

Calleguas Salinity Management Pipeline Enhancing the Use of Local Water Supplies



Project Benefits

Environmental

- ◇ Reduces greenhouse gas emissions by using local water resources instead of imported sources.
- ◇ Reduces dependence on imported water from sensitive Delta ecosystem in Northern California.

Water Supply

- ◇ Improves region's water reliability.
- ◇ Enables water agencies to develop new local water from existing poor quality groundwater.
- ◇ Facilitates potable reuse of recycled wastewater.

Water Quality

- ◇ Safely removes salts to the ocean where they cause no harm.

The Salinity Management Pipeline (SMP) makes it possible for water agencies in and around the Calleguas Creek Watershed to make better use of local water supplies. Treatment of salty groundwater and advanced treatment of wastewater generate a concentrate, or brine, that is too salty to be discharged to inland waterways but can be safely released to the ocean, where natural salt levels are higher. The SMP is the conduit through which that brine is moved from the local supply projects to the ocean.

The SMP allows salty groundwater to be treated and used. Many of the local aquifers are too high in salts for municipal and agricultural use. By treating groundwater to remove salts, water agencies can make use of these supplies. Without a conduit to move the brine from brackish groundwater treatment safely to the ocean, these supplies could not be developed.



Pipeline Construction

The SMP makes it possible for wastewater to be treated to an advanced level and reused. Most of the local wastewater is already being used as a recycled water supply or a source of recharge for aquifers. However, in the winter months there is not enough demand for the recycled water and, as a result, some is discharged to the ocean. In order to maximize the use of recycled water, water agencies propose to treat it to a high standard and store it in a lake or aquifer for later use as a drinking water supply. Without a conduit to move the brine from advanced treatment of wastewater safely to the ocean, these supplies could not be developed.



Berries need low salt water Projects made possible by the SMP are expected to produce more than 40,000 acre feet of locally sourced water each year (one acre-foot is enough water for two households for one year). The SMP is vital to the region's water reliability as imported supplies from the State Water Project have become increasingly vulnerable to drought, catastrophic levee failures from flood and/or seismic events, and regulatory shutdowns of pumping facilities to protect endangered species. The SMP reduces demand for imported water and improves reliability by diversifying the region's water supply portfolio.



Ocean Outfall Construction

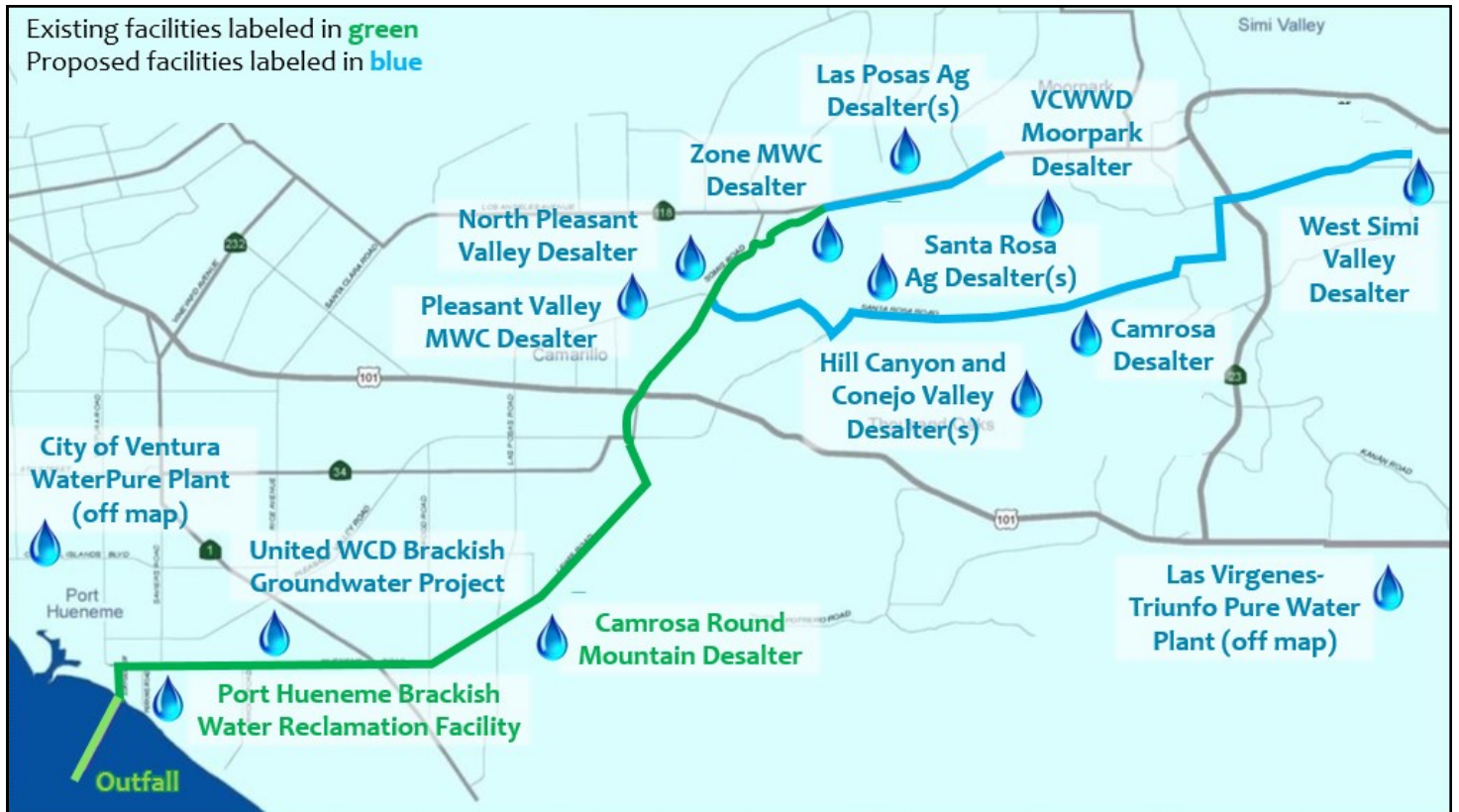
Calleguas Salinity Management Pipeline and Associated Local Water Resource Projects



Port Hueneme Brackish Water Facility



Camrosa Round Mountain Desalter



Drilling a test well for the Ventura County Waterworks Moorpark Desalter

Artist's rendering of the North Pleasant Valley Groundwater Desalter