



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, Samoa Peninsula Land-based Aquaculture Project Initial Study/Mitigated Negative Declaration (IS/MND) Record number PLN-2020-16698 (filed 10/5/2020); Assessor Parcel Number 401-112-021.

Ha'wa'lou (greetings) Humboldt County Planning Department,

We hope this comment letter finds you and your staff and families well. This letter is to convey comments and concerns about the Samoa Peninsula Land-based Aquaculture Project proposed by Nordic Aquafarms (NAF) California, LLC on the *Twahya't* (Samoa) Peninsula. The Wiyot hope that these comments will be addressed and assist with ensuring the project does not lead to significant environmental impacts, which presently has not been fully evaluated or mitigated within the IS/MND as components of the project are still being developed, including the wastewater treatment system, seawater intake, identification and source of the fish feed, or approval from the California Department of Fish and Wildlife (CDFW) to farm Atlantic salmon. Impacts and mitigation measures specific to Atlantic salmon escape at Humboldt Bay should have been analyzed during the CEQA process, which is a concern to the Tribe.

The Wiyot Tribe and the Wiyot Natural Resources Department (WNRD) have long been stewards of the lands and waters of the *Wigi* (Humboldt Bay). Wiyot ancestral territory is part of the great salmon nation of the Pacific Northwest. Since western contact, tribal peoples have been persecuted and their sacred animal, plant, earth, wind, and water resources stolen for profit, which many times was a way to the means of pushing ancestral peoples off their lands through the elimination of subsistence food sources. Learning from the lessons of the past and carrying the Tribe's caretaking role forward, we must be assured that our salmon and other tribal cultural and natural resources are not being put into excess jeopardy through cumulative impacts from development projects and that outside investors are genuinely engaging to benefit the local and global communities, rather than exploiting them.

Need for Environmental Impact Report (EIR)

Salmon are one of the most sacred beings to the Wiyot. The WNRD acknowledge that the crash of native stocks is exacerbated by global climate change, unsustainable and clear-cut logging practices, and overfishing. In one project alternative, that was not evaluated during this CEQA process, because a full Environmental Impact Report (EIR) was not completed, is the effect that NAF could have on local stocks and fisheries, which could be either beneficial through alleviating pressure on wild stocks, or harmful

through the potential introduction of toxins, pathogens, antibiotics, and disease through the effluent and runoff, or genetic co-mingling as a result of a potential escape, which still occurs at land-based facilities (see Fore & Thorvaldsen 2021). There are also potential impacts to forage fish at the intake and potentially through fish feed production, which has not yet been identified. The project risks for such significant environmental impacts were not adequately evaluated in the IS/MND and thus do not 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.” This is a pertinent assurance that the community should be able to assess and comment on when reviewing the project, and underscores the need for an EIR, considering the potential for significant environmental impacts at scale, while also acknowledging and weighing the need for sustainable food products and expansion of the blue economy.

The NAF project, if permitted and built, would be the largest aquaculture facility in California, and with that in mind, we can easily conclude that it should be important to fully evaluate potential significant environmental impacts from the project through examining alternatives and taking into account the vast knowledge of our local tribal, fisheries, environmental, and academic communities, which are fully engaged on the North Coast, with much overlap between stakeholder groups and interdisciplinary perspectives that could benefit the NAF project. By not completing a full EIR, this critical community input and vesting has not been fully developed, yet is essential in making the project as environmentally and community friendly as possible to be successful and ethically ecologically sound to comply with CEQA.

Two of the primary components to a functioning RAS on the *Twahya't* (Samoa) peninsula are the abilities to take in seawater from the *Wigi*, at 10 MGD, and fresh water from the *Baduwa't* (Mad) River at 2-3 MGD. This is a significant volume of water which would all need to be treated for contaminants and pathogens. The IS/MND does not provide enough information about these two major components of the project, which will be permitted through different agencies, and thus not under the purview of the document nor does it allow for proper review. For instance, the NPDES and waste discharge requirements will be permitted by the North Coast Regional Water Board, with comments due June 4, one day after the MND will be voted on at the Planning Commission. The intake pipe, components, and mitigations relative to impacts it may have on aquatic bay species will be permitted by the California Coastal Commission at some future date, limiting the ability to assess the intake during this primary project permitting phase, assess alternative design options, consider cumulative impacts, or process public comments and concerns. To our knowledge there has been no attempt by the Regional Water Board to consult with tribes in accordance with the 2019 State Water Board Tribal Consultation Policy. Neither the County nor the Regional Water Board has provided enough time for tribes to coordinate consultation on impacts to ocean resources.

The MND fails to analyze potential risks from high concentrations of reduced inorganic nitrogen (NHX) and oxidized inorganic nitrogen (NOX) that pose a potential risk to the receiving coastal waters in terms of increased ecosystem productivity (e.g. higher phytoplankton levels). Instead, the MND states the effluent discharge would be compliant with established water quality thresholds in the Ocean Plan and the Thermal Plan and regulated under the NPDES program. By doing this analysis at a later time when the public and tribes do not have enough time to fully analyze the impacts of such nutrient buildup and higher phytoplankton levels the Project violates CEQAs prohibition against piecemealing.

In the discharge permit application, which is inappropriately not included in the IS/MND, it notes that “it is uncertain whether the discharge from the Facility will exhibit reasonable potential to cause or contribute to an exceedance of the water quality objectives in the Ocean Plan for ammonia. Therefore, this Order requires the Permittee to conduct monthly effluent monitoring for total ammonia nitrogen (as N) to collect sufficient data for conducting an RPA prior to the next permit renewal.” This minimal amount of monitoring is unacceptable to identify issues before negative impacts could potentially occur, and the Tribe would request the installation of continuous monitoring equipment at the outfall to ensure water quality. It is also unclear how often the permit renewal would be required. Related to these concerns, in the projects Mixing Zone Modeling Report (Dilution study), page 8, it notes that “it is clear that the key effluent water quality parameters of concern from the Nordic facility are the high concentrations of reduced inorganic nitrogen (NHX) and oxidized inorganic nitrogen (NOX) that pose a potential risk to the receiving coastal waters in terms of increased ecosystem productivity (e.g. higher phytoplankton levels)”. NAF predicts that the future NOX loads could be as high as 729 kg/day and that the wastewater system, which is not yet designed, will perform at a 90% reduction of nitrogen discharge. This would leave 10%, or in this case 73 kg/day that would be released into the ocean, with no adequate analysis of potential significant environmental effect or mitigations listed. Such concerns and a lack of reference sites and facilities to compare with the proposed NAF project are concerning to the Wiyot, who do not want the *Wigi* to be employed as a “guinea pig”.

One reason that land based recirculating aquaculture is not as common and studied as other systems is the amount of energy required to run such facilities can make them cost prohibitive. While solar renewable sources are planned to be employed by NAF, this would only produce a fraction of the facilities required energy (3-5%) and the facility could be an additional burden on the Pacific Gas and Electric plant at King Salmon, where in the event of a Public Safety Power Shutdown (PSPS) due to potential future wildfire risk, backup diesel or natural gas power would be required. For example, the capacity of the PG&E plant is 163MW, while the NAF facility will require 20MW, or roughly 12% of the current Humboldt Bay plant capacity. This is significant and not mitigated by the IS/MND.

Another contribution to greenhouse gas (GHG) emissions will be the projected 95 trucks/week in distribution. While NAF states that Humboldt is centrally located on the west coast, making it an ideal distribution hub, our roads are treacherous and it is not uncommon that winter storms and/or construction to close off access to and from the coast, particularly at the ever failing “last chance grade” on U.S. Highway 101, increasing storage energy costs and decreasing market value, which was not assessed.

Several Wiyot cultural as well as special status species have the potential to be affected by the NAF project, including but not limited to *ba'm* (green sturgeon), *gou'daw* (Pacific lamprey), migrating Coho salmon, Chinook salmon, and steelhead. The project area is specifically within designated critical habitat of the green sturgeon, and a site-specific evaluation is needed to properly evaluate the water quality impacts of this project on that and other species.

These analyses need to be completed before they can be relied upon in other permitting processes—especially here, where the NPDES permit is prematurely relied upon to evaluate impacts.

The Wiyot also support the use of native plants and Wiyot cultural plants for revegetation associated with the project and the preservation and restoration of high-quality dune mat and coastal bramble natural communities.

In addition to the concerns mentioned, the Wiyot are concerned about lack of preparation and/or mitigations in the chance of fish escape, increased water consumption from the Mad River during a time of catastrophic drought and climate change, increased traffic on a fragile peninsula and impacts to recreation, lack of information regarding the source and supply of the fish feed, and cumulative impacts to marine resources in general.

The Wiyot do recognize potential environmental benefits from the cleanup of the former pulp mill site and the job creation that would be associated with such a project. Yet, these benefits must be weighed against the potential for un-mitigable environmental impacts, which have not been fully evaluated during this IS/MND. The Wiyot cannot fully support this project until it complies with CEQA through the completion of an adequate and full EIR so that all impacts are evaluated cumulatively and in association with one another, and until there is a commitment to more thorough and regular monitoring for impacts, such as those potentially associated with the effluent at the outfall, fish escape, and the cultural and environmental justice concerns that many tribal peoples feel and associate with farmed fish. This could be partly mitigated through the creation of a tribal fisheries scholarship and/or an endowment to be focused on salmonid conservation work in support of tribes on the North Coast.

The Wiyot want to thank you for allowing us to comment on this significant local development project in hopes that we can all work together to collectively make the best-informed decisions for the *Wigi* and our greater community of life. We ask that you help further this effort by completing a more thorough and complete EIR. Thanks for your attention and consideration to the Tribe's concerns.

Rra'dutwas (with kindness),



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