

# Marine Aquaculture in Maine:

How the public can  
participate in  
the leasing process



# What is aquaculture?

**Marine aquaculture is the culture and cultivation of marine animals and algae.**

Aquaculture provides about 53% of the world's seafood.<sup>1</sup>

Nearly 90 percent of the seafood Americans eat is imported from other countries, half of it from aquaculture. One-fifth of the value of U.S. seafood production is from aquaculture.<sup>2</sup>



Aquaculture is not a new industry in Maine, where people have been growing fish and shellfish since the mid-twentieth century. Maine has been the number one producing state in marine aquaculture sales for 10 out of the last 15 years.<sup>3</sup>

Maine's aquaculture industry raises finfish, shellfish, and seaweed in farms along the coast. The most significant commercial species are Atlantic salmon, blue mussels, oysters, and seaweed.

Today, aquaculture is a large part of the marine resource economy, employing more than 1,000 people<sup>4</sup> and generating revenue that is second only to lobsters, Maine's leading commercial fishery.<sup>5</sup>

Aquaculture farms must obtain a lease from the state because they operate in public waters. Most leases do not grant exclusive use of the waters and compatible uses are allowed. As a leaseholder, the aquaculturist or farmer must pay annual fees, submit annual reports, and meet the obligations of the lease.



# How are leases granted?

The aquaculturist submits a lease application to the Maine Department of Marine Resources (DMR) that describes the proposed operation, its exact location, and a description of the site and the surrounding area.

Applicants may apply for one of two types of leases, or a license:

- **Standard leases** cover up to 100 acres, can be in effect for up to 20 years, and may be renewed. Aquaculturists must hold a public meeting in the town where the lease will be located.
- **Experimental leases** cover up to four acres, are in effect for up to three years, and may not be renewed, unless the lease is for scientific research.
- **Limited Purpose Aquaculture Licenses (LPAs)** are annual licenses that allow aquaculture on up to a 400-square foot plot. Up to four licenses can be held by an individual, and training is required. These are granted through a different process than a lease; contact DMR for further information.



## For any lease to be granted, it must meet specific statutory criteria.

The lease cannot unreasonably interfere with:

- navigation;
- the coming and going of riparian landowners;
- fishing and other uses of the area, including other aquaculture uses;
- significant wildlife and marine habitat or the ability of the lease site and surrounding area to support ecologically significant species;
- the public's use and enjoyment of public parks and facilities or certain publicly-owned conserved lands within 1,000 feet of the proposed lease (standard leases only).

The DMR commissioner must also determine that there is an available source of the organisms to be raised at the lease site; that the lease will not result in an unreasonable impact from noise or light at the boundaries of the lease site; and that the lease is in compliance with visual impact criteria (standard leases only).



The laws governing aquaculture in Maine and the rules governing how applications are reviewed and approved are available at [maine.gov/dmr/aquaculture](http://maine.gov/dmr/aquaculture).

The DMR commissioner makes the final decision about whether a lease is granted, modified, or denied based on the application and on evidence submitted by the public and local, state, and federal agencies.

Depending on the type of aquaculture, applicants must obtain a number of other required federal and state permits before starting operations. These permits may also provide an opportunity for public comment.

# The leasing process and how

## How does DMR process applications?

### STEP 1

If applying for a standard lease, the aquaculturist meets with the DMR and town officials and then holds a scoping session, which is a public meeting, in the town where the lease will be located.

Aquaculturist submits application to DMR.

DMR reviews the application for completeness.

A copy of the application is sent to municipalities, relevant state and federal agencies, and shorefront property owners within 1,000 feet.

### STEP 2

DMR scientists visit the proposed location to verify site conditions. For all standard leases and some experimental leases, DMR scientists use video to document the bottom environment, including plants and animals, and summarize the information in a report.

For all finfish operations and others that include supplying feed to the animals, the applicant must conduct a detailed environmental baseline study to determine how aquaculture will impact the site in the future.

The town harbormaster, the U.S. Army Corps of Engineers, Maine Departments of Environmental Protection and Inland Fisheries and Wildlife, and other relevant federal and state agencies submit comments about potential impacts.

### STEP 3

DMR schedules and advertises a formal public hearing for all standard lease applications and for experimental lease applications when five or more people request a hearing, or when DMR considers a hearing necessary.

At least 30 days prior to the hearing, DMR notifies the municipality, state and federal agencies, shorefront property owners within 1,000 feet of the proposed site, and other interested parties regarding the hearing, the public comment period beforehand, and the opportunity to intervene. The application and DMR site report are posted on the DMR website.

The DMR hearing officer conducts the public hearing.

### STEP 4

The hearing officer writes a draft decision based on all the evidence from the public hearing and comments submitted to DMR.

The applicant and interveners review the draft decision and have 10 days to comment.

The Commissioner reviews the draft decision. If approved, lease or license is granted. Leaseholders must pay annual rent of \$100 per acre, maintain performance bonds, and submit annual reports.



# you can participate

## How do I participate?

Watch for notices in local newspapers, municipal offices, or information from shoreland owners who have been notified. Check the DMR website for a list of pending applications and hearing schedules and to read applications online. Sign up for email notification of aquaculture proceedings ([public.govdelivery.com/accounts/MEDMR/subscriber/new](http://public.govdelivery.com/accounts/MEDMR/subscriber/new)).

Attend a public meeting. You can attend the scoping session, which is an opportunity to learn about and discuss the proposal before an application is submitted, and you can attend the public hearing (described below).

Obtain a copy of the application from the DMR website or by contacting DMR.

Contact the applicant to discuss the proposal and establish a relationship.

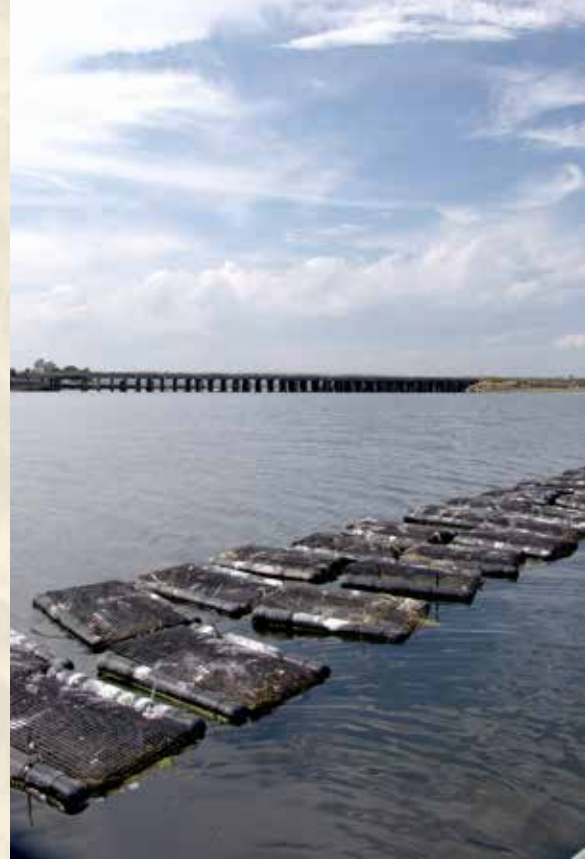
Submit written comments by mail, e-mail or fax. All comments submitted before the end of the public comment period, which is typically the day before the public hearing, will be considered during the lease review.

Request intervener status, if the proposed farm will substantially and directly affect you, by the date stated in the hearing notice. If DMR grants you intervener status, you will receive all correspondence during the review process, and can comment on the draft decision. You do not need to be an intervener to submit comments or testimony on a proposed lease.

Provide testimony at the public hearing. If you speak at a public hearing, you are testifying in a formal proceeding and will be sworn in. To be effective:

- Prepare your testimony in advance;
- Address your testimony to the statutory decision criteria;
- Support your points with evidence;
- Be prepared to answer questions from DMR and the applicant about your testimony.

Get to know your new neighbors. Working waterfronts are part of Maine coastal communities. All regulatory agencies and most growers encourage direct communication between producers and their neighbors on the shore; this has the greatest likelihood to resolve conflicts and to build good relationships between all parties.



## If a lease already exists

You can contact the leaseholder or DMR to ask questions or make suggestions. Marine Patrol Officers inspect aquaculture sites on a regular basis, and the DMR aquaculture staff can answer questions about what to expect from a lease site or leaseholder.

Meet your local harbormaster, who can be an excellent source of information about the waterfront. The harbormaster is responsible for enforcing state and local ordinances; regulating the use of all moorings; monitoring the condition of waterfront structures; and enforcing orders of the town council, town manager, and Coastal Waters Commission.

The Maine Department of Marine Resources welcomes and encourages comment on aquaculture lease applications.



# Where are Maine's aquaculture farms?

As of September 2018, there were 120 aquaculture leases covering 1,400 acres of coastal Maine waters, and 511 limited purpose aquaculture licenses. Most finfish farms are located Downeast, along the Washington and Hancock County coastlines.

Shellfish and seaweed farms are located along Maine's entire coastline. Many oyster farms are located where warm, productive waters promote growth. Farms vary in appearance based on the species being grown and the methods used.

Visit [maine.gov/dmr/aquaculture/leases/index.html](http://maine.gov/dmr/aquaculture/leases/index.html) for an inventory and map of aquaculture farms in Maine, and lease information.



# What to look for in a responsible aquaculture operation

Maine has some of the strictest aquaculture regulations and monitoring requirements in the world. These regulations and monitoring programs are enforced by both state and federal agencies. In addition to compliance with all regulatory requirements, operators should maintain an open dialog with local communities and residents. Sites should be kept neat and well maintained.

## Where to go for more information

Maine Department of Marine Resources: [maine.gov/dmr/aquaculture](http://maine.gov/dmr/aquaculture)

Jon Lewis, Director, Division of Aquaculture, 194 McKown Point Road, West Boothbay Harbor, ME 04575 | 207.633.9594  
[jon.lewis@maine.gov](mailto:jon.lewis@maine.gov)

Maine Sea Grant: [seagrant.umaine.edu/aquaculture](http://seagrant.umaine.edu/aquaculture)

Maine Aquaculture Association: [maineaquaculture.com](http://maineaquaculture.com)

Sebastian Belle, Director, P.O. Box 148, Hallowell, ME 04347  
207.622.0136 | [info@maineaquaculture.com](mailto:info@maineaquaculture.com)

Chris Davis, Director, Maine Aquaculture Innovation Center  
[maineaquaculture.org](http://maineaquaculture.org) | 5717 Corbett Hall, Room 438, Orono, ME 04469  
207.581.2263 | [maic@maineaquaculture.org](mailto:maic@maineaquaculture.org)

### References

- 1 Food and Agriculture Organization of the United Nations. 2018. The State of the World Fisheries and Aquaculture.
- 2 NOAA Fisheries. 2018. U.S. Aquaculture and Fisheries of the United States (2016).
- 3 Compiled from USDA Census of Aquaculture 2005 and 2013, U.S. Department of Commerce Fisheries of the United States 2002-2016.
- 4 University of Maine, Aquaculture Research Institute, Maine Aquaculture Economic Impact Report 2017.
- 5 Maine Department of Marine Resources Landings Data. 2016; Maine Department of Marine Resources, Aquaculture Harvest Data 2016.

### Image credits:

Front cover: background-Chris Bartlett (CB); mussel man, scallops-Kathlyn Tenga-González (KTG); hauling seaweed-T. Olson; oyster harvest: Maine Department of Marine Resources (DMR). Pp 2 & 3: salmon pen, mussel crate-CB; seaweed farmer-KTG. MBAQ drag-DMR; scallops-KTG. Pp 4 & 5: oyster harvester, scallops, juvenile scallops in bag-KTG; handful of oysters. Pp 6 & 7: oyster farm-DMR; rest-KTG. Back cover-Catherine Schmitt.



