



Guide to Navigating Lease & Permit Approvals for Ocean Farming in California *2018*

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Glossary of Acronyms

CatEx: Categorical Exclusion
CCC: California Coastal Commission
CDFW: California Dept of Fish and Wildlife
CDP: Coastal Development Permit
CDPH: California Dept of Public Health
CEQA: California Environmental Quality Act
CFGC: California Fish and Game Commission
CWA: Clean Water Act
EFW: Essential Fish Habitat
ESA: Endangered Species Act
EIR: Environmental Impact Report
GIS: Geographic Information Systems
IS: Initial Study
LCP: Local Coastal Program
MMPA: Marine Mammal Protection Act
MND: Mitigated Negative Declaration
MMPA: Marine Mammal Protection Act
MPA: Marine Protected Area
NEPA: National Environmental Policy Act
NMFS: National Marine Fisheries Service
NMS: National Marine Sanctuaries
NOAA: National Oceanic Atmospheric Administration
NPDES: National Pollutant Discharge Elimination System Permit
ND: Negative Declaration
PSA: Permit Streamlining Act
Porter-Cologne Act: Porter-Cologne Water Quality Control Act
RWQCB: Regional Water Quality Control Board
SLC: State Lands Commission
SWRCB: State Water Resources Control Board
USACE: U.S. Army Corps of Engineers
USFWS: U.S. Fish and Wildlife Service
USCG: U.S. Coast Guard
WQC: Water Quality Certification

Overview

Aquaculture is the process of raising and harvesting plants or animals in an aquatic environment. Marine aquaculture has a long history in California beginning with oyster culture in the late 1800s. Except where the State has otherwise assigned jurisdiction to local entities (e.g: Agua Hedionda Lagoon; Humboldt Bay; Port of San Diego; Ventura Harbor), the California Fish and Game Commission (CFGF) has the authority to lease state water bottoms for aquaculture. The CFGF serves as lead agency for purposes of the California Environmental Quality Act (CEQA), and relies on the Department of Fish and Wildlife (CDFW) for its role in subject matter expertise, resource management, and law enforcement. In concert, both the CFGF and CDFW oversee and ensure the continued protection of marine resources and essential habitat. In California, marine aquaculture for commercial purposes is currently limited to shellfish (e.g: oysters, abalone, clams, and mussels) and seaweed. And currently, no new state water bottom leases have been granted in California for over 25 years¹.

The existing regulatory process was designed for permitting commercial shellfish operations rather than small-scale seaweed farms. There are a number of different factors that make seaweed farming unique: it can be low-tech with low environmental impacts, providing marine habitat and uptaking nutrients while serving as a carbon sink and creating a source of food, fuel or feed.

The current pathway to allow the establishment and operation of new ocean farms in California is a multi-phased, time consuming and expensive process. Project related costs may be prohibitively high and can serve as a barrier against any small scale ocean farmer starting up. First, the prospective farmer fleshes out a business plan and selects a location for the proposed operation. Contacting the State Aquaculture Coordinator is the next step, so representatives from the many regulating agencies can be organized into a Project Coordination Team (Team). This Team can help the proponent refine the plan, including its location, methods, and other possible regulatory or any operational challenges that may otherwise be encountered. This engagement occurs through a new tool called the Aquaculture Permit Counter, which is maintained by the Office of the State Aquaculture Coordinator. By engaging the Team early, surprises are reduced, and chances of successful approvals down the line are increased. At this point, an application is then submitted to the CFGF for a state water bottom lease.

Typically, the CFGF will refer the application to CDFW for recommendations, and go through a number of procedural and environmental review steps, including public notice that the lease application is to be considered by the CFGF at a public hearing. The application submittal triggers the environmental review process, i.e. CEQA, required to identify significant environmental impacts related to the farm and to avoid or mitigate any related impacts. The CEQA study, which is usually conducted by a private consultant (whether contracted by the lead agency or the project proponent) can cost anywhere from several thousand dollars and upwards

¹ At a CFGF hearing in February 2018, an existing state water bottom lease (1985) was approved for reconfiguration, which technically involved a new lease component for purposes of environmental impact analysis.

into six figures, e.g. \$500,000, with filing fees to the State costing around \$3,500. The second phase involves a complex and multi-agency (state and federal) permit application process and calls for extensive reviews as each project is assessed on a case-by-case basis. Possible permit fees may be in the range of \$5,000 to \$10,000 per project. Final approvals may take several years to be granted. However, if the Project Coordination Team is properly engaged at the outset, this multi-agency process should be less complex and time-consuming.

Note the projected timelines and estimated costs presented here may vary according to each project and will depend on its unique environmental and political circumstances. As there have been no new bottom leases granted by CDFW since 1991, there are currently no existing examples of recently approved ocean farms that could be used as a guide and precedent. In order to support the expansion of mariculture practices in California, specifically seaweed farming, new policy and regulations are needed.

This document outlines the steps required to set up an ocean farm. The first step is to secure approval by the CFGC for a state water bottom lease. The lease application triggers the environmental review process. Once a lease has been granted, the multi-agency permitting process can begin. The remainder of this document summarizes key steps that need to be taken to secure a lease and permits for seaweed farming. Projected costs and estimated timelines are provided and potential barriers and opportunities identified.

Process and Projected Timelines

State Water Bottom Lease Application: 18 months to 5 years

California Fish and Game Commission (CFGF) is the Lead Agency for issuing state and private water bottom leases. California Department of Fish and Wildlife (CDFW) supports CFGF in this effort. The process includes but is not limited to the following steps:

- Identification of a site and determination of ownership
 - Surveyed project location map
 - State Lands Commission (SLC) confirms no conflicting land use of site
- Project description with species and methods
- 5-year business plan
- Application submitted to CFGF including the above documents w/ fees
- Completed application reviewed by CDFW before presentation at CFGF public hearing for final review and approval of water bottom lease and terms.
- CEQA/NEPA Documentation: Preparation of Environmental Impact Report (EIR), Initial Study (IS), Mitigated Negative Declaration (MND), Categorical Exclusion (CatEx), etc.
- CEQA Review process: Notice issued by State Clearinghouse for 30-day public and multi-agency review and comment period
- CFGF: Following review, Marine Advisor writes staff report for public hearing
- CFGF Hearing: consent calendar item possible if all issues are addressed and there is no public or agency opposition
- If there are public concerns, hearing will include time for public process and sometimes may have to continue to later hearing

Multi-Agency Permit Application Process: “it depends” 2-5 years

Permits are required to install farming gear, grow aquatic species, and conduct farm operations. Pre-application consultations are highly recommended. The state Permit Counter process allows for multi-agency review and comment before a lease application is underway. The multi-agency permit application process begins once a project is granted CFGF lease approval.

The primary agencies involved in this process include, in order of importance/challenge:

- California Coastal Commission (CCC):
 - Coastal development permit (CDP) application submitted, staff review takes 30-days on receipt of application
 - If deemed incomplete, notice is sent for missing information.
 - Process repeats until staff deems application is deemed complete and filed
 - Permit Streamlining Act (PSA) states 180-days given to write report and present item at public hearing which occurs monthly
 - 90-day extensions granted if staff request Commissioners to postpone and item is heard within 270 days
- CDFW: species, methods, lease details, importation (if applicable)

- Tribal Interest Determination (identified as part of CEQA process)
- U.S. Army Corps of Engineers (USACE): existing 401 statewide permit
- National Oceanic and Atmospheric Administration (NOAA) Fisheries (and/or U.S. Fish and Wildlife Service (USFWS) if applicable): formal consultation to assess impacts happens through the USACE permit: Environmental Species Act (ESA), Essential Fish Habitat (EFH), Marine Mammal Protection Act (MMPA)
- Regional and State Water Quality Control Board Certification: covered by general NPDES permits and if de minimis project (aquaculture) discharges regulated by individual/general NPDES permit (before/after USACE)
- Local Govt Agency: Use Permit (or equivalent)

Secondary Agencies for Consultation:

- USCG
- National Marine Sanctuaries (NMS) (i.e. Farallones, Monterey, Channel Islands)
- USFWS

Estimated Costs

Phase 1: State Water Bottom Lease Application for Ocean Farm Location

Application submittal: \$500

CEQA Review:

- Environmental Impact Report (EIR) to assess potential environmental impacts of project and identifies specific mitigation measures
- Initial Study (IS) and Mitigated Negative Declaration (MND) document preparation costs are wide ranging, approx. \$25,000 to \$500,000+ including costs for consultants to generate and review report(s)

CEQA Environmental Document Filing Fees:

- EIR: \$3168
- MND or ND: \$2280 each
- County Clerk Filing Fee: \$50+ any additional applicable fees

Other Required Documents:

- 5-year business plan: consultancy fee
- CDPH testing: cost to conduct water quality surveys

Phase 2: Multi-Agency Permit Applications for Operating Ocean Farm

CCC Coastal Development Permit (CDP):

- Filing fee is determined by size in square footage, eg 10,000 sqft = \$11,670 fee; or by the project development cost, e.g. up to \$100,000 cost = \$3,501 fee

USACE application: \$100 (payable prior to issuance)

State Water Board/Regional Water Board:

- If covered by NPDES Permit, then Aquaculture project is considered De Minimis = \$2062

CDFW:

- Annual aquaculture registration Form FG750 = \$853

NOAA/National Marine Fisheries Service (NMFS):

- Project review and agency determination

Local Jurisdiction

- City/County Planning Dept taxes and fees

Operational Costs

CDFW Bottom Lease:

- \$50/acre per year + privilege taxes (costs vary with species; levied per landed pound or wet ton)
- Aquaculture Registration Annual Renewal: \$536
- Aquaculture Registration Annual Surcharge: \$642 if gross sales of at least \$25,000 in previous registration year
- Late Fee: \$158 (if application submitted after April 1st)

Barriers

Regulatory Challenges

- Complex process for obtaining water bottom lease and related permits to establish ocean farms in California (i.e. timeline, costs, issues, potential and unknown impacts)
- Determination of suitable locations for ocean farm sites can also lead to potential conflicts (and public opposition) with other existing coastal dependent uses in the same area (e.g. recreation, tourism, fishing, etc.)
- Potential impacts of ocean farming (and related activities) on existing surrounding marine environment (e.g. direct impact on environment, competition with other plants such as eelgrass; loss of gear, equipment and generating debris in the water)
- Lack of scientific evidence to demonstrate success (e.g. pilot farm)
- Lack of knowledge transfer between scientific research and industry
- No current legislation or regulations specific to seaweed farming or cultivation methods
- Unknown impacts may lead regulators to err on side of caution when imposing permit conditions of approval that are prohibitively expensive or unnecessarily restrictive

Cost

- Operational costs
- Condition Compliance: complying with regulations burden on farmer
- Cost of bonding and clean-up
- Lease application and multi-agency permitting fees including CEQA
- CDFW: agency “taxes”; annual permit fee and bottom lease fee
- Water quality testing conducted on regular basis (e.g. monthly)

Identifying Ocean Farmers

- Need ocean farming skills and/or training
- Financial investment for gear and equipment including boat
- Business expertise (lease application requires 5-year business plan)

Farm Locations

- Location in state waters: avoid conflict with fisheries, protected species, and habitat (e.g. ESA, EFW, MPAs, etc.)
- No existing GIS spatial planning maps to use for reference
- Protected sites like bays (e.g. Tomales Bay, Morro Bay, San Francisco Bay, etc.) preferred; Pacific storms can be detrimental to operations

Public Perception

- Lack of knowledge regarding mariculture and ocean farms can lead to public opposition and slowing down of the permitting process

Opportunities

- California's Coastal Act calls out coastal dependent uses as priority use in coastal zones (i.e. aquaculture)
- CFGC Bottom Lease terms allow for 15-year approval with 10-year extension
- Public knowledge and support is growing through outreach and press
- Support state legislative effort to propose future policy changes

Summary of Permitting Agencies and Requirements

Permitting Agency	Acronym	Type of Requirement
STATE AGENCIES		
California Coastal Commission	CCC	Coastal Development Permit/Consistency Determination Letter
California Department of Fish and Wildlife	CDFW	Approved species, methods, lease details (in no-granted state tidelands only), aquaculture registration
California Department of Public Health	CDPH	Operators License; Certification of growing area (pre-harvest) after sanitary survey; various post-harvest (safe-handling) requirements
California Fish and Game Commission	CFGF	Bottom Lease Approval
Regional Water Quality Control Board	RWQCB	401 Water Quality Cert or Waste Discharge Requirement i.e. Clean Water Act (CWA)
State Lands Commission	SLC	During the initial CFGF process to consider state water bottom leases, SLC needs to confirm no conflicting land use at site. Permit required if using State-owned property i.e. above mean high tide line (MHTL).
State Water Resources Control Board	SWRCB	Water Rights Permit/ General Industrial Stormwater Permit
FEDERAL AGENCIES		
National Marine Sanctuaries	NMS	Role of NMS differs among specific sanctuaries according to their own individual authorities. For instance in Tomales Bay, Greater Farallones National Marine Sanctuary (GFNMS) has no permit authority but by agreement (MOA) with State they provide comments when leases are considered
National Oceanic and Atmospheric Administration/ National Marine Fisheries Service	NOAA/ NMFS	Formal Consultation regarding Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), EFH
Native American Graves Protection and Repatriation Act	NAGPRA	Return certain Native American cultural items to lineal descendants and culturally affiliated Indian tribes

Native American Heritage Commission	NAHC	Notification of proposed action to California Native American Tribe for any Tribal interests/traditional lands within project area
U.S. Army Corp of Engineers	USACE	The USACE regulates wetlands and other waters of the United States per Clean Water Act (CWA)
U.S. Coast Guard	USCG	Maritime law enforcement agency requires aquaculture leases and structures to be marked
U.S. Fish and Wildlife Service	USFWS	ESA, MMPA
LOCAL AND REGIONAL GOVERNMENT PLANNING AGENCIES (as applicable)		
City/County		Environmental Health Department
City/County		Public notice, local review process, building permits
Harbor or Port District		Use permit or equivalent
Federal Emergency Management Agency - Flood Control Districts	FEMA	Floodway and hydrological review
Local Resource Conservation District	RCD	Consultation review
San Francisco Bay Conservation and Development Commission	BCDC	If project located in San Francisco Bay (local commission similar to CCC)

Key State & Federal Agency Contacts

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