

Guide to Developing an Inventory of Access Points to the Intertidal



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Introduction

Background

The wild shellfish industry is the second largest fishery in the state of Maine by economic value and is an important part of many of Maine's coastal communities. However, shellfish harvesters are facing an increasing loss of access to the intertidal on both private and public land. This trend is driven by changing coastal property ownership, challenges with access via public boat ramps, gentrification pressure, limited parking, and a fragmented statewide approach to identify and preserve working waterfront areas. All of these challenges were highlighted in recent reports by the Island Institute and Maine Coast Fishermen's Association, and in a forthcoming article in the special oceans issue of the *Maine Policy Review* by Zoellick et al. (in press)¹.

On private land, changing property ownership has been identified by harvesters as one of the biggest drivers of loss of overland access to intertidal flats. Real estate pressure increased during the COVID-19 pandemic, making coastal properties unaffordable for many local residents. The Maine Association of Realtors [reported](#) that the number of homes sold in Mid-Coast and Downeast counties increased 24% in one year, from 2,899 in 2019 to 3,594 in 2020. Many of these homes have been purchased by out-of-state residents ([30-33% of properties statewide](#) from 2020-2022) who often do not have an understanding of what it means to live on a working waterfront. Harvesters who previously had informal "handshake" agreements with coastal homeowners to access the shore through their properties are finding that new owners will not honor those agreements.

This loss of overland access for harvesters has cascading effects for coastal communities. Limitations on walk-in access can lead to overcrowding and competition for parking at public access points. In addition, a shrinking number of access points increases the distance that a harvester must travel – hauling gear and shellfish across land, or sometimes traveling several miles by boat in dangerous conditions, particularly in the winter months.

From 2022 to 2023, Manomet partnered with several towns in Casco Bay to conduct an inventory of access points to the intertidal on both public and private land. The goal was to support the efforts of municipal shellfish committees, harvesters, and town officials to identify opportunities to preserve or acquire intertidal access in priority places. To do that, an understanding of where these access points are located currently, and where access has been lost, is a critical first step.

Manomet worked with the towns of Brunswick, Harpswell, Georgetown, Yarmouth, Arrowsic, and Phippsburg to inventory intertidal access. This occurred through discussions with shellfish committees, town staff, and harvesters, and was an iterative process that spanned several months in each town. This document lays out more details on that process. Across all of these towns, 65% of the access points that were identified were on private property, and of those 96% were either through informal agreements with private landowners, of an uncertain status, or sites where access had been lost. This highlights the precarious nature of access along the coast, as these agreements can be revoked at any time if the landowner changes their mind for any reason. Inventorying intertidal access can help to bring attention to this issue, and serves as a starting point for identifying opportunities to protect and enhance access along the coast for commercial harvesters and public users of the intertidal environment.

Purpose of this document

The purpose of this document is to provide a step-by-step guide for municipalities looking to inventory coastal access points used for shellfish harvesting. This is intended to create some consistency in approaches across municipalities to contribute to a coast-wide understanding of access, and to share strategies and lessons learned so that no municipality is reinventing the wheel. The document is intended for municipal shellfish committees, town staff, and organizations supporting towns in developing coastal access inventories.

¹ Zoellick, B., Angione, P., Farr, E., Fisher, A., Joyce, J., Lauer, B., McMahan, M., Pinkham, M., and V. Rea. (in press). Getting to the Shore on Foot: Sustaining Access for Clam and Worm Harvesters. *Maine Policy Review*.

This guide builds upon several prior efforts that have taken place over the last two decades, described briefly in **Appendix A**. The approach outlined here differs from most of these efforts in its discrete focus on access for shellfish harvesters, recognizing that these access points are also often used for other commercial and recreational purposes. Unlike other types of working waterfront, a large proportion of these access points are informal, walk-in access agreements with private landowners that have not been captured through these other efforts, and are often sensitive in nature and must be kept confidential.

Data confidentiality considerations

Coastal access data has practical implications for local, regional, and statewide waterfront planning. Getting the information into the hands of decision-makers at all levels is critical. At the same time, some of the information is sensitive in nature, and requires a thoughtful data sharing policy. This is particularly important for any access points that represent informal agreements between harvesters and private landowners, where those landowners do not want the information about the use of their property to be publicly available. Similarly, confidentiality is important in situations where such an informal access agreement may only apply to a few harvesters that have a relationship with the landowner, and publicizing that arrangement may jeopardize the access agreement. Developing clear data ownership, use, and sharing agreements is a critical first step before embarking on an access inventory process.

Appendix B is a model data sharing agreement that outlines data ownership, data sharing, and data confidentiality provisions for the coastal access dataset in a municipality.

Appendix C is a model data use agreement that details how data can be used when a municipality does decide to share it with an external organization (in this case, a land trust).

Other considerations

Any inventory of coastal access is a snapshot in time and should be revisited every few years. Creating a baseline inventory allows a municipality to assess how access is changing over time – if access points are being gained or lost; if there are trends in particular areas of the coast; if the breakdown of access on private vs. public property is changing; etc. Revisiting the inventory every few years can help a municipality identify problem areas or opportunities and make a plan to address them.

Methods

The overall process for developing an access inventory is: (1) planning, (2) gathering existing data, (3) participatory mapping, (4) organizing the data and gathering additional information, and (5) developing products for the municipality. Different municipalities may choose to modify this approach to fit the local context, but this is intended to provide a roadmap that can be adjusted as appropriate. For example, some towns may choose to visit each site to take pictures and collect additional information, while for others this may not be feasible.

Planning

The first step in this process is for the municipality to determine its goals and approach, and to get buy-in from the shellfish committee and harvesters. This may involve introducing the project at a shellfish committee meeting, and having the committee vote on how and whether they want to proceed. Because this inventorying effort will involve gathering information from harvesters and town staff (e.g., warden, harbor master, marine resource administrator), it is important that everyone understands the goals and is comfortable with the approach.

At the same time, the municipality should identify who is going to lead the mapping effort. This may be an external organization that is supporting the municipality, volunteers working with the town, or municipal staff. This person/group's role will involve putting together materials needed for the inventory, leading the mapping effort, organizing the spatial dataset, and developing final inventory products.

It may also be useful to have discussions with other towns who have already done this work and can help answer any questions. For a list of towns and individuals who may be helpful resources, see **Appendix D**.

Before starting the mapping activity, decide what specific information needs to be captured about each access point. A suggested list of data fields is below (Table 1), and towns may choose to use a similar template to allow for comparisons across towns and help build a statewide understanding of coastal access. However, there may be additional information that is important to capture within the local context.

If an external organization is supporting the municipality in developing the coastal inventory (and even if the municipality is leading the work themselves), make sure there is a clear data sharing agreement in place before the mapping begins to protect any confidential data.

Table 1. Information Collected for Each Access Point

Name	Description/Options
Number	Number each access point on the map for reference
Latitude	
Longitude	
Local name	Name harvesters/town use for the site
Access type	Walk-in, Drive-down, Boat ramp, Tidal boat access, Place to keep boats, Access from water only, other
Ownership	Private, Municipal, State, Federal, Land Trust, Other
Status	Secured, Informal Access lost, Priority to acquire, Unsure
Nature of Access	Informal/handshake, Easement, ROW, Public landing, Public park, Land trust preserve, Private wharf/pier, Fee parking, Other
Public Owner (if applicable)	Name of town, land trust, state agency, etc.
Private Owner (if applicable)	Name of private owner and Map/Lot number
Surface	Paved, dirt, boat ramp, trail, other
Priority	1 = critical access; used a lot; high priority, 2 = important access; used frequently; medium priority, 3 = access is used infrequently; low priority
Reason for Loss (if applicable)	e.g., change in land ownership, change in of informal agreement, decline in resource, other
Issues	e.g., parking, overcrowding, infrastructure needs, potential for property to change hands, no trespassing signs, other
Off-street Parking (Y/N)	Y/N
Other Commercial Uses (Y/N)	Is this access point used for other commercial fisheries or other commercial uses? (Y/N)
Recreational Use (Y/N)	Is this access point used by recreational users? (Y/N)
Historically Used (Y/N)	Has the property been used historically for access, but isn't anymore? (Y/N)
Water Body	Name of body of water this site provides access to
Sharing permission	How can the location and information about this access point be shared? Public, Confidential to town, with permission from landowner
Question	Any outstanding questions or uncertainties about this access point?

Gathering existing data

Before beginning the inventory, determine whether the municipality has already conducted any shore or coastal access inventories in the past that may be used as a starting point. This might include a working waterfront or marine resources inventory in the comprehensive plan, or an assessment of public access at coastal rights-of-way (ROWs) or paper streets.

Participatory Mapping

Materials:

The first step in the mapping process is to determine how the data will be collected. If collecting the data digitally, a town may choose to enter the data directly into ArcGIS, Google Earth, or another mapping software, or use the [template survey that can be found in the Community Intertidal Data Portal](#). Data may also be collected by identifying access points on a print map, with printed data sheets used to capture information at each point (more detail below). Another option is to visit each site and collect GPS data on the point or path to reach the flats, which allows for more contextual information to be gathered, including photos of the site.

Mapping process:

The mapping process may take anywhere from an hour to several hours depending on the number of access points in the town, how much discussion there is amongst participants, and the number of people participating in the process.

Mapping the access points may be done in a few different ways, and a municipality may choose to take one or several of these approaches to gather the data:

- Discuss and map access points during a regular shellfish committee meeting (or at a special shellfish committee meeting outside of the monthly meeting schedule, given the time commitment, to avoid interfering with other agenda items)
- Individual conversations between the person facilitating the mapping exercise and harvesters and town staff (e.g., warden, harbormaster, marine resource administrator) to identify and map access points
- Harvesters or municipal staff may fill out a data sheet (using Table 1) to share access points, which can later be put onto a map
- Visit each of the access sites and collect GPS data on the point or path to the flats, and photos of each site. Site visits may also be a follow-up to mapping done during a shellfish committee meeting (see the Gouldsboro Shore case study on page 12 for more detail on this approach).

If collecting data digitally, a map (e.g., an ArcGIS map or Google Earth map) may be projected on a screen, and points and their associated data attributes added directly to the map as they are identified and discussed. If using a print map, small stickers may be placed at each access point on the map, labeled with a number (Figure 1), and their associated information can be added to a data sheet with the same number (see **Appendix E** for a template data sheet).



Figure 1. Printed map with stickers in Yarmouth (only showing public access points).

One benefit of using print maps for this exercise is the ease of visualizing all the access points for participants in the room. In several towns that have gone through this inventory process, the committee members and harvesters in the room were often surprised by the number and distribution of access points when they were all laid out on the map with stickers. The physical visual was helpful to get a sense of how many access points there are, how precarious access arrangements may be, and where the big gaps in access exist along the coast.

In towns with few access points, it may be beneficial to visit each site to discuss and document information about the site, including capturing spatial data using a phone or GPS unit, and site photos. This may be especially useful for access paths that cross multiple properties or are particularly long and may be difficult to delineate on a map without visiting the site.

Organizing the data and gathering additional information

Once the mapping exercise is complete, the data will need to be organized and cleaned. If the data were collected using a print map, those points will need to be transferred into a digital mapping software. Regardless of whether collected digitally or using a print map, the data should be reviewed to make sure there isn't any important information missing, and that the values are entered consistently. At this point, there may need to be additional data gathering to answer questions or fill in gaps that came up during the participatory mapping process.

To gather information on the individual owners of each of the private properties with access agreements, it may be necessary to cross-reference the access dataset with municipal tax maps. These can usually be found on the town's website. Some towns may have a spatial database with property tax data. In other towns, this may require cross-referencing the property on PDF tax maps with the most recent tax commitment book (which is easiest to do using the "Map/Lot" number for the property). Recognizing that ownership can change over time, documenting the Map/Lot number of a given property will make it easier to look up the property owner in the future.

The most common questions that came up in towns that have gone through the inventory process were related to ROWs and paper streets. Specifically: (1) whether a location has a public ROW or easement associated with it, and (2) access rights associated with specific ROWs or paper streets (e.g., is the ROW public, for harvesters, or just for adjacent landowners or members of a homeowner's association?). Answering these questions likely will require a discussion with the town's tax assessor or planner (see box, *Public Access on Private Roads, Private Ways, and Paper Streets*).

Public Access on Private Roads, Private Ways, and Paper Streets

The information in this section is drawn from research done by Ben Algeo as a legal intern at the New England Ocean Cluster.

Maine is one of the few states where private landowners along the coast can own land in the intertidal zone. Land in the intertidal is subject to a public easement for fishing, fowling, and navigation, but the upland owner can still prohibit people from crossing their property to reach the coast. Mechanisms that provide for public access, such as rights-of-way and other public easements, are important avenues for municipalities to retain public access to the coast, but can be complex.

What rights do the public have to use private ways to access the intertidal zone? Many of the roads leading to the shore in Maine are private roads or private ways. *Private roads* are truly private and do not inherently allow public access, while *private ways* are public easements that allow public access to land or water. Often, a public easement is created when a municipality decides to discontinue a town way (e.g., converting a town road to a private road). A private landowner may also choose to dedicate a portion of their property for public use, which can become an easement held by the municipality or another interest (e.g., a land trust). The existence of public ways and public easements can be determined by reviewing public meeting records.

What rights do the public have to use paper streets to access the intertidal zone? “Paper streets” has become a legally defined term in Maine for a subset of rights of way that were recorded on subdivision deeds but never actually built or formally accepted by a municipality. The legislature passed a law² in 1997 to set a timer for towns to either formally accept paper streets or let them expire. Towns may also choose to extend the timer and reserve the right to accept certain paper streets at a future date by filing a notice in the registry of deeds³.

The public does not have any inherent access rights to paper streets, unless and until they are accepted by the municipality. However, the municipality can prevent adjacent landowners from constructing permanent structures on the paper street. In some cases, public easements may exist on paper streets, which can be determined based on a search of property, meeting, and court records.

How can municipalities expand public access on private roads and paper streets? Municipalities interested in protecting and expanding public access may (1) conduct records searches to determine established public easements across private roads and paper streets, (2) raise public awareness about their rights to use these public easements, (3) work with private landowners to develop new public easements, and (4) accept paper streets that run to the shore.

² Maine Revised Statutes, Title 23, Section 3032. <https://legislature.maine.gov/statutes/23/title23sec3032.html>

³ The town of Harpswell, for example, chose to extend the timer and reserve the right to accept all paper streets that provide, or have the potential to provide, access to the water.

Table 2. Subset of Brunswick access data table. This table only shows a subset of the information gathered for each access point. For a complete list of data fields, see Table 1. The numbers in the first column align with the numbers on the map (Figure 2) for easy cross-referencing.

No.	Local Name	Access Type	Ownership	Status	Nature of Access	Priority	Notes
1	Simpson's Point	Boat ramp	Municipal	Secured	Public landing	1	20-30 foot right of way to water; town owns property to side (8 parking spots). Will develop paths down to shore.
4	Wharton Point	Drive-down; Tidal boat access	State	Secured	Boat ramp	1	Important access to head of bay for working waterfront users. Needs some work.
6	Private access point (not included on map above)	Walk-in	Private	Informal	Informal/handshake	1	Probably most used privately owned access. Property just sold, TBD if new owner will continue access.

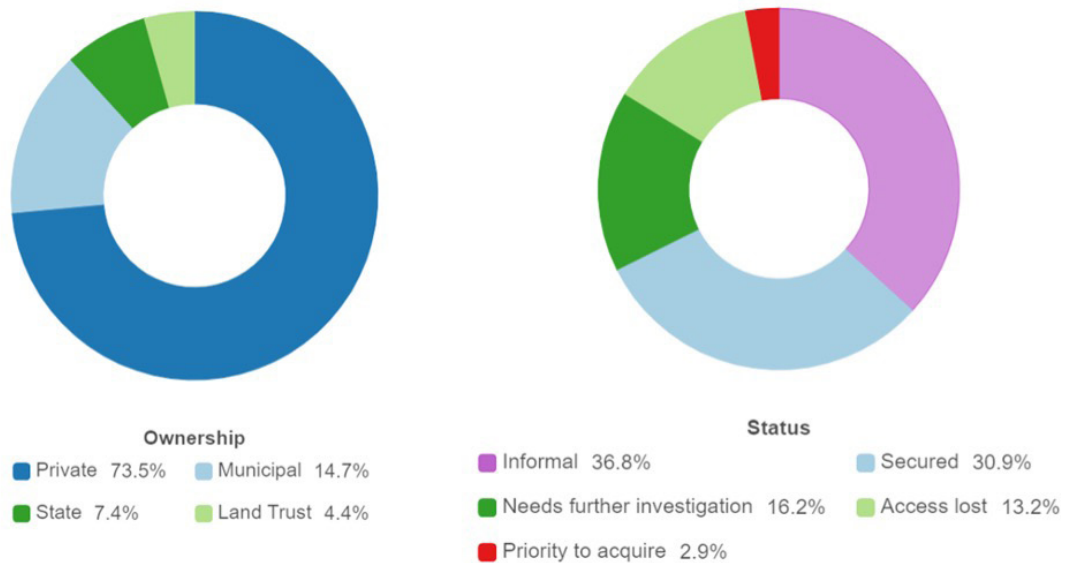


Figure 3. Summary of ownership and status of access points in Brunswick. Of 68 total access points identified, 50 are on private property, ten are on municipal property, five are on state property, and three are on property owned by land trusts. Twenty-five access points are informal agreements with private landowners, 21 are secured access points (e.g., on public property, through a formal right of way, on land trust property), 11 are access points that need further investigation (e.g., may be a paper street or right of way), nine access points have been lost (largely due to changing property ownership or agreements with landowners), and two locations are a priority to acquire but do not currently have access.

Information about public access points may be pulled out from the dataset to be shared with the public, whether on the town website or through the Intertidal Data Portal (see above). This may be useful information for recreational or commercial users of the coast to find information about where to launch a boat, where to access the shore on foot, and more details about each site.

Additional data layers

At this point, a town may also choose to bring in additional spatial data to see how intertidal access points intersect with other land uses or impacts. For example, the Maine Conserved Lands dataset through the State of Maine may be helpful for understanding land use and ownership along the coast, and opportunities for synergies between conserved lands and access arrangements. Overlaying information about projected sea level rise on the coast and the potential inundation of coastal infrastructure (e.g., roads) can help inform decisions around areas that may need attention or infrastructure improvements to build resilience (Figure 4).



Figure 4. Map of sea level rise projections and Arrowsic intertidal access. The bridge used to reach the flats experiences frequent flooding at high tide and will likely see additional impacts as sea levels continue to rise.

Using The Intertidal Access Inventory

Completing the inventory is an important first step toward identifying opportunities to protect or enhance access to the intertidal. Once the inventory is completed, it may be helpful to develop a list of priority sites for action. This may include places where a landowner may be open to formalizing an access agreement, priority sites for town acquisition or infrastructure improvement, opportunities to improve access through land trust properties, or other possible actions. **Appendix F** lists different options for addressing access on private, public, and land trust properties.

Different towns have taken varying approaches to addressing intertidal access after conducting the initial inventory. Below are short case studies describing the actions taken in a few towns and contact information for individuals who can provide more information for each case.

Overview of findings from intertidal access inventory in six towns in Casco Bay

Manomet worked with six towns in Casco Bay to inventory their access points to the intertidal for shellfish harvesting: Brunswick, Harpswell, Arrowsic, Georgetown, Phippsburg, and Yarmouth. Across these towns, 65% of all identified access points were across private property (Figure 5), ranging from 46% to 89% in each town. Of these access points on private property, only 4% were “secured” through some formal agreement. The inventory process identified 26 access points that had been lost in recent years, largely due to changing agreements with private homeowners, as well as several locations where it may be a priority to acquire access in the future (Figure 6). See the companion document [Mapping Access to the Intertidal in Six Towns in Casco Bay](#) for more detailed findings from this work.

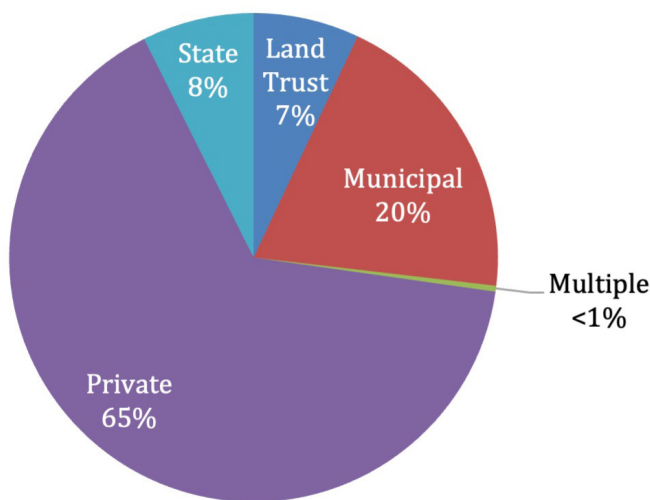


Figure 5: Ownership of the access points across the six towns in this project. The majority of access points were across private property (65%), which included private homeowners and businesses, followed by municipal, land trust, and state property. One of the access paths crossed property owned by three different entities (state, federal, and land trust), and is identified here as “multiple” ownership.

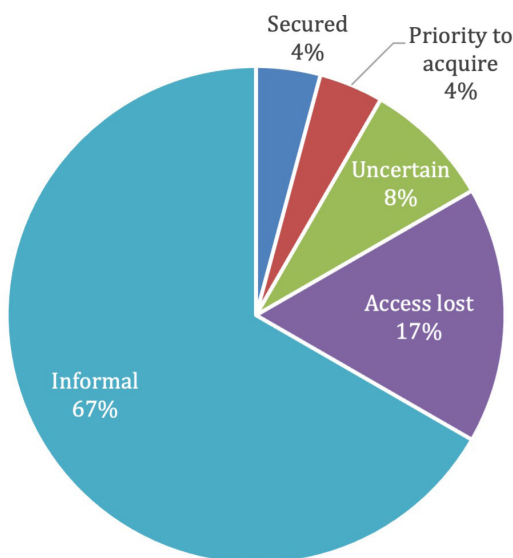


Figure 6. Status of access points across the six towns. Access lost indicates sites that previously provided access, but no longer do. Informal refers to informal arrangements with landowners for access, often referred to as “handshake” agreements. Uncertain refers to properties where the access arrangement was uncertain (e.g., whether there was a right-of-way associated with the property). Priority to acquire indicates sites where there is not currently access, but it is a priority for the future. Secured indicates properties where the access arrangement is stable, including access across municipal, state, or land trust property, as well as locations with a legal right-of-way or other formal agreement.

One of the highest priority needs identified across these towns was outreach to landowners to thank them for providing access and encourage continued support for the industry, and to identify opportunities to develop written agreements to protect access into the future, even as properties change hands. There were also several instances where questions remained about whether a ROW or paper street in town conferred public access, or access for commercial harvesters. Several towns also identified public landings, docks, or parcels where infrastructure improvements were needed to reduce crowding, increase parking, fix damages, or build greater resilience to sea level rise and coastal flooding. Below are several examples of actions these towns chose to take after completing the inventory process.

For more information contact Emily Farr, efarr@manomet.org

Case Study: Collaboration with Maine Coast Heritage Trust

Maine Coast Heritage Trust (MCHT) is a nonprofit land conservation organization focused on protecting and caring for lands along the coast of Maine, and expanding access to the coast is among their top priorities. Several of the towns Manomet collaborated with in Casco Bay chose to share their access inventory data with MCHT (under a written agreement that no data would be shared further without written permission from the shellfish committee). This allowed MCHT to compare their land conservation and access priorities with the access needs in each community, and to have access in mind as they work on land acquisition, conservation easements, and outreach to landowners along the coast.

MCHT staff also have deep experience working with landowners on conservation easements or other legal mechanisms to conserve land and access to the coast. In several instances, MCHT staff provided support conducting deed research to better understand the status of certain ROWs or other access arrangements across private property.

If a landowner is interested in developing a more formal access arrangement across their property, such as a ROW, conservation easement, or renewable license, MCHT is available to work with the landowner to navigate that process.

For more information contact Jeremy Gabrielson, jgabrielson@mcht.org

Case Study: Outreach to coastal landowners in Brunswick and Harpswell

Several towns have chosen to reach out directly to coastal landowners to share information about the importance of coastal access and invite them to discuss developing more formal arrangements. Both Brunswick and Harpswell recently sent letters to hundreds of coastal property owners to share information about the value of the shellfish fishery in each town, thank landowners who already provide access across their property, and encourage any landowners who do not currently provide access to reach out if they would like to do so. In response, several landowners responded to express their interest in providing access, including at least one moving to Maine from a different state. A template letter to landowners can be found in **Appendix G**.

Harpswell has also held a “landowner appreciation day” for the last several years, inviting community members to an informal summer clam cookout where they can ask questions and build relationships with local harvesters. These events have been very well attended and have resulted in several landowners offering access across their properties. These kinds of local outreach and relationship-building efforts can go a long way toward preserving informal access arrangements and beginning conversations about more formal arrangements (such as ROWs, access easements, or annual license agreements).

For more information contact Paul Plummer, Harpswell Harbormaster, pplummer@town.harpswell.me.us or Dan Devereaux, Brunswick Coastal Resources Administrator, ddevereaux@brunswickme.org

Case Study: Gouldsboro Shore

Gouldsboro's coastline stretches over 55 miles and includes harbors, bays, coves, salt marshes, and rocky coasts facing the open ocean. It has the potential to provide diverse clam-digging opportunities with locations well-suited to year-round harvesting in different weather conditions. But, you have to get to the shore.

As in other communities along the coast, subdivision development over the last 50 years has transformed long-used shore footpaths into houses and lawns. However, over time, many of these new shorefront owners came to understand that clam harvesting was part of the town's economy and culture. Harvesters developed informal arrangements with enough of these new arrivals to continue harvesting.

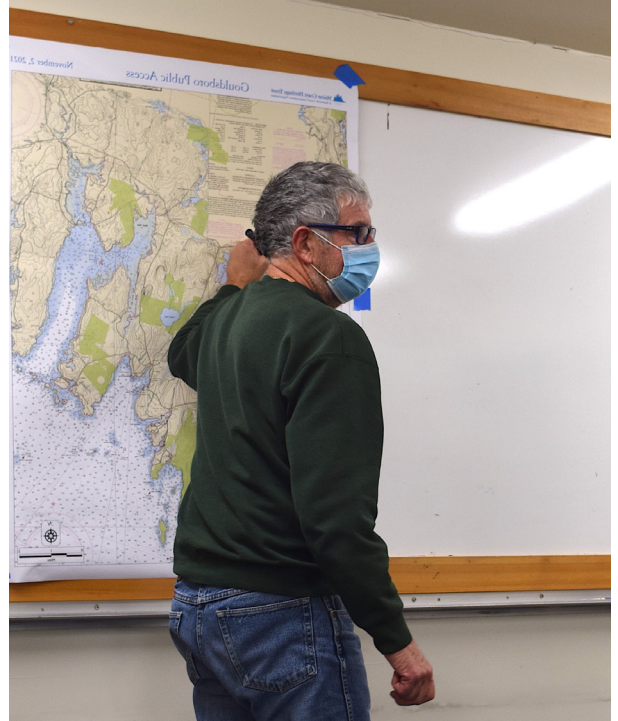
Two developments over the past five years have put these arrangements at risk. First, many people who had settled on the shore in the 1970s and 80s began thinking about downsizing or selling properties used only seasonally. Second, increasingly hot summers elsewhere in the country, COVID, unusually low interest rates, growing opportunities to work remotely, and growth of the short-term online rental market combined to create a real-estate boom. Shorefront property moved quickly. Informal arrangements for shore access suddenly disappeared for some properties.

In December 2021, Shellfish Warden Mike Pinkham and Volunteers with the town's Gouldsboro Shore program (www.gouldsboroshore.me) decided to start meeting with shorefront property owners who had been providing access to discuss ways to preserve it. Mike grew up in the area, was the local Marine Patrol officer for over 30 years, and knew most people living on the shore. The plan was for Mike to meet individually with people who owned especially valuable access sites and, if the owners expressed interest in doing something, to set up subsequent meetings with staff at Maine Coast Heritage Trust (MCHT) or Frenchman Bay Conservancy (FBC) to explore and, if possible, realize some of those possibilities.

Mike and the volunteers realized they needed the harvester's input to identify and prioritize sites. To facilitate this, Bob DeForrest of MCHT printed off a large map of Gouldsboro that Mike could tape to a wall at the December shellfish committee meeting. The plan was that Mike would place a letter on the map for each site, and the volunteers would record site details on a form as the harvesters talked. **Appendix H** has a copy of the form that was used.

As the meeting began, Mike and one of the volunteers explained that the goal was to identify the most important sites so that we could focus on them. Immediately, one harvester responded, saying, "Well, you need to protect ALL of them!" His words captured something important but might also have been a way to avoid sharing private information. Different harvesters use different sites, and not all are known to everyone.

Mike suggested that the group start by talking about well-known areas, focusing on the times of year and weather conditions when each site was most useful, the quality of the yield, ease of access, parking, and so on. That opened up the conversation, and soon, harvesters began adding to each others' remarks. Information began flowing so fast that the two volunteers recording it had difficulty keeping up.



Mike Pinkham, Gouldsboro shellfish warden and harbormaster, marking access sites on a map during a Gouldsboro shellfish committee meeting. Photo courtesy of Bill Zoellick.

In the weeks after the meeting, two harvesters each agreed to lead volunteers on tours of sites they used. Each trip lasted a few hours and provided much more information about each location and a picture of the complex considerations behind a harvester's decision about where to access the shore each day.

During its January meeting, the Shellfish Committee spent most of an hour reviewing the information the volunteers had collected about the sites. Cross-checking information with harvesters is essential to getting it right. The discussion was animated, provided new information, and surfaced harvester concerns about changes they were seeing. One worrisome trend was the conversion of seasonal properties from single-family use for a few months each year to year-round short-term rentals, where harvester access is not welcome.

After the meetings, Gouldsboro Shore volunteers used town tax maps to find ownership information about each access location and Google Earth to visualize the locations relative to town-owned property and conserved lands that might provide public access.

Figure 7 shows the situation that the harvesters are facing. The bright blue areas mark the mudflats open to harvesting at some point during the year, the dark blue targets identify town properties where access is possible, and the bright green areas indicate conserved lands that might provide public access. A quick look at the map shows how dependent harvesters are on access across private properties.



Figure 7. Map of Gouldsboro mudflats, public access sites, and conserved lands.

As the survey was being completed, Maine Inland Fisheries and Wildlife (IF&W) acquired one of the privately owned locations. Gouldsboro Shore learned of this from someone living on a small, separately owned site within the larger one. He had noticed new government signs posted around his property and reached out to us to ask what was going on. Working through the town office, we assembled the pieces and put the inholder in touch with IF&W. He was delighted to learn the State was his new neighbor. We also told IF&W about the site's importance to clam harvesters. They said they had not known this, were glad harvesters were using it, and would retain existing infrastructure that keeps the shore accessible.

Later, we learned that the harvesters had lost a once-much-used privately owned site when the owners converted it to short-term rental use. Over the summer, Gouldsboro Shore and FBC worked with people who owned property in the same area to secure [a new access site for clam harvesters](#).

More recently, Gouldsboro has begun working with MCHT to design a renewable, no-fee license agreement between the town and some new shore property owners who would like to find a manageable way to provide harvester access. This will ultimately serve as a resource for other towns who want to set up similar agreements.

Notably, volunteers from the town's Gouldsboro Shore program began talking with these new owners at this year's "Meet Your Local Clams" event, where people gather to eat clams and learn about the town's activities regarding shellfish and other coastal issues. Like the people who came to Gouldsboro decades ago, many new arrivals will want to be part of their newly adopted community and may be open to providing shore access. We can facilitate this by making coastal issues such as shore access visible, going out to meet and welcome people, and making the process of providing and managing shore access as simple as possible.

Although some of the methods that Gouldsboro uses to protect and expand shore access differ in small ways from ideas presented in this guidance document, the overall approach was identical:

- Work closely with shellfish harvesters
- Collect detailed data that help identify when alternative access points are available and when they are not
- Cross-check the data with harvesters
- Present the data visually
- Reach out to the people living on and moving to the shore. (It's not about the data.)

For more information, contact Bill Zoellick, bill@zoellick.com

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Appendix A: Description of coastal access studies and resources produced over the past two decades

This list represents a sample of coastal access studies and resources that were produced over the past two decades. Additional resources and studies are [listed in this document developed by the Maine Coastal Program](#) in 2022 for the Shellfish Advisory Council to the Maine Department of Marine Resources.

- [The Last 20 Miles: Mapping Maine's Working Waterfront](#) is a report detailing a mapping project that began in the summer of 2005 led by the Island Institute and many partners. The goal of this project was to map out the access points all along the coast to consolidate information about what access currently exists, and what needs to be done to protect this access to the working waterfront. Along with the geographic data, this project also started conversations among community leaders about protecting access to the coast. This project collected data about both public and private access points, and the focus was on trends in the working waterfront as a whole. Anyone interested in viewing or using the data from any given municipality from this effort is required to get individual permission from that municipality.
- [Accessing the Maine Coast](#) is a website developed in 2009 by Sea Grant, the University of Maine, NOAA, the Island Institute, and the Maine Coastal Program. The goal is to provide a compilation of everything you need to know about the rights and responsibilities of accessing the coast of Maine. This includes information for private landowners about public use of their property, tools for municipalities interested in creating access, and waterfront users who want to access the coast. The website is currently being updated to incorporate new information.
- [Paths and Piers](#) is a report published in 2003 by Sunrise County Economic Council for the Maine Coastal Program. The goal was to replicate a previous study that assessed coastal access statewide, but focus on communities in Downeast Maine. Information presented includes vulnerability estimates for each community, strategies to improve likelihood of continued access, and recommendations for how to continue preserving access and stay informed. This study did not reference specific sites or nuances between public and private sites, the focus was on community access in general for towns in Downeast Maine.
- [Preserving Access to the Intertidal](#) is a guide published by the Casco Bay Regional Shellfish Working Group. The goal is to provide tools to communities to preserve their coastal access to commercial shellfisheries. This guide addresses issues including private landowners restricting access, encroaching development, and lacking infrastructure. The guide mainly focuses on ways that harvesters and municipalities can legally preserve their access to the working shoreline.
- The [Working Waterfront Inventory Template](#) (WWIT) is a resource developed by the Maine Coast Fishermen's Association and Tidal Bay Consulting. By completing this inventory, towns can collect data on coastal access, working waterfront infrastructure, and the local economic impact of fisheries and aquaculture using an accessible, step-by-step approach. The WWIT helps communities understand their current working waterfront (including access to the intertidal), and provides the tools to monitor, preserve, and invest in working waterfront for future generations. Access to the intertidal can be inventoried as part of inventory Table A, Coastal Waters and Access. Manomet's inventory and mapping process can be utilized to complete this table.
- [Machiasport Maritime Plan, inventory of working waterfront access points](#): As part of its Maritime Plan development, the town of Machiasport worked with the Washington County Council of Governments (WCCOG) to inventory working waterfront access points across both public and private land used by commercial harvesters. This process was very similar to that undertaken by Manomet in partnership with towns in Casco Bay.

Appendix B: Data Sharing Agreement

The data collected through this project have practical applications for local, regional, and statewide waterfront access planning. Getting the information into the hands of decision-makers at all levels is critical. At the same time, some of the information is sensitive in nature, and requires a thoughtful data sharing policy that is determined by each town.

Information gathered through this project is available in the following ways:

- Each town will receive its local data through pdf maps and copies of all digital data
- With town permission, Manomet⁴ will share spatial data on public access points with the Maine Coastal Program and other interested parties.
- Generalized information about the status of a town's access points (e.g., number of informal agreements) is important for state policymakers to advance efforts to improve commercial access to the intertidal. With the town's permission, Manomet will share information with the state about:
 - The number of informal access agreements on private land in the town.
 - General trends in intertidal access, including changes in the number of access points, distance between access points and harvested flats, and commute from home to access points.
- The entire data set for each participating town, including all publicly owned and accessible points as well as privately owned and accessed points, is housed at Manomet and may be made available to interested organizations and individuals by request. In order to maintain local control over the data, data will only be shared with explicit permission from the town shellfish conservation committee.
- If any data is collected that is determined to be confidential to an individual harvester, Manomet will house the data and only share it with explicit permission from that individual (e.g., for the purpose of facilitating discussions around preservation of an informal access point).

⁴ Name of entity supporting the town in developing the inventory.

Appendix C: Data Use Agreement

Between Manomet, *[Town shellfish committee]*, and Maine Coast Heritage Trust

Purpose of Agreement

This data use agreement is between Manomet, *[Town shellfish committee]*, and Maine Coast Heritage Trust (MCHT) to govern MCHT's use of the "*[Town]* intertidal access inventory" dataset.

Manomet collaborated with the *[Town shellfish committee]* to gather information about access points to the intertidal through public and private property. Some of the data about intertidal access is sensitive in nature and requires confidentiality. A data sharing agreement between Manomet and the *[Town shellfish committee]* stipulates that the entire data set, including all publicly and privately owned access points, is housed at Manomet and may be made available to interested organizations and individuals by request. To maintain local control over the data, data will only be shared with explicit permission from the town shellfish committee.

This dataset is being shared to facilitate MCHT's ability to identify opportunities to improve, protect, or acquire access to the intertidal through the course of its work.

Manomet, *[Town shellfish committee]*, and MCHT agree to the following:

1. Data Access. Manomet will share a digital copy of the data with MCHT as a shapefile and excel sheet.
2. Ownership. The dataset is owned by the *[Town shellfish committee]*, and housed at Manomet.
3. Confidentiality. MCHT will not share any of the data without written permission from the *[Town shellfish committee]*, unless it is designated as "Public" in the "Sharing Permissions" field.
4. Transfer. Any third party granted access to the data, as permitted under condition #3, shall be subject to the terms and conditions of this agreement. Acceptance of these terms must be provided in writing by the third party before data will be shared.

Appendix D: Towns And Individuals Who May Be Helpful Resources

Towns that have conducted access inventories

Shellfish committee chairs from Phippsburg, Georgetown, Arrowsic, Brunswick, Harpswell, and Yarmouth are good resources, in addition to the following individuals:

BRUNSWICK

Dan Devereaux

Coastal Resources Administrator

ddevereaux@brunswickme.org

HARPSWELL

Paul Plummer

Harbormaster & Marine Resource Administrator

pplummer@town.harpswell.me.us

GOULDSBORO

Bill Zoellick

bill@zoellick.com

Other helpful points of contact

EMILY FARR

Manomet

efarr@manomet.org

MARISSA MCMAHAN

Manomet

mmcmahan@manomet.org

JESSICA GRIBBON JOYCE

Tidal Bay Consulting

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JEREMY GABRIELSON

Maine Coast Heritage Trust

jgabrielson@mcht.org

JUDY COLBY-GEORGE

Viewshed

jcg@viewshed.net

Appendix E: Template Data Sheet

Information Collected for Each Access Point

Data Field	Value
Number <i>Number each access point on the map for reference</i>	
Latitude	
Longitude	
Local name <i>Name harvesters/town use for the site</i>	
Access type <i>Walk-in, Drive-down, Boat ramp, Tidal boat access, Place to keep boats, Access from water only, other</i>	
Ownership <i>Private, Municipal, State, Federal, Land Trust, Other</i>	
Status <i>Secured, Informal Access lost, Priority to acquire, Uncertain</i>	
Nature of Access <i>Informal/handshake, Easement, ROW, Public landing, Public park, Land trust preserve, Private wharf/pier, Fee parking, Other</i>	
Public Owner (if applicable) <i>Name of town, land trust, state agency, etc.</i>	
Private Owner (if applicable) <i>Name and Map/Lot number</i>	
Surface <i>Paved, dirt, boat ramp, trail, other</i>	
Priority <i>1 = critical access; used a lot; high priority, 2 = important access; used frequently; medium priority, 3 = access is used infrequently; low priority</i>	
Reason for Loss (if applicable) <i>Change in land ownership, change in of informal agreement, decline in resource, other</i>	
Issues <i>Parking, overcrowding, infrastructure needs, potential for property to change hands, other</i>	
Off-street Parking (Y/N)	
Other Commercial Uses (Y/N) <i>Is this access point used for other commercial fisheries or other commercial uses?</i>	
Recreational Use (Y/N) <i>Is this access point used by recreational users?</i>	
Historically Used (Y/N) <i>Has the property been used historically for access, but isn't anymore?</i>	
Water Body <i>Name of body of water this site provides access to</i>	
Sharing permission <i>Public, Confidential to town, with permission from landowner</i>	
Question <i>Any outstanding questions or uncertainties about this access point?</i>	

Appendix F: Menu Of Options for Improving Intertidal Access

This list is intended to provide a “menu of options” for improving access to the intertidal for shellfish harvesting. It is not comprehensive but meant to help guide conversations about the appropriate strategy in any specific location identified in a town’s intertidal access inventory.

Access through private property:

Outreach

1. Letter to landowners: e.g., to thank them for providing access through their properties, and inviting them to reach out to discuss options for preserving that access into the future (see template in **Appendix G**)
2. Individual outreach to landowners who currently allow access and may be willing to formalize access agreement:
 - a. Step 1: initial outreach; step 2: connect them with land trust or others who can help with formalizing access
3. Individual outreach to new landowners in places that could provide access

Research

4. Deed and archival research on rights of way

Access agreements

5. Formal/permanent
 - a. Conservation easement with specific language allowing harvester access
Example language: “This conservation easement will allow for pedestrian access to the shore for harvesting of clams or other natural resources (except for seaweed), along pathway(s) to be designated by the Owners in concert with Coastal Rivers Conservation Trust” (from a Coastal Rivers Conservation Trust easement)
 - b. Acquisition of a right-of-way (see below under ‘Public access points’, 2c)
6. Semi-formal/less permanent
 - a. Written permission from private road association to allow harvester access
 - b. Use agreements or licenses: flexible, non-permanent tool to formalize harvesters’ right to cross private property for specific purposes and with specific guidelines. (note: MCHT is exploring this option in a few places; has been used for public trail access places – auto-renew unless revoked, details about where you can park, who is responsible for maintenance, etc.)

Public access points:

1. Site enhancements & Infrastructure improvements (e.g., parking, boat ramp, path)
 - a. Could focus on places where sea level rise and coastal flooding will have impacts (e.g., for parking areas and access roads)

2. Acquisition by town or state of key properties
 - a. Acquisition of full property
 - b. Buying and “carving off” a piece of property for access, re-selling the rest
 - c. Acquisition of a right-of-way or easement (the landowner still owns the underlying land but grants a right-of-way for harvester access. Unlike a license or formal agreement with the landowner, an easement “runs with the land”, meaning that the right-of-way or easement would remain in effect even when the property changes ownership).

Land Trust access points:

1. Site enhancements & Infrastructure improvements (e.g., parking, boat ramp, path)
 - a. Could focus on places where sea level rise and coastal flooding will have impacts (e.g., for parking areas and access roads)
2. Acquisition by land trust of key properties
 - a. Acquisition of full property
 - b. Buying and “carving off” a piece of property for access, re-selling the rest
 - c. Acquisition of a right-of-way or easement (the landowner still owns the underlying land but grants a right-of-way for harvester access. Unlike a license or formal agreement with the landowner, an easement “runs with the land”, meaning that the right-of-way or easement would remain in effect even when the property changes ownership).

Appendix G: Template Letter To Coastal Landowners About Coastal Access

This template is intended to be customized to fit the context of the town.

Dear Coastal Landowner,

Include a brief description of the importance of shellfish fishery to the town. This may include the acreage of intertidal mudflats, number of licensed harvesters, social and economic importance of the fishery or other relevant information.

As a coastal resident in [name of town], you play a vital role in the health, vitality, and resilience of the Town's coastal resources, including its shellfish fishery. Many coastal landowners take precautions to limit storm water runoff, properly maintain septic systems, and certain landowners even allow commercial clam harvesters to access the mudflats through their property. **We are writing today to express our sincere gratitude to those coastal landowners who work to help preserve the quality of our coastal waters through appropriate land practices and to those landowners who have allowed traditional foot path access to the mudflats. Thank you for supporting healthy estuaries and waters and this very important historic and iconic Maine fishery.**

These agreements to access the waterfront are often based on informal agreements, and they may change or be lost at any time, especially when properties change hands. When these traditional access points are closed off, it often requires harvesters to travel greater distances to reach important mudflats, increasing health and safety risks and making it more difficult to make a living.

The [town shellfish committee] is responsible for managing a healthy shellfish resource and fishery in the town. In [year], the town worked to document the location of access points that harvesters use to reach the coast and identify opportunities to improve and preserve that access into the future. If you already allow harvesters to access the shore through your property, thank you. If you are open to allowing access or interested in discussing options to preserve access across your property for the long-term, we would love to have a conversation with you.

Please reach out to: *Warden, Harbormaster, or Coastal Resource Manager name & contact information*

We encourage you to talk with your neighbors about the use of traditional access points where you live and thank you again for your role in supporting [town's] working waters.

Appendix H: Form Used To Collect Data In Gouldsboro

Date

Event

Recorder

REPORTED BY

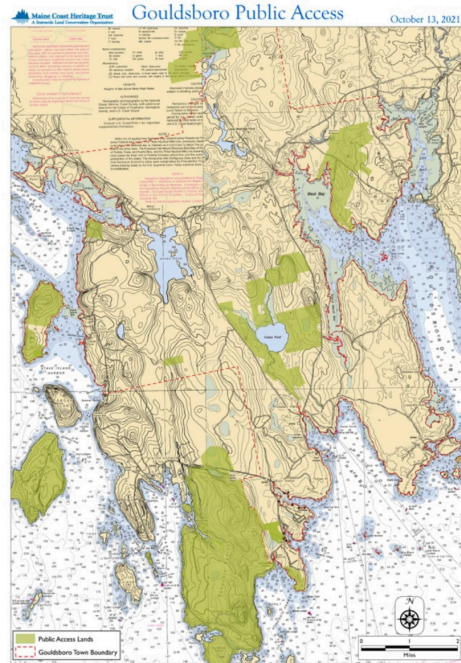
AREA NAME

ADDRESS/LOCATION

OWNER INFO

Agreement Type?

- None
- Personal w/owner
- Local w/owner
- Unknown to clammer
- Specifics (people, season, times??)



INTERNAL USE

MAP

LONG

LOT.

TOWN?

LAT

CONSERVATION?

IMPORTANCE

Overall	
Location?	
Access?	
Access by foot	
Boot/Canoe Access	
Parking Available	
Yield?	
Seasonal?	
Notes?	



Contact Us

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