



STATEMENT OF INTENT

IMPLEMENTATION OF PRIORITY SANITATION PROJECTS IN THE SAN DIEGO, CA. – TIJUANA, BC REGION

PARTICIPANTS:

- A) United States Environmental Protection Agency (USEPA).
- B) Secretariat of the Environment and Natural Resources of the United Mexican States, through the National Water Commission (CONAGUA by its acronym in Spanish).

OBJECTIVE:

To recognize the need to work in coordination in the planning, design, construction and rehabilitation of infrastructure for the conveyance, treatment, adequate disposal and, where appropriate, reuse of the wastewater generated in the Tijuana River basin and that crosses into the territory of the United States of America, and to help solve the sanitation problem in the San Diego/Tijuana region, including the Pacific Ocean.

For this purpose, Appendices 1 and 2 of this Statement of Intent list the projects that will contribute to the above objective in the short- and long-term.

BACKGROUND:

- Since 1995, the USEPA and CONAGUA have worked together on the implementation of the Border Water Infrastructure Program (BWIP), for the region 100-kilometers (62miles) north and 100 kilometers south of the US-Mexico border. This work has been supported by grants between the USEPA and the North American Development Bank (NADB). CONAGUA jointly invests in projects south of the border, within the framework of the Memorandum of Understanding (MoU) with USEPA signed on September 25, 2000.
- The United States-Mexico-Canada Agreement (USMCA), Section 821, for which the United States Congress allocated funds under the State and Tribal Assistance Grants, instructs the USEPA to address the problem of transboundary flows of untreated wastewater in the Tijuana River basin. Section 821 also instructs USEPA to coordinate the "eligible public entities" for which the Eligible Public Entities Group (EPECG) was formed.
- In September 2021, the USEPA and CONAGUA formed the "Tijuana Binational Wastewater Technical Working Group" ("Working Group"), which meets approximately every two weeks with the aim of identifying priority projects to be implemented in the short- and long-term.

Other Working Group members are the International Boundary and Water Commission (IBWC/CILA), the Secretariat for the Environment and Natural Resources (SEMARNAT), the Secretariat for the Management, Sanitation and Protection of Water of the state of Baja California (SEPROA), the Tijuana State Public Services Commission





(CESPT) and NADB. The Working Group meetings generated a list of infrastructure projects to be implemented in the short-and long-term. (Appendices 1 and 2).

INFRASTRUCTURE PROJECTS:

The "Participants" have defined the projects referred to above in 2 types: short- and long-term as indicated below:

- I. <u>Short-term projects for completion in the years 2022 through 2027</u>
 - A. Proposed works in the United States:
 - 1. Expansion of the International Treatment Plant (ITP) to 50 mgd (2191 l/s).
 - B. Proposed works in Mexico:
 - 1. Tijuana River Diversion
 - a) Rehabilitation of the Pumping Plant (PB, by its acronym in Spanish) CILA.b) Rehabilitation of PB-1.
 - 2. Rehabilitation of the International Collector.
 - 3. Rehabilitation of the parallel gravity line.
 - 4. Rehabilitation of the Antiquo Force Main.
 - 5. Enclose the open channel of the PB-1 to San Antonio de los Buenos.
 - 6. Rehabilitation of the Insurgentes Collector.
 - 7. Rehabilitation of the Poniente Interceptor.
 - 8. Rehabilitation of the Collector Carranza.
 - 9. Rehabilitation of the Oriente Interceptor.
 - 10. Phase I of effluent reuse from the La Morita and Arturo Herrera Wastewater Treatment Plants (WWTPs).
 - 11. Lift station and force main from Sainz Canyon to Arturo Herrera.
 - 12. Rehabilitation of PB Matadero and Laureles 1 and 2.
 - 13. New 18 mgd (800 lps) San Antonio de los Buenos Wastewater Treatment Plant (SABTP).
 - 14. Tijuana River Gates.
 - 15. Backup power supply for PB-1.
- II. Long-term projects:
- A. Proposed works in the United States.
 - 1. Diversion of the Tijuana River.
 - 2. Advanced Primary Treatment Plant to treat flows from the Tijuana River.
 - 3. Further ITP expansion.
 - 4. Capture and use of methane from anaerobic digesters at the ITP.
 - 5. Installation of a trash boom in the Tijuana River to capture trash before reaching the ocean.
- B. Proposed works in Mexico:
 - 1. Phase II effluent reuse project for the La Morita and Arturo Herrera Wastewater Treatment Plants.





- C. Proposed works with elements in the United States and Mexico.
 - 1. Return line for treated flows from the ITP in the United States to PB-1 in Mexico.
 - 2. Convey flows from Goat Canyon (Los Laureles) and Smuggler's Gulch (Matadero) by gravity to the ITP.

DEVELOPMENT:

To implement the aforementioned projects, the "Participants" acknowledge that to date the following activities have been carried out:

- a) In 2020 and 2021, CILA and CONAGUA signed an agreement for the rehabilitation of 4 pumping plants, PB-CILA, PB Los Laureles 1 and 2, and PB Matadero; in 2021 the rehabilitation of PB-CILA was completed. In early 2022, resources for 58.83 million pesos were transferred to CILA for the rehabilitation of PB Los Laureles 1, anticipating its start in the second half of 2022. In the short-term, the Mexican government, through CONAGUA, will implement the actions for the rehabilitation of PB Laureles 2 and Matadero for an estimated amount of 91.85 million pesos.
- b) Through the Planning Mechanism (MECAPLAN) of the Ministry of Finance and Public Credit (Hacienda), CONAGUA is managing resources for 1,742 million pesos are being developed to assist in the implementation of the rehabilitation of the International Collector, rehabilitation of a section of the parallel line that leads the flow from PB-1 to the SABTP, rehabilitation of the Antiguo Force main from PB-1 to the SABTP, enclose the open channel from PB-1A to the SABTP, rehabilitation of the Insurgentes and Carranza collectors, as well as the Poniente and Oriente interceptors; construction of a pumping station and force main to convey wastewater from the Sainz Canyon to the Arturo Herrera Wastewater Treatment Plant.
- c) Within the framework of the BWIP between Mexico and the United States, the " Tijuana River Diversion" projects are in the process of being certified, which include the rehabilitation of PB-CILA (already completed) and PB-1 A and B. The estimated cost of these two remaining projects is 240 million pesos. Meanwhile, the cost of the "Rehabilitation of the International Collector" project is estimated at 320 million pesos.
- d) Regarding the projects "Tijuana River Gates"" with a cost of 76 million pesos and "Backup power supply for PB 1" with a cost of 60 million pesos, the USEPA approved the allocation of resources within the framework of the BWIP. Additionally, it will contribute 50% of the resources for Phase I of the project for the reuse of effluents from the Arturo Herrera and La Morita WWTPs, whose cost is estimated at 400 million pesos, and the corresponding certification process is pending.
- e) Through a Public Private Partnership (PPP) scheme, CESPT will rehabilitate SABTP. The estimated cost of the project is 665 million pesos.

In relation to the long-term projects that are indicated in Appendix 2, "the Participants" intend to develop, with the corresponding authorities, the allocation of resources for their





FUNDING:

The sources of funding for the projects identified above include, but are not limited to: the USMCA Implementation Act, USEPA-CONAGUA MoU on the BWIP, the MECAPLAN, the National Infrastructure Fund, as well as federal, state and local resources authorized by the respective authorities and laws of each country.

COSTS:

The total investment cost of the short-term projects is estimated at \$329.4 million dollars (MD) from the US and \$142.8 million dollars from Mexico. The anticipated investment cost of long-term projects is approximately \$323 million USD, as indicated in the Infrastructure Projects Section and Appendix 2.

The Participants acknowledge that the collaboration under this document is subject to the availability of appropriated funds. Nothing in this Statement obliges the Participants to contribute funds or enter into any contracts, assistance agreements, inter-institutional agreements or incur any financial obligation.

NON-BINDING:

This document expresses the good-faith intentions of the Participants, is not legally binding, and does not create any contractual obligation, nor right or benefit, substantive or procedural, enforceable by law or equity against the Participants, their officials or employees, or any other entity or person. The Participants offer these services without expectation of payment and expressly waive any future claim for compensation.

CONTACT POINTS:

The following institutions are designated as contact points:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY located at 1200 Pennsylvania Avenue, 20460, NW Washington, DC, United States of America

NATIONAL WATER COMMISSION located at Insurgentes Sur 2416, Copilco el Bajo, Coyoacán, 04340, Mexico City, Mexico





On July 1st, 2022, this Statement of Intent is signed, in four originals, two in English and two in Spanish, both texts being equally valid.

ENVIRONMENTAL PROTECTION AGENCY OF THE UNITED STATES OF AMERICA USEPA

SECRETARIAT OF THE ENVIRONMENT AND NATURAL RESOURCES OF THE UNITED MEXICAN STATES NATIONAL WATER COMMISSION (CONAGUA)

RADHIKA FOX ASSISTANT ADMINISTRATOR OF THE OFFICE OF WATER

HUMBERTO JUAN PRANCISCO MARENGO MOGOLLÓN GENERAL TECHNICAL DEPUTY DIRECTOR





Appendix 1: Short-Term Projects and Capital Costs

I. Short-Term Projects	US Government share				Mexican Government share					Tota	al	Condition	Funding source
		million million USD MXN		million USD		million MXN		million USD		million MXN			
A. Proposed Works in the United States													
1 Expansion of ITP to 50 mgd (2191 l/s) Treatment to secondary standards applicable in the United States and installation of piping to permit potential future expansion by 10 mgd (438 l/s) for a total of up to 60 mgd (2629 l/s).	\$	300.0	\$6	5,000.0	\$	-	\$	-	. \$	300.0	\$ 6,000.0	Undergoing NEPA	USMCA
B. Proposed Works in Mexico		,							AN E				
1a Rehabilitation of PB-CILA Includes four new pumps; pretreatment system with fine screening, trash removal and Vortex for sand and grit removal; and new Tijuana River intake. Mexico completed this project in 2022.	\$	-	\$	-	\$	4.0	\$	80.0	\$	4.0	\$ 80.0	Completed project	BWIP/ CONAGUA and CESPT funds
1b Rehabilitation of PBI Rehabilitation and four new pumping trains; pretreatment system with fine screening, trash removal and Vortex for sand and grit removal; new motor control center; electric station maintenance; improvements to the pump station building; and installation of a supervisory control and data acquisition (SCADA) system and flow meters.	\$	8.0	\$	160.0	\$	4.0	\$	80.0	\$	12.0	\$ 240.0	Project in NADB certification process	BWIP/ CONAGUA and CESPT funds
2 Rehabilitation of the International Collector Phase I: construction of a new 60-inch polyvinyl chloride (PVC) pipe along an alternative alignment through the streets of Tijuana. Phase II: rehabilitation of 8,200 feet (2,500 meters) of 72- inch concrete pipeline using PVC pipe lining.	\$	8.0	\$	160.0	\$	8.0	\$	160.0	\$	160.0	\$ 320.0	Executive project under development	BWIP/ MECAPLAN





· · · · · · · · · · · · · · · · · · ·															
	 Short-Term Projects Rehabilitation of the parallel gravity line Replacement of 13,225 feet (4,031 meters) of 60- inch concrete pipe with PVC pipe. 	US Government share			nent	M	exican G sh	nment	Total				Condition	Funding source	
			illion JSD		nillion MXN		illion USD		nillion MXN	milli	on USD	-	nillion MXN		
3		\$	-	\$, -	\$	10.3	\$	205.0	\$	10.3	\$	205.0	Executive project under development	MECAPLAN
4	Rehabilitation of the Antiguo Force Main Replacement of 14,383 feet (4,384 meters) of 42- inch steel core concrete pipe.	\$	-	\$	-	\$	9.5	\$	190.0	\$	9.5	\$	190.0	Executive project under development	MECAPLAN
5	Enclose the open channel from PB-1 to San Antonio de los Buenos Installation of approximately 19,685 feet (6,000 meters) of piping by means of slip-lining a 60-inch section to close the open gravity channel.	\$	-	\$	-	\$	12.8	\$	256.0	\$	12.8	\$	256.0	Executive project under development	MECAPLAN
6	Rehabilitation of the Insurgentes Collector Replacement of a 36-inch concrete pipe with 36- inch PVC pipe for 18,360 feet (5,596 meters).	\$	-	\$	-	\$	17.9	\$	357.0	\$	17.9	\$	357.0	Executive project under development	MECAPLAN
7	Rehabilitation of Poniente Interceptor Replacement of 42-inch concrete pipe with PVC pipe for a length of 2,303 feet (702 meters).	\$	-	\$	· -	\$	1.4	\$	28.0	\$	1.4	\$	28.0	Executive project under development	MECAPLAN
8	Rehabilitation of the Collector Carranza Replacement of 36-inch concrete pipe with 36-inch PVC pipe for a length of 9,186 feet (2,800 meters) in Colonia Carranza.	\$	-	\$	-	\$	2.9	\$	58.0	\$	2.9	\$	58.0	Executive project under development	MECAPLAN
9	Rehabilitation of the Oriente Interceptor Replacement of 22,789 feet (6,946 meters) of 42- inch and 48-inch concrete pipe.	\$	-	\$	-	\$	15.5	\$	310.0	\$	15.5	\$	310.0	Executive project under development	MECAPLAN
10	Phase I of effluent reuse from La Morita and Arturo Herrera WWTPs Installation of 23,400 feet (7,132 meters) of high- density polyethylene (HDPE) piping and 2 new	\$	10.0	\$	200.0	\$	10.0	\$	200.0	\$	20.0	\$	400.0	Project in NADB certification process	USEPA- CONAGUA Joint





					Condition	Funding source								
I. Short-Term Projects	US Government share						Mexican Government share				Total			
		llion ISD		illion MXN		illion USD		nillion MXN	milli	on USD		nillion MXN		
pump stations to convey effluent from the treatment plants upstream of Rodriguez Dam for indirect reuse.														Investment Program
11 Lift station and force main from Sainz Canyon to Arturo Herrera Construction of a pump station and 5577 feet (1700 meters) of 16-inch diameter pipe with a capacity of 3.4 mgd (150 l/s).	\$	-	\$	-	\$	2.2	\$	43.0	\$	2.2	\$	43.0	Project in development	MECAPLAN
12 Rehabilitation of PB Matadero and Laureles 1 & 2 Replacement of backup pumps, installation of a new motor control center, and pretreatment system in the lift station.	\$	_	\$	-	\$	7.6	\$	152.0	\$	7.6	\$	152.0	Executive project under development	CILA- CONAGUA Cooperative Agreement
13 New 18 mgd (800 l/s) SABTP Uses an oxidation ditch process comprised of 2 independent modules, and includes construction of a 656-foot (200 meter) ocean outfall.	\$	2	\$	-	\$	33.3	\$	665.0	\$	33.3	\$	665.0	Executive project under development	PPP/ FONADIN
14 Tijuana River Gates Replacement of 23,211 feet (7,075 meters) of concrete wastewater pipe along the Alamar and Tijuana Rivers to reduce untreated wastewater flows to the Tijuana River.	\$	1.9	\$	38.0	\$	1.9	\$	38.0	\$	3.8	\$	76.0	Project in NADB certification process	BWIP
 Backup power supply for PB-1 Construction of a backup power supply system for the PB-1 electrical substation. 	\$	1.5	\$	30.0	\$	1.5	\$	30.0	\$	3.0	\$	60.0	Project in NADB certification process	BWIP
Total	\$3	29.4	\$	6,618	\$	142.8	\$	52,852	\$4	472.2	\$	9470		





Appendix 2: Long-Term Projects and Estimated Capital Costs, Share Has Not Been Determined

11.	Long-Term Projects	Total Capital Cost							
	Long-Term Projects	milli	on USD	million MXN					
Α.	Proposed Works in the United States								
1	Diversion of the Tijuana River.	\$	27	\$	540				
2	Advanced primary treatment plant to treat flows from the Tijuana River.	\$	104	\$	2,080				
3	Further ITP expansion.	\$	71	\$	1,420				
4	Capture and use of methane from anaerobic digesters at the ITP.	\$	21	\$	420				
5	Installation of a trash boom in the Tijuana River to capture trash before reaching the ocean.	\$	2	\$	40				
В.	Proposed Works in Mexico								
1	Phase II effluent reuse project for the La Morita and Arturo Herrera WWTPs.	\$	55	\$	1,100				
C.	Proposed Works with Elements in the United States and	Mexi	со						
1	Return line for treated flows from the ITP in the United States to PB-1 in Mexico.	\$	12	\$	240				
2	Convey flows from Goat Canyon (Los Laureles) and Smuggler's Gulch (Matadero) by gravity to the ITP.	\$	31	\$	620				
То	tal	\$	323	\$	6,460				