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STAFF REPORT: REGULAR CALENDAR

CDP Application No.: **1-21-0195**

Consistency Determination No.: **CD-0003-21**

CDP Applicant: **California Department of Fish and Wildlife**

CD Applicant: **National Oceanic and Atmospheric Administration Restoration Center**

Location: Ocean Ranch Unit, Eel River Wildlife Area, Humboldt County (**Exhibit 1**)

Project Description: Restoration of 571 acres of wetland habitat and 279 acres of dune habitat in the Ocean Ranch Unit of the Eel River Wildlife Area, including public access and recreation improvements.

Staff Recommendation: Approval; Concurrence

SUMMARY OF STAFF RECOMMENDATION

Working together, the National Oceanic and Atmospheric Administration Restoration Center (NOAA RC) submitted a Federal Consistency Determination and the California Department of Fish and Wildlife (CDFW) submitted a Coastal Development Permit application for their joint efforts to implement the Ocean Ranch Restoration project in the Eel River Wildlife Area (ERWA) located in Humboldt Bay. NOAA RC would carry out

the proposed restoration activities and CDFW owns the site and proposes to monitor and manage the restoration areas once the work by NOAA RC is compete. As part of the ERWA, Ocean Ranch is owned by CDFW and is managed as fish and wildlife habitat and for public recreational uses. The project area encompasses approximately 933 acres and is generally bound by the Pacific Ocean to the west, Table Bluff to the north, McNulty Slough to the east, and North Bay to the south. Currently, existing wetland habitat in Ocean Ranch is adversely affected by poor tidal flows and limited hydrological connectivity. Both wetland and dune habitats are also adversely impacted by large areas of dense invasive vegetation. The goal of this project is to restore and expand natural estuarine and dune function in the restoration area and to assist in the recovery and enhancement of habitat for native fish, wildlife and plant species. The applicants propose to restore tidal flows and hydrological connectivity to 571 acres of presently degraded estuarine habitat. The proposed project also includes the removal of invasive dense-flowered cordgrass (*Spartina densiflora*) in the wetland restoration area, and the removal of invasive European beachgrass (*Ammophila arenaria*) in 279 acres in the dune restoration area. The applicants further propose to improve public access to Ocean Ranch and add new recreational amenities including a new parking area and non-motorized multi-use trail system. These findings cover a combined coastal development permit and federal consistency certification; the standard of review for both is Chapter 3 of the Coastal Act.

While the ultimate project goal is habitat restoration, short term adverse impacts to marine resources and environmentally sensitive habitat could occur through construction and invasive vegetation removal activities. Specifically, the proposed project has the potential to adversely affect ecologically important species, habitats, and water quality.

To help ensure that adverse impacts from the project are avoided and minimized, the applicants have committed to implementing mitigation measures designed to protect marine and upland habitats, species, and water quality. These measures include limiting work to seasonal work windows, conducting pre-work surveys for sensitive wildlife and plant species, relocating individuals out of work areas, conducting pre-construction fish screening, implementing erosion control measures, minimizing emissions from prescribed burning, and implementing standard construction best management practices for work in sensitive aquatic and upland habitats. Implementation of these measures would be required through **Special Condition 1**. Additionally, to evaluate and confirm the project's success and progress on achieving the expected benefits to sensitive habitats, specials status species and wildlife, **Special Condition 3** would require the development and implementation of a monitoring plan for a period of 5 years following the completion of the restoration project.

In addition, the applicants have committed to coordinating with Commission staff on the development and finalization of four different mitigation plans prior to implementation of project activities. These plans include the Erosion Control Plan, Hazardous Material Spill Prevention Plan, Herbicide Drift Plan, and Monitoring Plan. With implementation of these measures and plans, the Commission staff recommends the Commission find the

proposed project is consistent with Sections 30230, 30231, 30232, 30233, and 30240 of the Coastal Act.

The proposed project also has the potential to adversely affect public access and cultural resources. To minimize such impacts, the applicants have committed to implementing mitigation measures including: avoiding full beach closures, monitoring for cultural resources, and consulting with Tribal representatives. **Special Condition 1** would also require implementation of these measures. Commission staff therefore recommends the Commission find the project consistent with the public access, recreation and cultural resource protection policies of the Coastal Act (Sections 30210, 30212, 30212.5, 30214, and 30244).

Although the project area was historically used for agricultural purposes, it has not been used for such purposes since 1991. This is likely because of decreased agricultural viability of the lands due to saltwater inundation from dike/levee breaches that were not fully repaired. The low-lying diked and drained land that was used for farming on the property has always been vulnerable to tidal inundation and saline influence. This flooding has displaced agricultural lands with salt water and brackish wetlands. The resulting saline soil conditions preclude the growth of grasses for grazing and other plants used for producing agricultural crops, rendering the land unsuitable for renewed agricultural use. The agricultural use of adjacent and nearby lands is also effectively buffered from the current and proposed habitat and public access uses on the subject property by McNulty Slough and the Eel River. The staff therefore recommends the Commission find the project consistent with the agriculture conversion policies of the Coastal Act (Sections 30241 and 30242).

For the reasons described above, Commission staff recommends that the Commission approve coastal development permit application 1-21-0195 and concur with consistency certification CD-0003-21. The motions and resolutions are on page 5.

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I. MOTION AND RESOLUTION

1. Coastal Development Permit

Motion:

*I move that the Commission **approve** Coastal Development Permit No. 1-21-0195 pursuant to the staff recommendation.*

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 1-21-0195 and adopts the findings set forth below on grounds that the development as proposed 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.

2. Consistency Determination

Motion:

*I move that the Commission **conditionally concur** with Consistency Determination CD-0003-21 on the grounds that the project described therein is fully consistent, and therefore consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program (CCMP).*

Staff Recommendation:

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

Resolution:

The Commission hereby conditionally concurs with Consistency Determination CD-0003-21 on the grounds that the project described therein is fully consistent, and therefore consistent to the maximum extent practicable, with the enforceable policies of the CCMP.

II. FEDERAL AGENCY'S CONSISTENCY DETERMINATION

The National Oceanic and Atmospheric Administration Restoration Center (NOAA RC) has determined the project is consistent to the maximum extent practicable with the California Coastal Management Program.

III. STANDARD CONDITIONS

The Coastal Development Permit (CDP) No. 1-21-0195 is granted subject to the following 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 permittee 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 the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

VI. SPECIAL CONDITIONS

Both CDP No. 1-21-0195 and Consistency Determination CD-0003-21 are subject to the following special conditions:

1. Environmental Impact Report Mitigation Measures. This permit incorporates those mitigation measures identified in the September 2020, *Draft Environmental Impact Report for the Ocean Ranch Restoration project* (State Clearinghouse No. 2018062020) concerning marine habitats, biological resources, environmentally sensitive habitat, public access, recreation, cultural resources, and hazards that are attached to this report as **Exhibit 2**.

2. Other permits and approvals. PRIOR TO THE COMMENCEMENT OF PROJECT ACTIVITIES, the applicants shall provide to the Executive Director copies of all other local, state, and federal permits and authorizations required to perform project- related work, or evidence that no permits are required.

3. Monitoring Plan. PRIOR TO INITIATION OF RESTORATION ACTIVITIES, CDFW, as the applicant responsible for the long-term management of the project area, shall submit a monitoring plan to determine whether the project has been successful in improving habitat conditions for special-status plants and wildlife. This monitoring plan shall be submitted for review and approval of the Executive Director and shall include:

1. Monitoring objectives, interim and final success criteria and performance standards, monitoring methods, monitoring timing for restored wetland tidal processes, water quality, native eelgrass establishment, tidal marsh and dune vegetation, overall habitat development, and fish and Western snowy plover use in restored areas.

2. For a period of five years, the applicant shall submit, within 90 days of completion of monitoring activities, annual monitoring reports for the review of the Executive Director.

    a. The first annual monitoring report shall include documentation showing the completion of the initial restoration work, including figures showing the as-built condition and photographs of restored areas.
    b. Annual monitoring reports shall indicate the progress and relative success or failure of the restoration/enhancement, including photographs of restored areas. These reports shall also include further recommendations and requirements for additional restoration/enhancement activities in order for the project to meet the success criteria and performance standards.

3. The final year five monitoring report shall detail the relative success or failure of the restoration/enhancement efforts.

V. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION AND BACKGROUND

Background
As part of the Eel River estuary, the Ocean Ranch Unit (Ocean Ranch), shown in **Exhibit 1**, historically contained estuarine saltmarsh habitat, including interconnected slough channels and streams that allowed for unrestricted tidal exchange to much of the low-lying regions of the project area. In the early to mid-1900's, the saltmarsh area was diked and cut off from tidal influence. This land was drained through tide gates to McNulty Slough and was used as pasture for cattle. In 1986, CDFW began managing the area as artificial shallow freshwater habitat and divided it into five management areas, defined as Areas A through E. In 1994, Area A of the Ocean Ranch property was inundated by tidal waters due to a levee breach along McNulty Slough. Most of the historically estuarine areas within Ocean Ranch have been gradually reverting to saltmarsh and brackish marsh habitat, due to levee breeches and failures of other water control structures in the project area. Historical channels allow for some tidal inundation within the project area, flooding adjacent lands at high tide. Remnant levees are still present between the management areas, impairing hydrologic connectivity and aquatic wildlife accessibility between the Ocean Ranch estuarine areas and McNulty Slough and North Bay. The existing remnant levee system and historical channels do not provide sufficient amounts of tidal exchange or circulation needed to support a healthy estuarine ecosystem.

Project Description
Working together, the National Oceanic and Atmospheric Administration Restoration Center (NOAA RC) submitted a Federal Consistency Determination and the California Department of Fish and Wildlife (CDFW) submitted a Coastal Development Permit application for their joint efforts to return the Ocean Ranch Unit to its historic ecological function through the implementation of the Ocean Ranch Restoration project. The goals of the project are to:

1) Restore and expand estuarine functions within Ocean Ranch by: (a) increasing the tidal prism; (b) improving tidal connectivity between Ocean Ranch, McNulty Slough, and North Bay; (c) increasing habitat complexity; and (d) removing invasive plant species.

2) Enhance dune function within Ocean Ranch by: (a) removing invasive plant species and (b) re-establishing native dune mat plant communities.

3) Improve public access and recreational amenities within the existing recreational areas.

To achieve the project goals, the applicants would carry out a variety of specific activities. These include restoration of tidal flows and hydrological connectivity, removal of invasive cordgrass, removal of invasive beachgrass, and development of public access and recreational amenities. Each of these proposed project elements are summarized below:

Restoration of Tidal Flows and Hydrological Connectivity

This component of the project would include restoration of tidal flows and hydrological connectivity to 571 acres of presently degraded estuarine habitat. In addition, the project would continue to protect adjacent private landowners from flooding, would reestablish a permanent elevation benchmark within Ocean Ranch to monitor sea level rise, and would continue to monitor wildlife and ecosystem processes within Ocean Ranch.

To restore tidal flows and hydrological connectivity, four external and four internal levees would be breached (as shown in **Exhibit 3**). As stated in CDFW's Draft Environmental Impact Report (DEIR):

> The maximum width of external breaches would be between 30 feet (9 meters) and 140 feet (43 meters) wide, with the widest breaches located at BR-1 and BR-2. Internal breaches would have a maximum width between 30 feet (9 meters) and 100 feet (30 meters), with the widest breach at BI-1.

As described in the DEIR, the following connections would be made following levee breaches (**Exhibit 4**):

> Breach BR-1 would connect Area A to North Bay downstream of the McNulty Slough and Hawk Slough confluence. Breaches BR-2, BR-3, and BR-4 would connect Areas B, C and D, respectively, to McNulty Slough at historic slough locations. Areas A, B, C, and E would be interconnected through four internal levee breaches, designated as BI-1 through BI-4.

To accomplish these changes, sections of the perimeter levee located to the east of Areas A, B, C, and D (**see Exhibit 4**) would be lowered to a crest elevation of eight feet using heavy equipment such as excavators and dozers and graded to provide sloping transitional habitat for wetland wildlife and vegetation. Large wooden structures would also be embedded into the lowered levee and within tidal channels, adjacent to tidewater goby shelves, in Areas B and C, by partially burying the wood in the substrate as the tidal channel excavation is being completed, to serve as high tide refugia for wildlife, provide wave attenuation, and increase habitat complexity. These wooden structures are commonly seen in tidal flats in this area and would be comprised of 20 to 30 foot long pieces of driftwood, preferably with trunks and root wads intact, sourced onsite from an extensive stockpile of driftwood located along the southwestern boundary of the estuarine restoration area. Other sections of the levee would be lowered down to the marsh plain elevation through grading to provide tidal exchange. To improve water quality and tidal exchange, internal levees between Areas B, C, and D would be excavated and removed. In addition to levee modifications, the project would involve the use of heavy equipment to excavate a maximum of 8,520 linear feet of new tidal channels within the estuarine restoration area.

As discussed in the project's DEIR, all excavated soil from the estuarine restoration would be re-used to create other restoration components including:

Creating high marsh habitat, filling internal ditches and lower elevation areas, creating habitat ridges, installing ditch plugs, repairing damaged levees and berms that would be lowered to crest elevation, and repairing damaged levees and berms not proposed for removal including but not limited to the location between Areas A and B (northern portion) and within Area E that would not otherwise be removed or lowered.

Habitat ridges would be built to a crest elevation of seven feet through placement of fill material. Habitat ridges are earthen mounds placed adjacent to constructed channels to guide their formation and provide habitat for high marsh vegetation. Ditch blocks are compact soil plugs that also help guide channel formation by redirecting water flow and would be used in Areas A and B. A thin layer, less than six inches, of left-over soil may be used to slightly raise the elevation of lower saltmarsh areas through placement of soil by low ground pressure trucks and grading by low ground pressure bulldozers, after the work area has been dewatered. No other external source of fill material would be used for the wetland restoration component of the project.

To implement the proposed grading and excavation work, access to the various work sites would be provided by existing roads including the single-lane gravel road on the north end of Ocean Ranch, Table Bluff Road, and South Jetty Road. Individual work sites would be accessed from the top of existing levees and berms and along the sand road as necessary. In discrete areas not accessible by existing levees or berms, low-ground pressure equipment or equipment staged on barges would be used. All areas used for staging and access would be decompacted and returned to their natural condition, as necessary.

Invasive Cordgrass

Following the construction of the wetland restoration component, invasive dense-flowered cordgrass is proposed to be removed from within a 571-acre area using a primary and secondary treatment, followed by annual maintenance treatments. Treatments would occur outside of the nesting bird season and follow the best management practices and mitigation measures described in the Humboldt Bay Regional Spartina Eradication Plan.

As a primary treatment for invasive cordgrass, prescribed burning is proposed to remove above-ground biomass, in coordination with the California Department of Forestry and Fire Protection (CAL FIRE) and the Loleta Fire Protection District and in accordance with a Burn Plan developed in coordination with and approved by these agencies. The Burn Plan would detail burn objectives, burn parameters, smoke management objectives, and minimum implementation organization. Unlike the other proposed vegetation removal methods, prescribed burning was not analyzed in the Humboldt Bay Regional Spartina Eradication Plan. Prescribed fire is being proposed here due to the large-scale stands of invasive cordgrass and the volume of large woody material that make the exclusive use of mechanical removal methods infeasible. Prescribed fire would burn off biomass and encourage re-growth of new shoots which increases the efficacy of mechanical removal and herbicide treatments. In other

locations, the combination of an initial prescribed burn treatment with subsequent herbicide application has been shown to have a higher efficacy than herbicide use or mechanical removal treatment efforts alone. With a higher efficacy of treatment, less management would be needed and native species would be better able to colonize treated areas. Following burning, other removal methods including manual, mechanical, and herbicide treatment would be performed to control and ultimately eradicate invasive cordgrass. Adaptive management is also proposed to inform sequencing of control methods, as determined by the project's invasive plant species monitoring.

As a secondary treatment, herbicide application is proposed in conjunction with mechanical removal for areas where other removal methods have not succeeded. The proposed herbicide Imazapyr would be applied by a qualified applicator directly to cordgrass leaves during the active growing season, following the appropriate directions for aquatic environments. Applicators would walk through the marsh, spraying herbicide with backpack sprayers or wick applicators. No aerial applications are proposed. Imazapyr is classified as "practically nontoxic to freshwater and estuarine/marine fish and invertebrates, birds, and bees, and is registered for use as an aquatic herbicide." Imazapyr is a systemic aquatic herbicide approved by the U.S. Environmental Protection Agency and the State of California for use in sensitive estuarine environments. The herbicide is applied to the leaves of target plants, absorbed into the plant's circulatory system, and transported to the root system to kill the vegetation. The herbicide works to prevent the synthesis of three amino acids produced only by plants – not by animals – that are required for plant growth and maintenance. The use of imazapyr for invasive cordgrass control is a preferred method in other places where it is being treated and eradicated, such as San Francisco Bay, because of its high effectiveness and minimal impacts.

For mechanical treatment, top-mowing is the proposed method that would be used. The applicant would use a brush cutter or weedwhacker in low to moderate cordgrass density areas and a Marshmaster mower in high density areas. Following the removal of above-ground vegetation, a brush cutter or rototiller would be used to grind down the root and rhizomes three to six inches below the surface. Another mechanical treatment and removal method proposed to be used is the complete removal of cordgrass plants including their rhizomes, by either manual or mechanical excavation. Excavated material would be stockpiled and buried or chipped onsite to be used as mulch.

Dune Restoration/Removal of Invasive Beachgrass

The dune restoration component of the project would include the removal of invasive European beachgrass (*Ammophila arenaria*) within 279 acres of impacted dune habitat through a combination of prescribed burning, herbicide application, and manual removal. As described in the DEIR:

> European beachgrass, which was established on the north spit of the Eel River in the 1970s and now dominates the dunes along the western boundary of the ORU [Ocean Ranch Unit], forms a dense monoculture that outcompetes native plant communities, contributes to the decline of certain native plants, limits dune

function (e.g., limits sand movement), and decreases shorebird nest success by displacing nesting sites and enhancing cover for predators (Pickart 1997).

Proposed removal efforts would be phased into primary and secondary treatment areas (as shown in **Exhibit 5**), to "reduce edge effects and provide native vegetation time to re-establish." European beachgrass removal would generally occur outside of the nesting bird season, between August 1 and March 15. In areas where Western Snowy Plover (*Charadrius alexandrines*) nests, removal would occur between September 16 and March 15, unless CDFW and the U.S. Fish and Wildlife Service (USFWS) determine a wider season would not adversely affect Western Snowy Plover. Removal of European beachgrass from the primary treatment area (207 acres) is proposed in phases throughout a period of 6 years, using contiguous plots. Following the management of the primary treatment area, removal of European beachgrass from the secondary treatment area (72 acres) is proposed to occur over several years using a spot treatment approach rather than using plots.

Similar to invasive cordgrass removal, to initially treat European beachgrass, prescribed burning is proposed to remove aboveground biomass, in coordination with the California Department of Forestry and Fire Protection (CAL FIRE) and the Loleta Fire Protection District and in accordance with a Burn Plan developed in coordination with and approved by those agencies. As in the wetland restoration area of the project, the herbicide Imazapyr will be sprayed by a qualified applicator to target rhizomes post-burning and re-sprouts following the first phase of manual removal efforts. European beachgrass would be manually removed using hand tools to cut away rhizomes in areas with special status species, such as beach layia plants, and in areas with re-sprouting. Leftover plant material from this treatment would be burned in piles or allowed to decompose on site. Manual removal of re-sprouts would continue in the growing season for two seasons as needed. In accessible flat areas without native or special status plant species, bulldozers would excavate and bury dense stands of European beachgrass under three to six feet of sand. The existing Sand Road and access routes would be used to allow bulldozers to reach these areas and no grading or road construction for this access is proposed as part of the project. If other invasive plant species are found, such as pampas grass (*Cortaderia selloana*) and Himalayan blackberry (*Rubus armeniacus*), the same methods would be used to remove them from the project area.

Public Access and Recreational Amenities

The public access and recreational component of the project includes proposed improvements to public access and recreational amenities. As shown in **Exhibit 3**, the existing gravel access road and northern parking area that lead to the estuarine restoration area are proposed to be graded and resurfaced with asphalt, pervious concrete, or gravel. A footpath that runs along the access road would also be surfaced with gravel. In addition, a new southern parking area with access to the new proposed non-motorized multi-use trail system would be paved with asphalt or pervious concrete. The parking area would be constructed in an area of disturbed ruderal habitat and fit six to ten parking spaces, including an American with Disabilities Act (ADA)-accessible

parking space with a van pull out area. Three concrete picnic tables, a kiosk, and an interpretive display would be installed in and next to the parking area. The existing gate on Table Bluff Road would be updated and provide daytime access to the estuarine restoration area. In addition, a 0.5 mile segment of the modified levee between Areas A and B would be converted into a trail for pedestrians, equestrians, and bicyclists. Another 0.25 mile segment of modified levee between Areas A and E would be converted into a trail from the new parking area to the existing sand road that provides coastal access to the Pacific Ocean. Both trails would be ADA-accessible and surfaced with graveled rock. An ADA-accessible non-motorized boat put-in would be installed in Area B as a floating dock with gangway ramps or a simple foot accessible ramp, accessed from the trail system. The boat put-in would improve the current access to the water which currently only exists at a boat launch near the end of Reservation Road, which can only be used at high tide and has limited parking.

B. Jurisdiction and Standard of Review

The proposed project is planned for areas within the Commission's retained jurisdiction and in areas that are within the jurisdiction of Humboldt County's certified LCP. In response to the request for a consolidated permit from the County and applicants, the Commission is conducting a consolidated permit review for the project pursuant to Coastal Act Section 30601.3. The standard of review is Chapter 3 of the Coastal Act.

C. Other Governmental Approvals and Consultations

Interagency Coordination Meetings

Beginning in 2017, NOAA RC and CDFW held a series of interagency meetings with a variety of state and federal resource and permitting agencies. These meetings focused on the coordinated review of the proposed project and feedback on project findings and identification of sensitive species and habitat that could be present and/or affected by the proposed project. Participants included staff from the California Coastal Commission, U.S. Fish and Wildlife Service , National Oceanic and Atmospheric Administration's National Marine Fisheries Service, U.S. Army Corps of Engineers, and the North Coast Regional Water Quality Control Board.

U.S. Fish and Wildlife Service (USFWS)

The applicants have begun consultation with the USFWS. USFWS is providing grant funding to the proposed project and will continue consulting with the applicants to submit an Endangered Species Act (ESA) Biological Opinion.

National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries)

NOAA Fisheries is reviewing the proposed project and working with the applicants to provide an Endangered Species Act Biological Opinion and Essential Fish Habitat consultation.

U.S. Army Corps of Engineers (USACE)

The USACE is reviewing the proposed project for compliance with Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (RHA).

North Coast Regional Water Quality Control Board (NCRWQCB)
The applicants submitted a pre-filing meeting request with the NCRWQCB in March 2021. Review is pending for a Clean Water Act Section 401 Water Quality Certification.

California State Office of Historic Preservation (SHPO)
NOAA RC is currently conducting tribal outreach and will begin consultation with the SHPO for historic and cultural resources located in the Ocean Ranch Unit. East San Pedro Bay.

Tribal Outreach and Consultations
During the process of reviewing the proposed project, Commission staff reached out to representatives from Native American Tribes understood to have current and/or historic connections to the project area. These Tribes include the Bear River Band of Rohnerville Rancheria, the Big Lagoon Rancheria, the Blue Lake Rancheria, the Cher-Ae Heights Indian Community of the Trinidad Rancheria, the Wiyot Tribe, and the Yurok Tribe. Contact information for these Tribal Representatives was gathered from the Native American Heritage Commission's Native American Contact List. In addition, CDFW initiated formal consultation with Native American tribes culturally affiliated with the study area pursuant to CEQA and Public Resources Code (PRC) Section 21080.3.1, as well as CDFW's Tribal Communication and Consultation Policy. During this consultation, Wiyot Tribal Chairman, Ted Hernandez wrote a letter to CDFW supporting the overall restoration concepts and goals of the project and raising several potential concerns. Those specific concerns and CDFW's responses to them are described in the Cultural Resources section of this report.

D. MARINE RESOURCES AND WATER QUALITY

Coastal Act Section 30230 states:

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

Coastal Act Section 30231 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.

NOAA proposes to restore 571 acres of marine estuary, saltmarsh habitat, consisting of tidal channels, mudflats, saltmarsh, brackish marsh, and freshwater wetlands. Once complete, the project would result in a significant increase in the quality of habitat and habitat area available for marine and freshwater fish, invertebrates, Essential Fish Habitat, and native saltmarsh plant communities. However, the proposed restoration activities and methods also have the potential to result in adverse impacts to water quality and a variety of marine and wetland resources, including habitat, special status plants and wildlife.

Special Status Plants

Estuarine mudflat habitat can be found in Area B (shown in **Exhibit 4**), and typically floods during high tide. Shorebirds use the mudflat and marsh areas as a feeding ground due to the abundance of invertebrates these habitats support. Migratory birds also depend on these wetland areas as a stop-over site during their migration. Within tidal channels throughout the project area, native eelgrass (*Zostera marina*) can be found and is documented in McNulty Slough. Eelgrass is a highly productive foundation species that supports a variety of aquatic organisms. Eelgrass also serves as a food source and nursery for fish species, and aids in cycling nutrients and stabilizing sediment.

Much of the saltmarsh in Areas A through D is dominated by invasive dense-flowered cordgrass (*Spartina densiflora*). Invasive cordgrass is currently listed by the California Invasive Plant Council (Cal-IPC) as high risk with “severe ecological impacts on physical processes, plant and animal communities, and vegetation structure, as well as high rates of dispersal and establishment.” Invasive cordgrass adversely affects saltmarsh productivity, prevents native saltmarsh vegetation from establishing, outcompetes existing native saltmarsh vegetation, reduces foraging habitat for native and migratory birds, reduces invertebrate and algal diversity, and physically changes the saltmarsh and channel habitat by overtaking open water areas and mudflats. Native and special-status species can also be found in the project area, although they are currently adversely affected by the uncontrolled spread of invasive cordgrass within the project area.

Pickleweed is also found within the salt marsh portions of the project area and is a mat-forming native plant species that is considered a Sensitive Natural Community by CDFW. Pickleweed mats in Ocean Ranch support three special status plants: Humboldt Bay owl’s clover (*Castilleja ambigua* subsp. *humboldtiensis*), Point Reyes bird’s beak (*Chloropyron maritimum* subsp. *palustre*), and Lyngbye’s sedge (*Carex lyngbyei*). In the

project area, Humboldt Bay owl's clover and Point Reyes bird's beak were observed in the upper coastal saltmarsh habitat areas in Area A bordering McNulty Slough. Lyngbye's sedge has been observed within the project area in small amounts in Area A and along the McNulty Slough border. Some patches of Lyngbye's sedge are present within dense cordgrass, but Humboldt Bay owl's clover and Point Reyes bird's beak cannot grow in areas with dense cordgrass. Within the brackish marsh areas, saltmarsh bulrush (*Bolboschoenus maritimus* subsp. *paludosus*) and/or three-square bulrush (*Schoenoplectus pungens* var. *longispicatus*) are the dominant plant species. Saltmarsh bulrush is also threatened by invasive cordgrass and is listed by CDFW as a Sensitive Natural Community.

Freshwater marshes in the project area have largely been replaced by salt and brackish marsh since the 1994 levee breach and currently are found in the northern area of the project area. Within the project area, CDFW considers the freshwater marshes dominated by either slough sedge (*Carex obnupta*), salt rush (*Juncus lescurii*), water-parsley (*Oenanthe sarmentosa*), or Pacific silverweed (*Argentina egedii* subsp. *egedii*) as Sensitive Natural Communities. Seacoast angelica (*Angelica lucida*) is a rare perennial plant species that can be found in the transition zone between marsh and coastal dune habitats in Area A and E. Coastal dune willow thickets can be found in the minimal areas of freshwater shrub wetlands in the northern region of the project area, and is also considered a Sensitive Natural Community by CDFW.

Construction activities and invasive plant removal in wetland areas may result in the temporary disturbance and loss of special status plant species. For example, work crews may inadvertently trample plants on foot or crush plants and their habitat with construction equipment. Accidental spill of oil or fuel in wetland areas from construction equipment and vehicles could be toxic to special status plant species. Additionally, improper herbicide application could cause death in non-target plants or adversely affect non-target plant health and reproduction. In addition, the proposed use of area treatment methods for invasive plants, such as prescribed burning and mechanical removal methods (mowing, excavation, and burial) may inadvertently include individual special status plants, plant communities and the habitat areas they occupy.

The proposed project includes implementation of best management practices (BMPs) and mitigation measures during construction to help avoid and reduce these potential adverse impacts to special status wetland plant species. The full list of these BMPs and mitigation measures is provided in **Exhibit 2** and their implementation would be required through **Special Condition 1**. Those that are most relevant to special status plants and communities and would be expected to significantly reduce the magnitude and likelihood of adverse impacts to them include Mitigation Measures BIO-3, BIO-1a, BIO-1d, BIO-1e, HHM-2, WQ-1, and WQ-2. These measures would ensure that all construction and invasive plant management activities would occur after most annual plants have seeded and that a biologist stake out those locations with special status plants prior to construction for avoidance. These measures would also require that

herbicide be applied directly to invasive plant species in low-drift conditions and that buffer zones be established around special-status plant species. In addition, Plant management crews would also be trained in avoidance and protection measures for special status plant species.

Included in these proposed mitigation measures are several that were also included in the Programmatic Final EIR for the Humboldt Bay Regional Spartina Eradication Plan. The Commission approved implementation of this regional eradication plan in 2015 (CDP 1-14-0249) and required implementation of these same best-management-practices (BMPs) and mitigation measures. Additionally, as part of the project, CDFW has proposed to continue to monitor and maintain the project area as fish and wildlife habitat. CDFW has committed to collaborate with Commission staff to develop and finalize a five year monitoring program that would include monitoring of physical and biological conditions of the restored habitats and an evaluation of the project's progress towards the established success criteria. This five year monitoring program would be submitted for Executive Director review and approval, as required in **Special Condition 3**.

With implementation of these BMPs and mitigation measures through **Special Condition 1**, the proposed project would be carried out in a manner that would help ensure that adverse impacts to special status plants and vegetation communities would be avoided and minimized to the extent feasible. Given the level of habitat disturbance and wide area of application of some of the proposed treatment and restoration methods, a potentially significant loss and damage to sensitive plant populations and individuals is likely to be unavoidable. However, because the successful project would result in the eradication and reduction in invasive cordgrass across approximately 571 acres of saltmarsh wetlands, a significant source of competition and stress on these native plants and habitats over an extensive area would be removed, thus facilitating the expansion of special status plants and vegetation communities and promoting their continued health and resilience.

Special Status Wildlife

Bordered by the existing levees, salt and brackish marsh habitat is the most common wetland type found in the project area. Several special status fish species have a high potential to be present or have been observed in these estuarine areas of the project area. The federally endangered Tidewater goby (*Eucyclogobius newberryi*) has been observed within the project area in the northern regions of Areas A and E. In addition, the federally threatened Coho Salmon, Southern Oregon-Northern California Coast ESU (*Oncorhynchus kisutch*); Northern California DPS Steelhead (*Oncorhynchus mykiss*); Chinook Salmon, California Coastal ESU (*Oncorhynchus tshawytscha*); and state threatened Longfin Smelt (*Spirinchus thaleichthys*) have been observed within the Eel River estuary including tidal marsh areas in Areas A and E and near McNulty Slough.

Within the freshwater marsh habitats, the Northwestern Pond Turtle (*Emys marmorata marmorata*) and Northern Red-legged Frog (*Rana aurora*) are commonly found and are CDFW Species of Special Concern. Within the project area, these species have a high potential to occur in the northern regions of Area E and C.

There is a potential for fish species, including salmonids and other estuarine fish, to occur in tidal areas where placement of fill or excavation is proposed as part of restoration activities. According to the project DEIR, dewatering activities in Areas B, C, D, and E could potentially result in adverse impacts to fish species by causing "stranding or entrainment into pumps, mortality due to dewatering equipment, debris, or relocation." In addition, restoration activities in Area A would involve excavating tidal channels which could result in "crushing, injury and stranding of fish and other aquatic species." Further, levee breaching would change hydrologic functions including salinity, flow, and velocity which could temporarily create an unsuitable environment for the Tidewater Goby. Finally, there is also potential for Northern Red-legged Frog or frog egg masses (if construction occurs during the breeding season) and Northwestern Pond Turtle to be adversely effected by project activities during construction periods, either through bodily harm or direct mortality.

To avoid and minimize these types of adverse impacts to marine and aquatic resources during construction, or when heavy equipment is used, Mitigation Measure BIO-3 from the project DEIR requires work areas to be isolated and dewatered when feasible and requires existing disturbed areas to be used for access roads and staging areas. This measure also requires the contractor on-site to be trained on avoidance measures to further protect sensitive aquatic resources during construction.

In addition, Mitigation Measure BIO-1a (also from the project DEIR) would apply to activities in tidal areas and require that construction, invasive plant management, and maintenance activities for aquatic species be limited to the dry season, when fish species are not likely to be present and the likelihood of potential adverse impacts to water quality are low. As part of this measure, pre-construction fish screening would also be required prior to work in tidal areas to avoid accidental adverse impacts to fish species. All fish species found in the construction footprint during such screenings would be safely relocated to an appropriate habitat as determined by NMFS, USFWS, and CDFW. To avoid injury to fish species and reduce erosion into the channel, this measure would also restrict amphibious vehicles from contacting the channel substrate.

To avoid adverse impacts to Northern Red-legged Frog and Northwestern Pond Turtle during project activities, Mitigation Measure BIO-1d in the DEIR requires protective measures to be implemented when project activities occur within 50 feet of suitable habitat in the northern regions of Areas C and E. Construction, invasive plant management, and maintenance activities would be limited to outside the Northern Red-

legged Frog breeding season, as feasible. If work must occur during the breeding season, surveys would be required for egg masses in the work area and if any egg masses are found, they would be relocated to suitable aquatic habitat. If any Northern Red-legged Frogs or Northwestern Pond Turtles are found during project activities, they would also be required to be safely relocated to suitable habitat outside of work areas.

To help ensure that these mitigation measures from the project DEIR are implemented as described, **Special Condition 1** would memorialize them and integrate them into the project CDP and consistency determination. Both the federal and state agency applicants, CDFW and the NOAA Restoration Center, have confirmed their support and acceptance of this condition.

Additionally, as part of the project, CDFW has proposed to continue to monitor and maintain the project area as fish and wildlife habitat. CDFW has committed to collaborate with Commission staff to develop and finalize a five year monitoring program that would include monitoring of physical and biological conditions of the restored habitats and an evaluation of the project's progress towards the established success criteria. This five year monitoring program would be submitted for Executive Director review and approval, as required in **Special Condition 3**.

With implementation of these BMPs and mitigation measures through **Special Condition 1**, the proposed project would be carried out in a manner that would help ensure that adverse impacts to special status wildlife would be avoided and minimized to the extent feasible. However, given the level of habitat disturbance and overlap of construction areas with special status species habitat, individuals could still potentially experience bodily harm or mortality. Overall, the adverse impacts from the proposed project would be short-term and ultimately be offset by the long-term beneficial impacts from the restoration of 571 acres of saltmarsh wetland. The removal of invasive species and improved tidal flows and hydrological connectivity within the project area would create high quality habitats for native wildlife, thus facilitating healthy populations of all species of marine organisms.

Water Quality

Increased sediment in the water column during construction activities and after the first major rain event post-construction may adversely affect water quality by increasing erosion and sedimentation from areas disturbed by proposed project activities. The reduction in plant cover that would occur as a result of invasive plant removal efforts could also increase soil erosion and surface water runoff, also negatively affecting water quality and increasing turbidity. Increased turbidity can adversely affect fish gill function, reproduction, or feeding in fish and may create unsuitable living conditions for aquatic species, including the Tidewater Goby. In addition, invasive plant removal and

excavation activities may increase the amount of wrack in the project area which could result in low levels of dissolved oxygen in wetland and aquatic habitats.

To help avoid and minimize these impacts to water quality, the project includes several erosion and sedimentation mitigation measures including Mitigation Measures BIO-1a, HWQ-1, HWQ-2, and HWQ-3 from the project DEIR. As part of these measures, work in tidal areas would be limited to the dry season and work areas would be isolated from the surrounding water to minimize the risk of sediment disturbed during construction activities from entering surface waters. In addition, they establish that during channel excavation and ground disturbance activities, BMPs to prevent erosion would be implemented including using in-stream turbidity curtains, cofferdams, silt fencing, and restricting vehicle use around channels. Further, these measures require erosion control supplies to be on site at all times and available for use in areas susceptible to erosion. Additionally, disturbance of existing vegetation not targeted for removal is required by these measures to be minimized to only that necessary to complete the restoration. Mitigation Measure WQ-6 calls for an Erosion/Sediment Control Plan to be implemented to control sediment erosion in areas used for access roads, staging, and stockpiling. Additionally, to minimize the risk of depressed oxygen levels, any area with wrack greater than ¼ acre and within or adjacent to waters known to have low dissolved oxygen levels would have the wrack removed or mulched. All of these protective measures are listed and more fully described in **Exhibit 2** and, as required in **Special Condition 1**, would be in place until all project restoration areas are stabilized.

Additionally, as part of the project, CDFW has proposed to continue to monitor and maintain the project area as fish and wildlife habitat. CDFW has committed to collaborate with Commission staff to develop and finalize a five year monitoring program that would include monitoring of physical and biological conditions of the restored habitats and an evaluation of the project's progress towards the established success criteria. This five year monitoring program would be submitted for Executive Director review and approval, as required in **Special Condition 3**.

With implementation of these BMPs and mitigation measures through **Special Condition 1**, the proposed project would be carried out in a manner that would help ensure that adverse impacts to water quality would be avoided and minimized to the extent feasible. While construction activities and vegetation removal could result in increased erosion and sedimentation into the water column, adverse impacts would be temporary and not cause long-term adverse impacts to aquatic species. Thus, with the measures discussed above and included in **Special Condition 1**, the project would not adversely impact water quality.

Conclusion

As stated in CDFW's DEIR, one of the main objectives of the project is to: "restore and expand the area of tidal influence and enhance habitat for native fish, invertebrates,

wildlife and plant species. Increased tidal exchange and enhancement of existing tidal channels in the project Area is anticipated to provide a significant improvement to fish and other aquatic species' habitat as compared to existing conditions." To achieve those goals, restoration activities may result in the short-term adverse impacts to plant and wildlife habitats and species and water quality as described above. However the extensive and significant long-term benefits from the improvements to wetland and aquatic habitats, species and water quality from the proposed project would offset those temporary disturbances many times over.

With implementation of BMPs and the protective measures listed in Mitigation Measures BIO-3, BIO-1a and BIO-1d, including limiting work to seasonal work windows, relocating individuals out of work areas, and conducting pre-construction fish screening, adverse impacts to fish and Northern Red-legged Frog and Northwestern Pond Turtle from restoration activities within estuarine areas would be minimized. In addition, with implementation of the protective measures listed in Mitigation Measures BIO-1e, HHM-2, WQ-1, and WQ-2, including herbicide regulations and development and implementation of a spill prevention and response plan, potential adverse impacts to special-status plant species from the project would be minimized and avoided. Further, the expansion of improved tidal areas created by excavating channels, building Tidewater Goby refuge, and breaching the levees would provide long-term benefits to species, including special status species, and would increase their abundance and critical habitat within the project area. Once construction of the restoration is complete, CDFW would continue to manage the project area as fish and wildlife habitat for healthy populations of marine species long-term and evaluate the restoration project success.

The Commission therefore finds that, with implementation of the BMPs and mitigation measures described above, further detailed in **Exhibit 2**, and required through **Special Conditions 1 and 3**, the project would maintain and improve water quality and the biological productivity of coastal waters, wetlands and aquatic habitats. Therefore, the project, as conditioned, is consistent with Sections 30230 and 30231 of the Coastal Act.

E. ENVIRONMENTALLY SENSITIVE HABITAT

Section 30240 of the Coastal Acts 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.

Section 30240 of the Coastal Act strictly limits activities allowed in ESHA to “only uses dependent on those [ESHA] resources.” The Commission has previously found restoration activities to be allowable in ESHA, including activities similar to those proposed to be carried out as part of this project (for example, CDP No. 4-07-098). NOAA proposes to restore 279 acres of dune habitat consisting of coastal dunes and open sand habitat, located inland from the beach. This dune restoration area, although in a degraded condition due to the presence and effects of invasive non-native plants, is ESHA and provides habitat for several rare and easily disturbed bird and plant species described in detail below.

These species may potentially be located, at times, within or near the project area and could be adversely affected by temporary construction activities. The dunes are currently heavily affected by invasive European beachgrass, which is listed by the California Invasive Plant Council (Cal-IPC) as a high risk species with “severe ecological impacts on physical processes, plant and animal communities, and vegetation structure, as well as high rates of dispersal and establishment.” European beachgrass adversely affects native dune plant communities by outcompeting native plants and changing natural sand movement dynamics. European beachgrass grows deep into the sand, trapping and blocking sand movement, resulting in an altered dune structure and ecology of coastal and interior dunes. The loss of open sand areas due to European beachgrass reduces the habitat available for many native dune plant species to colonize and grow.

Western Snowy Plover

The Western Snowy Plover (*Charadrius nivosus nivosus*) is a federally threatened species and CDFW Species of Special Concern. Snowy plover critical habitat is present within the project area in the dunes, and extends from the Humboldt Bay South Spit, south to Centerville Beach. Nesting and wintering populations of Western Snowy Plovers use the beach adjacent to the proposed dune restoration areas. Western Snowy Plovers typically use areas of open sand or sparsely vegetated dunes above the high tide line to nest. Plovers have been observed to nest on the upper waveslope of dunes, primarily in a sparsely vegetated spit by the mouth of the Eel River.

Although ultimately the dune restoration would result in a long-term benefit to the Western Snowy Plover, vegetation removal methods could cause short-term adverse impacts to this species and its designated critical habitat. Herbicide application on invasive European beachgrass, if improperly used, could cause herbicide drift onto open sand nesting areas used by the plover. Mechanical equipment, such as bulldozers, could cause disturbances to plovers and plover nests from noise and presence of heavy equipment. Dune restoration activities that involve vegetation removal and noise could result in nest abandonment.

To avoid and minimize adverse impacts to nesting birds, including the Western Snowy Plover, and their habitat, the applicant proposes to implement protective measures as described in the project DEIR. For example, as part of Mitigation Measure BIO-1b from the project DEIR, all project construction and invasive plant management activities that could potentially affect nesting birds would be required to occur outside of the bird nesting season (August 1 to March 15). Additionally, in areas within 50 feet of suitable plover habitat, Mitigation Measure BIO-1c in the project DEIR establishes specific protective measures to be implemented to help ensure that adverse impacts to plovers are avoided. For example, in Western Snowy Plover nesting habitat, the working window would be shortened to September 16 to March 15. If construction or invasive plant management activities must occur within the bird nesting season, this mitigation measure describes procedures that would need to be followed, including use of a qualified biologist to carry out pre-construction surveys and establishment of buffer areas in consultation with CDFW and USFWS. No herbicide application would be allowed within buffer areas during the nesting period.

Through the requirement in **Special Condition 1** that all mitigation measures identified in the project DEIR (fully listed and detailed in **Exhibit 2**) be implemented during relevant project activities, potential adverse impacts to the Western snowy plover and the ESHA that supports it within the project area would be avoided and minimized so that they will not rise to the level of significant disruption of the habitat. Although some incidental adverse impacts may still occur, the proposed removal of invasive European beachgrass from 279 acres of dune ESHA and their restoration and enhancement would provide a significantly greater long term benefit for that habitat and the species that rely on it.

Special Status Plants

At the dune restoration site, European beachgrass is pushing out existing small patches of native sea lyme grass and dune mat, both of which are listed by CDFW as Sensitive Natural Communities and are have been consistently determined to be ESHA by the Commission. Small patches of sea lyme grass have been observed in the primary foredune closest to the beach, while patches of dune mat have been observed inland of the primary foredune. Dune mat consists of different plants that form sparse mats in open sand areas and change in size due to factors like wind, dune stability, and invasive species. Dune mat species at the dune restoration site that are threatened by the ongoing invasion of European beachgrass include four rare or special status plants: beach layia (*Layia carnosa*), dark-eyed gilia (*Gilia millefoliata),* short-leaved evax (*Hesperevax sparsiflora var. brevifolia*), and American glehnia (*Glehnia littoralis subsp. leiocarpa*). Beach layia is a State and Federally listed endangered species, and is present in large numbers within dune mat habitat in the northern dune restoration area and in the southern sand pit area. A 2017 survey by CDFW and USFWS estimated 4.7 million individual beach layia were present within the project area, a substantial portion of the population in the region. Seacoast angelica (*Angelica lucida*) can also be found in

northern coastal scrub on levees in northern coastal scrub habitat and in the transition zone between freshwater marsh and coastal dune habitats in Areas A and E. Seacoast angelica is a perennial species and is considered a California Rare Plant by the California Native Plant Society due to its limited distribution in California.

As described in the DEIR, adverse impacts to special status plants in dune areas would be minimized due to the locations of project activities:

> Dune habitat special-status plant species almost entirely occur in dune mat habitat and where sand still moves, outside of areas of European beachgrass. Therefore, potential impacts to these species, such as trampling, mortality or general harm due to equipment use, are only expected to occur along the fringe of European beachgrass locations. For these special-status plants, avoidance shall occur by using only treatment methods that are highly selective; for example, heavy equipment would not be operated where these plants occur.

In addition, all invasive plant treatments would occur after most annual plants have seeded. In the case that special status plant species are found during pre-construction surveys, Mitigation Measure BIO-1e from the project DEIR would require staking of locations where sensitive species are found and the clear marking and establishment of equipment access routes outside of dune mat habitat. To minimize potential adverse impacts to special status species during prescribed burning, Mitigation Measure BIO-1f would limit burning to after the primary blooming period for annual dune species and require burning be carried out in accordance with safety procedures listed in the CAL FIRE developed and approved Burn Plan.

To help ensure that these mitigation measures from the project DEIR are implemented as described and provided in **Exhibit 2, Special Condition 1** is included to establish them as requirements of the CDP and consistency determination.

Additionally, as part of the project, CDFW has proposed to continue to monitor and maintain the project area as fish and wildlife habitat. CDFW has committed to collaborate with Commission staff to develop and finalize a five year monitoring program that would include monitoring of physical and biological conditions of the restored habitats and an evaluation of the project's progress towards the established success criteria. This five year monitoring program would be submitted for Executive Director review and approval, as required in **Special Condition 3**.

While invasive plant removal could result in adverse short term effects to ESHA, with implementation of the mitigation measures discussed above and the inclusion of **Special Conditions 1 and 3**, the Commission finds that those impacts are not significant, especially in light of the fact that the project is intended to, and would result in overall improvements to the quality of the ESHA within the project area. Short-term

disruptions to habitat and wildlife would be offset by long-term benefits to wildlife and plant species from the enhanced habitat value and expanded native habitat in the project area. The Commission therefore finds that, as conditioned, the project would maintain and improve the quality of the ESHA and is consistent with Section 30240 of the Coastal Act.

F. FILLING AND DREDGING OF COASTAL WATERS

Section 30233 of the Coastal Act states:

> (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:
>
> > (l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
> > (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
> > (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
> > (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.
> > (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
> > (6) Restoration purposes.
> > (7) Nature study, aquaculture, or similar resource dependent activities.

As previously described above, the proposed project includes the restoration and enhancement of Ocean Ranch to improve the long-term function of the wetland ecosystem by breaching levees, removing levees, excavating tidal channels, and creating and installing high marsh habitat, transition slopes, habitat ridges, ditch blocks, large wood structures, and Tidewater Goby shelves. These project activities would increase the tidal prism, improve connectivity between the restoration area, McNulty Slough and North Bay, and increase habitat complexity. According to the applicant, proposed excavation and fill activities include:

> Placement of fill in salt marsh would be associated with the creation of high marsh habitat, habitat transition slopes and habitat ridges, and installation of large wood along tidal channels. Excavated sediment would also be placed in ditches as ditch plugs to redirect flow. Excavation activities would be associated with the creation of tidal channels, interior levee breaches, and exterior levee breaches to McNulty Slough and North Bay.

All excavated sediment from the wetland restoration would be reused onsite for the above restoration project components. All reused sediment would be placed onsite at elevations suitable for wetland habitats to continue functioning as wetlands and no fill material would be imported or exported into the project area for restoration activities. In total, approximately 156,640 cubic yards of dredging and 156,640 cubic yards of fill are proposed as part of the project.

Allowable Use

The first test of Section 30233(a) limits dredging and fill activities in wetlands to only those carried out for one of seven allowable uses. In this case, all proposed dredging and placement of fill within wetland areas is for the purpose of restoring the wetland and estuarine ecosystem at Ocean Ranch. Thus, the proposed dredging and fill placement is an allowable use pursuant to Section 30233(a)(6).

Alternatives

The second test of Section 30233 allows the dredging or filling of wetlands only where there is no feasible less environmentally damaging alternative. Commission staff considered several alternatives to the proposed dredging and filling of wetlands, including the “no project” alternative and the “no invasive plant management” alternative.

The “no project” alternative would avoid short-term impacts to sensitive aquatic and terrestrial species from grading, dewatering, and construction noise. However, the “no project” alternative would also result in the continuation of the degraded condition of the wetland and its surrounding upland habitat areas. Under the “no project” alternative, invasive plant species would continue to dominate wetland and ESHA areas, adversely impacting native species, including special status plant and bird species. In addition, erosion of the levees would continue to adversely impact hydrology and water quality. Overall, the proposed project is expected to have long-term beneficial impacts on native and special-status species with minimal short-term impacts from construction and invasive plant removal. Thus, the Commission finds that the “no project” alternative would not be a less environmentally damaging feasible alternative.

The “no invasive plant management” alternative was also considered. This project would avoid potential short-term impacts to coastal resources from invasive plant treatment methods, including prescribed burning, herbicide application, and mechanical

removal. However, this alternative would also result in ongoing adverse impacts to wetland and dune habitats from invasive cordgrass and beachgrass overtaking valuable habitat from native and special status plant species. Given the large areas of invasive plant cover in the project area, the restoration of the project area would not be feasible without removing the invasive plant species. Thus, the Commission finds that the "no invasive plant management" alternative would not be a less environmentally damaging feasible alternative.

Another alternative considered by CDFW was the "no herbicide use" alternative. Under this alternative, herbicide would not be used to treat invasive plants, and would instead only use prescribed burning, and manual and mechanical removal treatments. While this project would have fewer risks due to hazardous materials exposure or spills from herbicides, the vegetation removal methods would be significantly less effective in removing invasive plant species from degraded wetland and upland habitat. Not using herbicide would require additional removal treatments over a longer time period and would also have a higher risk of not properly removing invasive species from degraded habitat, thus delaying the restoration benefits for native species that would be achieved if invasive plant species were more efficiently removed. Given the large areas of invasive plant cover in the project area and the efficacy of the proposed herbicide application, the restoration of the project area would not be feasible without the inclusion of herbicide as an invasive vegetation removal treatment. Therefore the "no herbicide use" alternative would not a feasible less environmentally damaging feasible alternative.

For the reasons discussed above, the Commission finds that there is no feasible less environmentally damaging alternative to the proposed project, thus satisfying the second test of Section 30233(a).

Mitigation Measures

The third test of Section 30233(a) requires that adequate mitigation measures are provided to minimize adverse environmental effects. Potential adverse impacts from the dredging and filling aspects of the project may include impacts to special-status fish species, special-status birds, special-status plants, and water quality. The applicant has incorporated numerous mitigation measures in the proposal and in the DEIR for the protection of wetland and upland habitat, water quality, and special status species (as shown in **Exhibit 2**). **Special Condition 1** would require the implementation of these mitigation measures during all relevant project activities.

Mitigation measures required through **Special Condition 1** to avoid and minimize adverse impacts to fish species include limiting work to the dry season when fish species are less likely to be present in the work areas and safely relocating individuals outside of work areas if they are found during pre-construction surveys. Required mitigation measures would also require wetland areas to be isolated and dewatered

prior to dredging and filling activities in order to avoid fish species from entering work areas. Erosion and sedimentation mitigation measures would also be required to be implemented in tidal areas through **Special Condition 1** to minimize potential adverse impacts to water quality. For example, in-stream turbidity curtains, cofferdams, silt-fencing, and other erosion control supplies would be required to be installed and readily available on-site during the project. In addition, an Erosion/Sediment Control Plan would be required to be implemented to control sediment erosion in areas used for access roads, staging, and stockpiling. To avoid adverse impacts to birds such as nest abandonment or direct injury during dredging and filling activities, **Special Condition 1** would also require all dredging and filling activities to occur outside of the bird nesting season. If pre-construction surveys determine the presence of nesting birds, **Special Condition 1** would require an appropriate buffer zone to be established that would prohibit construction activities from disturbing the nest. Additionally, as part of the project, CDFW has proposed to continue to monitor and maintain the project area as fish and wildlife habitat. CDFW has committed to collaborate with Commission staff to develop and finalize a five year monitoring program that would include monitoring of physical and biological conditions of the restored habitats.

Additionally, as part of the project, CDFW has proposed to continue to monitor and maintain the project area as fish and wildlife habitat. CDFW has committed to collaborate with Commission staff to develop and finalize a five year monitoring program that would include monitoring of physical and biological conditions of the restored habitats and an evaluation of the project's progress towards the established success criteria. This five year monitoring program would be submitted for Executive Director review and approval, as required in **Special Condition 3**.

With the inclusion of **Special Conditions 1 and 3**, the Commission finds that the project will provide adequate mitigation measures to minimize adverse environmental effects, as required by the third test of Section 30233. The Commission therefore finds that, as conditioned, the proposed project is consistent with Coastal Act Section 30233.

G. HAZARDOUS SUBSTANCE SPILL

Coastal Act Section 30232 states:

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

The proposed project includes potential risks for adverse impacts on coastal resources through the accidental spill of hazardous materials. For example, the applicant proposes to use herbicide to manage invasive cordgrass and European beachgrass. The improper use or application of herbicide could adversely affect water quality or non-

target species. Coastal resources could also be adversely affected by the unintentional release of chemicals or motor fuel from project equipment or activities.

To avoid and minimize adverse impacts to coastal resources from the improper application of herbicide for invasive vegetation removal, the project includes mitigation measures from the Programmatic Final EIR for the Humboldt Bay Regional Spartina Eradication Plan. For example, Mitigation Measure HHM-4 from the project DEIR requires that the applicants prepare and implement an Herbicide Drift Management Plan to reduce the possibility of chemical drift into populated areas. Additionally, herbicide would be required to be applied in accordance with the manufacturer's label by a qualified applicator, as described in Mitigation Measure WQ-1. This measure also requires herbicide to be applied directly to target plants using the coarsest drop possible in order to minimize drift into adjacent areas and restricts it from being applied when wind could carry drift into inhabited areas. To minimize herbicide spill risks into surface waters, Mitigation Measure WQ-2 would restrict pre-application herbicide preparation to bermed areas with spill protections.

To avoid and minimize adverse impacts to coastal resources from the accidental release of hazardous materials from construction equipment or vehicles, including oil, fuel, or hydraulic fluid, the project DEIR includes other mitigation measures that would be implemented. Mitigation Measure HHM-2 would require spill cleanup kits to be on site and a Hazardous Materials Spill Prevention Control and Countermeasure Plan to be approved by the North Coast Regional Water Quality Control Board for petroleum. In addition, this measure would also require a spill prevention and response plan to be implemented for all other chemicals used during project activities. By conducting work in tidal areas during the dry season, as stated in Mitigation Measure BIO-1a, there would be a lower risk for accidental spills to mobilize to surface waters and reach native species. As stated in Mitigation Measure HWQ-1, the applicants would implement BMPs from the California Stormwater Quality Association's California Stormwater BMP Handbook for Construction regarding dewatering operations and spill prevention and control. In addition, vehicles and construction equipment would be fueled and maintained out of sensitive areas and construction crew would be trained in hazardous spill material containment, as called for in Mitigation Measure HWQ-1.

With implementation of all of these measures and protocols to reduce and manage spill risk, as required in **Special Condition 1**, the project would not result in adverse impacts to coastal resources. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Section 30232.

H. PUBLIC ACCESS AND RECREATION

Coastal Act Section 30210 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.

Coastal Act Section 30212 states in part that:

> Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) Adequate access exists nearby, or, (3) Agriculture would be adversely affected.

Coastal Act Section 30212.5 states:

> Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

Coastal Act Section 30214 states in part:

> The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following: (1) Topographic and geologic site characteristics. (2) The capacity of the site to sustain use and at what level of intensity. (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses. (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

Coastal Act Section 30224 states:

> Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

Current visitation to the project area is low, approximately 20 people per day, and most visitors are likely to be local due to the site's remoteness and distance from Highway 101. The project area is generally used for hunting, fishing, wildlife viewing, and general exploration, all of which would remain available following the restoration. Currently, there are no formal trails in the project area.

The project includes improvements to public access and recreational amenities that are consistent with the Coastal Act's policies on the protection and encouragement of coastal access and recreation. Proposed access improvements, including an improved parking area, improved access road, new parking area with ADA-compliant parking, and new gate system would allow for more visitors to be able to visit Ocean Ranch and access the coast year-round. The new and improved recreational amenities proposed as part of the project, including a formalized non-motorized multi-use trail system, new non-motorized boat put-in, and picnic tables, would allow for visitors to recreate safely in the project area during daylight hours, without degrading sensitive natural resource areas. Opportunities for water-oriented activities such as fishing, boating, seasonal hunting, wildlife viewing, and hiking in Ocean Ranch would also result in improved access. The project DEIR states that: "Anticipated additional recreational use of the project Area (four to six additional vehicles per day) would readily be accommodated by the project's improved parking area and multi-use trail system and would not result in impacts associated with overuse or overcrowding." Thus the proposed improvements to public access would not adversely impact natural resources.

To maintain public safety, the wetland restoration area and associated access roads would be temporarily closed to the public during construction in 2021 (August 15 – October 15) and 2022 (June 15 - October 15). If in between those work windows, site conditions are too dangerous for public use, due to levee breaching or dewatering activities, CDFW also proposes to close the restoration area to the public as well. CDFW would post informative signage at the site with a project description, impacts to public access, and directions to nearby comparable recreational sites such as Cock Robin Island, Crab Park, Cannibal Island Mad River Slough Wildlife Area, Fay Slough Wildlife Area, and the Humboldt Bay National Wildlife Refuge, including the Salmon Creek, Hookton Slough, and Dunes Units. Table Bluff Road, the only road that leads to the project area, would remain open continuously during construction so that public access to the coast would not be affected.

For the reasons described above, the proposed project would not adversely affect the public's ability to access, enjoy and recreate in the project area, but would instead allow and encourage new public access opportunities, consistent with the need to protect sensitive resources. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with the public access and recreation policies of the Coastal Act (Sections 30210, 30212, 30212.5, 30214, and 30224).

I. CONVERSION OF AGRICULTURAL LAND

Section 30241 of the Coastal Act requires the protection of prime agricultural lands and sets limits on the conversion of all agricultural lands to non-agricultural uses. Section 30241 states (emphasis added):

> The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the area's agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:
>
> (a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.
>
> (b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.
>
> (c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.
>
> (d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.
>
> (e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.
>
> (f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.

Section 30242 of the Coastal Act states as follows (emphasis added):

> All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.

Historical Context of Agriculture in the project Area

According to information from the CEQA document prepared for the project, the project area was used as a farmstead complex and dairy farm beginning in 1860. Known historically as Ocean Ranch, the property included a 600-acre dairy farm that was maintained in agricultural use for over 100 years. Beginning in the early 1960s, the agricultural use transitioned from dairying to beef livestock grazing and hay production. The historic agricultural use of the property is reflected in the Agriculture Exclusive (AE) land use and zoning designation applied to the entirety of the property under the Humboldt County certified LCP.

The entirety of the property, except for the ~279-acre sand dune area, historically was subject to tidal inundation based on State Lands Commission maps showing areas where the state retains a public trust interest. The use of the property for the historical agricultural uses discussed above only was possible through hydrologic modifications involving diking (constructing earthen levees to exclude tidal waters from the area) and draining (channelizing runoff and installing tide gates in dikes to facilitate stormwater runoff leaving the site and to prevent tidal waters from entering the area) of the land. These hydrologic modification practices were well established throughout the property prior to the mid-20th century.

In 1986, CDFW acquired the property as part of its Eel River Wildlife Area. CDFW prepared a Grazing Management Plan for the area that identified 745 acres of suitable grazing land open to grazing lease, including 500 acres of grazing land within the project area. The lands on site were grazed under CDFW's adopted plan until 1991. CDFW has no records of the land being used for grazing or any other agricultural use after 1991, likely because of decreased agricultural viability of the lands due to saltwater inundation from dike/levee breaches that were not fully repaired. The low-lying diked and drained land that was used for farming on the property has always been vulnerable to tidal inundation and saline influence from dike breaches, tide gate failures, and saltwater intrusion into groundwater, which fluctuates with the tides.

Prime Agricultural Lands within the project Area
Coastal Act section 30113 defines "prime agricultural land" through incorporation-by-reference of paragraphs (1) through (4) of Section 51201(c) of the California Government Code:

> Prime agricultural land entails land with any of the follow characteristics: (1) a rating as class I or class II in the Natural Resource Conservation Service land use capability classifications; or (2) a rating 80 through 100 in the Storie Index Rating; or (3) the ability to support livestock used for the production of food and fiber with an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture; or (4) the ability to normally yield in a commercial bearing period on an annual basis not less than two hundred dollars ($200) per acre of unprocessed agricultural plant production of fruit- or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than five years.

The four different prongs of the definition cited above relate to the value and utility of the land in terms of range of agricultural uses and productivity. According to the above definition, and according to mapping by the Natural Resources Conservation Service, prime agricultural soils historically existed within much of the project area. As mentioned, the dominant historic agricultural use in the project area was livestock grazing for dairy and beef production. At its highest levels of production, the farmland in the project area likely could support 1 to 2 Animal Unit Months (AUMs).1 However, as explained below, due to daily tidal inundation, residual soil salinity, and the resulting natural reversion of much of the site to abundant wetlands and sand dunes, the agricultural productivity of the lands has degraded to the point that continued or renewed agricultural use on the site is not feasible. Today, according to the CEQA document completed for the project, only 8% of the soils within the project area (~68 acres) are considered prime (Hookton-Tablebluff complex soils), limited primarily to existing uplands at the northeast end of the project site, though a portion of this area currently is degraded from soil salinity impacts (currently delineated as brackish marsh).

Conversion of Agricultural Lands

Section 30241 cited above applies to prime agricultural land and to all agricultural lands on the periphery of an urban area. The subject property is not on the periphery of an urban area, but, as discussed above, it retains a small area of mapped prime agricultural land. This area is proposed to be used in part for construction staging and ultimately for a combination of public access improvements (parking access) and habitat restoration (wetland restoration as part of the proposed Area C habitat restoration). Therefore, the Commission must review the proposed conversion of the agricultural land for the habitat restoration project for consistency with the requirements of sections 30241. The Commission also must review the proposed conversion of the non-prime agricultural lands within the project area under section 30242. This section protects lands suitable for agricultural use that are not prime agricultural lands or agricultural lands on the periphery of urban areas from conversion to non-agricultural use unless continued agricultural use is not feasible, or such conversion would preserve prime agricultural land or concentrate development consistent with section 30250 of the Coastal Act.

Permissible Conversion of Prime Agricultural Land

As cited above, section 30241 enumerates a series of measures to be undertaken to maintain the maximum amount of prime agricultural land in agricultural production and minimize conflicts between agricultural lands and urban uses. The Commission finds that for the reasons discussed below, the proposed conversion of the agricultural lands on site to the habitat restoration/public access uses is a permissible conversion consistent with the applicable criteria of sections 30241(a) – (e). As the subject site is not on the periphery of an urban area or surrounded by urban uses, provisions (a), (b), and (c) of sections 30241 are not applicable.

With regard to section 30241(d), the proposed conversion of agricultural lands will occur on lands no longer suited for agriculture use and will avoid conversion of productive agricultural lands. Due to regular tidal inundation, abundant wetlands cover much of the

site, and the soil throughout much of the project area has become so saline that grasses used for grazing and the plants supporting most other agricultural crops cannot survive. The small area of Hookton-Tablebluff complex soils at the northeast end of the project site, a portion of which currently is saline and wetland in nature, by itself would be too small of an area to be used agriculturally. In addition, renewed agricultural use of the project area would require the placement of significant wetland fill for the repair and expansion of dikes, upgrading and replacing tide gates, and other hydrologic modifications. Such development would result in a suite of impacts to sensitive estuarine wetland species and habitats and would not be sustainable with projected rising sea levels in the area. Therefore, the proposed conversion of the lands designated and zoned for agricultural use at the site for habitat restoration purposes and public access involves lands that are no longer suited for agriculture, consistent with section 30241(d).

With regard to section 30241(e), the proposed habitat restoration and public access project will not increase assessment costs or degrade air and water quality. The proposed development will not be financed through assessments against the adjoining agricultural properties. In addition, the proposed conversion of agricultural land will not result in emissions that would degrade air quality, and, as discussed in Finding X of this report, the development has been designed and conditioned so as not to degrade water quality. Thus, the project will not result in air and water quality impacts. Therefore, the proposed nonagricultural development will not impair the agricultural viability of surrounding agricultural lands consistent with section 30241(e).

With regard to section 30241(f), the proposed conversion will not diminish the productivity of adjacent prime and non-prime agricultural lands. McNulty Slough and the Eel River function as stable boundaries and clearly defined buffers from the nearest prime and non-prime agricultural lands to the subject site, minimizing conflicts between the lands to be converted for habitat restoration purposes and the remaining agricultural lands in the area. Indeed, the lands to be converted from agricultural land use and zoning designations have not been used for agriculture for several decades and have already largely reverted to wetland habitat. The site is also used for public access uses. No evidence exists that these uses have diminished the productivity of nearby prime agricultural lands.

Permissible Conversion of Other Land Suitable for Agricultural Use

Section 30242 limits the conversion of lands that are not prime or agricultural lands on the periphery of urban areas to non-agricultural uses. As discussed above, tidal inundation of the project area has displaced agricultural lands with salt water and brackish wetlands and created saline soil conditions that preclude the growth of grasses for grazing and other plants used for producing agricultural crops, rendering the land unsuitable for renewed agricultural use. As also discussed above, the agricultural use of adjacent and nearby lands is effectively buffered from the current and proposed habitat and public access uses on the subject property by McNulty Slough and the Eel River. Therefore, the Commission finds that ,as continued or renewed agricultural use is not

feasible, and because the conversion is compatible with continued agricultural use on surrounding lands, the proposed conversion is consistent with section 30242.

Therefore, for all of the reasons stated above, the Commission finds the proposed conversion of agricultural lands is a permissible conversion of agricultural land consistent with sections 30241 and 30242 of the Coastal Act.

J. CULTURAL RESOURCES

Section 30244 of the Coastal Act states:

> Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Archaeological resources may include sacred lands, traditional cultural places and resources, and archaeological sites, including places or objects that possess historical, cultural, archaeological or paleontological significance and include sites, structures, or objects significantly associated with, or representative of earlier people, cultures and human activities and events. Archaeological resources are important to an understanding of cultural, environmental, biological, and geological history. Degradation of archaeological resources can occur if a project is not properly monitored and managed during earth moving activities and construction. Site preparation can disturb and/or obliterate archaeological materials to such an extent that the information that could have been derived would be permanently lost.

Cultural and Historical Resources
As described in the project DEIR:

> The study area is located within the ethnographic territory of the Wiyot Indians, who had an original population of 1,000 to 3,300 prior to European settlement. According to Humboldt State University linguist Victor Golla, the Wiyots arrived in the Humboldt Bay area approximately 2,000 years ago, inhabiting a lagoon environment that afforded the use of coastal resources (Roscoe and Associates 2016). The Yuroks then came “at a much later date,” sometime subsequent to the arrival of the first Athabascan speakers, who came after 600 Common Era (CE) (Roscoe and Associates 2016). The Wiyot lived almost exclusively in villages along the protected shores of Humboldt Bay and near the mouths of the Eel and Mad Rivers. They were hunter-gatherers in rich environments that allowed for dense populations. They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary villages were inhabited throughout the year while other sites were visited seasonally to obtain particular resources (Origer & Associates 2017).

A 2017 cultural resources assessment identified the Welapl site (a Wiyot archaeological site) and a potential historical complex (1929 USC&GS Complex) in the project area,

however no archaeological evidence was found at either site. These two sites are located where invasive cordgrass is proposed to be removed.

Tribal Resources and Consultation
CDFW has initiated formal consultation with the following California Native American tribes culturally affiliated with the study area pursuant to CEQA and Public Resources Code (PRC) Section 21080.3.1, as well as CDFW's Tribal Communication and Consultation Policy: Bear River Band of Rohnerville Rancheria, the Big Lagoon Rancheria, the Blue Lake Rancheria, the Cher-Ae Heights Indian Community of the Trinidad Rancheria, the Hoopa Valley Tribe, the Round Valley Reservation/Covelo Indian Community, and the Wiyot Tribe. As part of this effort, Origer & Associates initiated contact with the Native American Heritage Commission (NAHC) on October 26, 2017 requesting information on any known sacred lands or other cultural sites that may be present within the study area.

In response to its outreach efforts, Wiyot Tribal Chairman, Ted Hernandez, and Natural Resources Specialist, Adam Canter, from the Table Bluff Reservation wrote a letter to CDFW supporting the restoration concepts and goals of the project, and efforts to restore native species and ecological processes. They listed concerns regarding Tribal access on the existing sand road to continue practicing traditional resource procurement activities, environmental impacts from herbicides, impacts to the culturally important Indian potato (*Brodiaea terrestris*), and continued use of boats in McNulty slough. In response to the Table Bluff Reservation's concerns, CDFW noted that there would be no changes in public access to the existing sand road proposed as part of the project but that a new proposed trail would provide additional access to the sand road. CDFW also noted that the proposed herbicide, Imazapyr is approved for use in aquatic habitats and has been proven to have a low toxicity to wildlife and low potential for bioaccumulation and biomagnification. With the implementation of its mitigation measures, CDFW also communicated that it does not expect adverse impacts to water quality, wildlife, or non-target plant communities. CDFW invited the Wiyot Tribe to map and identify culturally important plant species in the project area and collaborate on additional measures to protect plant species listed in the Tribal Trust species list. In addition, CDFW noted that the project would not cause long-term impacts on boat navigation in McNulty Slough.

To avoid and minimize adverse impacts to these sites and undiscovered cultural resources, Mitigation Measures CR-1, CR-2, CR-3, CR-4, and CR-5 would be implemented and required through **Special Condition 1**. These measures include conducting an environmental awareness training led by a qualified archaeologist, to train construction crews and project staff on the types of cultural resources that may be present and the protocols to follow if cultural resources are found. Both the Welapl and 1929 USC&GS Complex sites will be re-surveyed for cultural resources prior to ground disturbing work in the area. If cultural resources are uncovered during surveys or ground disturbing activities, work will be immediately stopped within 100 feet of the resource and a qualified archaeologist and Native American representatives from the appropriate affiliated tribes would evaluate the resource and determine the protection

and preservation of the resource. Lastly, if human remains, associated grave goods, or items of cultural patrimony are found, work would immediately stop and CDFW and the County Coroner would be notified. If the human remains are determined to be of Native American origin, the Coroner will notify the Native American Heritage Commission within 24 hours of the determination.

The Commission agrees with NOAA and CDFW that the proposed project, with avoidance and mitigation measures incorporated into this CDP/CD in **Special Condition 1** and ongoing tribal consultation, will not adversely affect cultural and archaeological resources. Therefore, the Commission finds that the proposed project is consistent with the archaeological resource policy of the Coastal Act (Section 30244).

K. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Department of Fish and Wildlife (CDFW) served as the lead agency for the project for CEQA purposes. CDFW prepared a Final Environmental Impact Report in February 2021 for the Ocean Ranch Restoration project which included the Draft EIR. Section 13096 of the Commission's administrative regulations requires Commission approval of CDP applications to be supported by a finding showing the application, as modified by any conditions of approval, is consistent with any applicable requirement of the CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits approval of a proposed development if there are any feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect the proposed development 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).)

The Commission incorporates its findings on Coastal Act consistency as if set forth in full herein. No public comments regarding potential significant adverse environmental effects of the project were received by the Commission prior to preparation of the staff report. As discussed above, the project has been conditioned to be consistent with the policies of the Coastal Act. As specifically discussed in these above findings, mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no other feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impacts which the activity may have on the environment, and the project will not have any remaining significant impacts.. Therefore, the Commission finds that the proposed development, as conditioned to mitigate the identified impacts, is consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A: SUBSTANTIVE FILE DOCUMENTS

Draft Environmental Impact Report for the Ocean Ranch Restoration Project (SCH # 2018062020)

Application file for CDP Application No. 1-21-0195

Application file for CD-0003-21