CALIFORNIA COASTAL COMMISSION
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Filed:	05/27/22
180th Day:	11/23/22
Staff:	C. Seifert -LB
Staff Report:	07/28/22
Hearing Date:	08/11/22

STAFF REPORT: REGULAR CALENDAR

Application No.:	**5-21-0907**
Applicant:	**Orange County Public Works (Attn: Giles Matthews)**
Location:	Northeastern slope of Talbert Marsh, Huntington Beach, Orange County (APN: 114-160-72)
Project Description:	Rehabilitation of the Talbert Marsh northeastern slope, including removing broken concrete, replacing a 1,160-ft. long portion of the existing, 1,850-ft. long rip-rap, and import of 1,200 cy. of sediment to establish 0.25 acres of new coastal marsh habitat.
Staff Recommendation:	Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

The project site is the northeastern slope of Talbert Marsh extending between Brookhurst Street and the Santa Ana River in the City of Huntington Beach. The site is located 300 ft. inland of Huntington State Beach and less than 300 ft. north of the Santa Ana River mouth. An asphalt path above the northeastern slope provides cyclist and pedestrian access along the marsh and connects to the Santa Ana River Trail; an Orange County Sanitation District treatment plant is located immediately inland of the path and was constructed prior to the Coastal Act. The wetlands and land adjacent to the project area is designated as “Open Space Conservation/Wetland” by the Coastal Land Use Plan (LUP). The LUP is a component of the Huntington Beach Local Coastal

Program certified by the Commission in 1985 and amended in 1986. However, the project site is located within the Commission's retained permit jurisdiction pursuant to Coastal Act Section 30519(b) of the Coastal Act. Therefore, the standard of review is the Chapter 3 policies of the Coastal Act, with the certified LCP providing guidance.

The subject 25-acre salt-marsh was constructed as a flood-control channel in 1958 and restored as a wetland in 1986 (Ref. CDP No. 5-87-432). In previous decades, likely prior to the wetland restoration, rip-rap and concrete rubble were placed as stabilizing measures for the northeastern slope supporting the public path. Eroding forces have since undermined the rip-rap and concrete lining the northeastern slope and left portions of the slope unprotected. In many areas rip-rap and concrete rubble have slumped into the mudflats at the toe of the slope, impeding wildlife habitat use.

The proposed project is intended to protect the public accessway and the treatment plant development, enhance visually degraded resources, and restore biological resources. The applicant proposes two phases of slope rehabilitation. First, the applicant will rehabilitate the existing hard armoring. The first project phase will take four months to complete, spread over two years. Re-locating and repairing existing armoring will reduce the armoring footprint below the mean high tide line (MHTL) by approximately 556 sq. ft. Next, the applicant's consulting biologist will restore the area below the slope with 0.25 acres of new salt-marsh habitat. The second project phase will require approximately two months to complete, spread over two years.

Sediment dredged from the Santa Ana River is typically available in the spring season. To avoid redundant trips and account for limited funding, the applicant will conduct the proposed work in a two-year timeframe—one year for each half of the slope length. The limited activity will avoid work during the summer season (when the Multi-Use Path is especially active) and winter season (when periodic storm event submerge the area of work). Construction timing will be dependent on limited sediment availability, which may require several months of inactivity. The applicant intends to begin work in September 2022.

Talbert Marsh contains a wide range of ecological zones, including mudflats, soft-bottom habitat, and coastal sage scrub. Each zone contributes to a wetland ecosystem valuable to coastal wildlife. The area of work is limited to the northeastern slope and does not extend below the mean low tide line. The applicant will protect surrounding eelgrass with turbidity BMPs, including conducting all work below the slope manually, installing sediment only when water is below the elevation of work, and maintaining a buffer between eelgrass beds and the new habitat. The proposed work will convert 0.25 acres of existing mudflats along the northeastern slope to new, coastal salt-marsh vegetation.

Based on Coastal Act Section 30233, the installation of rip-rap on the slope face and sediment in the marsh constitutes fill in wetlands, as portions of both elements will be installed below the MHTL. However, both project components are intended to improve an existing encroachment below the MHTL and restore degraded biological resources. The project thus constitutes an allowable use under Section 30233(a)(6). Additionally,

the applicant has provided an alternatives analysis which demonstrates that the proposed project constitutes the least environmentally damaging alternative feasible and does not require mitigation for any permanent, adverse impacts.

Special Conditions 2 and 3 require the applicant to retain a qualified biologist for pre-construction nesting surveys and daily habitat monitoring during work below the slope. **Special Condition 4** requires the applicant to adhere to all proposed construction BMPs, in addition to BMPs requiring the use of biodegradable materials in the marsh and immediate removal upon completion of work. **Special Condition 4** also prohibits the applicant from using artificial lighting for work between sunset and sunrise, as this can disturb nearby wildlife.

Special Conditions 5 and 6 requires a new eelgrass survey and *Caulerpa sp.* survey prior to commencement of construction activities. During the spring and summer seasons, warm weather and active wildlife populations draw visitors to the marsh. The project will support continued use of the path by preventing further steepening of the slope drop-off. During construction, the applicant will park vehicles in the 10-ft. wide buffer adjacent to the path to maintain public access. Portions of the path may be temporarily obstructed by vehicles, but at least 10 ft. of unobstructed access will remain on the east side of the path median. To ensure construction does not impact public access, **Special Condition 7** requires the applicant to submit a construction staging plan for review and approval of the Executive Director prior to issuance of the CDP. The construction staging plan must include a statement that construction shall not obstruct access to the Multi-Use Path.

Staff recommends that the Commission **approve** the project with eight special conditions. The motion and resolution are on page 5.

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MOTION AND RESOLUTION

Motion: I move that the Commission **approve** Coastal Development Permit Application No. 5-21-0907 pursuant to the staff recommendation.

Staff recommends a **YES** vote. 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 the Commissioners present.

Resolution: The Commission hereby approves Coastal Development Permit Application No. 5-21-0907 and adopts the findings set forth below on grounds that the development, as conditioned, will be in conformity with the Chapter 3 policies 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 will substantially lessen any significant adverse impacts of the development on the environment.

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 or 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 the applicant to bind all future owners and possessors of the subject property to the terms and conditions.

SPECIAL CONDITIONS

1. **Other Agency Approvals.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall provide to the Executive Director copies of any/all permits issued by the United States Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife, and the United States Fish and Wildlife Service, or letter(s) of permission, or evidence that no permit or permission is required. The permittee shall inform the Executive Director of any changes to the project required by these resource agencies. Such changes shall not be incorporated into the project until the permittee obtains a Commission amendment to this coastal development permit, unless the Executive Director issues a written determination that no amendment is legally required.

2. **Biological Monitor.** By acceptance of this permit, the permittee agrees that a qualified biologist or environmental resources specialist, with knowledge of and experience with southern California coastal marsh habitats and species, acceptable to the Executive Director, shall monitor the proposed development for disturbance to sensitive species or habitat area. At minimum, monitoring shall occur once a week during any week in which construction occurs. Daily monitoring shall occur during development which could significantly impact biological resources such as dredging or construction that could result in disturbances to the raptors or sensitive species in the area. Based on field observations, the biologist shall advise the permittee regarding methods to minimize or avoid significant impacts, which could occur upon sensitive species or habitat areas. The permittee shall not undertake any activity that would disturb habitat area unless specifically authorized and mitigated under this coastal development permit or unless an amendment to this coastal development permit for such disturbance has been obtained from the Coastal Commission.

3. **Bird Nesting Survey & Noise and Lighting Restrictions**. BY ACCEPTANCE OF THIS PERMIT, the permittee agrees to retain the services of a qualified biologist or environmental resources specialist acceptable to the Executive Director, to conduct a biological survey of the area within 300 feet of the project site, including, but not limited to areas located within the Santa Ana River and within the open space and habitat areas to the east of the Santa Ana River (Talbert Regional Park). The survey shall be conducted within five days prior to commencement of the development approved by this permit. The survey shall be sufficient to determine the presence of sensitive or endangered bird species nesting or roosting within 300 feet of the work site. The findings of the survey shall be reported immediately to the Executive Director. In the event the required survey reveals sensitive or endangered bird species nesting or roosting within 300 feet of the work site, the following restrictions shall apply:

    A. Noise reduction measures such as sound shields and other measures shall be implemented to minimize loud noise generation to the maximum feasible extent during construction.

B. Noise generated by construction shall not exceed the greater of 100 dB or ambient noise level at any active roosting or nesting site within 300 feet of the project site. If construction noise exceeds the greater of 100 dB or ambient noise level, then alternative construction methods or other sound mitigation measures (including, but not limited to, sound shielding and noise attenuation devices) shall be used as necessary to achieve the required dB threshold levels. If these sound mitigation measures do not reduce noise levels, construction within 300 feet of the roosting and/or nesting sensitive bird species shall cease and shall not recommence until either adequate sound mitigation measures are employed or nesting is complete and any juveniles have fledged.

The permittee shall undertake development in conformance with this condition and required biological survey unless the Commission amends this permit or the Executive Director issues a written determination that no amendment is legally required for any proposed minor deviations.

4. Construction Best Management Practices.

A. The permittee shall comply with the following construction-related requirements and shall do so in a manner that complies with all relevant local, state and federal laws applicable to each requirement:

1. No construction materials, debris, or waste shall be placed or stored where it may be subject to wave, wind, rain, or tidal erosion and dispersion;

2. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours of completion of the project;

3. Construction debris and sediment shall be removed from construction areas each day that construction occurs to prevent the accumulation of sediment and other debris which may be discharged into coastal waters;

4. Erosion control/sedimentation Best Management Practices (BMPs) shall be used to control dust and sedimentation impacts to coastal waters during construction. BMPs shall include but are not limited to the placement of sand bags around drainage inlets to prevent runoff/sediment transport into coastal waters; and

5. All construction materials shall be covered and enclosed on all sides, and stored as far from a storm drain inlet and any receiving waters as possible.

B. Best Management Practices (BMPs) designed to prevent spillage and/or runoff of construction-related materials, sediment, or contaminants associated with construction activity shall be implemented prior to the onset of such activity. Selected BMPs shall be maintained in a functional condition throughout the duration of the project. Such measures shall be used during construction:

1. The permittee shall ensure the proper handling, storage, and application of construction materials. These measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. It shall be located as far away from any receiving waters and storm drain inlets as possible;

2. The permittee shall develop and implement spill prevention and control measures;

3. The permittee shall maintain and wash equipment and machinery in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems. Washout from concrete trucks shall be disposed of at a location not subject to runoff and more than 50 feet away from a storm drain, open ditch or surface water;

4. The permittee shall provide adequate disposal facilities for solid waste produced during construction;

5. The use of temporary erosion and sediment control products (such as fiber rolls, erosion control blankets, mulch control netting, and silt fences) that incorporate plastic netting shall be prohibited, to minimize wildlife entanglement and plastic debris pollution. Only 100% biodegradable (not photodegradable) natural fiber netting shall be allowed;

6. The permittee shall not spray landscaping chemicals in or within 25 feet of any drainage swale, and will minimize the use of landscaping chemicals within the project to the extent feasible;

7. The permittee shall implement Integrated Pest Management (IPM) for the project to the extent feasible, to minimize the use of landscaping chemicals and to prevent the degradation of coastal water quality;

8. Containment products, including, but not limited to, tarps or debris booms, shall be used to capture and prevent the discharge of construction pollutants into the adjacent waterway;

9. All construction equipment shall use vegetable oil-based hydraulic fluids and/or biodiesel;

10. All materials temporarily installed in the marsh shall be constituted of wood or another biodegradable source. If plastic must be used, its use shall be minimized; and

11. All temporary materials placed in the marsh and/or slope shall be installed to minimize the risk of detachment to the maximum extent feasible and shall be removed immediately upon completion of work in the subject area.

5. Eelgrass Survey(s).

A. **Pre-Construction Eelgrass Survey.** A valid pre-construction eelgrass (*Zostera marina*) survey shall be completed during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed prior to the beginning of construction and shall be valid until the next period of active growth. The survey shall be prepared in full compliance with the "California Eelgrass Mitigation Policy" (CEMP) dated October 2014 and adopted by the National Marine Fisheries Service (NMFS) (except as modified by this special condition) and shall be prepared in consultation with the California Department of Fish and Wildlife. The applicant shall submit the eelgrass survey for the review and approval of the Executive Director within five (5) business days of completion of each eelgrass survey and in any event no later than fifteen (15) business days prior to commencement of any development. If the eelgrass survey identifies any eelgrass within the project area that would be impacted by the proposed project, the applicant shall undertake mitigation pursuant to the Final Eelgrass Mitigation and Monitoring Plan approved by the Executive Director.

B. **Post-Construction Eelgrass Survey**. Within 30 days of completion of construction, or within the first 30 days of the next active growth period following completion of construction that occurs outside of the active growth period, the applicant shall survey the project site and the 10 meter buffer area to determine if any eelgrass was adversely impacted. The survey shall be prepared in full compliance with the CEMP adopted by the NMFS (except as modified by this special condition), and in consultation with the CDFW. If side-scan sonar methods are to be used, evidence of a valid permit from California State Lands Commission must also be provided prior to the commencement of each survey period. The applicant shall submit the postconstruction eelgrass survey for the review and approval of the Executive Director within thirty (30) days after completion of the survey. If any additional eelgrass has been adversely impacted beyond the area of impacted identified in the pre-construction eelgrass survey, the applicant shall replace the impacted eelgrass at a minimum final 1.38:1 ratio on-site (mitigation: impact), or at another location, in accordance with the CEMP. Any exceptions to the required 1.38:1 minimum final mitigation ratio found within the CEMP shall not apply. Based on past performance of eelgrass mitigation efforts, in order to achieve this minimum, the appropriate regional initial planting ratio provided in the CEMP should be used. Implementation of mitigation to ensure success in achieving the minimum final mitigation ratio (1.38:1) shall require an amendment to this permit or a new coastal development permit unless the Executive Director provides a written determination that no amendment or new permit is required.

6. Pre-construction *Caulerpa sp.* Survey(s).

A. Not earlier than 90 days nor later than 30 days prior to commencement or recommencement of any development authorized under this coastal

development permit (the "project"), the applicant shall undertake a survey of the project area and a buffer area at least 10 meters beyond the project area to determine the presence of the invasive alga *Caulerpa sp.* The survey shall include a visual examination of the substrate.

B. The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the National Marine Fisheries Service.

C. Within five (5) business days of completion of the survey, the applicant shall submit the survey:

1. for the review and approval of the Executive Director; and

2. to the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through California Department of Fish & Wildlife (858/467-4218) National Marine Fisheries Service (562/980-4043).

D. If *Caulerpa sp.* is found within the project or buffer areas, the applicant shall not proceed with the project until 1) the applicant provides evidence to the Executive Director, subject to concurrence by the Executive Director, that all *Caulerpa sp.* discovered within the project and buffer area has been eliminated in a manner that complies with all applicable governmental approval requirements, including but not limited to those of the California Coastal Act, or 2) the applicant has revised the project to avoid any contact with Caulerpa species. No revisions to the project shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

7. Construction Staging Plans. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, two full-size sets of construction staging plans including, at minimum:

A. A site plan depicting the following components:

1. The location of the parking lot where construction vehicles and equipment will be stored overnight;

2. The location of any temporary construction fencing and/or trailer structures onsite; and

3. The location of the construction corridor(s) used to provide access between Brookhurst Street, the western marsh slope, and the parking lot where construction vehicles and equipment will be stored.

B. A narrative plan sheet demonstrating the following:

1. Construction shall not obstruct public access to the Talbert Marsh Multi-Use Path, which will remain open during typical access hours; and

2. No portion of the marsh, including on and seaward of the northeastern slope, shall be used for staging or storage of construction equipment and/or vehicles.

8. **Assumption of Risk, Waiver of Liability and Indemnity.** By acceptance of this permit, the permittee acknowledges and agrees (i) that the site may be subject to hazards from storms, sea level rise, fluvial or tidal induced erosion, earthquakes, and other hazards; (ii) to assume the risks to the permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards; (v) that sea level rise could render it difficult or impossible to provide services to the site (e.g., maintenance of roadways, utilities, sewage or water systems), thereby constraining allowed uses of the site or rendering it uninhabitable; and (vi) that the development may be required to be removed or relocated and the site restored if it becomes unsafe or if removal is required pursuant to the Coastal Act.

FINDINGS AND DECLARATIONS

A. Project Location and Description

The project site is Talbert Marsh, a 25-acre salt-marsh extending between Brookhurst Street and the Santa Ana River in the City of Huntington Beach, Orange County **(Exhibit 1)**. The proposed work is limited to the 1,850-ft. long northeastern slope, located adjacent to a public pedestrian/bicyclist path and an Orange County Sanitation District treatment facility. The southwestern slope is opposite of the area of work and bordered by the Pacific Coast Highway (PCH). Talbert Marsh is located 300 ft. inland of Huntington State Beach and less than 300 ft. north of the Santa Ana River mouth.

Within the area of work, the northernmost parcel is owned by Orange County Public Works (the applicant) and the southernmost parcel is owned by Orange County Sanitation District. Additionally, the Huntington Beach Wetlands Conservancy has an easement for restoration and ongoing maintenance of the marsh habitat. The applicant has provided letters of support for the proposed project from both the Sanitation District and Huntington Beach Wetlands Conservancy.

Talbert Marsh was constructed as a flood-control channel in 1958, prior to adoption and certification of the Coastal Act. Talbert Marsh receives flows from the Fountain Valley, Talbert, and Huntington Beach channels, all of which constitute the Talbert Valley

Channel System. Despite its proximity, Talbert Marsh is not connected to the Santa Ana River. A three-acre channel—the Talbert Ocean Channel—abuts the southwestern portion of the marsh and leads below PCH to the Pacific Ocean. The Ocean Channel allows seawater to flow in and out of the marsh at least twice a day with Pacific Ocean tides, unless the Ocean Channel is blocked with tidal sand deposits. It also allows freshwater to exit the marsh during storm events and the winter rainy season. The marsh is influenced primarily by saltwater flows.

Talbert Marsh's soft-bottom habitat supports approximately 1.1 acres of eelgrass. The western slope hosts 1.2 acres of coastal salt scrub. The northeastern slope face is covered in patches of rip-rap and concrete rubble intended to stabilize the slope. Mudflats extend along the toe of the slope into the mean low tide line. An approximately 20-ft. wide, two-lane asphalt path open to the public (the Multi-Use Path) sits above the northeastern slope and connects to the Santa Ana River Bike Path.

The subject berm is visible in archive aerial images and constructed prior to the Coastal Act. The berm was supported with an unstable combination of concrete rubble and rip-rap, resulting in erosion undermining the northeastern slope and creating steep, nearly vertical portions. The layer of rip-rap and concrete supporting the slope have gradually slumped further below the MHTL into the marsh **(Figure 1 of Exhibit 4)**. The applicant estimates that 60% of the northeastern slope is poorly protected, or entirely unprotected, by the existing rip-rap distribution.[1]

The applicant proposes two phases of slope rehabilitation with the intent of protecting existing development (the public accessway and Sanitation District treatment plant), enhancing visually degraded resources, and restoring biological resources. First, the applicant will rehabilitate the existing hard armoring structures. Portions of broken concrete unsuitable for retention (such as concrete with exposed metal bars or sharp edges) will be removed and the majority will be lifted back onto the slope face above the MHTL. The 1,160 lin. ft. of irregular patches of exposed slope will be filled with new rip-rap less than four sq. ft. in size, consistent with the existing rip-rap size. The armoring footprint will be reduced by 556 sq. ft. compared to existing conditions via the relocation of concrete and rip-rap back onto the slope face. An excavator will park on the path buffer during the day to install rip-rap and park overnight in a nearby lot owned by the applicant. The first project phase will take four months to complete, spread over two years to avoid the avian nesting season.

Next, the applicant will install 0.25 acres (1,200 lin. ft.) of new salt-marsh habitat along the outer rip-rap edges **(Page 12, Exhibit 2)**. Based on the location of the adjacent eelgrass beds, a field biologist will use temporary measures to demarcate the bounds of the new habitat and ensure an eelgrass buffer of at least five feet (with the exception of limited areas where only two feet is possible.) Most of the new marsh habitat will be installed with a much greater eelgrass buffer. Multiple rows of two-ft. diameter coir and

[1] The applicant estimates 1,160 linear ft. of unprotected areas exist on the 1,850 linear ft. northeastern slope (60%).

oyster-rock rolls will be manually anchored to the marsh substrate with wooden stakes. Coir rolls are thick rolls filled with coconut husk fibers, while oyster and rock rolls are filled with oyster shells and small rocks. All proposed roll forms are biodegradable and commonly used against erosion. An excavator will pour 1,200 cy. of sand dredged from the Santa Ana River between the rolls. The applicant will allow at least one tidal cycle to inundate the project area and settle the sand before native, adult plants are installed between the rolls. If the plug plants do not establish successfully, the applicant will next install pre-planted sod mats between the rolls.

Habitat construction is anticipated to take up to two months—one month per year—and is expected to meet success criteria within five years. Success criteria will be determined based on at least two comparison sites in the Talbert Marsh or Brookhurst Marsh at elevation ranges similar to the new habitat cells.

Sediment dredged from the Santa Ana River is typically available in the spring season. To avoid redundant trips and account for limited funding, the applicant will conduct the proposed work in a two-year timeframe—one year for each half of the slope length. The first phase will occur in fall and/or winter and the second phase will occur in spring, resulting in three total months of work per year (two months of armoring alteration and one month of habitat construction in each of the two years). The limited activity will avoid work during remaining nine months of inactivity will be due to the summer season when the Multi-Use Path is especially active, work during winter periodic storm events, and will be dependent on limited sediment availability that may take multiple years to become available. The applicant intends to begin work in September 2022.

The applicant identifies the project as a “living shoreline” due to the use of new habitat to dampen eroding forces **(Exhibit 3)**. The Commission typically considers living shorelines as a form of ‘nature-based adaptation strategy’ that is comprised of natural or mostly natural elements which provide both ecological and protection benefits. Here, the applicant proposes to use both soft and hard elements of shoreline protection: rip-rap/concrete and new wetland habitat. This kind of project is typically considered ‘hybrid armoring’ because it fixes the shoreline with harder elements and includes a nature-based feature to provide ecological benefits.

The City of Huntington Beach LCP was effectively certified in 1995. However, the project site is tidally influenced and within the Commission’s retained permit jurisdiction pursuant to Coastal Act Section 30519(b) of the Coastal Act. Therefore, the Chapter 3 policies of the Coastal Act constitute the standard of review for this project, with the City’s certified LCP used as guidance.

B. Site History

The Talbert Valley Channel System was constructed in 1958 to protect the 13 sq. mi. Huntington Beach and Fountain Valley flood plain. However, the channel system was not designed to accommodate 100-year storm events and raised the risk of inadequate protection. The proximity of PCH to the Talbert Channel also posed an issue, since any

widening of the highway would impact the adjacent channel. Local resource agencies have worked to remediate these issues since 1986.

In 1983, the Huntington Beach Wetlands Complex (which includes Talbert Marsh) was designated the PCH Area of Deferred Certification due to unresolved questions of wetlands protection. The Commission's deferral was based in part on a California Department of Fish and Game study which found degraded wetlands and environmentally sensitive upland habitat in the area. In 1986, the Commission approved an LUP amendment which included Talbert Marsh in certification. The subject marsh is designated "Open Space Conservation/Wetland" in the certified LUP.

In 1986, the Commission issued Consistency Certification No. CC-23-86 for Caltrans to widen the portion of PCH extending between Newport Beach and Huntington Beach. In 1988, the Commission approved CDP No. 5-87-432 for Caltrans to widen the highway and mitigate impacts to adjacent, sensitive dune habitat. Caltrans was required to transfer ownership of a 25-acre flood channel containing degraded wetlands (the current project site) to the Coastal Conservancy and fund restoration. This decision was further formalized by the eight-party Agreement No. D87-241, which recorded ownership rights and established a mitigation bank.[2] Less than a year later, the Commission approved CDP Amendment No. 5-87-432-A1 for revisions to reduce the originally approved number of levees. The 25-acre degraded marsh was restored and became Talbert Marsh.

In 1989, the Commission approved CDP No. 5-89-283 for the Orange County Emergency Management Agency to construct a new outlet between Talbert Marsh and the Pacific Ocean. At that time, Talbert Marsh directed flows to the Pacific Ocean by emptying into the Santa Ana River. Neither waterway was designed to capture floods in a 100-year storm event. The U.S. Army Corps of Engineers intended to increase the river's capacity by widening the Santa Ana River mouth, although this would block its northern connection to Talbert Marsh and reduce Talbert Marsh slightly in size. CDP 5-89-283 allowed the Emergency Management Agency to remediate these impacts through construction of the three-acre Talbert Ocean Outlet. The new outlet conducted Talbert Marsh flows under PCH and across Huntington State Beach to the Pacific Ocean. By improving tidal circulation, the outlet enhanced salt-marsh habitat located along the western slope.

In 1995, the Commission certified an Implementation Plan (IP) which included Talbert Marsh. The subject site is zoned "Coastal Conservation" in the certified IP.

In 2008, the Commission approved CDP No. 5-08-061 for the Huntington Beach Wetlands Conservancy to improve existing habitat in the Talbert Marsh and Talbert Ocean Channel (as well as other waterways in the Talbert Valley Channel System). The

[2] The eight parties were the Orange County Flood Control, Orange County Sanitation District, U.S. Fish and Wildlife, California Department of Fish and Game, Huntington Beach Wetlands Conservancy, City of Huntington Beach, Coastal Conservancy, and Coastal Commission.

approved work included creation of sediment traps in and around the marsh to reduce the formation of submerged sand banks (i.e. sand shoaling). Sand shoaling can result from a range of natural processes, including lessened tidal velocity, increased salinity, and/or the channel's soft-bottom topography. Shoaling often impacts water quality via stagnation and increased temperatures; it can also bury existing soft-bottom and mud-flat habitat. While the approved work did not permanently resolve sand shoaling in Talbert Marsh, it improved conditions during implementation.

No additional permit history exists for Talbert Marsh, although the Commission has acted on additional projects upstream and downstream of the project site. In 2010 and 2014, the Commission approved CDP Nos. 5-09-225 and 5-14-0197 for Orange County Public Works to repair the existing cathodic protection system and install a debris boom in Talbert Channel, respectively.[3] In 2019, the Commission approved Emergency Permit No. G-5-19-0020 for Orange County Public Works to protect the least tern preserve by removing sediment adjacent to the Talbert Ocean Channel. In 2020, the Commission approved de minimis waiver No. 5-20-0069-W for California State Parks to further protect the least tern preserve by replacing the degraded chain link fence demarcating nesting area. In 2021, the Commission approved de minimis Waiver No. 5-20-0590-W for Orange County Public Works to address corrosion with installation of new sheet pile walls throughout the Talbert Valley Channel System.

Regarding future items, Orange County Public Works has discussed potential future seasonal dredging of the Talbert Marsh to address water quality and habitat impacts from sand shoaling. To date, the Commission has not received a CDP application for the proposed work.

C. Biological Resources

Section 30107.5 of the Coastal Act states:

> "Environmentally sensitive area" means any area in which plant or animal life or their habitats are either 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.

Section 30230 of the Coastal Act states:

> Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will

[3] Cathodic protection is a method of preventing corrosion of submerged metallic structures. Ref. https://cathwell.com/prinipples-of-cpppppp/

> maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

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

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

> 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: …
>
> (6) Restoration purposes. …

Section 30240 of the Coastal Act states:

> (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
>
> (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The City's certified LUP contains the following polices, in relevant part:

> C.6.1.28
>
> Support the creation of a wildlife sanctuary for habitats along the coast in order to preserve and protect natural beach environments.
>
> C.7.2.4
>
> Encourage the Orange County Flood Control District to improve. and continue to maintain once improved, the Huntington Beach and Talbert Flood Control Channel embankment from Beach Boulevard to the Santa Ana River by implementing the following measures:

a) Restore and enhance tidal flows into the area and expand the existing mudflat and saltmarch [sic] habitats.

b) Plant native plant species to enhance wildlife diversity.

c) Enhance the visual appearance of wetland areas.

d) Projects that impact the wetlands shall be sited and designed to improve the overall functioning of the wetland ecosystem.

Sections 30230 and 30231 of the Coastal Act require that marine resources, including biological productivity, be maintained, enhanced, and, where feasible, restored. Section 30233(a) requires that any project involving fill of open coastal waters constitute a specifically allowed use, be the least environmentally damaging alternative feasible, and adequately mitigate any unavoidable, adverse environmental impacts. Section 30240 limits any impacts to ESHA to those resulting from resource-dependent uses.

Site Characterization
The project site is a 25-acre salt-marsh containing a range of ecological zones. Looking seaward from the pedestrian/bicyclist path, the northeastern slope drops steeply into layers of broken concrete, degraded rip-rap, and unvegetated soil. The soil becomes water-logged at the toe of the slope and transitions into mudflats speckled with invertebrate burrows and decaying plant matter **(Figure 2 of Exhibit 4)**. The mudflats extend from the slope edge to the low tide line, alternating between exposure and inundation four times a day with tides from the Ocean Channel. Mudflats are a food source for several trophic levels, including filter-feeding worms, omnivorous crabs, and foraging shorebirds.

Beyond the low tide line, soft-bottom habitat supports approximately 1.1 acres of eelgrass beds. The applicant's drone survey conducted on January 21, 2021 shows one major bed spanning most of the northeastern slope and a smaller bed at the south end, although there may be additional eelgrass beds located outside of the survey scope. Fish live in the brackish water and serve as a food source for the federally protected California least tern. In the spring season, male terns snatch the largest fish from the marsh and present them to females as a courtship ritual.[4]

Moving further west, mudflats transition into dry sand and approximately 1.2 acres of coastal sage scrub **(Figure 4, Exhibit 4)**. The western slope rises steeply and ends in a wooden fence separating the area from PCH. During peak traffic hours, the applicant has measured up to 100 decibels of noise on the western slope. Regardless, shorebirds have acclimated to the noise pollution and use the scrub habitat for nesting and loafing. The western slope does not include any hardscape or armoring.

[4] Ref. https://www.audubon.org/field-guide/bird/least-tern

Talbert Marsh's spectrum of ecological zones is crucial in supporting biodiversity. Each zone described above facilitates a different activity for its inhabitants—feeding, mating, resting—and maintains healthy populations of predators and prey. The marsh thus constitutes a protected marine resource under sections 30230 and 30231 of the Coastal Act.

ESHA Protection

Under Section 30107.5 of the Coastal Act, ESHA includes rare species' habitat that "could be easily disturbed or degraded by human activities and developments." This protection applies to the overall marsh area, vegetated salt-marsh and coastal sage scrub, as all support rare species. Examples include the California least tern, a state and federally endangered species, that has an established breeding and nesting sanctuary south of the Ocean Channel (outside of the project site), and regularly uses the overall marsh area for foraging. And the Belding's savannah sparrow, a state endangered species, that uses the vegetated salt-marsh for nesting and the vegetated salt-marsh and coastal sage scrub for foraging. Vegetated salt-marsh areas are easily disturbed by turbidity and shading and coastal sage scrub habitat is easily disturbed by invasive species tracked in by visitors. Section 30240 requires ESHA to be protected from significant disruption of habitat values and allows only resource-dependent uses in these areas.

The project has been sited and designed to avoid significant disruption of habitat values. The proposed work will be limited to the northeastern slope, which has been previously armored. Specifically, alteration of rip-rap and concrete will occur on the slope face and installation of new habitat will occur immediately below the slope in a less than 10-ft. wide area. The project envelope is within the wetland because it is below the MHTL, but it does not extend below the mean low tide line.

The applicant will protect the overall marsh area near the project with an eelgrass buffer; most buffer portions will be at least ten feet, with the exception of very few 'pinch-points' that approach two feet **(Exhibit 2)**. The applicant's proposed BMPs will minimize turbidity by 1) limiting work below the slope to when the water level has receded below the area of work; 2) demarcating the distance between eelgrass beds and habitat beds with temporary materials; 3) installing coir rolls first to prevent silt disturbance; 4) installing heavier oyster/rock rolls second to prevent sand fill from burying eelgrass; and 5) conducting all habitat installation manually, with no construction vehicles or equipment allowed to enter the marsh.

The proposed work will convert 0.25 acres of existing mudflats along the northeastern slope (i.e. approximately 60% of the existing eastern mudflats) to new, coastal saltmarsh vegetation. It will also convert areas where rock and debris have slumped downward back to marsh habitat. The proposed coastal saltmarsh supports sensitive coastal species such as the Belding's savannah sparrow and the state and federally endangered Ridgeway's rail. The new habitat is designed to maintain pockets of mudflats between saltmarsh cells, in addition to a narrower band of mudflats at the base of the cells. The project will not entirely displace the eastern mudflats and there will be no net reduction in marsh habitat onsite. Rather, the proposed habitat will improve the

transition between mudflats and armored northeastern slope with a new ecological zone. The unvegetated mud that accommodated primarily burrowing invertebrates will now offer shelter for additional fauna with new saltgrass *(Distichis spicata)*, marsh jaumea *(Jaumea carnosa)*, and other native species.

Therefore, the proposed work will not disrupt habitat values or disturb ESHA onsite consistent with the requirement of Section 30240(a). Creation of new habitat is also consistent with certified LUP policies C.7.2.4 and C.6.1.28, which encourage expansion of mudflat and salt-marsh habitats for the use of coastal wildlife.

Allowable Use

The applicant proposes installation of fill in wetlands to establish new habitat and halt erosion on the northeastern slope. While the 1,200 cy. of sediment and rows of coir rolls technically constitute fill, these features are necessary to create 0.25 acres of new salt-marsh habitat. By softening the transition between mudflats and hardscape, as well as introducing a new ecological zone, the project will enhance and restore biological productivity in the surrounding area. Additionally, lifting concrete fragments back onto the slope face will result in a 556 sq. ft. decrease in existing encroachments below the MHTL. (All concrete and rip-rap will be lifted from the toe of the slope, but the new rip-rap installed on the bluff face lessens the net change in encroachment below the MHTL.) This will result in 556 sq. ft. of new available habitat previously filled/buried by degraded concrete.

Therefore, the project meets the first requirement of Section 30233(a)(6) as a restoration project. Improvement of natural habitat is a resource-dependent use allowed within ESHA under Section 30240(a). In addition to specifying allowed uses, these policies require that the project constitutes the least environmentally damaging alternative feasible.

Alternatives Analysis

The applicant provided the following alternative projects intended to protect the Multi-Use Path, Orange County Sanitation District sanitation plant, and marsh habitat from the effects of slope erosion.

> **1. No Project.** The applicant could take no action to remediate erosion. The base of the northeastern slope where tidal influence is most consistent would gradually erode. The slope supporting the Multi-Use Path would increase in steepness. Pavement from atop the slope would begin crumbling into the marsh as the slope became unstable. The applicant estimates that the slope has receded at least five feet in the past eight years.[5] While it may take another decade (or less depending on storm frequency), the Multi-Use Path would ultimately be closed due to an insufficient buffer from the steep drop-off. Concrete and rip-rap would continue

[5] The applicant outlined the slope edge on Google Earth satellite images between 2013 to 2021 and measured the change over eight years. The results showed an erosion rate of approximately 0.63 ft. per year.

slumping into the marsh and could bury the existing mudflats, making it difficult for birds to forage around the jagged debris. Visual and biological resources would continue to degrade.

2. Remove Rip-Rap. The applicant could remove all existing rip-rap and concrete from the northeastern slope. The slope would have no protection against wind and tidal forces. The erosion rate would increase and the Multi-Use Path would be closed in a shorter time frame than that of Alternative 1; eventually the Orange County Sanitation District may be threatened. New concrete and asphalt would slump into the marsh and bury the existing mudflats. Removal of the concrete would be a continuous task rather than a discrete event, requiring multiple excavator vehicles trips and ongoing noise pollution. Unpredictable slope failures and frequent human maintenance may deter birds from accessing the northeastern slope. There would be minimal improvement to visual resources with exposure of the unvegetated slope and no enhancement of biological resources.

3. Remove Rip-Rap and Plant Salt-Marsh. The applicant could remove all existing rip-rap and concrete for installation of new salt-marsh habitat along the entire northeastern slope length. Before establishing the new habitat, the slope would require significant re-grading to prevent damage to the habitat. Construction vehicles would have to enter the marsh habitat. Significant noise pollution would continue for months, potentially over three years if work is timed to avoid nesting seasons. Once the 1,850-ft. long slope was cleared and re-graded, biodegradable rolls would be installed to create upper and lower marsh benches. More than 1,200 cy. of sediment would be installed in the benches to ensure the new habitat extended the full slope length. It would be impossible to maintain a 5-ft. eelgrass buffer in certain portions, resulting in impacts to the existing 1.1 acres of eelgrass onsite. This alternative would create a significant amount of new salt-marsh habitat, but would reduce the mudflat acreage along the northeastern slope to less than 40%. The slope would be unprotected during the period of plant establishment. If establishment was not successful, erosion would continue unchecked. And even assuming a fully vegetated shoreline were established, it would not provide significant protection against a major storm or flood event. There would be improvement to visual resources and enhancement of specific biological resources, but damage to eelgrass beds.

4. Repair Rip-Rap. The applicant could lift slumped concrete back onto the slope face and install new rip-rap to close gaps in the existing armoring layer. This alternative would require construction vehicles to operate near the marsh for four months and could be completed in a single year during fall and winter seasons. Wildlife would continue use of the mudflats, despite the current, abrupt transition from mudflats to rip-rap/concrete. The slope would continue to slump into the marsh over several decades, although it would occur over a long span of time with the protective rip-rap. There would be no change to the existing visual and biological resources, although there may be future damage to the mudflats as the rip-rap/concrete slumps back into the marsh over time.

5. Repair Rip-Rap and Plant Salt-Marsh (Proposed Project). As previously described, the applicant could lift slumped concrete back onto the slope face, fill gaps in the existing rip-rap, and establish salt-marsh cells along portions of the shoreline. Retention of the concrete and rip-rap would eliminate the need to re-grade the slope—construction vehicles and equipment would not enter the marsh. Noise pollution from rip-rap placement would occur for four months (two months per year). Habitat establishment would occur for two months (one month per year), but would not produce significant noise pollution. Fill would be limited to 1,200 cy. of sediment installed in between the rolls, resulting in 0.25 acres of new salt-marsh. Eelgrass beds would not be adversely impacted. New vegetated cells would be interspersed with existing mudflats to create a transition zone between the mudflats and rip-rap, with retention of at least 40% of the existing, eastern mudflats. The 0.25 acres of habitat would dampen tidal forces on the armored slope. Compared with alternatives 1 through 4 above, this alternative provides the greatest degree of slope protection. It will also improve visual resources and enhance biological resources without adversely impacting eelgrass beds.

The site condition documented in **Exhibit 4** demonstrates a clear need for remediation of the concrete encroachment which would not be satisfied by Alternative 1 (No Project). Alternative 2 (Remove Rip-Rap) would remediate all encroachments below the MHTL, but ultimately disrupt biological productivity in the project area. While Alternative 3 (Remove Rip-Rap and Plant Salt-Marsh) would result in the greatest amount of new salt-marsh, it could have the largest adverse impact on biological resources. This alternative would produce long periods of noise pollution, equipment within the marsh, an inadequate eelgrass buffer, and displace nearly all of the existing eastern mudflats. In addition to the biological resource impacts, the salt-marsh may be insufficient protection for the slope without any adjoining rip-rap. Alternative 4 (Repair Rip-Rap) would improve the slope condition by lifting concrete and repairing the armoring gaps—however, it would be a temporary solution likely to produce the same results as the current condition over the new few decades. This alternative would not improve the existing visual and biological resources and may ultimately damage the mudflats.

Alternative 5 (Proposed Project) will enhance biological resources with a 556 sq. ft. reduction in the existing encroachment below the MHTL and 0.25 acres of new salt-marsh habitat. BMPs will be used to avoid any adverse impacts to nearby eelgrass beds. The transition between mudflats and armoring will be improved with a new ecological zone, facilitating improved biodiversity in the project area. The proposed project will provide the greatest degree of slope protection and biological resource enhancement.

Therefore, the proposed development meets the criteria of sections 30233(a) and 30240 as the least environmentally damaging alternative feasible.

Construction BMPs and Timing to Avoid Impacts
The project has been sited and designed for consistency with the Coastal Act sections above. However, additional resource agencies could request revisions to the project

which result in environmental impacts or changes to the scope of work authorized by this permit.

The applicant has indicated that the project has a pending permit from the United States Army Corps of Engineers (USACE) which reflects conditions imposed by the National Marine Fisheries Service (NMFS) of the National Oceanic and Atmospheric Association (NOAA). The permit is pending Commission approval of the subject CDP. To ensure that the proposed project adheres to the requirements from other resource agencies, and to account for changes to other resource agency permits that may be necessary given the design alternative required by the Commission, **Special Condition 1** requires the applicant to comply with all local resource agency requirements and submit any project revisions to the Executive Director for determination whether a CDP amendment is required prior to commencement of construction.

As proposed, alteration of rip-rap and concrete will be scheduled to avoid the avian nesting season occurring from February 1st to September 1st. But the one-month installation of coir rolls and sediment is proposed in the nesting season to enable work during dry periods and avoid turbidity. The area of work is located at least 150 ft. from the western salt-marsh best suited for avian nesting. To avoid impacts during the nesting season, **Special Condition 2** requires a qualified biologist to monitor the work for disturbance to sensitive species at least once a week during the rip-rap/concrete work (which is significantly louder than the habitat establishment work) and daily during habitat establishment. **Special Condition 3** requires the applicant to retain a qualified biologist or specialist to survey the area within 300 ft. of the project site, including the western slope, within five days of work commencement. If the survey finds sensitive bird species nesting or roosting within 300 ft. of the work site, construction noise levels shall be limited to at or below a peak of 100 dB, the maximum noise level already present onsite from PCH.

The applicant proposes several BMPs described in the 'ESHA Protection' subsection above. **Special Condition 4** requires the applicant to adhere to these BMPs and additional measures, including the use of biodegradable materials for temporary demarcation in the marsh and immediate removal upon completion of work. The proposed and conditioned BMPs will minimize risks to water quality and nearby eelgrass to the greatest extent feasible. **Special Condition 4** also prohibits the applicant from using artificial lighting for work between sunset and sunrise, as this can disturb nearby wildlife.

The applicant submitted an eelgrass survey for the project site, conducted on January 21, 2021, which identified 1.1 acres of eelgrass within the project site. Eelgrass surveys completed between August through October are valid until the resumption of active growth (i.e., March 1) and the subject eelgrass survey is no longer valid for project construction. Therefore, **Special Condition 5** requires a new eelgrass survey and identifies the procedures necessary to be completed prior to beginning construction. If the pre-construction eelgrass survey required by **Special Condition 5** identifies new eelgrass beds that would be impacted by the proposed dock construction, the applicant

must apply for a CDP amendment or new CDP to re-design and/or relocate the proposed habitat cells to avoid eelgrass impacts.

An invasive algal species, *Caulerpa sp.*, has been discovered in Newport Bay and other areas of Orange County. The species proliferates quickly to prevent native algal species from sharing the substrate. The applicant has not submitted a Caulerpa survey. Given the potential for the Caulerpa species to take over eelgrass and other marine habitat in the project vicinity, **Special Condition 6** requires the applicant to survey the project area for the presence of *Caulerpa* prior to commencement of construction activities. If any *Caulerpa* is detected within the project area, **Special Condition 6** identifies the procedures necessary to be completed prior to beginning any construction.

As proposed and conditioned, the project will enhance biological resources without resulting in adverse environmental impacts. Therefore, the proposed development does not necessitate mitigation under sections 30233(a) and 30240.

Conclusion
The project area contains wetlands and open coastal waters protected under Chapter 3 policies of the Coastal Act; however, the proposed development will serve a coastal-dependent use as habitat restoration, constitutes the least environmentally damaging alternative feasible, and will avoid any impacts to terrestrial and aquatic habitat. Repair of the eroded shoreline and creation of new salt-marsh habitat will maintain, enhance, and restore biological productivity. Therefore, as proposed and conditioned, the project is consistent with Chapter 3 policies of the Coastal Act regarding protection of biological resources, as well as relevant policies of the certified LUP.

D. Public Access and Recreation

Section 30210 of the Coastal Act states, in relevant part:

> 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.

Section 30211 of the Coastal Act states:

> Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

The City’s certified LUP contains the following policy:

> C.2.2
>
> Encourage the use of City and State beaches as a destination point for bicyclists, pedestrians, shuttle systems, and other nonauto-oriented transport.

Section 30210 of the Coastal Act requires recreational access for all people in the coastal zone consistent with public safety needs and protection of biological resources. Section 30211 prohibits development from interfering the public's right to access the sea, which includes coastal waterways like the Talbert Marsh, and the pedestrian and bike path that runs adjacent to the marsh and then connects to the San Gabriel River Path and the public beach. Certified LUP Policy C.2.2 encourages the establishment of beach destination points for bicyclists and pedestrians.

Talbert Marsh is accessed by a Multi-Use Path open to pedestrians and bicyclists; following the path south leads to the Santa Ana River and the California least tern sanctuary. During the spring and summer seasons, warm weather and active wildlife populations draw many visitors to the marsh. The project will support continued use of the path by preventing the slope drop-off from becoming steeper. During construction, the applicant will maintain public access to the path by parking Public Works staff vehicles in the 10-ft. wide buffer adjacent to the path. Portions of the path may be temporarily obstructed by vehicles, but at least 10 ft. of unobstructed access will remain on the east side of the path median. As proposed, the applicant will store the excavator overnight in a private lot located adjacent to the path and keep the path open for typical hours of operation.

To ensure construction does not impact public access, **Special Condition 7** requires the applicant to submit a construction staging plan for review and approval of the Executive Director prior to issuance of the CDP. The staging plan shall depict the location of overnight construction vehicle and equipment parking and the corridor(s) used to move vehicles between Brookhurst Street, the area of work, and the parking lot. **Special Condition 7** requires the plans to include a narrative demonstrating that construction shall not obstruct public access to the path.

Therefore, as proposed and conditioned, the Commission finds the project consistent with Section 30210 and 30211 of the Coastal Act and the public recreation policies of the certified LUP.

E. Visual Resources

Section 30251 of the Coastal Act states:

> The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The City's certified LUP contains the following policy, mirroring Section 30251:

C.4.7

Improve the appearance of visually degraded areas within the Coastal Zone.

Section 30251 of the Coastal Act requires that the scenic and visual qualities of coastal areas be protected and, where feasible, restored and enhanced. Certified LUP Policy C.2.2 mirrors Section 30251 by encouraging the improvement of visually degraded coastal areas. There are viewsheds on all sides of Talbert Marsh, including the Multi-Use Path, Brookhurst Drive, and PCH.

The northeastern slope is characterized by an irregular, crumbling drop-off and patches of rip-rap and concrete. Metal bars jut from portions of the concrete rubble **(Figure 1, Exhibit 4)**. The areas without concrete or rip-rap are unvegetated patches of water-logged earth. The project will improve visually degraded resources by removing unsuitable chunks of concrete (such as pieces with protruding metal) and lifting others back into a uniform layer below rip-rap on the slope face. The project will also improve visual resources with 0.25 acres of new salt-marsh visible to all surrounding viewsheds.

There will be a temporary adverse impact to visual resources with the presence of construction vehicles and equipment for approximately six total months (three months per year.) However, no work is proposed during the summer season most popular with coastal visitors. All vehicles and equipment will be removed upon completion of work, including temporary eelgrass markers installed in the marsh. The initial proposed habitat appearance—rows of earth-colored rolls and sediment—will improve with vegetation growth **(Exhibit 2)**.

Therefore, as proposed and conditioned, the Commission finds the project consistent with Section 30251 of the Coastal Act and the visual resource policies of the certified LUP.

F. Coastal Hazards

Section 30253 of the Coastal Act states, in relevant part:

New development shall do all of the following:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. […]

The City's certified LUP contains the following policy, in relevant part:

C.10.1.14

> … Development shall, to the maximum extent feasible and consistent with the Water and Marine Resource policies of this LCP, be designed and site to:
>
> a) Avoid the use of protective devices
>
> b) Avoid encroachments into the floodplain, and
>
> c) Remove any encroachments into the floodplain to restore the natural width of the floodplain.

Coastal Act Section 30253 requires new development to minimize risks to life and property by assuring stability and avoiding any contribution to erosion or the need for shoreline or bluff protection.

The applicant was unable to identify the year when rip-rap and concrete fragments were placed along the northeastern slope. Based on its current condition, the armoring appears several decades old and may have been installed with initial construction of Talbert Marsh in 1958 or soon afterward. Prior to Coastal Act adoption, it was common practice to use construction debris (and sometimes even decrepit vehicles) as shoreline protection.

Satellite imagery confirms the path and Sanitation District structures were constructed prior to passage of Prop 20 in 1972 or adoption of the Coastal Act in 1976, rendering both structures entitled to shoreline protection if threatened by coastal hazards. The applicant estimates an erosion rate of approximately 0.63 ft. per year based on satellite imagery. Portions of the slope have caved in and form a steep, five-foot drop-off below the path buffer. Other portions of the slope are less steep, but have slumped enough to push large amounts of concrete and rip-rap into the marsh. The applicant's plans show 60% of the 1,850-ft. long northeastern slope to be poorly protected, or entirely unprotected, by the existing rip-rap and concrete.

While LUP Policy C.10.1.14 requires development to avoid the use of protective devices and floodplain encroachments, removing all existing armoring would endanger nearby structures and habitat (as discussed in more detail as Alternative 2 in the 'Alternatives Analysis' subsection of the 'Biological Resources' section above.) Contributing to geologic instability would render the project inconsistent with Section 30253.

The project has been designed to reduce the degree of encroachment into the floodplain while still protecting the slope from erosion. Portions of concrete with exposed metal and debris will be removed; the rest of the concrete fragments will be lifted back onto the slope face above the MHTL. New rip-rap will be placed in exposed patches on 60% of the slope below the concrete. Cells of new salt-marsh habitat will be planted at the base of the rip-rap, further dampening eroding forces on the slope. The project will result in a 556 sq. ft. reduction in concrete/rip-rap encroachment below the MHTL, consistent with requirements b) and c) of LUP Policy C.10.1.14. It will also improve geologic safety in the project area.

To ensure the applicant acknowledges the risks inherent to the project location, **Special Condition 8** requires the applicant to assume all risks of the development, indemnify the Commission in the event of any damage resulting from the approved project, and acknowledge that future removal may be determined necessary if at any point the development poses a risk to public safety.

Therefore, as proposed and conditioned, the project is consistent with Section 30253 of the Coastal Act and the coastal hazard policies of the certified LCP.

G. Local Coastal Program

The City of Huntington Beach LCP was effectively certified in March 1985, with Talbert Marsh originally designated as within the PCH Area of Deferred Certification. In 1986, the Commission approved an LUP amendment to include the subject site in the certified LCP. Regardless, the project area is located on tidally influenced public trust lands within the Commission's retained permit jurisdiction. Therefore, the Chapter 3 policies of the Coastal Act constitute the standard of review for this project, with the City's certified LCP used as guidance.

H. California Environmental Quality Act (CEQA)

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

The County of Orange is the lead agency for purposes of CEQA compliance. Orange County Public Works determined that the project is Categorically Exempt from the provisions of CEQA pursuant to Guidelines section 15133 (Small Habitat Restoration Projects). The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full: as conditioned, there are no feasible alternatives or additional feasible mitigation measures available that would substantially lessen any significant adverse effect that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate potential impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

1. City of Huntington Beach Certified Local Coastal Program.

2. Alternatives Analysis for the D02 Talbert Marsh Restoration Project, prepared by Orange County Public Works, dated December 2021.