

## Groundwater Recovery Enhancement and Treatment Program, Phase 1

The Groundwater Recovery Enhancement and Treatment Program Phase 1 in Oxnard, Calif., also known as the GREAT Program, received \$20 million in American Recovery and Reinvestment Act funding. This was combined with approximately \$65 million in non-federal funding to complete the project.

The primary feature of this project was the construction of the Advanced Water Purification Facility. Secondary effluent from the Oxnard Wastewater Treatment Plant is pumped to the AWPf where it is subjected to a multiple barrier treatment system including microfiltration, reverse osmosis and ultraviolet light advanced oxidation. The AWPf will initially produce 6.25 million gallons per day of high quality recycled water but was designed to accommodate future capacity expansion.

A Recycled Water Backbone pipeline and its associated distribution laterals were included in the project. The pipeline conveys the recycled water from the AWPf to customers throughout Oxnard and to agricultural users east of the city. A total of 12 miles of pipeline, ranging in size from 16 to 42 inches, were installed. Portions of the Backbone were constructed using slip lining or pipe bursting of an existing pipe in order to avoid construction impacts and save money.

It is likely this project would not have started without ARRA funding. The funding accelerated the project by at least two years. This allowed the use of recycled water much sooner than anticipated and reduced the need to pump water from the overdrafted local aquifer or import water from the Sacramento-San Joaquin Delta region of Northern California.

