

CERTIFICATION PROPOSAL

FORCE MAIN REHABILITATION PROJECT IN MEXICALI, BAJA CALIFORNIA

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CONTENTS

| EXI | ECUTI | VE SUMMARY | 1 |
|-----|--------|--|----|
| 1. | PRO | JECT OBJECTIVE AND EXPECTED OUTCOMES | 2 |
| 2. | ELIG | GIBILITY | 2 |
| | 2.1. | Project Type | 2 |
| | 2.2. 1 | Project Location | 2 |
| | 2.3. 1 | Project Sponsor and Legal Authority | 3 |
| 3. | CER' | TIFICATION CRITERIA | 3 |
| | 3.1. | Technical Criteria | 3 |
| | | 3.1.1. General Community Profile | 3 |
| | | 3.1.2. Project Scope | 7 |
| | | 3.1.3. Technical Feasibility | 8 |
| | | 3.1.4. Land Acquisition and Right-of-Way Requirements | 8 |
| | | 3.1.5. Project Milestones | 8 |
| | | 3.1.6. Management and Operation | 9 |
| | 3.2. | Environmental Criteria | 10 |
| | | 3.2.1. Environmental and Health Effects/Impacts | 10 |
| | | A. Existing Conditions | 10 |
| | | B. Project Impacts | 10 |
| | | C. Transboundary Impacts | 10 |
| | | 3.2.2. Compliance with Applicable Environmental Laws and Regulations | 11 |
| | | A. Environmental Clearance | 11 |
| | | B. Mitigation Measures | 12 |
| | | C. Pending Environmental Tasks and Authorizations | 12 |
| | 3.3 | Financial Criteria | 13 |
| 4. | PUB | BLIC ACCESS TO INFORMATION | 14 |
| | 4.1. | Public Consultation | 14 |
| | 4.2. | Outreach Activities | 14 |
| 5. | REC | OMMENDATION | 16 |

EXECUTIVE SUMMARY

FORCE MAIN REHABILITATION PROJECT IN MEXICALI, BAJA CALIFORNIA

Project Summary

| Project Name: | Force Main Rehabilitation Project in Mexicali, Baja California. | | |
|------------------------|---|--|--|
| Project Sector (Type): | Wastewater. | | |
| Objective: | Eliminate exposure to untreated or inadequately treated wastewater discharges by replacing deteriorated infrastructure prone to leaks and failure, thus helping to reduce water pollution and the risk of waterborne diseases. | | |
| Expected Outcomes: | Improve wastewater collection infrastructure and services for over 235,000 existing residential connections. Reduce the risk of pipeline failures that could result in: Approximately 1,961 liters per second (lps) or 44.8 million gallons per day (mgd) of uncontrolled wastewater discharged to the New River. Transboundary wastewater flows to the U.S. | | |
| Population to Benefit: | 753,000. | | |
| Sponsor: | Local water utility, Comisión Estatal de Servicios Públicos de Mexicali (CESPM). | | |
| Project Cost: | US\$6,800,000. | | |

Financial Summary

| Program: | Border Environment Infrastructure Fund (BEIF). | |
|-------------------------------|---|--|
| Grant Amount: | US\$3,400,000. | |
| Percentage of Project Cost | 50%. | |
| Recipient | CESPM. | |
| Other Funding Sources | US\$3,400,000 from Mexican federal, state, and local sources, representing 50% of the total project cost. | |

CERTIFICATION PROPOSAL

FORCE MAIN REHABILITATION PROJECT IN MEXICALI, BAJA CALIFORNIA

1. PROJECT OBJECTIVE AND EXPECTED OUTCOMES

The proposed project consists of rehabilitating five force mains by replacing deteriorated valves and two lift station pump manifolds (the "Project"). The Project sponsor is the local water utility, Comisión Estatal de Servicios Públicos de Mexicali (CESPM), which has developed a Strategic Wastewater Plan aimed at eliminating untreated wastewater discharges to the New River, an impaired water body that flows into the United States. The proposed rehabilitation work will improve the wastewater collection infrastructure serving over 235,000 existing residential wastewater connections¹ by reducing the risk of pipeline failures and preventing the potential discharge of up to 44.8 million gallons per day (mgd) of wastewater from spills and leaks that could impact the New River.²

Approximately 753,000 residents in Mexicali are expected to benefit from this project.3

2. ELIGIBILITY

2.1. Project Type

The Project falls within the eligible sector of wastewater.

2.2. Project Location

The Project will be implemented in the city of Mexicali, Baja California, which is adjacent to the U.S.-Mexico border. Mexicali is in the northeast region of the state of Baja California, directly across the border from Calexico, California, and approximately 15 miles south of the

¹ Source: CESPM, Subdirección General de Agua y Saneamiento [Assistant Office of Water and Wastewater], Habitantes Beneficiados por el Proyecto de Rehabilitación a Emisores a Presión de Alcantarillado Sanitario [Residents Benefitting from the Force Main Improvements Project].

² The flow volume was calculated based on the 235,000 wastewater connections served by the force mains to be rehabilitated, with 225 liters (59.44 gallons) of wastewater generated per person a day as indicated by the Government of Baja California in its 2019 Technical Standards for Water and Sanitary Sewer System Projects (*Normas técnicas para proyectos de sistemas de agua potable y alcantarillado sanitario, actualización 2019*) and 3.2 persons per household as reported by the Mexican national institute of statistics (INEGI).

³ The estimated population benefitted in Mexicali is calculated based on 3.2 persons per household, as reported by INEGI and rounded to the nearest 1,000 persons.

city of El Centro, California. The Project is located within the Mexicali II and III service areas approximately five miles south of the border and is roughly centered at the following coordinates: latitude 32°37'33.00" north and longitude 115°27'03.00" west. Figure 1 shows the location of Mexicali.



Figure 1
PROJECT LOCATION MAP

2.3. Project Sponsor and Legal Authority

The Project sponsor is the local water utility in Mexicali, Comisión Estatal de Servicios Públicos de Mexicali (CESPM). As established in the Baja California Law for State Water Utilities, CESPM has the legal authority to operate and maintain water treatment, storage and distribution systems, as well as wastewater collection and treatment systems for the municipality of Mexicali, Baja California.

3. CERTIFICATION CRITERIA

3.1. Technical Criteria

3.1.1. General Community Profile

The Project is expected to benefit residents in the community of Mexicali, Baja California. As reported by the Mexican national institute of statistics, INEGI, the population of Mexicali was 1,049,792 in 2020, which represented approximately 27.9% of the state population. Based

on the census data, the population of Mexicali increased by 61,375 residents between 2015 and 2020, and the economically active population was estimated at 406,135 residents.

The force mains that will be rehabilitated under this Project receive wastewater flows from the Mexicali I, II and III areas of the municipal wastewater system and, in the event of failure, would discharge to the New River. There is a total of 235,000 residential accounts in those areas, representing a population of nearly 753,000 people.

The following table summarizes the status of water services and infrastructure in Mexicali.

Table 1
BASIC PUBLIC SERVICES AND INFRASTRUCTURE IN MEXICALI

| Water System | | | | |
|-------------------------------|------------------------------|------------------|----------------------|--|
| Coverage | 99.96% | | | |
| Supply source | Colorado River | | | |
| Number of connections | 326,347 | | | |
| Wastewater Collection | | | | |
| Coverage | 95.5% | | | |
| Number of connections 301,269 | | | | |
| Wastewater Treatment | | | | |
| Coverage | 100% of collected wastewater | | | |
| Treatment facilities | Plant | Type | Capacity | |
| | Zaragoza | Oxidation ponds | 1,300 lps (29.7 mgd) | |
| | Las Arenitas | Oxidation ponds | 840 lps (19.2 mgd) | |
| | UABC | Activated sludge | 10 lps (0.22 mgd) | |
| | CETYS | Activated sludge | 7 lps (0.16 mgd) | |
| | Tecnológico | Activated sludge | 7 lps (0.16 mgd) | |

Source: CESPM, December 2022.

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

Local Wastewater System

CESPM operates the water and wastewater systems for Mexicali, Mexicali Valley and San Felipe, Baja California. The Mexicali wastewater system is divided into four service areas. Mexicali I and II cover the old urban areas of the city, while Mexicali III and IV serve most of the maquiladora industry and new urban developments. The wastewater collection system has approximately 1,800 miles of sanitary sewer lines and 14 lift stations, serving more than 301,000 connections in the city of Mexicali with coverage reaching approximately 95.5% of households.

CESPM operates two major wastewater treatment plants (WWTPs)—Zaragoza WWTP and Las Arenitas WWTP—both of which provide secondary treatment. Although a new regulation has been issued, the WWTPs are currently subject to the discharge standards established in

Official Mexican Standard NOM-001-SEMARNAT-1996.⁴ CESPM has already initiated planning to upgrade both plants to comply with the new regulations and continues to address high concentrations of total suspended solids occurring periodically, during summer months and elevated total nitrogen concentrations during some winter months.

The Zaragoza WWTP discharges 506 lps (11.5 mgd) of effluent into a drain that is a tributary of the New River, while the Las Arenitas WWTP discharges 1,030 lps (23.5 mgd) to the Hardy River, a tributary of the Colorado River. Along with three other small treatment facilities, the utility has a maximum treatment capacity of 2,165 lps or nearly 50 mgd to serve the city of Mexicali.

Most of the wastewater collection infrastructure in Mexicali was constructed more than 30 years ago, has reached or exceeded its expected useful life and needs to be repaired or replaced. In recent years, CESPM has dealt with several spills from force main infrastructure, often because of deteriorated pump manifolds, valves and other fittings. In 2022, failures in the Las Arenitas Force Main and in a valve in Lift Station #2, caused a major spill resulting in 133 million gallons of sewage flowing into the New River.

Most of the automatic air relief valves are no longer functioning, allowing air bubbles to become trapped inside the pipeline. In addition, the high concentration of sulfates in the drinking water, along with the organic matter in the wastewater, is conducive to the formation of hydrogen sulfide (H_2S) in the wastewater, which corrodes the pump manifolds. Together, these conditions accelerate deterioration of the infrastructure. This situation combined with a pressurized environment creates an important risk for pipe failure, resulting in untreated discharges to the river.

To address these issues, CESPM developed a Strategic Wastewater Plan in 2017 aimed at eliminating or reducing untreated wastewater discharges to the New River, prioritizing infrastructure rehabilitation activities and identifying potential funding sources. To date, CESPM has undertaken several projects under the plan to rehabilitate 15.5 miles of pipeline and 15 major and small lift stations.

As part of the next set of priorities in the plan, the proposed Project consists of rehabilitating Force Mains #1, #3, #4, #6 and #7 within the Mexicali I, II and III service areas, which currently convey an average of about 44.8 mgd. The characteristics of each force main are described in the table below.

⁴ On March 3, 2022, a modification of NOM-001-SEMARNAT-1996 was published in Mexico, establishing new maximum permissible levels of contaminants. The new standard went into effect on April 3, 2023. In accordance with CONAGUA guidelines, CESPM registered both Las Arenitas and Zaragoza WWTPs in a compliance program, which gives CESPM until 2027 to comply with the new NOM-001-SEMARNAT-2021. CESPM is responsible for achieving and maintaining compliance with the new standard in accordance with the calendar of activities established under program.

Table 2
DESCRIPTION OF THE FORCE MAINS TO BE REHABILITATED

| Force Main | Year Installed | Point of Origination to WWTP | Conveyance Capacity | Average Flow | Area Served |
|---------------|-------------------|------------------------------------|-------------------------|-----------------------|-----------------------------|
| #1 | 1997 | Lift Station #1 to Zaragoza | 1,400 lps (32.0 mgd) | 600 lps (13.7 mgd) | Mexicali I (downtown) |
| #3 | 1998 | Lift Station #3 to Zaragoza | 1,200 lps (27.4 mgd) | 264 lps (6.0 mgd) | Mexicali III (northwest) |
| #4 | 2007 | Lift Station #4 to Las Arenitas | 1,620 lps (37.0 mgd) | 924 lps (21.1 mgd) | Mexicali II (southeast) |
| #6 | 2001 | Lift Station #6 to Zaragoza | 350 lps (8.0 mgd) | 92 lps (2.1 mgd) | Mexicali III (northwest) |
| #7 | 2002 | Lift Station #7 to Zaragoza | 450 lps (10.3 mgd) | 82 lps (1.9 mgd) | Mexicali III (northwest) |

Figure 2 shows the typical conditions of the automatic air relief valves that will be replaced.





The Project is needed to protect public health and the environment by minimizing the risk of force mains breaks that can cause sewage overflows onto local streets and into the New River, which flows northward into the United States. For these reasons, the Project was prioritized for funding through the U.S.-Mexico Border Water Infrastructure Program of the U.S. Environmental Protection Agency (EPA).

JULY XX, 2023

3.1.2. Project Scope

The Project consists of rehabilitating the five force mains described above. The specific improvements to each include:

• Force main #1:

- o 22 gate valves
- o 20 automatic air relief valves

• *Force main #3*:

- o 16 gate valves
- o Two water hammer valves
- o Ten automatic air relief valves

• *Force main #4*:

- o 35 gate valves
- Two water hammer valves
- 33 automatic air relief valves

Force main #6:

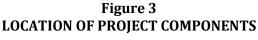
- o 15 gate valves
- o A pump manifold with accessories
- o Two water hammer valves
- Nine automatic air relief valves

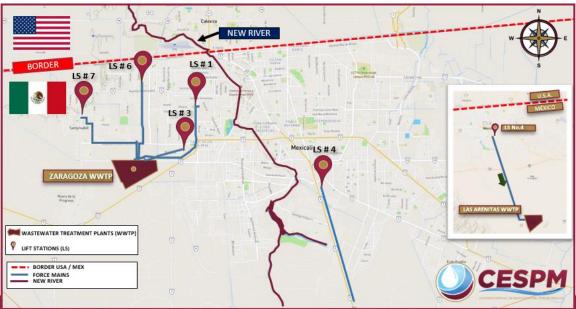
• *Force main #7*:

- o 11 gate valves
- o A pump manifold with accessories
- o Two water hammer valves
- o Four automatic air relief valves

In addition, 34 concrete valve boxes, as well as a Supervisory Control and Data Acquisition (SCADA) system will be installed.

Figure 3 shows the location of the force mains that will be rehabilitated.





DRAFT BOARD DOCUMENT BD 2023-##
CERTIFICATION PROPOSAL
FORCE MAIN REHABILITATION IN MEXICALI, BC

A grant from the Border Environment Infrastructure Fund (BEIF) is expected to supplement the funding available from Mexico to rehabilitate the five force mains. Considering current cost estimates the BEIF funds are targeted to address infrastructure in Force Mains #1 and #3, while the remaining force mains are expected to be rehabilitated with Mexican funds. However, depending on the availability of funds, additional components may be funded through BEIF.

3.1.3. Technical Feasibility

The final designs of the proposed infrastructure works were completed in accordance with recommendations provided in the Water and Wastewater Manuals developed by the Mexican National Water Commission (CONAGUA). The final design documents were reviewed by CONAGUA and NADBank. The CONAGUA regional office in the state of Baja California validated the technical specifications of the various Project components through official correspondence dated June 27, 2022 (BOO.807.06/108), September 1, 2022 (BOO.807.06/137) and September 9, 2022 (BOO.807.06/140).

An external consultant was hired to survey and assess the current condition of the five force mains. The thickness of the different pipe materials (asbestos-cement, ductile iron and PVC) used for each force main was reviewed and determined to be within the required limits. The analysis results indicate that all the existing automatic air relief and gate valves in all five force mains need to be replaced and force main #1 needs sixteen additional automatic air relief valves. The study also determined that water hammer valves need to be installed for force mains #3, #6 and #7 and that the existing water hammer valves in force main #4 need to be replaced.

To prevent untreated wastewater discharges from flowing into the New River during construction, wastewater flows will be bypassed to an existing manhole downstream when necessary.

3.1.4. Land Acquisition and Right-of-Way Requirements

All the force mains will be rehabilitated within existing municipal easements and rights of way. No additional land or rights of way need to be acquired for Project implementation.

3.1.5. Project Milestones

Once the notice to proceed is issued for rehabilitation of the force mains, the work is expected to take approximately 18 months to complete. Potential factors that could affect the Project completion timeline, such as issues with traffic control, weather or the delivery of materials and accessories, were considered in estimating the construction period.

Table 3 provides a summary of the critical Project milestones and their respective status.

JULY XX, 2023

Table 3
PROJECT MILESTONES

| Key Milestones | Status | |
|--------------------------------------|--|--|
| Environmental clearance - Mexico | Completed July 29, 2021 | |
| Environmental clearance – U.S. | Completed September 13, 2021 | |
| Final designs | Completed September 9, 2022 | |
| Procurement for BEIF grant component | Anticipated in the 3rd quarter of 2023 | |
| Construction period (BEIF portion) | Estimated period of 18 months | |

3.1.6. Management and Operation

Management and operation of the proposed Project will be the responsibility of CESPM, which currently serves 326,347 water hookups and 301,269 wastewater connections in Mexicali. In 2022, the utility treated 2,137 lps (48.5 mgd) of wastewater from the urban area.

Capital investments to extend service or replace deteriorated infrastructure is a priority for CESPM, which has successfully implemented several certified projects. Specifically, CESPM has already rehabilitated approximately 15.5 miles of deteriorated wastewater pipelines, as well as Lift Stations No. 1, No. 3, Centro Civico and Calle G. The rehabilitation of Lift Stations No. 2, No. 4 and No. 5, along with 10 additional small lift stations, is currently under way. CESPM is also working on the preliminary analysis to upgrade both the Las Arenitas WWTP and the Zaragoza WWTP, in order to assure compliance with the new regulatory requirements for discharge quality. NADBank is working with CESPM to review its comprehensive wastewater infrastructure needs, many of which will also be considered for certification.

CESPM is organized in various departments, including Water Treatment, Wastewater Treatment, Operation and Maintenance, Construction, and Management. The utility has an operation and maintenance (O&M) manual that includes routine tasks to ensure proper operation of the system, as well as procedures to address unexpected conditions, including mobile back-up pumps that are used to prevent temporary discharges related to aging pipes or pumps. The impact of the proposed Project on CESPM's O&M budget and procedures has been reviewed and is considered sustainable.

An important sustainable management practice that CESPM has implemented, in coordination with the Baja California Ministry of Environmental Protection (SPA), is a pretreatment program to control the quality of wastewater discharges into its sewer system from industrial and small business customers. The pretreatment program also complies with BEIF program requirements, and the covenants established in BEIF grant agreements for projects previously funded in Mexicali.

⁵ Such discharges must comply with Official Mexican Standard NOM-002-SEMARNAT-1996, which regulates the quality of wastewater discharged into municipal sewer systems.

3.2. Environmental Criteria

3.2.1. Environmental and Health Effects/Impacts

A. Existing Conditions

Deteriorated wastewater collection infrastructure increases the potential for breaks and leaks resulting in untreated wastewater spills, which in turn increases the risks of water contamination, exposure to raw sewage and the vulnerability of residents to waterborne diseases.

Due to its proximity to the New River, wastewater spills on local streets in the Project area are likely to flow into the river. During 2019 and 2020, a total of 20.5 million gallons of wastewater were discharged to the New River due to system failures. In 2022, failures in the Las Arenitas Force Main and in a valve in Lift Station #2, caused a major spill resulting in 133 million gallons of sewage flowing into the New River, which has caused sanitary problems and worsened the contamination of the already impaired water body.

Since the New River flows from Mexico into the U.S. and discharges into the Salton Sea, the poor quality of the river flows running in or near Calexico may lead to health alerts in Imperial County, California.

B. Project Impacts

The Project will provide the infrastructure necessary to collect the wastewater flows and safely convey them to the existing Zaragoza and Las Arenitas WWTPs, which were designed to comply with Official Mexican Standard NOM-001-SEMARNAT-1996 and their respective discharge permits. Nevertheless, both WWTPs present high concentrations of total suspended solids periodically during summer months and elevated total nitrogen concentrations during some winter months. The rehabilitated infrastructure will improve system reliability by preventing leaks and spills and thus significantly reduce the risk of exposure to untreated wastewater and the potential contamination of surface and groundwater.

Specifically, the Project is expected to generate environmental and human health benefits related to the following Project outcomes:

- Improve wastewater collection and conveyance infrastructure for over 235,000 existing residential wastewater connections, benefiting approximately 753,000 residents.
- Reduce the risk of force mains failure and thus prevent approximately 44.8 mgd of uncontrolled wastewater discharges to the New River that could result in transboundary flows to the United States.

C. Transboundary Impacts

The proposed Project is expected to have an overall positive impact on the New River, a transboundary water body flowing from Mexico into the United States. Implementation of the

Project is intended to prevent future system failures resulting in wastewater spills that could contaminate the river, thus helping to protect water resources in California.

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

3.2.2. Compliance with Applicable Environmental Laws and Regulations

The Project will comply with the following official Mexican standards and regulations:

- Official Mexican Standard NOM-001-CONAGUA-2011, 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.⁶
- <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.

A. Environmental Clearance

Pursuant to state regulations, the Baja California State Sustainable Economy and Tourism Ministry (SEST), through the Sustainable Development Agency, determined that an environmental impact assessment (MIA) for the Project was not required and subsequently authorized its implementation through official letter No. SEST/SDS/DGIA/MXL/4058/2021 issued on July 29, 2021.

However, to be eligible for a BEIF grant funded by federal appropriations from the EPA 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). To meet this requirement, a Transboundary Environmental Information Document (EID) was developed and submitted to EPA for consideration.

Based on the findings and conclusions of the EID, EPA Region 9 found that the proposed Project met the parameters for exclusion from a detailed environmental review and does not involve any extraordinary circumstances. On September 13, 2021, EPA issued a Categorical Exclusion, which establishes that the proposed Project will not result in any significant impacts to the environment that may negatively impact the U.S.-Mexico border region.

⁶ On March 3, 2022, NOM-001-SEMARNAT-2021 was published, updating NOM-001-SEMARNAT-1996 and establishing new maximum permissible levels of contaminants in wastewater discharges to national waters and resources. The new standard went into effect on April 3, 2023. In accordance with CONAGUA guidelines, CESPM registered the Las Arenitas and Zaragoza WWTPs in a compliance program, which gives CESPM until 2027 to comply with the new standard.

B. Mitigation Measures

Although Project implementation will have no significant adverse impact on the environment, mitigation measures have been established to address temporary and minor adverse impacts during construction and operation of the Project. To prevent untreated wastewater discharges from flowing into the New River during construction, wastewater flows will be bypassed to an existing manhole downstream when necessary. Other potential impacts, as described in the EID, include:

- The local air basin may be temporarily impacted by carbon monoxide, nitrogen oxides and sulfur dioxide emissions due to vehicles and equipment used during construction.
- A temporary increase in soil erosion and particulate matter emissions may be experienced due to construction.
- Surface water resources could be temporarily impacted by stormwater runoff during the construction phase.
- Noise levels may be elevated during construction activities; however, this impact is short term and will be concentrated in the work area. Potential impacts also include temporary roadway blockages, as well as the presence of workers in the area.

Typical mitigation measures to be implemented include:

- Application of water to reduce the emission of dust particles and soil erosion;
- Hay bales or silt fences to be placed along rights of way to prevent erosion and contamination of surface water resources;
- Vehicle tune-ups to reduce emissions and noise;
- Construction to be scheduled between 8 a.m. and 5 p.m. to prevent extended disturbances from noise;
- Placement of warning signs to prevent potentially hazardous situations; and
- All construction personnel will attend a briefing to familiarize workers with potential construction impacts and mitigation measures.

The resolution issued by SEST for the Project describes mitigation measures, such as requiring the proper disposal of construction debris (including excavated materials) and other measures similar to those listed above. Therefore, the results deriving from implementation of the proposed Project will be positive overall. In addition, the Utility will be responsible for maintaining continuous coordination with SEST and must comply with any water quality requirements, authorization procedures or recommendations that the state agency may issue throughout the life of the Project.

C. Pending Environmental Tasks and Authorizations

There are no environmental authorizations pending.

3.3 Financial Criteria

The total estimated cost of the Project is \$6,800,000, which includes construction costs, as well as supervision and contingencies. The Sponsor requested a BEIF grant to support the implementation of the Project and improve the affordability of the investment. Based on a thorough analysis of both the Project and the Sponsor, NADBank is recommending that EPA approve a BEIF grant for up to \$3,400,000 for its construction. Table 4 presents a breakdown of total Project costs and the proposed sources of funding.

Table 4
USES AND SOURCES OF FUNDS (USD)

| Uses | Amount | % | |
|--------------------------------|--------------|--------------|-------|
| Construction | \$ 5,950,000 | 87.5 | |
| Supervision and contingencies* | 850,000 | 12.5 | |
| TOTAL | \$ 6,800,000 | 100.0 | |
| Sources | Instrument | Amount | % |
| Mexican federal funds | Grant | \$ 1,500,000 | 22.1 |
| CESPM | Equity | 1,900,000 | 27.9 |
| NADBank-BEIF | EPA grant | 3,400,000 | 50.0 |
| TOTAL | | \$ 6,800,000 | 100.0 |

^{*}Supervision will be available for the entire investment. The contingency budget is estimated for the BEIF grant only.

When determining BEIF assistance for projects, BEIF program guidelines require a loan component, when feasible, to finance part of the project. The loan component amount is subject to the sponsor's ability to support the project through user fees, other specific project revenue and/or funds available from state or local sources. In addition, the analysis considers the overall capital investment plan for the utility and the demand it will place on the financial capacity of the project sponsor. In this case, a request to waive the loan requirement was submitted by NADBank to EPA with the intent to maintain CESPM's current debt capacity so that, in the near future, CESPM may use debt financing to fund critical investments that will further advance wastewater improvements.

In addition, for projects located in Mexico, EPA requires that every grant dollar be matched with grant funding from other sources. As indicated in Table 4, with the approval of the loan waiver, total funding from Mexican sources for this Project is estimated at US3.4 million, which will cover 50% of the project costs.

4. PUBLIC ACCESS TO INFORMATION

4.1. Public Consultation

NADBank published the draft certification proposal for a 30-day public comment period beginning June 1, 2023. The following Project documentation is available upon request:

- Environmental Exclusion Letter SEST/SDS/DGIA/MXL/4058/2021 issued by the Baja California Sustainable Economy and Tourism Ministry on July 29, 2021.
- Categorical Exclusion issued by EPA on September 13, 2021.
- Technical validations of the wastewater collection system issued by CONAGUA through official letters BOO.807.06/108 dated June 27, 2022, BOO.807.06/137 dated September 1, 2022 and BOO.807.06/140 dated September 9, 2022.
- Mexicali Strategic Wastewater Plan developed by CESPM in July 2017.

The 30-day public comment period ended on July 1, 2023, with no comments received.

4.2. Outreach Activities

CESPM conducted extensive outreach efforts to publicize the Project, including its costs and user fees, to gain the support of residents in the Project area. In accordance with the requirements of the BEIF program, outreach activities included the establishment of a local steering committee, public meetings and access to appropriate project information, as described in the Public Participation Plan.

The Local Steering Committee was established on July 28, 2021, with members of the community and utility staff. The steering committee developed the Public Participation Plan and periodically met with the Project team to help CESPM disseminate information regarding the Project. The Steering Committee, with assistance from the Project Sponsor, prepared a fact sheet and a PowerPoint presentation about the Project. Because of public health concerns and social-distancing requirements related to the COVID-19 pandemic, public meetings were prohibited, and other forms of outreach were used to disseminate information about the Project. For that reason, in lieu of a first public meeting, CESPM distributed a fact sheet with the project information on September 28 and 29, 2021, and conducted a survey, which indicated that 100% of residents surveyed supported the Project.

Based on improved conditions and an easing of restrictions regarding public gatherings, CESPM held a public meeting on December 7, 2022, to present the final Project scope, proposed financial structure and implementation timeline. The meeting offered the residents in the project area a public forum to learn about the Project and to share any comments. The meeting was attended by members of the steering committee, the city mayor, state and CESPM representatives and approximately 125 local residents. After the meeting, the attendees completed a survey, where 100% of respondents indicated that they understood the project and expressed their support.

financiamiento/50332897

Fernández Samaniego.

Additionally, 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. Media attention over the past two years has documented recurring conditions related to untreated discharges. A summary of some of the articles and news reports found is presented below.

- Imagen del Golfo (March 13, 2023) "Baja California y NADBank concretan financiamiento para el suministro y saneamiento del agua." [Baja California and NADBank execute financing for water supply and wastewater treatment]. To reverse the historical backlog in water infrastructure and secure an adequate supply for Baja California households, as well as to take aggressive action regarding wastewater issues, Baja California Governor Marina del Pilar Avila Olmedo executed the state's first sustainability financing with NADBank for \$3.0 billion pesos. https://imagendelgolfo.mx/nacional/baja-california-y-nadbank-concretan-
- Redacción/Adelante Valle (December 8, 2022) "Anuncian en Mexicali proyecto de mejora de calidad de agua" [Water quality improvement project announced in Mexicali]. With a binational investment of more than \$115.8 million pesos managed by the state government, a project to rehabilitate force mains will be implemented, which will enhance the environment and benefit 700,000 Mexicali residents, reported by the Secretary for Water Management, Treatment and Protection, José Armando
 - https://www.ivpressonline.com/adelantevalle/anuncian-en-mexicali-proyecto-de-mejora-de-calidad-de-agua/article 73819d04-769a-11ed-90ff-27d5ad9d9466.html
- <u>El Mexicano</u> (December 8, 2022) "Se celebra segunda reunión pública para la rehabilitación de emisores a presión" [Second public meeting held for the rehabilitation of force mains]. The second public meeting for the proposed rehabilitation of force mains in Mexicali was held on December 7, 2022. https://www.el-mexicano.com/estatal/se-celebra-segunda-reunion-publica-para-la-rehabilitacion-de-emisores-a-presion-en-mexicali/2169108
- <u>Cadena Noticias</u> (January 21, 2022) "Envía Mexicali aguas negras a EEUU por ruptura de drenaje" [Sewer line collapse in Mexicali sends sewage to the United States]. A landslide broke the seal between the pipe joints causing the force main to collapse in the Satélite subdivision. CESPM had to shut down Lift Station #4 and temporarily divert incoming flows to the New River.

 https://cadenanoticias.com/regional/2022/01/envia-mexicali-aguas-negras-a-eeuu-por-ruptura-de-drenaje
- <u>CESPM web page</u> (September 6, 2021) "Concluyen obras de reparación del socavón en el fraccionamiento Sonora" [Work to repair sinkhole completed in Sonora subdivision]. The sinkhole was fully repaired with the installation of 14 meters of 60-inch polyethylene pipe and perimeter concrete rings to reinforce the connections made inside Drain 134.

http://www.cespm.gob.mx/tf-noticias.html?not=1761#gsc.tab=0

- <u>Unimexicali</u> (February 11, 2021) "Buscan reducir flujos transfronterizos de aguas negras al Río Nuevo" [Looking to reduce transboundary sewage flows to the New River]. CESPM announced approval of two wastewater projects that will benefit communities on both sides of the border by minimizing the risk of sewer spills and wastewater spills onto streets and into the New River.
 https://www.unimexicali.com/noticias/mexicali/625817/buscan-reducir-flujos-transfronterizos-de-aguas-negras-al-rio-nuevo.html
- <u>El Imparcial</u> (September 18, 2020) "Descarga CESPM agua sin tratar al Río Nuevo" [CESPM discharging untreated water to the New River]. CESPM discharged untreated sewage into the New River and thus alerted the Imperial County Public Health Department. The notice was made through the International Boundary and Water Commission (IBWC) to warn Imperial County officials about the impacts that the sewage discharge could have on the river that flows into the Salton Sea. https://www.elimparcial.com/mexicali/mexicali/Descarga-CESPM-aguas-sintratar-al-Rio-Nuevo-20200918-0025.html
- <u>La Voz de la Frontera</u> (June 20, 2020) "Alerta Estados Unidos por descargas de aguas residuales al Río Nuevo" [U.S. issues warning due to wastewater discharges to the New River]. IBWC issued a notice about wastewater discharges to the New River from Mexicali. The Imperial County Public Health Department activated an alert asking residents to avoid contact with the river water.

 https://www.lavozdelafrontera.com.mx/local/alerta-eu-por-descargas-de-aguas-residuales-en-rio-nuevo-5367155.html

The activities carried out by the Project Sponsor and the articles identified above demonstrate that the public has received periodic information regarding the infrastructure problems and need for wastewater collection system improvements. The Project Sponsor informed NADBank that no comments expressing concern about the Project were received during the public outreach process, and no opposition to the Project was detected in the media search.

The proposed Project is one of many investment efforts currently under development to resolve uncontrolled discharges to the New River and will help address the main concerns identified by residents in Mexicali.

5. RECOMMENDATION

Certification Criteria Compliance

The Project falls within the eligible sector of wastewater and is located in the border region, as required under NADBank Charter. The 30-day public comment period ended on July 1, 2023, with no comments received. The Project review performed by the NADBank Chief Environmental Officer confirms that the Project complies with all the certification requirements, and there are no pending activities required for compliance.

Funding Criteria Compliance

The Project Sponsor applied for funding through the U.S.-Mexico Border Program prioritization process and was selected for technical assistance through the Project Development Assistance Program (PDAP) and construction assistance through the Border Environment Infrastructure Fund (BEIF). The Project meets all BEIF program criteria and is expected to be approved by EPA to receive a BEIF grant for up to US\$3,400,000 for its construction.

Accordingly, based on the foregoing conclusions as supported and presented in detail in this certification proposal, NADBank hereby recommends the certification of the Project.