

McNamara, Cade

From: Gail Kenny <gailkenny@gmail.com>
Sent: Monday, February 14, 2022 8:10 PM
To: CEQAResponses
Subject: Nordic Aquafarms Land-Based Aquaculture Project
Attachments: RRASNordicCommentsFinal.docx; Nordic Aquafarom DEIR comment letter 2-15-22.docx; Nordic Aquafarom DEIR comment letter 2-15-22.pdf

Dear Cade McNamara:

Attached is Redwood Region Audubon Society's comment letter on the Nordic Aquafarms project. One document is a pdf of our current comment letter with our previous two comment letters included. I have also included our first letter dated May 22, 2021 (because it was not included in the DEIR and which we refer to in our 7/3/21 letter which was included in the DEIR) and the current 2/15/22 letter in Microsoft Word format as requested.

Please confirm that you have received this email.

Let me know if you have any questions.

Thank you,

Gail Kenny
President
Redwood Region Audubon Society

REDWOOD REGION AUDUBON SOCIETY

A MEMBER OF THE NATIONAL AUDUBON SOCIETY
P.O. BOX 1054, EUREKA, CALIFORNIA 95502



February 15, 2022

Cade McNamara
County of Humboldt Planning and Building Department, Planning Division
3015 H Street
Eureka, CA 95501

CEQAResponses@co.humboldt.ca.us

RE: Nordic Aquafarms California (NAFC) DEIR Statement on Page 2-47 in Draft
Environmental Impact Review (DEIR) Comments

Dear Cade McNamara:

Redwood Region Audubon Society (RRAS) has reviewed the DEIR with emphasis on the seawater intake in the Humboldt Bay Estuary and the sourcing of fish food. We are concerned that the potential environmental impacts of the proposed seawater intake have not been fully evaluated and that an environmentally preferred ocean intake alternative has not undergone a robust analysis as required by the California Environmental Quality Act (CEQA). We also find that the sourcing of fish food has neither been identified nor its environmental impact evaluated.

RRAS is a public benefit 501(c)(3) non-profit corporation dedicated to environmental protection and conservation, with an emphasis on birds. Ten million gallons per day of estuarian seawater intake and thousands of tons per year of small fish harvested to feed farmed fish have the potential to significantly harm the base food source for billions of sea birds. Although our focus is on birds, we realize that is also the basic food source for commercial fisheries worldwide that catch fish for direct human consumption.

Seawater Intake

RRAS recognizes the Humboldt Bay estuary as an important nursery for vertebrate and invertebrate life that is the beginning of the food chain which supports estuary and open ocean life, including birds and the commercial fishery.

- The NAFC DEIR statement on page 2-47 in §2.4 that the “modernization of saltwater intakes will add features that reduce environmental impacts” is false because the former saltwater intakes have not been in use for at least 14 years. There is currently no environmental impact from the withdrawal of seawater. Assumed relative impacts between a system installed nearly sixty years ago without environmental regulations and a new system proposed under current environmental standards is irrelevant.
- Appendix N is presented as potential mitigation for operation of the NEW saltwater intake structures, pumps, and pipelines proposed. The mitigation measures proposed are not adequate because they only consider specific adverse impacts to a listed species, Longfin Smelt. There is no consideration given to the impingement and entrainment of important

A MEMBER OF THE NATIONAL AUDUBON SOCIETY

commercial marine species including Dungeness Crab and Herring. Herring are an important forage fish for other marine species and for an extensive array of avian species. No consideration is given to the significant adverse environmental impacts the saltwater intake will have on forage resources for avian species. This lack of analysis of significant adverse environmental impacts is not just unfortunate, it is one of several reasons that the DEIR is inadequate.

- The discussion of addressing adverse environmental impacts on Longfin Smelt are based on assumptions that are not supported with data collected on site, or in Humboldt Bay. The DEIR mentions a “planned intake assessment study” but does not provide specifics. The planned assessment study is most likely a consulting contract with Tenera signed by Humboldt Bay Harbor, Recreation, and Conservation District (HBHRCD) on Dec. 15, 2021. The contract states that completion of work is not required until April 30, 2023. This critical information only addresses Longfin Smelt, and it will not be available to quantify impacts until after Humboldt Co. Planning Dept., the public and all interested parties are expected to provide a complete CEQA review of the subject DEIR. The lack of fundamental, site specific natural resource data and analysis makes the DEIR inadequate.
- The DEIR analysis of impacts to the aquatic biomass of Humboldt Bay is skewed because only those organisms large enough to be occluded from entrainment and/or able to swim away from the water intake were included in the evaluation. For example, the first instar of Dungeness Crab larvae is smaller than 1 mm and move with the current. In addition to sub-millimeter zooplankton, the DEIR fails to analyze the effects on phytoplankton.
- The DEIR states that due to strong tidal current, the impact of the seawater intake would not have a significant negative effect due to entrainment or impingement. During slack tides there is either no or minimal current for several hours per day. The DEIR must provide a full analysis of tidal flow at the proposed intake and mitigation if this option is to be pursued.
- The “planned intake assessment study” is a \$414,000 contract between HBHRCD and Tenera. However, results will not be available until early 2023. The failure to fully analyze the impacts of the shallow water intake from the Humboldt Bay estuary makes the DEIR inadequate.
- Appendix R is an August 6, 2021, letter from SHN engineering to HBHRCD. When describing design criteria, the letter cites a National Marine Fisheries Service (NMFS) 1997 document: “Fish Screening Criteria for Anadromous Salmonids (NMFS).” In the SHN letter there is clear guidance from the NMFS summary in item B. Structure Placement, subpart b. that “Where possible intakes should be located offshore to minimize fish contact with the facility.” Humboldt County Planning Dept. and NAFC should consider avoiding most, if not all Humboldt Bay entrainment and impingement issues by locating the saltwater intake offshore as recommended by the NMFS 1997 guidelines cited by SHN. The project description anticipates discharging 12 MGD of effluent water 1.5 miles offshore. Placing an intake structure offshore should be just as important as location of the discharge of polluted effluent water.

This DEIR is inadequate due to the absence of a full and robust analysis of providing necessary saltwater from an intake structure located offshore.

Piecemealing of Project

In several places the NAFC project DEIR indicate that they are relying on the HBHRCD to obtain permitting and provide saltwater intake facilities for the subject project. This is not an appropriate approach since the HBHRCD has not been able to permit the 10 MGD saltwater

intake system prior to release of the DEIR. Additionally, this approach is attempting to “piecemeal” the required saltwater intake as a separate project for the purpose of CEQA. This is a violation of CEQA and creates the “catch 22” situation described above of seeking public review prior to completion of an essential environmental analysis. Lastly, the HBHRCD has limited financial means to cover the costs of fully permitting and installing the conceptual design for the saltwater intake structures. In fact, without the funding and full participation of NAFC in covering the installation costs of the new saltwater intake, it will not be constructed. Based on the design criteria that the HBHRCD has used of a 10 MGD capacity in seeking consulting contracts to begin data collection on potential environmental impacts, and the fact that 10 MGD is also stated as the demand for saltwater supply after full development by Nordic, there is only one possible end user of the saltwater developed. Therefore, there are two projects being discussed, one by HBHRCD and one by NAFC. There is only one project for the purpose of CEQA, and the DEIR has not provided a full or complete analysis of the environmental effects of NAFC’s use of 10 MGD of saltwater taken from Humboldt Bay. For this reason, the DEIR is inadequate.

Project Scheduling Conflict

Discussion in Section 2.1.6 reflects a construction schedule that appears to conflict with the fact that HBHRCD has not obtained any permits for Saltwater Intake structures. In fact, the required studies necessary for potential submission of permit application(s) have not been completed and completion is not expected for 1 to 2 years. It is possible that the HBHRCD submission of permit application(s) may not be possible until 2023 due to contract work having only recently been authorized. This creates a schedule where the DEIR indicates in Section 2.1.1 that the Harbor District would commence construction required for saltwater intakes before permits could possibly be issued. This is a substantial error based on an unreasonable speculation about the construction schedule. More importantly, the public is being asked to review this fish production facility project BEFORE the site-specific study or studies necessary to determine the anticipated environmental impacts are available. HBHRCD signed a contract agreement with the consulting firm Tenera on Dec. 15, 2021, to obtain data that has been requested by CA Coastal Commission staff before they (CA Coastal Comm.) will consider accepting a Coastal Development Permit (CDP) application as complete.

Since the CA Coastal Comm. CDP process may not be initiated before a detailed analysis of saltwater intake structures is performed, it is unreasonable to expect that the subject DEIR can be reviewed and approved by the public or public agencies in advance of data collection necessary for an informed decision.

The clear potential for conflicts in construction schedules provided in the DEIR is also a concern in Section 3.13.6. In a discussion of “utilities” a statement that seawater drawn from Humboldt Bay would be supplied by the Harbor District, via sea chest intakes...” assumes that permits which have not been submitted as applications, will assuredly be obtained. There is no way to be assured that the CA Coastal Commission, or other regulatory agencies will agree to the large (10 MGD) diversions of saltwater sought.

The confusion created by the conflict in several timelines stated in Section 2.1.6 for demolition work and permitting for the saltwater intake cause concern and reflect an inadequate DEIR.

Fish Food Sourcing

On page 2-28 of the Project Description NAFC states “NAFC will require that our feed supplier have a program of traceability for determining the origin of ingredients used in the feed. This is especially true with responsible sourcing of fish meal, fish oil, and soy ingredients.”

Following the above statement two paragraphs describe, in general terms, how certification bodies and initiatives like the Marine Stewardship Council (MSC), Aquaculture Stewardship Council (ASC), International Fishmeal and Fish Oil Responsible Supply (IFFORS), and Fisheries Improvement Projects (FIP) set standards for responsible harvesting, processing, and sourcing of marine derived raw materials. These fishing industry membership organizations provide voluntary certification of various aspects of the fishing and fish farming industry. Although their sustainability certifications set standards, such certification for environmental review purposes needs to be verified.

- A revised DEIR should include a separate section that fully analyzes the potential negative impacts to the marine environment and how they will be avoided or mitigated.
- The revised DEIR should include specific details on how third-party certification organization standards will be incorporated onto the permit to operate.

Based on the above stated points, Redwood Region Audubon Society finds that the current DEIR is not compliant with CEQA and that a Revised DEIR must be written to provide adequate information for public review.

Sincerely,



Gail Kenny
President
Redwood Region Audubon Society

Attached: RRAS comment letters dated May 22, 2021, and July 3, 2021

Copy: Audubon California, Anna Weinstein

REDWOOD REGION AUDUBON SOCIETY

P.O. BOX 1054, EUREKA, CALIFORNIA 95502

May 21, 2021



Humboldt County Planning and Building Dept.
3015 H St.
Eureka, CA 95501

ATTN: Alyssa Suarez, Planner, "Submitted by email" to planningclerk@co.humboldt.ca.us

RE: Nordic Aquafarms Permits

Dear Mr. John Ford, Director, Humboldt Co. Planning Dept., and Planning Commissioners:

The following comments are submitted in review of the proposed Mitigated Negative Declaration (MND) (finding of no significant adverse environmental effect) for Nordic Aquafarms California, LLC (Nordic) Coastal Development Permit and Special Permit Project, Samoa area; Record number PLN-2020-16698 (filed 10/5/2020); Assessor Parcel Number 401-112-021.

Redwood Region Audubon Society (RRAS), a member of the National Audubon Society, is a 501(c) (3) public benefit corporation of about 500 members. We promote wise, balanced, responsible, and ethical use of natural systems on a local, national, and global scale, protecting the biotic and abiotic components of local, national, and global natural systems, with an emphasis on birds.

RRAS is opposed to the Nordic aquaculture project as described in the Initial Study (IS) and believe that the Mitigated Negative Declaration (MND) is inadequate. The IS and MND fail to meet the California Environmental Quality Act (CEQA) required level of documentation to "demonstrate with substantial evidence that, after incorporating mitigation measures, a proposed project will clearly not cause any significant effect on the environment." The IS fails to analyze numerous aspects of the project that could lead to significant impacts that would need to be mitigated. There is no analysis on impacts to recreational or commercial fishing. Humboldt Bay is an important nursery for economically valuable marine species, and the potential adverse impacts to avian species from fish larvae reduction caused by saltwater diversion pumping have not been addressed in the IS.

In 2021 Western Hemisphere Shorebird Reserve Network (WHSRN) announced Humboldt Bay Complex as its Outstanding WHSRN Site winner based on habitat restoration activities, monitoring projects, and outreach. The Humboldt Bay Complex serves as a model of what being a WHSRN sites should stand for. In 1998 Humboldt Bay Complex was recognized as a Site of International Importance; in 2018, the site was upgraded to Hemispheric Importance. Based on percentage of total population and numbers, Humboldt Bay is a key site for populations of western sandpipers, Alaska population of marbled godwits, and long-billed curlews. Annually

over 500,000 shorebirds pass through Humboldt Bay including most of the Alaska population of marbled godwits.

Not only is Humboldt Bay important for providing food directly to shorebirds and brant, but it is also a nursery for smaller fish that migrate to offshore waters and are an important source of food for sea birds such as common murre and marbled murrelet. Forage fish populations are currently declining in offshore waters along the Pacific Coast due to ocean warming and other factors, making it more important to assure that seabird food sources, such as Humboldt Bay, retain their productivity.

The MND finding of “no significant impact” is unfounded.

One of our members requested access to the “Draft Final Report” by Tenera to determine potential adverse environmental impacts and was informed by Adam Wagschal, HBHRCD staff, that it was not ready for public release prior to the May 24, 2021 comment deadline. The Initial Study and proposed MND are inadequate and should not be approved by the Humboldt County Planning Commission. The IS and MND are inadequate on several issues related to Water Intake Measures in Section 2.9 of the IS. The approach used in Section 2.9 that improving the two “Sea Chests” and increasing intake volume to 10 million gallons per day is a separate project being conducted independently by the Humboldt Bay Harbor, Recreation and Conservation Dist. (HBHRCD) is disingenuous and attempting to “piecemeal” an essential component part of the Nordic fish farm project. Suggesting that 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 intake screen that protect juvenile fish, meeting the standards for impingement” may not be correct. HBHRCD has not submitted a permit application as of 5-1-2021. Only recently were contractors hired to begin collecting resource data that would be necessary to apply for a permit.

After reviewing the IS, and contacting Humboldt County Planner A. Suarez, and Nordic Aquafarm representatives, we have been unable to determine how much saltwater the proposed Nordic fish farm will use on a routine basis. Reasonable deductions can be made from the description of discharge water composition in Section 2.10. The IS does not provide adequate detail in Section 2.9 Water Intake Measures.

The following statement in Section 2.9 could confuse readers; a description of “existing sea chests (water intake structures)” may cause people to think that these structures are currently in use. The statement that the HBHRCD is in the process of Permitting upgrades ... that “reduce environmental impacts,” including saltwater intake fish screens is not accurate, because there are no diversions of saltwater currently occurring. All indications are that the Sea Chests have been inoperable for years. New diversions would increase environmental effects, *not* reduce adverse impacts.

There is a concern that the separation of the saltwater intake to be used by Nordic into a separate project from the Nordic aquaculture project is a “piecemeal” approach that the CA Environmental Quality Act (CEQA) does not allow. Even if the approach that improving the sea chests is a separate project under CEQA were acceptable, it is essential that Humboldt Co. Planning staff and the public have an opportunity to review the fish screen design criteria and evaluate the adverse environmental impacts from fish kill due to a significant new saltwater

intake diversion from Humboldt Bay. The IS states that “juvenile fish” impingement standards will be met. Without access to the fish screen design criteria the public cannot evaluate the potentially significant adverse environmental effects that will occur from entrainment.

The IS Section 2.10 Water Discharge Measures indicates. “Total water volume discharged at full operational capacity is estimated at a maximum of 12.5 million gallons per day. The discharge water will be comprised of 10 MGD seawater sourced from Humboldt Bay and 2.5 MGD freshwater sourced from Humboldt Bay Municipal Water District Mad River pumping station and river intake.”

The hypothetical HBHRCD saltwater diversion proposal is only large enough to meet the demands of one customer, if Nordic is given 10 MGD. This deduction would then conflict with statements made in section 2.9 that “upgrading the sea chests is to support growth of the aquaculture industry on Samoa Peninsula by Nordic Aquafarms and other entities.” For this reason, increased saltwater intake capacity at the sea chest sites and Nordic’s fish factory are *not* two projects. The expanded Humboldt Bay saltwater intake is a component part of the Nordic project proposal. There are no other “customers” at this time for the volume of water being proposed. Additionally, HBHRCD has not demonstrated the financial means to build a high quality (state of the art) fish screen without funding from Nordic Aquafarms. This is one project for the purpose of CEQA.

Cumulative impacts analysis does not address the saltwater intake improvements or the HBHRCD Samoa Terminal proposal to service the wind energy (which are NEW projects) on land adjacent to the Nordic lease.

There is another key topic completely missing from the IS/MND analysis: information on the type and quantity of food for the fish. This is the most important indirect impact of the project from our point of view, given that farmed salmonids are typically sustained by wild fishmeal and oil that is sourced from smaller “forage fish” which are key to seabird survival. In the same way that songbirds rely on insects, seabirds — including puffins, auklets, and murre — depend on oily, protein-rich forage fish to keep their chicks healthy and growing (<https://abcbirds.org/blog/saving-a-third-for-seabirds/>).

Fish food constitutes the vast majority of the fish farm industry’s overhead, and so far, the only commercially viable form is fish meal. About 70% of fishmeal and oil is produced from small, open-ocean fish such as anchovies, herring, menhaden, capelin, anchovy, pilchard, sardines, and mackerel (<https://www.fisheries.noaa.gov/insight/feeds-aquaculture>). Indeed, about 25% of all fish caught globally at sea are used to feed farmed fish. Researchers have identified some more sustainable potential food sources—including seaweed, cassava waste, fly larvae, single-cell proteins produced by fungi and bacteria—but none are being produced affordably at scale. (<https://www.newyorker.com/magazine/2021/03/08/fish-farming-is-feeding-the-globe-whats-the-cost-for-locals>).

RRAS surmises that fish utilized by Nordic may well be sourced from British Columbia because that coast already has a thriving Atlantic Salmon farming industry. The Pacific herring fishery has been deemed unsustainable and herring along Canada’s west coast is expected to “teeter on the edge of complete collapse” unless fishing is reduced. (<https://www.theguardian.com/environment/2021/apr/03/canada-herring-collapsing-moratorium-commercial-fishing>).

A DEIR is also required to provide the proposed project's food source and its potential cumulative impacts on North Pacific marine life. Nordic's Atlantic Salmon may well be consuming fish meal and oil sourced from the North Pacific, depleting food for numerous seabirds, marine mammals and coveted wild fish like Pacific salmon, cod, or tuna in the greater coastal region.

We believe that the IS study must be withdrawn, and a Draft Environmental Impact Report (DEIR) is required to meet CEQA requirements. The potential adverse effects of increasing saltwater diversions at two Humboldt Bay Harbor, Recreation, Conservation District's (HBHRCD) "Sea chests" up to a maximum of 10 million gallons per day (MGD) has not been analyzed by either the IS for Nordic or a permit proposal for HBHRCD.

A robust alternatives analysis is lacking in the IS and would be more appropriately conducted in a DEIR after the fish screen design is selected by HBHRCD and funding is committed to implement construction.

In Conclusion, we respectfully ask that the Humboldt Planning Commission refuse to approve any project based on the subject IS and MND. A more appropriate action is to require the preparation of a draft EIR.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gail Kenny", written over a faint circular stamp.

Gail Kenny, President
Redwood Region Audubon Society

Copies:
Audubon California, ATTN: Anna Weinstein

REDWOOD REGION AUDUBON SOCIETY

P.O. BOX 1054, EUREKA, CALIFORNIA 95502

July 3, 2021



Humboldt Co. Planning & Building Dept.
3015 H St.
Eureka, CA 95501
Attn: Alyssa Suarez, Planner II
Sent via email to asuarez@co.humboldt.ca.us

Re: Nordic Aquafarms Notice of Preparation

Dear Ms. Suarez:

Redwood Region Audubon Society is pleased to respond to the notice of preparation of an Environmental Impact Report (EIR). We submitted a letter of comment dated May 22, 2021, addressing the Initial Study (IS) and would like to suggest that all of the issues raised previously are still appropriate for consideration in the Nordic EIR.

We are especially concerned with the source and specific contents of the feed to be used by Nordic Aquafarms. Please refer to our Initial Study comments.

Additionally, we believe that there should be serious consideration given to alternative sources possible to provide the water necessary for the project. Humboldt Bay is a significant nursery for marine organisms and provides unique migratory bird habitats (again please refer to our IS comment letter). The EIR alternatives analysis should look for methods to replace the 10 million gallon per day (MGD) from Humboldt Bay with the Pacific Ocean, or other sources of water. Entrainment of important marine food sources may be less likely when deeper water sources are evaluated.

Lastly, cumulative impacts to the shallow waters and wetlands of Humboldt Bay must be fully considered. There are both current proposals for additional new projects on the Samoa peninsula, and recent oyster culture projects which may have cumulatively significant adverse impacts on birds and marine resources that depend on the globally significant resources currently available in Humboldt Bay.

Thank you for the opportunity to provide these comments.

Sincerely,

Gail Kenny, President
Redwood Region Audubon Society

