



# Great Mother of Pearl!

## The Looming Growth of Offshore Aquaculture in the Garden State and How to Navigate its Legal Framework

By Zachary A. Klein



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Aquaculture is an industry that is uniquely well-suited for growth both globally and in the United States in the coming decades. For policymakers grappling with how to ensure food security for the masses despite the finite natural resources at their disposal, ocean and coastal areas offer considerable potential to boost production of protein and other vital nutrients. New Jersey must be prepared for the opportunities and challenges that rising demand for seafood will bring. In addition to the more high-profile worlds of commercial and recreational fishing, which enjoy widespread popularity in the Garden State, few members of the public—and even fewer members of the legal professional—are aware that New Jersey also enjoys a long history of aquaculture, which is the term for the controlled cultivation of aquatic organisms, extending back to Native American practices that predate the arrival of European settlers. Broadly speaking, aquaculture can occur directly in natural waterways or in controlled onshore tanks. It can also occur in both freshwater and saltwater settings, and the species involved range from shellfish and seaweeds to finfish like catfish and salmon.

For purposes of context and clarity, this article will focus only on saltwater aquaculture operations located in the waters of the State of New Jersey, *i.e.*, “the ocean and its estuaries, all springs, streams, wetlands, and bodies of surface or ground water, whether natural or artificial, within the boundaries of the State of New Jersey or subject to its jurisdiction.”<sup>1</sup> The state’s jurisdiction over ocean waters, in turn, extends three nautical miles (nm) from the shore.<sup>2</sup> Thus, even for practitioners who are unlikely to counsel offshore aquaculture operations directly, New Jersey’s legal framework for these activities affords insight into aspects of environmental law, property law, and administrative law that will benefit a variety of attorneys.

### **The Lay of the (Submerged) Land: The Public Trust Doctrine and Related**

The state’s authority over the seabed and other resources related to their tidal waters is derived from the Public Trust Doctrine (PTD or the Doctrine). The PTD is a principle with roots in ancient Roman law. The Institutes of Justinian, a sixth century codification of Roman civil law, declares, “By the law of nature these things are common to all mankind—the air, running water, the sea, and consequently the shores of the sea.”<sup>3</sup> This has traditionally been interpreted as imposing upon a sovereign the obligation to create and preserve public rights of access and use of tidal waterways and their shores for purposes of navigation, fishing, and commerce,<sup>4</sup> and plaintiffs have recently started pursuing climate-related litigation under the Doctrine with some success as well.<sup>5</sup> The PTD was preserved in English common law and inherited by the original 13 colonies after the Revolution, when the rights to tidal waterways and their shores—which were previously reserved to the Crown—passed to the newly created American states.<sup>6</sup>

The interpretation and application of the Doctrine varies from state to state,

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and New Jersey has one of the most expansive Doctrines in the nation. The state Supreme Court originally recognized the state government’s PTD obligations in the 1821 case *Arnold v. Mundy*, where the Court held that the public trust included all land between the high and low tidewater levels—not just tidal waters.<sup>7</sup> The Doctrine has since been applied in New Jersey not only to natural resources directly such as marshes and upland forests, but also to the public’s right to recreational uses of the natural resources as well.<sup>8</sup> In fact, the state Supreme Court has explicitly clarified that “[t]he [Doctrine], like all common law principles, should not be considered fixed or static, but should be molded and extended to meet the changing conditions and needs of the public it was created to benefit.”<sup>9</sup> Familiarity with New Jersey’s PTD is thus critical for not only navigating the framework for aquaculture operations in the state’s tidal waterways, but also for providing sound legal advice to any clients who engage in activities involving the use of state waters, or even the possession or use of land that was formerly flowed by tidal waters.

### **Staking Your Claim**

While seaweed aquaculture or finfish aquaculture operations can theoretically be authorized under New Jersey’s framework for aquaculture in tidal waterways, the state’s policies governing tidal aquaculture are generally oriented around structural shellfish aquaculture.<sup>10</sup> Structural aquaculture refers to the cultivation of aquatic organisms through the use of equipment and gear, such as cages or racks.<sup>11</sup> Structural aquaculture operations are unique in that they may take up large areas of water that would otherwise be open waters of the state, and the structures at these sites pose an enlarged risk of interfering with public trust rights to the area, such as navigation.<sup>12</sup> As such, aquaculture operations in New Jersey need to obtain a Tidelands instrument,

which gives them the right to occupy tidally flowed state waters, in addition to permits from the Department of Environmental Protection (DEP) that authorize the actual activities and operations at the site.

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Additionally, New Jersey has developed multi-operation ADZs in the Delaware Bay to promote the development of shellfish aquaculture in the Garden State. An ADZ has several purposes. First, it streamlines the permitting process for potential oyster farms because the New Jersey Bureau of Shellfisheries obtains all necessary permits from the Corps and relevant state agencies on behalf of individual growers within the ADZ.<sup>16</sup> Grouping multiple aquaculture farms in relatively close proximity to each other consequently facilitates efficient state management of aquaculture operations, and likewise minimizes potential conflicts by centralizing water access, access to seed and equipment, technical support for farms, and post-harvest processing.<sup>17</sup>

Finally, aquaculture operations must consider the need for an aquaculture license from the Tidelands Resource

Council (TRC). Should the aquaculture operation in question already own the adjacent upland property or have permission from that property's owner to use and occupy the offshore area, then an aquaculture license can be issued by the DEP's Bureau of Tidelands Management without obtaining TRC approval. Conversely, if the operation cannot or does not secure the shoreside property owner's permission, it can seek TRC approval of an aquaculture license only after providing six months' notice to the shoreside property owner.<sup>18</sup> Regardless of which path an applicant pursues, it must already have a Waterfront Development permit from DEP for in-water structures at the site before an aquaculture license will be issued.<sup>19</sup>

### **Show Me the Money: Bringing the Product to Market and Accessing State Support**

For aquaculture operations interested in turning a profit on their activities, one key state approval is the commercial shellfish license, which is required to sell any shellfish or to "catch" more than 150 shellfish per day.<sup>20</sup> In fact, a commercial shellfish license is required prior to applying for a shellfish lease along the Atlantic Coast and within the Delaware Bay's ADZ. For operations in the Delaware Bay but outside of the ADZ, meanwhile, a license is not required prior to applying for a lease, but a license will nevertheless need to be secured before harvesting or selling any product.<sup>21</sup> A recreational shellfish license is also available for operations that do not "catch" more than 150 shellfish per day or offer their shellfish for sale.<sup>22</sup>

In addition to a commercial shellfish license, any producers who anticipate production of aquacultured products worth \$2,500 or more annually must obtain an Aquatic Farmer License (AFL) from the New Jersey Department of Agriculture (NJDA). The AFL also affords aquaculture operations many benefits to

licensees beyond "merely" authorizing their ability to sell product in meaningful volume and, thus, to profit from their aquaculture activities. More specifically, AFLs demonstrate ownership of the organisms being raised, which is helpful when dealing with products that are under size limits or seasonality limitations, such as summer flounder and hybrid striped bass.<sup>23</sup> The AFL system also prevents the introduction of aquatic invasive species and other pests that can harm aquaculture operations and wild stocks alike.<sup>24</sup> Moreover, akin to the ADZ, AFLs reduce the regulatory burden on aquaculture operations by facilitating the smart planning of sites and the early identification of any additional permits that operations may need, thereby reducing the time and money required to complete the permitting process without compromising environmental integrity.<sup>25</sup>

Separately, AFLs serve as an invaluable lifeline to various forms of government support for aquaculture operations. Not only do AFLs establish operations' eligibility for marketing assistance from the NJDA and other programs at both the state and federal level,<sup>26</sup> but they likewise ensure that operations have records of their production history, which are critical for receiving disaster relief and other forms of funding.<sup>27</sup> Consequently, the state recommends that all aquaculture operations obtain an AFL, even if they are not technically required to do so based on their anticipated production levels.<sup>28</sup>

### **Conclusion**

As the U.S. and global populations continue to grow, the limitations of land-based food production systems are inspiring widespread contemplation of how to meet demand and ensure food security for the masses. One viable solution is increasing the cultivation of finfish, shellfish and seaweed, which is more commonly known as aquaculture, in offshore waters. As a coastal state with

a rich history of aquaculture, New Jersey is well-positioned to capitalize on the industry’s impending boom. Attorneys in the Garden State should therefore understand New Jersey’s legal framework for offshore aquaculture operations to ensure they can provide sound advice to clients moving forward.

While this article provides an overview of the legal framework for offshore aquaculture in the state, it is far from exhaustive. Attorneys with clients who engage in offshore aquaculture must be prepared to deal with other sources of law that impact these activities, such as New Jersey’s tax code and Right to Farm Act. Nevertheless, a basic familiarity with the legal framework for offshore aquaculture operations offers invaluable insight into aspects of environmental law, property law, and administrative law that are relevant to a variety of legal practices throughout the state. ■

## Endnotes

1. N.J.A.C. 7:9B-1.4.
2. See 43 U.S.C. § 1301(b).
3. J. Inst. 2.1.1, in *The Institutes of Justinian*, With Notes 67 (Thomas Cooper ed. & trans., 3d ed. 1852).
4. Tidal waterways include oceans, bay, and tidal rivers.
5. See, e.g., *Held v. Montana*, No. CDV-2020-307 (Mont. 1st Dist. Ct.) (14 Aug. 2023)
6. All other states acquired ownership of the beds and banks of these waters upon their statehood as a result of the Equal Footing Doctrine, under which all subsequent states were admitted with the same rights as the original thirteen. See *Idaho v. United States*, 533 U.S. 262, 272 (2001); Robin Kundis Craig, *A Guide to the Western States’ Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust*, 37 *Ecological L. Q.* 53, 65 (2010); see also *United*

- States v. Alaska*, 521 U.S. 1, 5 (1997); *Idaho v. Coeur d’Alene Tribe of Idaho*, 521 U.S. 261, 283-84 (1997); *United States v. Holt State Bank*, 270 U.S. 49, 55 (1926); *Weber v. Bd. of Harbor Comm’rs*, 85 U.S. (18 Wall.) 57, 65-66 (1873).
7. 6 N.J.L. 1 (N.J. 1821).
8. See *Borough of Neptune City v. Borough of Avon-by-the-Sea*, 61 N.J. 296, 2 ELR 20519 (N.J. 1972).
9. *Id.* at 309.
10. N.J. Tidelands Resource Council, Resolution Concerning Aquaculture License Fees Assessed by the Tidelands Resource Council (Adopted Mar. 3, 2010, Revised Sept. 6, 2027, and Re-authorized Sept. 14, 2022) 1, [dep.nj.gov/wp-content/uploads/wlm/downloads/tidelands/td\\_009.pdf?bcs-agent-scanner=1b73ed28-8693-8344-85fa-8e4f01b89c9d](https://dep.nj.gov/wp-content/uploads/wlm/downloads/tidelands/td_009.pdf?bcs-agent-scanner=1b73ed28-8693-8344-85fa-8e4f01b89c9d).
11. See *id.*
12. See *id.*
13. *Tidelands*, N.J. Dept. of Env’tl. Prot. Watershed & Land Mgmt. (last revised Jan. 18, 2024), [dep.nj.gov/wlm/tidelands/#:~:text=A%20Riparian%20Grant%20is%20a%20the%20mean%20high%20tide](https://dep.nj.gov/wlm/tidelands/#:~:text=A%20Riparian%20Grant%20is%20a%20the%20mean%20high%20tide).
14. See N.J.A.C. §§ 7:25-24.1 – 7:25-24.17.
15. N.J.S.A. § 50:1-23.
16. Catherine Janasie, *The Effects of the Endangered Species Act on Aquaculture in New Jersey*, Natl. Sea Grant L. Ctr. 2 (May 2019), [nsglc.olemiss.edu/projects/shellfish-aquaculture/files/esa-nj.pdf?bcs-agent-scanner=21b001f2-6728-2044-b0d7-40beb591553e](https://nsglc.olemiss.edu/projects/shellfish-aquaculture/files/esa-nj.pdf?bcs-agent-scanner=21b001f2-6728-2044-b0d7-40beb591553e).
17. See *Commercial Shellfish Leasing on the Aquaculture Development Zone*, “Overview of Shellfish Leasing,” N.J. Dept. Env’tl. Prot. (last revised Apr. 28, 2023), [dep.nj.gov/aquaculture/adz-lease/](https://dep.nj.gov/aquaculture/adz-lease/).
18. N.J. Tidelands Resource Council, Resolution Concerning Aquaculture

- License Fees Assessed by the Tidelands Resource Council (Adopted Mar. 3, 2010, Revised Sept. 6, 2027, and Re-authorized Sept. 14, 2022) 1, [dep.nj.gov/wp-content/uploads/wlm/downloads/tidelands/td\\_009.pdf?bcs-agent-scanner=1b73ed28-8693-8344-85fa-8e4f01b89c9d](https://dep.nj.gov/wp-content/uploads/wlm/downloads/tidelands/td_009.pdf?bcs-agent-scanner=1b73ed28-8693-8344-85fa-8e4f01b89c9d) [hereinafter “TRC Resolution”].
19. TRC Resolution, *supra* xviii.
20. N.J.S.A. § 50:2-2(b).
21. *Obtaining a Commercial Shellfish License* (last revised Mar. 27, 2023), N.J. Dept. Env’tl. Prot., [dep.nj.gov/aquaculture/obtaining-a-commercial-shellfish-license/](https://dep.nj.gov/aquaculture/obtaining-a-commercial-shellfish-license/).
22. N.J.S.A. § 50:2-2(a).
23. N.J.A.C. 2:89 Appx. A at (1) and (4).
24. See *id.* at (2).
25. See *id.* at (3) and (4).
26. *Id.* at (6)-(7).
27. *Id.* at (5).
28. See N.J.A.C. 2:89-2.1(a)(1).