

Frequently Asked Questions About Santa Clara River chlorides

Q. What is the source of the salt in the river?

A. There are several sources. Much of the water delivered to homes in the Santa Clarita Valley is from the State Water Project, and it picks up salt before it is pumped from the Sacramento-San Joaquin Delta. Some salt is a product of the water-disinfection process. The biggest single contributor, however, is the brine produced by self-regenerating household water softeners, which is discharged into the municipal sewer system.

Q. Why is salt a problem in the Santa Clara?

A. When salt levels rise above a certain level, they cause plants to weaken or even die. Even minor plant damage reduces crop yields, cutting into farmers' revenue. Nursery stock being grown for ornamental purposes often cannot be sold if its foliage shows signs of damage. Currently, the Saugus and Valencia treatment plants discharge more than 8 million pounds of salt into the river each year.

Q. Is anything being done to reduce the salt level in the river?

A. Yes. State water-quality regulators have ordered the Santa Clarita Valley Sanitation District of Los Angeles County, which operates the wastewater treatment plants in Valencia and Saugus, to reduce the level of salt in the effluent they discharge into the river. The allowable limit has been set at a level that will protect salt-sensitive crops in Ventura County.

Q. How will they do that?

A. Agencies in the Santa Clarita Valley have adopted several strategies. They have banned water softeners in new construction. They are providing rebates to homeowners who voluntarily remove existing water softeners, and they have placed a referendum on the November ballot asking voters to outlaw existing softeners. They also are planning to switch to a new water-purification system using ultraviolet light instead of chlorine, which also will reduce chloride in the supply.

Q. Will that be enough?

A. No. The districts also are planning to build an advanced treatment facility that will filter salt out of the wastewater-plant discharge before it enters the river.

Q. How will that work?

A. The original strategy being considered would have involved construction of a very large reverse-osmosis plant to purify all or most of the effluent. That purification process produces mineral-laden brine as a byproduct, so the project also would have involved a 43-mile pipeline to carry the brine along the Santa Clara River through Ventura County to a new ocean outfall off the Ventura coast. This alternative is no longer regarded as desirable, however.

Q. Why not?

A. The project would be hugely expensive, involve a daunting set of political and legal obstacles during permitting and construction, and would result in greatly reduced flows in the Santa Clara River. Recent modeling suggests that the loss in usable flow downstream in Ventura County would be about 7,000 acre-feet a year — equivalent to the entire annual contribution of the Freeman Diversion Project to the county’s water supply. Raising the money to purchase that much replacement water, even if it could be found, would require United Water Conservation District (which operates the Freeman) to more than double its rates for agricultural users.

Q. What’s the alternative?

A. The Alternative Water Resources Management Plan that’s been developed through negotiation between the Sanitation District and the Ventura County Agricultural Water Quality Coalition — of which the Farm Bureau is a founding member — involves several physical components, all of which would be funded by the Sanitation District:

- A small reverse-osmosis plant to purify effluent at the Valencia treatment plant, with the waste brine piped to a deep-well injection field in Los Angeles County.
- A new extraction well field in the East Piru Basin at the approximate location of Camulos Ranch.
- A pipeline to carry purified water from the Valencia plant to the well field, with an additional turnout approximately at the county line.
- A second pipeline from the well field to an outlet on the Santa Clara River near the Fillmore Fish Hatchery.

Q. How would the project operate?

A. Under typical conditions, the facilities would be operated in concert in the following fashion:

- High-quality treated water from the Valencia RO plant would be piped to the East Piru well field, where it would be blended with low-quality groundwater pumped from the wells.
- The blended water would be piped to the fish hatchery outlet (thereby bypassing the “dry gap” in the river where all flows typically are lost to the subsurface basin) and dumped into the river. The blended water would be low enough in salt to have a diluting effect on the total river flow, enabling it to meet regulatory standards established to protect salt-sensitive crops.
- That water would flow downstream and be available for diversion at Freeman and eventual delivery to users.

During drought years, or other times when State Water Project water has high salt levels, the project would be operated a bit differently, but the overall effect on water quality in Ventura County would not change.

Q. How would this benefit Ventura County?

A. The benefits to Ventura County are substantial:

- A net increase in local water supplies, thanks to the provision of year-round flows suitable for diversion at Freeman.

- Reduced overdraft and seawater intrusion on the Oxnard Plain, as increased diversions at Freeman provide additional surface water to displace groundwater pumping.
- Improved water quality in the Santa Clara River and in the East Piru Basin.
- A faster timetable for protection of agricultural users.
- Avoidance of the negative impacts associated with the large RO plant and brine line, including high energy use, conflict over permitting and environmental impacts, loss of river flows and increased costs for irrigation water.

Q. What's the status of the alternative plan?

A. Members of the Ventura County Agricultural Water Quality Coalition — which includes the Ventura County Agricultural Association and United Water Conservation District — are meeting regularly with representatives of the Santa Clarita Valley Sanitation District and upstream water purveyors to develop a legal document describing the plan and committing the Sanitation District to the actions required to implement it. Because certain elements of the plan will require revision of water quality standards for sections of the river in Los Angeles County, approval by the Regional Water Quality Control Board is needed. A hearing on that request tentatively is set for November 2008.