

CENTRAL VALLEY WATER RECLAMATION FACILITY, SALT LAKE CITY, UTAH

HIGHLIGHTS

Feasibility study for recycling 50 mgd of polished secondary effluent.

Multiple-agency coordination.

Preliminary design and cost estimates for pipelines, pumping, and storage facilities.

Salt Lake Valley Water Reuse Project

Carollo, in association with others, conducted a feasibility study for recycling 50 mgd of polished secondary effluent from Central Valley Water Reclamation Facility. Sponsoring agencies for this study included the Central Valley Water Reclamation Facility Board, the Central Utah Water Conservancy District, the Metropolitan Water District of Salt Lake City, and the Salt Lake County Water Conservancy District. The purpose of this study was to formulate a viable, cost-effective and beneficial water recycling alternative to complying with the Utah Department of Environmental Quality's ammonia limits for the continued discharge of Central Valley effluent to the Jordan River.

The study evaluated the feasibility of discharging the effluent to various irrigation canals in the southwest Salt Lake Valley and assessed water quality issues associated with effluent recycling for unrestricted landscape irrigation. The report also considered possible funding through the conservation credit program of the Central Utah Project Completion Act.

Additional project elements included developing costs, sizes, and alternative alignments for pipelines, preliminary design and cost estimates for effluent storage and pumping facilities, and cost estimates for tertiary filtration.