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| Filed: | 5/11/26 |
| 180th Day: | 11/7/26 |
| Staff: | AR-SF |
| Staff Report: | 5/29/26 |
| Hearing Date: | 6/10/26 |

## STAFF REPORT: REGULAR CALENDAR

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| **Application No.:** | **9-26-0389** |
| **Applicant:** | **County of San Diego** |
| **Location:** | Saturn Boulevard crossing of the Tijuana River, near the intersection of Saturn Blvd. and Sunset Ave. in San Diego (County of San Diego). |
| **Project Description:** | Extension of two pipe culverts at the Saturn Boulevard crossing of the Tijuana River to help reduce emissions of hydrogen sulfide and other toxic air pollutants. |
| **Staff Recommendation:** | Approval with conditions. |

## SUMMARY OF STAFF RECOMMENDATION

The County of San Diego (County) is proposing to extend two culvert pipes at the Saturn Boulevard crossing of the Tijuana River in order to reduce emissions of hydrogen sulfide ($H_2S$) gas and other noxious air pollutants. During low flows, existing culverts discharge water approximately six feet above the channel, causing aeration and turbulence that increase off-gassing of $H_2S$. The proposed culvert extensions would redirect these flows so they are released below the surface of the river, reducing aeration and turbulence and improving air quality for neighboring communities. Weir caps would be installed on the three remaining culverts at the Saturn Blvd crossing to prevent water from entering them during low flows. Orifice caps would be installed on the two extended culverts in order to protect the culvert extension infrastructure.

Additional riprap and tie-down anchors would help to stabilize the extension pipes. The project would not involve any vegetation clearing or ground disturbance in areas not already disturbed (such as previously placed fill material). All heavy equipment (e.g., cranes) would be operated from the Saturn Boulevard roadway above the culverts. Construction personnel would access the work site on foot through designated routes selected to avoid and minimize impacts to surrounding riparian woodland habitat.

The proposed project is intended to act as an interim measure to improve public and environmental health by reducing exposure to toxic air pollutants originating from contaminated Tijuana River flows entering the United States from Mexico. Communities near the Saturn Boulevard "hotspot" have been disproportionately impacted by poor air quality as a result of the ongoing transborder Tijuana River pollution crisis. The County is currently pursuing a long-term solution to minimize $H_2S$ emissions from the Saturn Boulevard hotspot. This project would improve air quality for local communities while the planning and funding of the longer-term project is underway.

The key Coastal Act issues raised by this project are the potential for adverse impacts to environmentally sensitive habitat areas and water quality and public access and recreation. Riparian woodland habitat adjacent to the project area may potentially be disturbed by construction activities and staging. Water quality may be adversely affected by any accidental spills or discharges from project equipment and vehicles. Coastal access may potentially be reduced through the temporary use of Saturn Boulevard (a part of the California Coastal Trail) for staging and construction activities.

To avoid and minimize these adverse impacts, staff recommends several conditions designed to protect environmentally sensitive habitat areas, sensitive species, water quality, and public access. **Special Conditions 1 and 2** require the applicant to submit evidence of authorizations from other federal, state, and local agencies, and plans and materials informing final project design, including evidence that continuous public access will be provided on Saturn Boulevard during construction. **Special Condition 3** requires a site access plan that demonstrates avoidance of disruption to environmentally sensitive habitat areas, and **Special Conditions 5 and 6** provide further protection by requiring a qualified biologist on site during construction activities and protections for nesting birds, respectively. **Special Condition 4** requires a Construction Pollution Prevention Plan describing in detail the measures that would be implemented to protect water quality during construction activities. With implementation of these special conditions, the project would be consistent with the Chapter 3 policies of the Coastal Act.

Commission staff recommend that the Commission **APPROVE** Coastal Development Permit application no. 9-26-0389, as conditioned. The motion is on page 4. The standard of review is Chapter 3 of the Coastal Act.

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## EXHIBITS

# I. MOTION AND RESOLUTION

**Motion:**

I move that the Commission approve Coastal Development Permit No. 9-26-0389 subject to conditions set forth in the staff recommendation specified below.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of Commissioners present.

**Resolution:**

The Commission hereby approves the Coastal Development Permit for the proposed project and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

# II. STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the applicant or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and applicant to bind all future owners and possessors of the subject property to the terms and conditions.

# III. SPECIAL CONDITIONS

**1. Other Agency Authorizations.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall provide to the Executive Director a copy of permits, consultations, and authorizations issued by the United States Navy, the United States Army Corps of Engineers, the City of San Diego, the California Department of Fish and Wildlife, the United States Fish and Wildlife Service and the San Diego Regional Water Quality Control Board, or evidence that no such permit or authorization is required. The permittee shall inform the Executive Director of any changes to the project required by the agencies listed above. Such changes shall not be incorporated into the project until the permittee obtains an amendment to this Coastal Development Permit, unless the Executive Director issues a written determination that no such permit amendment is legally required.

**2. Revised Project Plans.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall provide to the Executive Director for review and approval Revised Project Plans that substantially conform to the project description and associated materials submitted with the application. The Revised Plans shall be drawn to scale, and include the specific locations, dimensions, and elevations of all proposed project elements, including but not limited to the proposed culvert extensions, riprap fill, construction and staging areas, and work site access routes. In addition, the Revised Plans shall include the following detailed elements:

(1) Removal of the previously proposed 12-foot wide construction access roads connecting Saturn Blvd. to the upstream and downstream work sites;

(2) Addition of a downstream work site access route consistent with the Site Access Plan required by Special Condition 3;

(3) The location and extent of the proposed new riprap fill, in sufficient detail to demonstrate that the amount and footprint of the fill have been minimized;

(4) A Traffic Control Plan demonstrating that continuous public access to the California Coastal Trail (i.e., along Saturn Blvd. or an identified and mapped detour route) will be maintained throughout the project duration.

The permittee shall inform the Executive Director of any changes to the project that have been made since the approval of the Coastal Development Permit, and identify such changes in the Revised Plans. In the event of any changes, construction shall not commence until the permittee obtains an amendment to this Coastal Development Permit, unless the Executive Director issues a written determination that no such permit amendment is legally required. The permittee shall undertake development in conformance with the approved Revised Project Plans unless the Commission amends this permit or the Executive Directory provides a written determination that no such permit amendment is legally required.

**3. Site Access Plan**. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall provide to the Executive Director a Site Access Plan for review and

approval. The Plan shall include a description and maps of how workers and equipment will access the several work sites. The Plan shall demonstrate how erosion, vegetation removal, and other significant degradation of riparian habitat will be avoided, and shall specify where equipment, materials, and worker rest areas will be staged in developed or disturbed areas fully outside riparian woodland habitat. In relation to the downstream work site, the Plan shall delineate an on-foot worker access route that avoids major vegetation, sensitive plant species, and steep slopes and other areas prone to erosion and ground disturbance. The permittee shall undertake development in conformance with the approved Plan unless the Commission amends this permit or the Executive Directory provides a written determination that no such permit amendment is legally required.

**4. Construction Pollution Prevention Plan.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the applicant shall submit for the review and written approval of the Executive Director, a Construction and Pollution Prevention Plan. The Plan shall demonstrate that all construction, including, but not limited to, staging, storage of equipment and materials, or other activities that involve building, reconstructing, and creation or replacement of impervious surfaces, complies with the following requirements:

a) **Avoidance or Minimization of Discharge of Construction Pollutants.** The discharge of other pollutants resulting from construction activities (such as chemicals, paints, vehicle fluids, petroleum products, asphalt and cement compounds, debris, and trash) into runoff or coastal waters shall be avoided or minimized through the use of appropriate BMPs, including:

(1) Materials management and waste management BMPs (such as stockpile management, spill prevention, and good housekeeping practices) shall be installed or implemented as needed to avoid or minimize pollutant discharge and polluted runoff resulting from staging, storage, and disposal of construction chemicals and materials. BMPs shall include, at a minimum:

(a) Covering stockpiled construction materials, soil, and other excavated materials to prevent contact with rain, and protecting all stockpiles from stormwater runoff using temporary perimeter barriers.

(b) Cleaning up any leaks, drips, and spills immediately; having a written plan for the clean-up of spills and leaks; and maintaining an inventory of products and chemicals used on site.

(c) Proper disposal of all wastes; providing trash receptacles on site; and covering open trash receptacles during wet weather.

(d) Prompt removal of all construction debris from the site.

(e) Detaining, infiltrating, or treating runoff, if needed, prior to conveyance off-site during construction.

(2) Fueling and maintenance of construction equipment and vehicles shall be conducted off site if feasible. Any fueling and maintenance of mobile equipment conducted on site shall take place at a designated area located at least 50 feet from coastal waters, drainage courses, and storm drain inlets, if feasible (unless those inlets are blocked to protect against fuel spills). The fueling and maintenance area shall be designed to fully contain any spills of fuel, oil, or other contaminants. Equipment that cannot be feasibly relocated to a designated fueling and maintenance area (such as cranes) may be fueled and maintained in other areas of the site, provided that procedures are implemented to fully contain any potential spills.

(3) Construction vehicles shall be restricted to designated roads. Construction equipment and materials shall be stored only in designated staging and stockpiling areas.

The permittee shall undertake development in conformance with the approved final plan unless the Commission amends this permit or the Executive Directory provides a written determination that no such permit amendment is legally required.

**5. Biological Resources Protection**. A qualified biologist shall be present and monitor activities during construction. The qualified biologist shall brief all project personnel prior to commencement of construction activities. At a minimum, the briefing shall include a description of the listed species likely to be present, sensitive biological resources occurring in the area, and the restrictions necessary to avoid impacts to these resources during project implementation.

**6. Nesting Bird Protection**. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the applicant shall submit to the Executive Director for review and written approval, a Nesting Bird Monitoring and Avoidance Plan that shall, at a minimum, include the following provisions: If project activities must occur during bird nesting season (January 1 through September 15), surveys for nesting birds shall be conducted by a qualified biologist according to current recommended protocols, commencing no more than three days prior to the start of construction and shall extend out 500 ft from the edge of the work area. Surveys shall begin prior to sunrise and continue until vegetation, nesting behavior, and nests have been sufficiently observed. If the survey reveals no nesting birds, no follow up surveys are necessary unless construction is paused for 7 days or more. If any active bird nests are detected, construction within the following buffer zones shall be delayed until young have fully fledged, as determined by a qualified biologist, except as described below. Buffers shall be 500 feet for nesting raptors and 300 feet for other nesting bird species.

If it is infeasible to delay construction within buffer zones until young birds have fully fledged, reduced buffers may be used as determined by the qualified biologist, subject to following requirements:

a) Additional surveys shall take place once a week thereafter during construction, until a qualified biologist determines that the young have fledged,

the nest has been abandoned, or noise monitoring indicates that noise levels remain below 60 dB continuous noise level at the nest.

b) The qualified biologist shall have the authority to halt construction activities to enable the applicant to employ best management practices (BMPs) to ensure that construction activities do not disturb or disrupt nesting activities.

c) Noise levels at active nest sites must not exceed 60 dB unless a noise study has determined that ambient noise in the immediate area exceeds that level. If this is the case, noise levels at the nest site must not exceed the ambient noise level measured in the noise study. Noise reducing BMPs may include using alternative equipment, equipment noise buffering, sound walls or blankets, etc. Alternatively, construction activities and schedules may be adjusted to avoid active nest areas until the respective young birds have fledged.

d) Unrestricted construction activities may resume when no active nests remain in the construction area.

Any buffer reductions recommended by the qualified biologist shall occur in consultation with the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS), as applicable, and the Executive Director, and shall consider line-of-sight and noise disturbance relative to the work areas.

# IV. FINDINGS AND DECLARATIONS

## A. Project Description and Background

The County of San Diego (County) is proposing to extend two existing culvert pipes at the Saturn Boulevard crossing of the Tijuana River, located in the City of San Diego north of the intersection of Saturn Boulevard and Sunset Avenue. The culvert extension pipes would be designed to direct water flowing through the culverts during low flow events (such as during the dry summer season) beneath the road and subsequently release the water below the surface of the river downstream.

The primary purpose of the proposed project is to reduce the release of hydrogen sulfide ($H_2S$) gas and other noxious air pollutants from the Tijuana River at the Saturn Boulevard crossing, a location that has been identified as a hotspot for $H_2S$ production.[1] This would benefit communities disproportionately impacted by poor air quality, and by hydrogen sulfide gas in particular, for decades. The $H_2S$ and other toxic air pollutants released from the Tijuana River originate in Mexico, where untreated or only partially treated municipal and industrial wastes enter the river. This issue has been ongoing for many years, despite binational efforts to improve waste management in Mexico and to divert and treat contaminated river water after it crosses the U.S.-Mexico border into the

[1] Rico *et al*. Heavily polluted Tijuana River drives regional air quality crisis. *Science* **389**, eadv1343 (2025). https://doi.org/10.1126/science.adv1343.

Tijuana River Valley in San Diego. The proposed project would act as an interim solution to provide immediate improvements in local air quality while the County seeks funding for a larger-scale, permanent solution.[2]

The Saturn Boulevard crossing consists of five pipe culverts, including four 60-inch reinforced concrete pipe culverts and one 60-inch corrugated metal pipe culvert, that direct Tijuana River flows beneath Saturn Boulevard. During low river levels, the pipe culverts release water approximately six feet above the downstream river surface, resulting in aeration of the river flow and significant turbulence downstream of the culverts due to water freefalling, cascading over riprap, and eventually mixing into the river. This turbulence increases water-to-air transfer of hydrogen sulfide and other air pollutants from the Tijuana River, contributing to the long-standing regional air pollution crisis in South San Diego. The current configuration and associated turbulence also contribute to the formation of foam that accumulates just downstream of the culvert.

The County of San Diego is proposing to extend two of the pipe culverts so that they terminate beneath the surface of the Tijuana River even when the river level is low, thereby limiting turbulent mixing and off-gassing. The inlets of the remaining three culverts would be fitted with weir-style caps to prevent river water from entering them during low flows.[3] When flows exceed the threshold of the weir caps, a portion of the flows would enter the three weir-capped culverts in addition to the two extended culverts.

During rain and other high flow events, orifice caps on the inlets of the two extended culverts would preferentially direct flow to the three remaining (non-extended, weir-capped) culverts in order to reduce the potential for damage to the pipe extension structure.[4] The orifice caps would reduce the overall capacity of the culverts during high flows, but they are not expected to worsen flooding of the roadway at the existing "Arizona crossing" (located just south of the culvert crossing) because overtopping of the roadway already occurs by design in that location during wet weather.[5] The County has committed to ensuring the project complies with its flood damage prevention ordinance,[6] specifically that the project would not worsen flooding.

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[2] A future project could consist of replacement of the pipe culverts with a box culvert, bridge, or similar. In any case, this later project would be significantly more expensive to implement than the current project and would require longer lead times. Therefore, the County is proposing an interim solution to provide immediate relief to local residents overburdened by air pollution. More information on the potential future projects can be found in the Saturn Boulevard Feasibility Study (**Exhibit 3**).

[3] Peak low flow volumes were determined by the applicant based on river flow data provided by the International Boundary and Water Commission (IBWC), which operates a stormwater treatment facility in the Tijuana River Valley.

[4] More on the design of these culvert intake caps can be found in the Saturn Boulevard Feasibility Study (**Exhibit 3**). See p. A-8 of Appendix A.

[5] An Arizona crossing, also called a low-water crossing or a ford, is a type of crossing in which a road crosses through a riverbed that stays dry during low flows but becomes submerged during higher flows.

[6] San Diego County Code of Regulatory Ordinances Section 811.506(a).

The extension pipes would be joined to existing culvert pipes using non-destructive methods that avoid drilling in order to preserve the structural integrity of the existing culverts. Perforations would be drilled through the tops of each of the extension pipes for at least ten feet of their length to vent the extension pipes and to provide alternative outlets should either extension pipe become clogged.[7] A maintenance access hatch would also be installed approximately halfway along each of the extension pipes to allow for sediment removal.

To secure the extension pipes, riprap would be added downstream of the existing culverts. This riprap would be piled high enough to allow the extension pipes to lay flat against the riprap for stability. While there is currently riprap in this area to prevent scouring, the proposed additional riprap would increase the height and overall footprint of the riprap within the stream. To further secure the extension pipes, tie-down anchors would be installed to hold the pipes down against the riprap, with each culvert extension pipe having at least two tie-down anchors located at the center and near the outlet. The tie-down anchors would be held in place by rods that are drilled down through the streambed until appropriate substrate is reached (such as bedrock).

Placement of materials—including the HDPE plastic extension pipes, tiedowns, and riprap—would be accomplished by crane or other large equipment that would operate from atop Saturn Boulevard. No heavy equipment is proposed to be used along the banks of the Tijuana River, and no large equipment would traverse through riparian vegetation. A designated site access pathway, selected to avoid damage to the surrounding habitat, would be used by workers to access the downstream worksite. Handheld equipment could be carried into the downstream work area, but large or heavy equipment would be lowered by crane.

To minimize potential adverse impacts during construction, the County has proposed to restrict staging and construction vehicles to the roadway, road shoulder, and other developed areas. No vegetation clearing is proposed as part of the project, and trimming or other disturbance would be minimized.

## B. Consultations and Other Agency Approvals

### U.S. Navy

The United States Navy (Navy) owns the land on either side of the existing Saturn Boulevard culvert and Arizona crossings. The County has received authorization from the Navy to access the project site for pre-construction surveys. Additional authorization would be needed prior to project construction, and during that review the Navy would evaluate the proposed project to ensure it is consistent with applicable requirements of the federal National Environmental Policy Act (NEPA).

[7] A secondary outlet is not anticipated to be needed during dry weather flows. The extension pipes would be designed to accommodate the entire dry weather flow in a single extended culvert. Thus, the ventilation holes are not expected to act as an alternative flow path during low flows.

**City of San Diego**
The City of San Diego (City) owns the roadway of the Saturn Boulevard crossing and adjacent Arizona crossing. The City has authorized the County to access the roadway for purposes of surveys and construction. Portions of the proposed project are located within the City's local coastal program (LCP) jurisdiction, while the remainder is located within the retained jurisdiction of the Coastal Commission. The City has agreed to a consolidated permit review by Commission pursuant to Section 30601.3 of the Coastal Act to help expedite the project and promote the project goal of improving air quality in the area surrounding the Saturn Boulevard hotspot.[8]

**United States Army Corps of Engineers**
The United States Army Corps of Engineers (USACE) is responsible for issuing permits for the discharge or placement of fill or dredged material into waterways of the United States, including wetlands.[9] This requirement applies to perennial, intermittent, and ephemeral streams. The proposed project includes the placement of fill within the Tijuana River. Therefore, the County applied for an emergency authorization from USACE under Regional General Permit 63 (RGP-63).

**United States Fish and Wildlife Service**
The United States Fish and Wildlife Service (USFWS) is responsible for providing biological opinions as part of Section 7 Endangered Species Act consultation to federal agencies for projects that could impact federally-protected species.[10] The proposed project requires federal authorization from the USACE via a dredge and fill permit. Additionally, the proposed project area is within potential habitat for multiple federally-protected species (including the least Bell's vireo and light-footed Ridgway's rail) and within 0.5 miles of federally-designated critical habitat for the least Bell's vireo. Therefore, a Section 7 consultation is required if the USFWS determines that the project may affect protected species.

**California Department of Fish and Wildlife**
The California Department of Fish and Wildlife (CDFW) is responsible for issuing Lake and Streambed Alteration Agreements for projects that involve the placement of materials into any river, stream, or lake.[11] This project involves the placement of riprap within the Tijuana River and therefore requires a Streambed Alteration Agreement. The County has applied for an emergency Streambed Alteration Agreement from CDFW, which would be issued within fourteen days of the start of construction.

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[8] The City of San Diego confirmed their approval of a consolidated Coastal Development Permit review by the Coastal Commission on April 14, 2026, in an email to the County. The email was submitted to the Executive Director of the on May 11, 2026. In a consolidated permit review, the Chapter 3 policies of the Coastal Act serve as the standard of review.

[9] 33 U.S.C. § 1344.

[10] 16 U.S.C. § 1536.

[11] Cal. Fish and Game Code §1602.

**San Diego Regional Water Quality Control Board**
The San Diego Regional Water Quality Control Board (Water Board) is responsible for issuing permits for discharges into surface, coastal, and ground waters as part of the National Pollutant Discharge Elimination System (NPDES) program.[12] Because the proposed project includes the placement of riprap within the Tijuana River, a NPDES permit is required. The County has applied for an emergency permit from the Water Board, which is expected to be issued within 48 hours of the start of construction.

**Tribal Governments**
In May 2025, Commission staff invited representatives from Tribes understood to have connections to the project area to consult on the proposed project. These Tribes include:

- Barona Group of the Capitan Grande
- Campo Band of Diegueno Mission Indians
- Ewiiaapaayp Band of Kumeyaay Indians
- Iipay Nation of Santa Ysabel
- Inaja-Cosmit Band of Indians
- Jamul Indian Village
- La Posta Band of Diegueno Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Diegueno Mission Indians
- San Pasqual Band of Diegueno Mission Indians
- Sycuan Band of the Kumeyaay Nation
- Viejas Band of Kumeyaay Indians

The project as proposed would not include ground disturbance in areas that have not already been disturbed (i.e., previously placed fill). Therefore, impacts to cultural resources are not anticipated.

## C. Water Quality and Environmentally Sensitive Habitat Areas

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

[12] 33 U.S. Code § 402.

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.

Section 30240(b) of the Coastal Act states:

(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.

**Environmentally Sensitive Habitat Areas**
Environmentally Sensitive Habitat Areas (ESHA) are areas where plant communities or wildlife habitats are rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activities and developments. The project site within the Tijuana River channel is adjacent to riparian woodland that provides habitat for several rare and special-status species of wildlife including: the least Bell's vireo, Crotch's bumblebee, and Ridgeway's rail. Riparian woodlands in southern California have historically experienced severe declines due to stream channelization, floodplain development and other stressors, and remaining areas of intact woodland, such as those present in the Tijuana River Valley, provide important foraging, rearing and migration corridor habitat for numerous wildlife species. Due to their rarity, sensitivity to disturbance and degradation, and value in supporting rare species, the riparian woodland in the project vicinity may be considered ESHA. At present, the quality of these habitats is severely affected by the high concentrations of $H_2S$ and other noxious pollutants degassing from the cascading river water downstream of the existing culverts. As described above, the purpose of the proposed project is to reduce the release of gaseous pollutants at the Saturn Boulevard crossing, which is expected to improve air quality in the surrounding habitats and nearby developed areas.

**Modifications to Biological Survey Methodology**
Due to high levels of pollution in the area and the need to protect workers, detailed biological surveys to classify habitat and identify rare species are difficult and potentially hazardous without appropriate protective equipment. The County is instead proposing to perform desktop studies and limited on-the-ground surveys. Given the limitations of this proposed alternative to in-person biological surveys, these findings assume the presence of least Bell's vireo, light-footed Ridgeway's rail, and Crotch's bumble bee in the riparian woodland in the project vicinity.

**Habitat for Special Status Bird Species**
Based on available information and conservative assumptions made due to the infeasibility of completing comprehensive field surveys, the riparian woodland adjacent to the project area is expected to provide suitable nesting habitat for the least Bell's vireo (Vireo bellii pusillus; abbreviated here as LBV) and the light-footed Ridgway's rail (Rallus obsoletus levipes; abbreviated here as LFRR).

Least Bell's Vireo

The LBV is a federally- and state-listed endangered species that primarily nests in willow-dominated riparian woodlands along the coast of Southern California. The LBV is also known to forage and nest in neighboring mulefat scrub, oak woodlands, and chaparral; and in non-riparian habitats both within and adjacent to floodplains.[13,14] The LBV is known to occur in coastal areas of southern San Diego, including within the Tijuana River slough and estuary. Additionally, designated critical habitat for the LBV is located less than 0.5 miles south of the proposed project area.[15]

The LBV was state listed in 1980 and federally listed in 1986 because of historic and ongoing habitat loss as well as reduced nest productivity associated with brood parasitism by cowbirds; these pressures continue to impede the species' recovery.

Light-footed Ridgway's Rail

The LFRR (formerly the light-footed clapper rail) is a federally and state-listed endangered species that primarily nests in the lower littoral zone of coastal salt marshes near dense stands of cordgrass that help to conceal the nest from predators. In Southern California, the LFRR may also nest in adjacent brackish or freshwater marsh habitats. The LFRR requires shallow water and mudflats for foraging and utilizes adjacent higher vegetation cover during high water. The Tijuana River National Wildlife Refuge, downstream of the project site, supports a breeding population of LFRR,[16,17] and there is potential for this species to occur in the project area.

Loss of coastal wetland habitats due to development and degradation (e.g., through interference with tidal flow) is a leading cause of population decline for the LFRR.[18] Historically, closure of the Tijuana River mouth has caused cordgrass die-offs that significantly reduced the local LFRR population. Predation by mammalian and avian predators, both native and non-native, is also a contributing factor.

The proposed project does not include any vegetation clearing but has the potential to adversely impact LBV and LFRR nesting behavior due to construction noise originating at the project site immediately adjacent to riparian woodland habitat. To address this potential impact, **Special Condition 6** requires the implementation of nesting bird protections, including pre-construction surveys, buffer zones between bird nests and

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[13] USFWS. Least Bell's Vireo Species Description. https://www.fws.gov/species/least-bells-vireo-vireo-bellii-pusillus.

[14] USFWS. Least Bell's Vireo. https://www.fws.gov/story/least-bells-vireo.

[15] Federal Register Vol. 59, No. 22. February 2, 1994. FR-1994-02-02.pdf See map on p. 4867.

[16] USFWS. Light-footed Ridgway's Rail. https://www.fws.gov/story/light-footed-ridgways-rail.

[17] Zembal et al. (2025). Light-footed Ridgway's (Clapper) Rail in California: 2025 Season. Final Report to USFWS and CDFW. Work completed under permit no. TE839480-5.7, Huntington Beach Wetlands Conservancy, Clapper Rail Recovery Fund.

[18] USFWS. Light-footed Clapper Rail Species Description. https://www.fws.gov/species/light-footed-clapper-rail-rallus-longirostris-levipes.

work areas, and other protections to reduce disturbance to nesting birds, for any construction occurring during the nesting bird season.

**Crotch's Bumble Bee Habitat**
Crotch's bumble bee (Bombus crotchii, abbreviated here as CBB) is a candidate for listing under the California Endangered Species Act (CESA). Although not officially designated as threatened or endangered, its candidate status affords the CBB the same protections as a state-listed threatened or endangered species. The CBB's range includes much of California, including in and around the project area, and it has been observed within the Tijuana River Slough.[19,20]

The life cycle of the CBB includes periods of time when the bee lies dormant in an underground nest, sometimes consisting of a rodent burrow. These nests may not be co-located with foraging resources.[21] Project activities involving vegetation clearing or ground disturbance, such as the placement of fill, the construction of work site access routes, or the siting of staging areas, have the potential to harm CBB habitat, especially during the hibernation stage. As described in more detail below, the proposed project does not include ground disturbance or vegetation clearing within the riparian woodland adjacent to the project site, and it incorporates several measures to avoid significant degradation of potential CBB habitat in the project area.

**Avoidance and Minimization Measures**
The County has designed the proposed project to avoid direct habitat disturbance and to minimize work during the bird nesting season.[22] Specifically, all vehicles and heavy equipment would be operated from the Saturn Blvd. roadway, and most project materials (e.g., culvert extensions) would be lowered to the work site by a crane. No heavy equipment would be used along the banks of the Tijuana River, and no large equipment would traverse through riparian vegetation. Workers would access the downstream construction site on foot, along a route that will avoid ground disturbance, steep slopes, and the removal of riparian vegetation. To confirm that use of the access path would avoid disturbance or loss of the surrounding riparian habitat, **Special Condition 3** requires submittal of a Site Access Plan demonstrating how workers and equipment would avoid riparian vegetation and steep slopes and minimize the potential

[19] CDFW dataset. Crotch's Bumble Bee Range [ds3095]. https://gis.data.ca.gov/datasets/CDFW::crotchs-bumble-bee-range-cdfw-ds3095/about.

[20] For CBB observation information, see: [1] USFWS, 2012. Bumble Bees of the Western United States. [2] California Bumble Bee Atlas. [3] iNaturalist.

[21] CDFW. 2013. Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150.

[22] Nesting bird season varies by species. For the least Bell's vireo, the nesting season spans approximately Mar 15 – Sep 15. For the light-footed Ridgway's rail, the nesting season begins as early as February. In general, non-raptor nesting seasons tend to fall within Feb 15 – Aug 31 and raptors nesting seasons tend to fall within Jan 1 – Aug 31.

for erosion while accessing the work site. The Site Access Plan must be submitted to the Commission's Executive Director for review and approval prior to construction.

Additionally, the County is seeking authorization for the project from the California Department of Fish and Wildlife, and federal authorizations requiring consultation with the US Fish and Wildlife Service. The County will implement protective measures for special-status species as required by those agencies. For the portion of work occurring during the bird nesting season, the County shall implement nesting bird protections as required by **Special Condition 6**. **Special Condition 6** requires nesting bird surveys, buffer zones between bird nests and work areas, and additional protective measures to avoid or minimize disturbance to nesting birds.

Additionally, **Special Condition 1** requires submittal of other agency authorizations and any changes to the proposed project resulting from those authorizations. Similarly, **Special Condition 2** requires submittal of revised project plans, in addition to the Site Access Plan, to demonstrate that the final project design will avoid impacts to riparian woodland habitat, and to document any changes made to the proposed project. Changes shall not be incorporated into the proposed project until the County obtains an amendment to its Coastal Development Permit, unless the Executive Director issues a written determination that no amendment is required. Finally, **Special Condition 5** requires that a qualified biologist be present to monitor activities during construction and to brief all project personnel prior to construction activities regarding sensitive species and resource protection measures.

With **Special Conditions 1, 2, 3, 5, and 6**, and the anticipated improvements in air quality from the project improving surrounding habitat by reducing wildlife exposure to toxic hydrogen sulfide gas,[23] the proposed project would be designed to be compatible with the continuance of that habitat, consistent with Section 30240(b) of the Coastal Act.

**Water Quality**

The proposed project would include the use of heavy equipment to place fill and construction materials into the streambed and secure the culvert pipe extensions. Although project vehicles and equipment would be operated from the Saturn Blvd roadway and would not enter the Tijuana River or surrounding riparian areas, the use and fueling of such equipment may result in accidental spills or releases of diesel, gasoline, oil, hydraulic fluid, or other potentially harmful materials. To address these potential adverse impacts, the applicant will submit a Construction Pollution Prevention Plan to the Executive Director for review and approval, as required by **Special Condition 4**. The Construction Pollution Prevention Plan shall demonstrate that all construction activities comply with best management practices to protect coastal waters, including fueling and maintenance of equipment in designated staging areas, ensuring oil containment materials are available at the project site for immediate spill response,

[23] Lusk, J. and Kraft, E. 2010. Hydrogen sulfide monitoring near oil and gas production facilities in Southeastern New Mexico and potential effects of hydrogen sulfide to migratory birds and other wildlife. DOI: 10.13140/RG.2.2.30008.14082.

and ensuring construction materials are managed so that they do not enter sensitive habitat or the waterway. With the authorizations required in **Special Condition 1**, and the best management practices required in **Special Condition 4**, the proposed project would protect the biological productivity and quality of coastal waters and is consistent with section 30231 of the Coastal Act.

## D. Coastal Access and Recreation

Section 30210 of the Coastal Act states:

> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Saturn Boulevard is part of the California Coastal Trail (CCT). Access to the CCT would be maintained throughout project construction through the implementation of one-way traffic controls that allow for the continued use of Saturn Boulevard by cars, bikes, and pedestrians. Project equipment would be staged in a location that does not inhibit recreational uses of the CCT. Detailed plans for traffic control would be described further in the Traffic Control Plan provided to the Executive Director as part of **Special Condition 2**.

Additionally, the proposed project is expected to improve recreational value for nearby portions of the CCT through improved air quality. With continued access to the California Coastal Trail and submittal of the Traffic Control Plan, as required by **Special Condition 2**, the proposed project would protect existing recreational opportunities at the project site. Therefore, the proposed project, as conditioned, is consistent with section 30210 of the Coastal Act.

## E. Fill of Coastal Waters

Section 30233(a) of the Coastal Act states, in relevant part:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

…

(4) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

…

(6) Restoration purposes.

Section 30233(a) of the Coastal Act allows fill of coastal waters only for specified allowable uses. The proposed project is a public service project because it involves the modification of existing culverts to reduce emissions of toxic air pollutants and improve public health. Therefore, the project is an allowable use under Section 30233(a)(4). The expected reduction in emissions of toxic air pollutants would also partially restore the degraded air quality within the stream channel and riparian woodland ecosystem surrounding the project site. Thus, the project also qualifies as having restoration purposes and is additionally an allowable use under Section 30233(a)(6).

Fill alternatives considered for bracing the culvert extension pipes are: (1) no fill, (2) fill dirt or another material similar to the streambed substrate, (3) gravel-sized fill, and (4) solid concrete. The no-fill alternative was eliminated because the likelihood of storm damage to the extension pipes would be much higher if they were left unsupported under high flow conditions. Additionally, if the extensions were to fail completely due to lack of supporting material, they could become dangerous debris that may not be feasible to retrieve and could be harmful to wildlife or habitats downstream. Fill dirt was eliminated from consideration because it would not provide adequate protection from erosion and scouring and could easily be washed away. Gravel-sized fill was eliminated from consideration because it would also be ineffective for erosion control. Riprap is preferred over concrete or a similar alternative using a single (or small number of) large piece(s) of material rather than many smaller pieces, because the future removal of riprap is expected to be more feasible and cause less disturbance of stream channel habitat and local wildlife. A large concrete support would likely need to be broken up, possibly by jackhammering or other methods that would generate debris and loud noises, in order to be removed. Therefore, there is no feasible less environmentally damaging alternative than the riprap fill proposed as part of the project.

The proposed project has incorporated avoidance and minimization measures to protect habitat and avoid unnecessary fill, including staging only in developed areas, placing materials and equipment in the work area via crane from the road, and selecting a site access pathway that avoids damage to habitat and erosion. As shown in **Exhibit 2**, the proposed fill is expected to be placed largely beneath the proposed culvert extensions, such that the riprap fill would not add significant additional fill beyond the culverts themselves. Additionally, **Special Condition 2** requires the submittal of revised project plans identifying the precise placement of the added riprap fill and demonstrating that the proposed fill is the minimum necessary to support the culvert extensions and prevent erosion and scour. **Special Conditions 3 and 4** require submittal of a site access plan and a construction pollution prevention plan, respectively, that help ensure no unnecessary fill or discharge of construction materials to the Tijuana River occurs. Finally, the proposed project is intended to reduce hydrogen sulfide levels, until a long-term solution can be implemented, and it would therefore help restore and benefit nearby habitats, wildlife, and human communities. With the avoidance and minimization measures included in the project, and **Special Conditions 2-4**, fill impacts are not significant and no mitigation is required under Section 30233 of the Coastal Act. Thus, the project, as conditioned, is consistent with Section 30233 of the Coastal Act.

## F. California Environmental Quality Act

Section 13096 of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing that the application, as modified by any conditions of approval, would be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant impacts that the activity may have on the environment. The Commission's regulatory program for reviewing and granting CDPs has been certified by the Resources Secretary to be the functional equivalent of CEQA. (14 CCR § 15251(c).)

For this project, the County of San Diego is the lead agency and the Commission is a responsible agency for the purposes of CEQA. The County of San Diego has determined that the proposed project is exempt from CEQA pursuant to Cal. Code of Regulations 14 § 15269(b). The Commission incorporates its findings on Coastal Act consistency as if set forth in full herein. As discussed in the findings, the project as conditioned herein incorporates measures necessary to avoid any significant environmental effects under the Coastal Act, and there are no less environmentally damaging feasible alternatives or mitigation measures. Therefore, the proposed project is consistent with CEQA.

# V. SUBSTANTIVE FILE DOCUMENTS

California Department of Fish and Wildlife (n.d.). Life History Account for the Least Bell's Vireo. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2091.

Lott, C.A., Reyes, E., A. Glass, and D. Johnson. 2023. A Range Wide Map of Least Bell's Vireo Nesting Vegetation: Mapping Protocol. Conservation Science and Data Visualization; Boise, ID; and Aerial Information Systems, Inc.; Redlands, CA.; 111pp. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=215147.

United States Fish and Wildlife Service (USFWS). (n.d.) Light-footed Ridgway's Rail. https://www.fws.gov/story/light-footed-ridgways-rail.

USFWS (n.d.). Light-footed Clapper Rail. https://www.fws.gov/species/light-footed-clapper-rail-rallus-longirostris-levipes.