

North Pleasant Valley Desalter Fact Sheet

Background

Since the early 1990s, both groundwater levels and salinity have been increasing in northeastern Camarillo. In 2009, the City of Camarillo completed a pilot study which determined the treatment process and estimated cost to remove the salinity and make use of this resource.

In 2010, a group of water agencies began to explore the possibility of participating in a desalter as a joint project. These agencies included the cities of Camarillo, and Thousand Oaks, and Calleguas Municipal Water District (Calleguas). Their goals were to:

- diversify and improve the reliability of each agency's water supplies,
- stabilize and control water rates, and
- improve and preserve the water resources in the Calleguas Creek Watershed.

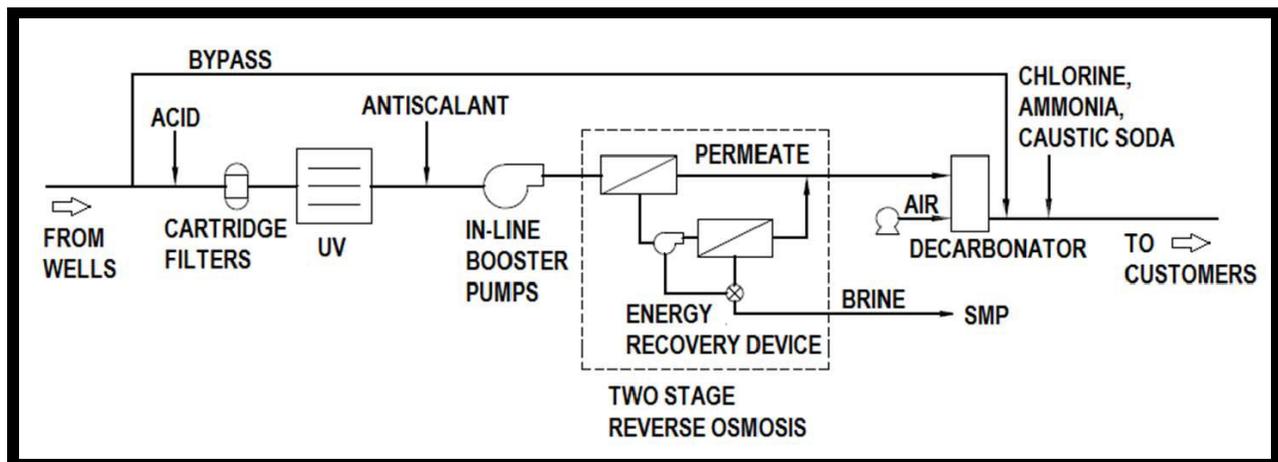
The group investigated the feasibility of installing wells and a desalter in the Somis area, but ultimately determined



Approximate Location



Typical Reverse Osmosis Plant



that Camarillo would be a better location because the production of groundwater would not adversely affect other pumpers. The group decided that the City of Camarillo would take the lead in building a desalter and they would participate on an as needed basis.

The City proposes to build and operate wells and a desalter near the intersection of Lewis Road/Las Posas Road in Camarillo.

Project Description

Salty groundwater would be pumped from two existing City of Camarillo wells and two new wells north of Las Posas Road and east of Somis Road.

Salinity would be removed from the water by a reverse osmosis treatment plant, producing about 4,650 gallons per minute (7,500 acre feet per year) of drinking water. A process diagram of the plant is shown on the next page.

Treated water would be delivered to pipes owned by either Calleguas or the City of Camarillo.

Participants not adjacent to the plant would wheel water through Calleguas' potable water transmission system, receiving a credit on their water bills from Calleguas, similar to that received by homeowners who send solar power into the electrical grid.

Salty brine from the process would be discharged to Calleguas' Salinity Management Pipeline (SMP), which would transport it through an outfall into the Pacific Ocean.



Portion of SMP to be used by North Pleasant Valley Desalter

The map above shows the reach of the SMP between the North Pleasant Valley Desalter and the ocean, which is expected to be operational by 2015 in the area where the NPV Groundwater Desalter is to be located.

Estimated Costs

The project is expected to cost \$50 million for construction and \$2.9 million per year for operation and maintenance Based on a 25-year project life.

With the cost of imported water currently \$1300 per acre foot and expected to rise by 5% per year, this water resource will be not only more reliable but also less expensive than imported water.

Next Steps

- 2014 – 2015: Design
- 2016 – 2017 Construction
- Early 2018 Begin Operation