

Charting the Working Waterfront:

A Matrix for Understanding Commercial Fishing and Aquaculture Access



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Introduction

In October 2025, the Maine Coast Fishermen's Association (MCFA) and project partner VIEWSHED were contracted by the Maine Coastal Program to begin a statewide inventory of critical working waterfront infrastructure.

Working with Coastal Program staff and a steering committee of knowledgeable working waterfront experts, the project team developed a standardized typology for working waterfront property organized along two axes to reflect ownership (public and private) and scale (major commercial, operational, discreet, residential, purgatory, and loss), as well as cross-cutting categories for mixed use and limited use sites. Through direct conversations with harvesters, the project team identified five data categories that would provide the foundation for an efficient and easily maintainable statewide inventory: bait, fuel, landings, access, and gear storage. This study focused on built infrastructure predominately used by the commercial fishing industry as well as some aquaculture growers as the first part of the working waterfront to be inventoried. As an initial step in a statewide inventory of working waterfront, some critical pieces of infrastructure and access points were outside the scope of this project and should be captured in subsequent iterations. Other uses that are not captured here are major shipping ports, recreational and charter fishing access points, walk-in access points used by intertidal harvesters, and boat yards.



VIEWSHED developed a GIS interface for data collection and display of these essential data points, along with the capacity to house additional site-level attributes as available. At the time of project completion, the GIS database and associated inventory tools are hosted by VIEWSHED. A long-term data management plan and inventory hosting platform are currently being developed to ensure municipalities, regional planning bodies, service providers, and state entities have access to this information.

The tools and methodology were developed through field inventories in Southern Maine and then tested and refined in communities across the Midcoast and Downeast regions. Baseline inventories were completed and mapped for 22 towns. These inventories are comprehensive, though not exhaustive, reflecting harvesters' perspectives on critical built infrastructure in their communities.

By value, lobster accounts for roughly 75% of landings in Maine followed by soft-shell clams, Eastern oysters, and Atlantic menhaden, and aquaculture is growing and has a substantial presence in some communities along the coast. Oyster harvesters often depend on public infrastructure to access their lease sites, manage gear, and land product. Understanding how the working waterfront serves aquaculture operations, and building that understanding into future inventory work, is a critical next step that this inventory did not fully address.

This report summarizes the methodology and tools for a standardized inventory approach and, perhaps more importantly, provides important context regarding overall trends and critical differences found along the coast. The working waterfront is not static, and neither is this inventory. The communities, data, and tools documented here are a starting point, a baseline against which change can be measured and from which protection efforts can be prioritized. The most important finding is not any single site or community but the cumulative picture of a coast under pressure, adapting in real time, and in need of tools that can keep pace with the rate of change.

This report represents a snapshot of Maine's working waterfront as of June 2026. Because the working waterfront is continually changing, some information may become outdated as properties, businesses, infrastructure, and access arrangements evolve. Readers should verify current conditions where appropriate. This report is intended to serve as a living document and a foundation for future inventory work, building upon the ongoing efforts of organizations and communities working to document and protect Maine's working waterfront.

What is the Working Waterfront?

The phrase "working waterfront" is not that old.

In 1989, the Maine State Planning Office published a study called *Protecting Prime Sites for Water Dependent Uses* that documented the same pressures on commercial fishing access that motivated this inventory. Interestingly, the report only uses the term once, referring to "approximately 175 miles that are suitable for working waterfront activities" but does not include any definition. The formal term throughout is "water dependent uses." Mostly, the waterfront was still just the waterfront, a place so integral to coastal life that it required no special designation.

By 2001, however, that had changed. The Maine Legislature convened a committee to study the loss of commercial fishing waterfront access, and in the body of that committee's final report the phrase "working waterfront" appears eight times, although, again, lacking any formal definition.

Four years later, LD 1930 gave the term legal authority for the first time, establishing the Working Waterfront Covenant as a binding deed restriction in Maine statute. That is the first time the term appeared in state legislation with a definition:

Working waterfront land means a parcel of land, or a portion thereof, that fully or partially abuts water to the head of tide or land located in the intertidal zone that is used primarily or used predominantly to provide access to or support the conduct of commercial fishing activities.

The term itself did not originate in Maine or in fishing communities, though. Ann Breen and Dick Rigby, founders of the Waterfront Center in Washington D.C. and the leading national voices on waterfront revitalization at the time, included a dedicated chapter called "The Working Waterfront" in their 1996 book *The New Waterfront: A Worldwide Urban Success Story*. They described it as "an often-forgotten aspect of the new waterfront" and noted that the industrial and commercial uses it represented were being systematically edited out as cities navigate the future of their waterfronts.

Breen and Rigby were documenting a global phenomenon: the conversion of working port cities into cultural, residential, and recreational destinations, and the quiet erasure of the industries that had made those places economically viable. Maine borrowed the term from that broader conversation but did something no other state had done, which was to give it a legal definition, a protection covenant, and a funding mechanism specifically designed for commercial fishing access.

Prior to 2005, the term had never been fully defined in statute, and even now there are several different definitions that apply to various titles and programs. In practice, though, the phrase works the other way around. "Working waterfront" calls to mind the wharves, piers, ramps, and even fishing gear, but that leaves the social and economic relationships that make that infrastructure function invisible.

A wharf with bait, fuel, and a buying station is working waterfront. So is a fisherman's residential dock where three neighbors have landed their catch on an informal handshake arrangement for forty years. So is a town landing that a handful of clambers use. The infrastructure in each case is different, the ownership is different, the vulnerability is different, and the available protection tools are different. This inventory created and used a typology that attempts to account for that diversity.

You name a thing when you are afraid of losing it. Once upon a time "the waterfront" sufficed. It was understood to include commercial fishing activity because that is what the waterfront was for. Today, the number of people, industries, and businesses competing for space on the waterfront has grown so much that we now have to specify which part belongs to whom.

In this report, the working waterfront refers to the wharves, piers, docks, and ramps along the shoreline that are used by commercial fishermen, intertidal harvesters, and aquaculturists to access the water; manage, load, unload, and store gear, bait, and landings; access moorings or a lease site; or to beach, haul out, or launch a boat (i.e. skiff, dory, or vessel).

PART 1: Inventory Methodology

The methodology for this inventory was developed through fieldwork rather than from a prior framework. Early conversations with harvesters in pilot communities quickly established that a simple list of waterfront properties would not address the questions we were trying to answer. What the project team needed was a way to assess not just what was there but what role it played, who depended on it, and what happens when it is lost. The categories, criteria, and data collection approach described below all emerged from that original problem. The following sections of this report are also meant to provide context for the inventory findings that follow.



Working Waterfront Typology

One of the first and most important decisions in building this inventory was how to organize working waterfront sites into types that would be meaningful for context and summaries, deploying potential future funding, or for the protection of critical infrastructure. The project team and steering committee started with approximately seven categories and revised them through fieldwork as sites were encountered that did not fit cleanly into any existing buckets. What became clear is that there is no perfect way to categorize working waterfront properties. The categories below represent a framework reflective of the range of sites documented in Maine's coastal communities through this initial process. They should be understood as useful approximations, not rigid definitions.

This typology organizes working waterfront sites along two axes: ownership and operational scale. The first axis distinguishes between public and private ownership because both public and private sites exist across a wide range of scales and operational characteristics. A major commercial co-op and a residential dock are both privately owned, and a state commercial pier and a town boat ramp are both publicly owned. Ownership shapes what protection tools are available, what risks a site faces, and who is responsible for maintaining it. The second axis describes operational scale, the size, visibility, and level of formal designation of a site's working waterfront use and applies to both public and private sites. Three cross-cutting categories capture sites that do not fit neatly into either axis, and one descriptor that can be applied to any site type to note conditions that affect how the site should be assessed.

Fieldwork Methodology

The data collection process for this inventory relied primarily on direct conversations with fishermen, supplemented by some online research for clarity and verification.

In each pilot community, the process began with outreach to fishermen already known to the project team, either personally or through existing MCFA relationships. These

were informal, in-person conversations, often over coffee, structured around a few open-ended topics: how the fisherman's business operates day to day, which waterfront sites they depend on and for what (landings, bait, fuel, gear storage, access), what concerns them most about the future of those sites, and what they have seen change in the community over time.

These conversations served two purposes. First, they identified the specific sites that needed to be inventoried, since many of the most important working waterfront sites, particularly discreet and residential ones, are not listed in any public database. Second, they surfaced the context behind each site: who owns the site, how secure that access is, and what it would mean to the fisherman and their community if the site or access were lost.

After each conversation, the project team conducted follow-up research to supplement what was discussed.

For anyone seeking to replicate this methodology in a new community, the practical steps are:

1. Identify one or two fishermen in the target community, ideally fishermen the inventory team already has a relationship with, or who can be introduced through a mutual connection.
2. Have an informal, in-person conversation rather than a formal interview, focused on their business, the sites they use, and their concerns.
3. Use that conversation to identify additional sites and additional fishermen worth talking to in the same community.
4. Follow up with online and records research to verify ownership, history, and any other available data for each site identified.
5. Bring findings back to fishermen in the community to confirm accuracy before finalizing.
6. Expect this process to take multiple conversations and visits per community. It is not a one-time data collection exercise.

Working Waterfront Typology

Axis 1: Ownership and Access Type

Private

Privately owned, with access controlled by the owner, cooperative members, or informal relationship. Includes co-ops, buying stations, fish houses, residential wharves, and discreet access points. *Examples: Lobster co-ops, private dealer wharves, residential wharves*

Public

Government-owned, with access available to commercial fishermen and aquaculturalists through municipal or state management. Includes town piers, state commercial piers, boat ramps, and public landings. *Examples: Municipal fish piers, state-owned commercial piers, public boat launches, town landings*

Axis 2: Scale and Operational Visibility

Each scale level applies to both private and public ownership. The private and public versions of a given level in the scale share the same general character but differ in ownership structure, vulnerability, and available funding and protection tools.

Major Commercial

Private — Major Commercial A high-capacity, privately owned commercial waterfront that supports full-service fishing operations. These sites provide landings (buying), bait (for sale and storage), and fuel; allow temporary gear storage for loading and unloading; and may serve multiple fisheries including lobster, menhaden, and others. Serving 30 or more harvesters. *Examples: Most co-ops; Greenhead Lobster, Stonington*

Public — Major Commercial A municipally or state-owned site actively maintained and formally designated for commercial fishing use at scale. These sites may offer landings, bait storage, and fuel and may support aquaculture activity or provide intertidal access. Gear storage is typically temporary and regulated. *Examples: Government Wharf, Kennebunk; Stonington Public Pier*

Operational

Private — Operational A privately owned working waterfront that supports commercial fishing and/or aquaculture operations but at a smaller scale than major commercial sites. These sites provide landings, bait, and fuel and support temporary gear storage and basic operations. Serving fewer than 30 harvesters. *Examples: Henry Allen's Seafood, Harpswell*

Public — Operational A municipally or publicly owned wharf that supports a mix of commercial and community use. These sites may offer landings, limited bait (likely just storage), and fuel. They may also support aquaculture activity or provide intertidal access. Gear storage is typically temporary and regulated. *Examples: Commercial Fish Pier, Eastport*



Discreet

Private — Discreet A low-visibility, privately owned site used informally for commercial access but without formal landings, services, or infrastructure. These sites may allow longer-term gear storage and may support limited commercial activity but offer no fuel, bait, or other services. Ownership is often ambiguous or held in a handshake agreement. *Examples: Lowell's Cove, Orr's Island; Shore Road, Beals*

Public — Discreet A publicly owned site used informally or minimally for commercial fishing, aquaculture, or intertidal access. Includes town landings, boat ramps, and public access points where a small number of fishermen launch or tie up. These sites do not typically provide landings, bait, or fuel, but fishermen use them with a trailer to load and unload gear, bait, and landings, or to launch a skiff to access the flats or a lease. *Examples: Elton R. Brooks Memorial Rest Area and Boat Launch Facility, Robbinston*

Residential (Private Only)

Private — Residential A private waterfront owned primarily for residential use that also provides waterfront access for the owner, family members, or informally for other fishermen in the community. These sites generally do not provide bait, fuel, or landings to others but may have bait and fuel for the owner's personal use and are likely used for gear storage by the owner. Access for other fishermen is informal and unwritten, embedded in the social relationship economy of the fishing community.

Purgatory

Private — Purgatory A privately owned site with unclear ownership, inconsistent use, or transitional status. These sites may have potential for landings, fuel, aquaculture, gear storage, or intertidal access, but none of those uses are formalized. They carry a high risk of loss due to their uncertain status and lack of recognized commercial infrastructure. Purgatory sites represent the window between a working waterfront that still exists and one that is lost. *Examples: Moody's property in Cundy's Harbor; Blackbeard's in Eastport; North Cove, Phippsburg*

Public — Purgatory A publicly owned working waterfront site whose continued availability to commercial fishing is uncertain due to budget pressures, deferred maintenance, competing demands on limited waterfront space, or a shift in municipal governance.

Loss

Private — Loss A privately owned site of any scale that was formerly used as working waterfront and has since been converted to non-fishing use, allowed to deteriorate beyond functional use, or formally designated for other purposes. *Examples: Leeman's Wharf, Orr's Island*

Public — Loss A publicly owned site of any scale that was formerly available for commercial fishing use and has since been repurposed, formally closed to fishing, allowed to deteriorate beyond functional use, or formally designated for other purposes.



Cross-Cutting Categories

The following categories apply across both axes and describe sites whose ownership or use does not fit neatly into the private or public designation, or that serve functions which cut across scale levels.

Mixed Use A site shared between commercial fishing and recreational, tourism, or other competing uses. Commercial fishing or aquaculture access is not guaranteed and is subject to shifting priorities or user pressure. *Example: Bar Harbor Town Pier*

Limited Use A marina, boatyard, or facility whose primary purpose is recreational or non-commercial but which permits a small number of commercial fishermen or harvesters to tie up, access services, or land catch. Access is usually informal, not contractually guaranteed, and subject to change with ownership or management decisions. *Example: Sebasco Harbor Resort*

Island Community Infrastructure The geographic isolation, ferry dependency, and limited civic capacity of island communities make even modest working waterfront sites critically important. This category can be applied as a flag to any site type above.

Foundational Layer Criteria

For each inventoried site, MCFA staff collected data across a standardized set of foundational criteria established through conversations with harvesters. The criteria are:

- *Bait* distinguishes between bait available for sale, which is a supply chain function whose loss affects the entire fleet, and bait storage only, which is for individual fishermen. Bait is typically stored in cold storage to maintain its quality and usability. Public properties generally accommodate only bait storage, while private wharves or businesses may sell bait and provide cold storage for both bait inventory and, in some cases, fishermen's own bait.

- *Fuel* distinguishes between fuel sold on site from a permanent tank and fuel available by truck delivery only. Permanent fuel infrastructure represents capital investment that is difficult to replicate informally. Truck delivery can be arranged at other accessible waterfront sites.
- *Landings* documents whether catch or harvest can be unloaded at the site in the ordinary course of operations, including whether access is all-tide or tidal only, and whether any buying station or dealer relationship is in place.
- *Gear storage* distinguishes between temporary storage, gear kept between trips or seasonally, and permanent storage facilities that serve as dedicated gear management infrastructure for a significant number of fishermen.
- *Gear Loading/Unloading* distinguishes between properties that provide adequate space and infrastructure for moving gear, supplies, and equipment to and from vessels, including loading, unloading, staging, and maneuvering space, and properties where these activities are limited or not supported.

These criteria represent the core of a “rapid inventory”, the foundation layer that can be collected efficiently and updated relatively easily. They are the minimum needed to begin a meaningful inventory.

The inventory table of all the pilot communities can be found in Appendix A.

The Larger Matrix and GIS Layer

The criteria above are supplemented by a more detailed matrix developed in partnership with VIEWSHED that captures additional site-level attributes including parking capacity, nearby boat ramp access, moorings, travel lift, and physical infrastructure condition. This data feeds into a GIS layer that allows sites to be mapped, compared, and analyzed spatially, including proximity to other working waterfront sites and eventually climate and sea level rise exposure.

The relationship between the quick inventory layer and the detailed matrix is intentional. Not every site warrants or allows the full matrix treatment, and not every community partner has the capacity to collect detailed GIS-compatible data. The rapid inventory criteria can be collected by someone with basic fieldwork skills and community access. The detailed matrix requires more time, more technical capacity, and ideally a site visit. Together they produce a tiered picture: broad coverage at the rapid inventory level and deeper documentation for the sites that most need it.

Purpose

The geospatial database was created to incorporate existing working waterfront data in Maine into one dataset and provide a template for collecting and updating working waterfront data into the future. Some of the data has been updated as a part of the inventory pilot project, with the expectation that more updates will be incorporated and additional sites will be collected.

Creating a Data Schema/Template

Based on initial conversations with the Steering committee, analysis of existing working waterfront datasets, and the knowledge of project team members, a draft data schema was developed. This schema included attributes related to site use, zoning,

infrastructure, threats, and general property information. The selection of attributes was guided by the goals of the inventory pilot project and the need to support future analysis of working waterfront conditions, risks, and opportunities.

For example, attributes to store data on site criticality, structural issues, sea level rise, debt, insurance, and succession plans were included to support future assessments of sites that may be in danger of conversion, decline, or loss. Infrastructure and site amenities, including parking, boat ramps, bait, ice, and fuel, could be used to identify service gaps and infrastructure needs. Information about site use, such as the types of fishing industries (menhaden, lobster, aquaculture, shellfish digging) and the number of users, could be used to situate the site's importance within the broader working waterfront of a community or a region.

Following review and refinement by the steering committee, the schema was implemented as a point feature class within an ESRI ArcGIS Pro geodatabase. Additional fields were incorporated to support long-term data governance and stewardship, including editor tracking fields that record the creator, creation date, most recent editor, and most recent edit date for each inventory record. These fields provide a transparent audit trail for future updates and support distributed data maintenance by multiple partner organizations.

Data Sources

Existing datasets developed in Maine to capture data on working waterfront sites were gathered to inform this work. In 2006, the Island Institute created a geospatial dataset covering the entire Maine coast to inform the Last 20 Miles Report. This dataset has not been significantly updated in the intervening 20 years.

The Maine Coastal Program developed a geospatial dataset in 2013 to create the Maine Coastal Public Access Guide (MCPAG), which was updated in 2025-26. While the intended use and audience of MCPAG dataset is broader than the working waterfront inventory project, a subset of relevant data was incorporated into this dataset.

Populating the Database with Existing Data

The Island Institute and MCPAG data were combined to populate the Working Waterfront Inventory (WWF) feature class. For each of the existing datasets, the relevant subset of data was loaded into the feature class. For the Island Institute data, only the records which were identified as having a commercial fishing use or had a null response to that field were included. The Island Institute allowed the use of the portion of their data which had been kept out of published data sets for various reasons. This data was brought in with only the name of the point and no other data. The Maine Access Guide data that was used only included those records identified as a Pier or Wharf.

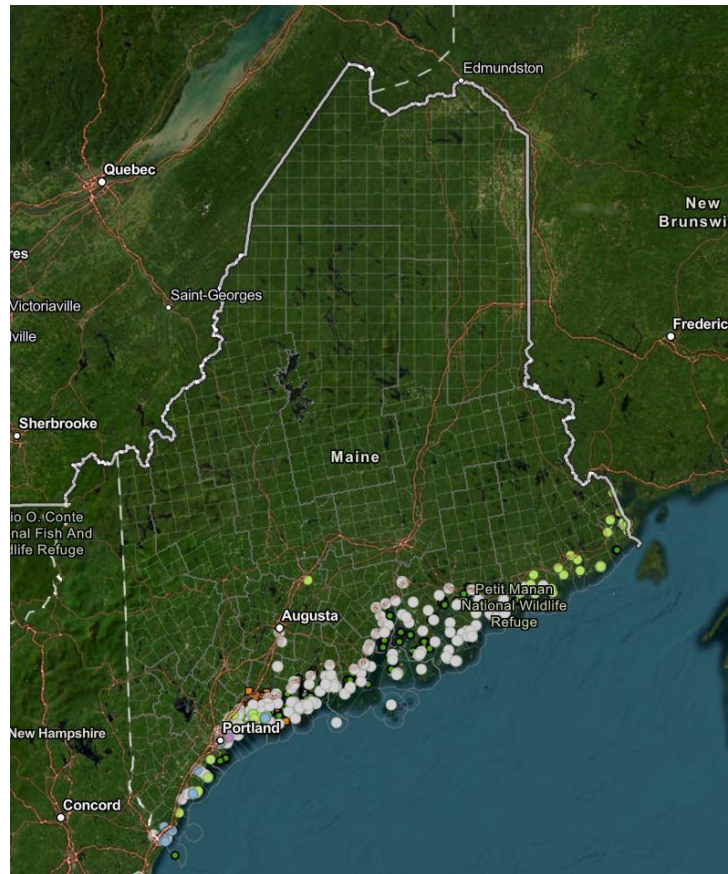
For both datasets, attributes that were available and matched the attributes designated in the WWF feature class were populated with the corresponding responses.

After records from both datasets were added to the WWF feature class, duplicate records were identified and consolidated into one record. Where attribute information was available from both data sets that conflicted, the attribute information from the most recent record was maintained (usually the data from the Maine Access Guide

data). The data source of each record was added from these existing datasets as well as the original ID of each record.

All of the fields which remained unpopulated were calculated to be “Unknown”. When the data is updated, each field must be changed even if it is to record a “No.” This reduces confusion over whether a response is truly unknown or if data went unrecorded. If a field is listed as *unknown* then no data has been gathered for that field. Any other response is intentional.

Domains were set up for the relevant fields to minimize data collection errors and enforce consistency. Domains ensure that answers to most text fields are restricted to a set of responses, numeric fields have acceptable ranges, and only note fields are left open to any response.



See Appendix B for a detailed table showing the cross reference between the two existing datasets and the WWF feature class as well as the domain information.

Updating the Data

The feature class was published to Esri’s ArcGIS Online platform to support editing by project team members. The feature class was added to a web map and symbolized based on the Review field. The Review field identifies a point that has been reviewed by any entity working on the project and can identify a point as one to Keep, Delete, or Discuss.

Using Forms in the ArcGIS Online Map Viewer, a form was set up with the most relevant fields listed first to facilitate more efficient data collection. Supporting datasets were added to the web map for context, including Maine DMR’s Aquaculture Leases and Limited Purpose Aquaculture (LPA) sites and Manomet’s Intertidal Access data. Whenever a new point is added, the default values for fields with domains is set to “Unknown”. This map can be used for data collection in the field using the ArcGIS Field Maps application on a mobile device. VIEWSHED also built a Working Waterfront Inventory Editing Dashboard using ArcGIS Online Experience Builder to enable desktop data entry and refinement. This application uses the same web map as Field Maps. Users can select a point to edit its attributes or the location of that record, or they can add new record and populate the data from there.

A User Guide was created to provide instructions to editors for using Field Maps and the Working Waterfront Inventory Editing Dashboard and was linked as an Adobe PDF. The User Guide is also provided in Appendix C of this report.

Currently, VIEWSHED is hosting the data and has provided a Creator license for the duration of the data collection. The feature class, web map, and Working Waterfront Inventory Editing Dashboard are part of a shared group so that other entities working on this data can be allowed to use the Field Maps or Editing Dashboard during their work through summer and fall of 2026. The data is being updated by staff at MCFA, Sea Grant, College of the Atlantic, and Sunrise County Economic Council. This group allows these partners to update records and add new data using their own ArcGIS Online account.

Finally, VIEWSHED created a simple viewer for the project steering committee to view progress on the inventory process. This application, called the Working Waterfront Inventory Data Viewer, includes a map of the inventory points (symbolized by their update status), the ability to display information for a selected point, and a table to allow viewers to scroll through the attributes of all the records.

Data Maintenance and Governance

The value of this inventory is not in the initial data collection effort but in its continued maintenance. Working waterfront infrastructure, ownership, use patterns, and community relationships change over time. Properties are sold, businesses close or expand, access agreements evolve, and new pressures emerge. As a result, this inventory should be treated as a living dataset rather than a static record.

At project completion, the Working Waterfront Inventory database, web applications, and associated GIS infrastructure are hosted by VIEWSHED within an ArcGIS Online environment. The system was intentionally designed to support distributed data collection and collaborative stewardship, allowing multiple organizations to contribute updates while maintaining a single authoritative dataset.

Governance Structure

A long-term governance model should identify both a Data Host and a Data Collection Network.

The Data Host is responsible for maintaining the technical infrastructure, including ArcGIS Online licensing, database administration, application updates, user management, and data backups. Whether this responsibility remains with VIEWSHED or transitions to another organization, the host should have demonstrated GIS capacity and a commitment to maintaining public-sector geospatial infrastructure.

The Data Collection Network should include organizations actively engaged in working waterfront issues, including the Maine Coastal Program, Maine Coast Fishermen's Association, Maine Sea Grant, colleges and universities, regional planning organizations, conservation partners, municipalities, and other approved contributors. These partners provide the knowledge necessary to keep inventory information current and ensure that updates reflect changing conditions on the ground.

Data Access and Sharing

While broad inventory findings, methodologies, and generalized maps can support planning and policy discussions, certain site-level information may require restricted access. This is particularly true for sites that depend on informal access arrangements, private working waterfront facilities, or sensitive community relationships. In the process of determining the long-term data governance structure, data access should be a key consideration. The people working in this space should determine if all the fields are made public or only some of them. It is likely that there is a tiered method of data release that can work within state ownership. This approach balances transparency with the need to protect sensitive information and maintain trust with fishing communities.

Data Maintenance Framework

The inventory was developed with a tiered approach to data maintenance. Core inventory fields, including ownership, access, landings, bait, fuel, and gear storage can be updated relatively quickly through interviews, site visits, and partner reporting. More detailed site attributes, such as infrastructure condition, parking capacity, climate vulnerability, and operational constraints, may be updated on a longer review cycle or through discrete projects as resources allow.

Recommended maintenance activities include:

- Ongoing updates to fill out the attributes of existing data points
- Determine missing locations and add them to the data set
- Determine how to handle docks/wharves with multiple businesses, activities, owners, and/or facilities (one point or many)
- Annual review of high-priority sites and major commercial facilities
- Periodic regional inventory updates to verify operational status and emerging needs
- Integration of new datasets, including climate vulnerability, landings trends, aquaculture infrastructure, and socioeconomic indicators as they become available
- Documentation of site losses, conversions, and newly established working waterfront facilities

Quality Assurance and Quality Control

To maintain consistency across multiple contributors, all edits should follow standardized data collection protocols and field definitions. Domain-controlled fields, editor tracking, and structured forms have been incorporated into the database design to reduce data entry errors and provide accountability for updates. Editor tracking records the creator, creation date, most recent editor, and last edit date for each feature, creating a transparent audit trail for future review.

Periodic QA/QC reviews should be conducted by the data host to:

- Verify attribute accuracy
- Resolve duplicate records
- Review incomplete or conflicting information
- Confirm spatial accuracy
- Ensure consistent application of the working waterfront typology

Future Integration and Sustainability

The database was designed to support future expansion. Additional layers, including climate vulnerability assessments, socioeconomic resilience indicators, aquaculture infrastructure, historical working waterfront documentation, protection status, and grant investment tracking, can be incorporated without restructuring the existing framework. The inventory should remain flexible enough to accommodate new priorities while preserving consistency with the foundational dataset.

Ultimately, the success of this inventory will depend less on who owns the data than on who remains committed to maintaining it. Long-term stewardship requires ongoing investment in relationships, local knowledge, and collaborative management. The inventory is most valuable when it continues to reflect how Maine's working waterfront is actually used over time, not simply how it existed at a single point in time.

Opportunities & Next Steps

The current ArcGIS-based inventory system successfully supports data collection, editing, and visualization of working waterfront infrastructure. The next phase of development should focus on data governance decisions, expanding functionality, improving user experience, and supporting long-term stewardship of the inventory.

Long-term Data Governance

- Determine the long-term Data Host for the data
- Implement the data maintenance framework

Data Viewer Development

The existing Inventory Data Viewer provides an effective way to browse and review inventory records. Future enhancements should include:

- Public-facing and partner-facing versions of the viewer with different levels of access.
- Search and filtering tools by community, ownership type, typology, fishery, and infrastructure characteristics.
- Summary dashboards displaying regional statistics, inventory progress, and trends.
- StoryMap integration to communicate findings to municipalities, funders, and the public.
- Mobile-friendly viewing applications for field verification and stakeholder engagement.

Data Collection Applications

The ArcGIS Field Maps and Editing Dashboard applications provide a strong foundation for ongoing inventory maintenance. Future improvements could include:

- Simplified rapid-assessment forms for volunteers, municipal staff, and partner organizations.
- Photo attachments and document management capabilities.
- Standardized workflows for annual inventory reviews.
- Automated notifications when records have not been updated within a defined review period.

Advanced Analytical Tools

As the inventory grows, the ability to use a GIS platform to support additional analytical capabilities will also grow. Some ideas for future analysis include:

- Climate vulnerability and sea-level-rise exposure assessments.
- Infrastructure redundancy and service-gap analysis.
- Proximity analysis for bait, fuel, landings, and gear storage services.
- Working waterfront loss and conversion tracking.
- Integration with DMR landings data, aquaculture lease information, housing affordability indicators, and socioeconomic resilience metrics.

Partner Editing Network

The long-term vision should be a distributed editing network where approved regional partners contribute updates through shared GIS tools. This model reduces duplication of effort while maintaining a single authoritative dataset.

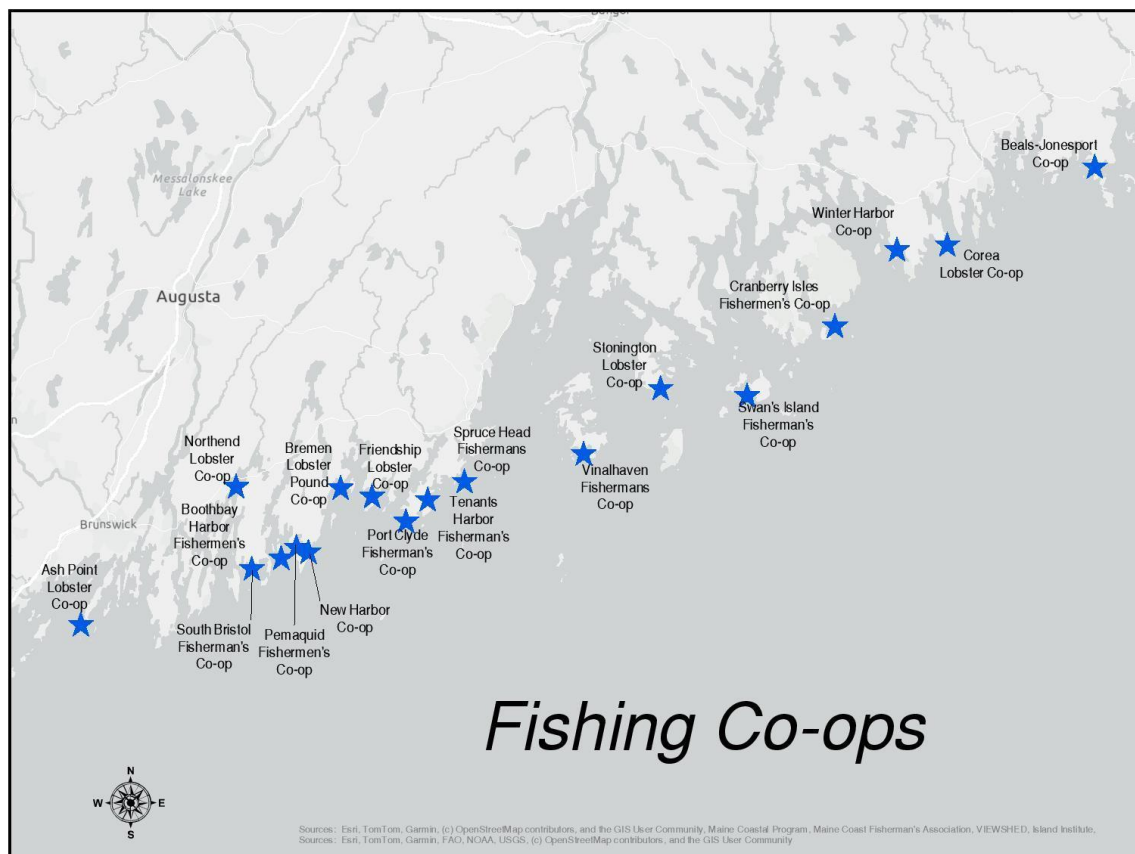
PART II: Cooperatives & Understanding Regional Differences

Lobster & Aquaculture Cooperatives (As of June 2026)

Brief History

The lobster cooperative model has been central to Maine's commercial fishing economy for nearly eighty years. Co-ops give fishermen collective ownership of the infrastructure they depend on and collective bargaining power in negotiating with larger seafood dealers.

The first fishermen to organize as a co-op were based in the Pemaquid Harbor area in 1947. A small group of local fishermen each purchased a share, elected officers, and used their own capital to purchase bait and supplies and contract locally to sell their lobsters and clams. Over time they added land, a wharf, a store, and a restaurant. Pemaquid remained the oldest continuously operating lobster co-operative in the country until its co-op structure dissolved in 2016, when declining membership led to a sale of the property. In 2009, the property entered the Working Waterfront Access Protection Program, and a restrictive covenant was placed on the property to keep it in working use. The WWAPP covenant restricting the property to working waterfront remains in place, though the property now functions primarily as a retail seafood market and restaurant.



Fishermen recognized that acting as a group gave them both operational efficiency and more clout when negotiating price with larger buyers. Damariscotta lawyer Clayton Howard helped organize many co-ops during the 1970s and 1980s, and in the mid-1970s helped create the Maine Association of Cooperatives (MAC), a cooperative of ten fishermen's co-ops whose members owned shares in a joint marketing venture. MAC purchased up to 95 percent of each co-op's catch and marketed the product collectively, netting members five-to-ten cents more per pound. Unfortunately, MAC went bankrupt, but thankfully the cooperative model survived.

The 2000s brought new co-op formations in communities that recognized the model's protective value.

Today there are 19 active lobster co-operatives on the Maine coast, collectively landing over a quarter of Maine's total lobster catch each year.

- They are concentrated in the Midcoast where 14 co-ops operate, 11 of them with WWAPP covenants in place.
- Downeast Maine has 5 co-ops and none have WWAPP covenants.
- Southern Maine has no active lobster co-operatives.

Much of the data regarding cooperatives was gathered via conversations and internet research. This inventory should be updated and reviewed as part of the ongoing inventory process.

Co-op Losses

- **Pemaquid Fishermen's Co-op (New Harbor)**
Maine's oldest lobster co-op dissolved its cooperative structure in early 2016 after membership declined to seven fishermen who could no longer generate enough catch to cover operating costs. The 6-acre property with 670 feet of shorefront was sold by the Co-op in 2016. The new owners sought to increase lobster landings at the site and continued to operate the existing restaurant. The property was subsequently sold again to its current holder, who has made further investments in the wharf. The WWAPP covenant restricting the property to working waterfront remains in place, but the fisherman-owned structure is gone. This is an important covenant case study because, while the co-op dissolved, the property remains protected.
- **Bucks Harbor Co-op (Machiasport)**
Bucks Harbor was among the communities Clayton Howard (noted above) helped organize into a co-op in the 1970s. No active co-op currently operates there. The Machiasport town website describes over 90 licensed lobster fishermen working independently and selling to local wholesalers, but no co-op infrastructure.

- **Pine Point Fisherman's Co-op (Scarborough)**

This was a retail lobster buying business operated for several decades as the 'Pine Point Fisherman's Co-op' in Scarborough but it functioned as a lobster pound rather than a traditional member-owned cooperative. The property closed and was sold; Stern Seafood now operates on the site. (There is a WWAPP covenant from 2011 on a separate Pine Point property.)

A full list of Lobster Coops can be found in Appendix D.

Aquaculture Cooperatives

Aquaculture cooperatives are a newer and growing part of Maine's coastal economy. Unlike lobster co-ops, which have a history dating back nearly eighty years, most aquaculture co-ops in Maine have formed within the last decade as oyster, mussel, kelp, and scallop farming have expanded along the coast. The Maine Aquaculture Co-op, formed in 2016, was the first aquaculture co-op in the state, founded by a group of nine midcoast fishermen and aquaculturists to help develop the sea scallop aquaculture industry.

Aquaculture co-ops are distinct from lobster co-ops in their infrastructure needs. Rather than bait, fuel, and landing services, they depend on waterfront space for gear management, staging, and harvesting. They may also rely on shared refrigeration, processing, and sales infrastructure that individual small operators cannot afford independently.

Known Aquaculture Cooperatives

- **Maine Aquaculture Co-op** — Scallop aquaculture; Midcoast; founded 2016; farms from Tenants Harbor to North Haven to Stonington. First aquaculture co-op in Maine.
- **New Meadows River Shellfish Cooperative** — Founded January 2020; ten shellfish farms on the New Meadows River from Small Point Harbor in Phippsburg to Princes Point in Brunswick; oysters.
- **Georgetown Island Oyster Cooperative** — Georgetown Island; oyster aquaculture in Robinhood Cove. Founded in 2017.

Understanding Regional Differences

Southern Maine (Kittery to Freeport)

When we think about Maine's working waterfront, Southern Maine is often not the first place that comes to mind. The iconic images of lobster boats and weathered co-ops tend to come from the Midcoast and Downeast regions. But Southern Maine has commercial fishermen too, and they are fishing in some of the most challenging working waterfront conditions in the state. This is not because of remoteness or limited infrastructure, but because of the opposite. Development pressure in Southern Maine is high, and it has been for a long time. Property values in Cumberland and York counties have more than doubled since 2016. The communities where fishermen work are some of the most

desirable real estate markets in New England, and the waterfront is the most desirable part of all of it.

What makes Southern Maine different from everywhere else that was visited is the almost complete absence of fishermen-owned infrastructure. There are no active lobster co-operatives from Kittery to Brunswick. Most commercial fishermen in the region depend on a municipal or state-owned facility or a private arrangement. In both Southern and Midcoast Maine there are instances of lobstermen having relationships with marina owners, but this access is usually restricted to one or two boats.

Of the 33 properties protected through WWAPP statewide, only two are in Southern Maine.

Most active commercial fishing infrastructure in Southern Maine sits alongside significant recreational and tourism use, often as mixed use or limited use sites rather than dedicated commercial fishing wharves. That overlap makes the region harder to inventory than it sounds. Does a privately owned marina belong in this inventory if only one or two fishermen happen to fuel up there sometimes? There is no clean answer, and that uncertainty is itself a sign of how thin Southern Maine's dedicated commercial infrastructure really is.

What Southern Maine does have, in Portland, is the strongest municipal working waterfront zoning framework in the state. The Waterfront Central Zone has held commercial fishing access on Portland's waterfront for more than thirty years. It is proof that municipal protection can work. It is also, honestly, the exception. Most Southern Maine communities do not have Portland's staff capacity, political will, or long history of fishing community engagement in local government.

Portland is also home to the Portland Fish Exchange, which opened in 1986 as the first all-display fresh seafood auction in the United States. It was created to give fishermen transparent pricing and timely payment at a time when the existing system left many dependent on dealers whose terms they had little ability to negotiate. It operates as a nonprofit, quasi-public corporation with a board representing seafood buyers, fishermen, and government leaders. Landings at the Exchange hit a low of 1.4 million pounds in recent years, down from peak years when tens of millions of pounds moved through the facility annually. (The exchange and the Portland Fish Pier Authority merged in 2024.) (City of Portland, Maine, n.d.)

Midcoast Maine (Brunswick to Deer Isle-Stonington)

Midcoast Maine is where the working waterfront looks most similar to what people picture when they think about commercial fishing in Maine. There is more working waterfront, it is better resourced, and in many communities, it has been protected and sustained in ways that Southern Maine and much of Downeast have not. That does not mean it is without challenges. It just means the challenges look different.

The most significant difference in the Midcoast is infrastructure density. In a community like Harpswell, Friendship, or St. George, a fisherman has access to a wharf with bait and fuel on site, a place to beach a boat and clean the hull, a mooring, a buying station, and a network of other fishermen. The working waterfront does a lot of the logistical work passively. It is just there, and it has been there long enough that the relationships built around it are as much a part of the infrastructure as the planks and pilings. That is important for who can fish and how, and it matters especially for new entrants trying to get started.

Phippsburg is a good example of how even in the Midcoast, the picture is more complicated than it looks, though. There is a mix of public and private infrastructure like a co-op serving the Small Point fleet, a private buying station at West Point, a state pier at Popham (with limitations), and a handful of discreet and informal access points that fishermen have cobbled together over time. Bait and fuel are more accessible than in some Downeast communities, but they are not guaranteed. North Cove, which had a buying station and provided some redundancy in the system, was lost in the January 2024 storms and has not been rebuilt. Most lobsters from Phippsburg fishermen now flow through a single private buying station or are landed in nearby communities.

In the Midcoast, fishermen have come to rely on a certain level of service and access, and when a piece of it disappears, the gap is felt immediately. The co-op model has been the most resilient answer to that problem. Communities with strong co-op infrastructure like Friendship, Port Clyde, Tenants Harbor, and South Bristol, have something that belongs to the fishermen who use it and that is built to serve their specific needs.

The Midcoast is also where Southern Maine's development pressure is now arriving. The civic dimension of that pressure is underappreciated: as waterfront communities change, so do the people making decisions about zoning, noise ordinances, and harbor management. Rural coastal gentrification is subtle until the people who depend on the water for their



livelihood are no longer the ones deciding what happens to it.

In the Midcoast, the problem is succession and signs of the same pressures that reshaped Southern Maine a generation ago. The infrastructure is the strongest in the state and there are 14 coops, 11 of which are protected by WWAPP. From Harpswell to Deer Isle-Stonington, fishermen are more likely to have reliable access to bait, fuel, and buying stations without having to build that supply chain themselves. But property values are rising, young fishing families are doing affordability calculations, and the student pipeline has declined sharply. The problem is not that the working waterfront is disappearing today, it is that the conditions that sustained it like access to affordable housing, a next generation coming up through student licenses, a civic culture that still centers commercial fishing, are eroding.

Downeast Maine (Ellsworth to Eastport)

Downeast Maine is where the working waterfront looks most different from the rest of the state, and where the gap between what the data shows and what fishing actually requires is widest. The pressures here are not primarily about development, though, those are arriving.

Gentrification in Downeast Maine is subtler than anywhere else on the coast, moving more quietly through rising property values and seasonal home purchases, and starting to alter the municipal governance landscape. And much like in the Midcoast, many Downeast fishermen do not live in the towns they fish out of, which means they are less likely to show up at a planning board meeting, less likely to run for selectboard, and less likely to be in the room when decisions are made that affect their access and their businesses. (Coombs, 2026)

Bar Harbor is an example of what that gentrification trajectory looks like at full scale. Once a working fishing community with an active lobster fleet, Bar Harbor is now one of the most tourism-dependent towns in Maine, with huge seasonal population swings and a waterfront that now primarily serves recreational boating and cruise ship passengers. The impact can be seen in the number of harvesters landing in Bar Harbor which dropped from 71 in 2008 to 31 in 2024, and the number of license holders with Bar Harbor mailing addresses has also fallen since 2016. The student license pipeline has fallen even faster, from 22 in 2016 to just 6 in 2026, a dramatic decline in just a decade.

The town's recent decision to cap cruise ship visits was driven primarily by residents saying cruise crowds were degrading the quality of life and the experience of the



already-busy-town itself. (Jones, 2026) The fishermen who still work out of Bar Harbor are doing so in a town where the waterfront infrastructure, land values, and civic priorities have been reshaped around an economy that does not depend on them. Bar Harbor is not a cautionary tale for Downeast Maine, but it is an important data point about what the end of that trajectory looks like.

What makes Downeast Maine operationally distinct from every other region in this inventory is the tides. Access to the water is constrained by tide windows in a way that Midcoast and Southern Maine fishermen do not experience to the same degree. Public infrastructure that might be adequate in a community with a six-foot tidal range is functionally limited in a community with a twenty-foot range.

The supply chain looks different here too. In Eastport, the fuel truck comes from fifty miles away. Bait is usually self-arranged. Many fishermen manage their own buyer relationships rather than relying on a co-op or a single buying station. Every trip is a logistics project before it is a fishing trip, and building a business in this environment requires a degree of self-sufficiency and planning that is not reflected in any inventory field.

Some Downeast fishermen operate within the "Grey Zone", a section of the Gulf of Maine that is claimed by both the United States and Canada. While this does not directly impact the working waterfront in that way that development pressure does, this unique and often challenging situation adds another layer of uncertainty to a business environment that is already thin on margin. When a fisherman's gear is at risk, his income is at risk, and a stressed fishing business is a business that may not survive a property sale or a succession decision the way a healthier one might.

In Eastport, there is a growing concern about cruise ships. Bar Harbor's decision to cap cruise ship visits redirected traffic to other Maine ports, and Eastport will likely now be receiving ships that Bar Harbor turned away. Fishermen in Eastport are watching decisions being made about the future use of the Eastport Breakwater, infrastructure they depend on and pay fees to access, without feeling like their history in the community or their operational needs are being weighed equally against the economic promise of tourism. This dynamic is not unique to Eastport. It is a version of the same story playing out in coastal municipalities across Maine: when a waterfront becomes attractive to a different economic use, local planning decisions, zoning priorities, and harbor management begin to reflect the interests of new arrivals rather than the people who built their livelihoods there, and commercial fishermen find themselves with fewer resources and less political leverage at the municipal level than the interests arriving to replace them.

A fisherman from the Eastport area summed up what all of this looks like day to day:

"Lobstering out of Eastport isn't easy. One of the biggest challenges we face is working around the area's extreme tides and periods of slack water. Timing is critical, and the changing conditions can make hauling gear difficult and unpredictable.

Another challenge is our proximity to the Canadian border. Because Eastport is so close to Canada, fishermen have to be careful not to let their boats or gear cross the international boundary. A simple mistake can lead to complications and potential penalties.

Getting fuel can also be difficult. About 90 percent of local fishermen rely on a fuel delivery truck rather than fueling at a dock. Coordinating schedules and meeting the truck at the right time is its own challenge, especially during a busy season when every hour on the water counts.

To load and unload our boats with traps, bait, and lobster, we rely on the town dock. It's in the center of town and offers very limited parking. It also gets complicated when cruise ships are in port, since we often have to adjust our schedules and dock access around them.

Looking ahead, I worry about what this industry will look like in the coming years. Not many young people are showing interest in getting into it. Most fishermen come from families with generations of fishing experience, but the cost of becoming a lobsterman today is extremely high, and for a lot of young people, the financial risk is just too great.

Eastport is home to one of the oldest working waterfronts in Maine, yet it often feels forgotten. When people talk about Downeast Maine, they're talking about us. They're talking about Eastport, a community built on the sea, sustained by hard work, and deeply connected to Maine's fishing heritage."

In Downeast Maine, the problem is economic viability, succession, and the slow erosion of the conditions that make fishing possible in the most remote and most fishing-intensive region in the state. The infrastructure is thin in some areas, but fishermen have built their operations around it, accessing fuel and bait by truck, and managing their businesses around the tide.

Downeast Maine is among the most productive lobster fishing regions in the state, Beals alone lands more lobster than most of Southern Maine combined and has more working waterfront properties than the entirety of Southern Maine. There are five lobster co-ops in the Downeast region, but not one has WWAPP protection.

Aquaculture in Southern, Midcoast, and Downeast Maine

Aquaculture is growing across all three regions, but its relationship to the working waterfront looks different depending on where you are on the coast. The sector's growth is significant: Maine's aquaculture sector grew 51 percent in total economic contribution between 2014 and 2023, from \$137.6 million to \$208.1 million, while total employment increased 60 percent over the same period (Maine Aquaculture Association, 2026). This inventory mapped aquaculture leases alongside shoreline infrastructure, but more work is needed to fully understand what aquaculture requires from the working waterfront and how to account for it in future inventory work.

Where a lease or LPA can be sited is not evenly distributed along the coast. Water depth, bottom type, current, and proximity to navigation channels all limit where aquaculture can physically go, which means the competition for water and waterfront space

concentrates in certain areas rather than spreading out evenly. Nearly 70 percent of Maine's LPAs and almost half of its standard leases are in the Midcoast, with the Yarmouth to Harpswell corridor alone accounting for over a third of all LPAs statewide.

That concentration is exactly where development pressure has made waterfront access hardest to find and hardest to maintain. Most aquaculture operators depend on public boat ramps and informal access arrangements rather than dedicated waterfront space, and in the same corridors where farms are most concentrated, that space is also in highest demand from lobster operations, recreation, and residential development. In some communities, aquaculture is well integrated into the existing working waterfront and coexists with lobster operations. In others, the two compete for the same ramps, floats, and space on the water. Untangling which is true where, and why, is a question that requires regional investigation rather than a single statewide answer.

An oyster farmer described what that competition feels like from inside the industry:

"I would have to say unity. Having just come off a meeting with our harbor committee last night discussing limiting aquaculture, I feel this acutely. As an LPA holder, year to year we are under threat from a single frivolous complaint that could shut down our operation. The larger farms are under constant scrutiny from towns looking to protect the view from million-dollar homes. We also have organizations pitting the commercial fishing industry against aquaculture and spreading misinformation. These are the issues I have actually spent my emotional energy and time defending and advocating against.

The paperwork, understanding the laws as they change, staying compliant, that all comes with the territory, the same as it would with any other fishery. But as our aquaculture community grows, these conflicts are becoming more front and center. We are losing working waterfront as a whole, no matter which fishery we're part of. Unity is vital. We all need to band together to preserve the working waterfront for everyone."

Maine Aquaculture Leases and LPAs by Region

Limited Purpose Aquaculture (LPA) licenses and standard leases by region and select sub-region

By Region				
	LPAs	% of Total	Leases	% of Total
Southern	123	20%	50	24%
Midcoast	429	69%	97	47%
Downeast	74	12%	59	29%
Total	626		206	

Select Sub-Regions				
	LPAs	% of Total	Leases	% of Total
Damariscotta River	87	14%	39	19%
Yarmouth – Harpswell	238	38%	54	26%
Washington County	20	3%	16	8%
York County	11	2%	3	1%

Intertidal Fisheries

In every region, access to intertidal fisheries often depends on public boat ramps and town landings, but it also depends heavily on private property and parking. (Manomet, 2023) A harvester needs somewhere to park a truck and a path to the flats that may cross private land. Many of these access points are informal or based on longstanding permission from landowners who have allowed access for generations. As coastal properties change hands, those permissions are not guaranteed to transfer. The loss of a parking spot or a path across private land can be as consequential for an intertidal harvester as the loss of a wharf is for a lobsterman.

PART III: Recommendations & Next Steps for Future Work

- Partner with Theresa Burnham, Josh Stoll, and the Applied Social-Ecological Research in Fisheries and Ocean Governance lab at the University of Maine to explore the intersections between the socioeconomic resilience indicators developed in their 2024 lobster fishery report and the working waterfront inventory data compiled here. One specific opportunity is to use those indicators, alongside landings data, license counts, and community-level inventory data, to develop a more nuanced way of assessing the criticality of individual working waterfront sites.

- Student license data is a particularly useful starting point: licenses declined 60 percent statewide between 2016 and 2026, more than twice the rate of decline in the active harvester fleet. Examining student license and new entrant data can help identify where the next generation of fishermen is and is not entering the industry, and what role infrastructure access, housing, and startup costs play in that pattern.
- Develop a methodology for discreet and residential sites that does not require individual site identification. A heat map or high-medium-low classification by harbor or community would capture the shape of vulnerability without creating a public record of specific informal arrangements or proprietary information.
- Prioritize island communities in any future inventory work. The no-alternative problem is most acute on islands: when a working waterfront site is lost on an island, there is nowhere else to go. Ferry dependency, extreme housing pressure, limited civic capacity, and geographic isolation combine to create a vulnerability profile that the current methodology only partially captures. It should also be noted that fishing businesses from island communities also depend heavily on mainland infrastructure.
- Use MCFA's working waterfront inventory template to conduct or update a local inventory. Having a current and robust community-level broader inventory is the foundation for protection decisions and mitigating rural coastal gentrification. (<https://www.maineoastfishermen.org/working-waterfront-inventory>)
- Investigate aquaculture's relationship to the working waterfront on its own terms and with its own regional lens. The working waterfront infrastructure that oyster, mussel, and kelp operations depend on is different from lobster infrastructure in important ways, and what that looks like varies significantly by region. Downeast Maine has a growing aquaculture sector with its own access needs and vulnerability profile, and Midcoast communities are navigating the coexistence of traditional lobster infrastructure and newer aquaculture operations on the same limited waterfront. A dedicated aquaculture working waterfront assessment, organized regionally and coordinated with DMR's aquaculture lease data, should be a priority for the next phase of this work.
- Reckon honestly with the fisheries that currently sustain Maine's working waterfront. Lobster represents 75 percent of Maine's total commercial landings value. The conversation about diversifying Maine's fisheries is important and worth having, but it deserves honesty. There is nothing in the ocean right now that is abundant enough, accessible enough, and economically viable enough to replace what lobster contributes to Maine's fishing communities and working waterfront. The working waterfront infrastructure we protect today needs to be flexible enough to serve what is *mostly likely* to come next like gear changes (i.e. on-demand fishing gear) or tourism business opportunities (e.g. charter boats, lobster tours, kayaks, food trucks) and which can supplement fishing businesses.

- Identify key regional partners for data ownership and maintenance and formalize those relationships. *These partners should be committed to a long-term process rather than a single inventory outcome.*
- Explore AI tools for ongoing inventory work. AI-assisted data aggregation can reduce the time burden of compiling and comparing publicly available information. Future AI work can also likely support mapping and inventory maintenance.
- Monitor the DMR historical landings data, watching the top ports and the ports that have fallen off the list over time. Between 2008 and 2024, 18 ports that once appeared by name in the landings data dropped off, falling below the privacy threshold and folding into the "Other Maine" category. Only 32 ports have appeared consistently in every year of the dataset since 2008. Monitoring those ports, watching which ones are approaching the privacy threshold, and tracking the "Other Maine" trend alongside student license numbers will be a good way to monitor how and where working waterfront trends are changing.
- Research archives for historical photos and reports about the working waterfront to create a repository that accompanies the ArcGIS inventory and mapping. This history will help document what has been lost, provide context for what exists today, and give fishing communities a record of their own working waterfront over time. The Digital Maine newspaper archive, the Maine State Library, and local historical societies are all starting points.
- The Penobscot Nation, the Passamaquoddy Tribe at Sipayik (Pleasant Point) and at Motahkomikuk (Indian Township), the Houlton Band of Maliseet Indians, and the Mi'kmaq Nation have relationships with Maine's coastal waters and working waterfront from time immemorial, reflecting a distinct set of rights, priorities, and governance structures. Accordingly, this inventory did not include tribal working waterfront, as those lands and waters are not part of the state's jurisdiction. Inventorying tribal waterfront infrastructure without the direction and participation of the tribes themselves would risk misrepresenting how those sites are used for commercial, subsistence, and cultural purposes, and how they are governed and valued. Any future effort to include tribal working waterfront should begin with outreach to tribal leadership and follow the tribes' own priorities and timeline.

The inventory work documented in this report is a foundation, not a finished product. Continuing it requires two things that are not yet resolved: sustained funding and a long-term home for the data.

Budget Considerations for Statewide Inventory

MCFA estimates the cost to complete the coastwide inventory of critical built working waterfront properties to be \$45,000-65,000. This assumes that the same typology and GIS tools are used and that the same streamlined list of essential data points are emphasized. This budget is based on estimates of field days and mileage for each coastal

county, as well as additional travel to each county. It assumes some level of centralized project coordination, ArcGIS hosting, QA/QC, and technical training and support for individuals who will be completing inventories.

Maine has 144 coastal towns. While most are home to seafood harvesters, working waterfront infrastructure is not evenly distributed. For example, while only about half of these communities still report lobster landings, those licenses and landings are weighted to Midcoast and Downeast. Critical infrastructure inventory work to date has focused on Southern Maine, with a representative sampling from Midcoast and Downeast to vet the matrix and data collection tools.

Completing the statewide inventory will require significantly more inventory fieldwork days because Midcoast and Downeast communities are more heavily reliant on smaller and privately owned properties scattered up and down peninsulas, as compared to Southern Maine, where use is more consolidated to public properties and a smaller number of larger holdings. Additionally, island communities require special attention. Based on our experience to date, we would anticipate between a half and a full day of fieldwork per community (and recognizing that some may not require fieldwork at all) for a total of up to 79 days of fieldwork. While some inventory pre-work can be done by phone, face-to-face meetings with local harvesters and harbormasters in communities important for building trust .

Coastal Counties	Est Towns	Est. Inventory Field Work (Days)
Hancock	32	18
Washington	29	18
Cumberland (Complete)	24	0
Lincoln	18	12
Knox	15	10
York (Complete)	14	0
Sagadahoc	8	4
Waldo	4	2
Island Communities	15	15
Total	159	79

Efficient completion of the inventory, which avoids duplication of effort, could be accomplished through a distributed model, with two to four teams coordinating on fieldwork. It will be imperative for these teams to agree on standardized data collection and sharing methods and be fully comfortable using the GIS-based data collection app developed by VIEWSHED. Leveraging local knowledge and piggybacking on existing

work in each region may cut down inventory days and mileage (both within and to each county) – perhaps by as much as a third. However, it is also important to remember that groups like the Sunrise County Economic Council and Maine Sea Grant are already under-resourced compared to local needs and operate with a lean staff. They should not be asked to tack on extra work or drive additional miles without additional resources. There may also be opportunities to work with students/interns/fellows to reduce the per hour cost for fieldwork, assuming staff time by a regional team is available for supervision.

In the near term, until a permanent host for GIS service can be determined, an annual contract with VIEWSHED is estimated at \$9,600. This includes

- Data QA/QC (checking the data and fields to ensure information is entered properly, fixing anything that needs revising)
- Working with Collaborators (adding people to the collaboration group, answering questions, checking in every other week to review data, resolve duplicated points and other issues, going over points to be discussed)
- Maintaining Software License/Apps (keeping the license for people to use to add and edit data, making sure that the apps continue to work)
- General project coordination.

Inventory data that lives in one organization's files will likely become stale and eventually be lost. The recommendation is a shared data repository with tiered access: aggregate findings and methodology available publicly; site-level data accessible to specific partners collecting specific information including LMF, DMR, Maine Sea Grant, MCFA, and the GMRI working waterfront trust project.

See complete budget in Appendix E.

PART IV: Inventory Context

MCFA's first working waterfront report, published in 2019, grew out of conversations with Portland fishermen about development pressure along Commercial Street. What began as a local concern quickly revealed itself as a statewide one. Communities up and down the coast were watching the same changes unfold: rising property values, seasonal development pressure, and a growing sense that the people making decisions about coastal land use were increasingly disconnected from the realities of commercial fishing. That report documented what was there, began to identify what was at risk, and called for closer attention to the infrastructure Maine's fishing industry depends on.

This inventory builds directly on that work, conducted on behalf of and in partnership with the Maine Coastal Program to develop a replicable methodology for identifying working waterfront and the risks facing it. Baseline inventories were completed for Southern Maine, with additional pilot inventories in Harpswell, Phippsburg, and Eastport to represent Midcoast and Downeast conditions, with additional conversations with fishermen in nearby communities to gather context.

Inventorying working waterfront is harder than it sounds. Some of the most important sites are invisible to anyone conducting a visual assessment without local knowledge,

both to find them and to understand their role within that community of harvesters. An inventory of the physical infrastructure only tells part of the story.

What we cannot easily inventory is the cultural significance, business viability, succession uncertainty, and changing community dynamics. Or the relationships that fishermen have built with their neighbors, fellow fishermen, bait dealers, and fuel trucks in order to operate their businesses on existing physical infrastructure. Understanding this system is critical and any effort to protect, add, or change working waterfront infrastructure without understanding the full web of relationships and arrangements that allow fishermen to operate risks unintended consequences. The physical infrastructure and the human relationships that sustain it are inseparable.

Inventorying Obstacles: Broad Themes

Over the course of this work, several themes emerged that go beyond what a physical inventory alone can capture and that warrant further exploration:

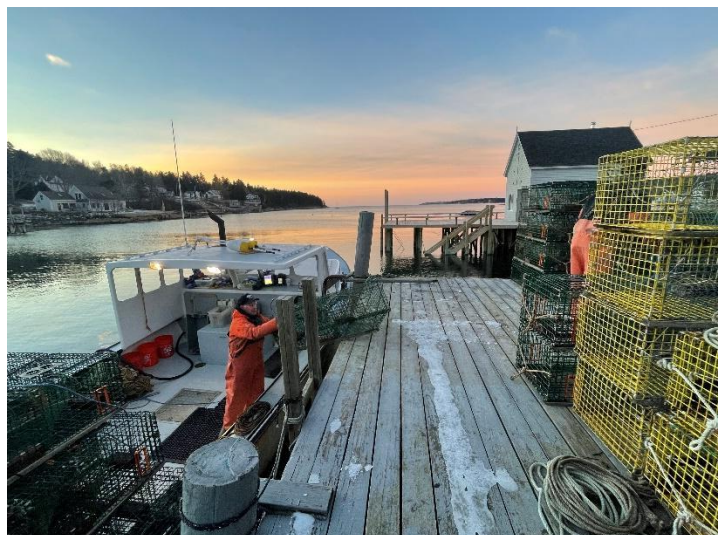
- *Housing affordability is a working waterfront issue.* Rising coastal property values are forcing fishermen to live further from the water, increasing operational costs and weakening the community ties that make informal waterfront arrangements possible. Every county with a housing cost increase above 100 percent since 2016 shows a student pipeline decline of 55 percent or more. Darcie Couture, Harpswell Harbormaster, put it this way:

"It's not a lifestyle preference. It's a foundational piece of the system, and once we go too far beyond the tipping point, it will be an eventual death knell to our coastal fishing heritage in Maine."

This is not a new concern. In 2001, in the *Final Report of the Committee to Study the Loss of Commercial Fishing Waterfront Access and Other Economic Development Issues Affecting Commercial Fishing*, the committee recommended: "the creation of a legislative task force to study issues related to preserving the commercial fishing industry in Maine. A particular charge to the task force should be to study the ability of commercial fishing industry workers to find affordable housing."

A Beals Island fisherman connected this directly to property taxes and what it looks like in practice:

"The working waterfront in Maine is one of the last frontiers on the coast. Far too many fishermen are being pushed out for commercial purposes, condominiums, and



vacation homes. This in turn drives up the land tax, causing fishermen to also move inland where the taxes are cheaper. It's not uncommon for fishermen to drive up to an hour in some parts of the state just to get to their boats. I would like to see the state protect some of these working waterfronts before it's too late."

- *The social relationship economy is critical and invisible to conventional inventory methods.* Knowing who to talk to, where to go, and who is willing to help often matters as much as the infrastructure itself. This shows up in how fishermen access bait, fuel, and gear storage across community lines, and even in how young fishing families find affordable homes through direct, informal arrangements before properties reach the open market.
- *Adaptive capacity is asymmetric.* Fishermen show remarkable resilience for challenges native to their work, but that capacity largely disappears when the challenge is civic and economic displacement in their community. A fisherman cannot adapt their way out of a building permit that won't be granted or outbid a buyer from out of state. The tools that have always worked, including hard work, flexibility, and problem-solving, do not work for structural problems.
- *Substitutability is more complex than capacity.* Whether a lost site can actually be replaced depends not just on physical alternatives but on relationships, history, and the social and political realities of who will and will not use a given wharf. And a discreet site often carries cultural weight that cannot be replaced by another site with equivalent square footage.

A fishing family that lost their wharf in the January 2024 storms described it this way:

"Our wharf, in many ways, was the beating heart of our family. Especially in the spring, when it was time to work on gear. Sometimes I'd be down there alongside my grandfather, grandmother, my dad, brother, both uncles, and a few cousins. There was really no other place or event where we spent time together like that. Scraping barnacles, measuring rope, replacing heads in lobster traps, and telling fishing stories. For me, it was where I learned about lobstering, but also about my family's history, our stories, and our heritage. Now it's like a phantom limb. Even after two and a half years, it's hard to fathom that it's gone."

The informal, discreet sites that carry this kind of meaning are among the hardest to inventory and the least likely to be reached by existing protection tools.

- *Aquaculture creates both opportunity and new pressure.* The aquaculture sector grew 51 percent in economic contribution between 2014 and 2023, creating real opportunities along the coast. But access to lease sites is in competition for the same limited waterfront space as tourism and other fisheries, and startup costs and access to coastal real estate remain significant barriers to entry.
- *Recreation and tourism add another layer of competition.* As the number of people and uses competing for the waterfront grows, the working part of the working waterfront becomes harder to protect and easier to overlook.

These themes point to clear next steps: deeper case studies in specific communities, closer coordination with research on socioeconomic resilience in the fisheries and aquaculture sectors, and ongoing conversations with fishermen, harbormasters, and municipal partners as this inventory is extended and updated.

PART IV: Conclusion

Maine's working waterfront is more resilient than the headlines might suggest. The fishermen who depend on it have been making it work for generations, adapting to changing markets, navigating thin margins, arranging their own bait and fuel, coordinating with neighbors, and finding ways to keep fishing when the system around them offers limited support. That resilience is real, and it deserves acknowledgment. The working waterfront is not on the verge of collapse. But it is under pressure in ways that are not always visible from the outside.

None of this should be read as a verdict that commercial fishing in Maine is in irreversible decline, or that the future of the working waterfront belongs only to whatever comes next. Maine's aquaculture sector has grown 51 percent in economic contribution over the past decade, and that growth is a genuine bright spot for the state's coastal economy. But aquaculture is not a replacement for the lobster industry, and it should not be treated as one. The two depend on different infrastructure, serve different markets, and in some places are already competing for the same limited waterfront space. The healthiest version of Maine's working waterfront is not one that picks a winner between fishing and aquaculture. It is one with enough flexibility and enough protected access to support both, because the people doing this work, whether hauling traps or tending a lease, are trying to build the same kind of life on the same stretch of coastline.

This inventory has focused heavily on lobster, because lobster accounts for roughly 75 percent of Maine's landings and because lobster infrastructure is what most of the working waterfront in this state was built around. But scallops, menhaden, and other fisheries also depend on this same infrastructure, often the same wharves, the same fuel access, the same gear storage, just at different times of year or in different proportions. Their landings data exists alongside the lobster data this inventory drew from, and future versions of this work should pull that data in more fully. A site that looks underused if measured only by lobster landings may be essential to a menhaden boat for a few weeks each summer, or to a scallop dragger in the winter.

A working waterfront inventory is like taking care of a boat. You do not just count the parts, because understanding what you have is not the same as understanding how everything runs together. And taking care of a boat is never done — there is always something that needs attention, that has shifted, something that only becomes noticeable when someone is paying consistent attention. The working waterfront inventory is the same. It requires ongoing time and investment, an understanding of how the pieces connect, and a commitment to staying present in the communities and relationships that make the waterfront function.

Orr's Island is a good example of why that nuance matters. It has no lobster landings, historical or recent, and a landings-only inventory would not show it as working waterfront at all. But fishermen there load and unload gear, stack traps, and access the water as part of the same fleet landing a mile away in Bailey Island. An inventory built only around what gets counted at the dock would have missed it entirely. That is the risk in any inventory: mistaking what is measurable for what matters.

The same risk applies to ownership. This inventory has largely organized sites around private and public ownership, but a growing number of working waterfront properties are owned by nonprofits, and they do not fit neatly into either category. Sea Meadow Marine Foundation in Yarmouth exists specifically to support working waterfront access and infrastructure for aquaculture, and its property carries a WWAPP covenant. Quahog Bay Conservancy in Harpswell, the Maine Center for Coastal Fisheries in Stonington, and MCFA's own Wildcat property in St. George all own or steward waterfront property in service of fishing communities, research, or education, rather than private profit or public budget cycles. These organizations are part of the working waterfront landscape, and a future version of this inventory should account for them as their own category rather than folding them awkwardly into public or private.

If the goal is to support fishing communities and ensure that Maine's working waterfront remains viable for the next generation, the path forward requires looking beyond infrastructure — not excluding it but not stopping there. The physical wharves, co-ops, and bait and fuel access are critical. But who can afford to live near them, who is coming up behind the current fleet, whether there is a harbormaster in the harbor, and whether the people making decisions about coastal communities understand what commercial fishing and aquaculture actually requires is also critically important. Addressing these things holistically, with the same rigor and attention that goes into protecting a single wharf, is what it will take to sustain not just the infrastructure but the communities and the way of life that give it meaning.

A working waterfront inventory is a process, not an outcome. It will never be finished and should not be thought of as something that gets completed and then referenced. The working waterfront is dynamic because the way fishermen use infrastructure changes with their businesses and their needs. Even the seasons shape how a site functions. The question is not how to maintain an inventory. It is how to keep building it.

Keeping this inventory current requires shared ownership over the process — not just the data, but the responsibility for updating it and the relationships that make new information discoverable. There is an important distinction between owning data and maintaining a living understanding of how the working waterfront, coastal communities, and fishing businesses intersect. The former is a records management problem, and the latter is a relationship problem.

Fishing families bring reasonable skepticism to any outside organization that arrives with an offer to help protect or inventory their property. The experience of watching fisheries management decisions made by people who do not fish, watching conservation arguments used to restrict commercial fishing activity, and watching communities

change in ways they did not choose has produced a wariness that any effort to maintain an inventory must also reckon with.

Lastly, maintaining a working waterfront inventory should not require something to go wrong in order to trigger an update. The most useful signals are not always visible on the waterfront itself. They are in the DMR landings data, in shifts in license counts, in a community dropping below the threshold that triggers a privacy-protected designation — meaning the fleet has fallen below the minimum number DMR requires before disclosing port-level data. These are not triggers for a re-inventory. They are ongoing indicators that the landscape is shifting and that how fishermen are using the working waterfront is changing.

The working waterfront has sustained fishing communities in Maine for generations because the people in those communities showed up for it consistently, in all conditions.

The inventory should work the same way.

APPENDICES:

a. Community Inventories

Site Name	Town	Typology	Ownership	Tidal Access	Landings	Bait / Fuel	Gear Storage	Fishery / Aquaculture	Buyer On-Site	Notes
Kittery Point Wharf (Frisbee's Pier)	Southern Maine	Mixed-Use	Public	All/High	Yes	No/Yes	No	Lobster	No	Harbormaster located at this property. Kittery is primarily Discreet WWs.
Town Docks (York)	Southern Maine	Mixed-Use	Public	All	No	No/No	On floats	Lobster	No	Town Docks: #1 and #2
Sewall Bridge Dock (York)	Southern Maine	Discreet	Private	All	Yes	No/No	No	Lobster	Yes	sOff the Boat Lobsters
John Hancock Wharf (York)	Southern Maine	Discreet	Private (Owned by museum/N GO)	All	No	No/No	Yes	Lobster	No	WWAPP
Perkins Cove (Ogunquit)	Southern Maine	Mixed-Use	Public	All	No	Yes/Yes	Temporary	Lobster, Tuna	No	Harbormaster located at this property.

Site Name	Town	Typology	Ownership	Tidal Access	Landings	Bait / Fuel	Gear Storage	Fishery / Aquaculture	Buyer On-Site	Notes
Wells Harbor Town Wharf	Southern Maine	Mixed-Use	Public	All	No	Yes/Yes	Unknown	Unknown	Unknown	
Biddeford Pool Fishermen's Association Pier	Southern Maine	Discreet	Private (Leased from Biddeford Pool Yacht Club)	All	Yes	Yes/Yes	Temporary	Lobster, clams	No	Biddeford Pool (In comprehensive plan it says, "Biddeford has no commercial wharves."
Camp Ellis Pier (Saco)	Southern Maine	Mixed-Use	Public	All/High	Yes	No/Yes	No	Lobster	No	Paved ramp unusable for larger boats at low tide.
Pine Point (Scarborough)	Southern Maine	Mixed Use	Public	All	Yes	Yes/Yes	Temporary	Lobster, Clams	Yes	WWAPP
Spring Point Marina (South Portland)	Southern Maine	Limited Use	Private	All	No	No/Yes	No	Lobster, Tuna	No	
Kettle Cove Commercial Launch (Cape Elizabeth)	Southern Maine	Discreet	Public/ State	High	No	No/No	No	Access only	No	
Falmouth Town Landing	Southern Maine	Mixed Use	Public	High	No	No/No	No	Access only	No	
Yarmouth Town Landing	Southern Maine	Mixed Use	Public	High	No	No/No	No	Access only	No	
Sea Meadow Foundation (Yarmouth)	Southern Maine	Operational (NGO)	Private	Tidal	Yes	No/Unknown	Yes	Aquaculture	Unknown	WWAPP
Brewer's Marina (South Freeport)	Southern Maine	Mixed Use	Private	All	No	No/Yes	No	None	No	Marina
South Freeport Town Wharf	Southern Maine	Mixed Use	Public	High	Yes	No/Yes	No	Lobster, Clams, Aquaculture	No	
Porter's Landing/ Dunning Boatyard (Freeport)	Southern Maine	Mixed Use	Public	Limited	No	No/Unknown	No	Access only	No	Falls Point Marine

Site Name	Town	Typology	Ownership	Tidal Access	Landings	Bait / Fuel	Gear Storage	Fishery / Aquaculture	Buyer On-Site	Notes
Winslow Park Boat Ramp (Freeport)	Southern Maine	Mixed Use	Public	High	No	No/No	No	Access only. Clammers launch airboats here.		
Mere Pt. Boat Launch (Brunswick)	Southern Maine	Mixed Use	Public	All	No	No/No	No/No	Aquaculture	No	
Paul's Marina (Brunswick)	Southern Maine	Limited Use	Private	High	No	No/Yes	No	Unknown	No	Marina on the water, access, but no landings or much commercial fishing.
Clam Shack	Kennebunk Area	Discreet	Private	Unknown	Yes	No/No	No	Lobster	Yes	Restaurant/Kennebunk (04043)
Government Wharf	Kennebunk Area	Operational	Public	All	Yes (trucked off site)	Storage/Yes	Loading/Unloading	Lobster, Tuna	No	Kennebunkport (04046) Recent DOT funding
Cape Porpoise Fish Pier	Kennebunk Area	Operational	Public	All	Yes (trucked off site)	Storage/Yes	Loading/Unloading	Lobster, Tuna	No	Cape Porpoise (04104) Recent DOT funding
Maine Wharf	Portland	Mixed Use	Private	All	Yes	No/No	Yes	Mussels, Oysters, Tuna	Yes	
Custom House Wharf	Portland	Mixed Use	Private	All	No	Yes/No	Yes	Lobsters	No	
Portland Pier	Portland	Mixed-Use	Private	All	Yes	No/No	No	Lobsters	No	
DiMillo's	Portland	Mixed-Use	Private	All	No	No/Yes	No	None	No	
Chandler's Wharf	Portland	Loss	Private	No	No	No/No	No	No	No	Before 1985, the pier served commercial fishing boats until condos development replaced them,

Site Name	Town	Typology	Ownership	Tidal Access	Landing s	Bait / Fuel	Gear Storage	Fishery / Aquaculture	Buyer On-Site	Notes
										triggering public backlash that led to Portland's 1987 marine-only waterfront zoning.
Widgery Wharf	Portland	Discreet	Private	All	Yes	No/No	Yes	Lobster	No	
Union Wharf	Portland	Mixed Use	Private	All	Yes	Yes/No	No	Lobster	No	Owned by GMRI
Merrill's Wharf	Portland	Mixed use	Private	All	Yes	No/No	Yes	Lobster	No	Law offices
Portland Fish Pier/PFEX	Portland	Major Commercial	Public	All	Yes	No/Yes	Yes	Groundfish, Menhaden, Tuna, Scallops	Yes	Vessel Services
Hobson's Pier	Portland	Mixed-Use	Private	All	No	No/No	Yes	<i>Commercial Fishing</i>	No	
Holyoke Wharf	Portland	Discreet	Private	All	Yes	No/No	Yes	Urchin, Lobster	No	
Sturdivant Wharf	Portland	Discreet	Private	All	No	No/No	Yes	<i>Commercial Fishing</i>	No	Bait cooler – not in use
Deake's Wharf	Portland	Mixed-Use	Private	All	No	No/No	Yes	Lobster	No	Free Range Seafood
Glen's Lobster	Bailey Island	Major Commercial	Private	All	Yes	Yes/Yes	Temporary	Lobster and menhaden	Yes	
Angie's	Bailey Island	Operational	Private	All	Yes	Yes/Yes	Temporary	Lobster	Yes	Owned by Angie's Restaurants (not a restaurant on site).
Cook's Wharf	Bailey Island	Operational/Discreet	Private	All	Yes	Yes/Yes	No	Lobster	Yes	Restaurant
Bass Rock	Bailey Island	Discreet	Private	High	No	No/No	Yes	Lobster	No	

Site Name	Town	Typology	Ownership	Tidal Access	Landing	Bait / Fuel	Gear Storage	Fishery / Aquaculture	Buyer On-Site	Notes
Barleyfield Point at Lowell's Cove	Orr's Island	Purgatory	Private — multiple shareholders	High	No	No / No	Yes — primary use is gear storage	Lobster	No	Primarily used for gear storage. Multiple shareholders. High risk of loss.
Orr's Island Bridge	Orr's Island	Discreet	Municipal — lease agreement	All	No	No / No	Temporary	Lobster	No	Primarily used for access.
Leeman Wharf	Orr's Island	Loss	Private — purchased by single homeowner	-	No	No / No	Previously yes	None	No	In Commercial Fisheries 1 (CF1) zoning district but purchased by single homeowner. No longer functioning as working waterfront.
Durant's Lobster	Cundy's Harbor	Operational	Private	All	Yes	Bait (storage): Yes; Fuel: Yes	Temporary	Lobster	Yes	
Cundy's Harbor Co-op	Cundy's Harbor	Operational	Private — co-op	All	Yes	Bait (storage): Yes; Fuel: Yes	Temporary	Lobster	Yes	
Hawkes Lobster	Cundy's Harbor	Operational	Private	All	Yes	Bait (storage): Yes; Fuel: Yes	Temporary	Lobster and menhaden	Yes	Gift shop on site.
Moody's Aquaculture	Cundy's Harbor	Purgatory	Private	All	Not currently	No/No	Temporary	Aquaculture and Clams	Not currently	
Holbrook's Wharf	Cundy's Harbor	Mixed-Use	Private — LMF covenant (WWAPP 2008)	All	No	No / No	No	Aquaculture access	No	Restaurant on site. WWAPP protected 2008. Aquaculture access noted.

Site Name	Town	Typology	Ownership	Tidal Access	Landing	Bait / Fuel	Gear Storage	Fishery / Aquaculture	Buyer On-Site	Notes
Interstate Co-op	Harpswell / South Harpswell	Major Commercial	Private	All	Yes	Yes/Yes	Temporary	Lobster/Menhaden	Yes	WWAPP
Pott's Harbor	Harpswell / South Harpswell	Operational	Private — co-op	All	Yes	Yes/Yes	Temporary	Lobster/Menhaden	Yes	
Henry Allen's Seafood	Harpswell / South Harpswell	Operational	Private	All	Yes	Yes/Yes	Temporary	Lobster/Scallops/Menhaden	Yes	Lobster touch tank, food truck
Ash Cove	Harpswell / South Harpswell	Operational	Private	All	Yes	Yes/Yes	No	Lobster	Yes	
Mitchell Field	Harpswell / South Harpswell	Purgatory	Municipal land/private business	Tidal	No	No/No	Potential	Aquaculture	No	Seeding, new boat ramp, potential for gear storage but currently not allowed
Erica's Seafood	Harpswell / South Harpswell	Operational	Private	All	Yes	Yes/Yes	No	Lobster, Menhaden, Scallops	Yes	Food truck also nearby
Webber's	Harpswell / South Harpswell	Operational	Private	All	Yes	Yes/Yes		Lobster	Yes	
Whiddens Wharf	Harpswell / South Harpswell	Operational	Private	ALL	YES	Yes/Yes	Temporary	Lobster, Menhaden	Yes	WWAPP
Small Point Dock Co.	Phippsburg	Operational	Private — member-owned co-op	All-tide (front floats); half-tide (main wharf)	Yes	Bait (storage); Fuel: Yes	Yes — nearby island, up to 1,000 traps; truck ramp	Lobster	No	Primary co-op for Small Point. Two floats. Parking. Truck ramp.
Aliquippa / Phippsburg Town Landing	Phippsburg	Discreet	Municipal	High tide only	No	No / No	No	Lobster	No	No parking, no storage, no docking. Mooring access at high tide only.

Site Name	Town	Typology	Ownership	Tidal Access	Landings	Bait / Fuel	Gear Storage	Fishery / Aquaculture	Buyer On-Site	Notes
Small Point Fisheries Wharf — West Point	Phippsburg	Operational	Private	Unknown	No — buying station only	Bait: Yes; Fuel: Yes	No	Lobster; Aquaculture — oysters (Maine Oyster Co.)	Yes	Fishermen bound to sell catch here if using services.
Wallace / Gilliam / Richards Wharf — West Point	Phippsburg	Operational	Private — 4 fishermen cost-share; one SPDC member is owner	Haul-offs only (3)	No formal landings	No / No	Yes — primary use is storage	Lobster	No	Informal cost-share; no formal protection. High risk of loss.
Former West Point General Store / Maine Oyster Company	Phippsburg	Discreet	Private	Unknown	No	No / No	No	Oyster (aquaculture); Maine Oyster Company base	No	Some informal fishermen access. Possible intertidal access.
North Cove	Phippsburg	Purgatory	Private	Unknown	Previously yes — inactive	Previously yes / Previously yes	Unknown	Lobster	No — inactive	Lost in January 2024 storms. Previously had buying station, bait, and fuel.
Sebasco Harbor Resort	Phippsburg	Private - Limited Use	Private — resort	Yes (recreational)	No	No / No	No	Lobster (1 vessel only)	No	Resort use. One lobsterman has private access arrangement.
Popham Wharf (State Pier)	Phippsburg	Limited Use	State — leased to Town of Phippsburg	No float; ice limits winter use	Yes	No / No	No	Lobster; clam digger access	No	State-owned, leased to Phippsburg. No float, fuel, bait, or gear storage.
Acre Lot	Phippsburg	Discreet	Public	Haul-offs only	Very limited	No / No	No	Lobster (limited)	No	Very limited practical utility for commercial operations.
New Meadows Town Landing	Phippsburg	Discreet	Public	Haul-offs only	No	No / No	No	Shellfish / aquaculture; New Meadows River Shellfish Cooperative nearby	No	Intertidal access: Yes.

Site Name	Town	Typology	Ownership	Tidal Access	Landings	Bait / Fuel	Gear Storage	Fishery / Aquaculture	Buyer On-Site	Notes
Winnegance Access Point	Phippsburg	Discreet	Public	Haul-off only	No	No / No	No	Oyster (aquaculture)	No	Intertidal access: Yes.
Parkers Head Landing	Phippsburg	Discreet	Public	Limited — no boats > 20 ft	No	No / No	No moorings	Clam (intertidal)	No	Clammer access to Kennebec River mud flats and Atkins Bay. Intertidal access: Yes.
Eastport Breakwater Pier	Eastport	Mixed Use	Municipal	High (limited)	No	No / No	No	Lobster, halibut	No	Fees charged for use. Cruise ship traffic is emerging threat to commercial fishing access.
Blackbeard's	Eastport	Purgatory	Private	Unknown	No	No / No	No	None currently	No	Outcome uncertain. Owner interested in restaurant development but may permit limited harvester access.
Looks Lobster	Eastport	Operational	Private	High (limited)	Yes	Bait: Yes; Fuel: by truck	Unknown	Lobster	Yes	WWAPP (Used to by Quoddy Bay Lobster)
Eastport Commercial Pier	Eastport	Operational	State	High (limited)	Yes	No / by truck	No	Lobster	No	Fees charged for use. Extreme tidal range makes hoist non-optional.
Inland Lobster	Eastport	Operational	Private	High (limited)	Yes	Bait (storage): Yes; Fuel: by truck	Yes	Lobster	Yes	Listed for sale at time of inventory.
Cooke Aquaculture	Eastport	Major Commercial	Private	Unknown	Yes	No/Unknown	No	Fin-fish	Yes	Multiple lease sites and properties

b. Detailed Dataset Table (see the documents posted on the website)

c. ArgGis User Guide (see the documents posted on the website)

d. Lobster Cooperatives

Co-op Name	Town	Est.	Members / Boats	WWAPP	Storm Grant	Notes
Interstate Lobster Co-op	South Harpswell	1974	21 members + ~20 additional boats	YES — 2021	Yes	First lobster co-op near Harpswell. Founded by Ronnie LeClair. Lobster, scallop, menhaden. (WWAPP)
Cundy's Harbor Co-op	Cundy's Harbor	Unknown	Unknown	No	No	Located on Cundy's Harbor Wharf.
Georgetown Fishermen's Co-op	Georgetown	Unknown	Unknown	No	Yes	
North End Lobster Co-op	Westport Island	2002	13 founding members (40+ families served per LMF)	YES — 2011	No	<i>Seasonal closures?</i>
Bremen Lobster Pound Co-op	Bremen	Unknown	24 boats; 34 families	YES — 2009	No	Muscongus Bay. Two piers, cold storage, fuel storage. Aquaculture, scallops.
South Bristol Fishermen's Co-op	South Bristol	1972	~40 boats	YES — 2013	Yes	Important commercial fishing access in Lincoln County. Dual realty co-op succession model. ~830K lbs lobster landed annually.
Fishermen's Heritage Lobster Co-op	Friendship	Unknown	37 boats; ~60 families	YES — 2010	Yes	Best student pipeline retention of any top-10 lobster port.
Port Clyde Fishermen's Co-op	Port Clyde	Unknown	~12 groundfish vessels	YES — 2008	Yes	
Owls Head Ship to Shore Co-op	Owls Head	Unknown	Unknown	YES — 2010	No	
Tenants Harbor Fishermen's Co-op	Tenants Harbor	2016	20+ members including student members	Yes	No	Newest co-op in Maine. Miller family wharf. ANR Enterprises)
Spruce Head Fishermen's Co-op	South Thomaston	1972	54 members; 100+ families served	YES — 2010, 2021	Yes	<i>Spring 2026 Mazzetta/smack boat dispute. No harbormaster as of 6/26</i>
Vinalhaven Fishermen's Co-op	Vinalhaven	Unknown	~60 boats; 84 members; 100 island families	YES — 2009	Yes	~50% of year-round population earns living from fisheries.
Matinicus Island	Matinicus	Unknown	Unknown	No	No	<i>Contact harbormaster (207) 366-3128 FMI</i>

Co-op Name	Town	Est.	Members / Boats	WWAPP	Storm Grant	Notes
Fishermen's Co-op						
Stonington Lobster Co-op	Stonington	1948	105-106 active members; 100+ families	YES — 2020, 2025	Yes	#1 lobster port by value 2024. 2nd oldest co-op in Maine. Started with 15 fishermen. Largest co-op in state.
Swans Island Fishermen's Co-op	Swans Island	Unknown	Unknown	No	No	Island
Cranberry Isles Fishermen's Co-op	Islesford	1978	26 boats; 28 members	No	Yes	MSC certified
Winter Harbor Lobster Co-op	Winter Harbor	1971	27 boats; 31 members (incl. students)	No	No	
Corea Lobster Cooperative Inc.	Corea (Gouldsboro)	Unknown	Unknown	No	Yes	2 fuel pumps lost Jan 2024 storms, repaired
Beals-Jonesport Co-op Inc.	Jonesport	Unknown	Unknown	No	No	Town received separate WWAPP grant for Henry's Point boat ramp — not co-op property.

e. Complete Budget

		Rate/Hr	\$55	Rate/mi	0.725	
Coastal Counties	Est Towns	Est Inventory Field Work (Days)	Est Inventory Fieldwork Cost	Est in Fieldwork Mileage	Est Fieldwork Mileage Cost	Est Fieldwork Cost per County
Hancock	32	18	\$7,920	350	253.75	\$ 8,174
Washington	29	18	\$7,920	450	326.25	\$ 8,246
Cumberland (Complete)	24	0	\$0		0	\$ -
Lincoln	18	12	\$5,280	250	181.25	\$ 5,461
Knox	15	10	\$4,400	200	145	\$ 4,545
York (Complete)	14	0	\$0		0	\$ -
Sagadahoc	8	4	\$1,760	100	72.5	\$ 1,833
Waldo	4	2	\$880	60	43.5	\$ 924
Island Communities	15	15	\$6,600	150	108.75	\$ 6,709
Total	159	79	\$34,760	1560	1131	\$ 35,891
Additional Inventory Costs						
Lodging (est 1/3 of inventory days)						\$ 3,950
Mileage to fieldwork counties (est. 900)						\$ 653
Field day meals + local guides (e.g., coffees, snacks, lunches)						\$ 2,500
Overnight meals						\$ 650
Ferry connections						\$ 300
Stipends for local knowledge holders (i.e., fisherman who drives field worker around)						\$ 2,000
GIS Support - Annual Contract						\$ 9,600
Subtotal Direct Costs						\$ 55,544
Estimated Indirect - 15%						\$ 8,332
Total						\$ 63,875

f. Definitions & Glossary of Working Waterfront Terms

Commercial Fishing (Wild-Caught)

All-tide Access A site that provides functional access to the water at any point in the tidal cycle, regardless of tidal stage. Floats, ramps, and infrastructure that adjust with the tidal range are typical features of all-tide access sites.

Bait Cooler A refrigerated unit used to store bait, ranging from a large walk-in cooler to a standalone commercial refrigeration unit. Bait coolers do not necessarily have to be near the waterfront. Larger bait coolers might be located more inland to reduce the costs of purchasing property on the coast, as well as being able to offer bait to more fishermen coming from various communities/peninsulas. (e.g. Stone Cold Storage, Freeport)

Bait Trailer Fishermen who utilize public piers or landings often have a trailer for loading and unloading gear, bait, and catch. Having a large trailer for this type of activity is an essential part of a fisherman's business in some areas.

Bait Shed A bait shed is more common terminology for a structure on a wharf for bait handling and distribution that is managed by the owner/dealer on the wharf. (That's not to say that fishermen can't still store their own bait there, but it is dependent on the arrangement.)

Bait Storage A general term for any facility or structure used to hold bait prior to use. May be refrigerated or frozen, enclosed or open, and can range from a dedicated building to a section of a larger structure. Some wharves provide bait storage that fishermen can rent if they are responsible for their own bait.

Barrels Large containers, typically blue, plastic, and 35 or 55-gallons, used to hold bait or rope. On the waterfront, barrels may be stored on docks, in bait sheds, or on vessels during the menhaden season. Can also be used to measure bait during the menhaden season. (In some areas, Bait barrels, are specifically the 35 gallon ones and drums are 55-gallon.)

Beaching Sometimes to clean the bottom of their boat or do other maintenance, fishermen will beach their boat. At high tide, they will drive the boat up onto the beach and then wait for the tide to go out so they can access the bottom of the boat. When they are ready to put the boat back in the water, they wait on the vessel till the tide comes back in and drive the boat off the beach.

Boat Ramp A paved or gravel incline allowing vessels to be launched from trailers or taken out of the water via a trailer. Most lobster boats can be trailered over the road so they can be taken out of the water with a hydraulic boat trailer. Boats over a certain weight and size (e.g. dragger boats, larger Novi boats) need to be taken out using a travel lift, often at a specific location.

In some communities, these spaces are also used by fishermen and aquaculture harvesters to get gear and catch out of the water using a trailer.

Boom/ Crane/ Pole Truck Mechanical lifting equipment used to move heavy loads (i.e. traps, gear, bait, catch, cages, etc.) on and off vessels and between the vessel and the wharf/ramp. (Not all working waterfronts are able to sustain the weight of a heavy truck.)

Buying Station A facility where catch is purchased directly from fishermen, typically operated by a dealer, co-op, or processor. May be a float with a scale on it where fishermen tie up to offload their lobsters, a building on the side of the road where intertidal harvesters sell their clams, or a building inland where lobsters are trucked by fishermen to be sold. Some buying stations are seasonal. This term is not actually used as often as the statement, "where I sell my lobsters/clams/etc."

Co-op A fisherman-owned cooperative. Co-ops handle the buying and selling of lobster and often use the power of group purchasing to get better prices on supplies, everything from bait gloves to hog rings. Some co-ops offer gear (e.g. gloves, bait irons) right at the wharf while others focus primarily on buying and selling lobster. Co-ops are typically governed by a board that makes decisions about the property and business. Co-ops

generally pay a lower price per pound during the season, with a bonus paid out at the end of the year based on what was left after covering the costs of any wharf improvements and other expenses. Importantly, not all co-ops are operated exactly alike.

Crates Crates are used to hold and transport lobsters or other catch. On the working waterfront, crates may be stacked on wharves, stored in sheds, or moved between vessels and buying stations. The term is standard along the coast. Some lobstermen will measure their catch by crates, which usually hold about 90 lobsters.

Dealer/Buyer A licensed buyer of commercial seafood. May operate from a fixed facility or come to the wharf via a truck. A wharf owner can also operate as a dealer for the wharf. Not all working waterfronts have a dealer on the wharf. Some lobstermen have to truck their own lobsters to an established dealer or wait for a truck to come if it's available. When wharves are operated by a dealer, very often fishermen sell their catch at that wharf as well as purchase bait and fuel, and that transaction is what allows the fisherman use of that wharf. When a dealer, bait, or fuel are not present, often fishermen will then have fees associated with using the wharf.

Fish House A multipurpose waterfront building used for storing gear and boat parts, building traps, or keeping buoys. A fish house is different from a bait shed, which is intended specifically for bait storage. Fish houses can be found on small, discreet wharves or on larger working wharves like those along Commercial Street in Portland. Many are aging and may be used by one fisherman or shared among a few.

Fisherman Access / Working Waterfront Access The practical ability of commercial fishermen to reach the water, land catch, load and unload gear, and conduct business. This can include access to the intertidal via a pathway and the more obvious wharf on the waterfront.

Float / Float System A floating platform attached to a fixed wharf via a ramp that rises and falls with the tide, allowing vessel access regardless of tidal stage. Floats can also be moored in a harbor. Floats are also sometimes referred to as a dock (because that's what it looks like). A float in a harbor with a scale might also be called the buying station or buy float.

Gear Storage / Trap Storage Any area, indoor or outdoor, used to store traps, rope, buoys, and other fishing gear. May be a dedicated building, a section of a wharf, or open land adjacent to the water. Gear storage is more permanent than the temporary use of a shared wharf, where a fisherman pulls gear out of the water and leaves it for a short period before moving it.

The Grey Zone An area of overlapping fishing territory in the Gulf of Maine near the Canadian border where the maritime boundary between the United States and Canada has not been formally resolved. Maine lobstermen and Canadian fishermen have historically fished in proximity in this area, and disputes over gear, access, and fishing rights have been an ongoing source of tension. The boundary dispute means that fishermen operating near this area face legal and operational uncertainty that fishermen

elsewhere on the Maine coast do not, adding another layer of risk to an already challenging business environment.

Heist/ Hoist A mechanical lifting device used to move traps, gear, catch, or other heavy materials on or off a vessel or wharf. Importantly, usage and need varies by harbor and operator preference. Some fishermen have hoists on their boats, lessening the need for a wharf to provide a hoist. These hoists are often smaller than those on a wharf and used for large fish (like tuna), lowering or raising a mooring, or crates of lobster. In Downeast Maine (where heist is the more common term) where the tides are more significant and run harder, making access to a wharf challenging for unloading and loading gear, catch, and bait. Large hoists are affixed to a wharf and can be raised and lowered to a vessel below. (These are more significant than a hoist that might be on a boat or on a private wharf in the midcoast.)

Lobster Car Usually a submerged crate where lobsters are held between harvest and sale. Sometimes you'll see a string of crates tied together and attached to the buy float. This term is very harbor dependent. In some areas, fishermen still refer where they land their catch as the lobster car, other places they simply refer to where lobsters are stored in crates.

Mooring A fixed anchoring point in the water where a vessel ties up instead of tying up at a wharf. A mooring-dependent harbor has different infrastructure needs than one where boats tie up wharfside. Fees vary by harbor, both for mooring use and for tying up at a wharf. In Portland, fishermen do tie up alongside a wharf, and this is sometimes referred to as a *slip/broadside berthing/side to*. Fishermen are often charged based on the length of their boat. This is also more common in places like Gloucester and New Bedford, MA.

Pier Piers are often public infrastructure built out from the shoreline, typically made of concrete. Piers may have a hoist affixed to it for loading and unloading gear, bait, and catch on and off a vessel since it is a fixed piece of infrastructure that is able to maneuver with the tide. In many cases, fishing vessels can be berthed alongside a pier.

Skiff A small, open or semi-open boat with an outboard used for a range of tasks. Some young fishermen start hauling their traps out of a skiff (by hand or with a small davit). Many wharves have shared skiffs to access boats on moorings. Often people who are working on the wharf to support the buying and selling of lobsters use a skiff to access the buy float. In some harbors you might see more skiffs because individual fishermen have their own skiff. At other harbors, you might only see a few because they are shared.

Tote A heavy-duty, stackable plastic tote used on commercial fishing boats and wharves to store bait or gear like rope and buoys. Unlike a crate, a tote doesn't have an interlocking cover.

Trap Shop Similar to a fish house but trap shops are often not on the water. A trap shop is where a fisherman builds and stores traps, boat parts, etc. Sometimes trap shops are located on a fisherman's residential property.

Wharf A wharf is a structure built out from the shoreline, typically made of planks and pilings, where vessels can tie up to load and unload gear or land their catch. It is where you will find working infrastructure like a bait shed, fuel, and a scale. Most wharves have a ramp that leads down to a float, which rises and falls with the tide. Fishing vessels are sometimes tied up to a wharf, but only temporarily.

Regions

Southern Maine: Kittery to Freeport

Midcoast Maine: Brunswick to Deer Isle-Stonington

Downeast Maine: Ellsworth to Eastport

Where Downeast starts according to a few Downeast fishermen:

“Schoodic Point”

“Deer Isle-Stonington to Jonesport is Downeast. Jonesport east is kinda forgotten about in my opinion.”

“At the McDonald’s in Ellsworth.”

Aquaculture & Intertidal

Aquaculture Cooperative A grower-owned cooperative whose members share infrastructure and services in support of aquaculture. Shared infrastructure can include refrigeration and cold storage, sales support, and water access for gear management, staging, and harvest. (There are currently 4 aquaculture coops, but that number is likely to grow in the future.)

Farm Barge / Work Platform A stationary, typically non-motorized barge or pontoon that serves as the primary work platform on a lease site for processing, washing, and harvesting oysters. The barge is towed out to the farm at the start of the growing season and lives there through harvest. Distinct from a vessel in that it is not self-propelled and is not used for transportation.

Harvest Tags Shellfish must carry waterproof tags with farm identification and harvest information at the point of sale, as required by state and federal regulation. Tag storage and printing are a minor but real operational need, particularly for farms selling at volume.

Hatchery A facility that produces shellfish or finfish seed for sale or use in the operator's own grow-out operation. May be land-based or partially water-dependent. Hatcheries require significant infrastructure (e.g. temperature-controlled water systems, algae production, specialized tanks) and represent a different category of working waterfront use than harvest operations.

Ice Machine / Ice Storage A structure or unit that produces or stores ice. Ice is an important infrastructure need for farmed oysters, as well as tuna, and groundfish but

not for lobsters which are temporarily stored in seawater. For oyster farmers, ice slurry tanks used to submerge and hold product on delivery days during warm months are a significant infrastructure need, and those tanks take up considerable storage space the rest of the year.

Oyster Cages / Gear The containment structures used to grow shellfish at a lease site, including cages, baskets, bags, longlines, and tray systems. Gear must be cleaned, repaired, and stored, which requires significant space on the working waterfront. Many farmers build their own bags rather than purchasing pre-assembled ones, which requires dedicated workshop space in addition to storage. Over-wintering cages which are used to sink oysters to the bottom during winter months, are a significant additional storage need for much of the year.

Note: there are meaningful differences between top culture and bottom culture operations in terms of gear type, footprint, and infrastructure needs.

Seeding / Nursery Area designated space where juvenile shellfish are held and tended before transfer to a lease site. Distinct from a hatchery in that it typically involves purchasing seed rather than producing it. May be a very small footprint or a substantial operation.

Sorting / Processing Table and Tumbler A surface used to sort, clean, and grade harvested shellfish before sale. May range from a simple plywood table to a stainless-steel processing station with running water, sometimes situated on the farm barge. Many operations also use a manual or electric tumbler alongside the sorting table. Oysters are loaded into the tumbler and rotated regularly throughout the warm months to prevent thin shell growth at the edges.

Tumblers are a separate piece of equipment from the sorting table and require their own storage space when not in use.

Upweller / Downweller Flow-through systems used to culture juvenile shellfish before they are large enough for open-water grow-out. Upwellers push water up through a cylinder of seed; downwellers push water down. Both require access to running seawater and must be located on or very near the water. They are expensive and often shared by harvesters or owned by a municipality (as in Harpswell).

Vessel / Skiff Aquaculture operations sometimes require multiple vessels operating at once. Many farms use a combination of a larger boat, often a lobster-style vessel in the 28 to 32 foot range, for shifting gear, bringing in harvests, and moving heavy loads, alongside two or more smaller flat-bottom skiffs for tending sites, checking gear, and seeding.

Wet Storage / Relay Tank A tank or submerged area used to hold live shellfish in clean water prior to sale, for conditioning, purging, or short-term holding. May be a land-based tank with pumped seawater or a submerged float system.

g. Related Reports & Working Waterfront Efforts

A Framework for Vulnerability Analysis in Sustainability Science

A Framework for Vulnerability Analysis in Sustainability Science is the vulnerability framework developed by Turner et al. (2003) that provides a structured way to assess how people, places, and systems are affected by external pressures by organizing vulnerability along three dimensions: exposure, sensitivity, and adaptive capacity. Turner, B.L., Kasperson, R.E., Matson, P.A., McCarthy, J.J., Corell, R.W., Christensen, L., Eckley, N., Kasperson, J.X., Luers, A., Martello, M.L., Polsky, C., Pulsipher, A., and Schiller, A. *Proceedings of the National Academy of Sciences* 100, no. 14 (2003): 8074–8079. doi.org/10.1073/pnas.1231335100

A Personal Perspective on Rural Maine's Coastal Transformation

A Personal Perspective on Rural Maine's Coastal Transformation examines how home rule, rising gentrification, conservation rhetoric, and population change are threatening the future of working coastal towns. Published in *Maine Policy Review*. Coombs, M. *Maine Policy Review* 34, no. 2 (2025): 129–131. doi.org/10.53558/uifm8483

Accessing the Maine Coast Accessing the Maine Coast is a self-help web resource for waterfront users, coastal communities, businesses, and landowners addressing issues related to coastal access and working waterfronts in Maine.

NOAA, Maine Sea Grant, Maine Coastal Program, Island Institute, and University of Maine Cooperative Extension. *Accessing the Maine Coast*. Originally launched 2007; updated 2025. umaine.edu/accessingthemainecoast/

The New Waterfront: A Worldwide Urban Success Story

The New Waterfront: A Worldwide Urban Success Story documents the global phenomenon of waterfront revitalization and the displacement of working waterfront uses that accompanied it, including a dedicated chapter on the working waterfront as an often-overlooked casualty of urban renewal. The book introduced the term "working waterfront" into broad circulation and framed its loss as a form of gentrification. Breen, Ann, and Dick Rigby. *The New Waterfront: A Worldwide Urban Success Story*. Thames and Hudson, 1996.

Socioeconomic Indicators of Resilience in Maine's American Lobster Fishery

Socioeconomic Indicators of Resilience in Maine's American Lobster Fishery uses a participatory, mixed-methods approach with Maine lobstermen and industry professionals to identify eight indicators of socioeconomic resilience in the Maine lobster fishery, including working waterfront access, housing affordability, and succession. Burnham, T.L.U., Kilchenmann, J., Guenther, C., O'Shea, M., Reardon, K., and Stoll, J.S. *Marine Policy* 173 (2025): 106543. doi.org/10.1016/j.marpol.2024.106543

Critical Crossroads: Coastline Challenges in Preserving Maine's Working Waterfronts

Critical Crossroads: Coastline Challenges in Preserving Maine's Working Waterfronts explores the challenges of sustaining Maine's working waterfronts in the context of COVID migration, demographic change, and coastal gentrification. Directly connects

rural coastal gentrification to working waterfront vulnerability in Maine. Coombs, M. *Maine Policy Review* 32, no. 2 (2023): 87–90. doi.org/10.53558/FVHD3449

The Critical Nature of Maine's Working Waterfronts and Access to the Shore

The Critical Nature of Maine's Working Waterfronts and Access to the Shore is a 2021 Island Institute report that surveys threats to working waterfront access statewide and recommends a coordinated, statewide approach to protecting it.

This report raises several themes that overlap closely with this inventory: the loss of working waterfront access driven by rising coastal real estate values and out-of-state buyers, the connection between housing affordability and a fisherman's ability to stay near the water he fishes, and the idea that Maine's existing protection tools, like WWAPP, are a starting point rather than a complete solution. It also makes the case that losing one piece of working waterfront access rarely stays contained to that single loss, it tends to set off a chain of new problems elsewhere. Carey, Merritt T. *The Critical Nature of Maine's Working Waterfronts and Access to the Shore*. Island Institute, August 2021. islandinstitute.org/wp-content/uploads/2021/11/WWF-Report_web.pdf

Federal Judge Overturns Part of Bar Harbor's Cruise Ship Ban

Federal Judge Overturns Part of Bar Harbor's Cruise Ship Ban reports on the May 2026 federal court ruling that struck down Bar Harbor's voter-approved 1,000-passenger cruise ship cap outside of July and August, and documents the town's escalating cruise ship restrictions since 2022. Jones, Carrie. "Federal Judge Overturns Part of Bar Harbor's Cruise Ship Ban." Bangor Daily News, May 15, 2026. bangordailynews.com/2026/05/15/hancock/hancock-police-courts/federal-judge-overturns-part-of-bar-harbors-cruise-ship-ban/

Final Report of the Committee to Study the Loss of Commercial Fishing Waterfront Access and Other Economic Development Issues Affecting Commercial Fishing

Final Report of the Committee to Study the Loss of Commercial Fishing Waterfront Access and Other Economic Development Issues Affecting Commercial Fishing is the 2001 Maine legislative committee report that launched the modern working waterfront protection framework in Maine, including the earliest formal policy uses of the term "working waterfront" and a recommendation to study housing affordability for fishing industry workers. The WWAPP and working waterfront covenant tools that followed grew directly from this report. Maine State Legislature, Office of Policy and Legal Analysis. 120th Legislature, First Regular Session. December 2001. digitalmaine.com/cgi/viewcontent.cgi?article=1101&context=opla_docs

Fishermen's Co-ops

Fishermen's Co-ops documents the history and founding of Maine's lobster cooperatives, including firsthand accounts from co-op members about why they were formed and what ownership has meant to fishing families across generations. Dinsmore,

Sandra. "Fishermen's Co-ops." *Fishermen's Voice*, November 2011, Vol. 16, No. 11. fishermensvoice.com/archives/112011FishermensCoops.html

GMRI Working Waterfront Trust / Conservation Tools Analysis

GMRI Working Waterfront Trust / Conservation Tools Analysis is an analysis of legal and financial instruments for working waterfront protection beyond WWAPP, including Island Institute interview research with owners, municipal leaders, lenders, and attorneys. Gulf of Maine Research Institute, 2026.

The Last 20 Miles

The Last 20 Miles is the most comprehensive statewide inventory of working waterfront access points available at the time of publication. Island Institute, 2006.

Maine Aquaculture Economic Contribution Report and Survey Report

Maine Aquaculture Economic Contribution Report and Survey Report uses farm-level data from a 2024 sector-wide survey to document the total economic contribution of Maine's aquaculture sector and provides the most current statewide economic data on aquaculture's growing role in Maine's coastal economy.

Maine Aquaculture Association. *Maine Aquaculture Economic Contribution Report and Survey Report*. 2024. maineaqua.org/maine-aquaculture-economic-contribution-report-survey-report/

Maine Aquaculture Roadmap 2022–2032

Maine Aquaculture Roadmap 2022–2032 is a ten-year strategic plan for Maine's aquaculture sector developed through focus groups with over 141 individuals representing 92 organizations.

Sadusky, H., C. Brayden, G. Zydlewski, and S. Belle. Maine Sea Grant and Maine Aquaculture Association, 2022. seagrant.umaine.edu/wp-content/uploads/sites/467/2022/01/Maine-Aquaculture-Roadmap-2022.pdf

Mapping Access to Intertidal

Mapping Access to Intertidal documents a 2022 to 2023 inventory of intertidal access points conducted by Manomet in partnership with the towns of Brunswick, Harpswell, Georgetown, Yarmouth, Arrowsic, and Phippsburg. Across all of these towns, 65 percent of the access points identified were on private property, most through informal agreements with landowners, confirming the same vulnerability this inventory found in discreet and residential lobster sites, but specifically for intertidal harvesters.

Manomet, December 2023. manomet.org/wp-content/uploads/2023/12/MappingAccessToIntertidal-122023.pdf

MCFA State of the Working Waterfront Report

MCFA State of the Working Waterfront Report is MCFA's first working waterfront report, documenting conditions across coastal communities, identifying vulnerabilities, and calling for closer attention to the variety of infrastructure and types of working waterfront Maine's fishing industry depends on. Introduces the term discreet working waterfronts. This inventory is a direct continuation of that work.

Maine Coast Fishermen's Association, 2019.

MCFA Working Waterfront Inventory Report and Template / Coastal Cohort Access Project

MCFA's Working Waterfront Inventory Report and Template (2023) supports municipalities in their efforts to integrate working waterfronts into broader town planning efforts through a standardized data collection process for current waterfront access, infrastructure and services, and to track change over time. The Coastal Access Cohort project is a direct continuation of the inventory report and template through its provision of technical assistance and supplemental project funding for eight municipalities throughout the coast. Ongoing project work will include mapping and analysis of the larger networks of relationships and processes across regions and the state that allow the fishing industry to operate. Understanding the larger scale is aimed at better centering fishing businesses in planning processes, more effective use of constrained resources and capacity, and potentially more collaborative and comprehensive governance and decision-making structures.

<https://www.maineoastfishermen.org/working-waterfront-inventory>

Portland Fish Pier Authority

Portland Fish Pier Authority is the City of Portland's official information page on the quasi-public corporation that owns and manages the Portland Fish Pier, including its governance structure and its 2024 merger with the Portland Fish Exchange. City of Portland, Maine. "Portland Fish Pier Authority." Accessed August 2026. portlandmaine.gov/portland-fish-pier-authority

Sea Grant / CRRC Climate Vulnerability Work

Sea Grant / CRRC Climate Vulnerability Work is ongoing work mapping physical climate vulnerability for working waterfront sites statewide, led by Natalie Springuel at Maine Sea Grant. Designed to be compatible and complementary with this inventory framework, adding a climate layer to the site-level data collected here. Maine Sea Grant / Coastal Resilience and Response Collaborative, ongoing.

Sunrise County Economic Council Working Waterfront Needs Survey

Sunrise County Economic Council Working Waterfront Needs Survey is a survey of commercial fishermen and working waterfront stakeholders documenting access needs, infrastructure gaps, and community concerns. In collaboration with GMRI's Trust project. Sunrise County Economic Council, date of publication to be confirmed.

Whose Shoreline? Whose Shoreline? explores how gentrification is reshaping who lives in Maine's coastal towns and who has the capacity to govern them, and what that means for the future of the working waterfront and the fishing communities that depend on it. Coombs, M. *From the Ground Up*, March 2026. fromthegroundupne.org/archive/whose-shoreline

h. How to Use the Inventory and Typology for Storytelling and Future Needs

Looking at the regions and types of working waterfront in each can help identify gaps, current needs, and where future needs are likely to emerge. It can also turn a number that looks confusing on its own into something more understandable. It can illuminate the kinds of questions we need to ask to develop a more nuanced understanding of

community-scale and regional-scale vulnerability and avoid the trap of one-size-fits-all solutions.

The 2024 Maine Working Waterfront Resiliency Grant Program (storm grant) data and the typology together can help identify funding gaps and explain them. Southern Maine received nearly twice the storm recovery funding of Downeast Maine, despite Downeast Maine having more harvesters, landings, and working waterfront properties. On its own, that number raises an obvious question: why did Downeast get less? A completed inventory helps answer a more useful one: what is actually driving that gap?

If Southern Maine's properties tend to be larger and more capital-backed, while Downeast's working waterfront is spread across more small, independently owned sites with less available capital, then the gap is not about who was prioritized. The real factors may have been more about eligibility (number of fishermen served and/or ability to meet match requirements). Exploring the unintended consequences that arise from uniform application of requirements across regions with different property types and uneven access to capital can provide insight into how future investment can provide tailored support to each region that reflects the working waterfront realities.

Combining student license data with the inventory can also help foreshadow future needs. Downeast had the largest student license pipeline in the state in 2016, and it has also fallen the fastest, down 69 percent by 2026. Shared alongside the inventory, the student license data becomes the story of a region where the next generation of fishermen is disappearing faster than anywhere else in the state, even though it currently has more boats on the water than most. This helps make the case for exploring tools like succession planning or grants for young fishermen.

Start with what already exists. The state already has landings data, license data, storm grant records, and aquaculture lease and LPA data. What has been missing is the layer that connects them and the story they tell together: a clearer understanding of which communities have which kind of infrastructure, owned by whom (public or private), serving how many people, and how vulnerable and exposed that infrastructure already is. This inventory is meant to begin building that layer.

The examples above are not the only ways to use the inventory and typology, but they show what is possible when a number is paired with the context that explains it, and they are a starting point for treating the working waterfront as a system rather than a single point.

Harvester and Student License Counts by Region, 2016–2026

Region	2016 Total Licenses	2016 Student	2024 Total Licenses	2024 Student	2026 Total Licenses	2026 Student	% Change in Student 2016–2026
Southern Maine	700	95	610	108	455	76	-20%
Midcoast Maine	2,911	473	2,449	353	1,857	240	-49%
Downeast Maine	2,269	489	2,025	326	1,391	154	-69%
Statewide Total	5,880	1057	5,084	787	3,703	470	-56%

Harvester and Student License Counts by Select Towns, 2016–2026

Town	Region	2016 Total Licenses	2016 Student	2024 Total Licenses	2024 Student	2026 Total Licenses	2026 Student	% Change in Student
Vinalhaven	Midcoast	253	41	215	23	169	16	-61%
Harpswell	Midcoast	228	36	202	27	169	22	-39%
Deer Isle	Midcoast	212	28	171	22	138	19	-32%
Stonington	Midcoast	170	18	121	5	92	1	-94%
South Thomaston	Midcoast	115	17	104	20	74	15	-12%
Owls Head	Midcoast	113	17	95	17	67	9	-47%
Tenants Harbor	Midcoast	91	23	66	5	53	3	-87%
Friendship	Midcoast	182	43	170	37	134	28	-35%
Cushing	Midcoast	80	17	85	20	72	19	+12%
Phippsburg	Midcoast	81	8	77	4	50	3	-62%
Jonesport	Downeast	187	42	172	27	121	11	-74%
Beals	Downeast	148	28	124	11	92	3	-89%
Steuben	Downeast	120	21	99	18	72	13	-38%
Swans Island	Downeast	105	33	104	25	67	8	-76%
Milbridge	Downeast	104	19	109	26	79	13	-32%

Town	Region	2016 Total Licenses	2016 Student	2024 Total Licenses	2024 Student	2026 Total Licenses	2026 Student	% Change in Student
Machiasport	Downeast	76	13	68	14	58	10	-23%
Bar Harbor	Downeast	73	22	64	10	50	6	-73%
Cutler	Downeast	70	20	72	17	46	2	-90%
Eastport	Downeast	7	0	9	2	4	0	N/A
Kennebunkport	Southern	36	3	26	1	24	1	-67%
Portland	Southern	48	6	46	12	35	15	+150%
Kittery	Southern	34	2	29	1	22	0	-100%

Regional Share of Maine Lobster Landings by Weight, 2008–2024

Year	Southern Maine	Midcoast Maine	Downeast Maine	Other Maine (unnamed)
2008	8.5%	53.4%	25.7%	12.4%
2009	7.9%	53.6%	27.7%	10.8%
2010	7.0%	54.5%	29.4%	9.1%
2011	7.0%	54.9%	27.2%	10.9%
2012	6.4%	54.7%	30.2%	8.7%
2013	6.1%	51.9%	31.5%	10.5%
2014	7.5%	50.7%	33.0%	8.8%
2015	7.5%	52.6%	30.3%	9.6%
2016	8.0%	51.9%	32.3%	7.8%
2017	7.3%	49.1%	32.9%	10.7%
2018	8.3%	49.5%	33.3%	8.9%
2019	7.4%	47.1%	33.9%	11.6%
2020	6.8%	46.2%	34.4%	12.6%
2021	9.2%	50.5%	31.0%	9.3%
2022	7.7%	49.2%	33.3%	9.9%

Year	Southern Maine	Midcoast Maine	Downeast Maine	Other Maine (unnamed)
2023	8.3%	47.7%	32.5%	11.5%
2024	7.7%	46.9%	31.4%	14.0%

Working Waterfront Resilience Grants — July 2024

Southern Maine Region Total: \$7,362,831.97		
Applicant	Town	Award Amount
T&K Realty LLC / Seaview Lobster Co.	Kittery	\$36,080.97
Town of Kennebunkport	Kennebunkport	\$289,915.00
Emmons Lobster Inc	Kennebunkport	\$6,656.00
Daggett Lobster Co., Inc	Kennebunkport	\$215,000.00
Town of Scarborough	Scarborough	\$91,680.00
Custom House Wharf	Portland	\$2,000,000.00
Maine Wharf LLC	Portland	\$2,000,000.00
Portland Pier Holdings LLC	Portland	\$553,000.00
Widgery Wharf — Thomas and Mary Kelly	Portland	\$2,000,000.00
Tenant's Harbor Wharf, LLC	Portland	\$170,500.00

Midcoast Maine Region Total: \$9,899,750.75		
Applicant	Town	Award Amount
Steven Johnson — Johnson's Boatyard	Long Island	\$3,486.90
Town of Rockport	Rockport	\$2,000,000.00
Raymond E. Young — City of Belfast	Belfast	\$110,307.56
Ash Cove Lobster, Inc	Harpswell	\$75,000.00
Francis Bichrest	Harpswell	\$97,320.00
James Clemons	Harpswell	\$57,325.00

Christopher S. Hole	Harpswell	\$400,000.00
Shawn Baumgartner / Glen's Lobster	Bailey Island	\$250,000.00
Ethan Morgan — Cook's Wharf	Bailey Island	\$303,500.00
Mark Alexander	Sebasco	\$75,000.00
Town of Georgetown	Georgetown	\$93,725.00
Georgetown Fisherman's Co-op	Georgetown	\$130,000.00
New Harbor Land Coop	New Harbor	\$516,408.24
Pemaquid Fisherman's Wharf	Pemaquid	\$43,000.00
Round Pond Village Improvement Society	Round Pond	\$60,287.50
Boothbay Harbor Waterfront Preservation	Boothbay Harbor	\$86,500.00
Fisherman's Realty IV Co-op	South Bristol	\$100,000.00
David J. Osier — Osier Seafood	South Bristol	\$250,000.00
Bramhall's Lobster Wharf, Inc	Friendship	\$27,500.00
Port Clyde Fisherman's Co-op	Port Clyde	\$85,647.50
Richard Olson and others	Cushing	\$113,759.00
Maine Lobster and Processing LLC	Thomaston	\$1,628,964.00
Spruce Head Co-op	Spruce Head	\$62,354.53
East Coast Seafood Group	Owls Head	\$243,639.73
Ace Lobster LLC	Stonington	\$524,531.00
Antonio Ramos	Stonington	\$278,000.00
Fifield Lobster Company	Stonington	\$52,625.00
Greenhead Holdings LLC	Stonington	\$540,000.00
Stonington Lobster Co-op	Stonington	\$596,869.00
Vinalhaven Fisherman's Cooperative, Inc	Vinalhaven	\$343,600.79
J O Brown & Son, Inc	North Haven	\$750,400.00

Downeast Maine | *Region Total: \$3,878,278.04*

Applicant	Town	Award Amount
Michael and Elizabeth Radcliffe / F.W. Thurston Co.	Bernard	\$225,893.00
Sheryl Harper	Southwest Harbor	\$400,000.00
Stuart Snyder	Southwest Harbor	\$132,698.82
Perry's Lobster Shack	Surry	\$72,000.00
Ready Seafood / Sorrento Real Estate	Sorrento	\$250,000.00
Bottom Line Fisheries, Inc	Corea	\$25,000.00
Corea Lobster Cooperative, Inc	Corea	\$329,309.38
Joseph Locurto	Steuben	\$60,000.00
MSLT Steuben LLC	Steuben	\$383,390.00
Pinkenn Alliance, LLC	Steuben	\$66,111.86
Chipman's Wharf LLC	Milbridge	\$271,889.99
Eric E. Beal — Skipper Shore Inc	Milbridge	\$48,393.62
Sawyers Wharf LLC	Milbridge	\$92,592.00
Inland Seafood Corporation of America Inc	Milbridge	\$76,843.00
Clay Rumery	Milbridge	\$50,000.00
MSLT Addison LLC	Addison	\$53,875.04
Steamboat Wharf Co. — Kent's Wharf	Swans Island	\$541,635.50
Leonard M. May Sr	Swans Island	\$150,000.00
Cranberry Isles Fishermen's Co-op	Islesford	\$86,748.00
Guptill's Wharf	Jonesport	\$85,557.83
William Look — O.W. and B.S. Look Co., Inc	Jonesport	\$150,000.00
Stephen Geel	Beals	\$24,000.00
Town of Beals	Beals	\$144,840.00
MSLT Machiasport LLC	Machiasport	\$13,500.00
William Look — O.W. and B.S. Look Co., Inc	Eastport	\$25,000.00

Town of Lubec	Lubec	\$119,000.00
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STATEWIDE TOTAL: \$21,185,712.47 | 68 working waterfront properties