

Date of Hearing: January 10, 2022

**ASSEMBLY COMMITTEE ON NATURAL RESOURCES**

Luz Rivas, Chair

AB 303 (Robert Rivas) – As Amended January 3, 2022

**SUBJECT:** Aquaculture: mariculture production and restoration: pilot program

**SUMMARY:** Establishes an alternative regulatory process from 2024 to 2036 for “mariculture” projects cultivating specified species of oyster, mussel, clam and kelp within five 200-hectare tracts designated by the Department of Fish and Wildlife (DFW).

**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.
- 2) 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. The Fish and Game Commission (FGC) may lease state water bottoms or the water column to any person for aquaculture.
- 3) Pursuant to the California Coastal Act of 1976 (Coastal Act), establishes the California Coastal Commission in the Natural Resources Agency and requires the Commission to consist of 15 members (12 voting and three non-voting).
- 4) Requires a person planning to perform or undertake any development, including aquaculture, in the coastal zone to obtain a coastal development permit (CDP) from the Coastal Commission or a local government with a Local Coastal Program (LCP) certified by the Commission.
- 5) Required the Coastal Commission, by December 31, 2020, in consultation with DFW, any other state agency relevant to coastal permitting, and stakeholders, to develop guidance for applicants for CDPs for shellfish, seaweed, and other low-trophic mariculture production and restoration.

**THIS BILL:**

- 1) Establishes the Mariculture Pilot Program managed by DFW, as follows:
  - a) Requires DFW, by January 1, 2024, in collaboration with the Coastal Commission, to begin the pilot program to further develop shellfish and seaweed mariculture production and restoration capacity, including designating pilot program tracts and adopting mariculture regulations.
  - b) Requires DFW to designate five 200-hectare tracts of ocean or estuary according to specified criteria.
  - c) Requires FGC and/or State Lands Commission (SLC) to review and approve or deny any required lease of state lands within four months of receiving a completed application.

- d) Authorizes a mariculturist holding a lease within a pilot program tract to begin cultivation without a permit, except any permit required by the State Water Resources Control Board (SWRCB).
  - e) Provides that DFW has sole authority and jurisdiction within the designated tracts to approve or deny mariculture projects, and enforce compliance with the pilot program rules and regulations, excluding the roles and responsibilities of the SWRCB and the relevant leasing authorities (i.e., FGC or SLC).
  - f) Requires DFW to only allow production of the following species:
    - i) Atlantic, European flat, Kumamoto, Olympia and Pacific oysters
    - ii) Bay mussels
    - iii) Bull and giant kelp
    - iv) Manila clams
  - g) Sunsets the pilot program January 1, 2036.
  - h) Requires DFW to offer pilot program participants one year after the program sunsets to comply with any rules and regulations not applicable in the pilot program tracts in order to keep operating.
- 2) Requires DFW to consider seeking state verification authority from the U.S. Army Corps of Engineers and other federal agencies in order to streamline review and approval of any required federal mariculture permits.
  - 3) Requires DFW to ensure the inclusion of socially disadvantaged aquaculturists, as defined.
  - 4) Revises the definition of aquaculture, and establishes definitions of mariculture and mariculture restoration, for purposes of the bill.
  - 5) Makes findings and declarations related to the purposes of the bill.

**FISCAL EFFECT:** Unknown

**COMMENTS:**

1) **Author's statement:**

Last fall, the Governor issued executive orders aimed at conserving 30% of California's area for nature by 2030 and sequestering more carbon in our state's natural and working lands and waters. Unfortunately, California is going in exactly the wrong direction on both of these goals in the ocean.

Many native ecosystems that provide critical habitat, improve water quality, and sequester large amounts of carbon, such as kelp forests, have been devastated by the effects of climate change, and there is an urgent need for restoration of these ecosystems on a larger scale than what is currently happening. Meanwhile, commercial production of

shellfish and seaweed can provide many of the same ecological benefits as restoration – making it one of the most sustainable forms of food production in the world – while revitalizing coastal economies and contributing to our supply of healthy food. Growing more seafood in-state will also reduce imports of shellfish and seaweed from countries with lower labor and environmental standards, which make up the bulk of our seafood consumption today.

Unfortunately, a byzantine and expensive permitting process makes it virtually impossible to get shellfish and seaweed production and restoration projects approved under current law. AB 303 will create a pilot program to test an alternative, more straightforward approach to mariculture permitting without sacrificing the high environmental standards the industry currently achieves. If successful, the pilot program could ultimately provide a model for future mariculture policy statewide.

- 2) **Background.** Aquaculture is a form of agriculture devoted to the propagation, cultivation, maintenance, and harvesting of aquatic plants and animals in marine, brackish, and freshwater. Mariculture is a sub-type of aquaculture that involves the cultivation of marine saltwater organisms in the open ocean, an enclosed section of the ocean, or in tanks or ponds filled with saltwater. According to DFW, “commercial marine aquaculture currently occurs primarily in sheltered and protected bays and estuaries, and, to a lesser extent, in the nearshore and offshore environment in California state waters.”

As of 2020, a total of 5,740 acres (2,323 hectares) of public tidelands were leased for aquaculture (i.e., mariculture) by FGC via a state water bottom lease, with an estimated 574 acres (232 hectares) in use. Aquaculture operations without a state water bottom lease issued by FGC encompass an additional 4,830 acres (1,955 hectares) in state waters and are managed by city or local governments or on private tidelands (primarily in Humboldt Bay). Typically, only a portion of the lease is actively used for aquaculture due to limitations in suitable growing areas, presence of sensitive habitats such as eelgrass, or other considerations. The operational footprint for all tideland leases combined is estimated at approximately 13% of the total acreage leased within the state. While estimates vary, it seems less than 1,000 acres (or approximately 400 hectares) is currently cultivated.

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. The state currently maintains a Permit Guide to Aquaculture in California website (<https://permits.aquaculturematters.ca.gov/Permit-Guide>) that contains information on the various agencies and permits required. Key oversight agencies include DFW, FGC, the Coastal Commission, Department of Public Health and SLC. FGC (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 CDP, 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 FGC 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.

In 2019, SB 262 (McGuire) required the Coastal Commission to develop guidance for applicants for CDPs for shellfish, seaweed, and other low-trophic mariculture production and restoration. Per SB 262, the purpose of the guidance is to increase agency coordination and regulatory certainty, and to reduce duplication, time and cost in the permitting process. In December 2020, the Commission published an 87-page guidance document for aquaculture and marine restoration:

[https://documents.coastal.ca.gov/assets/cdp/CDP%20Application%20Guidance\\_12.08.20.pdf](https://documents.coastal.ca.gov/assets/cdp/CDP%20Application%20Guidance_12.08.20.pdf)

- 3) **Bill is more likely to support expansion of commercial cultivation of non-native species than restoration of native species.** This bill seems to establish a large-scale, long-term, alternative permitting and regulatory process for commercial mariculture, rather than a short-term trial normally associated with the term “pilot program.” With a requirement to designate 1,000 hectares for mariculture production, this bill could increase the total area of state waters in mariculture production by 250% for a period of 13 years. There is no requirement to use innovative or low-impact practices, cultivate native species, or otherwise support restoration of any particular species or marine ecosystems. While the bill requires DFW to only allow “restoration of native species as part of the pilot program,” the bill contradicts that by specifically allowing production of the dominant commercial bi-valves, most of which (e.g., Pacific oysters and Manila clams) are non-native. Absent a requirement otherwise, there is no reason to believe that commercial production in the pilot program tracts won’t be dominated by those species with the highest value and consumer demand, which history suggests are non-native.
- 4) **Do the concerns about the current process justify eliminating project-specific environmental review?** Mariculture projects such as commercial oyster beds typically involve the construction of semi-permanent structures on public tidelands. By eliminating Coastal Commission review, and allowing leaseholders to commence operating without a permit, this bill establishes a process where the actual details of a particular project may not be reviewed prior to construction and operation. The bill then gives DFW sole authority to enforce compliance with the pilot program regulations, while restraining DFW’s authority by requiring DFW to work with operators to resolve noncompliance and authorizing DFW to close an operation only “if no other reasonable solution is possible.”

In theory, potential project impacts could be reviewed at the time a lease is considered by FGC or SLC. However, the quality of any environmental review at the leasing stage will be limited by lack of project-specific details and lack of time, as the bill requires FGC and SLC to approve or deny a lease within four months. If CEQA review is required for a new lease or lease amendment, the four-month deadline may be infeasible and the leasing authority may be compelled to deny the lease for the valid reason that the deadline makes it impossible to comply with CEQA. In some cases, there may be no lease review at all because the bill permits projects to proceed based on pre-existing leases that may have been granted years ago. In fact, the bill requires DFW to prioritize locating tracts in areas where leases have already been granted. As noted above, there are thousands of acres of tidelands leased for commercial aquaculture that are not currently in use, primarily in Humboldt Bay, but also in Tomales Bay, Morro Bay and Santa Barbara.

The bill also creates an unusual dynamic where mariculture operations outside designated tracts may be subject to more rigorous rules and enforcement. This would lend a competitive advantage to operators within pilot program tracts. However, it could also result in a push to

designate tracts where existing leases and operations are located, allowing existing operators to opt out of Coastal Commission jurisdiction and other rules and regulations that currently apply.

- 5) **Double referral.** This bill was approved by the Water, Parks and Wildlife Committee by a vote of 10-0 on April 8, 2021.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

Aquarium of the Pacific  
California Aquaculture Association  
Greenwave Institute  
Hog Island Oyster Company  
Pacific Coast Shellfish Growers Association  
Port of Los Angeles  
Port of San Diego  
San Diego Unified Port District  
The Climate Center  
The Nature Conservancy  
Ventura Port District

**Opposition**

Audubon California  
California Coastal Commission  
California Coastal Protection Network  
Center for Biological Diversity  
Coastwalk  
Defenders of Wildlife  
Environmental Action Committee of West Marin  
Environmental Defense Center  
Friends of the Earth  
Heal the Bay  
Los Angeles Waterkeeper  
Northwest Atlantic Marine Alliance  
Oceanic Preservation Society  
Sierra Club California  
Surfrider Foundation

**Analysis Prepared by:** Lawrence Lingbloom / NAT. RES. /