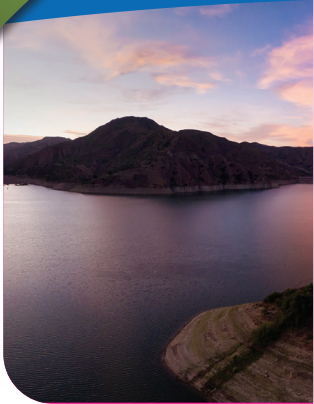


Santa Felicia Dam Safety Improvement Project Impacts



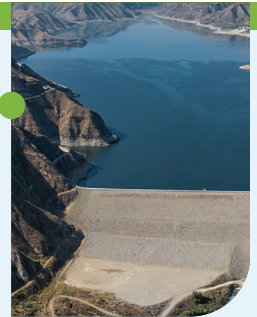
Project Description

The Santa Felicia Dam Safety Improvement Project (SFD SIP) consists of constructing a new water conveyance system to deliver water from the reservoir downstream, including a small hydropower facility. This new water conveyance system for the dam is referred to as the Outlet Works.

The new Outlet Works will be designed to withstand the Maximum Credible Earthquake, estimated to be a magnitude 7.2 earthquake. Additionally, the project includes raising the dam crest by 6½ feet and modifications to the existing spillway, resulting in an increased hydraulic capacity of the spillway in order to safely pass extreme flood events and prevent overtopping the spillway walls and dam.

Background

The project is located at the Santa Felicia Dam, at the southern edge of Lake Piru Reservoir and is in a moderately active seismic region of Southern California. Constructed in 1954-1955 by UWCD, the dam provides storage for local runoff and imported State Water used for sustainable groundwater recharge and direct delivery of water supplies within UWCD's service area. Santa Felicia Dam is categorized as an extremely high hazard dam due to the large population residing directly within the dam inundation zone.



POTENTIAL SANTA FELICIA DAM FAILURE AFTERMATH

Because Santa Felicia Dam is classified as an extremely high hazard facility, a failure of the dam would have significant consequences for downstream communities. In the unlikely event of such a failure, floodwaters could rapidly inundate large portions of Ventura County, threatening lives, property, and critical infrastructure. The information below illustrates the scale of potential impacts, underscoring the importance of the SFD SIP in protecting residents and ensuring the continued safety and reliability of regional water supplies.



County Population
835,430



Population Impacted
236,768



Percent of Impact
28%



Economic Losses
more than \$19 Billion



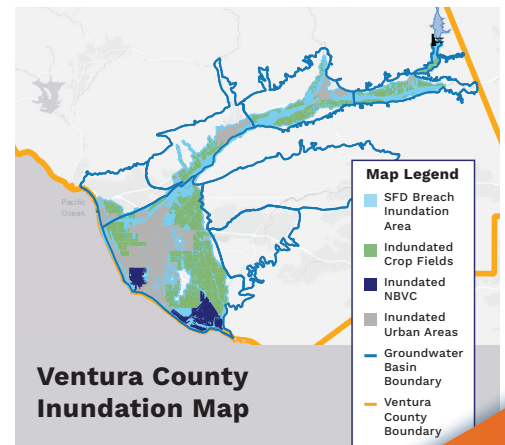
Agricultural Losses
more than \$2 Billion



Structures Impacted
more than 68,000



Infrastructure Damages
more than \$15 Billion



United Water
CONSERVATION DISTRICT

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Ventura County
February 2026



Benefits

- Improvements to the aging outlet works and spillway increase the resilience of Santa Felicia Dam, reducing the risk to public safety caused by potential dam failure and downstream flooding.
- The new outlet works secures continued operational flexibility for sustainable groundwater recharge and direct delivery of water supplies within UWCD’s service area, thereby increasing resilience of the region’s water supply and water sustainability and helping over drafted conditions of groundwater basins.
- The new outlet works will allow for selective withdrawal of reservoir water at various elevations for water quality management purposes, and accommodate future sediment level rise in the reservoir.
- The project will create new construction job opportunities. The estimated daily need for skilled laborers ranges from 37 to 46 workers.
- The new spillway will have additional capacity to safely pass extreme flood events, greatly reducing the risk of dam failure due to overtopping.



Estimated Cost:

Construction of the Santa Felicia Dam Safety Improvement Project will be completed at an estimated cost of \$314 million, including up to 15% contingency.

Current/Potential Partners:

State Department of Water Resources Division of Safety of Dams and Federal Energy Regulatory Commission.

Current/Potential Funding Sources:

- \$98 million - EPA Water Infrastructure Finance and Innovation Act (WIFIA) low-interest loan to support both project components
- \$163,000 - High Hazard Potential Dam (HHPD) Rehabilitation Grant program
- \$17.4 million - Application to FEMA Hazard Mitigation Grand Program (HMGP) to support construction of the new outlet works submitted September 2025



What You Can Do:

United Water Conservation Districts encourages residents and community leaders to stay informed on project progress, advocate for funding and interagency coordination, and help communicate the importance of these upgrades.

For more information, please visit unitedwater.org



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