



CERTIFICATION PROPOSAL

REHABILITATION OF THE COLLECTOR PONIENTE TIJUANA, BAJA CALIFORNIA

Revised: November 6, 2017

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EXECUTIVE SUMMARY

REHABILITATION OF THE COLLECTOR PONIENTE TIJUANA, BAJA CALIFORNIA

Project:	The proposed project consists of the rehabilitation of part of a collector main known as the Collector Poniente, as well as the replacement of a few related sub-collectors, in the northwestern area of Tijuana, Baja California (the "Project").
Project Objective:	The purpose of the Project is to eliminate exposure to untreated or inadequately treated wastewater discharges by replacing deteriorated wastewater infrastructure prone to leaks and failures, and thus contribute to the reduction of water pollution and the risk of waterborne diseases.
Expected Outcomes:	The environmental and human health outcomes anticipated as a result of the Project include:
	 Improve wastewater collection and conveyance infrastructure for up to 23,500 existing residential wastewater connections.
	 Eliminate approximately 177 liters per second (lps) or 4 million gallons per day (mgd) of untreated or inadequately treated discharges.¹
	 Reduce the risk of line failures resulting in untreated or inadequately treated wastewater discharges to the Tijuana River, a transboundary water body.
Population Benefitted:	86,950 residents of Tijuana, Baja California. ²
Sponsor:	Local water utility, <i>Comisión Estatal de Servicios Públicos de Tijuana</i> (CESPT).
Project Cost:	US\$3,014,000.

¹ The flow calculation is based on the 23,500 wastewater connections served by the segments of the collector to be rehabilitated. It estimated to be 177 lps (4 mgd) based on 176 liters (46.5 gallons) per person per day of wastewater and 3.70 persons per household (Source: Baja California 2012 technical standards for water and sewer system projects, *Normas Técnicas para Proyecto de Sistemas de Agua Potable y Alcantarillado – 2012, Gobierno del Estado de Baja California*

² Source: CESPT, based on 23,500 connections with 3.7 persons per household.

Grant:

US\$1,174,360 grant from the Border Environment Infrastructure Fund (BEIF) funded by the U.S. Environmental Protection Agency (EPA).

Uses & Sources of Funds: (US\$)

Uses	Amount	%
Rehabilitation of Collector Poniente*	\$ 3,014,000	100.0
TOTAL	\$ 3,014,000	100.0
Sources	Amount	%
Mexico (CONAGUA; CESPT) **	\$ 1,839,640	61.0
NADB BEIF (EPA grant)	\$ 1,174,360	39.0
TOTAL	\$ 3,014,000	100.0

*Includes construction, contingencies, supervision and taxes.

** Mexican National Water Commission (CONAGUA).

CERTIFICATION PROPOSAL

REHABILITATION OF THE PONIENTE COLLECTOR TIJUANA, BAJA CALIFORNIA

1. ELIGIBILITY

Project Type

The Project falls within the eligible sector of wastewater.

Project Location

The Project will be implemented in the city of Tijuana, Baja California, which is adjacent to the U.S.-Mexico border. The Project is located approximately four miles south of the border and is roughly centered at the following coordinates: Latitude 32.48° North and Longitude 116.94° West.

Project Sponsor and Legal Authority

The Project sponsor is the water utility in Tijuana, *Comisión Estatal de Servicios Públicos de Tijuana* (CESPT or the "Sponsor"), a decentralized public entity with legal personality and its own assets established by Decree No. 44 of the V Legislature of the State of Baja California, which was published on December 16, 1966. The utility was created to provide water and wastewater services to the municipalities of Tijuana and Playas de Rosarito, Baja California.

2. CERTIFICATION CRITERIA

2.1 TECHNICAL CRITERIA

2.1.1. Project Description

Geographic Location

The city of Tijuana is located in the northwest region of the state of Baja California, approximately 25.7 km (16 miles) south of the city of San Diego, California. The Collector Poniente runs parallel to the Tijuana River for about 16 km (10 miles), conveying wastewater north to the International Collector, which runs parallel to the U.S.-Mexico border. The Project will address deteriorated sections of the Poniente Collector beginning near the Rodriguez Dam and continuing northwest approximately 4.5 km (2.8 miles). Figure 1 shows the location of Tijuana and the Collector Poniente.

Figure 1

PROJECT LOCATION MAP



General Community Profile

The Project is expected to benefit residents in the community of Tijuana, Baja California. As reported by the Mexican national statistical institute, INEGI, the population of Tijuana was 1,641,570 in 2015, which represented approximately 50% of the total state population.³ According to the projections of the Mexican national population council, CONAPO, Tijuana grew at an average annual rate of 2.4% from 2010 to 2015 and is expected to grow at an average annual rate of 1.3% from 2016 to 2030, which is close to the national growth rate of 1.8%.⁴

According to the 2014 Economic Census, Tijuana contributed 51.9% to the gross product of the state in 2013, and its main activities are manufacturing (57.6%), retail trade (9.2%), wholesale trade (6.7%) and other sectors (26.5%).⁵

The section of the collector that will be rehabilitated under this Project receives wastewater flows from three areas in the Tijuana River watershed identified as El Sainz, Mexico Lindo and La Mesa. The number of residential accounts in these three areas total 23,500, representing a population of nearly 87,000 people.

The status of public services in Tijuana is described in Table 1.

³ Instituto Nacional de Estadística y Geografía de México (INEGI).

⁴ Consejo Nacional de Población (CONAPO).

⁵ Source: INEGI, 2014 Economic Census.

Table 1
BASIC PUBLIC SERVICES AND INFRASTRUCTURE IN TIJUANA

Water System*						
Coverage:	99%					
Supply source: Colorado River, Rodriguez Dam and local wells						
Number of connections: 556,332						
Wastewater Collection*	Wastewater Collection*					
Coverage:	91%					
Number of connections:	506,188					
Wastewater Treatment*						
Coverage:	99%					
Treatment facilities:	Plant	Туре	Capacity			
	San Antonio de los Buenos	Oxidation ponds	1 100 lps (25 mgd)			
	San Antonio de 105 Bachos		1)100 ips (10 mga)			
	South Bay International	Activated sludge	1,100 lps (25 mgd)			
	South Bay International La Morita	Activated sludge Activated sludge	1,100 lps (25 mgd) 254 lps (5.8 mgd)			
	South Bay International La Morita Arturo Herrera	Activated sludge Activated sludge Activated sludge	1,100 lps (25 mgd) 254 lps (5.8 mgd) 460 lps (10.5 mgd)			
Solid Waste**	South Bay International La Morita Arturo Herrera	Activated sludge Activated sludge Activated sludge	1,100 lps (25 mgd) 254 lps (5.8 mgd) 460 lps (10.5 mgd)			
Solid Waste** Collection coverage	South Bay International La Morita Arturo Herrera 80%	Activated sludge Activated sludge Activated sludge	1,100 lps (25 mgd) 254 lps (5.8 mgd) 460 lps (10.5 mgd)			
Solid Waste** Collection coverage Final disposal	South Bay International La Morita Arturo Herrera 80% Municipal landfill	Activated sludge Activated sludge Activated sludge	1,100 lps (25 mgd) 254 lps (5.8 mgd) 460 lps (10.5 mgd)			
Solid Waste** Collection coverage Final disposal Street Paving**	South Bay International La Morita Arturo Herrera 80% Municipal landfill	Activated sludge Activated sludge Activated sludge	1,100 lps (25 mgd) 254 lps (5.8 mgd) 460 lps (10.5 mgd)			

*Source: CESPT, December 2016.

**Source: Tijuana 2014-2016 Municipal Development Plan (Plan municipal de desarrollo 2014-2016 de Tijuana).

lps = liters per second; mgd = millions of gallons a day

Local Water and Wastewater Systems

CESPT operates the water and wastewater systems for Tijuana and Playas de Rosarito, Baja California. Approximately 98% of the water supply for the two communities comes from the Colorado River, and the remaining 2% is groundwater obtained from Tijuana and Playas de Rosarito aquifers. In 2016, water from the Rodriguez Dam was not available due to drought conditions. Surface water from the Colorado River is conveyed through a 125-km (78-mile) aqueduct with a capacity of up to 5.3 cubic meters per second or 120 million gallons a day (mgd), which serves several other communities, including Tecate, before reaching Tijuana and Playas de Rosarito. Raw water is delivered and stored at the El Carrizo Dam, is treated at the El Florido Water Treatment Plant and then distributed to the Tijuana and Rosarito urban areas.⁶ CESPT continues to look for ways to diversify its water sources, due to the high energy costs of pumping water from the Colorado River, coupled with the overuse of local aquifers.

The wastewater system currently serves more than 506,000 connections with coverage reaching approximately 91% of households in the two municipalities. CESPT operates three wastewater treatment plants (WWTP): San Antonio de los Buenos WWTP, La Morita WWTP and Arturo Herrera WWTP. The South Bay International Wastewater Treatment Plant (SBIWTP), located in the United States and operated by the U.S. Section of the International Boundary and Water Commission (IBWC), also treats wastewater flows from Tijuana. The utility has a maximum

⁶ Source: Baja California state water commission, *Comisión Estatal del Agua de Baja California* (CEABC).

treatment capacity of more than 2,914 liters per second (lps) or 66.5 mgd to serve Tijuana, which is sufficient in the short term. The effluent from all wastewater treatment facilities serving Tijuana is eventually discharged into the Pacific Ocean.

CESPT regularly conducts video inspections of its wastewater collection infrastructure through manholes. This effort has identified aging and deteriorated wastewater collection lines requiring major rehabilitation investments to prevent failures that could result in raw wastewater discharges to the Tijuana River. All of the collection lines identified for rehabilitation have shown evidence of damage, often in the form of breaks and collapses. Manholes that are spaced too far apart do not allow for adequate line maintenance, which could lead to concrete deterioration from the buildup of hydrogen sulfide (H₂S) gas and unpleasant odors.

Heavy rainfall during the 2016-2017 winter season, along with aged and deteriorated infrastructure in the wastewater collection system, caused several sections of a collector main to collapse spilling untreated wastewater into the Tijuana River and where it eventually flowed into the United States. This situation generated a formal complaint from the U.S. Government. To address this issue, the State of Baja California instructed CESPT to develop a Comprehensive Wastewater Treatment and Reuse Plan with the following objectives: reduce untreated wastewater discharges to the Pacific Ocean, improve the management of treated wastewater replenishment, address sludge disposal, prioritize infrastructure development and establish a financial strategy.

The immediate actions proposed by the plan include improvements to the San Antonio de los Buenos (SAB) WWTP and the rehabilitation of critical wastewater collectors. CESPT has initiated the development of feasibility studies for the SAB WWTP and is already completing construction on three segments of critical collectors, which will reduce the risk of discharges to the Tijuana River. The proposed Project will further support this objective. Additionally, CESPT continues to provide emergency maintenance for collapsed lines, as well as to improve control of system bypasses, which are needed to direct wastewater flows to a downstream manhole during planned operation and maintenance activities, rather than allowing their discharge to the Tijuana River.

The proposed Project will replace 4,503 meters (about 14,774 ft) of deteriorated pipe in the Collector Poniente, which currently conveys an average of about 177 lps (4 mgd) within the Project area. The Project is needed to protect public health and the environment by minimizing the risk of line breaks that can cause sewage overflows onto local streets and into the Tijuana River. For these reasons, the Project was prioritized for funding through U.S.-Mexico Border Water Infrastructure Program of the U.S. Environmental Protection Agency (EPA).

Project Scope and Design

The proposed Project consists of the rehabilitation of approximately 4,193 linear meters (13,756.6 ft) of the Collector Poniente. The Project has been designed in three consecutive segments, described as follows:

- Segment 1: 1,086 meters (3,563 ft) of 42-inch diameter pipe;
- Segment 2: 789 meters (2,588.6 ft) of 42-inch diameter pipe; and,

• Segment 3: 2,318 meters (7,605 ft) of pipe ranging from 18- to 42-inches in diameter.

The Project also includes the replacement of approximately 310 meters (1,017 ft) of sewer laterals connected to the Collector Poniente, with diameters ranging from 8 to 12 inches. The general layout of the Project is shown in Figure 2.



Figure 2 LOCATION OF COLLECTOR PONIENTE CONSTRUCTION COMPONENTS

Originally, CESPT considered using the existing alignment for the entire Project; however, upon further analysis, CESPT determined that there were many rights of way and technical issues that could affect the successful implementation of the Project. The proposed alignment was modified, which increased the overall cost. Therefore, the scope of the proposed Project was modified to include only the most critical improvements that can be implemented with the funding currently available. The unfunded portion of the line is still under development. Additional technical alternatives are being analyzed to identify the most cost-effective solution for future funding opportunities.

Construction on a portion of Segment 2 has already been completed by the utility. Segment 3 and the remaining portions of Segment 2 are expected to initiate procurement in the second quarter of 2018. A grant from the Border Environment Infrastructure Fund (BEIF) is expected to support the construction of Segment 1. Table 2 shows the proposed schedule for Project implementation milestones for the BEIF-funded component.

Table 2 PROJECT MILESTONES

Key Milestones	Status
Procurement	Anticipated: First quarter 2018
Construction period	Two-years from notice to proceed.

Construction permits will be the responsibility of the contractor and are considered a construction task. To prevent untreated wastewater discharges from flowing into the Tijuana River during construction, wastewater flows will be pumped to an existing manhole.

2.1.2. Technical Feasibility

<u>Design Criteria</u>

The final design of the proposed works was completed in accordance with the recommendations provided in the water and wastewater manuals (MAPAS) developed by the Mexican National Water Commission (CONAGUA). It also includes the implementation of green building practices as part of the technical construction specifications. The final design documents were reviewed by CONAGUA, BECC and NADB. The Project received technical validation from the regional offices of CONAGUA in the State of Baja California through official correspondence dated June 12, 2017 (BOO.807.06/080/171).

Selected Technology

During the hydraulic modeling and final design process, technical options for pipe diameter, material and alignment were evaluated. To identify the most appropriate technology, the evaluation considered the following technical factors:

- Proposed layout of the collector and related sub-collectors
- Constructability
- Capital cost
- Operation and maintenance cost
- Materials and equipment reliability
- Environmental impact
- Social/community acceptance
- Topography
- System reliability
- Rights of way and easement requirements
- Pavement removal and replacement
- Technology and sustainable practices

The current condition of the pipeline was assessed through closed-circuit television (CCTV) inspections and incident reports of problems with the lines, such as breaks, leaks or odors. The decision to rehabilitate or replace a particular segment using an open trench or pipe bursting method was based on the feasibility of each option. Specific factors taken into account included the condition of the existing line; the location of the line in relation to traffic, buildings and trees; and the presence or absence of scale and/or deflection that could affect the suitability for pipe bursting. Other constructability criteria that were used to screen alternatives or locations included those that would require extended closure of major roadways in the city or that would be prohibitively expensive.

Pipe diameters were selected using appropriate slopes and velocities to prevent silting, clogging, and septic conditions in the pipes, as well as over-excavation or the need for pumping facilities that could increase both capital and operation and maintenance (O&M) costs. Peak and maximum instantaneous flow rates were taken into consideration to determine necessary capacity and pipe diameter. The analysis also considered using various pipe materials in compliance with applicable standards and regulations. High-density polyethylene, PVC and asbestos-cement pipes were evaluated, taking into consideration their characteristics and suitability for the soil type in the Project area.

For the proposed Project, an open-trench process and PVC pipes were selected, which have proven to be reliable and are frequently used in the Tijuana wastewater collection system.

2.1.3. Land Acquisition and Right-of-way Requirements

All the construction tasks of the proposed Project will take place within existing municipal rights of way. No additional land or rights of way acquisition will be required.

2.1.4. Management and Operations

Management and operation of the proposed Project will be the responsibility of CESPT. The utility currently serves 556,322 water hookups and 506,188 wastewater connections in Tijuana, and treats approximately 2,616 lps (59.7 mgd) of wastewater from the urban area. According to the metrics compiled by the Mexican institute of water technology, *Instituto Mexicano de Tecnología del Agua* (IMTA) and he Mexican Ministry of Environment and Natural Resources (SEMARNAT) in the 2015 Comprehensive Utility Management Program, CESPT is considered one of the most efficient water utilities in Mexico.

The utility has an O&M manual that includes routine tasks, as well as procedures to address unexpected conditions, in order to ensure proper operation of the system. The utility is organized in various departments, including: Water Treatment, Wastewater Treatment, Operation and Maintenance, Construction, and Management. The impact of the proposed Project on CESPT's O&M budget and procedures has been reviewed and is considered sustainable.

As an important sustainable management practice, CESPT has implemented a pretreatment program to control the quality of wastewater discharges from industrial and small business

customers into its wastewater collection system, in coordination with the Baja California Ministry of Environmental Protection (SPA). Wastewater quality must comply with Official Mexican Standard NOM-002-SEMARNAT-1996, which regulates the quality of wastewater discharged into municipal wastewater collection systems. The pretreatment program also complies with BEIF program requirements and the covenants established in BEIF grant agreements for projects previously funded in Tijuana.

2.2. ENVIRONMENTAL CRITERIA

2.2.1. Compliance with Applicable Environmental Laws and Regulations

Applicable Laws and Regulations

The Project is subject to environmental authorization in accordance with the regulations of the State of Baja California and the General Law on Ecological Balance and Environmental Protection regarding environmental impact assessment, as determined by SPA. Moreover, to be eligible for a BEIF grant supported by federal appropriations to EPA's U.S.-Mexico Border Water Infrastructure Program, the transboundary impacts of the Project must be examined in compliance with the U.S. National Environmental Policy Act (NEPA).

The Project will support the utility's compliance with the following regulations:

- <u>Official Mexican Standard NOM-001-CONAGUA-2011</u>, which establishes the specifications for hermeticity in water distribution systems, residential water connections and wastewater collection systems, as well as methods for testing hermeticity.
- <u>Official Mexican Standard NOM-001-SEMARNAT-1996</u>, which establishes the maximum permissible levels of contaminants in wastewater discharges to national waters and resources.
- <u>Official Mexican Standard NOM-002-SEMARNAT-1996</u>, which establishes the maximum permissible levels of contaminants in wastewater discharges to urban or municipal wastewater collection systems.

Environmental Studies and Compliance Activities

Pursuant to the regulations of SPA, an environmental impact assessment (MIA) was required. The report was prepared and submitted to SPA on March 3, 2017, and the Project was authorized by SPA through official document SPA-MXL-1403/2017 issued on May 5, 2017.

In accordance with NEPA, EPA finalized a Supplemental Environmental Assessment (SEA) of the Effect on San Diego, California of the construction of the proposed Project and issued a public notice reaffirming that no significant impacts to the environment would result from the implementation of the Project. The comment period for the public notice closed without comment, and a Finding of No Significant Impact (FONSI) was issued on March 24, 2017.

Since the Project will be implemented in already disturbed areas, a consultation with Mexico's National Institute of Anthropology and History (INAH) is not required. No cultural or historical resources are expected to be disturbed.

Compliance Documentation

The following formal authorizations have been obtained for the Project:

- Official letter No. SPA-MXL-1403/2017, issued by the Baja California State Environmental Agency (SPA) on May 5, 2017, authorizing the environmental impact assessment (MIA).
- FONSI issued by EPA on March 24, 2017.
- CONAGUA technical validation BOO.807.06/080/171, issued on June 12, 2017.

Pending Environmental Tasks and Authorizations

There are no environmental authorizations pending.

2.2.2. Environmental Effects/Impacts

Existing Conditions and Project Impact – Environment

Due to its proximity to the Tijuana River, wastewater spills onto local streets in the Project area are likely to flow into the river. In the first three quarters of 2017, the utility had to address two major breaks in the pipeline, which resulted in discharges to the river. The proposed Project will improve wastewater infrastructure and system reliability, helping to ensure that untreated wastewater flows are safely conveyed to the treatment plants.

The rehabilitation of the Collector Poniente will significantly reduce both the exposure to untreated wastewater and the potential contamination of surface and groundwater by preventing leaks and spills. The Project is expected to generate environmental and human health benefits related to the following Project outcomes:

- Improve wastewater collection and conveyance infrastructure for up to 23,500 existing residential wastewater connections.
- Eliminate approximately 177 lps (4 mgd) of untreated or inadequately treated wastewater discharges.
- Reduce the risk of line failures resulting in untreated or inadequately treated wastewater discharges to the Tijuana River, a transboundary water body.

The overall results of the Project will be positive, as it will prevent the risks of surface and groundwater contamination and exposure to untreated discharges, as well as increase the reliability of the wastewater collection service.

Mitigation of Risks

Only minor environmental impacts are anticipated during construction of the Project, provided that the tasks are implemented in accordance with best management practices. Potential impacts that may occur during the construction phase include:

- Emission of dust particles;
- Combustion gas emissions from construction machinery; and
- Temporary roadway blockages and the presence of workers in the area.

Typical mitigation measures to be practiced include:

- Application of water to reduce the emission of dust particles;
- Vehicle tune-ups to reduce emissions; and
- Placement of warning signs to prevent potentially hazardous situations.

Natural Resource Conservation

The final design includes the implementation of green building practices as part of the technical construction specifications, with a specific focus on energy efficiency and optimal operational performance. The Project also contributes to the protection of natural resources by reducing the risks of soil and water contamination.

No Action Alternative

The no-action alternative was not selected since failing to rehabilitate the Collector Poniente would result in potential surface water and groundwater contamination, as well as significant health risks for residents.

Existing Conditions and Project Impact – Health

Waterborne diseases may be caused by protozoan, viruses, bacteria and intestinal parasites. An individual may become ill after drinking water that has been contaminated with these organisms, eating uncooked foods that have been in contact with contaminated water or through poor hygiene habits that contribute to the dissemination of diseases by direct or indirect human contact. Table 3 shows waterborne diseases statistics for the city of Tijuana, B.C. for the period 2011-2016.

				-		
No. of Cases						
Disease	2011	2012	2013	2014	2015	2016
Intestinal diseases other organisms	40,667	50,670	51,599	64,036	52,397	43,613

 Table 3

 WATERBORNE DISEASE STATISTICS FOR TIJUANA, B.C.

Source: Ministry of Health, Epidemiological Monitoring Coordinating Unit, General Morbidity, New Cases in Tijuana.

Deteriorated wastewater lines increase the potential for breaks and leaks, resulting in raw sewage spills, which in turn increases the risks of water contamination, exposure to raw sewage and the vulnerability of residents to waterborne diseases. The infrastructure improvements to be implemented under the proposed Project will reduce unsanitary conditions and thus prevent potential health threats. According to the World Health Organization (WHO), access to safe water and sanitation facilities, as well as better hygiene practices, can reduce ascariasis-related morbidity by 29% and diarrhea-related morbidity by 32%.

Transboundary Effects

The proposed Project is expected to have an overall positive impact on the Tijuana River, which flows from Mexico into the U.S. and empties into the Pacific Ocean through the Tijuana River Estuary. At any given time, the river may contain storm water flows, effluent from wastewater treatment plants located in Mexico, "fugitive" untreated wastewater discharges and other unidentified sources, which may impair its water quality. The poor quality of the river flows reaching the ocean in the U.S. may lead to beach closures in San Diego County. Implementation of the Project is intended to prevent future breaks and spills from the Collector Poniente, thus eliminating untreated discharges to this transboundary water body.

Moreover, according to the transboundary environmental assessment, no significant negative impacts are expected as a result of Project implementation.

2.3. FINANCIAL CRITERIA

The total estimated cost of the Project is US\$3,014,000, which includes construction, supervision, contingencies and taxes. The Sponsor requested a BEIF grant to support implementation of the Project. Based on a thorough analysis of both the Project and Sponsor, NADB has determined that the Project meets all BEIF program criteria and is recommending that EPA approve a BEIF grant of up to US\$1,174,360 for its construction. Table 4 presents a breakdown of the sources of funds for the Project.

Uses	Amount	%
Rehabilitation of Collector Poniente*	\$ 3,014,000	100.0
TOTAL	\$ 3,014,000	100.0
Sources	Amount	%
Mexico (CONAGUA; CESPT)	\$ 1,839,640	61.0
NADB-BEIF (EPA grant)	\$ 1,174,360	39.0
TOTAL	\$ 3,014,000	100.0

Table 4 USES AND SOURCES OF FUNDS (US Dollars)

*Includes construction, contingencies, supervision and taxes.

The BEIF grant is expected to support the construction of Segment 1 of the collector. To be eligible for BEIF funding, EPA requires that every grant dollar be matched with funding from other sources. CONAGUA requested match credit approval for a portion of Segment 2 construction, which was approved by EPA on August 3, 2017. Segment 3 and the remaining portion of Segment 2 are expected to be completed with contributions from federal and local sources.

3. PUBLIC ACCESS TO INFORMATION

3.1 PUBLIC CONSULTATION

BECC released the Draft Project Certification Proposal for a 30-day public comment period beginning October 6, 2017. The following Project documentation is available upon request:

- Final design for Rehabilitation of Collector Poniente, 2016-2017.
- MIA Resolution No. SPA-MXL-1403/2017 issued by the Baja California Ministry of Environmental Protection May 5, 2017.
- FONSI issued by EPA on March 24, 2017.
- CONAGUA technical validation BOO.807.06/080/171, issued on June 12, 2017.
- Master Plan for Water and Wastewater Management, 2003.
- Environmental Assessment, Tijuana and Playas de Rosarito Water and Wastewater Master Plan, 2003.
- Tijuana Comprehensive Wastewater Treatment and Reuse System Plan, CESPT April 2017.

The public comment period ended on November 5, 2017, with no comments received.

3.2. OUTREACH ACTIVITIES

A broad public outreach effort was conducted for the Project, including the use of a local steering committee, meetings with local organizations, surveys and public meetings.

The steering committee, which includes city council members and members of civil engineering and economic development associations, convenes periodically to help the Project Sponsor disseminate information regarding water and wastewater infrastructure works. In addition, residents from the areas to benefit participate directly with this group as the Project moves closer to being implemented in their specific communities.

Technical and financial information about the Project has been made available to the public. The Steering Committee, with assistance from the Project Sponsor, prepared a fact sheet and a power point presentation of the Project. Additionally, a survey was disseminated at the public meetings to document the community's concerns or support for the Project.

Project information was presented to the community at a public meeting in Tijuana, B.C. It was advertised in the local newspaper *Frontera de Tijuana* on March 3, 2017 and was held on May 26, 2017 at the conference room of the Arturo Herrera Wastewater Treatment. The meeting was attended by members of the steering committee, CESPT Planning Department and about 100 residents. After the meeting, an exit survey was administered to the attendees and 100% responded with full support for the Project. A second public meeting was held on October 20, 2017 at the conference room of the Arturo Herrera Wastewater Treatment again. The meeting was attended by members of the steering committee, CESPT Planning Department and approximately 70 residents. Also, an exit survey was administered to the attendees and 100% confirmed their full support for the Project. In addition, the steering committee successfully met with several social and professional organizations to promote the Project.

A media search was conducted to gauge public awareness of the Project, as well as to detect any possible opposition from the community concerning the proposed investment. While only one of the articles specifically mentions the Project, media attention over the past six months has documented recurring conditions related to untreated discharges to the Tijuana River and transborder flows affecting the shores of Imperial Beach and other communities in California. During the past year, heavy rainfall exacerbated the problems with aged and deteriorated infrastructure in the collection system, like Collector Poniente. A summary of some of the articles found is presented below.

- <u>ABC 10 News</u> (September 28, 2017) "Port of San Diego and Chula Vista join federal call to stop South Bay sewage spills." Reports that the Port of San Diego and Chula Vista are calling for federal action to stop sewage spills in Tijuana River. <u>http://www.10news.com/news/port-of-san-diego-and-chula-vista-join-federal-call-tostop-south-bay-sewage-spills</u>
- <u>El Mexicano.com</u> (August 3, 2017) "Estrechan colaboración CESPT y Autoridad EU." (CESPT and US authorities strengthen cooperation) Reports that CESPT and EPA authorities are discussing certification and support for the Collector Poniente project. <u>http://ed.el-mexicano.com.mx/impreso/Tijuana/080317/03-08-2017_TIJ_07A.pdf</u>
- <u>El Mexicano.com</u> (August 7, 2017) "Mantienen cooperación binacional en materia de saneamiento de aguas" (Binational cooperation ongoing for wastewater treatment). Head of CESPT at a binational meeting reported on the progress of the rehabilitation of critical collectors. http://ed.el-mexicano.com.mx/impreso/Tijuana/080717/07-08-2017 TIJ 03A.pdf
- <u>El Mexicano</u> (August 9, 2017) "Aguas negras enferman a los agentes de la Border Patrol; Podrían demandar a Tijuana por el derrame" (Border Patrol agents sickened by sewage; could sue Tijuana for spill). Reports 340,000-gallons sewage spill, its effect on the border patrol and the reaction of the Mayor of Imperial Beach. http://ed.el-mexicano.com.mx/impreso/Tijuana/080917/09-08-2017 TIJ 01A.pdf

- <u>UniMexicali.com</u> (March 24, 2017), "Contaminación de playas por arrojar aguas no tratadas; gente enferma" (Beaches contaminated by untreated sewage discharges; People sickened). WILDCOAST denounces contamination of South Bay beaches due to untreated wastewater discharges in the ocean by the San Antonio de los Buenos WWTP. <u>http://www.unimexicali.com/noticias/reportajesespeciales/444907/contaminacion-deplayas-por-arrojar-aguas-no-tratadas-gente-enferma.html</u>
- <u>San Diego Tribune</u> (March 24, 2017) "Tijuana plans new sewage treatment plant, expanded wastewater for re-use". Discusses Tijuana's comprehensive wastewater treatment and reuse plan. <u>http://www.sandiegouniontribune.com/news/border-baja-california/sd-me-baja-plans-20170323-story.html</u>
- <u>Fox 5 San Diego</u> (March 24, 2017) "Sewage contamination closes Imperial Beach shoreline." Announcement of expanded border-area ocean pollution warning due to influxes of storm-driven sewage out of Baja California. <u>http://fox5sandiego.com/2017/03/24/sewage-contamination-closes-imperial-beachshoreline/
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The proposed Project is one of many investment efforts currently under development to resolve uncontrolled discharges to the Tijuana River. Based on the media search, no opposition to the Project was detected; however, the Project will help to address the main concerns identified for residents in the Tijuana-San Diego region. The activities conducted by the Project Sponsor demonstrate that the public outreach requirements for the funding program have been met.