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# F10a

## CD-0009-22

## (U.S. Environmental Protection Agency and International Boundary and Water Commission)

## April 27, 2023

## EXHIBITS

## Exhibit 1

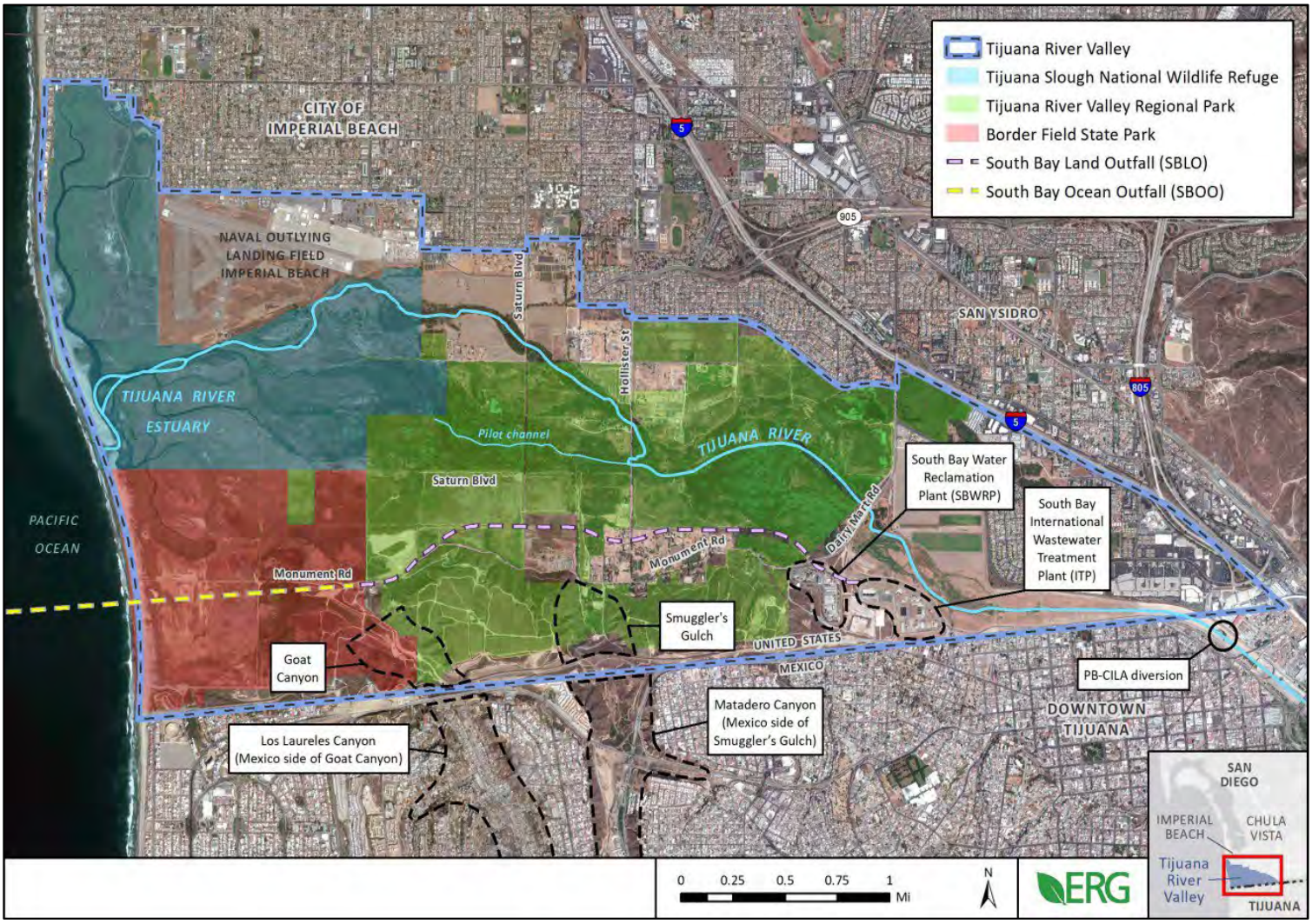
Tijuana River Valley
Tijuana Slough National Wildlife Refuge
Tijuana River Valley Regional Park
Border Field State Park
South Bay Land Outfall (SBLO)
South Bay Ocean Outfall (SBOO)
CITY OF IMPERIAL BEACH
NAVAL OUTLYING LANDING FIELD IMPERIAL BEACH
TIJUANA RIVER ESTUARY
PACIFIC OCEAN
Saturn Blvd
Hollister St
Pilot channel
TIJUANA RIVER
Monument Rd
Dairy Mart Rd
SAN YSIDRO
South Bay Water Reclamation Plant (SBWRP)
South Bay International Wastewater Treatment Plant (ITP)
Smuggler's Gulch
Goat Canyon
UNITED STATES
MEXICO
PB-CILA diversion
Matadero Canyon (Mexico side of Smuggler's Gulch)
Los Laureles Canyon (Mexico side of Goat Canyon)
DOWNTOWN TIJUANA
SAN DIEGO
IMPERIAL BEACH
CHULA VISTA
Tijuana River Valley
TIJUANA
0 0.25 0.5 0.75 1 Mi
N
ERG

**Table 4-8. Impacts on Discharges to the Pacific Ocean via the SBOO (Initial Operations) – Alternative 1**

| Parameter | Units | Current Conditions, Annual Avg [a] | Project A, Option A1 (Expand to 40 MGD) Only [c] | | Project A, Option A2 (Expand to 50 MGD) Only [b,c,d] | | Project A, Option A3 (Expand to 60 MGD) Only [b,c,d] | | Project D (35 MGD) Only [c] | | Alternative 1 Maximum (Projects A [Option A3] + D) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change |
| Effluent flow rate | MGD | 28.8 | 43.8 | 52% | 48.8 | 69% | 48.8 | 69% | 45.2 | 57% | 65.2 | 126% |
| Temperature | deg C | 23.4 | 23.3 | 0% | 23.3 | -1% | 23.3 | -1% | 22.8 | -3% | 22.9 | -2% |
| Ammonia-N | mg/L | 8.52 | 8.88 | 4% | 8.95 | 5% | 8.95 | 5% | 12.7 | 49% | 11.7 | 38% |
| $BOD_5$ | mg/L | 12.1 | 13.7 | 13% | 13.7 | 13% | 13.7 | 13% | 26.6 | 119% | 22.9 | 88% |
| | tons/yr | 533 | 912 | 71% | 1,020 | 92% | 1,020 | 92% | 1,830 | 244% | 2,270 | 326% |
| Total nutrients | mg/L | 38.0 | 39.3 | 3% | 39.6 | 4% | 39.6 | 4% | 43.0 | 13% | 42.6 | 12% |
| | tons/yr | 1,670 | 2,620 | 57% | 2,940 | 76% | 2,940 | 76% | 2,960 | 78% | 4,240 | 154% |
| Total dissolved solids (TDS) | mg/L | 1,320 | 1,330 | 1% | 1,340 | 1% | 1,340 | 1% | 1,360 | 4% | 1,360 | 4% |
| | tons/yr | 57,700 | 88,900 | 54% | 99,300 | 72% | 99,300 | 72% | 93,900 | 63% | 135,000 | 135% |
| TSS | mg/L | 10.4 | 10.7 | 3% | 10.7 | 3% | 10.7 | 3% | 10.6 | 2% | 10.8 | 4% |
| | tons/yr | 456 | 712 | 56% | 797 | 75% | 797 | 75% | 731 | 60% | 1,070 | 135% |
| Fecal coliform | MPN/ 100 mL | 387,000 | 391,000 | 1% | 392,000 | 1% | 392,000 | 1% | 433,000 | 12% | 423,000 | 9% |
| Cadmium (total recoverable) | µg/L | 0.117 | 0.122 | 4% | 0.123 | 5% | 0.123 | 5% | 0.0816 | -31% | 0.0969 | -17% |
| | lb/yr | 10.3 | 16.3 | 58% | 18.3 | 78% | 18.3 | 78% | 11.2 | 9% | 19.3 | 87% |
| Copper (total recoverable) | µg/L | 3.77 | 3.46 | -8% | 3.49 | -7% | 3.49 | -7% | 6.19 | 64% | 5.45 | 45% |
| | tons/yr | 0.143 | 0.231 | 61% | 0.259 | 81% | 0.259 | 81% | 0.426 | 197% | 0.541 | 277% |
| Lead (total recoverable) | µg/L | 0.130 | 0.133 | 2% | 0.133 | 2% | 0.133 | 2% | 0.219 | 68% | 0.194 | 49% |
| | lb/yr | 11.4 | 17.7 | 55% | 19.8 | 73% | 19.8 | 73% | 30.1 | 163% | 38.5 | 236% |
| Mercury (total recoverable) | µg/L | 0.0504 | 0.0464 | -8% | 0.0468 | -7% | 0.0468 | -7% | 0.0698 | 38% | 0.0638 | 27% |
| | tons/yr | 0.00192 | 0.00310 | 61% | 0.00348 | 81% | 0.00348 | 81% | 0.00481 | 150% | 0.00634 | 230% |
| Nickel (total recoverable) | µg/L | 18.7 | 19.5 | 4% | 19.7 | 5% | 19.7 | 5% | 14.4 | -23% | 16.4 | -12% |
| | lb/yr | 1,640 | 2,610 | 59% | 2,930 | 78% | 2,930 | 78% | 1,980 | 21% | 3,270 | 99% |
| Selenium (total recoverable) | µg/L | 5.11 | 5.35 | 5% | 5.39 | 6% | 5.39 | 6% | 4.69 | -8% | 5.03 | -2% |
| | lb/yr | 448 | 713 | 59% | 802 | 79% | 802 | 79% | 646 | 44% | 1,000 | 123% |
| Thallium (total recoverable) | µg/L | 2.07 | 2.08 | 1% | 2.09 | 1% | 2.09 | 1% | 2.09 | 1% | 2.10 | 1% |
| | lb/yr | 181 | 278 | 53% | 310 | 71% | 310 | 71% | 288 | 59% | 417 | 130% |

**Table 4-8. Impacts on Discharges to the Pacific Ocean via the SBOO (Initial Operations) – Alternative 1**

| Parameter | Units | Current Conditions, Annual Avg [a] | Project A, Option A1 (Expand to 40 MGD) Only [c] | | Project A, Option A2 (Expand to 50 MGD) Only [b,c,d] | | Project A, Option A3 (Expand to 60 MGD) Only [b,c,d] | | Project D (35 MGD) Only [c] | | Alternative 1 Maximum (Projects A [Option A3] + D) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change |
| Zinc (total recoverable) | µg/L | 16.9 | 15.6 | -8% | 15.7 | -7% | 15.7 | -7% | 17.5 | 4% | 17.3 | 3% |
| | tons/yr | 0.642 | 1.04 | 62% | 1.17 | 82% | 1.17 | 82% | 1.21 | 88% | 1.72 | 168% |

a – Current conditions (25 MGD for the ITP and 3.8 MGD for the SBWRP) were calculated using 2015–2020 effluent monitoring data.

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).

**Table 4-9. Impacts on Discharges to the Pacific Ocean via the SBOO (Projected 2050 Conditions) – Alternative 1**

| Parameter | Units | No Action, Annual Avg [a] | Project A, Option A1 (Expand to 40 MGD) Only [c] | | Project A, Option A2 (Expand to 50 MGD) Only [b,c,d] | | Project A, Option A3 (Expand to 60 MGD) Only [b,c,e] | | Project D (35 MGD) Only [c] | | Alternative 1 Maximum (Projects A [Option A3] + D) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change |
| Effluent flow rate | MGD | 33.2 | 48.2 | 45% | 58.2 | 75% | 68.2 | 105% | 49.7 | 49% | 84.7 | 155% |
| Temperature | deg C | 23.7 | 23.5 | -1% | 23.4 | -1% | 23.4 | -1% | 23.0 | -3% | 23.0 | -3% |
| Ammonia-N | mg/L | 7.62 | 8.22 | 8% | 8.45 | 11% | 8.61 | 13% | 11.7 | 54% | 10.8 | 42% |
| $BOD_5$ | mg/L | 11.3 | 13.0 | 15% | 13.2 | 17% | 13.4 | 18% | 24.8 | 118% | 20.5 | 81% |
| | tons/yr | 574 | 953 | 66% | 1,170 | 104% | 1,390 | 143% | 1,870 | 227% | 2,640 | 360% |
| Total nutrients | mg/L | 34.8 | 36.9 | 6% | 37.8 | 9% | 38.4 | 10% | 40.4 | 16% | 40.9 | 18% |
| | tons/yr | 1,760 | 2,710 | 54% | 3,350 | 90% | 3,990 | 126% | 3,050 | 74% | 5,280 | 200% |
| TDS | mg/L | 1,270 | 1,300 | 2% | 1,310 | 3% | 1,320 | 4% | 1,330 | 4% | 1,340 | 6% |
| | tons/yr | 64,500 | 95,700 | 48% | 116,000 | 81% | 137,000 | 113% | 101,000 | 56% | 173,000 | 169% |
| TSS | mg/L | 9.67 | 10.1 | 5% | 10.3 | 7% | 10.5 | 8% | 10.8 | 12% | 11.0 | 14% |
| | tons/yr | 490 | 746 | 52% | 916 | 87% | 1,090 | 122% | 821 | 68% | 1,420 | 189% |
| Fecal coliform | MPN/ 100 mL | 375,000 | 383,000 | 2% | 386,000 | 3% | 388,000 | 3% | 421,000 | 12% | 412,000 | 10% |
| Cadmium (total recoverable) | µg/L | 0.105 | 0.113 | 8% | 0.116 | 11% | 0.119 | 13% | 0.0764 | -27% | 0.0992 | -5% |
| | lb/yr | 10.6 | 16.6 | 57% | 20.6 | 94% | 24.6 | 132% | 11.6 | 9% | 25.6 | 141% |
| Copper (total recoverable) | µg/L | 3.29 | 3.15 | -4% | 3.26 | -1% | 3.33 | 1% | 5.65 | 72% | 4.87 | 48% |
| | tons/yr | 289 | 464 | 60% | 578 | 100% | 693 | 140% | 855 | 196% | 1,260 | 335% |
| Lead (total recoverable) | µg/L | 0.106 | 0.116 | 9% | 0.119 | 13% | 0.122 | 16% | 0.194 | 84% | 0.171 | 62% |
| | lb/yr | 10.7 | 17.0 | 59% | 21.2 | 98% | 25.4 | 137% | 29.4 | 175% | 44.0 | 312% |
| Mercury (total recoverable) | µg/L | 0.0443 | 0.0426 | -4% | 0.0439 | -1% | 0.0449 | 1% | 0.0639 | 44% | 0.0583 | 32% |
| | tons/yr | 3.89 | 6.25 | 61% | 7.79 | 100% | 9.32 | 140% | 9.67 | 149% | 15.0 | 287% |
| Nickel (total recoverable) | µg/L | 16.6 | 18.0 | 8% | 18.6 | 12% | 18.9 | 14% | 13.4 | -20% | 16.6 | 0% |
| | lb/yr | 1,690 | 2,650 | 57% | 3,290 | 95% | 3,930 | 133% | 2,030 | 20% | 4,270 | 154% |
| Selenium (total recoverable) | µg/L | 4.50 | 4.90 | 9% | 5.06 | 13% | 5.17 | 15% | 4.31 | -4% | 4.93 | 10% |
| | lb/yr | 455 | 721 | 58% | 897 | 97% | 1,070 | 136% | 653 | 43% | 1,270 | 179% |
| Thallium (total recoverable) | µg/L | 2.02 | 2.05 | 1% | 2.06 | 2% | 2.07 | 2% | 2.06 | 2% | 2.08 | 3% |
| | lb/yr | 205 | 302 | 47% | 366 | 79% | 431 | 110% | 311 | 52% | 537 | 162% |

**Table 4-9. Impacts on Discharges to the Pacific Ocean via the SBOO (Projected 2050 Conditions) – Alternative 1**

| Parameter | Units | No Action, Annual Avg [a] | Project A, Option A1 (Expand to 40 MGD) Only [c] | | Project A, Option A2 (Expand to 50 MGD) Only [b,c,d] | | Project A, Option A3 (Expand to 60 MGD) Only [b,c,e] | | Project D (35 MGD) Only [c] | | Alternative 1 Maximum (Projects A [Option A3] + D) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change | Annual Avg | % Change |
| Zinc (total recoverable) | µg/L | 14.9 | 14.3 | -4% | 14.7 | -1% | 15.0 | 1% | 16.1 | 8% | 16.4 | 10% |
| | tons/yr | 1,310 | 2,100 | 61% | 2,610 | 100% | 3,130 | 140% | 2,440 | 87% | 4,230 | 224% |

a – Projected 2050 conditions under the No-Action Alternative (25 MGD for the ITP and 8.26 MGD for the SBWRP) were calculated using 2015-2020 effluent monitoring data. The projected SBWRP effluent flow rate to the SBOO assumes operations will increase to use the plant's full 15 MGD capacity by 2050, while continuing to reuse the same percentage of treated effluent as they do under current operations (approximately 55 percent).

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.

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| *Water Resources (Includes Freshwater and Estuarine, Marine, and Floodplains)* | | | | | | | | | | | |
| **WR-1:** Adherence to NPDES permit conditions (operational effluent limitations, monitoring requirements, etc.). | Operation | ■ | | | ■ | ⊙ | | | | | |
| **WR-2:** Acquisition of CWA Section 404 permit authorization(s) and adherence to CWA 404 permit conditions, if applicable; water quality certification or waste discharge permit from RWQCB. | Planning, Construction, Operation | | ☐ | | | | ⊙ | | | | ⊙ |
| **WR-3:** Adherence to erosion and sediment control measures and prevention procedures in accordance with a project-specific Stormwater Pollution Prevention Plan (SWPPP) prepared by a certified Qualified SWPPP Developer and approved by the San Diego Water Board. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **WR-4:** Incorporation of stormwater runoff control measures, procurement of state stormwater permits, development of a Stormwater Quality Management Plan and Spill Prevention Plan that include BMPs for minimizing stormwater runoff, erosion, and potential water quality impacts. | Planning, Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **WR-5:** Avoidance of wetlands (through use of trenchless methods for channel crossings or through relocation of pipeline). | Construction | | | | | | | | | ⊙ | |
| **WR-6:** Limiting construction activities in the Tijuana River floodplain to the dry season. | Construction | | | | | | ⊙ | | | | ⊙ |
| **WR-7:** Use of remote assessment tools for inspections of infrastructure in the 100-year floodplain and regulatory floodway. | Operation | | | | | | ⊙ | | | | ⊙ |
| **WR-8:** Implementation of a pilot-scale trash boom study and further hydrologic modeling. | Planning | | | | | | ⊙ | | | | ⊙ |
| *Biological Resources (Inland and Marine)* | | | | | | | | | | | |
| **BR-1: (General)** Confine all heavy equipment, vehicles, and construction activities to existing access roads, road shoulders, and disturbed/developed or designated work areas. Limit work areas to what is necessary for construction. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-2: (General)** All materials imported into the Action Area (e.g., straw wattles, gravel, and mulch) will be obtained from certified sources that are free of noxious weeds. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| **BR-3: (General)** Wash stations will be set up at all vehicle entrances into the Action Area to remove plant material, mud and dirt from vehicles before entering the Action Area. Sediment accumulated from the washing will be removed daily and placed in a sealed container for disposal in an approved landfill. Project workers will use boot brushes, a metal scraper, soap, water and scrub brushes to remove mud, debris, and plant materials found on their clothing and personal equipment. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-4: (General)** BMPs for erosion control, stormwater runoff, hazardous material handling, and stockpile management will be implemented to prevent pollution caused by construction operations and to reduce contaminated stormwater runoff. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-5: (General)** All construction equipment will be inspected for leaks prior to being brought onsite. All equipment shall be well maintained and inspected daily while onsite to prevent leaks of fuels, lubricants or other fluids into wetlands and waterways. | Construction, Operation | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-6: (General)** Service and refueling procedures will be conducted in a designated area where there is no potential for fuel spills to seep or wash into waterways. | Construction, Operation | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-7: (General)** No pets, hunting, open fires (such as barbecues), or firearms will be permitted at the project site. | Construction, Operation | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-8: (General)** Project lighting will be of the lowest illumination necessary for safety and will be directed toward the construction area and away from sensitive habitats, as feasible. Light glare shields will be used to reduce the extent of illumination into sensitive habitats. In particular, use of lighting that causes direct illumination into sensitive habitats (e.g., riparian and coastal sage scrub) would be avoided during the period from one hour past sunset through one hour before sunrise. | Construction, Operation | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-9: (General)** Ground disturbance and vegetation removal should not exceed the minimum amount necessary to complete work at the site. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-10: (General)** All areas where revegetation is required will be replanted with native species. A native plant restoration and monitoring plan will be developed by a qualified botanist in coordination with USFWS. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| **BR-11: (Special-status Species)** A qualified biologist will develop an environmental training and will present the training to all crew members prior to them beginning work on the project. The training will include a description of special-status species with potential to occur, life history and habitat associations, general protection measures, the terms and conditions of project permits, penalties for non-compliance, and the boundaries of the construction areas. A handout will be provided to all participating personnel and at least one copy will be kept onsite during construction activities. Upon completion of the training, crew members will sign a form stating that they attended and understood the training. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-12: (Special-status Species)** Preconstruction surveys for special-status wildlife species shall be conducted within seven days prior to construction initiation. Surveys will be conducted by qualified biologists with appropriate knowledge and experience in the life history, ecology, and identification of special-status species that may be encountered. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-13: (Special-status Species)** A focused survey for vernal pools will be conducted in the project area no less than one year prior to construction. If any vernal pools are found, they will be flagged and fully avoided. If full avoidance is infeasible, USFWS-protocol San Diego fairy shrimp surveys will be conducted. If fairy shrimp are found to inhabit any vernal pools that cannot be completely avoided, ESA Section 7 consultation with USFWS will be reinitiated, and a mitigation plan will be developed. | Planning, Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-14: (Special-status Species)** A qualified biologist will conduct a preconstruction survey for Quino checkerspot butterfly host plants in areas of suitable habitat that may be impacted by construction (including staging areas) during appropriate blooming periods (to ensure host plants are correctly identified) no less than one year prior to construction. If found, areas containing host plants will be flagged and avoided. | Planning, Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-15: (Special-status Species)** Sensitive biological resources (e.g., vernal pools, nesting birds, listed plants, Quino checkerspot butterfly host plants, other sensitive wildlife) identified in or adjacent to construction work areas during preconstruction surveys will be clearly marked or flagged in the field. Such areas will be avoided during construction as detailed in relevant species-specific measures below. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| **BR-16: (Special-status Species)** Erosion control materials shall be installed per manufacturing material specifications and must not contain monofilament netting. Only tightly woven netting or similar material will be used for all geo-synthetic erosion control materials such as coir rolls and geo-textiles. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-17: (Special-status Species)** All construction personnel will visually check for wildlife on or beneath vehicles and construction equipment before moving or operating them. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-18: (Special-status Species)** If listed wildlife is observed within the work area or its immediate vicinity, work will stop until the animal leaves the area of its own volition. The animal will not be harried or harassed into leaving the area. If the animal does not leave of its own accord, contact the Project biologist for further guidance. | Construction, Operation | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-19: (Special-status Species)** During project activities, all trash that may attract wildlife will be properly contained in covered garbage receptacles. Following construction, all trash and construction debris from project sites will be removed. | Construction, Operation | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-20: (Special-status Species)** Impacts from fugitive dust during construction will be avoided and minimized through watering, limiting vehicle speeds to 20 miles per hour, controlling vehicle access, and other appropriate measures. | Construction, Operation | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-21: (Special-status Species)** At the end of the day, all steep-sided excavations more than 2 feet deep will either be covered or be provided with one or more ramps installed at an angle of no more than 45 degrees to allow egress. Covers and ramps shall be constructed of earth material or plywood (or similar material). All excavations will be inspected prior to backfill or grading to ensure that no listed species are trapped within. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| **BR-22: (Special-status Species)** For project activities conducted during the migratory bird breeding season (February 1 to August 15), a preconstruction nest survey will be conducted. Surveys will include ground nesting birds and raptors within 300 feet of the project area. Species-specific surveys for least Bell's vireo and California gnatcatcher will be conducted as described below in measures 23 and 24. If active nests (i.e., nests containing eggs or young) are identified, a no-disturbance buffer zone will be established around the nest using flagging, fencing, and/or signage as appropriate. No construction activities will occur within the buffer zone until a qualified biologist has determined that the young have fledged or that construction activities within the buffer zone are not disturbing the nesting birds. The width of the buffer zone will be determined by a qualified biologist in coordination with CDFW; recommended buffers are 500 feet for raptors and 100 feet for other birds. If the project is delayed longer than two weeks during breeding season, an additional survey will be necessary. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-23: (Special-status Species)** To the greatest extent practicable, work within 300 feet of suitable least Bell's vireo habitat (i.e., riparian habitat associated with Smuggler's Gulch) will be avoided during the vireo breeding season (March 15 to August 31). If work is necessary to begin within 300 feet of suitable vireo habitat during the breeding season, a biologist will conduct a preconstruction survey no more than 14 days before construction initiation in the area to determine if any nesting vireos are present. If an active nest is present, a 300-foot no-disturbance buffer around the nest will be clearly demarcated, and the area will be avoided until the young have fledged the nest and/or the nest becomes inactive. Preconstruction surveys will be repeated if construction start is delayed more than 14 days from the survey date. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| **BR-24: (Special-status Species)** To the greatest extent practicable, work within 300 feet of suitable gnatcatcher habitat (e.g., coastal sage scrub habitat associated with Smuggler's Gulch) will be avoided during the gnatcatcher breeding season (February 15 to August 31). If work is necessary within 300 feet of suitable gnatcatcher habitat during the breeding season, a biologist will conduct a preconstruction survey no more than 14 days before construction initiation in the area to determine whether any nesting gnatcatchers are present. If a nest is present, a 300-foot no-disturbance buffer around the nest will be clearly demarcated, and the area will be avoided until the young have fledged and/or the nest becomes inactive. Preconstruction surveys will be repeated if construction start is delayed more than 14 days from the survey date. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-25: (Special-status Species)** Additional conservation measures, if identified by USFWS during ongoing informal consultation for the Core Projects, to ensure that reductions in freshwater river flows will not result in a net loss of downstream riparian habitat for the least Bell's vireo. | To Be Determined | | | ☐ | ☐ | | | | | | |
| **BR-26: (Special-status Plants and Sensitive Natural Communities)** Protocol-level surveys for special-status plant species and sensitive natural communities with the potential to occur in the project areas will be conducted during appropriate blooming periods and no less than one year prior to construction. The survey protocol will follow the Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants (USFWS 2000) and Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). | Planning | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-27: (Special-status Plants and Sensitive Natural Communities)** If found, a no-work buffer will be established around the special-status plant population or sensitive natural community, and this buffer will be avoided to the maximum extent practicable. The buffer width will be determined in coordination with USFWS and/or CDFW. | Planning, Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-28: (Special-status Plants and Sensitive Natural Communities**) If the special-status plants or sensitive natural community cannot be avoided, a mitigation and monitoring plan will be developed in coordination with USFWS and CDFW. | Planning, Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | Alternative 2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | B | C | D | E | F | G | H | I | J |
| **BR-29: (Special-status Fish)** Prior to commencing work, installation of silt fencing, straw bales, fiber rolls, and/or other measures would be placed to reduce erosion and sediment transport from construction areas and activities. Exposed soil areas will be stabilized for overwintering protection from erosion. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-30: (Special-status Fish)** Hydrocarbon contamination of aquatic habitats could potentially occur during construction operations. Contamination could result from leaking fuel or hydraulic lines on heavy equipment, improper fuel handling practices, or spills during refueling or lubrication operations. The contractors will ensure that all fuel and hydraulic lines on heavy equipment are in good working order and not leaking. The operators will also conduct all fueling and lubrication operations at the designated out-of-channel laydown site and use BMPs when doing so. There will be no fuel storage facilities within the banks of the channel or within the floodplain. All equipment will be serviced on an as-needed basis with the necessary fueling and lubrication conducted at the designated locations. Accidents, such as a breaking of a hydraulic line, require immediate cleanup of the area well before the onset of high-flow conditions. Adequately sized spill kits will be present at all times during operation of equipment. All packaging, containers, tires and auto body debris, other large metal debris, and trash will be removed from the construction area and disposed of or recycled properly. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-31: (Special-status Fish)** In-water construction would be limited to the dry-season (approximately June through November) unless otherwise agreed upon with resource agencies. The intent of the established operating season is to limit the potential for direct impacts and other interactions between construction activities and various steelhead and Pacific lamprey life-history stages that occupy (seasonally or year-round) the project site. If construction occurs during migration season, implementation of trap and haul or other approaches to provide volitional or non-volitional passage should be considered in coordination with resource agencies. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-32: (General)** Additional unspecified measures, if necessary, to ensure wildlife and fish impacts are not substantial (to be identified during subsequent tiered NEPA analyses). | To Be Determined | | | | | | ⊙ | | | | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| **BR-33: (General)** A Field Environmental Monitor (FEM) will be onsite during ground-disturbing activities and during construction to monitor compliance with applicable environmental regulations and site-specific BMPs and conservation measures. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **BR-34: (Marine Wildlife)** Additional reasonable and prudent mitigation measures, if identified by NMFS during ongoing formal consultation or in the Biological Opinion for the Core Projects, to minimize potential effects to ESA-listed species due to SBOO discharges. | To Be Determined | ☐ | | | ☐ | | | | | | |
| **BR-35: (Marine Wildlife)** Vessel operator or crewmember must maintain a constant watch of the ocean surface in front and adjacent to the vessel for marine mammals and turtles at all times. If marine animals are observed distant to the vessel, vessel operators should adjust their course as necessary to ensure they do not disturb the natural behavior of these animals. If animals are observed within close limits of the vessel such that the vessel may disturb those animals, vessels are advised to follow close observation guidelines available through NMFS. These include the following recommendations:<br>▪ Slow down and operate at a no-wake speed.<br>▪ Stay out of the path of the animal's direction of travel.<br>▪ Do not put your vessel between whales, especially mothers and calves.<br>▪ Do not chase or harass animals, and do not approach the animals head-on, from directly behind them, or from the side (t-bone).<br>▪ If animals are following a trajectory closely parallel to the direction of vessel travel, gradually steer the vessel to be parallel to the animals from the side and stay at least 100 yards away—i.e., the length of a football field. | Construction | ☐ | | | ☐ | ⊙ | | | | | |
| **BR-36: (Marine Wildlife)** If a vessel needs to deploy any anchors, the vessel operators will check for reef with onboard sonar equipment and anchors will be deployed over sandy seabed at least 10 feet away from the edge of the rocky reef surrounding the SBOO. | Construction | ☐ | | | ☐ | ⊙ | | | | | |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| **BR-37: (Marine Wildlife**) Vessels must be maintained to a standard that eliminates the likelihood of diesel or hydraulic oil spills during normal operation, including the storage and maintenance of spill kits appropriate to dealing with small vessel-based spills such as sand buckets, absorbent pads and cloths, and other emergency containment devices to stop small spills of hydraulic fluids and other polluting fluids from entering the water if they are accidentally spilled on deck. | Construction | ☐ | | | ☐ | ⊙ | | | | | |
| **BR-38: (Marine Wildlife)** In the case of a catastrophic loss of engine power that may result in a grounding, vessel captains must have procedures in place to raise coastguard support rapidly. | Construction | ☐ | | | ☐ | ⊙ | | | | | |
| *Geological Resources* | | | | | | | | | | | |
| **GR-1:** Preparation of a geotechnical report to assess site soil characteristics. | Planning | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **GR-2:** Incorporation of site stabilization measures (e.g., revegetation of disturbed areas) during and post-construction. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **GR-3:** Ripping and/or loosening of compacted areas prior to revegetation. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **GR-4:** Site watering to reduce fugitive dust from disturbed, exposed soils. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **GR-5:** Potential reuse of high-quality removed topsoil for restoration activities elsewhere in the project area. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **GR-6:** Incorporation of standard erosion and sediment control BMPs, specified in a project-specific Erosion and Sediment Control Plan and/or Stormwater Management Plan (typical BMPs include silt fences, swales, and filter socks). | Planning, Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **GR-7:** Incorporation of specific measures to reduce the potential for soil contamination during construction (e.g., from equipment leaks or material spills) in a project-specific SWPPP prepared by a certified Qualified SWPPP Developer and approved by the San Diego Water Board. | Planning, Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **GR-8:** Compliance with Uniform Building Code, California Building Code, City of San Diego Municipal Code, and any applicable seismic design standards to ensure risks are minimized and mitigated. | Planning, Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **GR-9:** Incorporation of measures to prevent unstable soil conditions such as caving and sloughing, especially during trenching operations. | Construction | | ☐ | | ☐ | | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| *Cultural Resources* | | | | | | | | | | | |
| **CR-1:** Avoidance of previously identified cultural resources during project design and construction. Should project plans change, and avoidance become infeasible, a formal evaluation for eligibility to the NRHP is recommended. | Planning, Construction | | ☐ | | | | | | | | |
| *Visual Resources* | | | | | | | | | | | |
| **VR-1:** Minimization of construction lighting, when practicable consistent with applicable lighting regulations and ordinances. | Construction | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| ***VR-2:** Additional unspecified measures to reduce or mitigate potential detraction from the visual character or quality of the localized area due to U.S.-side river diversion and trash boom(s) (to be identified during subsequent tiered NEPA analyses). | To Be Determined | | | | | | ⊙ | | | | ⊙ |
| *Land Use* | | | | | | | | | | | |
| *[None identified]* | | | | | | | | | | | |
| *Coastal Zone* | | | | | | | | | | | |
| *[None identified (beyond those identified elsewhere in this table for resources in the coastal zone)]* | | | | | | | | | | | |
| *Air Quality and Odor* | | | | | | | | | | | |
| ***AQ-1:** 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 USIBWC. Examples include but are not limited to:<br>▪ Continuing to hold USIBWC Citizens Forum Meetings as vehicle for hearing community concerns.<br>▪ Publishing regular (e.g., annual) public notices to ensure community is aware of meetings.<br>▪ Providing contact information to ensure timely communication of any odor complaints.<br>▪ Conducting direct outreach to individual members of the potentially affected community (e.g., via email or flyer) before the proposed facilities become operational. | Planning, Operation | ■ | | | ■ | ⊙ | | | | | |
| ***AQ-2:** Appropriate use of scrubbers, aeration, fugitive emissions containment system, and/or other odor controls to lessen odor impacts. | Planning, Operation | ■ | | | | ⊙ | | | | | |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | Alternative 2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | B | C | D | E | F | G | H | I | J |
| ***AQ-3:** Installation of BACT emissions reduction technologies for criteria pollutants and/or HAPs (e.g., biogas pretreatment to remove formaldehyde and $H_2S$, selective catalytic reduction to remove NOx, catalytic oxidation to remove VOCs, combustion of biogas). | Planning, Operation | ■ | | | | | | | | | |
| ***AQ-4:** Development and implementation of a Fugitive Dust Control Plan to reduce fugitive dust emissions and community exposure to fugitive dust. The plan would apply to both active and inactive construction sites (i.e., including weekends and holidays) and to related activities including hauling and storage of fill material. This includes, but is not limited to, the following recommendations:<br>▪ Stabilizing of disturbed areas by covering and/or applying water or chemical/organic dust palliative.<br>▪ Covering of hauled and stockpiled materials to prevent spillage or transport by wind.<br>▪ Phasing of activities that produce substantial amounts of dust (e.g., grading operations and dumping of soil) and avoiding these activities under windy conditions.<br>▪ Limiting speed of earth-moving equipment to 10 mph.<br>▪ Placing stockpiles in locations away from nearby receptors. | Planning, Construction | ■ | ■ | | ■ | ⊙ | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| ***AQ-5:** Inclusion of construction fleet emissions reduction strategies as a factor in the scoring and evaluation of proposals during the procurement process. Examples include, but are not limited to, indicating a preference for proposals that include commitments to use the following:<br>▪ Energy-efficient and fuel-efficient fleets.<br>▪ Alternative fuel vehicles (e.g., electric, natural gas, biodiesel).<br>▪ Best available emissions control technology, including zero-emission technologies; on-highway vehicles that meet or exceed EPA exhaust emissions standards for model year 2010 and newer heavy-duty on-highway compression-ignition engines (and/or more stringent upcoming regulations such as EPA's proposed "Clean Trucks Plan"); and nonroad vehicles and equipment that meet or exceed EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines.<br>▪ Add-on emission controls, where appropriate (e.g., diesel particulate filters).<br>▪ Grid-based electricity for generators. | Planning | ■ | ■ | | ■ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| ***AQ-6:** Coordination with CDPR regarding construction and operation schedules to ensure, to the extent practicable, that activities with potential to generate substantial dust emissions at/near the ITP parcel and the Nelson Sloan quarry do not take place concurrently (e.g., grading, fill, or sediment hauling activities at the ITP parcel taking place concurrently with sediment hauling and deposition at the quarry). | Construction, Operation | ■ | ■ | | ■ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| ***AQ-7:** Procurement of a Program Management and Construction Management Services team, whose responsibilities will include ensuring the construction contractor takes appropriate measures to reduce air quality impacts. This includes, but is not limited to, the following:<br>▪ Ensuring the construction contractor adheres to emissions reduction commitments made during the procurement process (see AQ-5); adheres to the Fugitive Dust Control Plan (see AQ-4) and Construction Traffic Management Plan (see TR-3); limits idling of heavy equipment to less than five minutes; and locates diesel engines, motors, and equipment staging areas as far as possible from residential areas and other sensitive receptors.<br>▪ Conducting an equipment inventory (prior to groundbreaking) to identify opportunities for use of add-on emission controls. | Planning, Construction | ■ | ■ | | ■ | ⊙ | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| *Climate* | | | | | | | | | | | |
| **CL-1:** Adherence to State of California GHG cap and trade program requirements, if applicable. | Planning | ■ | | | | | | | | | |
| **CL-2:** Incorporation of anaerobic digestion of primary and secondary sludge into project design (with appropriate control of biogas emissions) to reduce downstream GHG emissions from landfilling of solids waste from the expanded ITP. | Planning, Operation | ■ | | | | | | | | | |
| **CL-3:** Adherence to mitigation measures identified elsewhere in this table for reducing/offsetting anticipated increases in stationary and mobile source emissions, energy use, and waste generation. | Planning, Construction, Operation | □ | | | □ | ⊙ | | | | | ⊙ |
| *Solid and Hazardous Waste* | | | | | | | | | | | |
| ***SHW-1:** Incorporation of anaerobic digestion of primary and secondary sludge into project design to reduce amount of solids waste from the expanded ITP. | Planning, Operation | ■ | | | | | | | | | |
| **SHW-2:** Development and implementation of a trash management plan for trash and debris captured by trash boom(s). | Planning, Operation | | | | | | | | | | ⊙ |
| **SHW-3:** Development and implementation of a Solid and Hazardous Waste Management Plan that identifies wastes generated at the project site and their appropriate means of disposal. | Planning, Operation | □ | □ | | □ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| **SHW-4:** Implementation of employee training that outlines appropriate disposal practices for allowable wastes that can be placed in a landfill and regulated substances including fluorescent light bulbs, oily rags, and aerosol cans. | Planning, Operation | □ | □ | | □ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| *Energy* | | | | | | | | | | | |
| **EN-1:** During siting, orientation, and design, encourage and explore ways to:<br>▪ Reduce wasteful, inefficient, and unnecessary consumption of energy during construction, operation, maintenance and/or removal.<br>▪ Minimize energy consumption (including transportation energy), increase water conservation, and reduce solid waste.<br>▪ Reduce peak energy demand.<br>▪ Employ alternate fuels (particularly renewable ones) or energy systems.<br>▪ Promote energy conservation, which could result from recycling efforts. | Planning | □ | □ | | □ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| *Public Services and Utilities* | | | | | | | | | | | |
| **PSU-1:** Incorporation of appropriate traffic control measures to ensure access to community facilities is not impeded during construction. | Construction | □ | □ | | □ | ⊙ | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| **PSU-2:** Additional unspecified measures to reduce or mitigate potential impedance to CBP operations due to U.S.-side river diversion and trash boom(s) (to be identified during subsequent tiered NEPA analyses). | To Be Determined | | | | | | ⊙ | | | | ⊙ |
| *Public Health and Safety* | | | | | | | | | | | |
| ***PHS-1:** Additional unspecified measures to reduce or mitigate presence of standing water in/around U.S.-side river diversion and intercepted trash (to be identified during subsequent tiered NEPA analyses). | To Be Determined | | | | | | ⊙ | | | | ⊙ |
| *Transportation* | | | | | | | | | | | |
| ***TR-1:** Additional unspecified measures, if necessary, to ensure trash hauling does not create substantial localized increases in traffic volumes in residential congestion (to be identified during subsequent tiered NEPA analyses). | To Be Determined | | | | | | | | | | ⊙ |
| ***TR-2:** Incorporation of anaerobic digestion of primary and secondary sludge into project design to reduce amount of solids waste requiring hauling from the expanded ITP. | Planning, Operation | ■ | | | | | | | | | |
| ***TR-3:** Development and implementation of a Construction Traffic Management Plan to include specific measures for reducing vehicle trips and VMT by the construction vehicle fleet (in particular, reducing heavy truck trips in areas currently experiencing extremely high overburdens from traffic impacts and/or traffic proximity). | Planning, Construction | ■ | ■ | | ■ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| ***TR-4:** 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). | Planning, Operation | ■ | | | ■ | ⊙ | | | | | |
| ***TR-5:** Feasibility assessment for the use of larger-capacity dump trucks for hauling of APTP solids waste to landfills, thus reducing the number of trips required. This would need to be conducted prior to or during design for the APTP to ensure the facilities and site plan incorporate sufficient clearance for larger trucks. | Planning | | | | ■ | ⊙ | | | | | |
| ***TR-6:** Local sourcing of fill material from within the Tijuana River Valley to limit haul route distances, such as from the sediment deposits in Goat Canyon or Smuggler's Gulch. | Planning, Construction | ■ | | | | | | | | | |
| *Noise* | | | | | | | | | | | |
| **NO-1:** Construction timing limited to Monday-Saturday from 7:00 a.m. to 7:00 p.m. | Construction | ■ | ■ | | ■ | ⊙ | ⊙ | | | ⊙ | ⊙ |

**Table 5-2. Summary of Mitigation Measures by Alternative and Project**

| Mitigation Measure | Project Phase | Alternative 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alternative 2 | | | | | | | | | |
| | | A | B | C | D | E | F | G | H | I | J |
| **NO-2:** Community outreach provide residents potentially affected by construction noise from Project B, Option B1 trenching along Monument Road with information on the benefits of the project, advanced notice of proposed construction dates and times, and contact information to ensure timely communication of any noise complaints. | Planning, Construction | | ■ | | | | | | | | |
| **NO-3:** Construction timing for work within 300 feet of suitable least Bell's vireo or coastal California gnatcatcher habitat limited to time-of-year restrictions outside of bird breeding season (see Biological Resources Mitigation Measures #22 and #23 above). | Construction | | ■ | | | | | | | | |
| **NO-4:** Proper siting of biogas-fueled engine and electrical generator within the ITP parcel (e.g., away from the property boundary) with incorporation of noise attenuation features. | Planning, Operation | ■ | | | | | | | | | |
| **NO-5:** Incorporation of design measures to minimize operational noise (i.e., acoustical structure housing). | Planning, Operation | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | |
| *Socioeconomics* | | | | | | | | | | | |
| **SO-1:** To the extent permitted by Federal statutes and regulations, USIBWC will encourage the use of local small disadvantaged businesses or women-owned businesses for Federal procurement(s) related to the proposed project. | Planning, Construction, Operation | ☐ | ☐ | | ☐ | ⊙ | ⊙ | | | ⊙ | ⊙ |
| *Environmental Justice* | | | | | | | | | | | |
| *[See mitigation measures identified with an asterisk (*) in Visual Resources, Air Quality and Odor, Public Health and Safety, and Transportation sections above in this table.]* | | | | | | | | | | | |

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

Symbol key:

- ■ Core Projects: Mitigation measure is necessary to address a significant impact identified in Section 4 and Table 5-1.
- ■ Core Projects: Mitigation measure is intended to address both a non-significant impact and a disproportionately high and adverse effect identified in the environmental justice analysis, as identified in Section 4 and Table 5-1.
- ☐ Core Projects: Mitigation measure is intended to address a non-significant impact identified in Section 4.
- ⊙ Supplemental Projects: Mitigation measure may be necessary to address impacts of a Supplemental Project. These potential impacts, their significance, and the associated mitigation requirements will be analyzed further in subsequent tiered NEPA analyses.