Freeman Diversion High Turbidity Capture and Conveyance Upgrades





Location:

Construction in Santa Paula Basin near Saticoy, an unincorporated area of Ventura County.

Project Description:

Increase utilization of stormwater flows for aquifer recharge by expanding capacity of United's diversion and recharge facilities, improve fish passage, and complete Multiple Species Habitat Conservation Plan (MSHCP). The project is anticipated to increase groundwater recharge and inlieu surface-water deliveries by 6,000 acre-feet per year (AFY) (Phase 1) to 10,000 AFY (Phase 2).





CURRENT STATUS

Construction of Phase 1 started in 2021 with the replacement of the headworks of the grand canal. This is the first of three conveyance system improvements scheduled and will increase the flow capacity through the headworks from the previous design of 375 cfs to 500 cfs. United's draft MSHCP is currently under revision with the Hardened Ramp Fish Passage alternative as the project. The Final MSHCP will be submitted to regulators in February 2024.



BENEFITS/YIELD

- Recharge of low-Total Dissolved Solids surface water (associated with high river flows) by United has been demonstrated in the past to improve groundwater quality, reduce nitrate levels for small mutual water companies and disadvantaged communities in El Rio and Saticoy and help combat seawater intrusion.
- Diversion of natural stormflows requires minimal energy, resulting in very low greenhouse gas emissions and costs per acre-foot of yield; it also provides significant energy savings to customers who utilize diverted surface water in lieu of pumping from their wells.
- The Project is anticipated to increase groundwater recharge and in lieu surface water deliveries y 6,000 acre-feet per year (AFY) (Phase I) to 10,000 AFY (Phase 2).



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Estimated Cost:

The capital cost is estimated at \$60 million for construction.





Current Funding Sources:

United pumping charges, federal and state grants. Grants to date:

Department of Water Resources (DWR) - Proposition 1 Round 2 Integrated Regional Water Management Implementation

• \$1,000,000 (50% match) design and construction of Phase I component Vineyard Avenue undercrossing.

DWR - Sustainable Groundwater Management Grant Program

• \$2,510,300 for design and construction of Phase I components inverted siphon and three barrel culvert.

Ask from United to Regulators, Legislators, Local Agencies, and Stakeholders:

Assistance with permitting through the State Water Resources Control Board, County of Ventura, Army Corps of Engineers, National Oceanic and Atmospheric Administration (NOAA)/National Marines Fisheries Service, California Department of Fish and Wildlife, CalTrans, and United States Fish and Wildlife Service.

