

**CEQA Findings of Fact**  
for the  
**Coast Seafoods Company Humboldt Bay Shellfish Aquaculture  
Permit Renewal and Expansion Project**

**SCH# 2015082051**

Adopted February 28, 2017

Humboldt Bay Harbor, Recreation and Conservation District

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## Introduction

A Final Environmental Impact Report (FEIR) was prepared to respond to the public comments received on the Recirculated Draft Environmental Impact Report (R-DEIR) for the Coast Seafoods Company's (Coast) Humboldt Bay Shellfish Aquaculture: Permit Renewal and Expansion Project (Project). The R-DEIR 45 day public comment period was from July 18 through September 1, 2016 and was extended an additional 15 days to September 16, 2016. The Findings of Fact (Findings) presented herein address the environmental effects associated with the Project that are described and analyzed within the R-DEIR and FEIR (collectively referred to as the Project EIR). These Findings have been made pursuant to California Environmental Quality Act (CEQA; California Public Resources Code Section 21000 et seq.), specifically Public Resources Code Section 21081, as well as the CEQA Guidelines (14 CCR 15000 et seq.) Section 15091.

Public Resources Code Section 21081 and CEQA Guidelines Section 15091 require that the Humboldt Bay Harbor, Recreation and Conservation District (Harbor District or HBHRCD) as the Lead Agency for this project, prepare written findings for any identified significant environmental effects along with a brief explanation of the rationale for each finding. Specific findings under CEQA Guidelines Section 15091(a) are:

- (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effects as identified in the Final EIR.
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

## Project Summary

The Project proposes a comprehensive management plan for Coast's owned and leased area and shellfish farm expansion in Humboldt Bay. The Project involves: (1) extending regulatory approvals for Coast's existing approximately 300 acres of shellfish culture; (2) increasing shellfish culture within an already permitted floating upwelling system by adding eight culture bins; (3) authorizing culture of Pacific and Kumamoto oysters within Coast's existing clam rafts; (4) relocating approximately 5 acres of existing cultch-on-longline culture; and (5) permitting 622 acres of additional intertidal culture in two phases. See R-DEIR Section 4.0 for the complete project description.

## Project Objectives

The overall Project purpose is to provide a comprehensive plan for management of Coast's owned and leased area and expansion of its shellfish farm to meet the increasing demand for its product. The Project is guided by several major objectives:

- To expand Coast's shellfish farm to increase future oyster production, meet Coast and Pacific Seafood's increasing customer demand for raw and shucked oysters, and regain access to markets and customers lost after production decreases associated with the 2006 transition to sustainable, off-bottom culture practices on a reduced footprint.

- To conduct comprehensive eelgrass monitoring and develop sustainable oyster cultivation practices that can be adapted to documented site conditions.
- To create additional job opportunities and sustainable economic development for Humboldt Bay and local jurisdictions.
- To enhance a source of local sustainable seafood and reduce Humboldt County and California's reliance on imported seafood.
- To provide comprehensive planning of Coast's owned and leased areas in Humboldt Bay.
- To develop a flexible farming plan that can adapt to Coast's operational and management needs, environmental conditions, and farm conditions.
- To utilize Coast's existing historic leased and owned areas while maintaining undeveloped areas for habitat and recreational uses.
- To locate oyster beds in areas with optimal growing conditions to maximize efficiency and limit the spatial footprint of the farm.
- To use a varied and diverse culture plot design to evaluate and determine the best method(s) to sustainably grow oysters in eelgrass, including different spacing regimes and an adaptive management plan that is responsive to the results of eelgrass monitoring.

## **CEQA Findings**

Having received, reviewed, and considered the information in the Project EIR, as well as the supporting administrative record, the Harbor District hereby makes findings pursuant to, and in accordance with Public Resources Code Sections 21081, 21081.5, and 21081.6. This section provides a summary of the environmental effects of the Project that are discussed in the Project EIR, and provides written findings for each of the potentially significant effects, and the rationale for each finding.

All CEQA project impacts and mitigation measures, including those discussed below, are analyzed in greater detail in the Project EIR. Implementation of mitigation measures identified in the EIR would reduce these potentially significant effects to a less than significant level. No significant and unavoidable adverse impacts are identified for the Project or any of the proposed Alternatives; therefore a statement of overriding considerations is not required.

### **Environmental Effects Found to be Less Than Significant**

Through project scoping and the environmental analysis contained within the Project EIR, it was determined that the Project would not result in a significant effect on the environment with respect to aesthetics, agricultural and forestry resources, geology and soils, greenhouse gas emissions, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems. The reasons for this determination are detailed in the Project EIR. Under CEQA, no mitigation measures are required for impacts that are less than significant (14 CCR Section 15126.4(a)(3)). Findings have not been prepared for impacts that are less than significant.

## **Findings for Environmental Impacts Found to be Less Than Significant After Mitigation**

The Project EIR identified potential significant effects in the following areas: cultural, archeological, and tribal cultural resources, biological resources, air quality, and hazards and hazardous materials. Based on the analysis contained within the Project EIR, other considerations in the record, and the standards of significance, the Board of Commissioners finds that implementation of mitigation measures identified in the Project EIR would reduce these potentially significant effects to a less than significant level. The Project Mitigation Monitoring and Reporting Program (MMRP), to be adopted concurrently with these findings, includes all Project mitigation measures intended to avoid and minimize significant impacts.

### **CULTURAL, ARCHEOLOGICAL, AND TRIBAL CULTURAL RESOURCES**

As discussed in R-DEIR Section 6.4, there would be potential significant impacts to Cultural, Archeological, and Tribal Cultural Resources that would be less than significant as a result of mitigation measures incorporated into the project. The impacts and mitigation measures are summarized below, see MMRP for complete mitigation measure language.

#### **Impact CR-1: Placement of equipment**

There are no identified or known historic, archaeological, or cultural resources on the Project site. While such resources are unlikely given the intertidal location of the Project, posts and stakes placed in the substrate to secure shellfish culture equipment could potentially disturb previously undiscovered or unknown historic, archaeological or tribal cultural resources. Additionally, such resources could be discovered by culturists when working in intertidal areas. Coast and the Harbor District met with representatives of the Wiyot Tribe in Spring 2014 to discuss how the Project might impact historic, archaeological and tribal cultural resources of interest to the Tribe; while the Tribe did not identify any known cultural or archaeological sites within the Project, it requested inclusion of the below mitigation measures to protect such resources if they are discovered during Project activities.

#### **Finding:**

Changes or alterations have been required in, or incorporated into, the Project which would avoid or substantially lessen the significant environmental effect as identified in the EIR. Protection of historic, archeological and tribal cultural resources will be based on protocols that would be implemented if resources are inadvertently discovered. Implementation of Mitigation Measures CR-1, CR-2, and CR-3 would reduce Impact CR-1 to a less than significant level. The mitigation measures are summarized below; see MMRP, to be adopted concurrently with these findings, for complete language, which is incorporated herein by reference.

#### **Mitigation Measures:**

**Mitigation CR-1:** Coast's authorized point of contact for inadvertent archaeological discovery. Coast will designate an authorized point of contact (Cultural Resources POC) in the event of inadvertent discovery of any cultural or archaeological resource or human remains or Native American grave goods during Project implementation; Coast will ensure that the Harbor District has the name and current contact information for its Cultural Resources POC.

**Mitigation CR-2:** Protocols for inadvertent discovery of any cultural or archeological resource. Should an archaeological resource be inadvertently discovered during ground-disturbing activities, the Tribal Historic Preservation Officers (THPO) appointed by the Blue Lake Rancheria, Bear River Band of Rohnerville Rancheria and Wiyot Tribe, and California State Lands Commission (CSLC), shall be immediately notified and a qualified archaeologist with local experience retained to consult with the Harbor District, the three THPOs, CSLC, Coast, and other applicable regulatory agencies to employ best practices for assessing the significance of the find, developing and implementing a mitigation plan if avoidance is not feasible, and reporting in accordance with the Harbor District's Standard Operating Procedures, as memorialized in this Mitigation Measure and as further laid out in the Harbor District Protocol.

**Mitigation CR-3:** Protocols for inadvertent discovery of human remains and grave goods. In the event of inadvertent discovery of human remains or Native American grave goods during ground-disturbing activities, work at the discovery locale shall be halted immediately, the Harbor District and County Coroner contacted, and, consistent with State law, the protocol described in Mitigation Measure CR-3 followed (in addition to the protocol described under Mitigation Measure CR-2).

**Impact CR-2: Impacts to eelgrass as a tribal cultural landscape and Impact CR-3: Impacts to other species with tribal cultural significance.**

The placement of oyster longlines in patchy and/or continuous eelgrass has the potential to cause a significant impact to eelgrass resources. Potential impacts to eelgrass associated with longline aquaculture include reduction in eelgrass density under and around longlines, trampling, desiccation, and stranding. To ensure that the potential eelgrass impacts remain less than significant, the Project incorporates in-kind compensatory mitigation for potentially significant impacts to eelgrass. The Project's impact assumptions will be verified by monitoring and any eelgrass impacts beyond those projected in the EIR will be resolved through adaptive management. With mitigation, the Project will therefore result in no net loss of eelgrass resources. The Project's potential impacts to waterfowl and other species with cultural importance to the Wiyot Tribe, including Dungeness crab and Black brant, are also further described in EIR Section 6.5, Biological Resources. With incorporation of applicable Mitigation Measures, these impacts are less than significant.

**Finding:**

Changes or alterations have been required in, or incorporated into, the Project which would avoid or substantially lessen the significant environmental effect as identified in the EIR. Implementation of Mitigation Measures BIO-1 through BIO-4 would ensure that the Project does not cause any significant impact to biological resources, and, thus to tribal cultural resources and would reduce Impact CR-2 and Impact CR-3 to less than significant levels. The Project's impact and mitigation assumptions will be verified by monitoring and any discrepancies resolved through adaptive management. With mitigation, the Project will therefore result in no net loss of eelgrass resources. Additionally, Conservation Measures BIO-1 through BIO-12 are designed to minimize the Project's potential impacts to biological resources, and thus to tribal cultural resources, to the greatest extent practicable. The mitigation measures are summarized below; see MMRP, to be adopted concurrently with these findings and incorporated herein by reference, for complete language.

## Mitigation Measures:

**Mitigation BIO-1:** Removal of existing culture (fallowing). Coast will remove existing culture (fallow) based on a 4:1 ratio of expansion acreage to removed existing culture acreage. Coast will remove 42.0 acres of existing culture as mitigation for Phase I, within the first 3 years of the project. For Phase II, up to 90.8 acres of expansion acreage would result in the removal of up to 22.7 acres of existing culture. See FEIR Figures 5.8 and 5.9 for the location of the mitigation sites proposed for removal of culture.

**Mitigation BIO-2:** Herring egg monitoring and consultation with CDFW. Coast will ensure that all employees who supervise work on the tidelands are trained by a qualified biologist to conduct pre-work herring spawn surveys. During the months of December through March, trained Coast employees will perform a pre-work herring spawn survey at each location where work is scheduled to take place to determine whether herring have spawned on eelgrass, culture materials, or substrate. If herring spawn is observed, Coast will: (1) notify the CDFW's Eureka Marine Region office within 24 hours, and (2) postpone activities on those beds until all eggs have hatched. In addition, Coast will work with CDFW during spawning surveys to sample within culture gear and identify whether herring are spawning in the longlines.

**Mitigation BIO-3:** Marine Mammal Buffers and Avoidance. No activity involving human disturbance will occur within 100 m of the area of Sand Island that is above mean higher high water to avoid the harbor seal haul-out location and nesting birds on Sand Island.

**Mitigation BIO-4:** Impact on eelgrass availability to black brant. If monitoring data demonstrate that eelgrass impacts are above the Project's adaptive management thresholds and additional mitigation is implemented, the mitigation provided eelgrass must be available to black brant.

## BIOLOGICAL RESOURCES

As discussed in R-DEIR Section 6.5, there would be potential significant impacts to Biological Resources that would be less than significant as a result of mitigation measures incorporated into the project. The impacts and mitigation measures are summarized below, see MMRP for complete mitigation measure language, which is incorporated herein by reference. (Impacts BIO-1, BIO-2, BIO-4 through BIO-20, BIO-22, BIO-24, and BIO-26 through BIO-33 are considered less than significant without mitigation.)

### Impact BIO-3 Eelgrass density reduction analysis.

Native eelgrass (*Zostera marina*) is the dominant habitat of North Bay (38.6%); North Bay is also the main location for shellfish culture (3.4% of North Bay) in Humboldt Bay. The major controlling factors for eelgrass include: (1) light, (2) temperature, (3) energy, and (4) nutrients (R-DEIR Figure 6.5.2). These controlling factors lead to a natural variability for eelgrass areal extent and shoot density in North Bay, as discussed in R-DEIR Section 6.5.

Impacts to eelgrass from the proposed expansion would occur during installation of the longlines (short-term impact) and from shading, mechanical abrasion, and desiccation (longer term impact) that would occur as the cultch grows over a 2-year period. While trampling during planting and harvest is estimated to result in a short-term impact, the current understanding of trampling frequency results in impacts to eelgrass that are not likely to persist for longer than 1 month (see Impact BIO-4).

Interactions between eelgrass and shellfish aquaculture operations under current conditions are both positive and negative. For example, at higher elevations (>1.0 ft MLLW) there are locations where sediment accumulation and/or desiccation at the 2.5-ft spacing are potentially resulting in less eelgrass. Conversely, in other locations at a similar elevation, there are depressions near the longline posts that are potentially creating more eelgrass habitat. Similar to potential movement of sediment around the longlines, there also appear to be both positive and negative effects on eelgrass due to shading. For example, there are a few locations within the existing culture operations that have a non-native species of macroalgae, *Sargassum* sp., growing attached to the lines. Because *Sargassum* floats in the water column, it can shade eelgrass below. Conversely, there are also locations within the existing culture beds where shading is resulting in less desiccation by limiting the effects from solar energy. Eelgrass growing both between and under the longlines within existing beds indicates that the presence of culture does not exclude eelgrass even at the 2.5-ft spacing of current aquaculture.

Potential impacts to eelgrass resources were assessed by evaluating five potential impact scenarios. The impact scenarios incorporate a range of potential impacts (e.g., shading, mechanical abrasion, desiccation, trampling) in order to predict the impacts to eelgrass habitat from the placement of shellfish aquaculture gear. The scenarios range from minimum predicted impacts to maximum predicted impacts, and are based on an approach that was developed in consultation with eelgrass experts, as described in R-DEIR Appendix D. Analysis in R-DEIR Section 6.5 describes the five impact scenarios; the equations used to calculate potential eelgrass density reduction in each impact scenario; and the results of the impact analysis. The impact scenarios include three “growth” scenarios to reflect the growth of oysters on longlines over time and two “footprint” scenarios calculated based on site- and culture-specific shading studies. Based on these impact scenarios, there would be a total of between 2.2% to 17.1% eelgrass density reduction within the Project Phase 1 expansion area. Included in the Phase I activities are a monitoring plan, peer-reviewed by independent experts, which includes monitoring eelgrass areal and density changes from the activity. If the monitoring shows a higher level of impact because of the project than accounted for in the proposed mitigation, additional mitigation will be provided. This step-wise approach will provide confirmation of the impact analysis presented in the R-DEIR and additional assurances of being able to meet the no-net-loss of ecological function of eelgrass standard incorporated into the R-DEIR. Based on this best available science, the Phase II expansion, proposes using 10-ft spaced lines, would have a neutral effect on eelgrass that is below the no-net-loss threshold of significance. It is notable that the Environmentally Superior Alternative, the EBMA Avoidance Alternative, incorporates a more conservative mitigation plan, by mitigating for the loss of 25% eelgrass habitat function.

To verify predicted impacts associated with the Project, Coast will be implementing an eelgrass monitoring plan. The monitoring plan includes an extensive survey of baseline eelgrass conditions prior to Project implementation and at least three years of monitoring following Phase I implementation. The Project may be modified or additional mitigation may be required if observed impacts to eelgrass are greater than anticipated. Assumptions from the impact analysis and monitoring results will be tracked through an adaptive management plan, as described in R-DEIR Section 6.5.7.

**Finding:**

Changes or alterations have been required in, or incorporated into, the Project which would avoid or substantially lessen the significant environmental effect as identified in the EIR. Implementation of Mitigation Measure BIO-1 would reduce impacts to eelgrass (Impact BIO-3) to less than significant. If monitoring reveals that impacts to eelgrass exceed those predicted in the EIR, the project will implement adaptive management and, potentially, additional mitigation, to ensure that eelgrass impacts remain below the no net loss threshold of significance. Additionally, Conservation Measures BIO-2, and BIO-4 through BIO-8 are designed to minimize the Project's potential impacts to eelgrass, to the greatest extent practicable. The mitigation measures are summarized below; see MMRP, to be adopted concurrently with these findings, for complete language, which is incorporated herein by reference.

**Mitigation Measures:**

**Mitigation BIO-1:** Removal of existing culture (fallowing). (See above under Impact CR-2 and CR-3)

**Impact BIO-21: Potential impacts to Pacific herring from the expansion of oyster aquaculture in Humboldt Bay.**

Pacific herring use Humboldt Bay primarily for spawning and nursery habitat. Herring typically spawn adhesive eggs onto on many different substrates including eelgrass, marine algae, and hard substrates. Predation, temperature and salinity variability, and turbidity are the most common threats to juvenile Pacific herring. Potential impacts from the Project include loss of herring eggs from desiccation or predation, and loss of spawning area.

Based on data from CDFW about past and current spawning locations (R-DEIR Figure 6.5.24), the East Bay Channel and Arcata Channel are likely locations for pre-spawning holding activities. These channels are used to transit to oyster plots, but other than temporary passage of work vessels, there would be no human activities in the pre-spawning holding areas. Potential disturbance in channels is anticipated to be minor. The East Bay Management Area has been identified by CDFW as a key resource for Pacific herring spawning activity. A typical spawning event involves the deposition of herring eggs on approximately 300 acres of eelgrass in North Bay. This represents less than 10% of available eelgrass used in each spawning event.

Overall, there are a variety of complex interactions that determine egg loss/survival. The R-DEIR recognizes that there are multiple factors potentially affecting herring spawn activity and survival of spawn to larval stage associated with the Project. Some of these interactions are likely to be beneficial for herring egg survival (e.g., decreased predation by fish and invertebrates, potential to reduce desiccation at higher elevations), while others may adversely affect survival (e.g., increased predation by birds).

While desiccation of herring eggs deposited on suspended lines can increase egg mortality, this effect is expected to be limited and offset by reductions in predation due to reduction in predation for eggs on lines. Longlines are not predicted to cause a reduction in area available for spawning since herring access to spawning areas and the total eelgrass cover are not predicted to be impacted. The R-DEIR recognizes that the removal of lines with herring spawn would represent a potential impact to herring and has, therefore, identified a mitigation measure to prevent the accidental removal of viable herring spawn from Humboldt Bay. While egg deposition on gear is not

a conclusive loss of eggs from the system, impacts to herring eggs could be significant if gear or shellfish product is removed or disturbed by aquaculture activities during the spawning period in Humboldt Bay.

**Finding:**

Changes or alterations have been required in, or incorporated into, the Project which would avoid or substantially lessen the significant environmental effect as identified in the EIR. Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce potential impacts to Pacific herring to less than significant by mitigating for reductions in eelgrass function and requiring monitoring and coordination with CDFW and limiting activity where spawning has occurred. While not proposed as mitigation, in response to comments received from CA DFW, Coast has also agreed to a herring monitoring plan, included as Appendix A of the FEIR. The mitigation measures are summarized below; see MMRP, to be adopted concurrently with these findings, for complete language, which is incorporated herein by reference.

**Mitigation Measures:**

**Mitigation BIO-1:** Removal of existing culture (fallowing). (See above under Impact CR-2 and CR-3)

**Mitigation BIO-2:** Herring egg monitoring and consultation with CDFW. (See above under Impact CR-2 and CR-3)

**Impact BIO-23: Potential impacts to marine mammals from the expansion of oyster aquaculture in Humboldt Bay.**

There are three main species of marine mammals that use Humboldt Bay: California sea lions, harbor seals, and harbor porpoises. Threats associated with shellfish aquaculture activities could include human disturbance, underwater noise, and potential boat strikes. Underwater noise produced by Coast work vessels could impact marine mammals if they are present in the vicinity. However, R-DEIR analysis found that the noise level from the use of Coast's boats would be similar to the background noise conditions currently experienced from existing boat traffic.

Harbor seals and California sea lions haul out on land for rest, thermal regulation, social interaction, predator avoidance, and to give birth. The closest pupping haul-out site is in South Bay, more than six miles away. Therefore, Coast's activities should have no impact on breeding or pupping activities at these haul-out sites. While there are closer non-pupping haul-out locations to the Project, only two haul-out locations are near a culture area, Sand Island and Arcata Channel. It is notable that Sand Island has been actively cultured for over 60 years with no indication that there are significant impacts to harbor seal populations. While there are temporary haul-out locations, most of the major haul out locations do not overlap with the proposed oyster culture areas. Coast will not conduct any activity when a marine mammal is observed hauled out in or near a culture area ready for planting, scheduled maintenance, or harvesting until the mammal has left on its own and without provocation from Coast (Conservation Measure BIO-10).

In terms of harbor porpoise use of the proposed Project area, the intertidal habitat where oyster longlines would be placed is likely too shallow to be used much by this species. According to NMFS (2016a), the harbor porpoise prefers deeper waters in bays, estuaries, harbors, and fjords. Potential interactions with boats in the subtidal portion of North Bay would be avoided using standard

avoidance measures. Additionally, Conservation Measure BIO-11 would restrict Coast from intentionally approaching or harassing marine mammals while transiting within subtidal channels.

**Finding:**

Changes or alterations have been required in, or incorporated into, the Project which would avoid or substantially lessen the significant environmental effect as identified in the EIR. Implementation of Mitigation Measure BIO-3 would reduce impacts to marine mammals (Impact BIO-23) to less than significant by avoiding activities that would disturb marine mammals and staying more than 100 m from animals hauled out on Sand Island. Additionally, Conservation Measures BIO-9 through BIO-11 are designed to minimize the Project's potential impacts to marine mammals, to the greatest extent practicable. The mitigation measures are summarized below; see MMRP, to be adopted concurrently with these findings, for complete language, which is incorporated herein by reference.

**Mitigation Measures:**

**Mitigation BIO-3:** Marine Mammal Buffers and Avoidance. No activity involving human disturbance will occur within 100 m of the area of Sand Island that is above mean higher high water to avoid the harbor seal haul-out location and nesting birds on Sand Island.

**Impact BIO-25: Potential impacts to black brant foraging from the expansion of oyster aquaculture in Humboldt Bay.**

Potential impacts to black brant from the Project primarily take two forms: loss of foraging opportunity due to exclusion from eelgrass beds when project infrastructure is exposed above the water's surface, and disturbance from the increased activity necessary to accommodate additional aquaculture.

The R-DEIR included a quantitative assessment of impacts to brant associated with the Project's operations based on the expansion of the Project's footprint and increases in harvesting and boat activity. Increased disturbances were substantially overestimated in the R-DEIR based on two very conservative assumptions: all boat traffic in Humboldt Bay is attributable to Coast Seafoods, and all of Coast Seafoods' boat activity will disturb brant. Based on these assumptions, the increase in disturbance due to the Project represents less than one percent increase over existing conditions. When this is compared to the best available science evaluating the effects of disturbance on brant in Humboldt Bay (Stillman et al. 2015), the increased disturbance is not expected to have a significant adverse impact on brant.

The R-DEIR acknowledges that impacts to brant foraging will occur due to exposed longline above water levels during low tides, but determined that these impacts will be less than significant. Specifically, the R-DEIR estimated that brant will be excluded from less than three percent of available eelgrass biomass bay-wide, which, when compared to published modeling results of brant foraging in Humboldt Bay (Stillman et al. 2015), does not suggest there would be substantial adverse effects on brant. Brant surveys in North Bay indicated that brant occur in approximately equal densities in aquaculture areas and in control areas when infrastructure is not exposed above the water's surface (R-DEIR Appendix E), which was confirmed with time-lapse video of aquaculture beds.

**Finding:**

Changes or alterations have been required in, or incorporated into, the Project which would avoid or substantially lessen the significant environmental effect as identified in the EIR. Implementation of

Mitigation Measure BIO-1 and BIO-4 would reduce impacts to black brant foraging (Impact BIO-25) to less than significant through eelgrass mitigation and monitoring. If monitoring reveals that impacts to eelgrass are greater than anticipated in the EIR, the Project will implement adaptive management and, potentially, additional mitigation, to ensure that eelgrass impacts remain below the no net loss threshold of significance. Implementation of Mitigation Measure BIO-4 will ensure that any eelgrass generated through additional mitigation is available for brant consumption. Additionally, Conservation Measure BIO-12 would minimize the Project's potential impacts to birds, to the greatest extent practicable. The mitigation measures are summarized below; see MMRP, to be adopted concurrently with these findings, for complete language, which is incorporated herein by reference.

**Mitigation Measures:**

**Mitigation BIO-1:** Removal of existing culture (fallowing). (See above under Impact CR-2 and CR-3)

**Mitigation BIO-4:** Impact on eelgrass availability to black brant. If monitoring data demonstrate that eelgrass impacts are above the Project's adaptive management thresholds and additional mitigation is implemented, the mitigation provided eelgrass must be available to black brant.

**AIR QUALITY**

As discussed in R-DEIR Section 6.7, there would be a potential significant impact to Air Quality that would be less than significant as a result of mitigation measures incorporated into the Project. The impact and mitigation measure are summarized below, see MMRP for complete mitigation measure language, which is incorporated herein by reference.

**Impact AQ-1: Contribution to PM<sub>10</sub> levels.**

The Project would create a small amount of emissions from two additional small boats that are expected to be used for Project operations and up to 18 additional boat trips per week throughout the bay. It would not create any substantial pollution concentrations or objectionable odors. Additionally, there are no sensitive receptors or substantial numbers of people in the Project vicinity.

As a result of increased boat traffic, there would be a minor net increase in emissions of particulate matter from vessel engines. The Project would also involve a small number of additional vehicle trips to and from Coast's facilities as a result of additional truck trips to accommodate increased production and additional employee trips. However, given the small size of the vessels at issue, the limited quantity of vessels (2 additional boats; 11 total boats), and the limited number of additional vehicle trips, Coast's contribution to PM<sub>10</sub> levels in Humboldt Bay is negligible.

The AQMD regulates vessel engine emissions pursuant to several air quality plans. In such circumstances, CEQA allows the lead agency to rely on the regulatory oversight of responsible agencies carrying out statewide policy. Specifically, pursuant to Section 15064(h) of the CEQA Guidelines, the District may rely on air quality management plans promulgated by the AQMD, including the AQMD's PM<sub>10</sub> Attainment Plan.

**Finding:**

Changes or alterations have been required in, or incorporated into, the Project which would avoid or substantially lessen the significant environmental effect as identified in the EIR. Coast would not contribute to a cumulatively significant air quality impact if it complies with the PM<sub>10</sub> Attainment Plan adopted by the AQMD and all attendant regulations established thereto. Mitigation Measure AQ-1 would

require Coast to comply with AQMD regulations and would reduce impacts to air quality (Impact AQ-1) to less than significant. The mitigation measures are summarized below; see MMRP, to be adopted concurrently with these findings, for complete language, which is incorporated herein by reference.

**Mitigation Measures:**

**Mitigation AQ-1:** Coast shall comply with the requirements of all adopted air quality plans, including plans covering particulate emissions, and shall implement all actions required by the AQMD for Coast's mariculture operations.

**HAZARDS AND HAZARDOUS MATERIALS**

As discussed in R-DEIR Section 6.10, there would be a potential significant impact to Hazards and Hazardous Materials that would be less than significant as a result of mitigation measures incorporated into the project. The impact and mitigation measures are summarized below, see MMRP for complete mitigation measure language, which is incorporated herein by reference. Impacts HAZ-1 and HAZ-3 are considered less than significant without mitigation.

**Impact HAZ-2: Hazard from the abandonment or loss of marine debris.**

The Project may result in accidental loss of mariculture gear or other debris into Humboldt Bay. Because the equipment is placed in intertidal areas, it is subject to various natural forces including tide, wind, waves and ultraviolet radiation. As a result, there is potential for equipment to become loose, wash away or otherwise escape into the environment. Escaped mariculture gear may pose a hazard to biological resources and to other users of the bay, including boaters (kayakers, stand-up paddle boarders, canoers, wind surfers) and scuba divers. When encountered, marine debris associated with mariculture equipment may damage boat bottoms or engines, snag on trailing lines or otherwise impair navigation. Recreational users of the bay may encounter escaped mariculture equipment in shallow intertidal areas, which may make transit of these areas more hazardous, particularly if escaped equipment is wholly or partially buried in the substrate and thus hidden from view.

Longline oyster culture involves installation of PVC tubes in the substrate, which are strung with monofilament line and hung with oysters or oyster baskets (polyethylene sleeves). Coast inspects cultch-on-longlines during monthly maintenance work and during harvest. Any pipes disturbed during the harvest are re-secured or removed if damaged. Any identified loose pipes or debris are removed from the culture area. During replanting, pipes are straightened out and replaced as needed. Basket-on-longlines are inspected and maintained each time the oysters are inspected for grading. Baskets are lashed in bins during transport to prevent loss.

Rack-and-bag culture utilizes 3' x 12' rebar frames on which are placed polyethylene mesh bags full of oysters. The bags are attached to the racks using industrial rubber bands. Worn, strained, or damaged rubber bands are routinely replaced during daily inspection and maintenance of the rack-and-bags. Any debris is removed during inspections. Coast also performs a monthly inspection of its owned and leased area for marine debris at both low and high tide and picks up any identified debris, regardless of the source of the identified items.

**Finding:**

Changes or alterations have been required in, or incorporated into, the Project which would avoid or substantially lessen the significant environmental effect as identified in the EIR. Mitigation Measures HAZ-1 through HAZ-5 would mitigate for impacts associated with IMPACT HAZ-2 concerning potential hazards generated by marine debris. The mitigation measures are summarized below; see MMRP, to be adopted concurrently with these findings, for complete language, which are incorporated herein by reference.

**Mitigation Measures:**

**Mitigation HAZ-1:** As soon as safely possible following storm or severe wind or weather events, Coast shall patrol all active mariculture areas for escaped or damaged mariculture equipment. All equipment that cannot be repaired and placed back into service shall be properly recycled or disposed of at an appropriate onshore facility. In addition, Coast shall retrieve or repair any escaped or damaged mariculture equipment that it encounters while conducting routine daily and/or monthly maintenance activities associated with shellfish culture (e.g. bed inspections, shellfish grading and sorting). If the escaped gear cannot be repaired and replaced on the shellfish bed, it shall be properly recycled or disposed of on land.

**Mitigation HAZ-2:** Within 30 days of harvest on any plot that is being discontinued, abandoned, fallowed, or taken out of production for six months or more, the applicant shall remove all oyster culture apparatus from that plot, including but not limited to stakes, racks, baskets, floats, rope, ties, wires, tags and pallets.

**Mitigation HAZ-3:** Coast shall implement annual employee training regarding marine debris issues and how to identify loose culture gear and proper gear repair and removal methods. Particular focus shall be placed on management and maintenance practices to reduce the loss of any gear type consistently found during bay cleanup and inspection activities. During trainings, Coast employees shall be encouraged to consider and implement field and management practices that reduce the amount of small plastic gear (such as zip-ties, tags and fasteners) and non-biodegradable material (such as PV stakes and nylon or polypropylene rope) used in its operations.

**Mitigation HAZ-4:** Coast will conduct quarterly bay cleanups in coordination with other interested parties or organizations, which will include walking portions of the bay and shorelines to pick up escaped shellfish gear and other trash (regardless of whether it is generated by the Project). The volume and type of shellfish gear collected and the cleanup location (marked on a map) and duration of cleanup activity shall be recorded and documented in the annual report submitted to the Harbor District. If consistent discoveries of certain gear types are made during cleanup events by Coast or the public, Coast shall evaluate (and if feasible, implement use of) alternative gear types or practices that would reduce these consistent sources of debris.

**Mitigation HAZ-5:** Coast will not leave tools, loose gear, or construction materials on its owned and leased tidelands or surrounding areas for longer than one tide cycle. All gear installed in the Project area will be kept neat and secure.

**Mitigation HAZ-6:** Coast shall mark shellfish culture bags, baskets, and basket label tags in an easily identifiable manner with its company name or other identification information. Markings shall be securely attached and robust enough to remain attached and legible after an extended period in the

marine environment (e.g. heat transfer, hot stamp. etching, etc.). Existing culture bags, baskets and basket label tags currently in use in culture beds shall be marked or replaced with marked versions when replanted and all unmarked gear shall be replaced in this way within 24 months. In the event that shellfish culture gear or equipment becomes dislodged from culture beds, it shall be Coast's responsibility to retrieve the material.

**Mitigation HAZ-7:** Coast shall provide \$10,000 to the Harbor District to fund staff time associated with patrolling Coast's project area to ensure compliance with Mitigation Measures HAZ-1 through HAZ-6, reviewing documentation of Coast's cleanup efforts, and documenting Coast's compliance with such requirements.

## **Mitigation Monitoring and Reporting Program**

As referenced above in the findings, a MMRP has been prepared for the project and is to be adopted concurrently with these findings pursuant to Public Resources Code Section 21081(a)(1). The MMRP is a separate stand-alone document that will be used by the Harbor District to track compliance with the Project mitigation measures. Conservation Measures were incorporated into the Project to ensure that the Project maintains a high standard that is environmentally responsible, and can be found in R-DEIR Section 6. Conservation Measures may also be applied to improve or provide a beneficial impact even where no significant impact has been identified. These Conservation Measures are also included in the MMRP, and will be incorporated into the Project permit requirements. The MMRP will remain available for public review during Project implementation and operation.

## **Project Alternatives**

The Project EIR addresses a range of reasonable alternatives in accordance with CEQA Guidelines Section 15126.6. The R-DEIR Section 5 provides a discussion of alternatives considered and rejected during Project planning and describes the four alternatives selected for further analysis. Refer to R-DEIR Section 6.0 for a complete discussion of relative impacts associated with Alternatives 1-4. In consideration of comments received on the R-DEIR, an additional project alternative was identified in the FEIR to address concerns related to herring, eelgrass, expansion of cultivation in the East Bay Management Area (EBMA), black brant, green sturgeon, recreational hunting and boating. See FEIR Section 4 for a complete discussion and analysis of the EBMA Avoidance Alternative. A total of five alternatives were identified and analyzed for relative impacts as compared to the Project:

- Alternative 1: 10-Foot Spacing Alternative
- Alternative 2: Reduced Footprint Alternative
- Alternative 3: Existing Footprint Alternative
- Alternative 4: No Project Alternative
- Alternative 5: East Bay Management Area (EBMA) Avoidance Alternative

## **Environmentally Superior Alternative**

Because no significant unavoidable adverse impact has been identified for the Project or any of the proposed Alternatives, there is no alternative that is "environmentally superior," as defined by CEQA. However, for the benefit of the public, the FEIR identifies Alternative 5: East Bay Management Area (EBMA) Avoidance Alternative, as the environmentally superior alternative because it has less potential

environmental impacts but still accomplishes some of the Project's objectives, and specifically avoids habitat that several regulatory agencies and commenters have identified as important habitat for a number of species. Alternative 1: 10 Foot Spacing Alternative, also accomplishes some of the Project objectives, but has greater, but still less than significant, environmental impacts than the EBMA Avoidance Alternative. Alternative 2: Reduced Footprint Alternative, also accomplishes some of the Project objectives, but has identified significant impacts to eelgrass that must be offset by compensatory mitigation. Alternative 3: Existing Footprint, has the least potential impacts to the environment, but achieves none of the Project objectives. Alternative 4: No Project, has fewer potential impacts to the environment than the Project, but similarly does not achieve any Project objectives.

## **Summary of Findings**

Based on the analysis of environmental impacts and mitigation measures in the Project EIR, summarized above, the Harbor District finds that: changes or alternations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effects of this Project and mitigate all of the significant environmental effects to a less than significant level, as identified in the EIR. No significant and unavoidable adverse impacts are identified for the Project or any of the proposed Alternatives. The Harbor District is committed to implementing the measures listed in the MMRP within its authority and responsibility. Incorporation of these measures into the Project will ensure that mitigation of significant environmental effects will occur.

## **Statement of Location and Custodian of Documents**

Public Resources Code Section 21081.6(a)(2) requires that the Harbor District, as the Lead Agency, specify the location and custodian of the documents of other materials that constitute the record of proceedings upon which its decision has been based. The following location is where review of the record may be performed:

Humboldt Bay Harbor Recreation and Conservation District  
601 Startare Drive  
Eureka, CA 95501

The Harbor District has relied on all of the documents contained within the record of proceedings in reaching its decision on the project.

## **References**

See R-DEIR Section 8.0 References (<http://humboldt-bay.org/sites/humboldt-bay2.org/files/Coast%20Seafoods%20R-DEIR%20July%202016.pdf>)