



NORTH AMERICAN DEVELOPMENT BANK

PROJECT CLOSEOUT FACT SHEET

Project:	Rehabilitation of the Collector Poniente		
Location:	Tijuana, Baja California	Certification Date:	November 9, 2017
Type:	Wastewater	Operation Startup:	September 2020
Population Benefitted:	86,950	Closeout Date:	October 2024

Pre-project Conditions

The local water utility, Comisión Estatal de Servicios Públicos de Tijuana (CESPT), regularly conducts video inspections of its wastewater collection infrastructure. This effort can be hampered by manholes that are spaced too far apart and do not allow for adequate line maintenance, which could lead to concrete deterioration from the buildup of hydrogen sulfide (H_2S) gas and unpleasant odors. Based on these inspections, CESPT has identified aging and deteriorated sewer lines requiring rehabilitation to prevent failures that could result in raw wastewater discharges to the Tijuana River. During the 2016-2017 winter season, heavy rainfall caused the collapse of several sections of a sewer main, spilling untreated wastewater into the Tijuana River, which eventually flowed into the United States. To address this situation, the state government instructed CESPT to develop a comprehensive wastewater treatment and reuse plan. Immediate actions under the plan included the rehabilitation of critical sewer mains.

Project Objective

Eliminate exposure to untreated or inadequately treated wastewater discharges by replacing deteriorated wastewater infrastructure prone to leaks and failures and thus help reduce water pollution and the risk of waterborne diseases.

Project Scope

The project consisted of rehabilitating approximately 4,193 linear meters (13,756.6 ft) of the Collector Poniente in three consecutive segments: Segment 1 with 1,086 m (3,563 ft) of 42-inch diameter pipe; Segment 2 with 789 m (2,588.6 ft) of 42-inch diameter pipe; and Segment 3 with 2,318 meters (7,605 ft) of pipe ranging from 18- to 42-inches in diameter. The project also included the replacement of approximately 310 m (1,017 ft) of sewer laterals connected to the Collector Poniente, with diameters ranging from 8 to 12 inches.



Project Results

Outputs	Indicator	Target in 2017 (at certification)	Actual (2020)
Wastewater collection lines installed	km	4.19	4.53

A total of 4,534 meters (14,875 ft) of pipeline was installed, slightly exceeding the length anticipated.

Outcomes	Indicator	Target in 2017 (at certification)	Actual (2020)
Population benefitted	number	86,950	86,950
Improved wastewater collection service	number of connections	23,500	23,500
Untreated wastewater discharges eliminated	liters per second (lps)	177	177

The project is reducing the risk of line failure, thus preventing the potential discharge of approximately 177 lps (4.04 million gallons a day) of untreated wastewater that could affect the Tijuana River.

Project Financing and Implementation

Sources of Funding (USD)	Estimated at certification	Actual Amount
NADBank BEIF construction assistance grant*	\$ 1,174,360	\$ 1,407,838
Other sources**	1,839,640	2,696,540
Total	\$ 3,014,000	\$ 4,104,378

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

** Other sources include CESPT, as well as state and federal funding.

Mexican funds for the project were increased by over US\$850,000, while BEIF funds were increased by US\$350,000 to complete the entire project. Cost increases were primarily related to preventing wastewater discharges to the Tijuana River during construction by pumping flows to the next manhole. The final cost of the project also included US\$367,519 for construction management services.