

Nordic Aquafarms California, LLC
Coastal Development Permit and Special Permit

Record Number: PLN-2020-16698

Assessor's Parcel Number (APN): 401-112-021

Recommended Planning Commission Action

1. Open the Workshop
2. Receive a Description of the Project from Staff
3. Receive an overview of the Environmental Impact Report from the preparer
4. Receive a presentation from the Applicant
5. Provide the public an opportunity to ask questions about the project.
6. Ask any additional information for clarification
7. Close the Workshop

Executive Summary: This item is being presented as an informational workshop to introduce Nordic Aquafarms project and EIR to the Planning Commission and the public. The workshop will include presentations on the key components of the project from staff, the project consultant GHD, the applicant, NAFC, and the Harbor District. The components of the Project, the Environmental Impact Report, and the regulatory framework, will all be presented. t

Nordic Aquafarms California, LLC (NAFC) seeks a Coastal Development Permit and Special Permit to facilitate the demolition and remediation of the existing Freshwater Tissue Pulp Mill site, and construction of a land-based finfish recirculating aquaculture system (RAS) facility which includes the development of five buildings totaling approximately 766,530 square feet. The facility will include the installation of 4.6 megawatt (MW) solar panel array mounted on building rooftops, covering approximately 657,000 square feet. The subject parcel is located in the Samoa area, on both sides of Vance Avenue, approximately 2,000 feet north from the intersection of Vance Avenue and Bay Street, on the property known as 364 Vance Avenue. The proposed work will occur on the east side of Vance Avenue within a 36-acre lease area on the 76 -acre parcel.

Land Use

The Project Site is zoned Industrial Coastal Dependent (MC) with the combining zone Archaeological Resource Area Outside Shelter Cove (A). The lands west of Vance Avenue are zoned Industrial General (MG). The aquaculture facility will be constructed on the MC-zoned portion of the parcel. Coastal dependent industrial uses include but are not limited to the following: fish processing for human consumption, ocean intake, outfall and discharge pipelines, and aquaculture and aquaculture support facilities. Industrial zones involve onsite production of goods by methods that are not agricultural or extractive in nature as defined in Humboldt County Code (Section 313-175).

A Cultural Resources Study was prepared for the project and established a formal discovery protocol and additional recommendations which have been required in the form of mitigation measures in the Draft Environmental Impact Report (DEIR) and the Mitigation Monitoring and Reporting Program (MMRP). The Project is consistent with the requirements of the 'A' combining zone.

The proposed use of "Aquaculture" is principally permitted in this zone. Principally permitted uses are are explicitly allowed within a given zone district. The Humboldt County Code contains a number of land use regulations intended to avoid and mitigate environmental impacts., The primary policies of relevance include:

1. §313-45.1 of the Humboldt County Code contains industrial performance standards intended to reduce the impact of coastal industrial development on coastal resources. Humboldt County Code
2. §313-45.1 seeks to reduce the impact of coastal dependent industrial development on coastal resources by requiring alternative sites to be considered for new coastal dependent industrial

uses. Alternative sites, once identified, are classified according to a priority schedule consisting of four levels, ranging from Priority 1 to Priority 4. Priority 1 sites are considered the most suitable (i.e. minimal impacts to coastal resources), while Priority 4 sites are considered the least suitable. The proposed facility was found to be a Priority 2 site because it requires the construction of new facilities to accommodate the proposed use but does not involve the conversion of wetlands. The Alternative Sites analysis required by the Humboldt Bay Area Plan (HBAP) (incorporating Section 30260 of the Coastal Act) is distinct from the alternatives analysis included in Chapter 4 of this Environmental Impact Report (EIR Priority Site 2 Letters seeking alternative site location proposals for the Project were sent to the following agencies in November 2020: California Coastal Commission, Humboldt Bay Harbor Recreation and Conservation District, Army Corps of Engineers, and the Humboldt County Planning and Building Department, Long Range Planning Division. Based upon responses received from the solicited agencies, the County has determined the RMT II Site is the most appropriate location for the Project, given the alternative sites evaluated do not meet the minimum Project requirements, including necessary intake and outfall infrastructure. Given the Project is a principally permitted Priority 2 site, requirements of the Local Coastal Program would be met, the Project would be consistent with the applicable policies of the certified Local Coastal Program and the Humboldt County Code.

The Project Site is located on a former pulp mill site that has historically supported industrial timber and pulp mill operations since the 1960s and is known as Redwood Maine Terminal II (RMT II). The parcel is an active Brownfield site (Regional Water Quality Control Board case no. 1NHU892) that has received grant funding from the U.S. Environmental Protection Agency (EPA) for cleanup and assessment activities.

Numerous investigations of soil, groundwater, soil gas, and construction materials have been conducted relating to historic contamination, starting from the late 1990s. The North Coast Regional Water Quality Control Board (NCRWQCB) is the lead agency for the investigation and cleanup of environmental impacts associated from former pulp mill operations and oversees the current groundwater monitoring program in place for the site. Remediation activities commenced in 1994 and have continued as recently as 2019. Past remediation activities were implemented by former Project Site owners, including Louisiana Pacific Corporation and the Harbor District. Asbestos material removal (abatement) at select structures was conducted by the Freshwater Tissue Company (FTC) subcontractors between 2011 and 2013. Between 2011 and 2013 many pulp mill structures were demolished, including the pulp mill Recovery Boiler, Bleach Plant, re-causticizing area, and liquor storage tanks. In August 2013 ownership of the former pulp mill site was transferred from FTC to the Harbor District. Today, the Project Site consists of remnant pulp mill infrastructure and concrete foundations associated with the former Freshwater Tissue Culture (FTC) Pulp Mill, which was decommissioned in 2009. In 2015 improvements to water, wastewater, electrical and fire suppression systems were conducted (CDP-15-043). If approved, NAFC would be responsible for the demolition and remediation of the existing site conditions to be able to redevelop and safely reuse the site for the proposed RAS facility.

Existing infrastructure on the project site proposed for NAFC's use include the ocean outfall for discharge of treated effluent (northwest portion of pulp mill site); Piping and intake structure for intake of salt water (East of pulp mill site); and a 60-KV, 20 MW electrical switchyard (northwest portion of the pulp mill site). The eastern portion of the parcel supports ongoing coastal-dependent industry within the RMT II that would not be disturbed by the project. There are currently seven tenants leasing areas within the proposed Site under an Interim Non-Coastal Dependent Industrial lease with HBHRCD. Occupants will be relocated with the assistance of HBHRCD in compliance with the California Relocation Assistance and Real Property Acquisition Guidelines. Current tenants will be permitted to remain on the property prior to demolition activities.

Project Components:

The project consists of three (3) distinct components: The Intake, the Terrestrial Development, and the Outfall. The Terrestrial Development is related to construction and operation of the land-based

aquaculture facility and campus and is under the permitting authority of the County. The Ocean Outfall is related to the discharge of treated wastewater effluent from the aquaculture facility through the existing Redwood Marine Terminal II Ocean Outfall and is subject to the permitting authority of the Coastal Commission and North Coast Regional Water Quality Control Board. The Humboldt Bay Water Intakes component relates to upgrades to two existing water intakes (sea chests) and associated terrestrial water piping and fire suppression line upgrades and is under the permitting authority of the Coastal Commission.

The EIR also addresses anticipated compensatory off-site restoration associated with permitting the water intakes. The EIR has joint applicants. Nordic Aquafarms California, LLC (NAFC) is the applicant for the Terrestrial Development and Ocean Outfall components, and the Humboldt Bay Harbor, Recreation, and Conservation District (Harbor District) is the applicant and responsible party for the Humboldt Bay Water Intakes.

Project phasing:

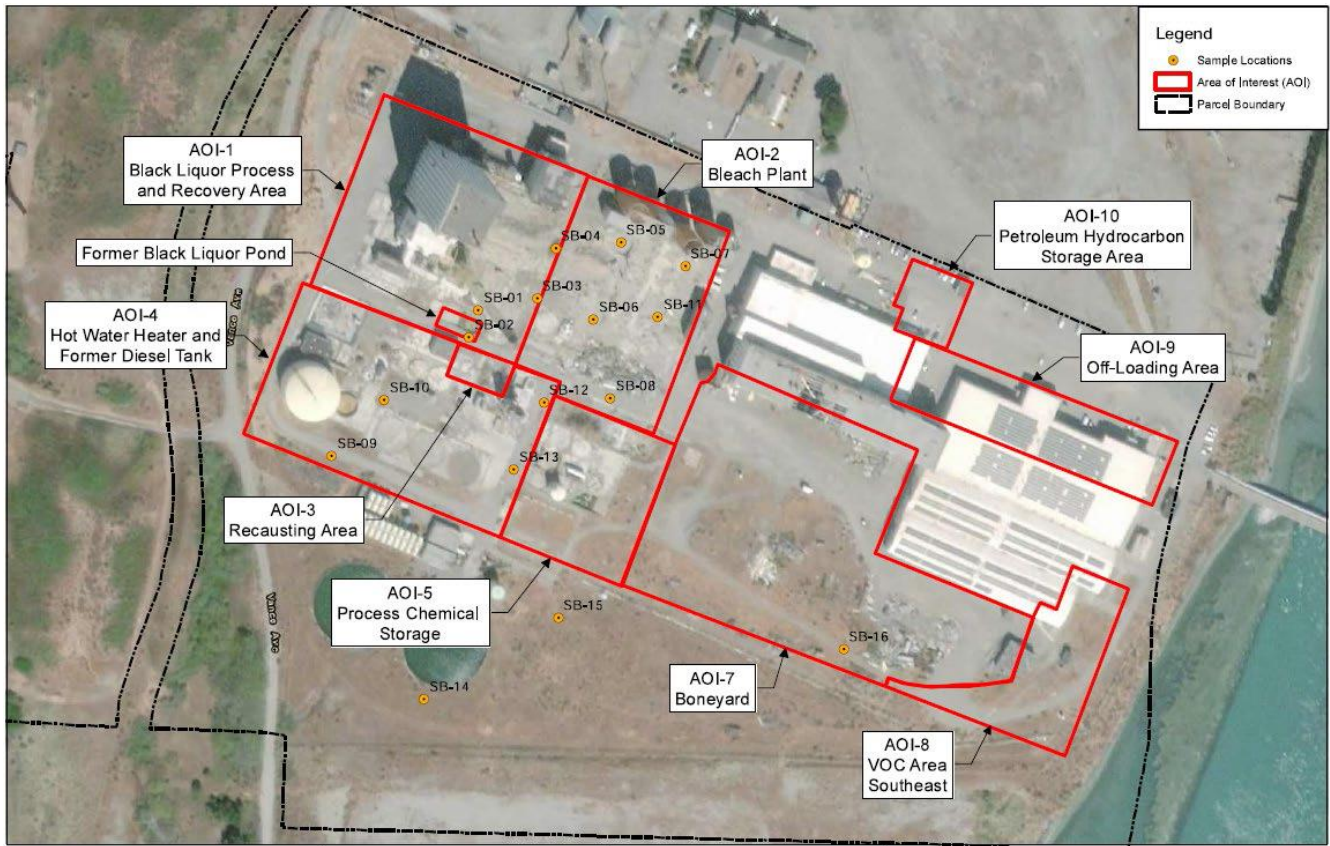
The Project is anticipated to be built out in two primary phases, with preliminary site preparation (Phase 0):

1. Phase 0 - Brownfield Redevelopment: asbestos abatement; structure demolition; soil remediation; waste stream characterization, transportation, and disposal.
2. Phase 1 – Brownfield Redevelopment and Aquaculture Facility Stage 1: Intake and outfall connections; ground densification to prepare construction of building foundations; construction of Phase 1 grow out module (Building 1), Central Utility Plant (Building 3), Fish Processing Plant/Administrative (Building 4), Wastewater Treatment and Backup Power (Building 5); Oxygen generation storage; stormwater systems; onsite and offsite biological mitigation.
3. Phase 2 – Aquaculture Facility Stage 2: Ground densification; Phase 2 grow out module (Building 2); soil remediation; expansion of utilities; existing leach field decommissioning.

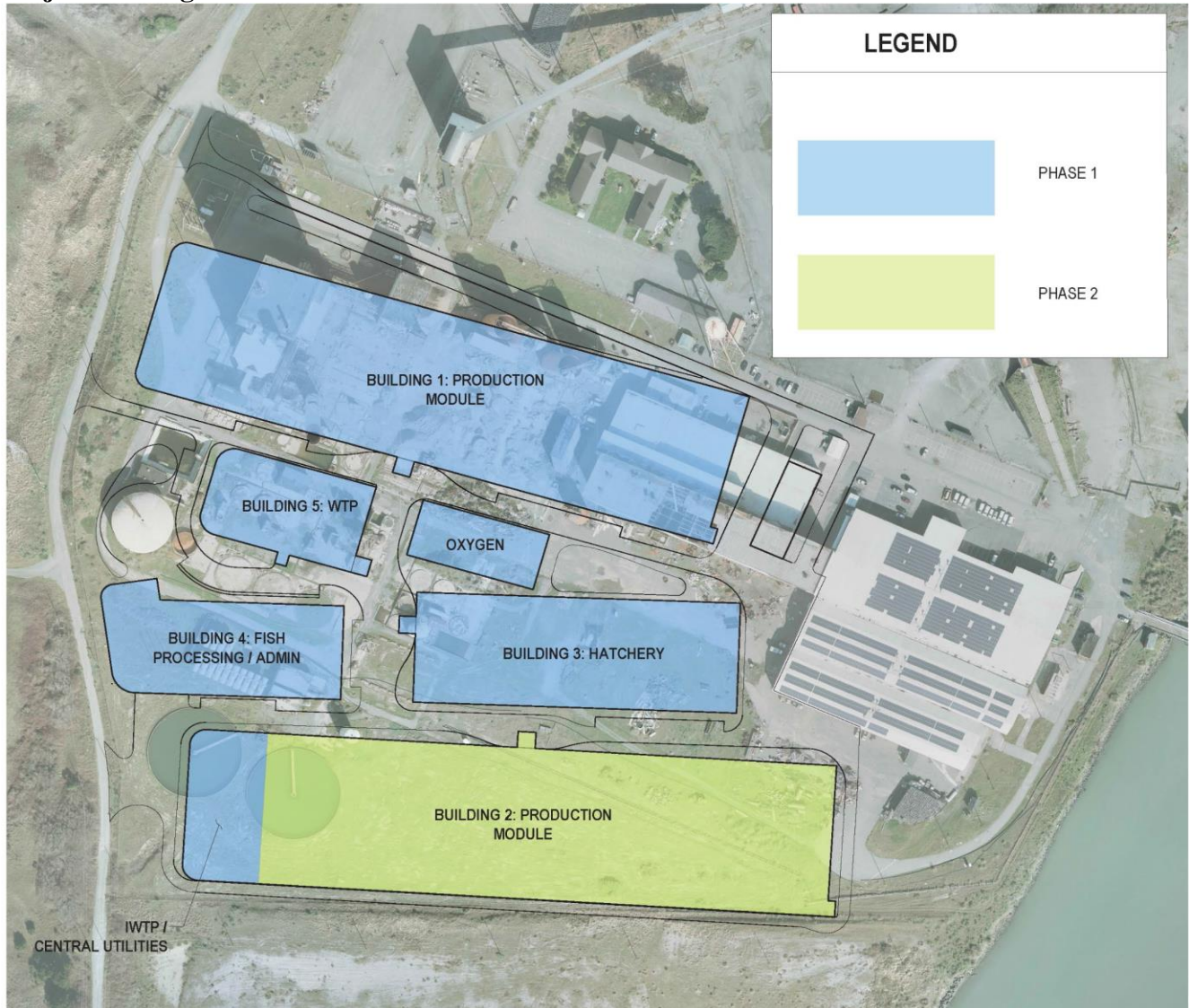
Existing Site Conditions:



Phase 0:



Project Phasing 1&2:



1. Building 1 (Grow-out Module 1): 265,028 square feet; 55-feet-tall; 1 story
2. Building 2 (Grow-out Module 2): 286, 888 square feet; 55-feet-tall; 1 story
3. Building 3 (Hatchery): 105,085 square feet; 55-feet-tall; 1 story
4. Building 4 (Fish Processing and Administration): 66,878 square feet; 60-feet-tall; 3 stories
5. Building 5 (Wastewater Treatment and Backup Power): 42,651 square feet; 40-feet-tall with 40-foot backup generator exhaust stack; 2 stories.

Facility Operations

The facility is estimated to employ around 90-100 employees for Phase 1, and up to 150 for full Phase 2 buildout. The facility will operate 24/7, with regular operation occurring Monday-Saturday. Employees will work in two shifts, one early morning and one late afternoon. It is estimated that the morning shift will consist of about 60 employees in Phase 1, increasing to approximately 90 in Phase 2, and the evening shift will have about 30 employees in Phase 1, increasing to approximately 60 in Phase 2. Aside from shift arrival and departure, on-site traffic will be mainly limited to personnel movement, deliveries, and outgoing shipments of products and coproducts. Fish movement within the site will be handled by subgrade piping and thus will not add to surface traffic.

Odor

The project would not generate odor outside of the facility. Potential sources of odor include sludge, fish coprocessing products, and fish feed. Management strategies of these sources are listed below:

1. Sludge would be stored in sealed and airtight containers before out shipment using Best Management Practices.
2. Fish processing coproducts will be maintained as food grade products and stored in chilled airtight containers for shipment.
3. Fish feed would be a minor odor source. Feed is stored in indoor rodent proof silos and will not be a source of outdoor odor.

Facility Parking

Parking will be located throughout the central campus corridor between Building 1 and Building 2. The facility will include a three-truck loading dock, seven-truck unloading / loading areas, 115 standard light vehicle parking spots, and six ADA accessible light vehicle parking spots. At full production there would be a maximum of 100 employees at the facility at any given time, including approximately 20 employees in the approximate 6,400 square foot office / management area of Building 4 and approximately 80 employees spread throughout the rest of the facility. A Special Permit has been applied for concurrently with the CDP for an exception to the loading space requirements pursuant to Section 313-109.1.5.2 of the Humboldt County Code.

Facility Truck Traffic

Facility operations will include regular shipments from and deliveries to the facility. Shipments would include finished product to market and waste streams to secondary use processing sites. While the final distribution strategy for the facility is still in development, initial estimates have been made based on knowledge of existing West Coast markets in relative proximity to the Project Site. At full production it is currently estimated that there will be 40 outgoing product delivery trucks per week with approximately 30% going to the Seattle area, approximately 30% going to the Los Angeles area, and approximately 40% going to the San Francisco Bay Area. It is expected at full production there will be 32 outgoing trucks weekly carrying waste streams to various secondary use processing sites within 150 miles of the facility. Deliveries to the facility include fish feed, shipping materials, and process chemicals. The final feed vendor will be selected at a later date. Deliveries of shipping materials and process chemicals will consist of three trucks per week likely originating in the Redding or San Francisco Bay area.

Solar and Energy Utilities

Pacific Gas and Electric Company (PG&E) provides electricity to the project site. The estimated normal daily electricity usage is 21.4 megawatts (MW). A portion of this usage will be offset by the 3-5 MW rooftop solar installation which will cover approximately 657,000 square feet of facility rooftops. Normal operation of the facility will use exclusively electricity. In the event of an emergency, the applicant proposes several dual fuel (natural gas or diesel) generators with a combined capacity of approximately 20 MW needed to supply emergency power to the fully developed facility. Regular testing and maintenance of the backup energy system will make use of small amounts of natural gas and diesel fuel. Diesel fuel would be supplied by two new 25,000 gallon double walled fiberglass underground storage tanks (UST), which will be located underground east of Building 5. Modernization and upgrade of the existing 60-kilovolt (KV), 20 megawatt (MW) electrical switchyard is planned to expand the total capacity of the switchyard to 30-35 MW to be utilized by NAFC and HBHRCD RMT II operations.

Sewer

The property is developed with an existing leach field and will be used temporarily during construction and operation of Phase 1. The leach field use will be discontinued once construction begins on Phase 2 production modules, as the second production module building is proposed to be located over the existing leach field. Once the Phase 2 production modules are under construction, the Project Site structures will be connected to the Peninsula Community Services District (PCSD) sewer line that will be constructed west of the Project Site.

Access

The parcel is accessed from Vance Avenue via New Navy Base Road and LP Drive, and is served by a 50-foot-wide non-exclusive easement for ingress and egress on Vance Avenue. Repair, resurfacing, and striping upgrades of Vance Avenue and LP Drive to support site access, construction, and operation is expected. Significant expansion of the paved surface of Vance Ave is not expected through the repair and resurfacing process. Temporary signage along Vance Avenue will be provided as needed during construction activities then permanent signage installed as appropriate for operations. Temporary construction and staging signage to New Navy Base Road will require an encroachment permit from the Public Works – Land Use Division.

Saltwater Intake

Salt water will be provided via existing sea chests (water intake structures) at the nearby RMT II and Red Tank Docks operated by the Humboldt Bay Harbor Recreation and Conservation District. Saltwater usage is estimated at a maximum of 10 MGD. The HBHRCD is in the process of permitting upgrades to the sea chests that will increase their water withdrawal capacity and add features that reduce environmental impacts, including upgraded intake screens that enhance the protection of juvenile fish/larvae. The RMT II Dock screen will be 36-inch diameter with a maximum intake flow rate of 5,500 gpm, and the Red Tank Dock screen will be 24-inch diameter with a maximum intake flow rate of 2,750 gpm. Screens are comprised of woven stainless-steel material with approximately 1.0mm spacing between bars (smaller than the standard requirement of 1.75mm). Committing to smaller screens on the intakes is intended to prevent entrainment and entrapment of larval organisms and smaller aquatic species. The sea chest pumps operated by HBHRCD would supply seawater through piping affixed to the existing docks. The piping infrastructure would extend onshore underground at least 50 feet from the RMT II dock terminus. The aquaculture facility would tie into the sea chest piping at the northeast corner of the RMT II building. There is a salt water well within the NAFC lease area, 340 feet in total depth northeast of the clarifiers. NAFC has no plans to use the well nor disturb the area where the well is located. If it is determined that the area of the well needs to be disturbed to facilitate construction, the well be properly decommissioned before any disturbance of the area. The sea chest is operated under a Coastal Development Permit within the permitting jurisdiction of the California Coastal Commission. Because NAFC is a tenant, the infrastructure and ability to provide saltwater to the RMT II site is the responsibility of the property owner, the Harbor District.

Freshwater

Freshwater is provided to the Project Site by an existing one-million-gallon (1-MG) water storage tank operated by Humboldt Bay Municipal Water District. The existing onsite water service would be connected to the new buildings for potable use, fire suppression, and irrigation. Water service to the buildings would connect to an underground water line running from the 1-MG tank to the Project Site. The HBMWD provided a will-serve letter on March 12, 2021, confirming the District has the capacity to serve NAFC facilities with three (3) million gallons of industrial water per day, and 300,000 gallons of domestic, potable water per day sourced from the Mad River. Service capacity exceeds the anticipated maximum usage of 2.5 MGD of industrial fresh water.

Wastewater Treatment and Discharge

Process Wastewater from the aquaculture facility will be treated on-site prior to discharge into the Pacific Ocean via the existing ocean outfall pipe that expands approximately 1.55 miles offshore. An advanced wastewater treatment plant will be developed to treat wastewater, including a Moving Bed Biofilm Reactor (MBBR), an ultrafiltration membrane bioreactor (MBR), and 300 millijoules per square centimeter

(mJ/cm) UV-C disinfection system. Total water volume discharged at full operational capacity is estimated at a maximum of 12.5 million gallons per day (MGD). Previous discharge from the former mill operations was 20 MGD.

Current outfall users, DG Fairhaven and Samoa Wastewater Treatment Plant, are permitted under the National Pollutant Discharge and Elimination System permit program to discharge 350,000 gallons per day and 53,000 gallons per day, respectively. The total hydraulic discharge capacity for the outfall is estimated at 40MGD. The discharge effluent is regulated by the North Coast Regional Water Quality Control Board (NCRWQCB). The NRWQCB draft permit No. CA1000003 would authorize a maximum of 12.5 MGD of treated effluent to be discharged by NAFC. The draft permit prohibits the following: the discharge of waste to Humboldt Bay; the discharge of domestic waste, treated or untreated, to surface waters; and discharge in excess of 12.5 MDG. Additional prohibitions are cited in the draft permit document. The National Pollutant Discharge Elimination System (NPDES) program requires monitoring of effluent constituents, with samples requirements ranging from daily to monthly collection samples. The Monitoring and Reporting Program (MRP) is outlined in attachments of the draft NPDES permit document. The applicant is required to provide the County with evidence of final permit issuance from the RWQCB prior to project operations. Compliance with the requirements of the final NPDES is an on-going requirement for the life of the Project. Water quality parameters of pre-treated effluent discharge were evaluated and conform to the applicable water quality parameters established in both the Ocean Plan and Thermal Plan.

Biosecurity Measures – Fish Escape

All fish production from reception of the eggs to rendering of the fish for transport is completed within enclosed buildings or pipes without exposure to the bay or ocean. All buildings are completely enclosed, and facilities are secured with three (3) physical barriers: a staff guarded entryway, a fenced enclosure around the campus, and keyed entry doors accessed by staff only who are equipped with appropriate PPE. Visitors must be approved by the Head of Production, must sign into a logbook, and are not permitted to bring personal items such as hang bags or back packs unless approved by Head of Production. Visitors are not allowed to visit other aquaculture facilities within 48 hours of the scheduled visit at NAFC.

The facility includes a series of physical barriers to eliminate risk of fish escape, including a sub-micron filtration stage before discharge of process water. All transport of fish within the facility occurs via a contained piping system to prevent fish escape. Each system is equipped with jump screens to prevent the fish from being able to jump out of the tank and will also work to contain them in the case of sloshing during an earthquake. The floor drains are fitted with grates specifically designed to prevent fish passage. Secondary grates sized to prevent fish passage are installed in the drain collection wells. All floor drains are sent to the wastewater treatment plant for the same rigorous treatment as all production water. There are physical barriers in place making fish escape nearly impossible. In summation, the aquaculture facility is land based and conforms with applicable setbacks from Humboldt Bay. Biosecurity Plans will be subject to third party audits twice per year. Compliance with this measure will be addressed as a Condition of Approval.

Fish Feed

Nordic Aquafarms has not made a final decision on a feed supplier for the Samoa facility. A feed supplier will be selected based on a number of criteria including, but not limited to, the use of natural carotenoid pigments, the avoidance of Genetically Modified (GMO) ingredients, avoidance of additives, pesticides and preservatives, and products that deliver essential omega-3 health benefits. At full scale operations, NAFC expects to use approximately 36,300 metric tons of feed per year. A variety of marine species fish byproduct trimmings from fisheries are used to produce aquaculture feed, as well as a variety of crops, insect meals, vegetable derived protein, and oils (including omega-3). Fish byproduct trimmings typically account for twenty percent of fish feed formula. The Marine Stewardship Council (MSC), International Fishmeal and Fish Oil Responsible Supply (IFFO RS), and Fisheries Improvement Projects (FIP) set standards for responsible harvesting, processing, and sourcing of marine derived raw materials. These certification agencies allow feed suppliers to identify and source materials like fish meal and fish oil from responsible

suppliers and maintain partnerships with companies that meet the requirements of their sustainability profile. NAFC will require its feed suppliers to participate in and be compliant with more than one of these programs. Additionally, fish feed will be regulated by the FDA under the Food, Drug, and Cosmetic Act. These regulations will apply to all feed, regardless of if imported or domestic. A conservative estimate of nutrients derived from fish waste was included in the Numerical Modelling Report (Dilution Study) prepared for the project. As described in the EIR, the Dilution Study found the nutrient load would have a less than significant impact on receiving waters after undergoing the wastewater treatment process..

Biological Resources

As stated in the Biological Resources evaluation contained in the Environmental Impact Report (EIR), the Project Site is a developed industrial area, characterized by hardscape and areas of historic grading and filling. The proposed project footprint lies on the east side of Vance Avenue, which to the north is primarily characterized by existing concrete foundations and remnant pulp mill structures. To the south, the project site is characterized by an existing leach field, historic fill, concrete debris, and a cyclone fence approximately 20-feet from the southern property line.

Botanical Resources

A Special Status Plant Survey and Vegetation Community Mapping/ESHA/Wetland Baseline Evaluation, Rev. 1 was prepared by GHD on February 8, 2021. Botanical studies consisted of seasonally appropriate (March 24-July 27, 2020) floristic surveys for special status plants, vegetation mapping, and assessment of Sensitive Natural Communities, Environmentally Sensitive Habitat Areas (ESHA), and wetlands. The report identified one rare plant population, Dark-eyed gilia (*Gilia millefoliata*), and three sensitive natural communities, including Dune mat (*Abronia latifolia-Ambrosia chamissonis Alliance*), Coastal brambles (*Rubus ursinus Alliance*), and Coastal willow thickets (*Salix hookeriana Alliance*), occur within the project boundary.

Dark-Eyed Gilia

According to the GHD Special Status Plant evaluation, the Project Site is host to approximately 100,000 individual dark-eyed gilia plants, occurring primarily on the south side of the parcel and overlapping with identified dune mat communities. Of these individuals, approximately 0.87 acres out of 2.4 acres of dark-eyed gilia and/or dark-eyed gilia habitat would be significantly impacted during construction and operation of the Project. To reduce this impact to a less-than-significant level, Mitigation Measure BIO-1 would require compensatory mitigation for loss of dark-eyed gilia habitat at a ratio of no less than 3:1 of both on-site and off-site methods, and include success criteria, monitoring requirements, and reporting requirements for mitigation.

Dune Mat (Abronia latifolia-Ambrosia chamissonis Alliance)

The GHD Special Status Plant evaluation identified both degraded dune mat and higher quality dune mat within the Project Site. Both consist of yellow sand verbena, seaside buckwheat, dune knotweed, beach strawberry, and sandmat, and rare dark-eyed gilia. A total of 6.72 acres of the project site was mapped as dune mat, and an additional 0.34 acres was mapped as higher quality dune mat. Based on the historic anthropogenic disturbance on the site, the 0.34 acres of high-quality dune mat was distinguished from the poor-quality dune mat area because of its location on a berm resembling a natural sand dune and high percentage of native plant cover compared to the degraded dune mat.

The associated biological studies were shared with the Coastal Commission North Coast District Office staff and Energy, Ocean Resources, and Federal Consistency Program staff. A site visit was conducted with the applicant team, GHD, County staff and Coastal Commission staff on March 5, 2021 to assess existing project site conditions and address concerns regarding impacts to Environmentally Sensitive Habitat Areas (ESHA) based on the identified rare plant (Dark-eyed Gilia) and special status plant communities, (dune mat, coastal brambles, and willow thickets) described in the Special Status Plant Survey. Based on the discussions and observations identified during the site visit, on March 9, 2021, a Supplemental Soils and Anthropogenic Disturbance Investigation of Potential ESHA Memo was prepared by GHD to evaluate abiotic conditions and historic disturbance onsite to help inform the County's

determination of potential ESHA and illustrate the anthropogenic disturbance that exists within the project area which overlaps with ESHA. The Memo revealed higher quality dune mat occurs on the southwestern margins of the berm and in the previously graded area near the powerlines where more open sand can be found intermixed with dredge spoils. These areas overlap with dark-eyed gilia. Due to the distinguishing characteristics of anthropogenic modifications and improvements, invasion of non-native plant species and overall degradation of habitat area much of the area was determined not to constitute ESHA. Whereas some of the area exhibiting high-quality dune mat and intact habitat is considered ESHA.

In order to preserve and avoid ESHA the applicant redesigned the building layout, with emphasis on Building 2, to establish a buffer from the high-quality dune mat. The project includes a 35-foot buffer from high quality dune mat to the nearest building (Building 2). An emergency fire lane constructed of permeable paving will be created behind Building 2, which will also act as a buffer from dune mat. Mitigation Measure BIO-6b of the EIR has been established to prevent impacts to ESHA and requires construction fencing on the area adjacent to the ESHA and edge of the proposed fire road to prevent any trampling or disturbance during construction activities.

A Restoration and Monitoring Plan (RMP) was developed by GHD (April 16, 2021) to include mitigation ratios, to address the ESHA determination. The purpose of the RMP is to ensure that sensitive vegetation and species occurring on-site are protected and enhanced where possible, or appropriately compensated with in-kind off-site restoration consistent with the Local Coastal Plan. The plan identified 3.49-acres of on-site dune restoration, protection of remaining dark-eyed gilia and coastal habitats as well as 11.70-acres of compensatory off-site restoration. Off-site restoration is planned in back dune habitats on the North Spit of Humboldt Bay in partnership with Humboldt Bay Harbor District (0.5-acres), Manila Community Services District (1.73-acres), Friends of the Dunes (7.45-acres), and U.S. Fish and Wildlife Service (2.02-acres). Encompassed in the RMP is a Landscaping Plan which illustrates the on-site mitigation which will occur. Adherence to the Landscaping Plan and Restoration and Monitoring Plan is required to compensate for the direct impacts to sensitive and rare plants on-site. This has been added as a Condition of Approval for the project.

Wetlands

A wetland delineation was completed for the Project in the Special Status Plant Survey and Vegetation Community Mapping/ESHA/Wetland Baseline Evaluation, Rev. 1 (GHD). The investigation was conducted during early and late spring after half of the annual rainfall in 2020. The report identified Coastal willow thickets within the project area and are characterized by a strong dominance of dune willow (*Salix hookeriana*) a Facultative-Wetland species, and qualify as one-parameter wetlands. One- and three-parameter wetlands do exist west of Vance Avenue but are outside of the Project Area. Impacts to one-parameter or three-parameter wetlands would not result. The Project is located outside the urban limit. The Humboldt Bay Area Plan establishes a wetland setback of 100 feet to 200 feet for areas outside the urban limit, with the exact buffer dimensions dependent on site-specific characteristics. Delineated wetlands are small and of poor quality; thus, the Project designates an applied buffer of 100 feet. Development within the buffer is allowable provided no more than 25% of the developed surface is effectively impervious, stormwater runoff does not detrimentally affect the wetland, areas of temporary disturbance are restored and promptly replanted, and erosion impacts related to construction are minimized with Best Management Practices (BMPs). East of Vance Avenue, on-site one-parameter wetlands are separated from the Project footprint, with setbacks ranging from approximately 53 feet to 64 feet. Development within the buffer would be predominantly limited to site grading and would not result in extensive new impervious surface. Following construction, graded surfaces would be reseeded and/or replanted as identified in the Landscaping Plan. The Project's stormwater drainage system would route stormwater away from the one-parameter wetlands, avoiding any potential impact related to stormwater. Adherence to the Landscaping Plan and BMPs are required as Conditions of Approval.

Terrestrial Resources

A Terrestrial Biological Resources Report was prepared by GHD (*Appendix C of the EIR*) for the project and identified four special status mammal species, 17 special status bird species, one special status amphibian, five special status fish (further evaluated in the Marine Resources discussion below), and one special status insect may occur at the Project Site or in immediately adjacent habitat within the Project Site Boundary. Of those species identified, the Northern American Porcupine (*Erethizon dorsatum*), has the potential to occur with the site and if present in the project area during construction activities, the species may be injured or trapped in open excavation pits. To mitigate impacts to North American Porcupines, Mitigation Measure BIO-2 of the EIR requires overnight covers for open-trenches, prohibition of dogs on the Project Site, and prohibition of unattended injurious materials, including anticoagulant rodenticides, during construction and operations. These measures are required to be specified on the construction plans for the project and added to the Conditions of Approval.

According to the Terrestrial Biological Resources Report, the project site is host to habitat that may support special status amphibians, Northern Red Legged Frog (*Rana aurora*), via a man-made rectangular pool. Dip-netting samples were taken and observed on-site, and no northern-red legged frog tadpoles were observed. However, if this species is present on-site during construction activities, it may be injured or killed via crushing, entrapment, or burying related to ground disturbance. Therefore, the EIR incorporated Mitigation Measure BIO-4, which requires that prior to ground disturbance within 50-feet of suitable NRLF habitat, a preconstruction survey must be performed by a qualified biologist. If present on-site, the California Department of Fish and Wildlife (CDFW) shall be consulted for to determine avoidance measures. Additionally, an Environmental Awareness Training will be provided to construction workers on the site to be able to identify species. This has been added as a Condition of Approval.

Seventeen special status bird species were identified and evaluated in the Terrestrial Biological Resources Report. Potential Project impacts to special status birds (including migratory birds) during construction and demolition may include visual disturbance, habitat destruction (no trees will be cleared; however, some species may nest on or inside buildings proposed for demolition on-site or be nesting in shrubs near the ground), and noise disturbance. In order to protect special status, migratory, and nesting birds, Mitigation Measure BIO-5 of the EIR would be implemented. This would require ground disturbance to be conducted outside of nesting season (March 15- August 15), however; if this is not possible, a qualified ornithologist shall conduct, at minimum, a one-day pre-construction survey within the 7-day period prior to vegetation removal or ground-disturbing activities. If active nests are detected within the construction footprint or up to 500 feet from construction activities, the ornithologist shall flag a buffer around each nest (assuming property access). A plan showing the buffer shall be submitted to the Planning and Building Department prior to commencement of construction activities. If active nests are detected during the survey, the qualified ornithologist shall monitor all nests at least once per week to determine whether birds are being disturbed. Upon completion of the survey, a memo will be provided to the Planning and Building Department that will describe the methods and results of the survey and any related recommendations. All requirements and recommendations of the ornithologist shall be conditions of this permit and shall be incorporated into the construction plans.

A Bat Habitat Assessment was prepared by Wildlife Research Associates (WRA) on February 4, 2021 to assess the potential for bats to occur within the project site (*Appendix C-2 of the EIR*). The report did not identify any special status bat species present on site, however, there is evidence of bats within three existing structures on-site (pump house, SUB FL. 2, and Filter. Softener Tank Building), all of which contain habitat to support bat species use as day and night roosts. In order to reduce any significant impacts to bats, the EIR outlined Mitigation Measure BIO-3, which requires pre-construction surveys and outlines the phases of demolition should bats be present in the three structures previously occupied during the initial survey conducted by WRA (*See Section 4.4 – Biological Resources of the EIR and BIO-3 of MMRP*). A Condition of Approval would require the applicant to adhere to and implement the Mitigation and Monitoring Plan for the life of the project.

Marine Resources

A Marine Resources Biological Evaluation Report was prepared by GHD on February 1, 2021 to address impacts from the ocean outfall discharge on special status marine species and commercial and recreational species (*Appendix D of the EIR*). Five special status or protected mammal species, one special status bird species, five special status fish, and Essential Fish Habitat may occur in the project site boundary (*See Section 3.3 – Biological Resources of the EIR*). Evaluated special status marine species with moderate or high potential to be present within the project site boundary include California Sea Lion, Stellar Sea Lion, Pacific Harbor Seal, Gray Whale, Humpback Whale, Killer Whale, and Harbor Porpoise. The Marine Resources Biological Evaluation concluded all evaluated special status marine species would have a very low risk of any potential impact resulting from the RMT II outfall discharge, due to their highly mobile foraging behavior along the coast, migratory behaviors, distance from breeding colonies to the diffusers, etc. As described in Section 3.3 of the EIR, any potential impact from the discharged effluent would be less than significant. Impacts to recreational and commercial species were also found to be less than significant.

Biological noise was evaluated in the Hydroacoustic, Noise, and Vibration Assessment (Illingworth and Rodkin 2020, Appendix J of the EIR). Impact analysis included evaluation of noise and vibration resulting from three potential soil densification construction methods, including rammed aggregate piles, vibro displacement columns, and vibro soil densification.

The EIR also evaluated noise and vibrations that would result from installation of sheet piling using a vibratory pile driver and installed to a depth of approximately 30 feet outlined in the noise study. Construction noise and vibration from the Project Site would not propagate to the Pacific Ocean; thus, marine noise-related impacts in the Pacific Ocean would not result. The noise study analyzed impacts to special status fish and found that construction methods would not result in any noise related impacts to special status fish in Humboldt Bay or in the Pacific Ocean. However, due to the proximity of the Humboldt Bay, impaction methods could likely extend as far as 330-feet for all marine mammal species, which could result in Level B injury for behavioral harassment. Level B harassment is defined under the National Marine Mammal Protection Act as “Any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including but not limited to migration, breathing, nursing, breeding, feeding or sheltering” (16 USC 1361-1407). The 330-foot radius is also within the confines of the existing dock, and marine mammals would be unlikely to be present within this zone during construction for long periods. In order to mitigate the potential impacts to marine mammals which could be present in the Level B harassment zone during soil densification construction during Phase 2 build out, Mitigation Measure BIO-5a of the EIR would be incorporated. This requires soil densification to only occur when the tidal surface water elevation is below the 330-foot radius where Level B injury could occur. Final construction plans are required to show the tidal elevation that corresponds with the 330-foot radius shown in Figure 2 of the Project’s Hydroacoustic, Noise, and Vibration Assessment (Illingworth and Rodkin 2020, Appendix J of the EIR). In addition, final construction plans shall also show the explicit portion of the Phase 2 Grow-Out Module required to adhere to soil densification construction during low tide conditions. This has been incorporated into the project as Condition of Approval.

Tsunami Inundation and Sea Level Rise

According to the Humboldt County Web GIS, the Project Site is located within the mapped Tsunami Inundation Area. A Site-Specific Tsunami Hazard Analysis was prepared on October 15, 2020 by Martin and Chock, Inc. The analysis applied the American Society of Civil Engineers (ASCE) Standard, which is a Maximum Considered Tsunami (MCT) with a 2% probability of being exceeded in a 50-year period, the equivalent to a return period of approximately 2,500 years (Martin & Chock 2020). Results indicate tsunami flow depth would be greatest along the north edge of the Project Site, nearest Building 1, with flow depths dissipating toward the south edge of the Project Site. The report also took into account 4.1 feet of sea level rise, derived from the California Coastal Commissions Sea Level Rise Policy Guidance for low risk aversion for the year 2100. The design of Phase 1 will be sited such that it would shield Phase 2, additional grow-out buildings, and infrastructure from the impacts of wave run up action in the event a tsunami. Backup generators would be elevated above the predicted tsunami wave height to avoid

potential for release of pollutants in the event of a tsunami. Diesel fuel storage would be underground in two 25,000-gallon tanks vented, anchored, and armored to prevent release. Additionally, an area within Phase 1 of the project will be designed as the Tsunami Vertical Evacuation Refuge Structure (TVERS) and will be utilized as a tsunami evacuation area for employees and the surrounding vicinity. The TVERS building and tanks would be designed to withstand a 2,500-year event.

Hazardous Materials

As discussed in Section 3.8 – Hazards and Hazardous Materials of the EIR, the Project Site is located on a former pulp mill site that remains an active Brownfield site (Regional Water Quality Control Board case no. 1NHU892), which includes Geotracker Field Points as shown in the EnviroStar and Geotracker online databases. Clean-up of this Brownfield site has occurred since the 1990s, and involved sampling of groundwater, soils, and pulp mill infrastructure. Contaminants of Potential Concern (COPC) identified in site soils are summarized in the Interim Measures Work Plan prepared by SHN (*Appendix G of the EIR*). Primary COPCs remaining at the Project Site are chlorinated hydrocarbons, petroleum hydrocarbons and pH (>8.5 pH units). Planned construction would not extend to areas where soils are impacted by chlorinated hydrocarbons. The area of concern for pH is approximately located in the center of the Project Site and would include portions of Buildings 3 and 4.

To ensure remaining COPCs in soil and groundwater would not detrimentally impact human health or the environment during construction, including demolition, soil excavation, and dewatering, and full compliance with cleanup requirements at the Project Site, interim measures have been developed by SHN and are incorporated into Mitigation Measure HAZ-1 of the EIR. Interim measures included in the plan include documentation of modifications to the existing Monitoring and Reporting Program administered by the NCRWQCB, compliance with the Stormwater Pollution Prevention Plan (SWPPP) program, implement a Sampling and Analysis Plan requiring approval by the NCRWQCB, preparation of a Health and Safety Plan, and a Soil Gas Monitoring Program evaluation as it pertains to the Samoa Solid Waste Disposal Site located west of the Project Site. Interim measures also include recommendations for structure demolition, excavation of soils, dewatering, soil testing, field screening, laboratory testing, quality assurance/quality control, and reporting that will be implemented as part of the Project. Compliance with these measures is required in Condition of Approval for the project.

GHD has performed asbestos, lead and universal waste (UW) characterizations of the remaining pulp mill structures. Reporting for asbestos, lead and UW at the existing pulp mill structures was completed in May 2020 and results are detailed in the Hazardous Materials Survey Report, Rev. 3 dated September 3, 2020. The report will be used in design of a demolition plan and specifications for the existing mill structures slated for removal. Adherence to OSHA regulations and safety protocols would be adhered to and are identified as Mitigation Measures AIR-2 of the EIR and would further protect workers and the environment from asbestos. Additionally, the recommendations identified in the report would be adhered to and are included as a Condition of Approval.

Cultural Resources and Tribal Coordination

A Cultural Resources Investigation Report was conducted by Roscoe and Associates in September 2020. The report evaluated the Samoa Pulp Mill's historical significance for each of the four Evaluation Criteria established by the National Register of Historic Places (36 CFR 60.4) and the California Register of Historic Place and is fully summarized in Section 3.4 of the EIR. Remaining buildings and structures associated with the former pulp mill are deteriorated and unsuitable for adaptive reuse, they do not meet the National Historic Preservation Act (NHPA) Evaluation Criteria for either individually eligible historical resources or as contributors to a historic district. According to the report, all field investigations were negative for evidence of cultural resources. The report concluded that the proposed project will not result in any adverse changes to historical or archaeological resources.

Consistent with the requirements of CEQA and the requirements of Public Resources Code section 21080.3.1, Humboldt County initiated consultation regarding tribal cultural resources pursuant to Assembly Bill (AB) 52 via letter on November 10, 2020, with the Bear River Band of the Rohnerville Rancheria, Blue Lake Rancheria, Cher-Ae Heights Indian Community of the Trinidad Rancheria, and the

Wiyot Tribe. The proposed project is within the ancestral territory of the Wiyot Tribe, though other Tribes were consulted. Although the Project Site is outside of the ancestral territory of the Yurok Tribe, the County held a preliminary consultation meeting with Yurok Tribe representatives on March 2, 2021, and a formal request for consultation was sent via email to the Yurok Tribe on March 3, 2021. A request for consultation was received by the County on November 19, 2020, from Edwin Smith, Vice-Chairperson of the Bear River Rancheria Tribal Council. Following the request for formal AB 52 Consultation with the Bear River Band of the Rohnerville Rancheria, a formal meeting was held on December 9, 2020. No tribal cultural resources were identified, though questions regarding fish species, fish escape measures, and effluent discharge were raised. The County provided a follow-up letter to Vice-Chairperson Smith on February 9, 2021, as a formal response to the requested information and concerns raised in the consultation meeting. No additional comments have been provided to the County.

On November 24, 2020, the County received an email from Janet Eidsness, Tribal Historic Preservation Officer for the Blue Lake Rancheria, declining AB 52 consultation. A subsequent email from Ms. Eidsness received on December 13, 2020 confirmed there are no identified Tribal Cultural Resources on the subject project area. The March 2, 2021 preliminary consultation meeting with the Yurok Tribe raised several concerns that are of importance to the Tribe, including fish species, fish escape measures, effluent discharge, competition with commercial and Tribal fisheries, and aquaculture methods. County staff followed up by sharing the supporting technical studies prepared for the project to address Tribal concerns. The County sent a follow-up letter to Executive Director Donald Barnes of the Yurok Tribe on April 9, 2021 concluding government to government consultation. No tribal cultural resources have been disclosed to the County, and a formal request for consultation has not been received. On March 10, the County held a preliminary consultation meeting with the Wiyot Tribe to answer questions regarding the project. On October 14, 2021, County officials met with Adam Canter, Director of the Wiyot Tribe Natural Resources Department, to continue AB 52 consultation on this project. No new concerns were identified and AB52 consultation was concluded November 12, 2021 with all Tribes.

Due to the fact that ground disturbing activities could result during project construction and implementation of the Restoration and Monitoring Plan, cultural resources could be inadvertently discovered. The EIR identified three Mitigation Measures to ensure protection of cultural resources. Mitigation Measures CR-1, CR-2, and CR-3 would require the applicant to (1) obtain a cultural monitor to be present during ground disturbing activities; (2) implement inadvertent discovery protocols outlined in the Cultural resources Report developed in coordination with the Tribal Historic Preservation Officers for the Bear River Band Rohnerville Rancheria, Blue Lake Rancheria, and Wiyot Tribe; and (3) require adherence to the Standing Operating Procedures including Standard Operating Procedures for Inadvertent Discovery of Native American Remains and Grave Goods. These are required for the life of the project.

Additional Items for consideration:

1. Environmental Benefits

The proposed Project plans to remediate a registered Brownfield site which may pose health risks to the surrounding community/environment. Remediation of the site includes soils remediation and the removal of hazardous material (i.e. asbestos). Existing materials/cement will be reused for grid densification once rid of potential hazardous material. Additionally, mitigation measures include the removal of creosote pilings from the Kramer Dock in Humboldt Bay. Creosote is a known carcinogen and is considered a hazardous material. The removal of these pilings would restore natural channels and ecosystems that benefit a number of species and enhance the surrounding environment.

2. Economic Benefits

Potential economic impacts would extend into numerous areas of the economy, including significant employment gains in the immediate term from construction, increased income generated and spent in the local economy and increased tax revenue directed towards local and state entities. The project proposes 150 local permanent jobs at full scale. At full scale, the project would also provide the Pacific Northwest a direct source of farmed salmon. Having this sourced on the west coast decreases cost of

product and reduces greenhouse gases that would typically result from domestic and international product shipment. Approval of the Project would provide important economic growth not only to the community, but to the region as well.

3. Educational Benefits

NAFC has committed to working with local higher education. NAFC has offered to assist College of the Redwoods with their aquaculture program and has offered to work hand and hand with staff and students from CalPoly Humboldt. The project would also provide a range of jobs suitable for college graduates of CalPoly Humboldt and College of the Redwoods.

Alternative Analysis required by CEQA:

Section 15126.6(a) of the CEQA Guidelines requires an Environmental Impact Report (EIR) to “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.” An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination in addition to the proposed project and must publicly disclose its reasoning for selecting those alternatives. This Chapter of the CEQA Guidelines also describes the purpose of considering alternatives (Section 15126.6[b]) as a way to identify any measures that would mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code (PRC) Section 21002.1).

The CEQA Guidelines further require that the alternatives be compared to the proposed Project's environmental impacts and that a “no project” alternative be considered (Section 15126.6[d] and [e]). CEQA Guidelines Section 15126.6(e)(1) states that the purpose of describing and analyzing the no project alternative is “to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.” The no project analysis is required to “discuss the existing conditions at the time the notice of preparation is published...as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services” (Section 15126.6[e][2]). If the project is a “development project on identifiable property,” the “no project” alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the Project were approved. In certain instances, the no project alternative (Alternative 1) and the off-site alternative (Alternative 2) means “no build” wherein the existing environmental setting is maintained (e.g., legacy industrial infrastructure and remaining contamination from the pulp mill would remain).

A Notice of Preparation (NOP) was circulated for the Project on June 3, 2021, describing the proposed Project. During the scoping period, the County of Humboldt (County) received comments expressing concerns related to energy usage, effluent discharge and related monitoring, transportation and traffic, alternative fish species, and potential biological impacts related to the water intake. Please see Appendix M of the FEIR for a summary of all comments received during the scoping period. Where feasible, Project alternatives and related impact analyses have been explored to offset these concerns. The alternatives to the Project analyzed in this chapter include the No Project Alternative, an Off-Site Alternative, and a Species/Water Supply Alternative. The environmentally superior alternative is described in Section 4.4 of the DEIR.

CEQA

This project is subject to the California Environmental Quality Act (CEQA). CEQA's stated objectives are the following:

1. Disclose to decision makers and the public significant environmental effects of proposed activities;
2. Identify ways to avoid or reduce environmental damage;
3. Prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures;
4. Foster interagency coordination in review of projects; and
5. Enhance public participation in the planning process.

After preliminary review, it was determined that this project was not exempt from CEQA and an Initial Study (IS) was conducted. The purpose of the Initial Study is to decide whether to prepare an EIR or Negative Declaration, and to avoid unnecessary EIR's through mitigation. While the IS prepared for this project relies on expert opinion supported by facts, technical studies, and other substantial evidence, an Initial Study is not intended to nor required to provide the level of detail required in an EIR (CEQA Sec. 15063). After circulation of the Initial Study it was determined that an EIR is required for this project.

On June 3, 2021, the County issued an NOP for the Project. The NOP was issued in accordance with the CEQA Guidelines (Title 14 CCR Section 15082) with the intent of informing agencies and interested parties that an EIR would be prepared for the Project. A copy of the NOP can be found in Appendix M. The NOP was circulated between June 3, 2021 and July 6, 2021. A regulatory agency scoping meeting and public scoping meeting for the Project was held via Zoom on June 10, 2021. Comments provided in response to the NOP and during the scoping meetings have been considered and are also included in Appendix M.

The Draft EIR was circulated for 60 days, from December 20, 2021 to February 18, 2022 to allow interested individuals and public agencies to review and comment on the document. The document will be available for review at Humboldt County Planning and Building Department, Humboldt County Library, Humboldt County Clerk-Recorder, Humboldt Bay Harbor, Recreation, and Conservation District, and Humboldt State University Library. Document files were also be made available upon request at <https://humboldt.gov/3218/Nordic-Aquafarms-Project>. Comments were submitted in writing via the United States Postal Service or via email. Written comments on the Draft EIR were be accepted until 5:00 pm on February 18, 2022.

A total of 243 comments were reviewed as a result of circulation, and staff is still in the process of responding to comments received. Once the EIR has been finalized, the EIR and CDP will be noticed for a hearing for decision where they will be heard together and approved/certified individually with their own respective resolutions.