Pacific Fishery Management Council

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Marc Gorelnik, Chair | Charles A. Tracy, Executive Director

December 21, 2020

Kristy Beard
NOAA's Aquaculture Program
1315 East-West Highway, 12th Floor
Silver Spring, MD, 20910

Re: Docket No: NOAA-NMFS-2020-0118

Dear Ms. Beard:

The Pacific Fishery Management Council (Council) submits the following comments in response to the National Oceanic and Atmospheric Administration's (NOAA) request for information on the identification of the first of two Aquaculture Opportunity Areas (AOAs), on other areas NOAA may consider for future AOAs off the West Coast, and on aquaculture facility siting within West Coast AOAs. The first West Coast AOA is located off Southern California south of Point Conception.

The Council is charged with sustainably managing West Coast fisheries and the habitats upon which they depend. The Council is one of eight Regional Fishery Management Councils established by the Magnuson-Stevens Fishery Conservation Management Act of 1976 (MSA) and recommends management actions for the Federal fisheries off Washington, Oregon, and California. The Council is required to achieve optimum yield for public trust fishery resources. Optimizing the yield of our nation's fisheries requires safeguarding these resources, their habitats, and the fishing communities that rely on their harvest.

Essential Fish Habitat

The MSA defines essential fish habitat (EFH) as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The MSA includes provisions to identify, conserve, and enhance EFH for species managed under the Council's fishery management plans, and authorizes the Council to comment on any Federal or state activity that may affect the habitat, including EFH, of a fishery resource under its authority.

The Council is concerned about actions that may have negative consequences for the EFH of Council-managed species. The study areas within the Southern California AOA overlap with areas designated as EFH for Pacific Coast groundfish, coastal pelagic species, and highly migratory species. Future West Coast AOAs may also affect salmon EFH, depending on their location.

In January 2020, the Council and the National Marine Fisheries Service (NMFS) implemented revisions to groundfish EFH Conservation Areas and Rockfish Conservation Areas (RCAs), which are areas closed to bottom trawling to minimize impacts to important benthic habitat features. The Southern California Bight EFH Conservation Area prohibits bottom-contact trawl gear in order to protect habitat in this Federally managed area. Other actions the Council has taken to protect EFH, which may be relevant to current and future AOA processes, may be found on our website (www.pcouncil.org).

Special habitat types and geologic features of high biological significance or sensitivity found within EFH are designated as "habitat areas of particular concern" (HAPCs). Rocky reefs, estuaries, canopy kelp, seagrass, and a number of unique geological structures such as seamounts and canyons are designated as HAPCs for Council-managed groundfish species because of their high resource value. HAPCs should be avoided for placement of current and future West Coast AOAs.

Adopt a precautionary approach to ensure fish habitat and ecosystem health are protected for current and future West Coast AOAs

The Council is also concerned that large-scale expansion of the aquaculture industry (particularly finfish aquaculture) may be unsuitable for the West Coast in the context of an unprecedented and rapidly changing marine ecosystem. The California Current Ecosystem is at the forefront of the global climate change crisis. For over a decade, this region has been dealing with the impacts of ocean acidification and hypoxia (OAH). Toxic algal blooms and marine heatwaves are becoming common phenomena across much of the region.

The Council urges NOAA to adopt a precautionary approach to studying and implementing AOAs, which means excluding areas that contain ecologically sensitive resources, establishing buffer zones, using siting and design criteria to avoid impacts on HAPCs and EFH Conservation Areas, and ensuring that activities associated with establishing and maintaining aquaculture structures and operations (such as use of biocides) are done with a thorough consideration of ecosystem health and resilience.

The Council is particularly concerned about the short-and long-term impacts of finfish and shellfish cultivation on habitat and commercial and recreational fisheries. Apart from concerns related to the introduction of structures in EFH areas, the Council is concerned about impacts to water quality, such as eutrophication, associated algal blooms, and hypoxia. Accumulation of nutrients, wastes, or excess feed can deplete oxygen, creating hypoxic conditions for species in the water column and within sediments, especially in low-current environments.

Scientists have stressed the need for protective measures to reduce the risk of exacerbating OAH. For example, the EPA now prohibits vessel discharges of offshore seafood processing waste in Federal waters less than 100 m deep off Oregon and Washington because of its potential to exacerbate hypoxia. Large-scale commercial finfish mariculture would also contribute oxygen-consuming organics to the system with the same potential to exacerbate hypoxia.

Aquaculture operations may impact the abundance and community structure of commercially important wild populations through interbreeding, competition, and disease and parasite

transmission due to escapement from and proximity to aquaculture facilities. Physical barriers or structures can limit access by resident fauna to feeding grounds or migration routes. Such structures can act as fish aggregating devices, and antifouling treatments used on permanent structures can impact commercially important species and their prey.

To reiterate, NOAA should thoroughly investigate the most recent ocean-climate information and conduct studies on the biochemical oxygen demand of organic waste streams associated with large-scale commercial mariculture operations before establishing AOAs or considering approval of facility sites on the West Coast.

Displacement of Fishing Activity and Council Management Processes

The Council expects that the use of some or all fishing gear would be limited in at least parts of AOAs for safety and liability reasons. The socioeconomic impacts of these exclusions to Council-managed fisheries and other parts of the human environment may be significant. Spatial data for many fisheries is lacking, making it difficult to estimate the economic impact these projects would have on the fishing industry. Impacts of aquaculture operations could result in a reduction in total fishing effort and lost productivity (with associated economic impacts), or displacement of fishing effort to areas outside the closed areas. Displaced fishers may concentrate their efforts outside the aquaculture farm boundary, resulting in increased pressure on fish and habitat in those areas, as well as increased competition among vessels and fishery sectors.

The direct and indirect impacts of aquaculture operations to commercial fisheries and living marine resources should be considered in the marine spatial analyses and compatibility evaluation used to identify AOAs, as well as during permitting, construction, maintenance, cultivation, decommissioning, and removal of aquaculture facilities.

Acquisition and appropriate use of fishing effort data is an important part of the analysis. In particular, fishing effort assumptions must account for expected changes to management frameworks. For example, the trawl RCA on the West Coast was in place from 2004 to January 1, 2020. The removal of this area means that fishing effort will be different than it has been in recent years. As such, making assumptions about recent fishing patterns could lead to flawed analyses and inappropriate siting decisions.

It will be important for analysts to have access to, and to use, fishing effort data that reflects times when the RCAs were open to fishing. The Council, stakeholders, and fishery analysts need to be consulted on how these assessments are developed, what data is used, and what assumptions are made early in the process to ensure the accuracy and relevancy of impact assessments of proposed aquaculture sites.

Future AOAs and Council Consultation

NOAA is requesting public input on what areas should be considered for future AOAs and will use the information received from this Request for Information to help determine where to focus efforts for future AOAs.

The Council appreciates the outreach of the NOAA Aquaculture Staff to the Council and Council staff and we look forward to ongoing coordination in the AOA process and any future proposed aquaculture operations on the West Coast.

Please note that the Council's meeting schedule does not necessarily align with public comment periods of other public processes. We appreciate your consideration of our comments if issues should arise outside the public comment window.

The Council looks forward to assisting NOAA's Aquaculture Program in reviewing its National Environmental Policy Act document as it pertains to fishing activities on the West Coast, as well as in finding options for aquaculture planning and operations that avoid and minimize impacts to important ecological and fisheries resources while allowing responsible development of this industry.

Sincerely,

Charles A. Tracy
Executive Director

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Cc: Council Members
Danielle Blacklock, NMFS Director of Aquaculture
Diane Windham, NMFS Southwest Regional Aquaculture Coordinator
Habitat Committee
Staff Officers
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