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March 11, 2022

California Fish and Game Commission
Marine Resources Committee

P.O. Box 944209
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Via Electronic Delivery: fgc@fgc.ca.gov

**Re: FGC MRC Agenda Item 10: Aquaculture leasing in California
– public interest determination**

Dear President Murray and Commissioner Sklar,

The Environmental Action Committee of West Marin (EAC) is based in Point Reyes Station and has been working to protect the unique lands, waters, and biodiversity of West Marin since 1971. Since our inception, we have been committed to the health of West Marin’s estuaries, bays, and watersheds including our strong focus on Tomales Bay. Tomales Bay is not only a RAMSAR site (wetland of international importance)¹, but is also recognized for protection by the California Bays and Estuaries Policy. Long-term data sets exist for water quality, waterbird and shorebirds, and harbor seals for Tomales Bay. The Bay must be carefully managed for competing interests from the tourism/recreational, aquaculture, and agricultural industries.

As part of our Healthy Tomales Bay campaign, we take an active role in monitoring state and local aquaculture, as well as supporting sustainable aquaculture and working with local growers in Tomales Bay when possible.

¹ Ramsar Sites and the List of Wetlands of International Importance. <https://rsis Ramsar.org/ris/1215>

We also advocated for the finalization of the 2021 *Guiding Principles for Sustainable Marine Aquaculture in California* (statewide Aquaculture Principles)² to inform a coordinated statewide approach to operations and intertidal leasing, and we serve as an alternate on the Ocean Protection Council (OPC) statewide aquaculture action plan listening group³ to support natural resource protection. We have consistently advocated for a consistent statewide approach to aquaculture.

We submit these comments on Agenda Item 10: *Aquaculture leasing in California – public interest determination* on behalf of our approximately 1,200 members. We thank the Fish and Game Commission and Marine Resources Committee specifically for prioritizing the discussion of the public interest criteria determination for new aquaculture lease applications on the March agenda. We understand that California and the aquaculture industry has a growing interest in expanding aquaculture. However, it is our position that no new leases should be issued until the public interest criteria are clearly defined through a transparent public process.

It is important that the effort to develop criteria continues the statewide work to take a coordinated approach including the Fish and Wildlife Department's Aquaculture Information Report (AIR)⁴, the California Coastal Commission's Coastal Development Permit Guidance⁵ required under California Senate Bill 262⁶, the statewide Aquaculture Principles⁷, and OPC's pending aquaculture action plan, which is supported by OPC's strategic plan⁸. The State Lands Commission's regulatory authority and use of the Public Trust Doctrine⁹ may also provide useful guidance for the development of public interest criteria. The Public Trust Doctrine holds that navigable waterways must be held in trust by the State for the people of California to engage in water-oriented activities. It is also in the public's interest to use science-based criteria to review new leases.

² California Ocean Protection Council: Guiding Principles for Sustainable Marine Aquaculture in California. https://www.opc.ca.gov/webmaster/_media_library/2021/06/Aquaculture-Principles-Public-20210604.pdf

³ Conservation Aquaculture Research Team. <http://www.cart-sci.org/our-approach.html>

⁴ Fish and Wildlife Department's Aquaculture Information Report. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=187229&inline>

⁵ California Coastal Commission, CDP Application Guidance (CDP Guidance), December 2020. https://documents.coastal.ca.gov/assets/cdp/CDP%20Application%20Guidance_12.08.20.pdf

⁶ SB-262 Marine resources: commercial fishing and aquaculture: regulation of operations. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB262

⁷ California Ocean Protection Council: Guiding Principles for Sustainable Marine Aquaculture in California. https://www.opc.ca.gov/webmaster/_media_library/2021/06/Aquaculture-Principles-Public-20210604.pdf

⁸ Ocean Protection Council Strategic Plan. https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20200226/OPC-2020-2025-Strategic-Plan-FINAL-20200228.pdf (see Objective 4.2)

⁹ California State Lands Commission: Public Engagement. <https://www.slc.ca.gov/public-engagement/>

Regarding the development of public interest criteria, it is important that this process is transparent and open to a variety of stakeholders. Of course, the criteria will also need to be somewhat broad in order to apply to different types of statewide leases. We provide some suggestions below for potential criteria to be considered as part of this process. As our perspective is primarily focused on Tomales Bay, many of our suggestions may pertain more to that region of California, which provides a significant portion (approximately a fifth) of California's aquaculture production. Aquaculture is broadly defined in the state of California to include kelp and inland operations¹⁰, so the criteria must also take this into consideration.

Criteria Considerations

- Impacts to vessel and boat navigation routes.
- Impacts to existing commercial and recreational fisheries.
- Research shows that coastal wetlands, like Tomales Bay, are crucial for reducing destruction from storm surges, strong winds and flooding, exacerbated by climate change. They can protect property and lower the amount of destruction. Tomales Bay acts as a natural barrier or levee for the nearby communities. As our climate changes and sea levels rise, we have an increasing need for areas where wetlands can migrate upland.
- Eelgrass is an essential fish habitat and is protected under the California Eelgrass Mitigation Policy.¹¹ Eelgrass and other aquatic eco-systems operate as an important carbon sink that will help us combat climate change and increased levels of carbon dioxide in the atmosphere.
- Coastal wetlands are a valuable place for students and residents to learn about biodiversity, biology, native species, history, and more, providing educational benefits.
- The tourism blue economy makes up a significant portion of California's recreational and tourism GDP. Coastal recreation alone is estimated to support \$26.5 billion in GDP to California and employ over 440,000 people.¹² At least half of all Californians visit the coast each year, and the vast majority undertake non-consumptive activities like bird watching, tidepooling, beach walking, and swimming.¹³

¹⁰ California Public Resources Code Section 828.

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC§ionNum=828

¹¹ California Eelgrass Mitigation Policy. 2014. https://media.fisheries.noaa.gov/dam-migration/cemp_oct_2014_final.pdf

¹² NOEP, Ocean Economy, California, Tourism and Recreation.

<https://www.oceaneconomics.org/Market/ocean/oceanEconResults.asp?IC=N&dataSource=E&selState=6&selCounty=06000&selYears=All&selSector=6&selIndust=TO00&selValue=All&selOut=display&noepID=unknown>

¹³ Charles Colgan and Philip King, Coastal Recreation in California: Beyond the Beach, Center for the Blue Economy: Middlebury Institute of International Studies at Monterey, November 2021.

https://www.middlebury.edu/institute/sites/www.middlebury.edu.institute/files/2021-12/California%20Recreation%20Report%20v8-final%20for%20web.pdf?fv=fv_okNTH

- Many coastal wetlands in California, like Tomales Bay, are pupping areas for harbor seals and other marine mammals. Harbor seals have long inhabited Tomales Bay, but in the 1990s were scared away by too much human activity. In the past decade or so their population has slowly started to come back, and we need to ensure that that trend continues. For their population health, it is important that the seals can raise their young without disturbance.
- Tomales Bay and our state's other estuaries also provide habitat to many avian species, providing recreational bird watching activities. Many shorebird species are in significant decline. Shorebird populations have declined by 66 percent in Tomales Bay since 1989¹⁴, specifically Dunlin and Western Sandpipers have been impacted by aquaculture development (such as equipment installed in intertidal areas that creates disturbance). Expansion into additional intertidal areas may also reduce foraging opportunities for great egrets¹⁵ across the range of tidal cycles.
- Regarding economic considerations, the viability of an aquaculture project is important to consider before any lease can be granted. What species will be grown and for what purpose? Are they native? Will they pose invasive risks? Will this project be contributing to equitable food production or just a niche food for a limited group of people? Will the business take good care of its employees and enact appropriate safety measures? Is there community support for the proposal?
- It is also important to consider the purpose of the project, e.g. is it multi-trophic or restorative in any way or is it for purely economic purposes?
- The State must also consider water quality protection. There needs to be a marine debris plan and a water quality monitoring plan in place for proposed operations.

These are examples of considerations related to the development of state aquaculture public interest criteria, and this is by no means a complete list. It may not be possible related to a review of public interest criteria, but the cumulative impacts of the operations in a specific bay or region is also a relevant consideration.

Although, not the focus of these comments, the recently updated application by San Andreas Shellfish¹⁶ provides an opportunity to review potential public interest criteria. The proposed lease area will affect

¹⁴ *Declining wintering shorebird populations at a temperate estuary in California: A 30-year perspective*, Vol. 123, American Ornithological Society, February 10, 2021.

https://egret.org/sites/default/files/declining_wintering_shorebird_populations.pdf

¹⁵ *Great egret (Ardea alba) habitat selection and foraging behavior in a temperate estuary: Comparing natural wetlands to areas with shellfish aquaculture.*

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0261963>

¹⁶ See Staff Summary for December 15-16, 2021. Item 28.

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=195909&inline>

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eelgrass beds, birds, and seals in sensitive habitat. To reiterate, it is EAC's position that no new leases should be issued before the public interest criteria are clearly defined.

Thank you for your consideration of our comments and your attention to this important natural resource consideration. We look forward to participating in a discussion on this topic on March 24th.

Sincerely,



Morgan Patton
Executive Director



Ashley Eagle-Gibbs, Esq.
Legal and Policy Director