

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY AND  
UNITED STATES SECTION OF THE INTERNATIONAL BOUNDARY  
AND WATER COMMISSION**

**JOINT RECORD OF DECISION**

**FOR THE**

**FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT**

**FOR**

**UNITED STATES-MEXICO-CANADA AGREEMENT MITIGATION OF  
CONTAMINATED TRANSBOUNDARY FLOWS PROJECT**

Approved by:

**MARTHA ACEVES** Digitally signed by MARTHA ACEVES  
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Date

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*Commissioner, United States Section  
International Boundary and Water Commission*

Date

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**1. INTRODUCTION**

This Record of Decision (ROD) has been prepared in accordance with 40 Code of Federal Regulations (CFR) § 1505.2 and 40 CFR § 6.208 to document the United States (U.S.) Environmental Protection Agency (EPA) and the U.S. Section of the International Boundary and Water Commission (USIBWC) decision on the United States-Mexico-Canada Agreement (USMCA) Mitigation of Contaminated Transboundary Flows Project (the Proposed Action). The decision is based on the Final Programmatic Environmental Impact Statement (PEIS) developed in accordance with the National Environmental Policy Act (NEPA) 42 U.S.C. § 4231 *et seq.*, Council on Environmental Quality (CEQ) NEPA Implementing Regulations (40 CFR Parts 1500–1508 [2022]), EPA Procedures for Implementing NEPA (40 CFR Part 6), and USIBWC NEPA Implementing Procedures (48 Federal Register 44083).

EPA and USIBWC, as joint lead agencies, published a Notice of Availability of the Final PEIS on November 18, 2022 and invited public review and comment on the Final PEIS. EPA and USIBWC identified two alternatives for evaluation in the PEIS to address the purpose and need for the action: a limited funding approach for implementing the Proposed Action (Alternative 1) and a more comprehensive solution for implementing the Proposed Action (Alternative 2), as well as a third alternative of no disbursement of funding and continuation of current wastewater management practices (No-Action Alternative). The USMCA Mitigation of Contaminated Transboundary Flows Project aims to reduce transboundary flows from Tijuana that cause adverse public health and environmental impacts in the Tijuana River watershed and adjacent coastal areas. Under present conditions, deficiencies in the treatment, piping, and pump station network in Tijuana contribute to contaminated transboundary flows entering the U.S. via coastal waters of the Pacific Ocean, the Tijuana River, and tributaries that flow north through canyons to the Tijuana River Valley and Estuary.

## 2. DECISION

EPA and USIBWC have decided to fund and implement Alternative 2 (Core and Supplemental Projects)—which was the preferred alternative identified in the Final PEIS—with selected sub-options and minor variations as described below based on engineering, environmental, and economic considerations and binational agreements. The commitments of the U.S. under this ROD are necessarily contingent upon the availability of appropriated funds or upon enactment of authorizing legislation providing other sources of funding.

- Core Projects:
  - Project A (Expanded South Bay International Wastewater Treatment Plant [ITP]), Option A3 (Expand to 60 million gallons per day [MGD]). *Variation from PEIS:* Implementation of Option A3 will take a phased approach. During the first phase of implementation, USIBWC will expand the ITP up to 50 MGD using the USMCA appropriation. In the second phase, USIBWC intends to expand the ITP up to 60 MGD (contingent on availability of funds).
  - Project B (Tijuana Canyon Flows to ITP), Option B1 (Trenching via Smuggler’s Gulch and Monument Road). Implementation is contingent on availability of funds.
  - Project C (Tijuana Sewer Repairs). To be implemented using a combination of Border Water Infrastructure Program (BWIP) and Mexico funds.
  - Project D (Advanced Primary Treatment Plant [APTP] Phase 1). Implementation is contingent on availability of funds.
- Supplemental Projects:
  - Project E (APTP Phase 2). Implementation is contingent on additional environmental analysis and availability of funds.
  - Project F (U.S.-side River Diversion to APTP). Implementation is contingent on additional environmental analysis and availability of funds.
  - *Variation from PEIS:* The selected alternative does not include U.S. funding and implementation of Project G (New San Antonio de los Buenos Wastewater Treatment Plant [SABTP]) for construction of a 5-MGD plant at the SABTP site to provide secondary treatment via conventional activated sludge, followed by disinfection. Instead, International Boundary and Water Commission Treaty Minute No. 328 resulted in the inclusion of a larger, 18-MGD plant at the SABTP site to provide secondary treatment via an oxidation ditch process, followed by discharge via a new 656-foot ocean outfall.<sup>1</sup> The 18-MGD SABTP is to be

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<sup>1</sup> While the project description in Treaty Minute No. 328 does not specify disinfection prior to discharge, EPA and USIBWC anticipate that disinfection will be necessary for the effluent to meet water quality standards.

funded and implemented entirely by Mexico and thus, without a federal nexus, is not within U.S. decision-making jurisdiction.

- Project H (Tijuana Wastewater Treatment Plant [WWTP] Treated Effluent Reuse). To be implemented using a combination of BWIP and Mexico funds (contingent on availability of funds).
- Project I (ITP Treated Effluent Reuse). Implementation is contingent on additional environmental analysis and availability of funds.
- Project J (Trash Boom[s]). Implementation is contingent on additional environmental analysis and availability of funds.

Table 2-1 provides an overview of the alternatives analyzed in the Final PEIS and the alternative selected in this ROD.

With this ROD, EPA and USIBWC have fulfilled their legal obligations under NEPA for the Core Projects.<sup>2</sup> However, the Supplemental Projects will likely require additional analysis in subsequent tiered NEPA document(s) before action can be taken.

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<sup>2</sup> Under Project A, the impacts of expanding the ITP in two phases will potentially differ from the impacts addressed in the Final PEIS—for example, due to changes in the affected environment that occur before the second phase (which is not likely to be implemented within 5 years of this ROD), and/or an increase in the extent and duration of construction activities for the two phases combined. If EPA and USIBWC determine that expanding the ITP in two phases (i.e., initially up to 50 MGD and subsequently up to 60 MGD) would result in substantial environmental impacts that were not evaluated in the PEIS or significant new information or circumstances relevant to the environmental concerns that have a bearing on the proposed action or its impacts, EPA and USIBWC will prepare a supplemental NEPA analysis for the second phase. In cases where funding for a Core Project does not become available within 5 years of this ROD, EPA and USIBWC would assess whether a supplemental NEPA analysis is necessary to account for changes in the affected environment and/or the project's anticipated impacts.

**Table 2-1. Comparison of Alternatives Analyzed in the Final PEIS and the Selected Alternative**

Project		Alternatives in Final PEIS <sup>a</sup>		Selected Alternative in this ROD (Minor Variation of Alternative 2)
		Alternative 1	Alternative 2 (Preferred Alternative)	
<i>Core Projects</i>				
A. Expanded ITP	Option A1: Expand to 40 MGD	■	■	■ (two phases)
	Option A2: Expand to 50 MGD	or ■	or ■	
	Option A3: Expand to 60 MGD	or ■	or ■*	
B. Tijuana Canyon Flows to ITP	Option B1: Trenching via Smuggler's Gulch and Monument Rd	■	■*	■
	Option B2: Trenchless Installation via Smuggler's Gulch and Under Mesa	or ■	or ■	
	Option B3: Connect to Existing Canyon Collector System	or ■	or ■	
C. Tijuana Sewer Repairs		■	■	■
D. APTP Phase 1		■	■	■
<i>Supplemental Projects</i>				
E. APTP Phase 2			■	■
F. U.S.-side River Diversion to APTP			■	■
G. New SABTP			■	
H. Tijuana WWTP Treated Effluent Reuse			■	■
I. ITP Treated Effluent Reuse			■	■
J. Trash Boom(s)			■	■

a – The Final PEIS also analyzed a No-Action Alternative, which would not implement any of the projects in this table.

Symbol key:

- The project is part of the alternative.
- \* The Final PEIS identifies these as the preferred options for Projects A and B.

### **3. ALTERNATIVES AND CONSIDERATIONS BALANCED IN MAKING THE DECISION**

In arriving at the decision to fund and implement a minor variation of Alternative 2, EPA and USIBWC considered three alternatives in the Final PEIS, including the feasibility of each alternative; the potential environmental impacts of each alternative; binational agreements between the U.S. and Mexico; input from federal, state, tribal, and local governments; and input from public commenters.

In 2022, the International Boundary and Water Commission (IBWC) signed Treaty Minute No. 328, “Sanitation Infrastructure Projects in San Diego, California — Tijuana, Baja California for Immediate Implementation and for Future Development”, which designates sanitation projects

for immediate implementation (i.e., operational by 2027) in San Diego and Tijuana as well as projects for future consideration and negotiation. Treaty Minute No. 328 identifies four projects for immediate implementation that have corresponding projects in the Final PEIS (Projects A, C, G, and H). Additionally, Treaty Minute No. 328 identifies other projects for future consideration that have corresponding projects in the Final PEIS (Projects B, D, E, F, I, and J). While Treaty Minute No. 328 defines priorities and identifies responsibilities for funding, project implementation, and operations and maintenance, it also acknowledges that projects are subject to applicable laws and regulations in each country (e.g., the decision-making process required by NEPA for projects with a federal nexus). As a result of consideration of Treaty Minute No. 328, EPA and USIBWC excluded Project G (New SABTP) from the selected alternative because Project G is no longer within U.S. decision-making jurisdiction and would not receive any U.S. funds. Since there is no federal nexus to Project G, it is therefore not subject to NEPA.

In the Final PEIS, EPA and USIBWC identified three alternatives: no disbursement of funding and continuation of current wastewater management practices (No-Action Alternative), a limited funding approach for implementing the Proposed Action (Alternative 1), and a more comprehensive solution for implementing the Proposed Action (Alternative 2). EPA and USIBWC identified Alternative 2 (Core and Supplemental Projects) as the preferred alternative in the Final PEIS because it would best fulfill the purpose and need for action as it is the comprehensive solution. The Supplemental Projects listed in Alternative 2 are necessary components to most effectively address public health concerns that stem from poor water quality and trash flows. As discussed in Section 3.3.2 (Benefits of Alternative 2), Alternative 2 would be the most effective alternative for addressing numerous water quality, trash, public health, climate change, and environmental justice concerns and would further efforts to achieve water quality standards in coastal waters and in the Tijuana River and Estuary. EPA and USIBWC estimate that full implementation of Alternative 2 would nearly eliminate tourist (dry) season beach impacts in southern San Diego County resulting from exposure to norovirus pathogens in untreated wastewater discharges. These public health and environmental benefits are the primary reason for selecting a minor variation of Alternative 2 in this decision.

Within Alternative 2, EPA and USIBWC determined that Project A, Option A3 (Expand to 60 MGD) and Project B, Option B1 (Trenching via Smuggler's Gulch and Monument Road) were the preferred sub-options. Economic and technical feasibility considerations are the primary reasons for selecting these sub-options. Project A, Option A3 was preferred because it would provide capacity to accommodate flows from the International Collector and the canyons, as well as capacity for current and projected wastewater flows through 2050. Project B, Option B1 was preferred because it would be considerably less expensive than Option B2 (Trenchless Installation via Smuggler's Gulch and Under Mesa) and has considerably more certainty in its engineering and operational feasibility than Option B3 (Connect to Existing Canyon Collector System).

Descriptions of all Final PEIS alternatives and their impacts are included in the subsections below.

### **3.1 No-Action Alternative**

Under the No-Action Alternative, EPA and USIBWC proposed to not expend the USMCA Implementation Act (Public Law 116-113) appropriation and other U.S. appropriations to fund components of the Comprehensive Infrastructure Solution. The Mexico-side river diversion and wastewater treatment options that exist currently would continue as-is unless modified through separate, less-comprehensive projects and funding mechanisms.

The No-Action Alternative would not meet the goals and objectives of the USMCA Implementation Act. Specifically, EPA would not be in compliance with Section 821 of the Act, which gives authority and direction to the EPA Administrator to “carry out the planning, design, construction, and operation and maintenance of high priority treatment works in the covered area to treat wastewater (including stormwater), nonpoint sources of pollution, and related matters resulting from international transboundary water flows originating in Mexico.”

#### **3.1.1 *Significant Impacts of the No-Action Alternative***

The No-Action Alternative would result in the continuation, and worsening over time, of significant impacts to freshwater, estuarine, and marine resources and water quality; negative effects to inland biological resources from contaminated transboundary flows; the exacerbation of unsafe field conditions for U.S. Customs and Border Protection (CBP) personnel; and exacerbation of water quality issues at public beaches.

#### **3.1.2 *Benefits of the No-Action Alternative***

The No-Action Alternative would result in no benefits to the environment or public health.

### **3.2 Alternative 1: Core Projects**

Under Alternative 1, EPA and USIBWC proposed to implement four Core Projects identified as Projects A, B, C, and D to address contaminated transboundary flows, subject to the availability of sufficient funding. These four projects, summarized below, constituted Alternative 1 in the Final PEIS.

**Project A (Expanded ITP):** Project A includes the expansion of the 25-MGD ITP for secondary treatment of wastewater at one of three different average daily flow capacity options, 40 MGD (Option A1), 50 MGD (Option A2), or 60 MGD (Option A3); construction of a new solids processing facility; installation of other new supporting facilities; associated site modifications; and the discharge of treated effluent to the Pacific Ocean through the South Bay Land Outfall/South Bay Ocean Outfall (SBLO/SBOO). Option A3 (Expand to 60 MGD) was identified as the preferred sub-option. The primary purpose of expanding the ITP is to reduce impacts to the U.S. coast by treating wastewater from the International Collector that otherwise would be discharged to the Pacific Ocean via San Antonio de los Buenos (SAB) Creek without adequate treatment, or any treatment at all. Depending on the proposed capacity of the plant, the expanded ITP may also provide treatment for sewage collected in the canyons (Project B), as well as for additional sewage flows produced by the additional future population of Tijuana. Project A construction is estimated to be completed by no later than 2027.

**Project B (Tijuana Canyon Flows to ITP):** Project B includes the installation of a wastewater conveyance system from Matadero Canyon and Los Laureles Canyon in Mexico to the expanded ITP for treatment (see Project A for details on the ITP expansion) and associated temporary construction activities. Following treatment, these flows would be discharged to the Pacific Ocean through the SBLO/SBOO as described for Project A. Three configurations and/or installation methods of the conveyance line were considered: trenching through Smuggler's Gulch and Monument Rd (Option B1), trenchless installation in Smuggler's Gulch and under the mesa (Option B2), and connection to the existing canyon collector system (Option B3). Option B1 (Trenching via Smuggler's Gulch and Monument Road) was identified as the preferred sub-option. The primary purpose of the proposed conveyance system is to reduce the amount of dry-weather wastewater flows that are currently discharged with little to no treatment to the Pacific Ocean via SAB Creek.

**Project C (Tijuana Sewer Repairs):** Project C includes rehabilitating or replacing targeted sewer collectors in the Tijuana metropolitan area in order to reduce the amount of untreated wastewater that currently leaks from the sanitary sewer system and enters the Tijuana River. By reducing wastewater leaks to the river in Tijuana, Project C would improve downstream water quality in the Tijuana River Valley and Estuary by both reducing the frequency of dry-weather transboundary flows and conveying more wastewater to the expanded ITP for treatment (see Project A).

**Project D (AFTP Phase 1):** Project D includes the construction and operation of a 35-MGD AFTP for advanced primary treatment of diverted water from the existing river diversion in Mexico and associated pump station known as PB-CILA,<sup>3</sup> rehabilitation and extension of the existing force main from PB-CILA to the new AFTP, installation of other new supporting facilities, associated site modifications, and the discharge of treated effluent to the Pacific Ocean through the SBLO/SBOO. The primary purpose of Phase 1 of the proposed AFTP is to reduce impacts to the U.S. coast by treating diverted river water that otherwise would be discharged to the Pacific Ocean via SAB Creek without adequate treatment, or any treatment at all.

### ***3.2.1 Significant Impacts of Alternative 1***

While Alternative 1 would result in an overall substantial net reduction in pollutant loadings to the Pacific Ocean, it would result in a localized but substantial increase in pollutant loadings discharged via the SBOO (i.e., discharges of treated effluent from the expanded ITP and the AFTP). Other significant impacts include potential objectionable odor emissions from the ITP anaerobic digestion process, also resulting in disproportionately high and adverse effects;<sup>4</sup> disproportionately high and adverse effects due to minor increases in fine particulate matter (PM<sub>2.5</sub>) and diesel particulate matter (PM) emissions in areas that currently experience high overburdens from PM<sub>2.5</sub> and diesel PM; potential cumulative daily respirable particulate matter (PM<sub>10</sub>) emissions exceeding Air Quality Impact Assessment trigger levels and resulting in disproportionately high and adverse effects; increase in greenhouse gas (GHG) emissions directly and through energy use, transportation, and waste generation, if built as conceptualized;

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<sup>3</sup> PB-CILA stands for Planta de Bombeo-Comisión Internacional de Limites y Aguas.

<sup>4</sup> In the environmental justice analysis in the PEIS, EPA and USIBWC analyzed whether the Proposed Action would result in disproportionately high and adverse effects on minority and/or low-income populations in the project area, such as potential exacerbation of existing social, economic, health, or environmental burdens.

disproportionately high and adverse effects due to minor increases in traffic associated with operations, commuting, and waste hauling in areas currently experiencing extremely high overburdens from traffic; potential localized, short-term exceedances of noise levels during construction, including in specific areas near noise-sensitive receptors; and potential long-term impacts from increases in noise due to continuous operation of the biogas-fired engine and electrical generator.

### ***3.2.2 Benefits of Alternative 1***

Alternative 1 would reduce transboundary flows from Tijuana that convey pollutants and sewage into the U.S., thereby reducing adverse public health and environmental impacts in the Tijuana River watershed and coastal areas. Alternative 1 would reduce the frequency of transboundary river flows by 56 percent and reduce transboundary BOD<sub>5</sub> loads<sup>5</sup> in the Tijuana River by 66 percent. Alternative 1 would have a net reduction in pollutant loadings to the Pacific Ocean. EPA and USIBWC estimate that full implementation of Alternative 1 would reduce tourist (dry) season beach impacts in southern San Diego County<sup>6</sup> by 73 to 92 percent. Alternative 1 would have potential long-term beneficial impacts on freshwater and marine water quality, wetlands, inland biological resources, marine wildlife, essential fish habitat, recreational parks and beaches, water-oriented recreational activities and oceanfront land, CBP and Navy public service missions, public health, and tourism and economic activity associated with water quality improvements.

### **3.3 Alternative 2: Core and Supplemental Projects**

Under Alternative 2, EPA and USIBWC proposed to implement all components of the Comprehensive Infrastructure Solution that are the responsibility of the U.S. The combination of the USMCA Implementation Act appropriation and funds from existing programs such as EPA's BWIP would not be able to fund the majority of this more comprehensive approach, which would require substantial additional funding. EPA and USIBWC developed a comprehensive solution to address transboundary flows which consists of the four Core Projects described above and the six Supplemental Projects (E, F, G, H, I, and J) described below.

**Project E (APTP Phase 2):** Project E includes the expansion of the 35-MGD APTP (Phase 1; see Project D) to an average daily flow capacity of up to 60 MGD (Phase 2). Depending on operating conditions at the existing 35-MGD PB-CILA river diversion in Mexico, the expanded APTP would treat contaminated river water from PB-CILA (during dry-weather flows) and/or a new river diversion farther downstream in the U.S. (see Project F). The primary purpose of Phase 2 of the proposed APTP is to reduce downstream impacts in the Tijuana River and Estuary by providing additional capacity to treat contaminated river water.

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<sup>5</sup> BOD<sub>5</sub>, or the biochemical oxygen demand over a five-day period, is an indicator of the amount of organic pollution in wastewater.

<sup>6</sup> Here, "beach impacts" refers to Beach Impact Fraction (BIF), which represents impacts resulting from exposure to norovirus pathogens in untreated wastewater discharges. EPA and USIBWC estimated tourist (dry) season BIF by interpolating the results of a 2021 modeling study by the Scripps Institution of Oceanography. See Section 4.2 (Marine Waters) and Appendix K (Interpolation of Modeled Beach Impacts) of the Final PEIS for more information on these methods and results.

**Project F (U.S.-side River Diversion to APTP):** Project F includes construction of a U.S.-side diversion system in the Tijuana River to convey transboundary river flows to the APTP for treatment. The primary purpose of Project F is to improve water quality in the Tijuana River Valley, the Tijuana River Estuary, and coastal communities in southern San Diego County by diverting transboundary river flows from the Tijuana River in the U.S. The capacity and operation of the river diversion, and thus the degree and extent of downstream water quality improvements, would depend on the capacity of the APTP that receives and treats the diverted flows. Specifically, with a 35-MGD APTP (Project D), the U.S.-side river diversion would be designed to divert 35 MGD, primarily of dry-weather transboundary river flows and a portion of smaller wet-weather transboundary river flows. With a 60-MGD APTP (Project E), the U.S.-side river diversion would be designed to divert 60 MGD, including dry-weather transboundary river flows and a larger portion of wet-weather flows.

**Project G (New SABTP):** Project G includes the construction of a new 5-MGD conventional activated sludge plant at the existing SABTP site in Mexico for secondary treatment of untreated wastewater that is currently discharged to the Pacific Ocean via SAB Creek. The primary purpose of Project G is to improve the quality of wastewater discharged from SAB Creek and reduce the associated water quality impacts along the Pacific Ocean coastline near the international border.

**Project H (Tijuana WWTP Treated Effluent Reuse):** Project H includes installation of conveyance pipelines to route between 10.3 and 16.2 MGD of treated effluent from the Arturo Herrera and La Morita WWTPs (which currently discharge to the Tijuana River) in Mexico to the Rodriguez Dam impoundment. The primary purpose of Project H is to improve water quality in the Tijuana River Valley and Estuary by reducing the frequency of dry-weather transboundary flows caused by river flow rates that exceed the PB-CILA diversion capacity.

**Project I (ITP Treated Effluent Reuse):** The purpose of Project I is to convey up to 40 MGD of treated effluent from the ITP to Mexico for potential beneficial reuse. This project involves constructing a new pump station in the northwest corner of the ITP parcel and a 42-inch diameter, 3,700-foot force main from the pump station to Pump Station 1B in Mexico.

**Project J (Trash Booms):** Project J includes the installation of one or more trash booms in the Tijuana River channel in the U.S., similar to those currently installed in Smuggler's Gulch and Goat Canyon, to capture trash and allow for its removal from the river. The purpose of the project is to reduce downstream trash-related impacts in the Tijuana River Valley and Estuary, particularly due to wet-weather transport of trash to downstream areas. The trash boom(s) would be installed in the river main channel between the U.S.-Mexico border and Dairy Mart Road and would be designed to float on the surface and capture floatable trash, such as plastics.

### ***3.3.1 Significant Impacts of Alternative 2***

Alternative 2 would result in the same significant impacts as Alternative 1, as well as potential impacts to potential jurisdictional waters of the U.S. and a potential permanent reduction in acreage of potential jurisdictional water resources requiring an individual Clean Water Act (CWA) Section 404 permit due to implementation of the U.S.-side river diversion and trash boom(s); potential short-term substantial disturbances of special-status wildlife and fish species during construction in the Tijuana River main channel and floodplain; potential long-term

substantial disturbances of special-status plant and wildlife species associated with downstream riparian habitat due to reduced wet-weather transboundary flows; potential reductions in special-status fish migration ability and/or disturbance of special-status fish rearing conditions in the Tijuana River Estuary due to reduced wet-weather transboundary flows; potential detracting from the visual character or quality of the localized area due to implementation of the U.S.-side river diversion and trash boom(s), also resulting in potential disproportionately high and adverse effects; potential objectionable odors and/or impacts to sensitive receptors from the trash boom operation; a potential impediment to CBP operations due to the U.S.-side river diversion and trash boom(s); an increase in unsafe field conditions for CBP personnel due to the trash boom(s); an introduction of breeding areas for disease-spreading vectors due to the U.S.-side river diversion and trash booms(s), also resulting in disproportionately high and adverse effects; and potential substantial localized increases in traffic volumes and congestion from Project J, depending on the frequency of trash hauling. Before implementation, Supplemental Projects triggering NEPA review and their impacts would be analyzed further in subsequent tiered NEPA analyses.

### 3.3.2 *Benefits of Alternative 2*

Alternative 2 would result in additional (in comparison to Alternative 1) long-term beneficial impacts on freshwater and coastal marine water quality, wetlands, inland biological resources, recreational parks and beaches, Navy public service missions, public health, and tourism and economic activity associated with water quality improvements. Alternative 2 includes Supplemental Projects, which are necessary components to effectively reduce contaminated transboundary flows. Alternative 2 would therefore be the most effective alternative for addressing numerous water quality, public health, trash, climate change, and environmental justice concerns, for reasons including, but not limited to, the following:

- *Water quality and public health:* Alternative 2 would further reduce transboundary flows and pollutant loadings in the Tijuana River. For example, implementation of Alternative 2 would reduce the frequency of transboundary river flows by 76 percent and reduce transboundary BOD<sub>5</sub> loads in the Tijuana River by 87 percent. Full implementation of Alternative 2 would therefore be more effective than Alternative 1 in helping alleviate impaired water listings for the Tijuana River and the Tijuana River Estuary and would provide greater water quality-related benefits to wetlands and inland biological resources. Additionally, EPA and USIBWC estimate that full implementation of Alternative 2 would nearly eliminate tourist (dry) season beach impacts in southern San Diego County,<sup>7</sup> reducing them by more than 99 percent. Alternative 2 would therefore result in a further reduction of public health impacts from contaminated transboundary marine flows, a further reduction of impacts to in-water Navy training activities, and a further reduction of water quality-related barriers to tourism and related economic activity in coastal communities.
- *Trash:* While Alternative 1 does not include any projects that specifically target trash, Alternative 2 includes Project J, which would capture floatable trash in the main channel of the Tijuana River and would reduce trash and debris deposits in the Tijuana River Valley. EPA and USIBWC estimate that the trash boom(s) in Project J would trap 75

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<sup>7</sup> See footnote 6 in Section 3.2.2 (Benefits of Alternative 1) regarding the definition of “beach impacts.”

percent of the trash load in the main channel, or in other words, capture 11,300 cubic yards of trash annually.

- *Climate change*: Alternative 2 would provide potential water reuse opportunities under Projects H and I to help reduce competition for increasingly scarce water resources. Alternative 1 alone does not include projects for treated effluent reuse.
- *Environmental Justice*: Under current conditions, minority and low-income communities in the Tijuana River Valley experience extremely high burdens for several environmental justice indicators, including but not limited to proximity to wastewater discharges and impaired water bodies. While Alternative 1 would reduce some of these burdens by reducing contaminated transboundary river flows, Alternative 2 would more effectively address these burdens by reducing contaminated flows even further and also reducing trash.

For these reasons, and after considering a variety of factors (e.g., economic, environmental, and technical), EPA and USIBWC determined that Alternative 2 (Core and Supplemental Projects) would best fulfill the purpose and need for action and therefore identified it as the preferred alternative in the Final PEIS.

#### **4. ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

The CEQ NEPA Implementing Regulations require the identification of the “environmentally preferable” alternative 40 CFR § 1505.2. The environmentally preferable alternative is Alternative 2 from the Final PEIS. Based on the analyses in the Final PEIS, Alternative 2 would be the most effective alternative for addressing numerous water quality, trash, public health, climate change, and environmental justice concerns and would further efforts to achieve water quality standards in coastal waters and in the Tijuana River and Estuary.

In this ROD, and as discussed in Section 2 (Decision), EPA and USIBWC have selected a minor variation of Alternative 2 under which Project A (Expanded ITP) will be implemented in two phases and, rather than implementing Project G (New SABTP) with U.S. funding, EPA and USIBWC defer to Mexico’s commitment under Treaty Minute No. 328 to construct and operate a new SABTP. As described below, this approach is expected to provide similar environmental benefits as Alternative 2 from the Final PEIS:

- Project A: Expansion of the ITP in two phases (initial expansion to 50 MGD and a second expansion to 60 MGD) is expected to result in the same environmental benefits as a single-phase expansion. This assumes that the second phase will be completed and operational before the volume of wastewater requiring treatment increases to a level that exceeds the capacity of the initial expansion (e.g., due to population growth in Tijuana and/or implementation of Project B [Tijuana Canyon Flows to ITP] to convey canyon flows from Tijuana to the ITP).
- Project G: Mexico’s commitment under Treaty Minute No. 328 to construct and operate a new 18-MGD SABTP is expected to provide similar environmental benefits as Project G, as evaluated in the Final PEIS. EPA and USIBWC expect Mexico’s proposed 18-MGD SABTP to achieve similar pollutant loading reductions as those estimated for

Project G because it would include secondary treatment and is likely to also include disinfection. Therefore, the environmental improvements resulting from the selected alternative, when considered in combination with those resulting from Mexico's construction and operation of a new 18-MGD SABTP, are anticipated to be approximately equivalent to those of Alternative 2 as evaluated in the Final PEIS.

## **5. SUBSTANTIVE COMMENTS ON THE FINAL PEIS**

The Final PEIS was released for a 30-day public review period that ended on December 19, 2022. EPA and USIBWC received 10 comments on the Final PEIS by the end of the public review period. Of the 10 received comments, four supported the Proposed Action in general, with three of those commenters specifically expressing support for Alternative 2 (i.e., the Comprehensive Infrastructure Solution). Three commenters opposed the Proposed Action, and three did not explicitly discuss the Proposed Action, instead commenting exclusively on CBP's Tijuana River Border Barrier project. Substantive comments on the Final PEIS are addressed below.

Seven letters made comments regarding CBP's Tijuana River Border Barrier project (the "CBP Project"), which is not part of the Proposed Action but is addressed as a cumulative project in the Final PEIS consistent with the requirements of NEPA. (CBP is exempt from the requirement of NEPA analysis pursuant to Section 102 of the Illegal Immigration Reform and Immigration Responsibility Act of 1996, Pub. L. 104-208, Div. C, as amended, and the waiver issued by the Secretary of Homeland Security on February 8, 2019 [Fed. Reg. Vol. 84, No. 27, pp. 2897-2898]). Commenters were specifically concerned that the barrier would pose a serious risk of catastrophic flooding and impacts to aquatic resources and could undercut the desired benefits of the Proposed Action. Commenters also requested that the CBP Project undergo further analyses (including NEPA analysis), consultation, and coordination regarding the barrier's potential environmental and social impacts in order to assess any need for design modifications. EPA has forwarded these comments to CBP.

USIBWC reviews projects within its Flood Control Projects, like the Tijuana Flood Control Project where the CBP Project is located, to ensure any planned structures do not cause obstruction to the design flood and that the Flood Control Project functionality remains as designed. This is done in coordination with the Mexican Section of the IBWC. USIBWC received and reviewed the 20%, 60%, 90%, and 100% designs of the CBP Project, including the hydraulic modeling prepared for the CBP Project, as well as CBP's draft operation and maintenance (O&M) plan for the O&M of the structure. The hydraulic model analyzed the 100-year storm event, which is the event that must be analyzed pursuant to USIBWC's requirements for the Tijuana River Flood Control Project. Modeling results of the 100-year storm indicated that the CBP Project, when constructed and operated as designed, should not increase the flood risk or significantly increase the water surface elevation for the analyzed flood event in the Tijuana River Flood Control project. Upstream water surface elevations would be confined to within the flood control channel when the gates are fully raised during the flood event. USIBWC engineers reviewed and confirmed these findings for the 100-year storm event analysis. The final O&M plan being developed by CBP will include details on CBP's operation of the gates for the

dry season and flood/high-water events and the maintenance that is required and will be conducted by CBP.

CBP did not provide EPA with the CBP Project designs, hydraulic modeling and O&M plan, and as a result EPA could not verify the above findings regarding the 100-year storm event in the published Final PEIS. The Final PEIS stated that the CBP Project had “the potential to impede transboundary river flows and thus impact river hydrology, which could increase the risk of catastrophic flooding during significant storm events and the resulting impacts to surrounding communities and infrastructure.” Subsequent to publication of the Final PEIS, to address potential flood effects in further detail, consistent with Federal Flood Risk Management standards under Executive Order (EO) 13690,<sup>8</sup> EPA coordinated with the North American Development Bank (NADBank) to provide additional flood modeling to assess the CBP Project. This analysis addressed the 100- and 500-year flood event and the resulting effects in both the U.S. and Mexico, including potential flooding that could result if the project is not operated as designed. While the 100% design of the CBP Project is not publicly available, CBP did provide sufficient conceptual design information to support the NADBank flood modeling.

The NADBank modeling report of the CBP Project was completed in April 2023,<sup>9</sup> and provides the following conclusions relevant to the Proposed Action: 1) The existing ITP facilities are not predicted to be inundated under the modeled scenarios, provided the surrounding levees do not fail; 2) Without additional flood protection, certain facilities contemplated at the ITP site under the Proposed Action could be flooded under various modeled scenarios, including from the 100-year event;<sup>10</sup> 3) Previous and currently planned EPA-funded wastewater infrastructure projects in Tijuana, especially those adjacent to the U.S.-Mexico border, could be impacted by flooding under various modeled scenarios; 4) Sediment deposits (as of 2014) in the river channel on U.S. side of the border significantly increase flooding risk; and 5) Flood waters overtop the levee in Tijuana under the 100-year event and any additional blockage in the river in the 100-year event would increase the severity and extent of flooding.

Discrepancies between the prior CBP hydraulic model and the NADBank modeling results summarized above are due primarily to the following: the prior hydraulic model prepared for the CBP Project is based on design conditions in the flood channel, whereas the NADBank model incorporates remote sensing data from 2014 to account for the ongoing deposition of sediments in the channel (which generally exacerbates flooding). Regardless, based on the more conservative NADBank modeling results, EPA and USIBWC have determined that the existing ITP facilities will not be significantly impacted by the potential flood effects resulting from the

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<sup>8</sup> EO 13690 requires agencies to prepare for and protect federally funded buildings and projects from flood risks. It requires agencies to determine specific federal building or project dimensions – that is, how high and how wide and how expansive a building or protect should be – in order to manage and mitigate any current or potential flood risks.

<sup>9</sup> See <https://www.nadb.org/knowledge-resources/studies-publications/technical-report-tijuana-river-border-barrier-flood-hazard-analysis>

<sup>10</sup> The NADBank model analyzed the 50-year, 100-year, 200-year, and 500-year flood event in both the U.S. and Mexico, including the anticipated changes to flooding with the CBP Project operating as planned and under scenarios that assumed a malfunction of the gates.

CBP Project. Moreover, due to the relatively limited scale and location (outside of the flood control channel) of the proposed facilities at the ITP site, implementation of these improvements under the Proposed Action would not substantially exacerbate or contribute to cumulative flood effects. EPA and USIBWC will consider existing modeling for USMCA-funded projects while designing the proposed facilities, and those designs may include enhanced flood control features to protect the facilities from potential flooding, if both parties deem necessary and where feasible. Finally, EPA has shared the results of the NADBank flood study with CBP.

Under the Proposed Action, Project F (U.S.-side River Diversion to APTP) and Project J (Trash Boom[s]) would involve the installation of new infrastructure within the U.S. side of the Tijuana Flood Control Project that is managed by USIBWC. As noted in the Final PEIS, during preparation of subsequent tiered NEPA analyses, EPA and USIBWC will continue to evaluate potential cumulative impacts to the levees resulting from these projects in combination with the CBP Project.

In reference to EPA and USIBWC's responses to public comments on the Draft PEIS, one commenter wrote, "EPA and USIBWC stated their decision to eliminate any interim measures to reduce discharges of untreated wastewater via the San Antonio de los Buenos (SAB) Creek." The commenter also stated that "known and feasible preventions exist" to temporarily reduce untreated wastewater discharges via SAB Creek in the near term. EPA and USIBWC presume that the statement regarding "known and feasible preventions" refers to a public comment on the Draft PEIS suggesting that Projects C (Tijuana Sewer Repairs) and H (Tijuana WWTP Treated Effluent Reuse) might successfully reduce discharges via SAB Creek. However, EPA and USIBWC note that these two projects would have the potential to increase untreated wastewater discharges via SAB Creek unless they are preceded by new or expanded treatment capacity at the ITP (for Project C), the APTP (for Project H), and/or the SABTP. Projects C and H—which are part of the selected alternative in this ROD—will reduce transboundary flows of untreated wastewater into the Tijuana River Valley caused by river flow rates that exceed the PB-CILA diversion capacity but are not considered short-term preventions to reduce untreated wastewater discharges via SAB Creek. No viable interim measures to reduce discharges of untreated wastewater via SAB Creek are known at this time. However, EPA and USIBWC will continue to engage with Mexico to ensure they adhere to their commitments in Treaty Minute No. 328, including replacing the SABTP expediently as well as funding and implementing Supplemental Projects.

One commenter stated that construction activities to replace the SABTP would temporarily impact the SABTP's ability to treat wastewater and would thus temporarily increase coastal discharges and beach impacts in San Diego. EPA and USIBWC have forwarded this comment to the appropriate entities in Mexico responsible for implementing the SABTP replacement project. However, as noted in the Final PEIS, current operations at the SABTP do not effectively improve water quality prior to discharge. This suggests that a temporary interruption to SABTP operations due to construction may be unlikely to result in substantial increases in pollutant loadings to coastal waters and the resulting beach impacts in San Diego.

One commenter expressed disappointment regarding the proposed 5-MGD capacity for Project G and the lack of a planned ocean outfall pipe at SABTP. As discussed in Section 2 (Decision),

Project G is not part of the selected alternative. Treaty Minute No. 328 instead resulted in the inclusion of a larger, 18-MGD plant at the SABTP site, funded and implemented entirely by Mexico, to provide secondary treatment via an oxidation ditch process. Per the Treaty Minute, this plant would include an ocean outfall.

One commenter suggested that EPA and USIBWC consider a longer planning horizon (i.e., Tijuana population growth beyond 2050) when determining the appropriate treatment capacity for the expanded ITP. The purpose of the Proposed Action is to address current transboundary contamination issues, rather than to provide capacity for potential long-term future growth. Expanding the ITP beyond a 60-MGD capacity would thus not further the project's purpose. However, to the extent feasible, EPA and USIBWC would design and construct the expanded ITP facilities such that they do not preclude potential further expansion under a separate later action (e.g., an action in the 2040s), if determined necessary to address continued population growth after 2050.

One commenter suggested that, despite the higher construction cost, EPA and USIBWC should select Project B, Option B2 (Trenchless Installation via Smuggler's Gulch and Under Mesa) instead of Option B1 (Trenching via Smuggler's Gulch and Monument Road) because Option B2 would have less construction-related environmental impacts and because the higher cost of Alternative 2 did not prevent EPA and USIBWC from identifying Alternative 2 as the preferred alternative in the Final PEIS. Regarding the impacts of the two options, while trenching under Option B1 will have more construction-related impacts in Smuggler's Gulch and along Monument Road compared to Option B2, these impacts will be temporary, localized, and mitigated per consultation with the U.S. Fish and Wildlife Service (USFWS). EPA and USIBWC also note that the Option B1 conveyance lines will be more accessible for repair in the unlikely event of a leak or damage (e.g., from an earthquake). Ultimately, Options B1 and B2 would have the same long-term environmental benefits by conveying wastewater from the canyons in Mexico to the ITP for treatment. Regarding cost, while Alternative 2 is more expensive than Alternative 1, it would be much more effective at addressing the purpose and need of the Proposed Action (i.e., reducing transboundary flows from Tijuana that convey pollutants, sewage, and/or trash into the U.S.). Conversely, the additional cost of Option B2 relative to Option B1 would result in no further progress towards addressing the purpose and need of the Proposed Action. EPA and USIBWC also note that, due to funding limitations, selecting the more expensive option could make it more difficult to secure sufficient funding to implement the project.

Referencing influent wastewater from Mexico to the ITP and/or entering the U.S. via the Project B canyon pipelines, two commenters questioned whether the Proposed Action would result in a "gravity flow" of untreated wastewater from Mexico into the U.S. with "no switch to shut it off."

- USIBWC uses a junction box with a gate valve to control the inflow of wastewater from the International Collector to the ITP. Under current conditions, occasional failures of the PB1-A and PB1-B pump stations in Mexico result in conditions where USIBWC must accept inflows from the International Collector at a rate that exceeds the ITP's design average daily flow capacity of 25 MGD. If these flows were not allowed to go into the ITP, they would cause Sanitary Sewer Overflows (SSOs) in Tijuana, which could reach the Tijuana River via Stewart's Drain or other flow routes in Tijuana. The

selected alternative will significantly increase the ITP's peak flow capacity from 50 MGD to 100 MGD, thus helping to avoid SSOs in Tijuana and ensure peak flows from the International Collector are appropriately treated prior to discharge. Additionally, as discussed in Code 8 of EPA and USIBWC's response to comments on the Draft PEIS (Appendix A of the Final PEIS), the operations and maintenance (O&M) cost sharing agreement in Treaty Minute No. 328 is intended to incentivize Mexico to fund and perform O&M properly. This is expected to result in fewer PB1-A and PB1-B failures and thus fewer situations where the ITP must accept peak flows from the International Collector.

- Under the selected alternative, the pipelines installed under Project B will use gravity to convey wastewater from the existing pump stations in Matadero Canyon and Los Laureles Canyon in Mexico to the U.S. for treatment at the ITP. While wastewater flow from the canyons is currently approximately 6.3 MGD (to the SABTP or SAB Creek), these pipelines will be capable of conveying up to 12.7 MGD (peak daily). As stated in the Final PEIS, three pump stations in Mexico are expected to remain in place as backup to pump these flows from the canyons to SABTP or SAB Creek, if necessary. However, the expanded ITP is expected to have sufficient capacity to provide treatment for all flows conveyed from the canyons, regardless of whether the canyon pump stations in Mexico are operational.

One commenter expressed concern that EPA is expediting the environmental review process to shorten the time for approval and also wrote that "local citizens want a full review," including review by the State Water Quality Board. The commenter also suggested that the review should include several additional analyses regarding the SBOO and its discharges of treated effluent.

- EPA and USIBWC presume that the comment regarding expedited review is referring to EPA's decision to prepare a Programmatic EIS. EPA and USIBWC chose to prepare a Programmatic EIS to ensure that NEPA review of the Supplemental Projects does not delay completion of the NEPA review of the Core Projects. With the Final PEIS and this ROD, EPA and USIBWC have completed a full review of the Core Projects per the requirements of NEPA, while the Supplemental Projects will likely require additional analysis in subsequent tiered NEPA document(s).
- EPA and USIBWC note that the NEPA review and the San Diego Regional Water Quality Control Board's (San Diego Water Board's) issuance of a National Pollutant Discharge Elimination System (NPDES) permit for increased discharges of treated effluent via the SBOO are separate environmental review processes. The San Diego Water Board's environmental review has not been initiated, because an application has not yet been submitted for a new or reissued NPDES permit. EPA and USIBWC anticipate that the NPDES permit application will receive the appropriate "full review" by the San Diego Water Board, including review per the requirements of the California Environmental Quality Act (CEQA).
- Regarding the suggestions for additional analyses, public suggestions regarding the scope of the analysis in the EIS should preferably be made during the EIS public scoping

period (which, for this PEIS, concluded on May 20, 2021). However, EPA and USIBWC note the following in response to the commenter's suggestions:

- The commenter asked "How has the existing SBOO outfall affected the sea bed and aquatic environment since 2004." Sections 3.2 (Marine Waters) and 3.5 (Marine Biological Resources) of the Final PEIS characterize the baseline (existing) conditions in the affected marine environment. The aggregate effects of historical discharges via the SBOO are reflected in these baseline conditions.
- The commenter asked "What effect does this outfall have the toxins in fish that are consumed by people fishing off the [Imperial Beach] pier." As noted in the Final PEIS, the Proposed Action would result in a significant net reduction in pollutant loadings to the Pacific Ocean, and discharges via the SBOO would be expected to meet discharge requirements and be able to obtain NPDES permits. The Proposed Action therefore would not be expected to disrupt recreational or commercial activities dependent on marine waters. EPA and USIBWC therefore did not attempt to model existing or projected bioaccumulation of pollutants in the tissues of regional fish populations.
- The commenter asked "Has the SBOO pipe contaminated ground water in the Tijuana River Valley." EPA and USIBWC have no record of groundwater contamination that is attributable to the SBOO.
- The commenter asked "Is the SBOO pipe structurally sound and what would be the impacts of increasing the amount of water from 25mgd to 120mgd have on the pipe." USIBWC and the City of San Diego both conduct annual inspections of the SBOO to ensure it is structurally sound. As noted in the Final PEIS, EPA and USIBWC estimate that with full implementation of Alternative 2, the average daily SBOO effluent rate would gradually increase to approximately 86.6 MGD by 2050 (not 120 MGD). This discharge would remain well below the SBOO design capacity of 174 MGD average daily flow rate.

One commenter expressed concern that the Proposed Action does not address invasive plants in the Tijuana River Valley. However as discussed in Section 7 (Compliance with Environmental Requirements) of this ROD, EPA and USIBWC's consultation with USFWS pursuant to Section 7 of the Endangered Species Act (ESA) resulted in the identification of conservation measures to avoid adverse effects to inland threatened and endangered species. These conservation measures, which are incorporated into this decision, include implementation of an invasives removal program in the Tijuana River Valley. See Attachment 1 for more information.

The County of San Diego provided a comment clarifying that, while the County issues beach advisories and/or warnings based on the digital droplet polymerase chain reaction (ddPCR) water quality test results, beach closures are based on observable sewage spill and chemical spill impacts on ocean or bay waters. EPA and USIBWC appreciate the County's clarification and find that it is consistent with the Final PEIS, which states that "ddPCR testing revealed higher bacteria concentrations than previous testing, resulting in more beach closures or posted signage warning beachgoers of potential water contamination" (emphasis added). The County's clarification does not affect EPA and USIBWC's assessment of reduced beach impacts under the

Proposed Action, which is based on norovirus concentrations modeled by the Scripps Institution of Oceanography (not “beach closures”).

Several issues raised in comments were topics that EPA and USIBWC have previously addressed in the Final PEIS and/or in the response to comments on the Draft PEIS (Appendix A of the Final PEIS). These issues included, but were not limited to, the following: project cost and responsibility burdens between the U.S. and Mexico; efforts to secure additional capital funding; wastewater treatment in Mexico versus the U.S; the increase in discharge of treated effluent via the SBOO; and reuse of treated effluent from the ITP and/or APTP. Some commenters also discussed topics and/or projects previously eliminated from detailed review in the PEIS (see Section 2.7 of the Final PEIS), including Project 6, Sub-project 1 (restoration of the Tijuana River main channel to its original 1977 design configuration); Project 8 (Upgrade the SABTP to Reduce Untreated Wastewater to Coast); installation of a trash boom in the Tijuana River in Mexico; and remediation and restoration of the Tijuana River Valley to its historic environmental conditions. Therefore, EPA and USIBWC did not prepare responses to these comments.

## **6. MEANS TO AVOID OR MINIMIZE ENVIRONMENTAL EFFECTS**

EPA and USIBWC are responsible for the following to ensure effective implementation of mitigation to avoid or minimize environmental effects:

- EPA will include terms and conditions (T&Cs) requiring implementation of the mitigation measures identified in the ROD in any future interagency agreement(s) or assistance agreement(s) entered into with USIBWC.
- USIBWC will include applicable mitigation measures identified in the ROD into contract documents covering the design and construction of the proposed project. USIBWC oversight of this process will include, but not be limited to, review and approval of final reports, assessments, and designs; and ensuring mitigation requirements are met. In addition, mitigation measures that apply to operations will be implemented either directly by USIBWC or via oversight and monitoring of the contracted operator.

### **6.1 Mitigation for Core Projects**

EPA and USIBWC have considered all practicable means to avoid or minimize environmental harm from the selected alternative and have adopted practicable means to avoid or minimize impacts from implementation of Core Projects. Attachment 1 identifies the following:

- The mitigation measures to be implemented for Core Projects.
- The entity (EPA and/or USIBWC) responsible for implementing mitigation measures at each stage of project implementation (planning and design; construction; or operation). Generally, EPA and USIBWC will have co-responsibility for implementing mitigation measures during planning, design, and construction, and USIBWC will have primary responsibility for implementing mitigation measures during subsequent operations.

- The Core Project(s) whose implementation would result in the impact that requires mitigation (identified using the ■ symbol).

With one exception,<sup>11</sup> all significant impacts identified in the Final PEIS for Core Projects have corresponding mitigation measures in Attachment 1. Additionally, Attachment 1 incorporates mitigation measures for certain non-significant impacts identified during the consultations described in Section 7 (Compliance with Environmental Requirements) of this ROD. These consultations resulted in agreements regarding the following:

- Conservation measures and best management practices (BMPs), identified in consultation with USFWS, to ensure that construction activities and USIBWC operations will not adversely affect inland federally listed threatened and endangered species. See mitigation measures BR-1 through BR-21.
- Conservation measures, identified in consultation with USFWS, to contribute to the conservation and recovery of the federally endangered least Bell's vireo (*Vireo bellii pusillus*) and its designated critical habitat, thus ensuring that reductions in freshwater river flows resulting from APTP operations will not result in adverse effects to the vireo or its habitat. See mitigation measure BR-22.
- Conservation measures, identified in consultation with USFWS, to contribute to the conservation and recovery of the federally endangered light-footed Ridgway's rail (*Rallus obsoletus levipes*), thus ensuring that reductions in freshwater river flows resulting from APTP operations will not result in adverse effects to the rail. See mitigation measure BR-23.
- Mitigation measures, identified in consultation with NMFS, to minimize adverse effects to marine wildlife and Essential Fish Habitat (EFH) caused by in-water construction activities at the SBOO. See mitigation measures BR-24 through BR-26.
- Reasonable and prudent measures (RPMs) and associated T&Cs, identified in consultation with NMFS, necessary or appropriate to minimize the impacts (i.e., amount or extent) of incidental take of marine federally listed threatened and endangered species. See mitigation measure BR-27.

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<sup>11</sup> In addition to the mitigation measures identified in Attachment 1, the Final PEIS also included the following measure to help mitigate the Proposed Action's net increase in GHG emissions, which was identified as a significant impact in the Climate section of the Final PEIS (Section 4.12):

**“CL-1: Adherence to State of California GHG cap and trade program requirements, if applicable.”**

This measure was included in the Final PEIS because EPA and USIBWC determined that the cap and trade program could apply if the Project A design were to incorporate combustion of biogas (produced by the anaerobic digestion process) and electricity generation with a potential to emit more than 25,000 metric tons per year of carbon dioxide equivalents. However, EPA and USIBWC have since determined that emissions from the combustion of wastewater treatment biogas are not counted towards this applicability threshold, per 17 California Code of Regulations (CCR) § 95852.2(a)(8). The selected alternative is therefore not expected to be subject to the State of California GHG cap and trade program, and EPA and USIBWC have excluded this mitigation measure from Attachment 1.

- Avoidance measures, identified in consultation with the California Office of Historic Preservation (OHP), to ensure that construction activities do not adversely affect previously identified cultural resources. See mitigation measure CR-1.

The consultation with NMFS identified additional “conservation recommendations” for marine species, which are suggestions regarding discretionary measures to minimize or avoid adverse effects of a proposed action on federally listed species or critical habitat or regarding the development of information. Also, the Final PEIS identified additional mitigation measures (beyond those listed in Attachment 1) to avoid or minimize non-significant impacts. However, due to funding limitations and uncertainty regarding the estimated costs to plan, design, and construct new infrastructure under the Core Projects, the conservation recommendations identified in consultation with NMFS and the additional mitigation measures identified in the Final PEIS to avoid or minimize non-significant impacts have not been incorporated into this ROD. Depending on the availability of future funding and design-specific considerations of individual projects, these conservation recommendations and mitigation measures may be implemented during construction and operation. Any conservation recommendations and additional mitigation measures to address non-significant impacts would be reflected in the T&Cs of the forthcoming interagency or cooperative agreement between EPA and USIBWC.

## **6.2 Mitigation for Supplemental Projects**

As a programmatic document, the Final PEIS identifies mitigation measures that were developed at a program level. The list of potential mitigation measures for Supplemental Projects found in the Final PEIS (see Section 5 of the Final PEIS) serves as a programmatic catalog of possible mitigation options for the Supplemental Projects when they are evaluated in future tiered NEPA analyses. However, the impacts of Supplemental Projects, their significance, and the associated mitigation requirements will be refined and analyzed further in subsequent tiered NEPA analyses and the associated consultations, resulting in mitigation commitments that could differ from the potential mitigation measures identified in the Final PEIS (e.g., by excluding or modifying certain measures).

## **7. COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS**

Table 7-1 summarizes the applicability of 22 federal cross-cutter authorities to the selected alternative. For a detailed discussion of the requirements of applicable cross-cutters, see Section 6.1 (United States Regulations and Permits) of the Final PEIS.

**Table 7-1. Summary of Applicability of Federal Cross-cutting Authorities**

Federal Cross-cutting Authority	Core Project			
	A	B	C	D
<i>Applicable Cross-Cutters with Major Requirements</i>				
Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668C)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Clean Water Act: Section 401 (33 U.S.C. § 1341) and Section 404 (33 U.S.C. § 1344)		*		
Clean Water Act: Section 402 National Pollutant Discharge Elimination System (33 U.S.C. § 1342)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Zone Management Act (16 U.S.C. § 1451 et seq.)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Endangered Species Act (16 U.S.C. § 1531 et seq.)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
EO No. 12898, <i>Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations</i> (59 FR 7629)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
National Historic Preservation Act and Archeological and Historic Preservation Act (16 U.S.C. § 469A-1)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
<i>Applicable Cross-Cutters with Minor Requirements</i>				
EO No. 11988, <i>Flood Plain Management</i> (42 FR 26951), as amended by EO No. 12148, <i>Federal Emergency Management</i> (44 FR 43239)		<input checked="" type="checkbox"/>		
Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq.)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Marine Mammal Protection Act (16 U.S.C. § 1361)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Migratory Bird Treaty Act (16 U.S.C. §§ 703-712)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Native American Graves Protection and Repatriation Act (25 U.S.C. § 3001 et seq.)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
EO No. 11990, <i>Protection of Wetlands</i> (42 FR 26961), as amended by EO No. 12608, <i>Elimination of Unnecessary Executive Orders and Technical Amendments to Others</i> (52 FR 34617)		<input checked="" type="checkbox"/>		
<i>Non-Applicable Cross-Cutters</i>				
Archaeological Resources Protection Act (16 U.S.C. §§ 470AA-MM)				
Clean Air Act Conformity (42 U.S.C. § 7401 et seq.)				
Coastal Barriers Resources Act (16 U.S.C. § 3501 et seq.)				
Farmland Protection Policy Act (7 U.S.C. § 4201 et seq.)				
Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.)				
Rivers and Harbors Act: Section 10 (33 U.S.C. § 403)				
Safe Drinking Water Act (42 U.S.C. § 300f et seq.)				
Wild and Scenic Rivers Act (16 U.S.C. § 1271 et seq.)				
The Wilderness Act (16 U.S.C. § 1131 et seq.)				

Symbol key:

- The project triggers the cross-cutter. All compliance requirements have been addressed.
- The project triggers the cross-cutter. Some compliance requirements need to be addressed prior to project implementation.
- \* The project potentially triggers the cross-cutter (applicability depends on final design and siting location). If applicable, compliance requirements need to be addressed prior to project implementation.

**Bald and Golden Eagle Protection Act (BGEPA):** Bald eagles and golden eagles are expected to have a low likelihood to occur within the project areas. Implementation of the Core Projects will have minimal or no potential to result in the take of bald eagles or golden eagles. Consultation and coordination with USFWS has not identified any further requirements for complying with the BGEPA.

**Clean Water Act (CWA) Sections 401, 402, and 404:** Activities associated with the construction of Project B, Option B1 (Trenching via Smuggler’s Gulch and Monument Road), depending on final design and siting location of the pipeline, would potentially require a Section 404 Nationwide Permit 58 for Utility Line Activities for Water and Other Substances and may be eligible for enrollment under a Regional Water Quality Control Board (RWQCB) General Order to meet Section 401 Water Quality Certification and Waste Discharge Requirements. Pursuant to Section 402 of the CWA, Projects A and D (APTP Phase 1) are expected to meet discharge requirements and obtain NPDES permits, which must account for projected changes in the influent wastewater resulting from implementation of Projects B and C. To comply with CWA Sections 401, 402, and 404, EPA and USIBWC will adhere to all Nationwide Permit 58, RWQCB General Order, and NPDES permit conditions.

**Coastal Zone Management Act (CZMA):** Pursuant to the CZMA, EPA and USIBWC prepared and submitted a Coastal Consistency Determination for the Core Projects to the California Coastal Commission on October 28, 2022. EPA and USIBWC determined that construction and implementation of the Core Projects would be generally consistent with the policies in the California Coastal Act (CCA). However, due to some localized impacts to the coastal zone, implementation of the Core Projects will “neither directly promote nor be inconsistent with” some individual policies of the CCA. See Appendix H of the Final PEIS for the full consistency determination. On May 12, 2023, the California Coastal Commission concurred with the consistency determination.

**Endangered Species Act (ESA):** Pursuant to ESA Section 7, EPA and USIBWC consulted with both USFWS and NMFS regarding potential impacts to federally listed endangered or threatened species under the respective agencies’ jurisdictions. ESA Section 7 is applicable to all Core Projects with effects in the U.S. Several federally listed endangered or threatened species have potential to occur in the project area.

EPA prepared and submitted a Biological Assessment to USFWS on May 25, 2022 and requested concurrence with the finding of *may affect, but is not likely to adversely affect* federally listed species and designated critical habitat under USFWS jurisdiction. See Appendix D of the Final PEIS for the Biological Assessment. Informal consultation with USFWS resulted in a letter of concurrence, dated May 31, 2023 (USFWS Consultation Number 2022-0014986-S7-I\_SD), which includes conservation measures necessary to ensure that construction activities and long-term reductions in freshwater river flows will not result in adverse effects to federally listed species and designated critical habitat. These conservation measures are incorporated into this decision.

EPA prepared and submitted a Biological Assessment to NMFS on July 22, 2022. See Appendix F of the Final PEIS for the Biological Assessment. In the Biological Assessment, EPA determined that implementation of the Core Projects *may affect, and is likely to adversely affect* listed species identified as having medium to high potential to occur within the project area and *may affect, but is not likely to adversely affect* all other listed species. With one exception, NMFS concurred with these findings and submitted its final ESA Biological Opinion and EFH Response, dated December 19, 2022 (NMFS Consultation Number WCRO-2022-02064). The Biological Opinion includes RPMs, along with associated T&Cs, necessary or appropriate to

minimize the impacts (i.e., amount or extent) of incidental take of marine federally listed threatened and endangered species. These RPMs and T&Cs are incorporated into this decision.

**EO 12898:** Pursuant to EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, EPA and USIBWC completed an analysis to determine whether, and to what extent, the projects will result in disproportionately high and adverse effects on minority and low-income populations. See Sections 3.20 and 4.20 and Appendix I (Supplemental Data for Environmental Justice Analysis) of the Final PEIS for additional information on the environmental justice review and analysis conducted for the Core Projects.

**National Historic Preservation Act (NHPA):** EPA consulted with OHP pursuant to NHPA Section 106. EPA defined the area of potential effects (APE) for the project to be 336 acres and after applying the criteria of adverse effect, EPA made a finding of *no historic properties affected* due to the inclusion of mitigation measures including avoidance of impacts to previously identified cultural resources that have not been formally evaluated for eligibility to the NRHP. EPA communicated the APE definition and finding of *no historic properties affected* to OHP in a letter dated May 25, 2022. Based on feedback from OHP, EPA revised this to a finding of *no adverse effect* in a letter dated September 19, 2022. OHP did not object to this finding of *no adverse effect* in a letter of concurrence dated October 20, 2022. See Section 7.2.3, Appendix M (NHPA Section 106 Correspondence), and Appendix C (Class III Cultural Resource Inventory) of the Final PEIS for additional information. Additionally, EPA conducted early engagement with local tribal contacts in the Spring of 2021; notified tribal contacts in May 2022 of the Class III Cultural Resource Inventory and EPA's request for OHP concurrence; and provided tribal contacts with the notice of intent to prepare an EIS and notices of the Draft PEIS and Final PEIS.

**EO 11988:** Pursuant to EO 11988, *Flood Plain Management*, the Final PEIS includes consideration of alternatives to development in the floodplain (e.g., the No-Action Alternative). Only a small component of Project B, Option B1 will occur within the 100-year floodplain.

**Magnuson-Stevens Fishery Conservation and Management (Magnuson-Stevens) Act:** Pursuant to the Magnuson-Stevens Act, EPA consulted with NMFS regarding effects of the Core Projects on EFH. In the EFH Assessment (provided in Appendix G of the Final PEIS), EPA determined that the Core Projects would adversely affect EFH within the Action Area due to increased discharges of treated effluent via the SBOO and potential disturbance of seabed communities due to anchor deployment. NMFS concurred with this finding and submitted its final ESA Biological Opinion and EFH Response, dated December 19, 2022 (NMFS Consultation Number WCRO-2022-02064). The EFH Response indicated that no additional measures are needed to avoid or minimize adverse effects to EFH, beyond those measures described in the EFH Assessment and the RPMs and T&Cs in the Biological Opinion.

**Migratory Bird Treaty Act (MBTA):** The USFWS Information for Planning and Consultation tool identifies 28 migratory bird species with the potential to occur in the Tijuana River Valley, plus additional species that could occur along the beaches north of the estuary. Typically, construction and operation of wastewater infrastructure has the potential to result in indirect impacts to protected migratory bird species. As noted above, informal consultation with USFWS pursuant to ESA Section 7 resulted in a letter of concurrence identifying conservation measures

necessary to avoid adverse effects to inland threatened and endangered species. These conservation measures, which are incorporated into this decision, will also help mitigate impacts to migratory birds. EPA and USIBWC received no recommendations specific to migratory birds during the comment review period, and consultation and coordination with USFWS has not identified any further requirements for complying with the MBTA.

**Marine Mammal Protection Act (MMPA):** Implementation of the Core Projects is likely to result in net benefits to marine mammals protected under the MMPA. Therefore, there is no likelihood of incidental take and no requirement for application to NMFS under the MMPA for an incidental take letter of authorization.

**Native American Graves Protection and Repatriation Act (NAGPRA):** NAGPRA requires the preparation of an inadvertent discovery plan for excavation to ensure that certain Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony are appropriately repatriated if found. EPA and USIBWC will ensure that an inadvertent discovery plan is prepared prior to excavation or trenching activities in the U.S. and will include a provision in the construction and/or other applicable contract to stop work if cultural resources are encountered.

**EO 11990:** Pursuant to EO 11990, *Protection of Wetlands*, EPA and USIBWC incorporated into the decision-making process mitigation, minimization, and avoidance measures to protect wetlands.

## **8. SUMMARY OF DECISION**

EPA and USIBWC certify in this ROD that the decision maker has considered all of the alternatives, information, analyses, and objections submitted by federal, state, tribal, and local governments and public commenters in developing the PEIS, making a decision on the selected alternative, and developing mitigation and conservation measures. Summaries of the alternatives, information, analyses, public comments, and consultation and coordination efforts with government and tribal entities are also included in the Final PEIS.

In conclusion, EPA and USIBWC find that selection of a minor variation of Alternative 2, following the provisions agreed upon in Treaty Minute No. 328, best serves the overall public interest. This decision is consistent with NEPA and includes all practicable means to avoid or minimize significant impacts from implementation of the Core Projects, while reducing transboundary flows from Tijuana that cause adverse public health and environmental impacts in the Tijuana River watershed and adjacent coastal areas.

### Attachment 1. Mitigation Measures Incorporated into the Decision

Mitigation Measure	Responsible Entity†			Core Project			
	Planning and Design	Con-struction	Operation	A	B	C	D
<i>Water Resources (Includes Freshwater and Estuarine, Marine, and Floodplains)</i>							
<b>WR-1:</b> Adherence to National Pollutant Discharge Elimination System permit conditions (operational effluent limitations, monitoring requirements, etc.).			USIBWC	■			■
<i>Biological Resources (Inland and Marine)</i>							
<b>BR-1 (General):</b> A Biological Monitor will be on site during clearing and during construction within 500 feet of gnatcatcher or vireo habitat to conduct surveys, project monitoring, and reporting to ensure that clearing and construction activities do not adversely affect gnatcatcher or vireo. See CM 1 in the U.S. Fish and Wildlife (USFWS) letter of concurrence, dated May 31, 2023 (USFWS Consultation Number 2022-0014986-S7-I_SD), for the full text of the conservation measure.		EPA, USIBWC		■	■		■
<b>BR-2 (General):</b> The limits of project impacts (including staging areas and access routes) will be temporarily fenced (with silt barriers) to prevent additional impacts and the spread of silt from the construction zone into adjacent avoided habitats. Fencing will be installed in a manner that does not impact avoided habitats. EPA/USIBWC will submit to the Carlsbad Fish and Wildlife Office (CFWO) for approval, at least 2 days prior to initiating project impacts, photographs that show the fenced limits of impact. If work occurs within habitat for listed species beyond the fenced/marked limits of impact, all work will cease until the problem has been remedied to the satisfaction of the CFWO. Any impacts to habitat for listed species that occur beyond the approved fence will be offset as determined by the Service. Temporary construction fencing will be removed upon project completion. [Ref: USFWS CM 2]		EPA, USIBWC		■	■		■
<b>BR-3 (General):</b> Confine all heavy equipment, vehicles, and construction activities to existing access roads, road shoulders, and disturbed/developed or designated work areas. Work areas will be limited to what is necessary for construction. [Ref: USFWS CM 3]		EPA, USIBWC		■	■		■
<b>BR-4 (General):</b> All materials imported into the project footprint (e.g., straw wattles, gravel, and mulch) will be obtained from sources that are free of noxious weeds to be confirmed through periodic inspections conducted by the Biological Monitor. [Ref: USFWS CM 4]		EPA, USIBWC		■	■		■
<b>BR-5 (General):</b> Wash stations will be set up at all vehicle entrances into the project footprint to remove plant material, mud, and dirt from vehicles before entering the project footprint. Sediment accumulated from the washing will be removed daily and placed in a sealed container for disposal in an approved landfill. Project workers will use boot brushes, a metal scraper, soap, water and scrub brushes to remove mud, debris, and plant materials found on their clothing and personal equipment. [Ref: USFWS CM 5]		EPA, USIBWC		■	■		■

### Attachment 1. Mitigation Measures Incorporated into the Decision

Mitigation Measure	Responsible Entity†			Core Project			
	Planning and Design	Construction	Operation	A	B	C	D
<b>BR-6 (General):</b> Best Management Practices (BMPs) for erosion control, stormwater runoff, hazardous material handling, and stockpile management will be implemented to prevent pollution caused by construction operations and to reduce contaminated stormwater runoff. [Ref: USFWS CM 6]		EPA, USIBWC		■	■		■
<b>BR-7 (General):</b> All construction equipment will be inspected for leaks prior to being brought onsite. All equipment shall be well maintained and inspected daily while onsite to prevent leaks of fuels, lubricants or other fluids into wetlands and waterways. [Ref: USFWS CM 7]		EPA, USIBWC		■	■		■
<b>BR-8 (General):</b> Service and refueling procedures will be conducted in a designated area where there is no potential for fuel spills to seep or wash into waterways. [Ref: USFWS CM 8]		EPA, USIBWC		■	■		■
<b>BR-9 (General):</b> No pets, hunting, open fires (such as barbecues), or firearms will be permitted at the project site. [Ref: USFWS CM 9]		EPA, USIBWC		■	■		■
<b>BR-10 (General):</b> Project lighting will be of the lowest illumination necessary for safety and will be directed toward the construction area and away from sensitive habitats, as feasible. Light glare shields will be used to reduce the extent of illumination into sensitive habitats. In particular, lighting that causes direct illumination into sensitive habitats (e.g., riparian and coastal sage scrub) will be avoided during the period from one hour past sunset through one hour before sunrise. [Ref: USFWS CM 10]		EPA, USIBWC		■	■		■
<b>BR-11 (General):</b> Ground disturbance and vegetation removal will not exceed the minimum amount necessary to complete work at the site. [Ref: USFWS CM 11]		EPA, USIBWC		■	■		■
<b>BR-12 (General):</b> All areas where revegetation is required will be replanted with native species. A native plant restoration and monitoring plan will be developed by a qualified botanist in coordination with the CFWO. [Ref: USFWS CM 12]		EPA, USIBWC		■	■		■
<b>BR-13 (General):</b> Erosion control materials will be installed per manufacturing material specifications and must not contain monofilament netting. Only tightly woven netting or similar material will be used for all geo-synthetic erosion control materials such as coir rolls and geo-textiles. All non-biodegradable erosion control materials will be removed following project completion. [Ref: USFWS CM 13]		EPA, USIBWC		■	■		■
<b>BR-14 (General):</b> All construction personnel will visually check for wildlife on or beneath vehicles and construction equipment before moving or operating them. [Ref: USFWS CM 14]		EPA, USIBWC		■	■		■

### Attachment 1. Mitigation Measures Incorporated into the Decision

Mitigation Measure	Responsible Entity†			Core Project			
	Planning and Design	Construction	Operation	A	B	C	D
<b>BR-15 (General):</b> If listed wildlife is observed within the work area or its immediate vicinity, work will stop until the animal leaves the area of its own volition. The animal will not be harried or harassed into leaving the area. If the animal does not leave of its own accord, the project biologist will be contacted for further guidance. [Ref: USFWS CM 15]		EPA, USIBWC		■	■		■
<b>BR-16 (General):</b> During project activities, all trash will be properly contained in covered garbage receptacles. Following construction, all trash and construction debris from project sites will be removed. [Ref: USFWS CM 16]		EPA, USIBWC		■	■		■
<b>BR-17 (General):</b> Impacts from fugitive dust during construction will be avoided and minimized through limiting vehicle speeds to 20 miles per hour, controlling vehicle access, watering, and other appropriate measures. [Ref: USFWS CM 17]		EPA, USIBWC		■	■		■
<b>BR-18 (Coastal sage scrub):</b> Clearing of coastal sage scrub will occur outside the gnatcatcher nesting season (February 15 to August 31, or sooner if the Biological Monitor demonstrates to the satisfaction of the CFWO that there are no active gnatcatcher nests within 500 feet of the vegetation removal area). [Ref: USFWS CM 26]		EPA, USIBWC		■	■		■
<b>BR-19 (Surveys):</b> A qualified biologist‡ will conduct a preconstruction survey for Quino host plants in areas of suitable habitat that may be impacted by construction, including staging areas, during appropriate blooming periods (to ensure host plants are correctly identified) no less than one year prior to construction within each project footprint. If Quino host plants are detected within the project area, EPA/USIBWC will coordinate with the Service on appropriate avoidance and minimization measures that can be implemented and to determine if additional consultation is needed. [Ref: USFWS CM 27] ‡ <i>The qualified biologist will be familiar with Quino life history and habitat requirements and have documented experience surveying for and detecting Quino host plants.</i>	EPA, USIBWC	EPA, USIBWC		■	■		■
<b>BR-20 (Surveys):</b> A seasonally appropriate, focused survey for seasonal pools will be conducted in each project footprint no less than two years prior to construction of each project. If any seasonal pools are found, they will be flagged and fully avoided. If full avoidance is infeasible, focused protocol surveys for San Diego fairy shrimp will be conducted. If San Diego fairy shrimp are detected in any seasonal pools that cannot be completely avoided, EPA/USIBWC will request reinitiation of Endangered Species Act (ESA) Section 7 consultation with the Service. [Ref: USFWS CM 28]	EPA, USIBWC	EPA, USIBWC		■	■		■

### Attachment 1. Mitigation Measures Incorporated into the Decision

Mitigation Measure	Responsible Entity†			Core Project			
	Planning and Design	Construction	Operation	A	B	C	D
<p><b>BR-21 (Surveys):</b> Focused surveys for federally listed plant species with the potential to occur in the project area will be conducted during appropriate blooming periods and no less than one year prior to construction within each project site. The surveys will follow the <i>Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants</i> (USFWS, 2000) and <i>Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities</i> (California Department of Fish and Wildlife, 2018). If federally listed plants are found, EPA/USIBWC will coordinate with the Service on appropriate avoidance and minimization measures that can be implemented and to determine if additional consultation is needed. [Ref: USFWS CM 29]</p>	EPA, USIBWC	EPA, USIBWC		■	■		■
<p><b>BR-22 (Vireo long-term conservation):</b> Prepare and implement a groundwater monitoring plan; implement an invasives removal program within 27.5 acres of USIBWC property west of Dairy Mart Road bridge; implement additional measures (e.g., funding of County of San Diego invasives removal plans) to contribute to vireo conservation and recovery; and fund vireo surveys of suitable habitat within the Tijuana River Valley. See CM 18 through CM 23 in the USFWS letter of concurrence, dated May 31, 2023 (USFWS Consultation Number 2022-0014986-S7-I_SD), for the full text of the conservation measures.</p>	EPA, USIBWC	EPA, USIBWC	USIBWC				■
<p><b>BR-23 (Ridgway's rail long-term conservation):</b> Conduct tamarisk removal within 26 acres of the Tijuana River National Estuarine Research Reserve and/or conduct alternative conservation and recovery actions that would provide equivalent benefit to the Ridgway's rail. See CM 24 and CM 25 in the USFWS letter of concurrence, dated May 31, 2023 (USFWS Consultation Number 2022-0014986-S7-I_SD), for the full text of the conservation measures.</p>	EPA, USIBWC	EPA, USIBWC	USIBWC				■

### Attachment 1. Mitigation Measures Incorporated into the Decision

Mitigation Measure	Responsible Entity†			Core Project			
	Planning and Design	Con-struction	Operation	A	B	C	D
<p><b>BR-24 (Marine):</b> To minimize potential risk for ship strikes, at least one crew, most likely the vessel operator, will maintain a constant watch of the ocean surface in front and adjacent to the vessel at all times. If marine mammals and sea turtles are observed distant to the vessel, vessel operators will adjust their course as necessary to ensure they do not disturb the natural behavior of these animals. If marine mammals are in close proximity, they will:</p> <ul style="list-style-type: none"> <li>▪ Slow down and operate at a no-wake speed.</li> <li>▪ Stay out of the path of the animal’s direction of travel.</li> <li>▪ Not put their vessel between whales, especially mothers and calves.</li> <li>▪ Not chase or harass animals, and will not approach the animals head-on, from directly behind them, or from the side. If animals are following a trajectory closely parallel to the direction of vessel travel, they will gradually steer the vessel to be parallel to the animals from the side and stay at least 100 yards away (i.e., the length of a football field). [Ref: NMFS BiOp Sec. 2.5.1]</li> </ul>		EPA, USIBWC		■			■
<p><b>BR-25 (Marine):</b> If anchoring is required (anticipating needing one or two), the vessel will deploy anchors on sandy habitat to avoid damaging the wye diffuser and associated structures. It is likely that the anchor lines will remain under tension, but details will ultimately depend on configuration and operation choices of the specialized recommissioning contractor that will do the work. Alternatively, a permanent mooring may be used. [Ref: NMFS BiOp Sec. 2.5.1]</p>		EPA, USIBWC		■			■
<p><b>BR-26 (Marine):</b> Vessel operators will maintain industry standard health, safety, and environmental standards that apply specifically to the intended construction operations. This is likely to include the storage and maintenance of spill kits appropriate to dealing with small vessel-based spills such as sand buckets, absorbent pads and cloths, and other emergency containment devices to stop small spills of hydraulic fluids and other polluting fluids from entering the water if they are accidentally spilled on deck. Vessels must be maintained to a standard that eliminates the likelihood of diesel or hydraulic oil spills during normal operation. In the case of a catastrophic loss of engine power that may result in a grounding, vessel captains must have procedures in place to raise Coast Guard support rapidly. [Ref: NMFS BiOp Sec. 2.5.1]</p>		EPA, USIBWC		■			■

### Attachment 1. Mitigation Measures Incorporated into the Decision

Mitigation Measure	Responsible Entity†			Core Project			
	Planning and Design	Construction	Operation	A	B	C	D
<b>BR-27 (Marine):</b> Reasonable and prudent measures and associated terms and conditions, identified in the National Marine Fisheries Service (NMFS) ESA Biological Opinion and Essential Fish Habitat (EFH) Response, dated December 19, 2022 (NMFS Consultation Number WCRO-2022-02064), necessary or appropriate to minimize the impacts (i.e., amount or extent) of incidental take of marine threatened and endangered species.	EPA, USIBWC	EPA, USIBWC	USIBWC	■			■
<i>Cultural Resources</i>							
<b>CR-1:</b> Avoidance of previously identified cultural resources CA-SDI-11096H, CA-SDI-11948H, and P-37-039462 during project design and construction activities in Smuggler’s Gulch and along Monument Road. Should project plans change, and avoidance become infeasible, a formal evaluation of these resources’ eligibility for the National Register of Historic Places (NRHP) will be performed.	EPA, USIBWC	EPA, USIBWC			■		
<i>Air Quality and Odor</i>							
<b>*AQ-1:</b> Community outreach to ensure that receptors potentially affected by odor emissions, including emissions from operation of the expanded South Bay International Wastewater Treatment Plant (ITP) (including the anaerobic digester) and the new Advanced Primary Treatment Plant (AFTP), have the opportunity to share information with USIBWC. Examples include but are not limited to: <ul style="list-style-type: none"> <li>▪ Continuing to hold USIBWC Citizens Forum Meetings as vehicle for hearing community concerns.</li> <li>▪ Publishing regular (e.g., annual) public notices to ensure community is aware of meetings.</li> <li>▪ Providing contact information to ensure timely communication of any odor complaints.</li> <li>▪ Conducting direct outreach to individual members of the potentially affected community (e.g., via email or flyer) before the proposed facilities become operational.</li> </ul>	EPA, USIBWC		USIBWC	■			■
<b>*AQ-2:</b> Appropriate use of scrubbers, aeration, fugitive emissions containment system, and/or other odor controls to lessen odor impacts.	EPA, USIBWC		USIBWC	■			
<b>*AQ-3:</b> Installation of best available control technology emissions reduction technologies for criteria pollutants and/or hazardous air pollutants (HAPs) (e.g., biogas pretreatment to remove formaldehyde and hydrogen sulfide [H <sub>2</sub> S], selective catalytic reduction to remove nitrogen oxides [NO <sub>x</sub> ], catalytic oxidation to remove volatile organic compounds [VOCs], combustion of biogas).	EPA, USIBWC		USIBWC	■			

### Attachment 1. Mitigation Measures Incorporated into the Decision

Mitigation Measure	Responsible Entity†			Core Project			
	Planning and Design	Construction	Operation	A	B	C	D
<p><b>*AQ-4:</b> Development and implementation of a Fugitive Dust Control Plan to reduce fugitive dust emissions and community exposure to fugitive dust. The plan will apply to both active and inactive construction sites (i.e., including weekends and holidays) and to related activities including hauling and storage of fill material. This includes, but is not limited to, the following recommendations:</p> <ul style="list-style-type: none"> <li>▪ Stabilizing of disturbed areas by covering and/or applying water or chemical/organic dust palliative.</li> <li>▪ Covering of hauled and stockpiled materials to prevent spillage or transport by wind.</li> <li>▪ Phasing of activities that produce substantial amounts of dust (e.g., grading operations and dumping of soil) and avoiding these activities under windy conditions.</li> <li>▪ Limiting speed of earth-moving equipment to 10 mph.</li> <li>▪ Placing stockpiles in locations away from nearby receptors.</li> </ul>	EPA, USIBWC	EPA, USIBWC		■	■		■
<p><b>*AQ-5:</b> Inclusion of construction fleet emissions reduction strategies as a factor in the scoring and evaluation of proposals during the procurement process. Examples include, but are not limited to, indicating a preference for proposals that include commitments to use the following:</p> <ul style="list-style-type: none"> <li>▪ Energy-efficient and fuel-efficient fleets.</li> <li>▪ Alternative fuel vehicles (e.g., electric, natural gas, biodiesel).</li> <li>▪ Best available emissions control technology, including zero-emission technologies; on-highway vehicles that meet or exceed EPA exhaust emissions standards for model year 2010 and newer heavy-duty on-highway compression-ignition engines (and/or more stringent upcoming regulations such as EPA’s proposed “Clean Trucks Plan”); and nonroad vehicles and equipment that meet or exceed EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines.</li> <li>▪ Add-on emission controls, where appropriate (e.g., diesel particulate filters).</li> <li>▪ Grid-based electricity for generators.</li> </ul>	EPA, USIBWC			■	■		■
<p><b>*AQ-6:</b> Coordination with California Department of Parks and Recreation regarding construction and operation schedules to ensure, to the extent practicable, that activities with potential to generate substantial dust emissions at/near the ITP parcel and the Nelson Sloan quarry do not take place concurrently (e.g., grading, fill, or sediment hauling activities at the ITP parcel taking place concurrently with sediment hauling and deposition at the quarry).</p>		EPA, USIBWC	USIBWC	■	■		■

### Attachment 1. Mitigation Measures Incorporated into the Decision

Mitigation Measure	Responsible Entity†			Core Project			
	Planning and Design	Construction	Operation	A	B	C	D
<p><b>*AQ-7:</b> Procurement of a Program Management and Construction Management Services team, whose responsibilities will include ensuring the construction contractor takes appropriate measures to reduce air quality impacts. This includes, but is not limited to, the following:</p> <ul style="list-style-type: none"> <li>▪ Ensuring the construction contractor adheres to emissions reduction commitments made during the procurement process (see AQ-5); adheres to the Fugitive Dust Control Plan (see AQ-4) and Construction Traffic Management Plan (see TR-2); limits idling of heavy equipment to less than five minutes; and locates diesel engines, motors, and equipment staging areas as far as possible from residential areas and other sensitive receptors.</li> <li>▪ Conducting an equipment inventory (prior to groundbreaking) to identify opportunities for use of add-on emission controls.</li> </ul>	EPA, USIBWC	EPA, USIBWC		■	■		■
<i>Climate</i>							
<b>CL-1:</b> Incorporation of anaerobic digestion of primary and secondary sludge into project design (with appropriate control of biogas emissions) to reduce downstream greenhouse gas emissions from landfilling of solids waste from the expanded ITP.	EPA, USIBWC		USIBWC	■			
<i>Solid and Hazardous Waste</i>							
<b>*SHW-1:</b> Incorporation of anaerobic digestion of primary and secondary sludge into project design to reduce amount of solids waste from the expanded ITP.	EPA, USIBWC		USIBWC	■			
<i>Transportation</i>							
<b>*TR-1:</b> Incorporation of anaerobic digestion of primary and secondary sludge into project design to reduce amount of solids waste requiring hauling from the expanded ITP.	EPA, USIBWC		USIBWC	■			
<b>*TR-2:</b> Development and implementation of a Construction Traffic Management Plan to include specific measures for reducing vehicle trips and vehicle miles traveled (VMT) by the construction vehicle fleet (in particular, reducing heavy truck trips in areas currently experiencing extremely high overburdens from traffic impacts and/or traffic proximity).	EPA, USIBWC	EPA, USIBWC		■	■		■
<b>*TR-3:</b> Development and implementation of an Operational Traffic Management Plan to include specific measures for reducing vehicle trips and VMT during treatment plant operations and employee commuting (in particular, reducing heavy truck trips in areas currently experiencing extremely high overburdens from traffic impacts and/or traffic proximity).	EPA, USIBWC		USIBWC	■			■

### Attachment 1. Mitigation Measures Incorporated into the Decision

Mitigation Measure	Responsible Entity†			Core Project			
	Planning and Design	Construction	Operation	A	B	C	D
<b>*TR-4:</b> Feasibility assessment for the use of larger-capacity dump trucks for hauling of APTP solids waste to landfills, thus reducing the number of trips required. This will need to be conducted prior to or during design for the APTP to ensure the facilities and site plan incorporate sufficient clearance for larger trucks.	EPA, USIBWC						■
<b>*TR-5:</b> Local sourcing of fill material from within the Tijuana River Valley to limit haul route distances, such as from the sediment deposits in Goat Canyon or Smuggler’s Gulch.	EPA, USIBWC	EPA, USIBWC		■			
<i>Noise</i>							
<b>NO-1:</b> Construction timing limited to Monday-Saturday from 7:00 a.m. to 7:00 p.m.		EPA, USIBWC		■	■		■
<b>NO-2:</b> Community outreach to provide residents potentially affected by construction noise from Project B, Option B1 trenching along Monument Road with information on the benefits of the project, advanced notice of proposed construction dates and times, and contact information to ensure timely communication of any noise complaints.	EPA, USIBWC	EPA, USIBWC			■		
<b>NO-3:</b> A Biological Monitor will be on site during clearing and during construction within 500 feet of gnatcatcher or vireo habitat to conduct surveys, project monitoring, and reporting to ensure that clearing and construction activities do not adversely affect gnatcatcher or vireo. See CM 1 in the USFWS letter of concurrence, dated May 31, 2023 (USFWS Consultation Number 2022-0014986-S7-I_SD), for the full text of the conservation measure.		EPA, USIBWC		■	■		■
<b>NO-4:</b> Proper siting of biogas-fueled engine and electrical generator within the ITP parcel (e.g., away from the property boundary) with incorporation of noise attenuation features.	EPA, USIBWC		USIBWC	■			
<i>Environmental Justice</i>							
<i>[See mitigation measures identified with an asterisk (*) in Air Quality and Odor, Solid and Hazardous Waste, and Transportation sections above in this table.]</i>							

† To be confirmed during finalization of the Interagency Agreement between EPA and USIBWC.

\* Indicates a mitigation measure is necessary to address a disproportionately high and adverse effect identified in the environmental justice analysis (see Final PEIS Section 4.20 [Environmental Justice]) or the environmental justice portion of the cumulative effects analysis (see Final PEIS Section 4.21.5 [Cumulative Effects]). In some cases, this mitigation is necessary to address a disproportionately high and adverse effect caused by impacts in a different resource area—for example, SHW-1 under Solid and Hazardous Waste is intended to mitigate disproportionately high and adverse effects to air quality and transportation.