

Land-Based Aquaculture: The Right Fit for Maine

The State of Maine and many of its coastal communities welcome new investment in the land-based aquaculture sector.

- ► Fishing is a vital heritage industry in Maine, and the Maine brand carries with it an intrinsic value stemming from the justified perception of Maine seafood as some of the best anywhere in the world.
- Maine's aquaculture products currently fetch one of the highest market values anywhere in the U.S., and the state has the clear potential to take advantage of its geographical and environmental position to further augment this value.

Source:

https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Maine/cp99023.pdf

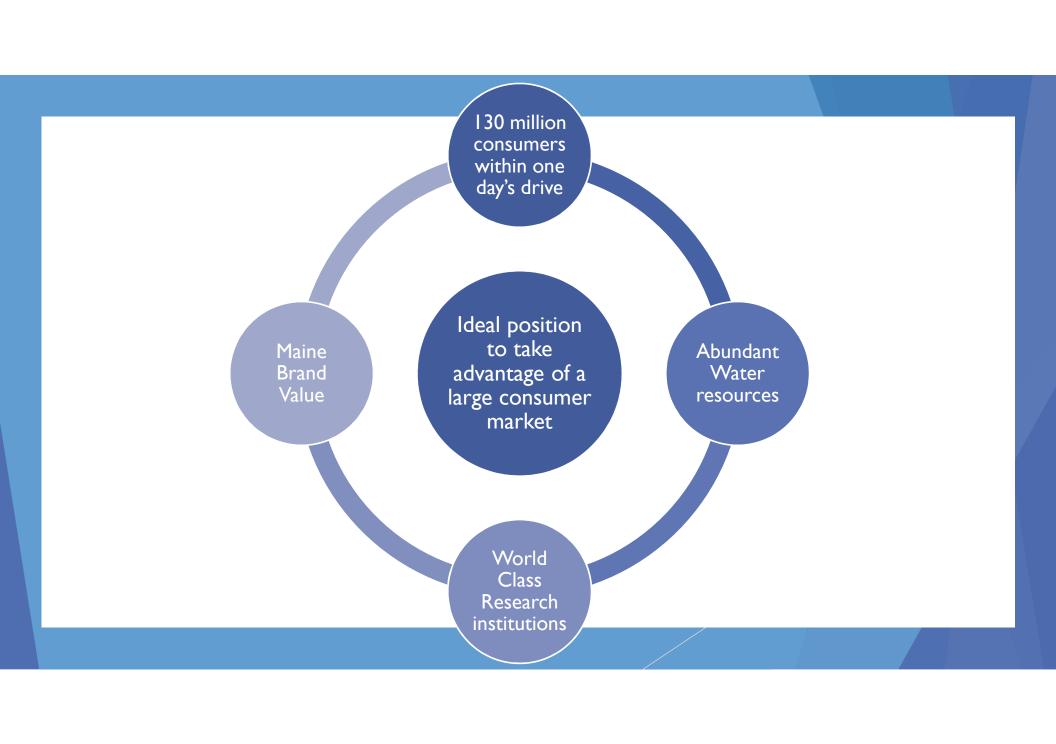
Land-Based Aquaculture: The Right Fit for ME

Global demand for high-quality seafood increases with each passing year. Currently, the United States imports over 90% of its seafood.

Increased demand has led to 57% of global fish stocks being fully exploited.

The Maine people have always placed a high level of importance on the health of our natural resources.

Consumers are becoming more judicious and pay more attention to sourcing than ever before, priming the market for the expansion of Maine's respected seafood brand.



Current Project Development Maine Success Stories

Current Projects: Success Stories Belfast, ME: Nordic Aquafarms



\$500 million project, will create at least 100 jobs



Constructed with environmentally-friendly and renewable technologies, including electric vehicles, solar panels, green roofs, and more



Designed to blend into the surroundings via green buffers, low sound emission, etc



Will eventually produce 33,000 metric tons of fish per year, and thus produce 7% of all salmon consumed in the U.S.



Current Projects: Success Stories

Bucksport, ME: Whole Oceans



Maine-based company



Will begin as a \$75 million project with the goal of expanding to \$250 million over time



Plans to produce 5,000 metric tons of salmon originally before expanding to between 10,000 MT and 20,000 MT over time

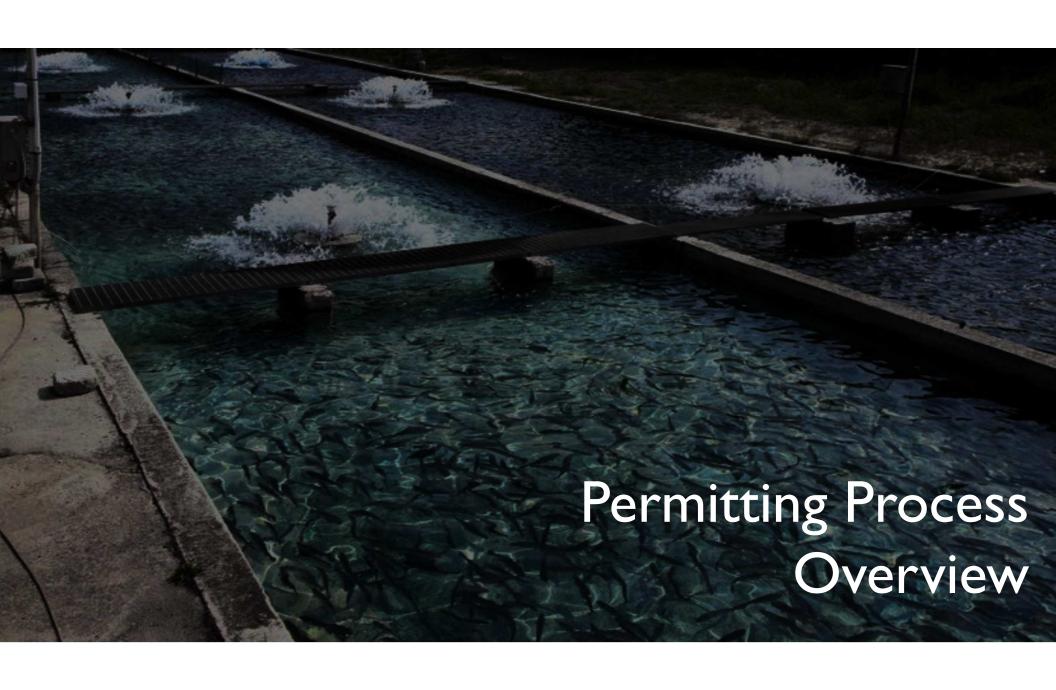


Will create over 250 jobs in the Bucksport area



Will utilize existing paper mill infrastructure to accelerate discharge permitting process





Overarching Tips and Principles

The permitting process for land-based aquaculture in Maine is very much a function of size, scale, project location, and other factors. Regulations and therefore the length and rigor of this process will vary based upon these factors.

Possessing detailed information and engineering plans regarding a prospective project is highly advised before beginning the permitting process, as the process will depend upon the details specific to that project.

Becoming familiar with the permit writers at the various state agencies is highly advised.

Utilizing pre-existing infrastructure, sites with pre-existing discharge permits, and import sources regularly used by others can significantly streamline the permitting process.

It's important to have a sense of what eventual scale-up can/will look like before the first permit is applied for.

Permitting Process Flow

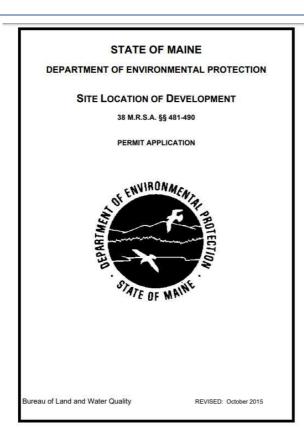
All permits can be completed concurrently. There is no strict limitation on the order in which they are completed. However, the state permits are usually submitted alongside the <u>submerged lands lease</u> and <u>discharge license</u>.

Typically, the municipality (town or city) process lags behind the state process so that the state can weigh in on complex issues with their technical staff before local government review.

The permits described in this presentation are not intended to be a fully comprehensive list, but a snapshot of the most common state permits for land-based aquaculture.

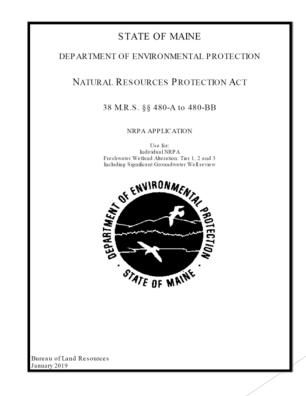
Permits and Regulations Department of Environmental Protection

- Site Location of Development General Permit (SLODA)
 - ► Highly inclusive permit
 - ► Includes a checklist of all possible required submissions, including:
 - ▶ Development description
 - Stormwater management details
 - ▶ Effect on wildlife



Permits and Regulations Department of Environmental Protection

- Natural Resources Protection Act (NRPA) License
 - Administered by Maine DEP
 - Intended to protected natural resources by licensing activities that occur or on near protected natural resources
 - Pre-application meeting required for most large projects

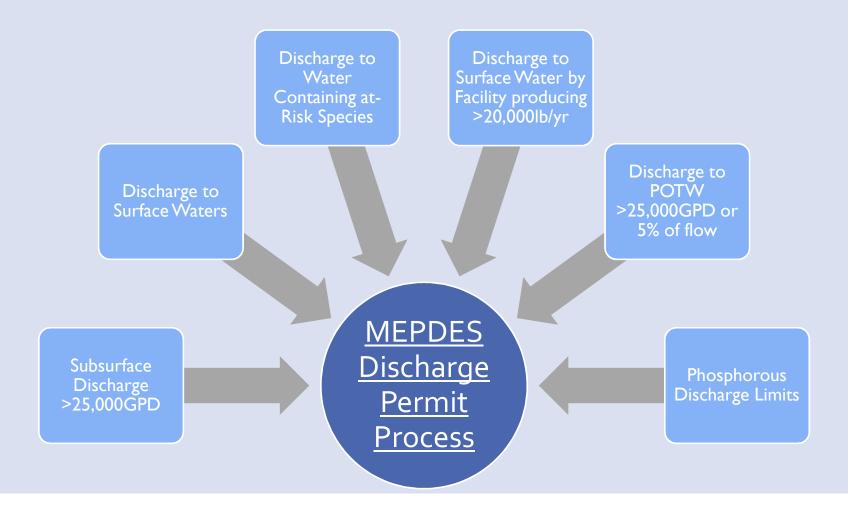




Permits and Regulations

Department of Environmental Protection





Permits and Regulations Department of Marine Resources

Importation of Live Marine Organisms

Application for Importation, Introduction, and/or Movement of Finfish

Application for the Importation or Introduction of Marine Invertebrates and Algae

Application for Cultivation of Atlantic Salmon

Trigger Points for Further Permitting and Review

- Cultivation of non-native species with some potential to establish in Maine if released
- Cultivation of a species which requires import from a source with limited/no disease testing documentation and discharge to surface waters of the state

Permits and Regulations U.S. Army Corps of Engineers



- Clean Water Act Section 404 General
 Permit, Maine
- Ensures that the project will not harm historic properties, wetlands, endangered species or ecosystems
- Coordinates with state and local agencies
- Permitting process is usually closely linked to the state process.
- Section 10 licensing may also be required



Local Permits & Regulations

- We suggest early and active engagement with the community in which your project is proposed
- ► Local legal counsel is advised
- ► We are here as a resource and partner to assist in liaising relationships with locals, building trust within communities, and navigating the permitting process at state and local levels



Next Steps and Contact Information

- Please contact the Maine Department of Economic & Community Development if you're considering an aquaculture project in Maine. Our staff is ready to help direct you to the best resources our state has to offer, including assistance with site selection, permitting resources, and a full suite of tax and financial incentives.
- Maine DECD Contacts:
 - ► Heather Johnson, Commissioner
 - ► Kate Foye, Director of Legislative Affairs & Communications
 - ► Charlotte Mace, Director of the Office of Business Development
 - ▶ For our contact information, visit our website at www.maine.gov/decd/about

