

CALIFORNIA COASTAL COMMISSION

455 MARKET STREET, SUITE 228
SAN FRANCISCO, CA 94105-2219
FAX (415) 904-5400
Voice (415) 904-5200



F10a

Filed	10/31/22
60 th Day:	12/30/22
75 th Day:	1/14/23
Extended to:	5/15/23
Staff:	CT-SF
Staff Report:	4/27/23
Hearing Date:	5/12/23

STAFF REPORT: REGULAR CALENDAR

Consistency Determination No.: CD-0009-22

Federal Agency: U.S. Environmental Protection Agency and U.S. Section of the International Boundary and Water Commission

Location: Tijuana River Valley and offshore waters, San Diego County (Exhibit 1).

Project Description: Improvement of sewage and wastewater treatment in Tijuana River Valley, including expansion of existing wastewater treatment capacity, upgrades to collection and transport systems, construction of a 35-million gallon per day Advanced Primary Treatment Plant for ocean discharge

Staff Recommendation: Concurrence

SUMMARY OF STAFF RECOMMENDATION

The United States (U.S.) Environmental Protection Agency (EPA) and the U.S. Section of the International Boundary and Water Commission (USIBWC), as joint lead agencies, have submitted a consistency determination for the funding and implementation of the United States–Mexico–Canada Agreement (USMCA) Mitigation of Contaminated Transboundary Flows Project (proposed project) to reduce transboundary flows of sewage and wastewater from Tijuana, Mexico that cause adverse public health and environmental impacts in the Tijuana River watershed and adjacent coastal areas in

southern San Diego County. 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 Valley and its estuary.

The proposed project is comprised of four core projects, referred to as Projects A-D:

- A) Expand the South Bay International Wastewater Treatment Plant (ITP) from its current capacity of 25 million gallons per day (mgd) of secondary treated wastewater to 60 mgd;
- B) Install a wastewater conveyance system from Matadero Canyon and Los Laureles Canyon in Mexico to convey dry-weather flows to the expanded ITP for treatment;
- C) Rehabilitate or replace targeted sewer collectors in Tijuana that currently leak into the Tijuana River; and
- D) Construct and operate a 35 mgd Advanced Primary Treatment Plant (APTP) for advanced primary treatment of diverted water from the existing Planta de Bombeo-Comisión Internacional de Limites y Aguas (PB-CILA) diversion in Mexico.

EPA and USIBWC expect these projects will reduce the flow of sewage and inadequately treated wastewater from Mexico into U.S. waters off San Diego County through the collection, treatment and discharge of wastewater through the existing South Bay Ocean Outfall (SBOO) off San Diego County. Of the four projects, Projects A and D would be located entirely within the U.S.; Project B would include elements in both the U.S. and Mexico, and Project C would be located entirely in Mexico. Project C and the elements of Project B located in Mexico are described in the EPA/IBWC consistency determination and this report for informational purposes only.

The proposed project has the potential to affect a variety of California coastal resources, primarily water quality, the biological productivity of coastal waters, public coastal access and recreation.

Water quality and the biological productivity of coastal waters would be affected by the proposed treatment and discharge of an additional 35 mgd of secondary treated wastewater as well as 35 mgd of advanced primary treated wastewater 3.5 miles into the Pacific Ocean through the existing South Bay Ocean Outfall (SBOO). This combined approximately 70 mgd¹ of advanced primary and secondary treated wastewater could have localized adverse water quality impacts, as the additional discharges of treated effluent via the SBOO resulting from Projects A (Expanded ITP) and D (APTP) would increase pollutant loadings in the immediate area around the

¹ As shown in Exhibit 2, the SBOO also discharges effluent generated by the City of San Diego's South Bay Water Reclamation Plant (SBWRP). The SBWRP treats wastewater collected from U.S. communities only and is designed to treat an average daily flow of 15 MGD and a peak daily flow of 35 MGD. The treatment process consists of preliminary, primary, and secondary treatment for discharged effluent, plus tertiary treatment and disinfection of effluent for beneficial reuse.

SBOO. However, the proposed treatment and discharge of up to 70 mgd through the SBOO would also result in significant benefits to both water quality and marine biological productivity by eliminating an equal or greater volume of untreated or inadequately treated sewage currently discharging into the Pacific Ocean through the Tijuana River and San Antonio de los Buenos Creek. This replacement of untreated wastewater discharged into nearshore waters with treated wastewater discharged 3.5 miles offshore through an existing ocean outfall and diffuser system would provide a substantial net benefit to coastal water quality and biological productivity. In addition, this proposed change is also expected to benefit coastal access and recreation by reducing the large number of water quality and public health related beach closures that have been in place across southern San Diego County for the past several years.

The staff therefore recommends that the Commission **concur** with the EPA and IBWC consistency determination (No. CD-0009-22) and find the proposed project consistent with the relevant, enforceable policies of the California Coastal Management Program, which consists primarily of the Chapter 3 policies of the Coastal Act. The motion to concur is on page 5.

Table of Contents

I. FEDERAL AGENCY’S CONSISTENCY DETERMINATION 5

II. MOTION AND RESOLUTION 5

III. APPLICABLE LEGAL AUTHORITIES 5

 A. Standard of Review 5

IV. FINDINGS AND DECLARATIONS 6

 A. Background 6

 B. Project Description 9

 Project Elements 9

 C. Consultations and Other Agency Approvals 12

 D. Marine Resources and Water Quality 14

 E. Coastal Recreation 24

 F. Air Quality 28

 G. Development 32

 H. Environmentally Sensitive Habitat 34

EXHIBITS

- [Exhibit 1 – Location Map](#)
- [Exhibit 2 – Characteristics of Proposed Discharge](#)
- [Exhibit 3 – Summary of Mitigation Measures from EIS](#)

APPENDICES

- [Appendix A – Substantive File Documents](#)
- [Appendix B – Expanded Project Background and Causes and Impacts of Contaminated Transboundary Flows from Tijuana](#)
- [Appendix C – Expanded Project Description](#)

I. FEDERAL AGENCY'S CONSISTENCY DETERMINATION

Based on the review of the Proposed Action's compliance with the Coastal Zone Management Act (CZMA), the U.S. Environmental Protection Agency and U.S. Section of the International Boundary and Water Commission have determined that the Proposed Action is consistent to the maximum extent practicable with the California Coastal Management Program (CCMP), pursuant to the requirements of the CZMA.

II. MOTION AND RESOLUTION

Motion:

I move that the Commission concur with consistency determination CD-0009-22 on the grounds that the project described therein would be fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the CCMP.

Staff recommends a **YES** vote on the motion. Passage of this motion will result in a concurrence with the determination and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution:

The Commission hereby **concurs** with consistency determination CD-0009-22 by the U.S. Environmental Protection Agency and U.S. Section of the International Boundary and Water Commission on the grounds that the project would be fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the CCMP.

III. APPLICABLE LEGAL AUTHORITIES

A. Standard of Review

The federal Coastal Zone Management Act (CZMA), 16 U.S.C. §§ 1451-1464, requires that federal agency activities affecting coastal resources be "carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs." Id. at § 1456(c)(1)(A). The implementing regulations for the CZMA, at 15 C.F.R. § 930.32(a)(1), define the phrase "consistent to the maximum extent practicable" to mean:

... fully consistent with the enforceable policies of management programs unless full consistency is prohibited by existing law applicable to the Federal agency.

This standard allows a federal activity that is not fully consistent with California's Coastal Management Program (CCMP) to proceed, if full compliance with the CCMP would be "prohibited by existing law." In its consistency determination, the EPA and IBWC did not argue that full consistency is prohibited by existing law or provide any

documentation to support a maximum extent practicable argument. Therefore, there is no basis to conclude that existing law applicable to the Federal agency prohibits full consistency. Since the EPA and IBWC have raised no issue of practicability, as so defined, the standard before the Commission is full consistency with the enforceable policies of the CCMP, which are the policies of Chapter 3 of the Coastal Act (Cal. Pub. Res. Code §§ 30200-30265.5).

IV. FINDINGS AND DECLARATIONS

A. Background

The subject consistency determination is the latest in a series of consistency determinations and negative determinations submitted by the International Boundary and Water Commission (IBWC) over the past thirty years for projects focused on the collection and treatment of sewage and wastewater flows from Mexico that have been released into the Tijuana River Valley. As described in detail in Appendix B (pages excerpted from the project's Final Programmatic Environmental Impact Statement (EIS)), the release of untreated sewage and wastewater into the Tijuana River Valley and around the city of Tijuana in Mexico has been a major public health and environmental problem for residents of the region for nearly 90 years. In addition to the numerous and substantial environmental and public health issues caused by contaminated flows in Mexico, northward flowing ocean currents bring them into California and southern San Diego County, causing similar environmental and public health issues in the U.S., and adversely affecting coastal access and recreation and degrading water quality and the biological productivity of coastal waters, including within the Tijuana River, its estuary, and areas extending from the U.S.-Mexico border north to the cities of Imperial Beach and San Diego.

Because the sources of the sewage, wastewater flows and pollution entering the U.S. are in Mexico (they are brought into the U.S. both through the Tijuana River, which flows from Mexico into the U.S., and the ocean, which has northward flowing currents that push into the U.S. waste discharged into the ocean in Mexico through sources such as the San Antonio de los Buenos Creek), the State of California and affected local governments have had limited tools to address or prevent impacts to public health and coastal resources in their communities. At the same time, it has historically been practically, politically, and financially difficult for the U.S. to prevent or mitigate the impacts of the transboundary pollution, though EPA has attempted to do so through various infrastructure projects since the early 1990s. The United States-Mexico-Canada Agreement (USMCA), signed in 2020, appears to have changed the historic dynamic. Through the USMCA, the U.S. government committed \$300 million to identify infrastructure solutions to mitigate the impacts of contaminated flows in the Tijuana River Valley. This represents the single most significant commitment of funding and resources to date towards resolving the issue of transboundary pollution and an opportunity to improve water quality in the region, which would otherwise remain an intractable problem for the State of California and San Diego County.

While the proposed project would not definitively end these issues or represent a final, permanent solution to them, it would result in a significant step forward and the latest and most substantial in a line of incremental advancements that have been pursued and implemented over the past several decades. As detailed in the EIS prepared for this project under the National Environmental Policy Act, a variety of additional projects and actions have been identified to continue this advancement that are not currently before the Commission. For example, the EIS evaluates six “Supplemental Projects” in both Mexico and the U.S. that would be pursued under the USMCA if additional funding is allocated as well as 19 other completed, planned, and ongoing non-USMCA projects to mitigate contaminated transboundary flows and thus benefit the coastal zone and improve coastal water quality. These include, among other actions, projects to address failing wastewater conveyance infrastructure in Tijuana; construction of a new 18-million gallon per day capacity wastewater treatment plant at San Antonio de los Buenos Creek in Mexico; new conveyance infrastructure to permit reuse of treated effluent in Mexico; installation of trash control infrastructure; projects for capture and removal of excess sediment; and projects to reduce localized flooding. Projects located in California and carried out by EPA and/or IBWC would be subject to additional federal consistency review by the Commission, if appropriate.

The Commission has reviewed and concurred with many of the past wastewater treatment and management projects in the Tijuana River Valley over the years, acknowledging the substantial benefits to coastal and marine water quality, coastal access and recreation and the broader marine environment that would occur because of their implementation. These past projects include the Commission’s concurrence in February of 1994 with a consistency determination submitted by the IBWC. This consistency determination (CD-002-94) covered construction of a 25 million gallon-per-day (mgd) advanced primary treatment and secondary treatment active sludge facility called the South Bay International Wastewater Treatment Plant (ITP), wastewater collection and distribution facilities, a South Bay Ocean Outfall (SBOO) connecting the terminus of the City of San Diego’s South Bay Land Outfall (constructed under coastal development permit no. 6-88-277) to a point 3.5 miles offshore, and discharge of 25 mgd of secondary treated wastewater through the SBOO into the Pacific Ocean. The timeline for construction and operation of the project elements considered in CD-002-94, particularly the secondary treatment facility and SBOO, turned out to be unachievable so the Commission’s initial concurrence for the ITP was followed by numerous consistency determinations and negative determinations for project modifications, including one (CD-137-96) for interim operation of the ITP at the advanced primary treatment level (rather than the secondary treatment level) as well as interim effluent discharge to the Pacific Ocean through the City of San Diego’s Point Loma Wastewater Treatment Plant and ocean outfall until construction of the SBOO could be completed. Although the ITP was intended to reduce wastewater impacts on water quality, habitat, and coastal recreation by collecting and providing secondary treatment for dry-weather flows of raw sewage in the Tijuana River Valley, the Commission concurred with CD-137-96 in 1996 and with negative determination ND-122-98 in 1998 to provide for the discharge of advanced primary-treated effluent through the SBOO, finding that this interim discharge (until such time as secondary

treatment could be achieved) would still lead to significant improvements in water quality and marine resource health by reducing the amount of untreated raw sewage discharged into the Pacific Ocean through the Tijuana River Valley.

In 1999, the Commission also concurred with CD-062-98 for the expansion of the ITP to include a different type of secondary treatment facility than initially considered in its 1994 concurrence, a Completely Mixed Aerated (CMA) pond. Also in 1999, construction of the SBOO was completed, its use began, and the interim discharge of effluent from the IPT through San Diego's Point Loma outfall was discontinued.

However, delays in construction of the secondary treatment facility at the ITP continued and in 2005, IBWC proposed a project (concurred with by the Commission in June of 2005 through CD-059-05) so that advanced primary treated wastewater from the ITP could be diverted to a proposed secondary wastewater treatment facility in Mexico before returning to the U.S. for discharge through the SBOO. As discussed in its findings in support of that concurrence, the Commission anticipated that by the year 2023, the project would result in an increase in the discharge of secondary treated wastewater through the SBOO from 25 million gallons per day (mgd) to 59 mgd.

That project was intended to lead to a decrease in (but not a complete elimination of) the volume of untreated wastewater flowing north across the international border into the Tijuana River Estuary and, ultimately, the Pacific Ocean. Discharge of up to 59 mgd of secondary treated wastewater by the year 2023 would have eliminated the 25 mgd of advanced primary treated effluent discharged into the ocean from the ITP and would have allowed the plant to comply with California Ocean Plan standards, as required under the standards of the California Regional Water Quality Control Board. However, the secondary treatment plant in Mexico was not constructed and in 2008, the IBWC instead began again to pursue a 25 mgd capacity activated sludge secondary treatment facility at the ITP – the same type of facility considered and concurred with by the Commission in 1994 through CD-002-94.

This secondary treatment facility at the ITP was constructed in 2011 and the ITP was further expanded in 2018 to include additional secondary sedimentation tanks to improve activated sludge process performance. Since that time, approximately 25 mgd of secondary treated wastewater has been discharged through the SBOO. As further described in Appendix B, however, significant issues remain regarding sewage and untreated wastewater discharge into the Pacific Ocean through the Tijuana River Valley and the San Antonio de los Buenos (SAB) Creek in Tijuana, Mexico. As noted in the CD for the currently proposed project,

...the conveyance of untreated wastewater and diverted river water [from the Tijuana River] to San Antonio de los Buenos Wastewater Treatment Plant (SABTP), and the inability to treat these flows prior to coastal discharge via San Antonio de los Buenos (SAB) Creek in Mexico, results in the discharge of approximately 35.5 MGD of mixed Tijuana River water and wastewater to the

Pacific Ocean via SAB Creek, approximately 28.2 MGD of which is untreated [sewage] wastewater.

Section 1.3.1 of Appendix B, “Causes of Contaminated Transboundary Flows” also describes additional sources of contaminated flows to the Pacific Ocean through “urban drool” from failing or non-existent sewer lines and conveyance infrastructure in Tijuana as well as unreliable operation of dry- and wet-weather wastewater collection and diversion systems. As a result, the long-standing challenge and associated adverse impacts of untreated contaminated wastewater discharge into the Pacific Ocean has grown significantly over the past several years. Continued deterioration of urban infrastructure in Tijuana coupled with high population growth projections is anticipated to further exacerbate these issues in coming years. IBWC and EPA’s proposed “USMCA Mitigation of Contaminated Transboundary Flows Project” is intended to help address these challenges through a four element effort in both the U.S. and Mexico, as further detailed below.

B. Project Description

Through the use of the \$300 million in funding provided to EPA in 2020 as part of the United States-Mexico-Canada Agreement (USMCA) and associated USMCA Implementation Act, as well as supplemental funding from Mexico, the EPA and IBWC propose to implement the USMCA Mitigation of Contaminated Transboundary Flows Project. This project would reduce transboundary flows of untreated wastewater, trash, and sediment that enters the U.S. along the San Diego County coast from Mexico via the Tijuana River, its tributaries and the Pacific Ocean. The goals of the project are to improve the collection and treatment of partially or untreated sewage and wastewater from Tijuana and to reduce adverse environmental and public health impacts to the southern San Diego County coast. The project is composed of four elements, referred to as Projects A, B, C, and D. Additional project elements associated with Alternative 2 from the project’s Programmatic Environmental Impact Statement² may also be pursued in the future if additional funding is allocated and, if necessary, would be the subject of future federal consistency review.

Project Elements

Please see Appendix C (an excerpt of pages 2-6 to 2-27 of the EIS) for expanded descriptions of the four project elements summarized below.

Project A – Expanded South Bay International Wastewater Treatment Plant (ITP)

Project A would expand secondary treatment capacity at the ITP from the existing 25 mgd to 60 mgd through a phased approach that would initially expand the ITP to 50 mgd and then 60 mgd by 2050. Wastewater would be treated through the proposed expanded ITP, flow through the existing South Bay Land Outfall, then be discharged into the Pacific Ocean approximately 3.5 miles offshore of the Tijuana River estuary through the existing South Bay Ocean Outfall (SBOO). The proposed ITP expansion would include the construction of a new solids processing facility, installation of other

² [USMCA Programmatic Environmental Impact Statement | US EPA](#)

new supporting facilities, and associated site modifications. The solids processing facility would substantially reduce the amount of waste solids produced per gallon of wastewater treated at the ITP but would also necessitate the installation of air pollution control equipment. Supporting facilities would include roads and parking within the ITP parcel; new utility connections such as electrical (including a backup electrical generator) and communications lines as well as expanded security fencing and lighting around the ITP. Site modifications necessary to accommodate the new and expanded facilities would include levelling foundations for facility equipment using fill material from within the Tijuana River Valley, relocating a portion of an existing road (Dairy Mart Road) that crosses through the planned ITP expansion, and enclosing or relocating an existing stormwater swale that runs alongside that section of Dairy Mart Road.

Also included in Project A are routine operations and maintenance activities necessary to ensure operational reliability and efficiency within the expanded ITP. These activities would include hauling sludge produced by the treatment process and disposing it in Mexico as well as repair and replacement of pumps and equipment associated with the ITP. Upon full expansion to a capacity of 60 mgd, the proposed expanded ITP would be able to address untreated sewage overflows discharged from Tijuana's sanitary sewer system to the Tijuana River, treat sewage discharged into the tributary canyons of the San Antonio de los Buenos Creek and collected by the International Collector System (see Project B, below) as well as sewage and wastewater generated by future population growth in the area. Construction of the initial phase of Project A is expected to be completed in 2027 and would be located entirely within the existing developed site of the current ITP in the U.S., as shown in Appendix C.

Project B – Tijuana Canyon Flows to ITP

Project B proposes the installation of a wastewater conveyance system from Matadero Canyon and Los Laureles Canyon in Mexico to the expanded ITP (Project A). This project element also includes associated temporary construction activities. The proposed conveyance system would reduce dry-weather wastewater flows that are currently being discharged untreated to the Pacific Ocean via the San Antonio de los Buenos (SAB) Creek. It is expected that the proposed conveyance system would collect up to 12.7 mgd (peak daily flow) of wastewater from the canyons in Mexico and transport it through gravity fed pipelines to the ITP for treatment. By using gravity to convey the wastewater, the proposed pipelines would reduce reliance on the pump stations in Matadero Canyon and Los Laureles Canyon in Mexico that are frequently offline and ineffective. The pipelines of the proposed conveyance system would be installed using either directional drilling or open-cut trenching methods. Installation activities may include temporary land disturbance and lighting in construction areas, temporary fencing, a truck-mounted generator and staging of other construction equipment. Following installation of the proposed pipeline reaches, excavated dirt would be backfilled over the pipes. There are three possible conveyance line configurations being considered for later selection by EPA and IBWC: trenching through Smuggler's Gulch and Monument Road (Project B1), trenchless installation in Smuggler's Gulch and Monument Road (Project B2), and connection to the existing canyon collector system (Project B3). EPA/IBWC is seeking the Commission's concurrence with all three

options so that it may have the flexibility to pursue whichever is found to be the most practical and cost effective. Project B also includes routine operation and maintenance activities which would include inspections of the pipeline network for leaks, cleaning, and repairs. Construction of Project B is expected to take approximately two years following mobilization and includes portions within both Mexico and the U.S., as shown in Appendix C.

Project C – Tijuana Sewer Repairs

Project C would be located entirely within Mexico and is therefore only included in the consistency determination and this report for informational purposes. Project C would involve rehabilitating or replacing seven sewer collectors in the Tijuana metropolitan area's sanitary sewer system that are leaking untreated wastewater into the Tijuana River. Reducing the amount of untreated wastewater in the Tijuana River would also improve the water quality in the downstream Tijuana River Valley and Estuary by reducing overall river flow volumes and conveying more wastewater to the expanded ITP for treatment. Old concrete pipes that are currently leaking would be replaced with more durable high density polyethylene or PVC pipes in order to prevent the risk of leaks or collapses. Each replacement is expected to take one to three years to complete following mobilization.

Project D – Advanced Primary Treatment Plant (APTP)

Project D would allow for more of the currently untreated or inadequately treated wastewater to be treated prior to being discharged into the Pacific Ocean. This would be accomplished through the construction and operation of a 35 mgd Advanced Primary Treatment Plant (APTP) at the ITP site that would provide advanced primary treatment of diverted flows from the Planta de Bombeo Comisión (PBA) Internacional de Límites y Aguas (CILA) diversion in Mexico. The proposed APTP would be constructed with an initial capacity of 35 mgd but would also be built to allow for potential future capacity expansion as part of a subsequent project phase (not considered as part of the current proposal). EPA/IBWC also considered the potential for instead constructing a new secondary treatment plant. However, they determined that the amount of funding currently available precluded such a project. As noted in correspondence to Commission staff, "while the total budget for the four core projects is \$300 million, incorporation of secondary treatment of diverted river water would cost an additional \$375 million."

Although sited at the ITP site, the APTP would be operated independently of the existing ITP. As noted in the EPA and IBWC consistency determination, the proposed APTP's wastewater treatment process would include "screening, aerated grit removal, grit dewatering, a ballasted flocculation process, and sludge handling." Proposed new facilities and processes would include: "preliminary and primary treatment facilities and the discharge of the additional resulting effluent through a new 300-foot pipeline located within the ITP parcel to tie into the existing ITP effluent structure [for subsequent discharge into the Pacific Ocean through the SBOO]." In addition, the APTP would require solids handling facilities that could process grit and sludge from the river water and sludge loading facilities. Supporting facilities are proposed to be co-located with

supporting facilities described in Project A when possible and electrical upgrades to the current system are also proposed to support the addition of the APTP. As shown in Appendix C, the proposed APTP would be built on the northern edge of the undeveloped ITP property. Construction of the proposed APTP would include grading and land disturbance for the APTP and associated staging areas, as well as temporary staging and stormwater management.

Additionally, as part of Project D, an existing force main in Mexico from PB-CILA would be rehabilitated and extended to convey river flows to the proposed APTP. Rehabilitation would involve installation of mechanical joint restraints and corrosion protection of approximately 7,200 feet of existing pipe, while the extension would involve open-cut trenching to construct approximately 1,800 feet of new HDPE force main. Another existing main would then be decommissioned once the force main is successfully rehabilitated. Proposed construction activities for this element of the project would be located entirely within Mexico. As with the expanded ITP, the proposed APTP would require routine operation and maintenance activities as well as sludge hauling to a local solid waste disposal site in Mexico. Construction of the APTP is expected to take approximately two years to complete following mobilization. However, the APTP is not currently funded and, as a result, the timing of mobilization is currently unknown.

C. Consultations and Other Agency Approvals

Regional Water Quality Control Board

As noted in the project's EIS,

Section 402 of the [Clean Water Act] establishes the [National Pollutant Discharge Elimination System (NPDES)] program, which regulates the discharge of pollutants through a point source into a water of the U.S. A NPDES permit is required for such discharges and would contain limits on the amounts of pollutants to be discharged in addition to enforceable permit conditions related to monitoring and reporting. In California, the state is fully authorized to issue NPDES permits through its state NPDES program managed by the [State Water Resources Control Board (SWRCB)] and the [Regional Water Quality Control Boards (RWQCBs)].

...

The California Ocean Plan is intended to protect the quality of ocean waters for public use and enjoyment, by means of controlling discharge of waste to ocean waters and intake of seawater. The California Ocean Plan therefore regulates discharges to the ocean from point source discharges such as the SBOO (SWRCB, 2019). The California Ocean Plan identifies water quality objectives, which include standards for bacterial, physical, chemical, and biological characteristics, as well as radioactivity. It also provides water quality objectives for protection of marine aquatic life (based on six-month median, daily maximum, and instantaneous maximum limiting concentrations) and protection of human health from carcinogens and non-carcinogens (based on 30-day average limiting concentrations).

...

These projects would ensure consistency with the California Ocean Plan via the NPDES process. As part of the NPDES application, EPA/USIBWC would complete and submit effluent testing data and whole effluent toxicity testing data consistent with EPA's NPDES application form requirements. In addition, EPA/USIBWC would submit a request to the San Diego Water Board for a regulatory mixing zone based on modeling that reflects the facility's operational and discharge characteristics at the time of application. When fully treated and with the establishment of a regulatory mixing zone, the discharge from the facility would not cause or contribute to exceedances of water quality objectives of the California Ocean Plan.

EPA/IBWC are currently in the process of developing final design and configuration details for the proposed expanded ITP and APTP and would begin to seek new or amended NPDES permits from the San Diego Regional Water Quality Control Board once those details are available.

National Marine Fisheries Service

In December of 2022, the National Marine Fisheries Service (NMFS) prepared a biological opinion and incidental take statement in accordance with Section 7(b) of the Endangered Species Act of 1973. NMFS also completed an essential fish habitat (EFH) consultation on the proposed project, in accordance with section 305(b)(2) of the Magnuson–Stevens Fishery Conservation and Management Act. The biological opinion and results of the EFH consultation were provided to Commission staff for review along with the consistency determination and helped inform Commission staff's analysis of potential adverse impacts to marine resources associated with project.

As stated by NMFS in its December 20, 2022, letter to EPA and IBWC,

Based on our analysis, it is our biological opinion that the proposed action is not likely to jeopardize the continued existence of the following ESA-listed species: blue whales, fin whales, Mexico distinct population segment (DPS) and Central America DPS humpback whales, Western North Pacific DPS gray whales, Guadalupe fur seals, East Pacific DPS green sea turtles, leatherback sea turtles, North Pacific Ocean DPS loggerhead sea turtles, olive ridley sea turtles, and white abalone.

The opinion also considered the effects of the proposed action for the following ESA-listed species: North Pacific right whales, sei whales, sperm whales, giant manta rays, Southern DPS green sturgeon, Gulf grouper, oceanic whitetip sharks, Eastern Pacific DPS scalloped hammerhead sharks, Southern California steelhead, and black abalone. Based on our analysis, we have determined that the proposed action is not likely to adversely affect these ESA-listed species.

...

In the EFH consultation, we determined that the proposed action would adversely affect EFH for federally managed fish species under the Pacific Coast Groundfish, Coastal Pelagic Species, and Highly Migratory Species [fisheries management plans] due to effects associated with the release of various contaminants by [ITP]

and APTP through the SBOO. The proposed action does contain measures to avoid, minimize, or otherwise offset many of these adverse effects on EFH, and includes monitoring and special studies to increase the understanding of potential effects associated with these constituents. Therefore, assuming these proposed measures are implemented, in addition to the measures spelled out in the [Endangered Species Act terms and conditions] of the opinion, we did not recommend any additional EFH conservation measures to avoid or minimize the adverse effects on EFH.

The biological opinion prepared by NMFS also provides a variety of non-discretionary Reasonable and Prudent Measures (RPMs), Terms and Conditions (T&Cs) and discretionary Conservation Recommendations intended to avoid and minimize the proposed project's adverse impacts to marine habitats and species. These are discussed further below in the Marine Resources and Water Quality section of this report.

D. Marine Resources and Water Quality

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats and minimizing alteration of natural streams.

Coastal Act Section 30232 states:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Coastal Act Section 30412(b) states:

The State Water Resources Control Board and the California regional water quality control boards are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate this section. The commission shall not, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights.

In addition, Section 307(f) of the federal CZMA specifically incorporates the Clean Water Act into the California Coastal Management Program. When the Commission has undertaken consistency review for sewage discharges (primarily for secondary treatment waivers), the Commission has relied on the Clean Water Act and its implementing regulations, the California Ocean Plan, the Coastal Act (Chapter 3 policies), and Water Code Section 13142.5 (incorporated into the Coastal Act by Section 30412(a)). The California Ocean Plan was originally adopted by the State Water Resources Control Board and approved by the EPA in June of 1972 and is revised every three years.

Consistent with past Commission practice when reviewing proposed wastewater treatment projects such as the proposed expanded ITP and new APTP - and in recognition of the limitations established through Coastal Act Section 302412(b) - the Commission defers to the State Water Resources Control Board for setting water quality effluent standards for both wastewater and drinking water and instead focuses its review on the project's land use elements to ensure consistency with the Coastal Act's coastal resource protection requirements.

Considering all of the above-referenced Coastal Act sections together and applied to this proposed project, the proposed expanded ITP and APTP and their associated components must be: 1) sited and designed so as to ensure protection of terrestrial biological resources, including both during construction and operation (as evaluated in Section H of this report); 2) operationally designed to treat and discharge wastewater in a manner protective of water quality and marine biological resources (as evaluated below); 3) operated in a manner that does not adversely affect air quality (as evaluated in Section F of this report) and 4) sized so as to not induce growth that cannot be developed in a Coastal Act consistent manner (as evaluated in Section G of this report).

The proposed project includes two primary elements with the potential to affect water quality, the sustained biological productivity of coastal waters, the maintenance of healthy populations of all species of marine organisms, and the protection and the maintenance of human health through minimization of the adverse effects of wastewater discharges. These elements are (1) the increased discharge of treated wastewater into

the Pacific Ocean through the existing South Bay Ocean Outfall (SBOO) due to the proposed expanded capacity of the South Bay International Wastewater Treatment Plant (ITP) and the proposed new Advanced Primary Treatment Plant (APTP); and (2) construction activities associated with modification of the diffuser array at the offshore terminus of the SBOO to facilitate the proposed increases in discharge volumes.

Increased Discharges of Treated Wastewater

The proposed project would increase the volume of treated wastewater discharged into the ocean through the SBOO by approximately 70 million gallons per day (mgd), nearly triple the current level of approximately 25 mgd³. This additional volume would be comprised of approximately 35 mgd of secondary treated wastewater from the expanded ITP and an equivalent volume of advanced primary treated wastewater from the proposed APTP. There are typically four levels referenced when discussing treatment of sewage and other wastewater: primary, advanced primary, secondary, and tertiary. Primary is the lowest treatment level and tertiary is the highest, capable of removing the greatest percentage of nutrients and contaminants.

Although it would be implemented in phases and is not anticipated to reach its full expanded capacity of 60 mgd (35 mgd above the existing ITP's current design capacity of 25 mgd) until approximately 2050, funding is currently available for the initial phase of expanded treatment capacity at the ITP and construction is expected to be completed by 2027. At that point, the ITP would begin discharging approximately 50 mgd of secondary treated wastewater into the ocean through the SBOO. Discharge of this additional initial volume of up to 25 mgd and the eventual additional discharge of 35 mgd beyond the current average level would adversely affect the water quality and marine ecology of areas surrounding the SBOO's diffuser system. These effects would be exacerbated by the proposed additional discharge of 35 mgd of advanced primary treated wastewater once the proposed APTP is constructed and operational. It is Commission staff's understanding, however, that funding for construction and operation of the APTP has not currently been identified and it is unknown when or if it will be brought online. The APTP is nevertheless included in the EPA/IBWC consistency determination as part of the proposed project in order to facilitate its construction and the potential effects to coastal resources associated with its operation are therefore included in this analysis.

In its consistency determination, the EPA/IBWC acknowledges that the proposed additional volume of treated wastewater discharge through the SBOO would "increase pollutant loadings in the immediate area around the SBOO" and would "adversely affect [essential fish habitat] within the zone of initial dilution through an increase in the total

³ As shown in Exhibit 2, the SBOO also discharges effluent generated by the City of San Diego's South Bay Water Reclamation Plant (SBWRP). The SBWRP treats wastewater collected from U.S. communities only and is designed to treat an average daily flow of 15 mgd and a peak daily flow of 35 mgd. These design capacities are intended to provide for future growth and as shown in Exhibit 2, the actual volume of effluent from the SBWRP discharged through the SBOO has been significantly less in recent years. The treatment process consists of preliminary, primary, and secondary treatment for discharged effluent, plus tertiary treatment and disinfection of effluent for beneficial reuse.

amount of chemicals toxic to marine life.” The project’s EIS expands on these effects and describes how the proposed discharge would compare to current levels:

Full implementation of the Core Projects (including the 60-MGD expanded ITP) would result in the following changes to the flow rate, nutrient loadings, and BOD5 [five-day biochemical oxygen demand] loadings of discharges via the SBOO:

- **Flow Rate:** The average daily SBOO effluent flow rate would immediately increase from approximately 28.8 MGD under current conditions to approximately 65.2 MGD under initial operating conditions of the expanded ITP and new 35-MGD APTP. The average daily SBOO effluent rate would then gradually increase (over the course of the 20-year period from 2030 to 2050) to approximately 84.7 MGD by 2050 as the full capacity of the 60-MGD expanded ITP comes into service in response to population growth in Tijuana. This discharge would remain well below the SBOO design capacity of 174 MGD average daily flow rate.
- **BOD5:** The annual BOD5 loadings in SBOO discharges would immediately increase from approximately 533 tons/yr under current conditions to approximately 2,270 tons/yr under initial operating conditions of the expanded ITP and new 35-MGD APTP. Annual BOD5 loadings would then gradually increase (over the course of the 20-year period from 2030 to 2050) to approximately 2,640 tons/yr by 2050.
- **Nutrients:** The total annual nutrient loadings (including total annual nitrogen and phosphorous loadings) in SBOO discharges would immediately increase from approximately 1,670 tons/yr under current conditions to approximately 4,240 tons/yr under initial operating conditions of the expanded ITP and new 35-MGD APTP. The total annual nutrient loadings would then gradually increase (over the course of the 20-year period from 2030 to 2050) to approximately 5,280 tons/yr by 2050.

Other constituents of the wastewaters stream would also change, most notably through increases in the amount of nutrients and metals such as copper, lead and mercury released into the ocean, as shown in the tables provided in Exhibit 2 (tables from pages 4-22 to 4-25 of the EIS). In its consistency determination, EPA/IBWC conclude that the release of these constituents in the proposed additional discharge would increase pollution levels around the discharge point and adversely affect fish habitat:

The Federal Agency Activity would not diminish biological productivity or populations of marine organisms of the coastal zone. However, the Federal Agency Activity could have localized adverse water quality impacts, as the additional discharges of treated effluent via the SBOO resulting from Projects A (Expanded ITP) and D (APTP Phase 1) would increase pollutant loadings in the immediate area around the SBOO. As stated in the Biological Assessment (BA) submitted to the National Marine Fisheries Service (NMFS), this increase in discharge of treated effluent via the SBOO is likely to result in adverse effects to [Endangered Species Act (ESA)]-listed species identified as having a medium to high potential to occur within the action area and may affect, but is not likely to adversely affect all other listed species

(EPA, 2022a). EPA also evaluated impacts to Essential Fish Habitat (EFH) in an EFH Assessment submitted to NMFS and found that the Federal Agency Activity would adversely affect the EFH within the zone of initial dilution (ZID) through an increase in the total amount of chemicals toxic to marine life as well as through anchor deployment during recommissioning of diffuser ports on the SBOO, which could disturb small areas of seabed communities (EPA, 2022b). While the increase in pollutant discharges via the SBOO could affect individual animals belonging to populations of conserved species, this would be unlikely to interfere with sustaining “healthy populations” of these species. Although there remains uncertainty as to whether and how EFH outside of the ZID would be affected by the discharge, the EFH Assessment concluded that the Federal Agency Activity would not adversely affect EFH outside of the ZID (EPA, 2022b).

In its December 2022 biological opinion, the National Marine Fisheries Service (NMFS) reaches similar conclusions:

Through the analysis presented in the opinion, we have determined that individual ESA-listed marine mammals, sea turtles, and white abalone residing or feeding in the action area could uptake and/or accumulate potentially harmful contaminants contained in discharged wastewater by ITP and APTP through the SBOO under the proposed action. This increases their body burden of these contaminants and the risk of incurring adverse effects to their growth, reproduction, and overall health and survival over a shorter period of time than would otherwise occur absent the action. We also determined that individual ESA-listed marine mammals, sea turtles, and white abalone residing or feeding in the action area would face increased risks of exposure to harmful algal blooms (HABs), and subsequent risks of sublethal and lethal health effects resulting from those exposures.

To help address these anticipated adverse impacts to marine biological productivity and water quality and to provide special protection for species of special biological significance, such as those ESA-listed species considered by NMFS in its analysis, EPA/IBWC would implement several mitigation measures. These include the non-discretionary Reasonable and Prudent Measures (RPMs), Terms and Conditions (T&Cs) and discretionary Conservation Recommendations identified by NMFS as part of its biological opinion and EFH consultation. Those focus on implementation of measures to monitor and better understand the extent of discharge of flame retardants and potential harmful constituents or nutrients in the wastewater stream, improving the understanding of the nature of harmful algal blooms in the project area, monitoring of contaminants of emerging concern to better inform future management, and reporting on the beneficial impacts of the proposed project associated with the reduction in untreated wastewater discharge into the Pacific Ocean. EPA/IBWC would implement these RPMs, T&Cs and Conservation Recommendations as part of its proposed project.

In addition, EPA/IBWC would also adhere to all future permit conditions (such as operational effluent limitations, monitoring requirements, etc.) of the National Pollutant Discharge Elimination System (NPDES) permit that would need to be issued by the San

Diego Regional Water Quality Control Board for the proposed additional discharge of treated wastewater through the SBOO. Further, the proposed project also includes modifications to the existing diffuser array at the offshore terminus of the SBOO that would increase its effectiveness in achieving the level of effluent dilution needed to minimize the extent of the project's adverse impacts on water quality. As discussed in the EIS,

EPA and USIBWC conducted outfall plume transport modeling using the UM3 nearfield model coupled with the Brook's far-field dispersion model from the Visual Plumes software suite to analyze the differences in potential pollutant transport from SBOO discharges under current and future conditions. For purposes of this modeling effort, EPA and USIBWC assumed average daily flows of 35 MGD for the baseline scenario and 110 MGD for future conditions (which is considerably higher than the average daily flow rate projected for 2050 in Table 4-9),⁵⁵ with modifications to the SBOO diffuser ports to accommodate the increased flow. This effort produced both nearfield dilution estimates and estimates of potential far-field transport processes over a longer time-period. The results, presented in Appendix J (South Bay Ocean Outfall Plume Transport Modeling), indicate that pollutant concentrations in far-field environments following implementation of the Core Projects would increase relative to baseline conditions, but that—depending on the specific number and configuration of open diffuser ports—pollutant concentrations would potentially decrease within a limited nearfield area around the SBOO (e.g., within approximately 300 to 500 meters of the point of discharge, based on the specific port configuration modeled for this effort). This phenomenon could be due, in part, to the increase in effective length of the diffuser achieved by bringing more ports into service to accommodate additional flow.

While installation of these design and structural improvements to the diffuser array and implementation of the mitigation measures and conservation recommendations identified by NMFS in its biological opinion would help minimize the proposed project's adverse impacts to water quality and the marine environment, the project itself would also serve to effectively mitigate for and offset those impacts. This is because it would collect, treat and then discharge in a controlled manner a significant volume of the raw sewage and inadequately treated wastewater from Tijuana that is currently being released directly into coastal areas and nearshore waters by the Tijuana River and San Antonio de los Buenos Creek. As summarized by EPA/IBWC in the project's consistency determination,

the Federal Agency Activity would result in reductions in pollutant loadings that would lead to substantial improvements to coastal water quality and potential reduction in the formation of harmful algal blooms. Based on these benefits, the Federal Agency Activity would result in net benefits to listed marine species and EFH. With the overarching goal of reducing contaminated transboundary flows, the Federal Agency Activity would minimize adverse effects of wastewater discharges.

The project’s EIS provides two tables (Table 4-6 and Table 4-7, copied below) and accompanying discussion that expands on this point and quantifies the anticipated reduction in uncontrolled sewage and wastewater release volumes and constituent elements that would result from the proposed expansion of the ITP, construction and operation of the APTP and installation of the sewage infrastructure and collector system improvements.

Table 4-6. Impacts on Discharges to the Pacific Ocean via SAB Creek (Initial Operations) – Alternative 1

Projects	Untreated Wastewater Flow Volume		BOD ₅ Load		Nutrient Load	
	Million gallons/day	Percent Change	Tons/yr	Percent Change	Tons/yr	Percent Change
Current conditions ^a	28.2	N/A	17,200	N/A	3,916	N/A
Project A, Option A1 (Expand to 40 MGD) only ^c	13.4	-52%	8,175	-52%	1,763	-55%
Project A, Option A2 (Expand to 50 MGD) only ^{b,c,d}	6.5	-77%	3,950	-77%	931	-76%
Project A, Option A3 (Expand to 60 MGD) only ^{b,c,d}	6.5	-77%	3,950	-77%	931	-76%
Project D (35 MGD) only ^c	22.7	-20%	13,800	-20%	2,835	-28%
Alternative 1 maximum (Projects A [Option A3] + D)	2.2	-92%	1,340	-92%	275	-93%

a – Current conditions were calculated using Tijuana River flow data from January 2016 through January 2022, during a period when PB-CILA capacity was 23 MGD.

b – Reflects ITP treatment of inflows resulting from Project B (Tijuana Canyon Flows to ITP).

c – Reflects ITP treatment of inflows resulting from Project C (Tijuana Sewer Repairs).

d – Reflects changes in discharges and loadings that would be achieved upon startup of new treatment facilities (i.e., before the full treatment capacity comes into service in response to population growth in Tijuana).

As shown above, implementation of the Core Projects would nearly eliminate discharges of untreated wastewater to the Pacific Ocean via SAB Creek. This would result in substantial regional coastal water quality improvements, leading to reduced negative impacts to beaches and public health as discussed below (see Improvements in Marine Water Quality and Reduced Beach Impacts) and in Section 4.16 (Public Health and Safety).

Implementation of the Core Projects would also reduce (by up to 93 percent) the portion of sediment loads via SAB Creek that come from untreated wastewater or river water. These projects would not affect sediment loads to the Pacific Ocean resulting from stormwater and erosion within the SAB Creek watershed.

Table 4-6 identifies the improvements that would occur upon startup of the new treatment facilities. However, the 50-MGD and 60-MGD options of Project A provide additional treatment capacity to accommodate projected population growth in Tijuana through the years 2030 and 2050, respectively, assuming Tijuana canyon flows are treated at the ITP (Project B). The full water quality benefits of

these options would be realized once this additional treatment capacity comes into service in response to population growth. To estimate these future improvements relative to baseline conditions, EPA and USIBWC projected 2050 baseline conditions for discharges to SAB Creek (i.e., assuming no infrastructure improvements are made) and estimated the impacts of the Core Projects on this projected baseline. Table 4-7 summarizes these projected (2050) reductions in discharges of untreated wastewater to the Pacific Ocean via SAB Creek.

Table 4-7. Impacts on Discharges to the Pacific Ocean via SAB Creek (Projected 2050 Conditions) – Alternative 1

Projects	Untreated Wastewater Flow Volume		BOD ₅ Load		Nutrient Load	
	Million gallons/day	Percent Change	Tons/yr	Percent Change	Tons/yr	Percent Change
Projected 2050 baseline conditions ^a	44.6	N/A	27,200	N/A	5,980	N/A
Project A, Option A1 (Expand to 40 MGD) only ^c	28.1	-37%	17,200	-37%	4,230	-29%
Project A, Option A2 (Expand to 50 MGD) only ^{b,c,d}	18.3	-59%	11,200	-59%	2,980	-50%
Project A, Option A3 (Expand to 60 MGD) only ^{b,c,e}	9.3	-79%	5,680	-79%	1,880	-69%
Project D (35 MGD) only ^c	37.8	-15%	23,100	-15%	4,750	-21%
Alternative 1 maximum (Projects A [Option A3] + D)	5.4	-88%	3,310	-88%	674	-89%

a – Projected conditions in 2050 reflect estimates of additional wastewater generated due to projected population growth in Tijuana with no corresponding improvements to wastewater treatment infrastructure.

b – Reflects ITP treatment of inflows resulting from Project B (Tijuana Canyon Flows to ITP).

c – Reflects ITP treatment of inflows resulting from Project C (Tijuana Sewer Repairs).

d – Reflects projected operations in 2030, when the 50-MGD ITP would be operating at full capacity based on estimated population growth in Tijuana.

e – Reflects projected operations in 2050, when the 60-MGD ITP would be operating at full capacity based on estimated population growth in Tijuana.

As shown above, implementation of Project A, Option A2 or Option A3 in particular, would be projected to substantially reduce future discharges of untreated wastewater to the Pacific Ocean via SAB Creek. The added capacity provided under Option A3 would help prepare for projected conditions in 2050 and provide additional coastal water quality improvements through 2050, achieving more than double the pollutant loading reductions that would occur under Option A1. Implementation of Option A3 would also be projected to reduce (by up to 88 percent) the portion of projected sediment loads via SAB Creek that would come from untreated wastewater or river water. These projects would not affect sediment loads to the Pacific Ocean resulting from stormwater and erosion within the SAB Creek watershed.

In its evaluation and concurrence with prior wastewater treatment projects in the Tijuana River Valley, the Commission placed significant emphasis on this rationale and the relative improvement provided by those projects over the conditions present at the time.

For example, the Commission's adopted findings in support of its concurrence with CD-059-05 for IBWC's discharge of secondary-treated wastewater through the SBOO, increased discharge volume through the SBOO and associated infrastructure note that:

The Commission previously found in CD-002-94 that discharge of 25 mgd of secondary treated wastewater (activated sludge process) through the South Bay Ocean Outfall (SBOO) was consistent with the water quality and marine resource policies of the Coastal Act. The Commission subsequently found in CD-137-96 that a temporary discharge of advanced primary treated wastewater through the SBOO (until the secondary treatment facility was constructed) was also consistent with the aforementioned policies of the Coastal Act. Both of these concurrences were supported in part by the Commission's determination that removal of raw sewage and untreated wastewater from the Tijuana River, its estuary, adjacent beaches, and nearshore waters – by diversion into the South Bay International Wastewater Treatment Plant for secondary or advanced primary treatment and subsequent ocean discharge through the SBOO – significantly improved coastal water quality and marine resources. The Commission's later concurrence with CD-062-98 for discharge of 25 mgd of secondary treated wastewater (completely mixed aerated pond process) reiterated those previous determinations and findings regarding the clear benefits to coastal water quality and marine resources from the diversion, treatment, and discharge of wastewater out of the Tijuana River Valley.

While it's important to note that a proposal for a new discharge of several dozen mgd of advanced primary or secondary treated wastewater into the ocean may be difficult to find consistent with the Coastal Act's water quality and marine biological resource policies, that is not what is proposed by the EPA/IBWC project. Similar to past projects in this area, the current project instead proposes to divert and treat, to the highest level currently possible given available funding allocations and the unique constraints imposed by the complicated international dynamic present in the Tijuana area, a significant portion of the raw sewage and inadequately treated wastewater currently being released directly into nearshore waters.

As such, Commission finds that the proposed increase in the discharge volume of effluent from the proposed expanded ITP and APTP represents a significant improvement over the current condition, would result in a net benefit to water quality and marine biological resources in the project area and is consistent with the water quality and marine resource policies of the California Coastal Management Program (Sections 30230, 30231, and 30412 of the Coastal Act).

Modifications to SBOO Diffuser System

The existing South Bay Ocean Outfall (SBOO) terminates approximately 3.5 miles offshore in a diffuser array equipped with risers and diffuser heads designed to disperse the discharged effluent in a controlled manner across a large area in order to facilitate dilution and minimize the water column area influenced by discharged wastewater flow. Although the SBOO and its diffuser array are designed with a capacity of over 170 mgd – significantly greater than the volume proposed to be discharged as a result of the

expanded ITP and new APTP – because the array is currently configured to process a much smaller volume, it may need to be modified as part of the proposed project.

Modifications to the wye diffuser array on the SBOO that could be necessary to promote dispersal of the increased discharge volume could include opening ports on existing capped risers and/or installing new diffuser heads and ports to existing closed, blind flanged risers. These underwater construction activities would involve the use of support vessels, installation of anchoring systems and diver operations.

As noted in the EIS,

Under Alternative 1, construction activities for the Core Projects would result in minor, short-term impacts to marine waters from activities associated with modifications to the wye diffuser array on the SBOO for Projects A (Expanded ITP) and D (APTP Phase 1) as described in Section 4.5.3 (Marine Biological Resources). Vessels required for these modifications would likely carry hydraulic fluids and fuel, thus vessel activities would bring a small risk of oil spill and water pollution. Assuming mitigation measures are maintained (see Section 5 [Mitigation Measures and Performance Monitoring]), the likelihood of an oil spill occurring would be negligible. Additionally, vessel operation and diver activity would potentially result in minor inconveniences to recreational and commercial fishing activities. However, construction activities would occur over a relatively short period of time (a few hours each day for a few weeks), would be localized to the area around the southern leg of the SBOO, and would likely occur in phases over the course of several years. No other components of the Core Projects would result in temporary effects on marine waters because they would not involve disturbance or activities in the marine environment. Based on this and the minor nature of impacts mentioned above, construction activities for Alternative 1 would not result in significant impacts to marine waters per the criteria in Section 4.2.1 (Standards of Significance).

In its consistency determination, EPA/IBWC expands on this analysis and describes the additional marine biological resource protective measures that would be implemented during any proposed work on the diffuser array to help ensure adverse impacts to marine species and habitats are avoided:

As described in the BA and the EFH Assessment, mitigation measures proposed as part of the Federal Agency Activity to minimize adverse effects during construction and O&M include: keeping a constant watch of the ocean surface in front of and adjacent to the vessel for marine mammals and turtles at all times, using onboard sonar equipment to check for reef before anchor deployment, and using an anchor that is as small as safely possible and minimizing the number of anchor deployments. Additionally, during operation, EPA and USIBWC would adhere to NPDES permit conditions, including by staying within operational effluent limitations for the discharge from the SBOO (EPA, 2022a, 2022b). EPA and USIBWC would also adhere to additional reasonable and prudent mitigation measures, if identified

by NMFS during ongoing formal consultation or in the Biological Opinion for the Federal Agency Activity, to minimize potential effects to ESA-listed species due to SBOO discharges.

With implementation of these measures and considering the limited duration and scope of underwater construction activities associated with the installation of modification on the SBOO diffuser array, the Commission finds this aspect of the proposed project is consistent with the water quality and marine resource policies of the California Coastal Management Program (Sections 30230, 30231, and 30412 of the Coastal Act).

Conclusion

The Commission finds that the proposed project is consistent with the water quality and marine resource policies of the California Coastal Management Program (Sections 30230, 30231, and 30412 of the Coastal Act).

E. Coastal Recreation

Section 30220 of the Coastal Act states:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30240 of the Coastal Act states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and park and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuation of such habitat areas.

The proposed project includes the construction and installation of infrastructure to collect, treat and discharge approximately 3.5 miles offshore flows of raw sewage and partially treated wastewater that are currently being released through the San Antonio de los Buenos Creek and Tijuana River into nearshore coastal waters. Prevailing ocean currents bring these contaminated flows and ocean waters north into southern San Diego County. EPA/IBWC discusses in its consistency determination the proposed project's potential effects on coastal access and water-oriented recreation as follows:

Primary water-oriented recreational activities in the area include surfing, sea kayaking, stand-up paddle boarding, boating, and recreational fishing. Poor coastal water quality, driven by both maritime and riverine transboundary flows, has caused frequent beach closures, particularly for the beaches closest to the U.S.-Mexico

border. Untreated wastewater contributes to high bacterial concentrations in the Tijuana River and tributaries, creating health risks for recreational users.

The Federal Agency Activity would nearly eliminate discharges of untreated wastewater to the Pacific Ocean via SAB Creek and would substantially reduce dry-weather transboundary flows and pollutant loadings in the Tijuana River. For example, EPA and USIBWC estimate that full implementation of the Federal Agency Activity would reduce annual [five-day biochemical oxygen demand (BOD5)] loadings in SAB Creek discharges and in transboundary Tijuana River flows by approximately 90 percent and 66 percent, respectively.

In particular, reducing discharges of untreated wastewater via SAB Creek is expected to result in substantial improvements to coastal water quality and reduced beach impacts during the tourist (dry) season—i.e., Memorial Day to Labor Day. EPA and USIBWC estimate that full implementation of the Federal Agency Activity would immediately lead to significant reductions in water quality–driven human health impacts at regional beaches, based on reduced exposure to norovirus pathogens in untreated wastewater discharges.

The estimated decreases in pollutant loadings to the Pacific Ocean via SAB Creek and the Tijuana River far outweigh the estimated increases in loadings from discharge of treated effluent via the SBOO. In addition, EPA and USIBWC would ensure new discharges via the SBOO are consistent with the California Ocean Plan via the National Pollutant Discharge Elimination System (NPDES) process, which would include the establishment of a regulatory mixing zone. Implementation of the Federal

The project EIS expands on the summary provided in the consistency determination and provides quantification of the expected project benefits to public health and coastal recreation:

The estimated decreases in pollutant loadings to the Pacific Ocean via SAB Creek and the Tijuana River described above far outweigh the estimated increases in loadings from discharge of treated effluent via the SBOO. Implementation of the Core Projects would therefore be expected to result in significant marine water quality benefits in the Pacific Ocean. Net reductions in nutrient loadings to the Pacific Ocean would potentially reduce the formation of [harmful algal blooms (HABs)] along the coastline and the associated health risks to wildlife and humans.

In particular, reducing discharges of untreated wastewater via SAB Creek is expected to result in substantial improvements to coastal water quality and reduced beach impacts during the tourist (dry) season—i.e., Memorial Day to Labor Day. In a recent modeling study, the Scripps Institution of Oceanography examined the frequency and causes of water quality–driven human health impacts at four beaches along the U.S. and Mexican coasts, based on four⁵⁶ wastewater input

scenarios representing different combinations of untreated wastewater contributions from SAB Creek and the Tijuana River (Feddersen et al., 2021). In this study, the authors estimated the following for each beach and input scenario:

- Shoreline norovirus concentrations.
- Number of ill swimmers (N_{ill}) due to exposure to norovirus pathogens in untreated wastewater discharges.
- Beach impact fraction (BIF), which is the fraction of time that the modeled mean (expected) probability of swimmer illness exceeds 0.036 (i.e., 36 per 1,000) due to exposure to norovirus pathogens in untreated wastewater discharges (Feddersen et al., 2021).

The model results indicate that untreated wastewater from SAB Creek is the dominant cause of swimmer illness at regional beaches during the tourist (dry) season (Feddersen et al., 2021). Drawing from the modeled relationship between discharges of untreated wastewater via SAB Creek and the resulting beach impacts, EPA and USIBWC interpolated the expected tourist (dry) season impacts at regional beaches that would result from implementation of the Core Projects.⁵⁷ See Appendix K (Interpolation of Modeled Beach Impacts) for the interpolation methodology. The results are presented in Table 4-10 and Table 4-11. These results demonstrate that full implementation of the Core Projects would immediately lead to significant reductions in water quality–driven human health impacts at regional beaches during the tourist (dry) season.

Table 4-10. Impacts on Tourist (Dry) Season N_{ill} at Imperial Beach (Initial Operations) – Alternative 1

Project	Untreated Wastewater from SAB Creek (MGD)	Imperial Beach	
		N _{ill} ^e	Percent Change
Current conditions ^a	28.2	21,352	N/A
Project A, Option A1 (Expand to 40 MGD) only ^c	13.4	11,779	-45%
Project A, Option A2 (Expand to 50 MGD) only ^{b,c,d}	6.5	7,315	-66%
Project A, Option A3 (Expand to 60 MGD) only ^{b,c,d}	6.5	7,315	-66%
Project D (35 MGD) only ^c	22.7	17,794	-17%
Alternative 1 maximum (Projects A [Option A3] + D)	2.2	4,534	-79%

a – Current conditions were calculated using Tijuana River flow data from January 2016 through January 2022, during a period when PB-CILA capacity was 23 MGD.

b – Reflects ITP treatment of inflows resulting from Project B (Tijuana Canyon Flows to ITP).

c – Reflects ITP treatment of inflows resulting from Project C (Tijuana Sewer Repairs).

d – Reflects changes in discharges and loadings that would be achieved upon startup of new treatment facilities (i.e., before the full treatment capacity comes into service in response to population growth in Tijuana).

e – N_{ill} is defined as the number of ill swimmers due to exposure to norovirus pathogens in untreated wastewater discharges. Results are interpolated from those of two scenarios in Feddersen et al. (2021) representing 0 MGD and 35 MGD of untreated wastewater from SAB Creek. See Appendix K (Interpolation of Modeled Beach Impacts) for additional information, including discussion of how this interpolation potentially overestimates N_{ill} reductions for certain projects.

Table 4-11. Impacts on Tourist (Dry) Season Beach Impact Fraction (Initial Operations) – Alternative 1

Project	Untreated Wastewater from SAB Creek (MGD)	Playas Tijuana		Imperial Beach		Silver Strand Beach		Hotel del Coronado	
		BIF ^e	% Change	BIF ^e	% Change	BIF ^e	% Change	BIF ^e	% Change
Current conditions ^a	28.2	0.576	N/A	0.396	N/A	0.292	N/A	0.212	N/A
Project A, Option A1 (Expand to 40 MGD) only ^c	13.4	0.490	-15%	0.297	-25%	0.193	-34%	0.099	-53%
Project A, Option A2 (Expand to 50 MGD) only ^{b,c,d}	6.5	0.330	-43%	0.178	-55%	0.110	-62%	0.047	-78%
Project A, Option A3 (Expand to 60 MGD) only ^{b,c,d}	6.5	0.330	-43%	0.178	-55%	0.110	-62%	0.047	-78%
Project D (35 MGD) only ^c	22.7	0.544	-6%	0.359	-9%	0.255	-13%	0.170	-20%
Alternative 1 maximum (Projects A [Option A3] + D)	2.2	0.156	-73%	0.060	-85%	0.037	-87%	0.016	-92%

a – Current conditions were calculated using Tijuana River flow data from January 2016 through January 2022, during a period when PB-CILA capacity was 23 MGD.
 b – Reflects ITP treatment of inflows resulting from Project B (Tijuana Canyon Flows to ITP).
 c – Reflects ITP treatment of inflows resulting from Project C (Tijuana Sewer Repairs).
 d – Reflects changes in discharges and loadings that would be achieved upon startup of new treatment facilities (i.e., before the full treatment capacity comes into service in response to population growth in Tijuana).
 e – BIF is defined as the fraction of time that the modeled mean (expected) probability of swimmer illness exceeds 0.036 (i.e., 36 per 1,000) due to exposure to norovirus pathogens in untreated wastewater discharges. Results are interpolated from those of two scenarios in Feddersen et al. (2021) representing 0 MGD and 35 MGD of untreated wastewater from SAB Creek and a third scenario (F. Feddersen, personal communication, April 23, 2022) representing 10 MGD of untreated wastewater from SAB Creek. See Appendix K (Interpolation of Modeled Beach Impacts) for additional information.

In previous concurrences with consistency determinations for discharging secondary treated wastewater through the SBOO, the Commission concluded that this type of discharge would benefit public recreation in the Tijuana River Valley, the shoreline north of the International Border, and in adjacent ocean waters due to the removal of raw sewage flows from the Tijuana River Valley and the upgrade in ocean wastewater discharges from advanced primary to secondary treatment. The proposed increase in discharges through the SBOO from the current approximately 25 mgd of secondary treated wastewater to the proposed 70 mgd of advanced primary and secondary treated wastewater is consistent with previous Commission actions to protect public recreation in the region. The Commission agrees with EPA/IBWC that by removing additional sewage and wastewater from the Tijuana River Valley and by improving the treatment level of increased volumes of wastewater discharged through the SBOO, upland and ocean recreation areas in the region will be protected and improved for public

recreational activities. Therefore, the Commission finds that the proposed increase in the discharge volume of effluent through the SBOO is consistent with the public recreation policies of the California Coastal Management Program (Sections 30220 and 30240) of the Coastal Act.

F. Air Quality

Section 30253 of the Coastal Act provides in part:

New development shall:

...

(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.

Section 30414 of the Coastal Act provides:

(a) The State Air Resources Board and air pollution control districts established pursuant to state law and consistent with requirements of federal law are the principal public agencies responsible for the establishment of ambient air quality and emission standards and air pollution control programs. The provisions of this division do not authorize the commission or any local government to establish any ambient air quality standard or emission standard, air pollution control program or facility, or to modify any ambient air quality standard, emission standard, or air pollution control program or facility which has been established by the state board or by an air pollution control district.

(b) Any provision of any certified local coastal program which establishes or modifies any ambient air quality standard, any emission standard, any air pollution control program or facility shall be inoperative.

(c) The State Air Resources Board and any air pollution control district may recommend ways in which actions of the commission or any local government can complement or assist in the implementation of established air quality programs.

EPA/IBWC note in the project consistency determination that the proposed project would adversely affect air quality during (1) construction and (2) operation of the expanded ITP and new APTP:

Construction would result in temporary and direct emissions of criteria air pollutants (volatile organic compounds [VOCs], nitrogen oxides [NO_x], particulate matter, and carbon monoxide) due to factors including combustion of fossil fuels by on-road and non-road vehicles and equipment, dust and soil disturbance, asphalt paving, and painting. Construction emissions are estimated to fall well below the General

Conformity Rule de minimis levels and Air Quality Impact Assessment trigger levels and would not result in significant air quality impacts.

Under Project A (Expanded ITP), incorporation of anaerobic digestion, and the associated requirement to combust the generated biogas (e.g., via flare, engine, or turbine), would drastically increase the ITP's potential-to-emit for regulated pollutants including NO_x, non-methane hydrocarbons/VOCs, and hazardous air pollutants including formaldehyde, as well as the odorous compound hydrogen sulfide. Operations under Projects A and D (AFTP Phase 1) would increase recurring mobile source emissions to and from the ITP parcel (e.g., along portions of Dairy Mart Road and through the Interstate 5 interchange) due to increases in staff commuting and truck hauling of solid waste. These increases in traffic volume in the U.S. would be negligible compared to existing levels. Operation of the new and expanded treatment plants under Projects A and D would also generate indirect emissions due to factors including energy consumption, landfill use, and water consumption. EPA and/or USIBWC would obtain and comply with all applicable air permits.

The project EIS expands on this analysis and additionally describes how the air and odor emissions from construction and operation of the proposed new and expanded wastewater treatment plants would contribute to and exacerbate ongoing stressors in environmental justice (EJ) communities⁴ near the area in which these plants would be located:

As discussed in Sections 4.11 (Air Quality and Odor) and 4.17 (Transportation), all criteria pollutant emissions from construction (including PM) would be very low compared to both GCR de minimis thresholds and San Diego AQIA trigger levels, and the expected increase in counts of vehicles during construction would be very low compared to existing average daily traffic volumes. However, these impacts would occur in communities that currently experience high (between the 65–89th percentiles) and/or extremely high (90th percentile or higher) burdens for these specific environmental indicators in addition to other social and environmental burdens—e.g., 95th percentile or higher for PM_{2.5} in all portions of the EJ Study Area and 65th percentile or higher for Diesel PM in more than half of the census tracts in the EJ Study Area (CalEPA, 2021a). Therefore, these construction-related impacts under Projects A and D would be significant when considered within the context of the impacted communities. Additionally, because these impacts would occur predominantly within minority, low-income, and/or overburdened communities, impacts to these communities would appreciably exceed those to the general population (e.g., San Diego County as a whole). EPA and USIBWC therefore considered these air quality and traffic-related impacts under Projects A and D to be disproportionately high and adverse effects.

⁴ The EIS identifies EJ communities in two EJ Study Areas by the project components identified in Section 3.20 (Environmental Justice) of the EIS.

Construction for Project B (Tijuana Canyon Flows to ITP), depending on the option selected, would also result in temporary construction activity in the U.S. between Smuggler's Gulch and the ITP parcel to install underground pipelines. While these activities would generate temporary air emissions and vehicle use, work would involve small construction crews and equipment fleets and would not involve prolonged use of heavy trucks along local roads and highways. Construction-

Under Alternative 1, implementation of the Core Projects would result in long-term impacts to communities with environmental justice concerns due to operational emissions, odor, and traffic. As described below, Alternative 1 would result in disproportionately high and adverse effects on minority, low-income, and/or overburdened communities. EPA and USIBWC would incorporate mitigation measures as described in Section 5 (Mitigation Measures and Performance Monitoring) to avoid, minimize, or compensate for these effects.

...

Operations under Projects A (Expanded ITP) and D (AFTP Phase 1) would result in long-term operational emissions, a long-term increase in employee commuting to the ITP parcel due to staff increases, and a long-term increase in the use of heavy trucks along roads between the ITP parcel and landfills (e.g., Otay Landfill) for disposal of solids waste. These operations would therefore result in long-term increases in criteria air pollutant emissions (including PM_{2.5} and diesel PM) and traffic. As discussed in Sections 4.11 (Air Quality and Odor) and 4.17 (Transportation), all criteria pollutant emissions from operations (including PM) would be very low compared to both GCR de minimis thresholds and San Diego AQIA trigger levels, with the incorporation of pollution controls as described in Section 4.11 (Air Quality and Odor), and the expected increase in counts of vehicles during operation would be very low compared to existing average daily traffic volumes. However, these impacts would occur in communities that currently experience extremely high burdens for these specific environmental indicators in addition to other social and environmental burdens. Therefore, these operational impacts under Projects A and D would be significant when considered within the context of the impacted communities. Additionally, as described in Section 4.11 (Air Quality and Odor), H₂S emissions from the anaerobic digestion process under Project A—which would operate on a continuous (or near-continuous) basis—would have the potential to create objectionable odors affecting nearby communities, thus resulting in a significant impact. Because these impacts would occur predominantly within minority, low-income, and/or overburdened communities, impacts to these communities would appreciably exceed those to the general population (e.g., San Diego County as a whole). EPA and USIBWC therefore considered these air quality, odor, and traffic-related impacts under Projects A and D to be disproportionately high and adverse effects.

To address these adverse impacts to air quality in the project area and the resulting additional burden to EJ communities in that area already experiencing “extremely high burdens for these specific environmental indicators in addition to other social and environmental burdens,” EPA/IBWC would implement a variety of avoidance,

minimization and mitigation measures. These measures are described in detail in Exhibit 3 and include those related to air quality such as community outreach to ensure that receptors potentially affected by odor emissions, including emissions from operation of the expanded ITP (including the anaerobic digester) and the new APTP, have the opportunity to share information with EPA/IBWC; appropriate use of scrubbers, aeration, fugitive emissions containment system, and/or other odor controls to lessen odor impacts; installation of best available control technology emissions reduction technologies for criteria pollutants and/or hazardous air pollutants (e.g., biogas pretreatment to remove formaldehyde and H₂S, selective catalytic reduction to remove NO_x, catalytic oxidation to remove VOCs, combustion of biogas); development and implementation of a Fugitive Dust Control Plan to reduce fugitive dust emissions and community exposure to fugitive dust; inclusion of construction fleet emissions reduction strategies as a factor in the scoring and evaluation of proposals during the procurement process; and 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.

Additional measures focused on transportation would be implemented to help minimize emissions associated with that element of the proposed construction and operation. These include incorporation of anaerobic digestion of primary and secondary sludge into project design to reduce amount of solids waste from the expanded ITP; development and implementation of a Construction Traffic Management Plan to include specific measures for reducing vehicle trips and vehicle miles traveled 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); and 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).

With implementation of these measures and EPA/IBWC's commitment in the project consistency determination to "obtain and comply with all applicable air permits," including those from the San Diego Air Pollution Control District, the proposed project would be carried out consistent with the requirements imposed by an air pollution control district. Further, the Commission uses an environmental justice lens when analyzing projects' substantive consistency with Chapter 3 policies in the California Coastal Management Program, guided by its adopted Environmental Justice Policy and Coastal Act Section 30013.⁵ The Commission's Environmental Justice Policy calls for analyzing environmental justice issues in applicable staff reports and, when appropriate, proposing mitigation measures to avoid or fully mitigate identified impacts in a manner

⁵ Coastal Act Section 30013, which provides that the Commission is to advance the principles of environmental justice and equality, references California Government Code section 65040.12(e), which defines "environmental justice" as "the fair treatment and meaningful involvement of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."

that is consistent with Chapter 3 policies. Therefore, the Commission finds that the proposed project is consistent with the air quality section of the California Coastal Management Program (Section 30253 of the Coastal Act) and proposes mitigation measures to address the project's disproportionate impacts to affected EJ communities.

G. Development

Coastal Act Section 30254 states (in relevant part):

New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division...

Coastal Act Section 30254.5 states:

Notwithstanding any other provision of law, the commission may not impose any term or condition on the development of any sewage treatment plant which is applicable to any future development that the commission finds can be accommodated by that plant consistent with this division. Nothing in this section modifies the provisions and requirements of Sections 30254 and 30412.

Growth Inducing Potential

In the adopted findings in support of its concurrence with the IBWC consistency determination for the original construction and operation of the ITP and SBOO (CD-002-94), the Commission considered the potential for the wastewater treatment plant and ocean outfall to induce additional growth and development in surrounding areas and found that the project would provide no such inducement of growth because they would exclusively treat sewage and wastewater generated in Mexico and that future projects in the area would be subject to Commission review and evaluated on their own merits:

Construction of a large public works project typically leads to concerns over that project's potential for inducing excessive population growth and with it, additional demands on public works infrastructure. However, growth inducement is not a major concern associated with the ITP, in spite of the capacity of the ocean outfall and the expansion potential at the plant site. The ITP will not provide treatment for sewage generated in the United States, and in particular, San Diego County (presently or in the future). The purpose of the ITP is to resolve a public health and sanitation problem caused by untreated sewage from Tijuana crossing the international border into California. The project is a defensive measure to capture and treat sewage flows (up to 25 mgd) which escape the undersized and malfunctioning wastewater treatment works in Tijuana. Although the proposed ITP site and ocean outfall are sized such that the 25 mgd-capacity treatment plant could be expanded to handle up to 100 mgd capacity in the future, any such expansion of the plant would require additional agreements between the United States and Mexico, and would require consistency review by the Commission.

In commenting on the 1991 Draft EIS for the proposed [SBOO] project, Commission staff did express concerns over the size and capacity of the ocean outfall in that it far exceeded the present or future needs of the ITP and the City of San Diego's proposed (at that time) wastewater treatment plants. Staff believed that the outfall could create an inducement to excessive growth in and outside the coastal zone, growth which could adversely affect sensitive coastal resources in the lower Tijuana River Valley. However, the Commission itself previously analyzed the growth-inducement issue associated with wastewater treatment projects in this region when it approved coastal development permit 6-88-277 (City of San Diego) for construction of the South Bay Land Outfall. The Commission was concerned that the size and capacity of the pipeline far exceeded the current or expected needs of the City's metropolitan sewage system and the current or future needs of the ITP. However, in determining that the South Bay Land Outfall was consistent with Section 30254 of the Coastal Act, the Commission found:

Regardless, the City is willing to risk having a pipe with unused capacity rather than establishing the potential for future incremental enlargement of a smaller system, with its attendant incremental environmental impacts. The Commission has agreed that a one-time disturbance of the river valley is the environmentally-preferable alternative, and further agrees that future treatment plant locations and/or capacities are not dictated by approval of the proposed twelve-foot diameter pipe. Furthermore, Special Condition #8 stipulates that only sewage generated in Mexico can utilize the proposed pipe at this time, and states that a permit amendment is required to accommodate U.S.-generated sewage volumes; any concerns about growth inducement can be addressed at the time of amendment review

The Commission finds that in concurring with this consistency determination, it again makes no statement regarding any future expansion of the ITP or future construction of City of San Diego wastewater treatment and reclamation plants (either adjacent to the ITP or at other locations in the San Diego region that would discharge into the proposed ocean outfall. Any such future projects will be evaluated on their own merits and on their consistency with the applicable policies of the Coastal Act. Given that understanding, the Commission finds that the proposed project will not be growth-inducing, but rather is designed to resolve the longstanding public health and environmental problems arising from sewage flows crossing the international border from Mexico to the United States. The Commission concludes that the project is consistent with Sections 30250 and 30254 of the Coastal Act.

The Commission's rationale in making these findings in its 1994 concurrence remain relevant today and applicable to the proposed project. The proposed expanded ITP and new APTP would continue to be used solely to treat waste generated in Mexico and serve as "a defensive measure to capture and treat sewage flows... which escape the undersized and malfunctioning wastewater treatment works in Tijuana." As such, the proposed project would not have the potential to induce additional growth and

development in southern San Diego County. Further, the decisions by the City of San Diego and IBWC in the late 1980s and early 1990s to construct infrastructure, including the South Bay Land Outfall and South Bay Ocean Outfall, with capacity that exceeded the needs at the time, are shown in the current context to be examples of appropriate advanced planning. The proposed expanded ITP and APTP that have also been designed with excess capacity or the potential to be augmented over time to address future needs show similar foresight that should help minimize costs and potential impacts associated with such future projects.

Because the proposed project would be limited to the collection, treatment and discharge of sewage and wastewater originating in Mexico, it would not induce growth in a manner prohibited by Section 30254. Instead, the project is a major step forward in the effort to manage and mitigate contaminated runoff to the Tijuana River watershed, with significant coastal resource improvements. Therefore, the Commission finds that the proposed project is consistent with the development sections of the California Coastal Management Program (Section 30254 and 30254.5 of the Coastal Act).

H. Environmentally Sensitive Habitat

Section 30240 of the Coastal Act states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The proposed project includes elements in Mexico and California that would result in ground disturbance and could affect terrestrial species and habitats. In California, these elements include the expansion of the existing South Bay International Wastewater Treatment Plant (ITP), the construction of a new Advanced Primary Treatment Plant (APTP), and the installation of conveyance pipelines to transport sewage and wastewater collected in Mexico to the ITP and APTP for treatment and discharge.

Preparation of the project EIS included extensive surveying, classification and mapping efforts for vegetation communities and habitat within and surrounding the proposed project sites. EPA/IBWC used this information to evaluate and discuss in its consistency determination the potential of the project to result in disruption or disturbance of sensitive plant and wildlife species or ESHA:

The Federal Agency Activity would not significantly disrupt environmentally sensitive habitat areas. Development for the Federal Agency Activity would occur in areas adjacent to environmentally sensitive habitat areas and parks (including

Lemonade berry scrub habitat in Smuggler's Gulch, critical habitat for least Bell's vireo along the Tijuana River, Tijuana River Valley Regional Park (TRVRP), and downstream riparian areas). The Federal Agency Activity would be designed and sited such that no significant degradation of these areas would occur. Specifically, Project B (Tijuana Canyon Flows to ITP) would be located within the TRVRP and Lemonade-berry scrub habitat. Impacts to these areas would be from trenching for pipeline installation and would be minor and temporary, and disturbed areas would be revegetated with native species. To further reduce impacts to sensitive habitat, open-cut trenching would be confined to the existing roadway in Smuggler's Gulch and along Monument Road, as well as the undeveloped strip of land adjacent to Clearwater Way and West Tia Juana Street (on federal land).

Vernal pools are environmentally sensitive habitat because they can provide habitat for a variety of endemic species, including protected specialist species such as the federally listed San Diego fairy shrimp. Although vernal pools are not known to occur in the project area for Project B, a focused survey for vernal pools would be conducted in the Federal Agency Activity area no less than one year prior to construction. If found, vernal pools would be avoided.

EPA and USIBWC have developed mitigation measures in case other environmentally sensitive habitats are identified during future surveys (e.g., Quino checkerspot butterfly host plants and sensitive natural plant communities such as Lemonade berry scrub and Gooding's willow-red willow Riparian Woodland and Forest). Implementation of the projects would include protocol level surveys and/or preconstruction surveys, conducted by a qualified biologist, for special-status flora and fauna and sensitive natural communities that have the potential to occur in the evaluated area. If found, a no-work buffer would be established around the special-status population or sensitive natural community, and this buffer would be avoided to the maximum extent practicable.

If the special-status species or sensitive natural community cannot be avoided, a mitigation and monitoring plan would be developed in coordination with USFWS and the California Department of Fish and Wildlife. Additionally, during construction all heavy equipment, vehicles, and construction activities would be confined to existing access roads, road shoulders, and disturbed/developed or designated work areas. Wash stations would be set up at all vehicle entrances into the work area to remove plant material, mud, and dirt from vehicles before entering the area. Project workers would 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. Therefore, with implementation of these mitigation measures and others described in the BA, construction would not result in significant disruption or degradation of environmentally sensitive habitat areas.

In the long-term, environmentally sensitive habitat areas could see benefits resulting from improved water quality as a result of the Federal Agency Activity. As described earlier, the purpose of the Federal Agency Activity is to reduce transboundary flows that cause adverse public health and environmental impacts in

the Tijuana River watershed and adjacent coastal areas. Within these areas, environmentally sensitive habitat areas, including but not limited to least Bell's vireo critical habitat, TRVRP, and downstream riparian areas, would see the benefits as a result of improved water quality after implementation of the Federal Agency Activity.

The project EIS also includes a range of adverse impact avoidance and minimization measures that would further ensure that ESHA and sensitive plant and wildlife species are protected. These measures are provided in Exhibit 3 and include the use of noise reduction measures and seasonal construction limits near areas with the potential to support nesting or sensitive bird species; focused biological surveys prior to the initiation of construction activities; environmental awareness training for project personnel; the use of environmental field monitors during ground-disturbing activities and during construction to monitor compliance with applicable environmental regulations and site-specific BMPs and conservation measures; establishment, demarcation and adherence to buffer areas around potential sensitive habitat or species areas (including a 300-foot buffer around potential gnatcatcher or least Bell's vireo occupied habitat); installation and use of erosion control BMPs to limit movement of sediment outside of construction areas; and ongoing consultation and coordination with the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service.

With implementation of the proposed protective measures described above as well as the focus of project activities within the existing disturbed and developed footprint of the ITP, adjacent road and pipeline corridors and the absence of ESHA and sensitive species habitat within the limited potential temporary disturbance areas outside of these areas, the proposed project would not result in disturbance or loss of ESHA.

The Commission therefore agrees with the EPA/IBWC that the proposed expansion of the ITP and construction of the APTP and associated wastewater conveyance and collection systems will not adversely affect sensitive habitat or species. Therefore, the Commission finds that the proposed project is consistent with the environmentally sensitive habitat policy of the California Coastal Management Program (Section 30240 of the Coastal Act).

APPENDIX A - SUBSTANTIVE FILE DOCUMENTS

1. Draft Programmatic Environmental Impact Statement, USMCA Mitigation of Contaminated Transboundary Flows Project (June 2022).
2. Final Programmatic Environmental Impact Statement, USMCA Mitigation of Contaminated Transboundary Flows Project (November 2022).
3. Coastal Consistency Determination, USMCA Mitigation of Contaminated Transboundary Flows Project, October 24, 2022
4. Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion and Magnuson–Stevens Fishery Conservation and Management Act Essential Fish Habitat Response, National Marine Fisheries Service, December 2022.
7. Consistency and Negative Determinations for IBWC project in Tijuana River Valley:
 - CD-2-94 Original treatment plant
 - ND-1-95 Minor changes to water line
 - CD-31-95 Outfall modifications
 - ND-34-96 Tunnel spoils disposal site
 - ND-77-96 Dechlorination facility and Goat Canyon plant
 - ND-120-96 Smuggler's Gulch culvert
 - CD-121-96 Interim discharge (objection)
 - CD-127-96 Vegetation removal in floodplain (objection)
 - ND-136-96 Removal of offshore construction platform
 - CD-137-96 Interim discharge (rehearing of CD-121-96)
 - CD-138-96 Vegetation removal in floodplain (rehearing of CD-127-96)
 - ND-150-97 Sidecast and disposal of concrete on ocean floor
 - CD-62-98 Secondary treatment option
 - ND-122-98 Effluent changes
 - CD-059-05 Ocean discharge of secondary treated wastewater
8. CC-62-91 (City of San Diego, Point Loma Treatment Plant outfall extension).
9. NE-94-95 (City of San Diego, Point Loma Treatment Plant secondary treatment waiver).
10. CDP 6-88-277 (City of San Diego, South Bay Land Outfall).
11. CDP 8-91-217 (City of San Diego, Point Loma Treatment Plant outfall extension).
12. Certified Tijuana River Valley Land Use Plan and City of San Diego LCP Implementing Ordinances.