

JORDAN VALLEY WATER CONSERVANCY DISTRICT, WEST JORDAN, UTAH

HIGHLIGHTS

\$45-million project funded
by a state trust.

Complete design, permitting
and construction services for
wells, pipelines and 5.8-mgd
RO treatment plant.

“The most significant
groundwater clean-up project
in the country today” -
USEPA (2001)



Carollo designed a demonstration-scale RO treatment plant to demonstrate full-scale product water quality and costs for a planned 6-mgd water treatment plant.

Southwest Groundwater Treatment Project

Carollo was selected to provide engineering services for the design, permitting, and construction of a new 5.8-mgd RO treatment plant, associated groundwater well fields, raw water conveyance pipelines, and RO by-product disposal system. This \$45-million project is funded by a state trust to remediate sulfate contaminated groundwater, which resulted from nearby mining activities. The Jordan Valley Water Conservancy District will own, operate, and provide potable water back to the public from this damaged groundwater resource. Carollo's involvement in this project spans back to the spring of 2000, when they were first hired to demonstrate the feasibility and cost benefits of RO technology. Upon successful completion of these activities, Carollo assisted the District with RO by-product disposal permitting, which ultimately resulted in the planned disposal system to the Great Salt Lake.

Carollo's services associated with the Southwest Groundwater Treatment Project consists of the following elements:

- 5.8-mgd RO treatment plant.
- 3.5 mgd of sulfate-contaminated groundwater RO.
- 2.3 mgd of shallow, riverbank filtration RO.
- 8 sulfate contaminated groundwater wells.
- 4 shallow groundwater, riverbank filtration wells.
- 52,800 feet of sulfate-contaminated groundwater conveyance pipeline.
- 10,000 feet of shallow groundwater conveyance pipeline.
- 11,000 feet of finished water pipeline.
- RO by-product disposal system:
 - 37,000 feet of pipeline.
 - 3 pump stations.
 - Outfall to the Great Salt Lake.

This project is scheduled to be in operation by January 2009.