



NORTH AMERICAN DEVELOPMENT BANK

PROJECT CLOSEOUT FACT SHEET

Project:	Water and Wastewater System Improvements		
Location:	Douglas, Arizona	Certification Date:	June 20, 2001
Type:	Water and wastewater	Operation Startup:	December 31, 2010
Population Benefitted:	18,000	Closeout Date:	July 30, 2021

Pre-project Conditions

In 2001, the drinking water and wastewater collection systems serving the residents of Douglas had exceeded their useful life and were significantly deteriorated. In addition to insufficient coverage and failing septic tank systems, approximately 30% of the wastewater collection system was deficient due to leaks or overloaded lines, while 18,160 feet of sewer lines had flow velocities of less than two feet per second, allowing solids to accumulate and clog the pipes. Improvements needed in the water distribution system included a new pressure zone to serve residents of east Van Buren Avenue and new transmission lines to convey water to the Fairview and Pirtleville *colonias*.¹

Project Objective

Provide a healthier environment for all residents of Douglas and the surrounding *colonias* by eliminating untreated sewage discharges from faulty septic systems and broken sewer lines. Improve the delivery and quality of drinking water and reduce water losses from leaky waterlines by rehabilitating the distribution system and providing a new pressure zone.

Project Scope

Water system improvements consisted of constructing 55,795 linear feet of distribution lines, as well as rehabilitating a booster station and a pressure reducing station. Wastewater system improvements included the construction of 83,770 linear feet of sewer lines and more than 170 manholes and fittings.



¹ *Colonias* are communities on the U.S. side of the international border with Mexico that lack critical infrastructure, such as paved roads, water distribution lines, sewer systems, flood protection and/or public facilities.

Project Results

Outputs	Indicator	Target in 2001 (at certification)	Actual (2011)
Waterlines installed	miles	10.57	10.57
Wastewater lines installed	miles	15.86	15.86

Outcomes	Indicator	Target in 2001 (at certification)	Actual (2011)
Institutional capacity strengthened	Compliance with applicable standards and regulations	100%	100%

Project Financing (USD)

Sources of Funding	Estimated at certification	Actual Amount
NADBank BEIF construction assistance grant*	\$ 3,501,850	\$ 3,089,551
NADBank BEIF transition assistance grant**		584,700
Other sources***	5,351,094	3,401,853
Total	\$ 8,852,944	\$ 7,076,104

* 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 included a loan through the Water Infrastructure Finance Authority (WIFA), a grant from the U.S. Department of Agriculture Rural Development (USDA-RD) and capital investments of the City of Douglas, AZ. However, the anticipated grant from USDA-RD was not provided in the end.