



## Pacific Fishery Management Council

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Dorothy M. Lowman, Chair | Donald O. McIsaac, Executive Director

July 14, 2015

Mr. Jack Crider  
Executive Director  
Humboldt Bay Harbor, Recreation, and Conservation District  
P.O. Box 1030  
Eureka, CA 95502-1030

Re: Comment on Humboldt Bay Harbor District Mariculture Project and Coast Seafoods Expansion Project

Dear Mr. Crider:

The Pacific Fishery Management Council (Council) wishes to provide comments and recommendations on the proposed Humboldt Bay Harbor District Mariculture Pre-Permitting Project (Harbor District Mariculture Project) and the Coast Seafoods Expansion Project. We recognize that while the Humboldt Bay Harbor Recreation and Conservation District is the lead agency on both of these projects, the projects are separate and on different timelines.

The Coast Seafoods Expansion Project, which is still in the planning and analysis stage, proposes to re-permit an additional 622 acres of intertidal culture area. The project would culture the same species that Coast Seafoods currently cultures, using current methods, and would result in a total of 910 acres cultured by Coast Seafoods. We understand that the Coast Seafoods Expansion Project would use clutch-on-longlines spaced five feet apart and one foot above the bay bottom, as well as basket-on-longlines spaced five feet apart with a 20-foot row between each three lines.

As you know, the draft State Environmental Impact Report (DEIR) for the Harbor District Mariculture Project is currently being finalized. This project would create 54 new culture rafts to grow different varieties of oysters and clams on 527 acres, using three intertidal culture methods and three subtidal culture methods. Approximately 21 acres of culture would be established in subtidal areas using rafts.

The Council's meeting schedule did not enable us to provide comments during the official comment period for the DEIR for the Harbor District Mariculture Project. We understand Coast Seafoods will be preparing a DEIR for the Expansion Project, with additional public comment opportunities in the near future. We encourage you to address our concerns related to both proposed projects.

The Council was established by the Magnuson-Stevens Fishery Conservation and Management Act of 1976 (MSA), and has jurisdiction over more than 119 fish species in Federal waters off Washington, Oregon, and California. The MSA charges the Council (and National Marine Fisheries Service [NMFS]) to protect the habitat these fish depend on during all stages of their life cycle, and includes provisions to identify, conserve, and enhance essential fish habitat (EFH) for those managed species.

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The MSA requires Federal agencies (in this case, the Army Corps of Engineers) to consult with NMFS on all proposed actions that may adversely affect EFH (MSA §305(b)(2)). The Council is also authorized under the MSA to comment on and make recommendations to Federal agencies regarding EFH protection. Furthermore, for activities that the Council believes are likely to substantially affect the habitat of the salmon fishery, the Council is obligated to provide comments and recommendations (MSA §305(b)(3)).

The estuarine habitats of Humboldt Bay are EFH for Council-managed species of salmon, groundfish, and coastal pelagic stocks. EFH includes habitats important for spawning, rearing, and feeding. Additionally, estuaries and eelgrass are designated as habitat areas of particular concern (HAPCs) for salmon and groundfish; this special designation within EFH includes habitats that are sensitive, rare, or vulnerable, and that may require additional protection. The HAPC designation requires greater scrutiny of actions that may damage these sensitive habitats.

The Council is concerned about the effects of these projects individually, and cumulatively, on EFH. In particular, we are concerned about the projects' impact on Pacific herring, an important prey species of salmon and groundfish. According to California Sea Grant, Humboldt Bay contains about 5600 acres of eelgrass, estimated to be approximately 50 percent of the state's total eelgrass. Humboldt Bay is also the third largest spawning site for Pacific herring in California, and eelgrass is the preferred substrate for spawning.

Currently, there are about 400 acres of shellfish mariculture in North Humboldt Bay. The two proposals include the continuance of 296 acres of existing mariculture by Coast Seafoods, and the cumulative expansion of aquaculture into an additional 1,149 acres of intertidal habitat, of which 952 acres are eelgrass. The proposals encompass approximately 17 percent of eelgrass in Humboldt Bay, including the most important Pacific herring spawning location in the bay, the East Bay Management Area. We are concerned that the cumulative impacts of both projects' proposed longline, rack and bag, and other culture methods on eelgrass habitat and its ecological role in the estuarine ecosystem might not be fully analyzed relative to potentially damaging effects prior to final decision-making.

Earlier research conducted in Humboldt Bay and other west coast estuaries has demonstrated that some commercial shellfish mariculture activities may result in decreased spatial cover and densities of eelgrass. The different types of mariculture growing techniques and oyster cultivation densities contribute to variability in the levels of physical and ecological disturbance to eelgrass beds and the soft-sediment estuarine habitats.

The Council agrees with and does not intend to duplicate the extensive comments that both California Department of Fish and Wildlife and NMFS provided concerning gaps in the project description and analyses in the DEIR and draft Initial Study for the Pre-Permitting Project and Expansion Project, respectively. However, we are particularly concerned that the proposed projects do not clearly demonstrate how they will strive to avoid adverse impacts on eelgrass, as is the first obligation of any permit applicant, according to both State and Federal eelgrass policies. Without avoiding damage to the greatest degree possible, there will be unnecessary impacts on EFH and, in particular, the eelgrass HAPC.

NMFS' California Eelgrass Mitigation Policy recommends no net loss of eelgrass habitat functions in California (November 7, 2014, 79 FR 66360). The Council's Pacific Coast Salmon Fishery Management Plan specifically recommends that new or expanded aquaculture farms implement 25-30

foot buffers from existing native eelgrass beds to avoid and minimize impacts to eelgrass (Appendix A, Pacific Coast Salmon Fishery Management Plan 2014:61). The Council recommends implementing the recommendations in the NMFS Eelgrass Mitigation Policy as well as the Council's salmon fishery management plan to avoid unnecessary impacts to EFH.

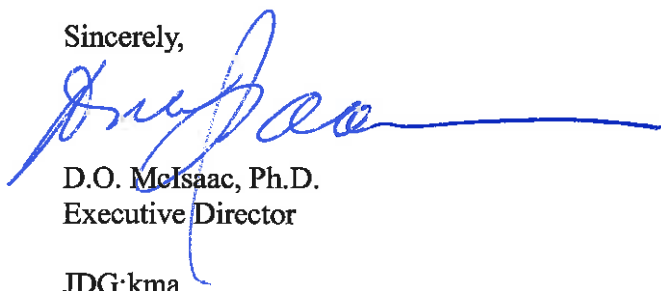
Shellfish habitat functions are not functionally equivalent to that of eelgrass habitat. The role of eelgrass in the food chain, including serving as spawning substrate for Pacific herring, is not replicated by cultured oysters. Shellfish do not provide the same function as eelgrass in exporting biomass into the estuarine food chain and in sequestering carbon into sediments. Shellfish filter plankton and organic matter from the water column and do not incorporate nutrients in the same way or to the same extent as eelgrass. The Council is concerned about the cumulative extent of water filtering by the mariculture operations and the loss of ecosystem services provided by eelgrass to the food web that supports our managed fishes, and thus asks that you ensure a full analysis of this issue in each DEIR.

Additionally, the impacts on managed fish from sedimentation changes under culture operations have not yet been analyzed; nor have disturbances caused by oyster culture operations (e.g., propeller wash, trampling, human disturbance) in the DEIR or draft Initial Study of the Harbor District Mariculture Project. This analysis should be included in both DEIR documents.

In summary, we ask that you ensure that these DEIRs include sufficient information and analysis that not only describes and quantifies the various potential impacts to estuarine resources, but provides mitigation measures to restore the loss of those essential habitats.

Thank you for considering these comments during further development of the Coast Seafoods Project and Harbor District Mariculture Project. We look forward to reviewing any new or pertinent studies or project modifications that would address project impacts on the EFH of Council-managed species (salmon, groundfish, and coastal pelagic species), and invite you (as the project California Environmental Quality Act lead for both projects, and as the applicant for the Harbor District Mariculture Project) to address our Habitat Committee at its September meeting in Sacramento, California, to discuss the measures you are taking to protect EFH. We plan to extend the same invitation to Coast Seafoods. We encourage you to contact Ms. Jennifer Gilden ([Jennifer.gilden@noaa.gov](mailto:Jennifer.gilden@noaa.gov)) to arrange a presentation at the meeting.

Sincerely,



D.O. McIsaac, Ph.D.  
Executive Director

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Cc: Council Members  
Habitat Committee Members  
Mr. Robert Smith, Coast Seafoods Project