

5.2.10 Wutchumna Ditch Delivery

The following describes the Wutchumna Ditch Delivery project, which will capture available excess water in high flow years and recharge the aquifer through the ditch bed. Eventually it may also facilitate in-lieu recharge through decreased use of groundwater wells by using the surplus surface water for irrigation. The length of Wutchumna Ditch expected to be used for recharge is shown in **Figure 5-8**.



Figure 5-8 Wutchumna Ditch Spurs in EKGSA

Project Title:	Wutchumna Ditch Delivery	Project ID: EK7
Project Type	Recharge (delivery to existing channel)	
Project Location	Intersection of Wutchumna Ditch and Tulare ID turnout west of the FKC and running west into non-districted areas of the EKGSA in Tulare County –T17S, R25E and T17S, R26E.	
Implementing Agency	Wutchumna Water Company and Ivanhoe ID	

Project Title: Wutchumna Ditch Delivery	Project ID: EK7
Project Description - 354.44(a)	
The Wutchumna Ditch Delivery Project will entail environmental permitting and management agreements. There is an existing connection to FKC through a Tulare ID turnout. Wutchumna Ditch and spur ditches will be used to capture CVP water supplies when available and recharge the underlying aquifer. The total length of ditches acting as a recharge facility is nearly 10 miles.	
Measurable Objective(s) Addressed - 354.44(b)(1)	
The project will primarily help stabilize groundwater levels and increase the amount of groundwater in storage. Indirectly there could be secondary benefits of some groundwater quality improvement from high quality surface water, and reduction in land subsidence.	
<input checked="" type="checkbox"/> Chronic Lowering of Groundwater Levels <input type="checkbox"/> Seawater Intrusion – <i>not applicable</i> <input checked="" type="checkbox"/> Land Subsidence	<input checked="" type="checkbox"/> Reduction of Groundwater Storage <input checked="" type="checkbox"/> Degraded Water Quality <input type="checkbox"/> 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. Implementation of the project would depend upon successful outcome of coordinating agreements and environmental clearance under NEPA. This is a medium priority project because it utilizes a readily available recharge area to address several of the measurable objectives, but agreements are needed on coordinating deliveries into the channel.	
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. The project is expected to recharge approximately 480 acre-feet per year, on average. This is based on an anticipated delivery capacity of 16 AF/day and 30 days of CVP water available per year.	
Permitting and Regulatory Requirements - 354.44(b)(3)	
The project will complete all necessary permitting and regulatory requirements. It will require NEPA documentation to utilize CVP water.	
Project Schedule - 354.44(b)(4) Anticipated Start & Completion, Timeframe to accrue benefits	
No project schedule has been determined. Once a source of project funding is secured, a schedule including environmental review and agreements can be developed. Project implementation is anticipated to occur near the end of the first 5 years of GSP Implementation.	
Evaluation of Benefits - 354.44(b)(5)	
The volume of water delivered for recharge will be measured daily and summarized monthly by Wutchumna Water Company. The rate of accrual of benefits will depend on the frequency of water availability and the infiltration capacity of the soil. The water level of groundwater wells in the area will be measured and water quality in the vicinity of the project will be monitored. This data will be used to determine project impacts and benefits.	

Project Title: Wutchumna Ditch Delivery	Project ID: EK7
How will project be accomplished, and what is the water source? - 354.44(b)(6)	
The project will be accomplished by Wutchumna Water Company with the support of EKGSA. The water source will most likely be CVP supplies and Kaweah River flood water when available.	
Legal Authority - 354.44(b)(7)	
The EKGSA is made up of Friant Contractors that have the legal authority to deliver CVP water. Coordination will be needed amongst the EKGSA and Wutchumna Water Company for delivery into the Wutchumna Ditch, which 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 \$100,000 and the annual cost over a 20-year return period is estimated to be \$15 to \$20/AF, including operational and capital costs.	
Funding Source - 354.44(b)(8)	
The funding source will likely be a combination of grant funding and EKGSA landowners.	
Management of Groundwater Extractions and Recharge - 354.44(b)(9)	
The project would be managed by Wutchumna Water Company with the oversight of the EKGSA. Recharge volumes will be measured and reported by Wutchumna Water Company. Groundwater extraction will be by landowners in the area within the EKGSA area. 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 permeability of the intended recharge area, and frequency of high flow water. The overall level of uncertainty is moderate for the volume of recharge water indicated.	