



Project:	Desert Shores Collection System Improvements		
Location:	Desert Shores, CA	Certification Date:	June 26, 2002
Type:	Wastewater	Operation Startup:	December 1, 2005
Population Benefitted:	1,208	Closeout Date:	March 2023

Pre-project Conditions

Property owners near the wastewater treatment facility were complaining that the water quality in their wells had deteriorated. A series of water quality tests detected exceptionally high concentrations of total dissolved solids (TDS) in sections of the wastewater collection system adjacent to the Salton Sea. The sewer lines were vitrified clay pipes installed on extremely steep inclines and at profound depths, well below the water table. The Salton Community Services District (SCSD) suspected that the pipelines had cracked allowing water from the Salton Sea to enter the collection system, increasing TDS concentrations in the entire system. The existing treatment process did not remove salts from the wastewater, so high TDS concentrations were percolating into the ground adjacent to the treatment plant, contaminating the groundwater in the surrounding area.

Project Objective

Prevent saltwater infiltration into the collection system and the percolation of brackish treated wastewater into the groundwater below the wastewater treatment ponds.

Project Scope

The project consisted of replacing 8,100 ft of sewer lines, installing an 18-inch sewer main along 3,200 feet of Thomas Avenue, plugging and abandoning the force main from Lift Station No. 6 and constructing a 400-foot gravity line from Lift Station No. 6 to the sewer main along Thomas Avenue, as well as upgrading Lift Stations No. 2 and No. 6 and removing two submersible pumps. The sewer system was also redesigned to allow for flatter slopes and shallower depths so the new lines could be installed above the groundwater table.



Project Results

Outputs	Indicator	Target in 2002 (Certification)	Actual (2005)
Wastewater collection lines installed	Linear feet	11,700 ft.	16,289 ft.
Improved wastewater lift stations	Number	2	2

Outcomes	Indicator	Target in 2002 (Certification)	Actual (2005)
Improved wastewater service	Number of connections	34	34

Replacing the cracked pipes eliminated the saltwater infiltration, thus reducing the concentration of total dissolved solids in the treatment system that had been percolating into the ground adjacent to the plant and contaminating the groundwater. The redesign of the wastewater collection system also simplified the pumping infrastructure, reducing operating and maintenance costs for the utility and Desert Shore residents.

Project Financing (USD)

Sources of Funding	Estimated at Certification	Actual Amount
NADBank BEIF transition assistance grant*	\$ 193,869	\$ 193,869
NADBank loan	530,000	500,000
Other sources**	530,000	703,000
Total	\$ 1,253,869	\$ 1,396,869

* Border Environment Infrastructure Fund (BEIF) funded by the U.S. Environmental Protection Agency (EPA) and administered by NADBank. BEIF transition assistance is used to help pay system debt associated with the project, so that user fees can be raised gradually to the level required to make the system self-sustaining.

** Other sources include a loan from the U.S. Department of Agriculture Rural Development (USDA-RD).