Recharge Planning and Pilot Study	Develop aquifer recharge projects to store and augment water supply. Model scenarios will be evaluated to improve understanding of the Sierra Valley hydrogeologic system to identify the most promising locations for groundwater recharge. One potential recharge project involves Badenaugh Creek, but other options will be included such as Smithneck and Little Last Chance Creeks. Strategies for recharge will include recharge ponds, drywells, surface flooding. Two pilot projects will be implemented, and benefits will be monitored. This will include gathering the needed temporary permits from the SWRCB and assumes that there is no need for significant infrastructure.	4, 1	\$750,000
Well Inventory	 Enhance inventory and metering efforts to support groundwater management. The well inventory expansion will be implemented using a phased approach: start with the agricultural wells for which data are not yet available in the data base. Engage well owners to obtain data/information on well including location, depth, age, status and type of use. Expand the inventory to all types of wells, including domestic wells used for drinking water which are within ¼ of a mile of agricultural pumping wells. Wells within ¼ of a mile are the most likely to be affected and if impact is monitored, then this information will be used to expand the inventory as needed. 	3, 5	\$100,000
Watershed and Upland Management and Restoration	Implement multi-benefit projects that enhance precipitation retention and infiltration (i.e., reducing runoff), reduce fuel loads, and support ecosystem services such as reducing peak flood flows and enhancing summer baseflows; Improvement of recharge in the higher elevations and provide multi-benefits, including potential	GW recharge planning (1) and geophysical investigations (4)	\$300,000

	benefit for fire prevention. Sierra Valley is an ideal pilot case because the different sides of the valley were affected by fires at different times: model scenarios will be developed to understand the entire system dynamics post fires and for areas that have not been impacted by (recent) fires.		
Reoperation of surface water supplies	Investigate process and evaluate feasibility of modifying surface water rights delivery from Frenchman Lake and Little Last Chance Creek for more efficient use of surface water (Dependent on what gets accomplished under current grant)	3	TBD

^{*}Categories of eligible projects listed in the grant solicitation Include:

- 1. Groundwater recharge projects and conjunctive use projects;
- 2. Prevention or clean up contamination of groundwater that serve as a source of drinking water (Public Resources Code § 80146(a));
- 3. Water supply reliability, water conservation, and water use efficiency and water banking, exchange, and reclamation;
- 4. <u>Geophysical investigation(s) of groundwater basins to identify recharge potential; floodplain expansion to benefit groundwater recharge or habitat;</u>
- 5. Revisions, updates, and/or modifications to a GSP.