

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON WATER, PARKS, AND WILDLIFE

Diane Papan, Chair

AB 3220 (Papan) – As Amended March 21, 2024

**SUBJECT:** Marine resources: Department of Fish and Wildlife: authority: mariculture

**SUMMARY:** Defines mariculture and requires the Department of Fish and Wildlife (DFW) to consider and, if appropriate, investigate whether and how to seek state verification authority from the United States Army Corps Engineers (USACE) and other federal agencies. Specifically, **this bill:**

- 1) Defines “mariculture,” for the purpose of this bill, to mean that form of agriculture devoted to the propagation, cultivation, maintenance, and harvesting of aquatic plants and animals in marine water. “Mariculture” does not include species of fin fish and species of ornamental marine plants and animals not utilized for human consumption or bait purposes that are maintained in closed systems for personal, pet industry, or hobby purposes.
- 2) Requires DFW to consider and, if appropriate, investigate whether and how to seek state verification authority from the USACE and any other appropriate federal agencies that offer state verification authority in order to streamline the review and approval of federal permits issued by the USACE or another federal agency that may be required by a mariculture project that intends to operate within the state.
- 3) Makes findings and declarations regarding shellfish and seaweed aquaculture.

**EXISTING LAW:**

- 1) Establishes DFW to oversee the conservation, protection, and management of fish, wildlife, native plants, and habitats necessary for biologically sustainable populations of the state’s diverse fish, wildlife, and plant species [Fish and Game Code (FGC) § 1802].
- 2) Defines “aquaculture” as the form of agriculture devoted to the propagation, cultivation, maintenance, and harvesting of aquatic plants and animals in marine, brackish, and fresh water; and specifies that aquaculture does not include species of ornamental marine or freshwater plants and animals not utilized for human consumption or bait purposes that are maintained in closed systems for personal, pet industry, or hobby purposes (FGC § 17).
- 3) Defines the role of the aquaculture coordinator within DFW (FGC § 15100).
- 4) Provides a framework for regulation of aquaculture operations in California, including regulations for broodstock acquisition, leasing of state water bottoms, disease control, and importation of shellfish and finfish (FGC §§ 15300, 15400, 15500, and 15600, respectively)

**FISCAL EFFECT:** Unknown. This bill is keyed fiscal.

**COMMENTS:**

- 1) **Purpose of this bill.** This bill defines “mariculture” and requires DFW to consider pursuing new mariculture permitting authorities from federal agencies, including USACE. According

to the author, “[This] is a simple bill that requests that the [DFW] to consider seeking state verification authority from the [USACE]. Three other states have sought this verification authority with permitting efficiencies realized by the implementation of this practice. Mariculture can significantly benefit the ocean ecosystem if done right, by improving water temperature, acidity, carbon sequestration, and more. Yet, the demand for environmentally beneficial shellfish and seaweed projects far outpace the regulatory permitting processes that are currently in place. [This bill] takes a critical first step in this direction by requesting the state [DFW] investigate means by which it can streamline the federal permit process of the [USACE] and other federal agencies whose approval is necessary to operate a restorative ocean farming project in California.”

- 2) **Background.** DFW and the Fish and Game Commission (Commission) are the principal state government entities responsible for the management, protection, and conservation of the state’s fish and wildlife resources. As part of that responsibility, the Commission has the authority to regulate certain aspects of commercial marine aquaculture on state lands or in state waters, while DFW has management responsibility. Commercial aquaculture in California is relatively modest in scale, but supports many different species, raised for many diverse purposes, and are cultured using a variety of techniques. So far, none of the species can be considered commodity products; each of them fit into fairly small-volume, high-value niche markets. A total of 5,740 acres of California public tidelands are leased for marine aquaculture, the majority in Humboldt and Tomales Bays, according to the 2020 report *The Status of Commercial Marine Aquaculture in California*.

*Aquaculture Action Plan.* The Ocean Protection Council (OPC) is tasked with coordinating the activities of ocean-related state agencies to improve the effectiveness of state efforts to protect ocean resources. The OPC is currently developing a statewide Aquaculture Action Plan (Action Plan) that will create a comprehensive, consistent, and science-based framework and policy for marine aquaculture in California. The Action Plan will focus on marine algae and shellfish in state marine waters and land-based/recirculating tank operations for marine algae, shellfish, and finfish, and was expected to be completed in 2023, but is still pending. The Action Plan is centered around three principal goals outlined in the *Guiding Principles for Sustainable Marine Aquaculture*: (1) develop and utilize best available science; (2) ensure aquaculture sustainability; and (3) build governance and management partnerships.

*Definitions.* Mariculture is not yet defined in statute, although the word does appear in both Public Resources Code § 30705 and § 28004. The definition proposed by this bill aligns closely with the current definition of aquaculture (FCG § 17) except it is limited to marine environments and specifically does not include finfish. Finfish aquaculture will be considered in the Action Plan, although finfish aquaculture is not currently permitted in California. While the Commission is authorized to issue leases for finfish aquaculture, the law prescribes that the Commission may not do so until it considers how it will address specific concerns, identified in statute, within a new regulatory framework using the analysis of a programmatic environmental impact report (FGC § 15400). The definition of mariculture only applies to this section so it will not impact other law.

*Permitting process for aquaculture projects.* Permitting an aquaculture project involves multiple state, federal, and local agencies and can take several years and involve significant costs (from tens of thousands of dollars to hundreds of thousands dollars) to an applicant (see

Figure 1 for a representation of the permitting process). The state currently maintains a Permit Guide to Aquaculture in California website that contains information on the various agencies and permits required. Key oversight agencies include DFW, the Commission, the Coastal Commission, Department of Public Health and State Lands Commission (SLC). The Commission (with DFW support) is lead for a state water bottom lease. DFW is also lead for an aquaculture registration, an importation permit (if applicable), and a wild broodstock collection permit (if applicable). The Coastal Commission is lead for a Coastal Development Permit, the regulatory mechanism to ensure proposed developments in the coastal zone are brought into compliance with the Coastal Act including the protection of marine resources and environmentally sensitive habitat areas. SLC is the primary state agency responsible for leasing of state waters; however, when it comes to aquaculture projects the Commission and DFW are lead on state water bottom and water column leases. SLC’s role is to certify that the area proposed for aquaculture is unencumbered or the ownership is properly described.

### Aquaculture Permitting Process in California Waters

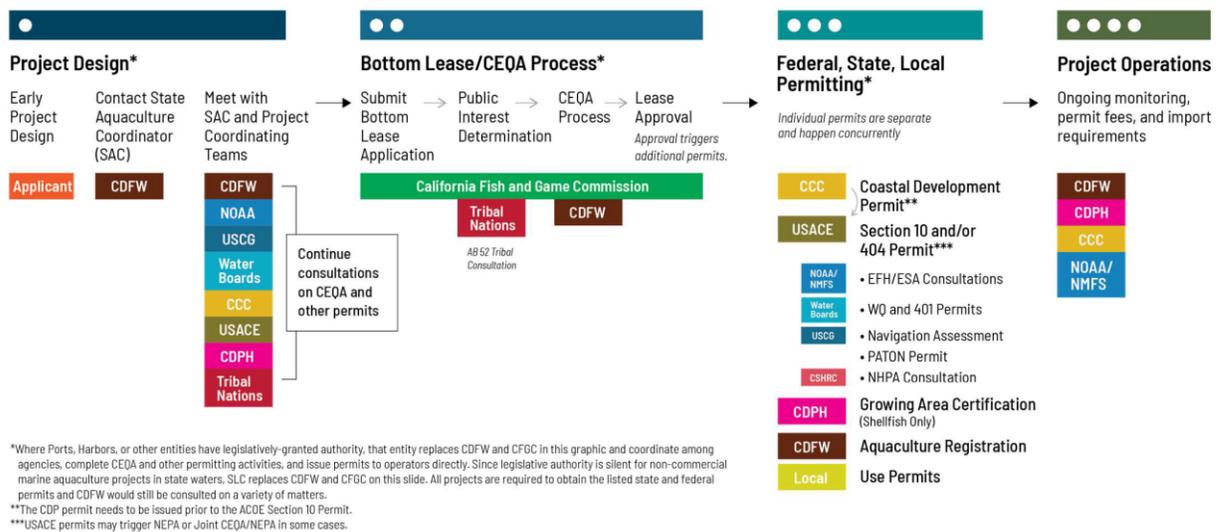


Figure 1– Flow chart of the permitting process in California Waters. From the *California Aquaculture* report by CEA consulting (October 2022)

*Report to National Marine Fisheries Service (NMFS).* A 2018 report to NMFS entitled “Evaluation of U.S. Shellfish Aquaculture Permitting Systems: Recommendations to Improve Permitting Efficiencies and Industry Development” (2018 Report) provided 15 recommendations based on a review of the permitting processes in all coastal states on the continental United States. Some of these recommendations include: #1—improve coordination between state and federal permitting agencies; #2—delegate federal authority; #4—provide adequate staffing; #5—develop a centralized permitting website; #7—develop siting tools; #8—improve permitting efficiencies where local agencies have permitting authority; and, #12—“establish expedited permitting programs for small-scale ‘experimental’ shellfish aquaculture operations.”

This bill requires DFW to consider pursuing recommendation #2—delegate federal authority. Specifically, this recommendation suggests ‘verification authority’ be delegated from federal to state authority. This delegation is regarding USACE’s Nation Wide Permits (NWP). NWPs are general permits issued on a nation-wide basis to streamline the authorization of

activities that will result in no more than minimal individual and cumulative adverse effects on the aquatic environment. ‘Verification’ is the term used instead of ‘permit’ for NWP’s. There are two relevant NWP’s for the purpose of this bill: NWP 55 for seaweed mariculture activity and NWP 48 for commercial shellfish mariculture activities.

NWP may also cover additional permits granted by USACE including Clean Water Act Section 404 and Rivers and Harbors Act Section 10 certifications. Clean Water Act 404 certifications are required for any project that disturbs or adds material to the ocean floor and Rivers and Harbors Act Section 10 certifications are required to protect navigation for commerce. The terms and conditions of these certifications are incorporated into a NWP verification by becoming a Special Condition of those permits.

The 2018 Report suggests that state verification authority would increase permitting efficiencies and reduce burden on the federal government. So far, this recommendation has only been implemented by three states: Florida, New Hampshire, and Virginia.

- 3) **Arguments in support.** Several organizations write in support promoting the role of bivalve and kelp aquaculture for mitigating the impacts of climate changes such as reducing excess nitrogen and carbon dioxide in the ocean as well as reduce methane emissions from beef cattle when certain types of seaweed are incorporated into feed. They write that this bill is “a critical first step in [... streamlining] the federal permit process.”
- 4) **Related legislation.** SB 500 (McGuire), Chapter 876, Statutes of 2023, extend the operation of the increased registration, renewal, surcharge, and penalty fees for aquaculture permits until January 1, 2025.

AB 303 (R. Rivas) of 2021 would have established an alternative regulatory process from 2024 to 2036 for mariculture projects (a sub-type of aquaculture that involves the cultivation of marine saltwater organisms) cultivating specified species of oyster, mussel, clam, and kelp within five 200-hectare tracts designated by the DFW. AB 303 was referred to, but never set for hearing in, the Assembly Natural Resources Committee.

SB 262 (McGuire), Chapter 472, Statutes of 2019, among other provisions, requires the Coastal Commission to develop guidance for applicants for coastal development permits for shellfish, seaweed, and other low-trophic mariculture production and restoration.

SB 809 (Senate Committee on Natural Resources and Water), Statutes of 2017, Chapter 521, among other provisions, extends the increased aquaculture registration, renewal, surcharge, and penalty fees until January 1, 2023, and requires a report from the DFW by February 1, 2022.

AJR 43 (Chesbro), Res. Chapter 123, Statutes of 2014, states that the Legislature supports ensuring a clean and healthy marine environment to protect existing shellfish beds and access to additional acreage for shellfish farming and restoration, and further supports a dialogue between industry, environmental, and federal and state agency leaders to develop an improved permitting process that is efficient and economical for both shellfish restoration and commercial farming.

AB 1886 (Chesbro), Chapter 301 Statutes of 2012, increases the regulatory fees for

aquaculture facilities and expands the duties of the aquaculture program coordinator position within the DFW.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

Altasea (Sponsor)

Altaseads Conservancy

California Aquaculture Association

Holdfast Aquaculture, LLC

Pacific 6 Enterprises

**Opposition**

None on file

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