



Project:	Wastewater Collection and Treatment Project		
Location:	Colonia Esperanza, Chihuahua	Certification Date:	September 28, 2007
Type:	Wastewater	Operation Startup:	June 2013
Population Benefitted:	2,097	Closeout Date:	June 2023

Pre-project Conditions

The local water utility provided drinking water service to approximately 50% of the population but did not offer any wastewater collection or treatment services. Residents disposed of their wastewater in latrines and septic tanks. However, due to the relatively shallow water table and local soil type, deficient latrines and septic tanks tended to overflow posing a serious contamination risk for groundwater and the health of residents. The local water utility, with the support of the state water agency, proposed a project to build a comprehensive wastewater collection and treatment system to serve the entire community.¹

Project Objective

Eliminate exposure to untreated or inadequately treated wastewater discharges through the construction of wastewater collection and treatment infrastructure that will help reduce water pollution and the risk of water-borne diseases.

Project Scope

The project consisted of the construction a lagoon-based wastewater treatment plant (WWTP) with the capacity to treat 5.57 liters per second (lps) or 127,146 gallons per day (gpd), a lift station and force main to convey wastewater to the treatment plant, and the installation of 20.1 kilometers (12.5 miles) of sewer lines with diameters varying between 8 and 15 inches, along with 455 household connections.



¹ A separate project was developed to expand the water distribution system to the cover 100% of the community.

Project Results

Outputs	Indicator	Target in 2007 (Certification)	Actual (2015)
Wastewater collection lines installed	kilometers	20.1	24.8
New wastewater connections installed	number	455	506
New lift station	number	1	1
New wastewater treatment capacity	liters per second (lps)	5.57	5.57

Outcomes	Indicator	Target in 2007 (Certification)	Actual (2015)
Increased access to wastewater collection service	connections	455	506
Wastewater discharges eliminated	lps	4	4.5

Source: Actual figure based on number of connections reported by the sponsor.

Project Financing (USD)

Sources of Funding	Estimated at Certification	Actual Amount
NADBank BEIF construction assistance grant*	\$ 430,000	\$ 425,509
Other sources**	1,747,756	1,536,733
Total	\$ 2,177,756	\$ 1,962,242

* Border Environment Infrastructure Fund (BEIF) funded by the U.S. Environmental Protection Agency (EPA) and administered by NADBank.

** Other sources include Mexican federal and state funding.