Introduction

As interest in the restoration of clam flats through improving water quality and reseeding increases in the next several years, conflicts over rights and responsibilities in the intertidal zone may also increase unless a common understanding of these rights develops. This document is intended to provide this understanding and to serve as a basis for considering the potential of clam aquaculture in Maine.

Who Owns the Tidal Flats?

In Maine, shorefront property owners hold title ("in fee") down to the low tide line, subject to public rights of fishing and navigation. The reason both shorefront property owners and the public have rights in the intertidal zone is historical, the result of the way the law developed in the "common law" courts of England prior to the American Revolution and in American courts thereafter.

The "common law" is the body of law fashioned by judges over time as they resolve individual disputes; it can be contrasted to laws enacted by a legislative body ("statutory law"). Under the common law of England, tidal lands were considered "incapable of ordinary and private occupation, cultivation and improvement" and best suited to public activities. Although the king owned title to all lands below the high tide line (the "jus privatum"), these lands were subject to public uses of fishing and navigation (the "jus publicum"). The king's responsibility with respect to the jus publicum was to preserve the public rights for the benefit of all the people. When the English colonists came to settle in what is now Massachusetts and Maine, they applied their notions of public/private rights in the intertidal zone to the new territory.

After Massachusetts Bay Colony was founded, however, the legislative body decided to alter the common law to grant shorefront property owners title to land down to the low tide line. This enactment, referred to as the Colonial Ordinance of 1641-47, was intended to encourage wharf-building and commerce. Nevertheless, the grant of title remained subject to public rights of fishing and navigation. Because Maine became a part of Massachusetts Bay Colony in 1692, the Colonial Ordinance is an established part of Maine common law. Maine retained the common law of Massachusetts when it became a state in 1820.

The public's rights to use tidal lands are often called "public trust rights" because the king traditionally held those rights "in trust" for the benefit of the public. Since the state is now sovereign, it is responsible for exercise of the public trust responsibility. Public trust rights are also referred to as a "public easement"; this term means they constitute a privilege to use shorefront property owners' land.

Who Owns Shellfish and Fish Found in Tidal Lands and Waters?

In English common law wild animals are owned by the sovereign in trust for the people. Because in our country the state is sovereign, the state owns title to shellfish and fish as the representative of the people. An individual has no property right in a wild animal until it has been "reduced to possession" or captured. If restored to its wild and natural state, an animal that had been captured is no longer in that person's possession. Consequently,
any property right which attached while the animal was captured is extinguished upon its release or escape and title reverts to the state.

What Are the Shorefront Property Owners' Rights in the Intertidal Zone?

Because their ownership extends to the low tide line, shorefront property owners generally have the same rights in the intertidal zone as they have in their upland property, so long as public rights are respected. They can sell or lease the intertidal zone, but if they do, the land is still subject to the public easement. Shorefront property owners can sue for trespass all persons who use the intertidal zone for purposes other than those allowed by the public easement.

Shorefront owners' rights differ from other property owners' in two respects. First, because of the tidal action on their land, the boundary of shorefront property may change due to accretion (the gradual building up of sand or soil) or erosion (the gradual loss of sand or soil). Second, shorefront property owners have a somewhat privileged position with respect to developing the intertidal zone. With the appropriate permits, for example, shorefront property owners have the exclusive right to wharf out or to attach a fish weir to the flats, provided the structure does not interfere with the public right of navigation. Also, they have first right to wharf out or construct a weir below the low tide line. Finally, they have a preference in obtaining a shellfish aquaculture lease through the Department of Marine Resources (DMR) (except over the Department itself).

The rights of shorefront owners to develop the property below the low tide line is subject to certain powers exercised by the federal government. Because the federal government has jurisdiction over all navigable waters of the United States (the "navigation servitude"), it regulates all activity in those areas. For example, in a recent case in York Harbor, the owners of a wharf had maintained pilings and floats below the low tide line in front of their neighbor's property since 1955. The Army Corps of Engineers ordered the wharf owners to shorten their wharf by twenty feet in order to make room for the abutters' wharf. The wharf owners sued. The court held that the order was valid because the wharf owners' privilege to maintain the pier was always subject to the Congress's power to regulate navigable waters, exercised through the Army Corps of Engineers. So, the federal government's powers supersede the right of private owners under the navigation servitude doctrine.

What Are the Public Rights in the Intertidal Zone?

As described above, public rights in the intertidal zone are limited to fishing, fowling and navigation, including recreational variants of those pursuits. The Law Court, the highest court in Maine, has had several opportunities to define these rights in terms of specific activities. Thus, the Law Court has upheld, as part of the public right of fishing, the right to dig shellfish, clams, and worms. With respect to the public right of navigation, the Law Court has held that charter boat operators can pickup and discharge passengers on the flats and the public can moor vessels and discharge cargo there. In addition, the public is entitled to use the flats as a public highway when frozen. In 1900, the Law Court summarized the rights as follows: the public "may sail over them, may moor their craft upon them, may allow their vessels to rest upon the soil when bare, may land and walk upon them, may ride or skate over them when covered with water bearing ice, may fish in the water over them, [and] may dig shell fish in them...

At the same time, the Law Court has recognized limits to public rights in the intertidal zone. For example, the public may not take mussel-bed manure or seaweed from the intertidal zone. Conversely, the public does not have a right to deposit substances on the flats. (This rule is derived from an 1894 case, in which an ice-cutter sought to deposit shavings on the flats.) Fish weirs may not be erected "in front of" a shorefront owner's property without the permission of the owner. In addition, in 1989, the Law Court decided that there is no public right to general recreation (such as bathing, sunbathing and walking) in the intertidal zone, unless those activities are incidental to fishing or navigational uses. Finally, access to the intertidal zone is restricted to approach from the water; there is no public right to cross the shorefront owner's upland property to get to the flats.
How Is the Clam Resource Managed?

The state has a public trust responsibility to conserve the resource for the benefit of the public. Traditionally, that authority has been delegated partially to municipalities. For example, in 1821, one year after Maine's separation from Massachusetts, the Legislature granted the selectmen of coastal municipalities the authority to issue permits for taking shellfish and imposed a standard penalty for violation of the permit conditions.25

Generally, however, municipalities have limited their conservation measures to withholding permits for non-residents or imposing special conditions on non-resident use.26 (In fact, the Colonial Ordinance itself limited free fishing and fowling to inhabitants who were householders.) The Law Court has consistently upheld municipal authority to exclude non-residents.27 However, in a 1975 case in North Haven,28 the court held that the ordinance in question, which prohibited non-residents from digging on certain specified flats, was not "reasonably necessary" for conservation of the shellfish. Consequently, it struck the ordinance down. It did state, however, that municipalities could discriminate against non-residents if they could show how that discrimination was "reasonably necessary" to further the goal of conservation.29

Currently, under Maine law,30 municipalities have a broader authority to conserve the shellfish resource than most have exercised. Maine municipalities, if they have appropriated money for a shellfish conservation program within the previous two years, and obtained approval from the Commissioner of Marine Resources for their programs, can: fix the qualifications for a shellfish license; regulate or prohibit the possession of shellfish; fix the amount of shellfish that may be taken; provide for enforcement, protection and evaluation of green crab fencing programs; and, authorize the municipal officers to open and close flats. In addition, municipalities may enter into reciprocal conservation agreements and joint programs with other municipalities, and create shellfish conservation committees.31 In spite of this broad authority, enactment of shellfish conservation programs is optional. In the absence of commitment from local clammers, municipalities may be unlikely to enact shellfish conservation ordinances at all.

If motivated, however, municipalities can enact progressive conservation programs.32 Brunswick, for example, has enacted an ordinance that is widely regarded as the most successful in the state. Several features of the ordinance ensure that success. For example, Brunswick has established a Marine Resources Committee (the equivalent of a conservation committee) that is comprised of seven members (including commercial clammers, non-clammers, and a recreational digger) to ensure that all interested parties are represented. The Committee is charged with the responsibility of surveying the coastal waters annually to maintain accurate information on the shellfish resource. In this way, the Committee is able to fix the number of licenses based on what the resource can actually sustain in any given year.33 Brunswick also participates in the Beal's Island Regional Shellfish Hatchery, which entitles the town to an annual portion of seed to broadcast on the flats in the spring.34 In addition, by imposing town closures over all state-closed flats, Brunswick is able collect all fines from harvesting violations in closed areas. This source of revenue supplements the license fees that partially fund the shellfish conservation program. Brunswick also maintains strict residency requirements to ensure that local harvesters have priority for residential shellfish licenses. Finally, Brunswick suspends the municipal licenses of diggers who have had their state licenses suspended. With this conservation ordinance, Brunswick has converted the clam resource into a $2 million a year industry.35

What Role Can Shellfish Aquaculture Leasing Play?

There is a long, though intermittent, history of aquaculture leasing in Maine. In 1905, the Legislature passed "An Act for the encouragement, development and conservation of the Shellfish Industry,"36 which allowed the Commissioner of Sea and Shore Fisheries to appropriate up to $1,000 for experiments in shellfish propagation to be conducted by a lease-holder on flats he either owned or had the owner's permission to use. The act also granted the lease-holder exclusive use of those flats, providing penalties against anyone who interfered. As a result, various experiments were conducted over the years, including the establishment of an experimental shellfish cultivation station at Popham Beach.37
Under current Maine law, there are two ways an individual can acquire a shellfish aquaculture lease. First, he can obtain a lease through the Department of Marine Resources. Assuming the applicant has supplied all the appropriate technical data, the DMR Commissioner will grant the lease provided the applicant has the permission of the shorefront owner and the lease will not interfere with various uses and conditions: the ingress and egress of the shorefront owner; navigation; fishing or other uses of the area; the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; and, public use or enjoyment of a government-owned beach, park, or docking facility within 1,000 feet of the site. In addition, the applicant must demonstrate there is an available source of organisms to be cultured at the site. The lease cannot exceed a term of ten years and may not exceed 100 acres in size. If, however, the municipality has an approved shellfish conservation program, the lease site cannot exceed two acres without approval of the municipal officers. DMR grants leases in the following order of preference: the department; the shorefront owner; fishermen who have traditionally fished in or near the area; and, shorefront owners within 100 feet of the leased coastal waters.

The second way to obtain a shellfish aquaculture lease is through the municipality in which the proposed site is located. Municipal leases can only be granted if the municipality has an approved shellfish conservation program. Furthermore, the total acreage of the lease site cannot exceed 25% of the total municipal intertidal zone open to the taking of shellfish. Finally, the municipal officers must find that granting the lease is in the best interests of the municipality.

Applicants for aquaculture leases should consider two important factors when considering whether to apply for a municipal lease or a DMR lease. First, applicants for municipal leases are granted a categorical preference over applicants through the DMR. Second, the municipality can establish conditions and limits on the lease which may differ from those imposed by DMR on its lease applicants. This provides an opportunity for the municipality to define what conditions are in its interests. In both cases, however, the permission of the shorefront owner is required. The approval of the Commissioner is also required in the case of municipal leases. However, the Department is unlikely to refuse a lease granted by a municipality unless it fails to meet the statutory requirements of a DMR lease.

The fact that municipal leasing is tied to municipal conservation programs (that is, one cannot obtain a municipal aquaculture lease unless the town has a DMR-approved conservation program in place) is an important aspect of the state's exercise of its public trust authority. In effect, the Legislature has decided that municipal aquaculture leasing is a form of conservation. This perspective may be true because of the biology of clam reproduction. When clams spawn, their fertilized eggs develop into free swimming larvae. These larvae can be scattered widely from their spawning grounds due to water currents and tidal action. Thus, an aquaculturist whose clams are contained at the lease site may be assisting in the propagation of clams in other rivers, coves or bays because of the dispersion of free swimming larvae. In this way, aquaculture may be an effective conservation measure.

What Effect May Recent Court Decisions in Massachusetts Have on Maine Aquaculture?

Because of Maine's shared history with Massachusetts, the common law as it develops there is closely watched by Maine courts. In Massachusetts there have been two recent Supreme Judicial Court decisions that could affect the prospects of clam aquaculture in Maine.

In the first case, the Town of Wellfleet granted an aquaculturist a lease to cultivate shellfish on a shorefront property owner's flats pursuant to authority granted by the Massachusetts Legislature. The site was located where the property owner moored his boats. Because the boats rested on the mesh covering the clams when the tide was out, the mesh tore. The Town filed a complaint against the property owner and sought an order from the court preventing him from mooring his boats at that location (an "injunction"). The Superior Court granted the order, and the property owner appealed.
The Supreme Judicial Court reviewed the case on its own motion. It concluded the Superior Court lacked the authority to issue the injunction and therefore reversed it. The potential problem in the case comes from statements made in the written opinion of a concurring judge.\textsuperscript{43} In that opinion, the judge described the relationship between the public right of free fishing and aquaculture. He wrote:

\begin{quote}
Aquaculture is not fishing, nor can it legitimately be considered a "natural derivative" of the right to fish, any more than breeding game animals on someone else's land could properly be considered a "natural derivative" of the right to hunt there. Thus, whatever the right the public has to interfere with the private property rights of coastal owners for purposes "reasonably related" to the promotion of fishing as well as navigation . . . turning the tidal flats . . . which this defendant [the property owner] apparently owns . . . into a shellfish farm is too great an extension of the public's right of "free fishing" to be "reasonably related" to that right.
\end{quote}

In essence, the judge argued that aquaculture should not be construed as part of the public right to fish in tidal waters or intertidal lands.

In the second case,\textsuperscript{44} the Supreme Judicial Court of Massachusetts picked up the language in the concurring opinion in the first case and gave it the force of law. In the second case, the Town of Truro granted an aquaculturist a lease to cultivate shellfish on a motel-owner's flats. The property owner sued, asking for a declaration from the court (a "declaratory judgment") that the lease-holder had no right to conduct aquaculture on her property. The Supreme Judicial Court ordered the Superior Court to grant it. In the process it held that aquaculture is neither reasonably related to nor a natural derivative of the public right of fishing. Thus, the public's right to use the intertidal zone for the purposes of aquaculture does not take priority over the shorefront owner's uses in Massachusetts.

Because Maine law requires shorefront owners' permission in order to conduct aquaculture on their flats, it is not likely the issues presented in the Massachusetts cases will arise here. The cases raise the question, however, of whether aquaculture should be construed to be within the public right of fishing in Maine. If so, then the public's right to use the flats would take priority over the shorefront owner's in instances where conflicts arise. If shellfish aquaculture, for example, is not a part of the public right of fishing in Maine, then shorefront owners could prevent flats from being leased for aquaculture. Because of the history of aquaculture as a conservation measure in Maine, and the fact that the State's leasing statute ties aquaculture to municipal conservation programs, a good case can be made that aquaculture is a tool with which the Legislature can conserve the clam fishery. From that perspective, an aquaculturist's use of flats would take priority over the shorefront owner's. Stated differently, the permission of the shorefront owner would not be required. However, the resolution of that issue must wait until either the Legislature acts to remove the provisions requiring shorefront owners' permission for aquaculture leases or someone challenges those provisions on public rights grounds.

**Conclusion**

The legal framework provides a basic definition of the respective rights of the State, towns, shellfish harvesters, shorefront property owners and aquaculturists in Maine. This framework can help to support the restoration of productive clam flats and aquaculture in this state.
Endnotes

4. *Case of Swans*, 7 Coke. 16. This rule is cited with approval, albeit in dictum, in *James v. Wood*, 19 A. 160 (Me. 1889).
5. *Freeman v. Leighton*, 38 A. 542 (Me. 1897).
7. *King v. Young*, 76 Me. 76 (1884).
10. ME. REV. STAT. ANN. tit. 12, s.s. s.s. 6072 (8) (West 1994).
25. Law of March 19, 1821, ch. 179, s.s. 3, 1821-34 Me. Laws 2, 891. Permits were not required for family use, Indian clamming, or digging clams for bait.
26. Maine municipalities have statutory authority to restrict the number of shellfish non-resident licenses. ME. REV. STAT. ANN. tit. 12, s.s. 6671 (3) (West 1994).
27. See *State v. Leavitt*, 72 A. 875 (Me. 1909); *State v. Alley*, 274 A. 2d 718 (Me. 1971).
29. While the question of the constitutionality of discrimination against non-residents is settled law in Maine, the issue of whether discrimination against non-residents alone constitutes effective conservation has not been addressed. Theoretically, if a municipality discriminates against non-residents as the sole conservation measure, it is vulnerable to a lawsuit by a non-resident alleging it is not properly exercising its statutory authority to conserve the resource.
30. ME. REV. STAT. ANN., ch. 12 s.s. 6671 (West 1994).
31. Under DMR regulations, creation of a shellfish conservation committee is optional. Requirements for Municipalities Having Shellfish Conservation Programs, Me. Dep't of Marine Resources Reg. 7.30.
32. The Department of Marine Resources has created a model shellfish conservation ordinance. The model ordinance does not, however, provide for the maximum use of municipal authority to conserve the shellfish resource.
33. DMR regulations require that municipalities survey their flats every three years.
34. Brunswick has also purchased an hydraulic dredge, which allows the operators to collect hundreds of undersized clams in one tide. These clams can either be transplanted or broadcast to more productive areas.
35. Brunswick recently terminated its reciprocal conservation program with Harpswell. This event may reduce the annual income to the Brunswick clamming community.
38. DMR can authorize aquaculture leasing under ME. REV. STAT. ANN. tit. 12, s.s. 6072 (West 1994).
39. ME. REV. STAT. ANN. tit. 12, s.s. 6673 (West 1994).
42. MASS. GEN. L., ch. 130, s.s. 57 (West 1991).
43. In a "concurring opinion" a judge agrees with the outcome of the majority opinion, but writes his own opinion because he disagrees with how the majority decided the opinion or because he wants to emphasize some other points. In this case, the concurring judge had both objectives.