The public trust doctrine protects the public’s right to use the ocean and coasts for a variety of activities including navigation, fishing, and commerce. These public rights coexist with the private ownership of coastal lands and other private uses of coastal areas. Improving the public’s understanding of the public trust doctrine is important for shellfish aquaculture because aquaculture affects the ability of the public to use coastal areas protected under the public trust doctrine. Aquaculture activity affects public use of certain areas, but state governments regulate the industry to protect public trust uses.

1 United States Supreme Court’s Interpretation

In 1892, the U.S. Supreme Court adopted the public trust doctrine into federal law. In a subsequent case, the Court summarized the rule, stating that “[s]tates, upon entry into the Union, received ownership of all lands under waters subject to the ebb and flow of the tide.” At the very least, states hold these areas in trust for the people to “enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein, freed from the obstruction or interference of private parties.” In many Eastern states, courts interpreted the public trust doctrine before the U.S. Supreme Court articulated the federal law and, in doing so, independently expanded on the doctrine.

The states’ early decisions established property rights of coastal landowners and continue to influence how the doctrine is applied.

2 State Law

In Southern New England, each state has adopted the public trust doctrine into state law. In Connecticut and Massachusetts, the states’ highest courts have interpreted the doctrine in cases dating back to the 1800s. The state of Rhode Island has gone a step further and codified the doctrine into the Rhode Island Constitution. Because the states defined the doctrine independently of one another, there is no universal interpretation. Therefore, the law defining the public trust doctrine differs amongst the states in Southern New England.

Table 1. Public Trust Boundary in Connecticut, Rhode Island, and Massachusetts

<table>
<thead>
<tr>
<th>State</th>
<th>Public Trust Boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhode Island</td>
<td>Mean high tide line</td>
</tr>
<tr>
<td>Connecticut</td>
<td>Mean high tide line</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Mean low tide line; public can use intertidal area for specified purposes</td>
</tr>
</tbody>
</table>

Each state independently determines the landward boundary that marks the end of private ownership and the start of the land held in the public trust. In Rhode Island and Connecticut, coastal landowners’ private ownership ends at the mean high tide line. Yet, in Massachusetts, the coastal landowner’s private ownership ends at the mean low tide line, but the public can use the private intertidal area for specific purposes including fishing, fowling, and navigating over the tidelands. Therefore, the different public trust boundaries in the states can affect the extent of private ownership a person has over a coastal area.

Additionally, the guaranteed public uses protected by the state’s public trust doctrines vary. For example, Connecticut has ruled that “bathing, taking shellfish, gathering seaweed, cutting sedge, and . . . passing and repassing” are all activities guaranteed to the public. Like Connecticut, Rhode Island guarantees the rights to fishing, gathering seaweed, and passage along the shore. In Massachusetts, the protection is broader and “includes all necessary and proper uses, in the interest of the public” such as fishing, fowling, and navigation. At the very least, the public trust doctrine in each state protects the public’s ability to navigate, fish, and conduct commerce on the lands held in trust by the state. Although these are not the only uses the public trust doctrine guarantees, they are the most cited benefits held for public use.

The state may also grant, either through a lease, license, or similar mechanism, sections of the land held in trust to private individuals to conduct private activities, such as aquaculture farming. The state may do so when the private use will “advance the public interest or when such a grant does not substantially diminish the public’s benefit in the remaining lands

13 Pazolt, 631 N.E.2d at 551.
and waters.”

However, the lease does not grant the growers complete private ownership of the allocated land. In Connecticut and Rhode Island, private rights in submerged lands are limited to the right to cultivate shellfish and other approved species in order to protect the public’s rights under the public trust doctrine. In Massachusetts, the farmer’s activity may not impair the private rights of any individual, and all public uses deemed “compatible with the aquaculture enterprise” are allowed. In other words, the growers’ leases and licenses are contingent upon certain conditions set to protect the public trust, and a violation by the grower may result in the termination of the lease. Many barriers have been put up to ensure that aquaculture leases can coexist with the public trust.

To qualify for an area to conduct aquaculture activities, state and federal agencies must first approve the application and then grant a lease, license or similar authorization to the farmer. The lead permitting agency varies from state to state because the legislature of the state may delegate the authority to a separate governmental agency. In Massachusetts, the Division of Marine Fisheries is the lead state agency for issuing private shellfish aquaculture permits after a lease is first issued by the local municipality. In Rhode Island, the legislature has delegated authority to the Coastal Resources Management Council (CRMC) to act as the lead state agency. In Connecticut, the Department of Agriculture’s Bureau of Aquaculture is the lead state agency for issuing leases within the state waters, and municipal shellfish commissions have jurisdiction over town waters. To utilize cultivation gear within an approved aquaculture area, the farmer must seek additional authorizations from the Connecticut Department of Energy and Environmental Protection. Other federal and state regulatory bodies that assess gear applications may include the U.S. Army Corps of Engineers, the National Marine Fisheries Service, the U.S. Environmental Protection Agency and the U.S. Fish and Wildlife Service, among many others, depending on the location, size, and scope of the planned operation. Input from the local harbormaster and shellfish and conservation commissions is solicited in these processes. The exhaustive application process aims to maintain a balance between public rights afforded by the public trust and the benefits of aquaculture development to the ecosystem and economy.

Applicants in Connecticut, Rhode Island, and Massachusetts are faced with many regulations that restrict aquaculture activity to ensure that the rights of the public are protected. For example, in Connecticut, aquaculture applications are poten-

15 See Shoreline Shellfish, LLC v. Town of Branford, 246 A.3d 470, 479 (Conn. 2020); R.I. GEN. LAWS ANN. § 20-10-1 (West 2021).
16 MASS. GEN. LAWS ANN. ch. 130, § 57.
17 MASS. GEN. LAWS ANN. ch. 130, § 17B.
18 R.I. GEN. LAWS ANN. § 46-23-16.
19 CONN. GEN. STAT. ANN. § 26-192a.
20 Id. § 22-11h.
tially reviewed by state and federal agencies, as well as municipalities, if the farm will be in town waters. In Rhode Island, the CRMC established numerous regulations restricting aquaculture activity, including limiting the area occupied by farms to be less than 5% of the total open water surface area of coastal ponds. In Massachusetts, specific regulations vary depending on municipality, but in general, aquaculture activity may not materially obstruct navigable waters. Aquaculture farms in Connecticut, Rhode Island, and Massachusetts are subject to many restrictions, requirements, and stringent reviews to ensure the rights of the public are not substantially hindered. Despite all the regulations, aquaculture activity may, to some degree, limit other uses such as navigation and fishing, but only after comprehensive reviews.

Aquaculture is an important part of the commercial maritime sector in southern New England. The states recognize the economic and environmental benefits of the industry. Currently, the industry in Connecticut is valued at over $30 million with over 60,000 acres being farmed. In Rhode Island, the industry is valued at $6.07 million with 339.08 acres being farmed. In Massachusetts, the industry is valued at $29.8 million with 1,240 acres being farmed. In addition to economic benefits, shellfish aquaculture can provide environmental benefits.

Aquaculture structures provide habitat for many species of marine organisms, and shellfish are excellent filter feeders, so shellfish farming can improve water quality by removing excess particulates from the water column. The type, size, and scope of the operation affect the type and scale of these benefits.

Even though the states value the benefits derived from the aquaculture activity, the state agencies still seek to maintain a balance between the public rights afforded by the trust and the commercial interests.

3 Conclusion
If properly permitted, aquaculture activity is not a breach of the public trust doctrine because many restrictions, requirements, and stringent reviews are in place to ensure the rights of the public are not substantially hindered. The public trust protects the public’s right to use the ocean and coasts for a variety of activities including, but not limited to, navigation, fishing, and commerce. The state may also authorize sections of the land held in trust to private individuals to conduct private activities such as aquaculture farming. This authorization is contingent upon certain conditions afforded to the public by the trust and a violation by the grower may result in the termination of the agreement. Thus, improving the public’s understanding of the public trust doctrine is particularly important for shellfish aquaculture because aquaculture operations often occupy areas of publicly owned lands and, in doing so, may affect the public use of certain areas. A better understanding of the public trust doctrine, and the laws and policies established to protect it and balance it with commercial interests will reduce conflict and encourage coexistence of shellfish aquaculture and public uses.

23 650 R.I. CODE R. § 20-00-1.3(K)(4)(f).
24 See, e.g., Shellfish Aquaculture Grant Regulations “Grant Program”, Town of Duxbury 8-9 (Mar. 1, 2017), https://perma.cc/YW4S-AD82. In Duxbury, licenses under the Grant Program shall be granted only to residents of the Town of Duxbury who have been domiciled within the Town for at least twelve consecutive months prior to the date of application.
25 MASS. GEN. LAWS ANN. ch. 130, § 57.
33 Shoreline Shellfish, LLC v. Town of Branford, 246 A.3d 470, 479 (Conn. 2020); R.J. GEN. LAWS ANN. § 46-23-16; MASS. GEN. LAWS ANN. ch. 130, § 57.