



MEMORANDUM

TO: California Ocean Protection Council
FROM: Valerie Termini, OPC Project Manager and Randy Lovell, DFW Aquaculture Coordinator
DATE: November 21, 2013
RE: Update Aquaculture Programmatic Environmental Impact Report (PEIR)
ATTACHMENTS: 1) [2006 Staff Recommendation](#)
2) [2010 Staff recommendation](#)

The OPC funded a Draft Programmatic Environmental Impact Report (PEIR) that assesses management policies for the statewide expansion of marine aquaculture, which is planned to be circulated for public review and comment for 45 days, beginning at the California Department of Fish and Game Commission (Commission) meeting, December 11-12, 2013. The goal of this document is to update the OPC about the general findings of the PIER, the timing for public comment after it is presented to the Commission and next steps associated with the possible adoption of a policy on marine aquaculture that includes certain species of fin fish. The Department will present a draft policy alternative to the Commission that could be then taken up by the Marine Resources Committee (MRC) of the Commission for further development. Once a policy is adopted, the Commission can then consider whether and to what degree it would like to undertake development of a suite of regulations designed to implement a program consistent with that adopted policy.

Though further environmental, economic and feasibility analysis would be required to develop regulations for the implementation of an effective and environmentally rigorous marine aquaculture program, it is clear from the Draft PEIR that steps could be taken at the project-level by regulators and managers to ensure possible impacts are mitigated or avoided in a manner consistent with the State's coastal policies. Further, this analysis and subsequent analyses that would be necessary to regulate the activity itself could, if properly coordinated, allow other permitting entities to work collaboratively with the Commission and the Department to design environmentally rigorous projects as well as mitigation and monitoring measures early in the approval process so that inconsistent permitting obligations by multiple entities are not the norm. In short, a theme of collaboration and early consultation has emerged relative to the consideration and adoption of best management practices for aquaculture which could, if properly implemented, lead to efficiencies for potential aquaculture farmers across the state. With this in mind, the Department hopes that the public will provide thoughtful and detailed comments both on the substance activity as well as procedural mechanisms for ensuring effective collaboration that will allow it to better inform and craft a policy recommendation for the Commission.

Background

Aquaculture is a growing industry throughout the world. As such, over 90% of seafood consumed in the United States is imported and more than half of that is produced on aquaculture farms (NOAA 2012, FAO 2012). It is estimated that Californians spent \$2 billion on imported seafood in 2011 (NMFS 2012). The annual U.S. demand for seafood is expected to increase as population grows and people become more aware of the health benefits of increased seafood consumption. This additional seafood will likely come from farms as harvest from global capture fisheries has leveled off over the last decade. With a 2012 population of 38 million, a conservative estimate of Californian's annual seafood consumption is 570 million pounds. For example, in Humboldt Bay, the shellfish industry in California has found that for every five new productive acres of shellfish culture added, one job is created.

The California Department of Fish and Wildlife (Department) and the California Fish and Game Commission (Commission) are the trustee agencies and the principal state government entities responsible for the management, protection, and conservation of the state's fish and wildlife resources held in trust for the people of California. As part of that responsibility, the Commission (and many other state and federal agencies) have the authority to regulate certain aspects of marine aquaculture on state lands or in state waters, and is able to rely upon the Department for management and implementation.

SB 201 (Simitian, 2005)

In 2005, SB 201 (Simitian) directed the Department to work with the Commission to provide guidance and structure for California's emerging finfish aquaculture industry. SB 201 directed the development of a PEIR for the consideration of such an undertaking. While the Commission has promulgated regulations on aquaculture practices in a piecemeal fashion, it does not presently have a marine finfish aquaculture program that would allow it to consider the capacity for individual regions to bear this activity in a holistic manner, nor has it achieved synchrony with other permitting entities to prevent duplication of environmental and other review requirements necessary for permit or lease approval. To produce seafood locally, efficiently, and avoiding bureaucratic frustration, regulatory changes must be considered and ultimately adopted by the Commission, while also maintaining environmental stewardship.

The PEIR shall serve as a framework for managing marine finfish aquaculture in an environmentally sustainable manner that adequately considers a range of environmental considerations, such as:

- (1) Appropriate areas for siting marine finfish aquaculture operations to avoid adverse impacts, and minimize any unavoidable impacts, on user groups, public trust values, and the marine environment.
- (2) The effects on sensitive ocean and coastal habitats.
- (3) The effects on marine ecosystems, commercial and recreational fishing, and other important ocean uses.
- (4) The effects on other plant and animal species, especially species protected or recovering under state and federal law.
- (5) The effects of the use of chemical and biological products and pollutants and nutrient wastes on human health and the marine environment.
- (6) The effects of interactions with marine mammals and birds.
- (7) The cumulative effects of a number of similar finfish aquaculture projects on the ability of the marine environment to support ecologically significant flora and fauna.
- (8) The effects of feed, fish meal, and fish oil on marine ecosystems.
- (9) The effects of escaped fish on wild fish stocks and the marine environment.
- (10) The design of facilities and farming practices so as to avoid adverse environmental impacts, and to minimize any unavoidable impacts.

Thus, the objectives the Department has outlined as to collaboration and management must be consistent with or otherwise further these statutory mandates. In considering these objectives and mandates, the Department hopes to provide the Commission with a framework upon which it can begin to scope for possible regulatory solutions, perhaps at a regional or local scale and relative to specific species that are under consideration for possible projects. Accordingly, the Department seeks further information and input that might better ensure mitigation, education, training, and facilitation of best practices for farmers and their employees so that a model of thoughtful, but efficient stewardship can become a successful reality.

The Ocean Protection Council staff further commit to using this PEIR as a tool for managing conflict and collaboration between various stakeholder groups interested in aquaculture expansion and development along the State's coast. This could include, for example, navigating potential conflicts as between commercial and recreational fisheries, bringing science to bear on possible environmental impacts associated with the cumulative activities in a region particularly suited for farming, and increased collaboration between state and federal government agencies responsible for permitting.