



Project:	Expansion of the Wastewater Collection System		
Location:	Agua Prieta, Sonora	Certification Date:	October 30, 2007
Type:	Wastewater	Operation Startup:	March 9, 2009
Population Benefitted:	2,956	Closeout Date:	December 17, 2021

Pre-project Conditions

In 2007, wastewater collection coverage in Agua Prieta was estimated at 75% of the community. Residents whose homes were not connected to the sewer system, disposed of their wastewater in latrines and cesspools, which posed a serious risk for contamination of groundwater sources, as well as the transmission of diseases associated with untreated wastewater. At that time, the sewer system was collecting an estimated 145 liters per second (lps) or 3.30 million gallons a day (mgd) of wastewater, which was treated by means of a facultative lagoon system with a design capacity of 200 lps (4.56 mgd). Approximately 86% (125 lps) of the treated effluent was conveyed to the local power company for reuse, while the rest was discharged into the Agua Prieta River.

Project Objective

Expand the sewer system to unserved areas in the southeast area of the city and thus reduce the potential for groundwater and surface water contamination, as well as health risks associated with raw sewage flows.

Project Scope

The project consisted of extending the sewer system to the southeast area of the city and included installing 12,814 linear meters (42,041 linear feet) of 20-cm (8-inch) diameter Polyvinyl chloride (PVC) piping and 778 new connections.



Project Results

Outputs	Indicator	Target in 2007 (at certification)	Actual (2010)
Wastewater collection system lines installed	km	12.8	13.2
Wastewater connections installed	number	778	809

Because construction was completed under budget, the utility was able to extend the wastewater collection system in other areas of the city, such as Streets 34 y 35 between Avenues 24 and 29. The additional work included installing approximately 482.8 meters (147.2 ft) of pipelines and 31 additional connections.

Outcomes	Indicator	Target in 2007 (at certification)	Actual (2010)
Wastewater discharges eliminated	lps	9.2	9.6
Increased access to wastewater collection	connections	778	809

Significant Contribution of the Project

As a result of this project, wastewater collection coverage was increased to approximately 79% and the potential for groundwater and surface water contamination was reduced by eliminating the use of cesspools and latrines.

Project Financing (USD)

Sources of Funding	Estimated at certification	Actual Amount
NADB BEIF construction assistance grant*	\$ 232,000	\$ 230,742
Other sources**	416,148	414,846
Total	\$ 648,148	\$ 645,588

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

** Other sources included the Municipality of Agua Prieta and equity investments of the local water utility, OOMAPAS.