

## **Mapping Maine's Working Waterfront: for Our Heritage and Economy**

### **Abstract**

*Mapping Maine's Working Waterfronts* is a collaborative project led by the Island Institute that inventories the state's current water-access infrastructure to provide better information to support working waterfront policy, conservation and planning at state and local levels.

### **Description**

Working waterfronts account for \$740M of Maine's economy and employ approximately 40,000 people. Beginning in the summer of 2005, the Island Institute and its partners embarked on a community-based mapping project to quantify the working-waterfront resources for Maine's 142 coastal towns. The goal of this research effort is to create a new tool in the form of a statewide *Working Waterfront Access Map* to facilitate dialogue between two historically divided coastal constituencies: the conservation community and the commercial-fishing community. This paper discusses the challenges and successes of this effort, the community participation process, the overall impact this research is currently having in Maine and its possible applications in other areas of the country. Issues such as defining working-waterfront access, setting protocol for public-data access, and the sustainability of mapping research are topics that this project addresses. A model methodology will be outlined that explores the potential for this community-based mapping effort to be replicated in other working waterfront states.

Working waterfronts are defined as waterfront lands that are used for or that support commercial fishing. Starting with this definition we also recognize that working waterfronts collectively define the soul and character of the Maine islands and coast for residents and visitors alike. Nevertheless, Maine's working waterfront is facing tremendous pressure from conversion for other, incompatible uses, a concern for communities, fishermen, and conservation groups alike. A study by the State Planning Office suggests that the majority of Maine's coastline will be classified as suburban/urban by 2050.

A major challenge facing those attempting to address this problem is a lack of information about the exact amount and nature of these working waterfronts. Maine's coastal communities had not been mapped with the explicit intention of identifying working waterfront as a land use, in the same way other land use and habitat data have been collected. *Mapping Maine's Working Waterfront* fills this gap by developing maps of working-waterfront infrastructure to provide communities, land trusts, and other interested groups with planning tools that will inform local and regional decisions and protection strategies for working-waterfront access sites across the coast.

### **Methodology**

The Island Institute coordinated a working-waterfront access workgroup through a partnership of community members, nonprofits, and state organizations that met to create a standardized methodology for developing a statewide working-waterfront access map. Using pilot projects conducted by the Island Institute and Cobscook Bay Resource

Center, the workgroup prioritized the access infrastructure types and attributes, vital for meaningful local and regional planning to be identified when collecting data statewide. These attributes include information around access privilege, usage, infrastructure, commercial fishing and general marine services. In addition to waterfront access data, this inventory also gathered information around local zoning ordinances that are in place to help maintain the viability of commercial fisheries/maritime activities. By cataloging zoning information in combination with comprehensive access data, we are able to look at current access-protection strategies and locations and needs for further investment to protect and conserve working-waterfront access.

Data collection was led by the Island Institute, with assistance from project partners Mitchell Geographics, Sunrise County Economic Council, and Cobscook Bay Resource Center. Data was collected through a series of detailed meetings at coastal town offices, and through phone interviews. The level of information collected was based on availability of local knowledge and perceived sensitivity to the data being collected. Seventy-five percent of the 142 coastal towns participated in a detailed inventory through face-to-face interviews. In these communities the data collection process involved using digital aerial photography, available from the Maine Office of GIS (MeGIS), and surveying officials in each town to identify points along the shore providing waterfront access for public use and/or working waterfront access and/or services. We then used GIS technology to transfer local knowledge to spatial and attribute data. Twenty-five percent of Maine's coastal communities participated via more informal phone surveys providing detailed information on water-access availability but not including the spatial location of that access.

All data developed were cross referenced wherever possible to existing studies such as CEI's project [\*Tracking Commercial Fishing Access: A Survey of Harbormasters in 25 Maine Coastal Communities\*](#), as well as the Maine Department of Conservation dataset on public boat launches to gather a complete picture of waterfront access.

### **Project Findings**

Within the 142 coastal towns and 5,300 miles that make up the coast of Maine, 1,555 points were identified as providing saltwater access. This access includes everything from public boat landings and municipal rights-of-way to boatyards, marinas, and private fishing docks. It includes both ocean and estuarine access.

Below you will find a summary of statewide statistics and project findings. The data shown here exemplify the type of information derived from the study, but are not inclusive of all of the information that was collected and could be examined from each coastal community.

#### *Public Access*

- 696 points statewide (45% of the total number identified) provide public water access
- 851 (55%) qualify as private or restricted access requiring owner permission to use

### *Access Use*

- 888 (57%) of the state's total access points support commercial fishing activities
- 924 (59%) support recreational activities

### *Zoning*

- 446 (29%) of waterfront access points are currently protected under water-dependent use zoning
- Only 45 (33%) of Maine's coastal towns have some type of water-dependent use zoning protecting 150 miles of coastline (less than 3% of Maine's coast)

### *All Tide Access*

- 1,125 points (72%) provide all-tide water access
- A 1989 Maine State Planning Office study identified only 175 miles of Maine's coastline as sufficiently deep and sheltered to support working-waterfront activities. Of these 175 miles, only 21 miles of Maine's entire coast provide all-tide water access.

### *Working Waterfronts*

- Only 1,045 of the 1,555 points identified provide working-waterfront access (that is, they support commercial fishing uses and/or water-dependent businesses)
- These 1,045 points represent approximately 20 miles of working-waterfront access remaining on Maine's 5,300-mile coast.
- Only 81 access points have the qualities of a "prime working waterfront" by providing adequate parking, all-tide access, and on-site fuel availability.
- Only 62 of these 81 "prime working waterfront" points with adequate parking, all-tide access, and availability of on-site fuel currently support commercial fishing activities.

### **Data Dissemination**

The data collected through this study were designed for practical applications for local, regional, and statewide waterfront access planning and therefore, getting the information into the hands of decision-makers at all levels is critical. At the same time, information collected through this study, such as privately owned waterfront access, is potentially sensitive in nature, and requires a thoughtful data-release policy.

This policy was developed working with representatives from local communities, regional and statewide non-profit and government organizations. While all information collected through this study is classified as public information, participating community leaders needed to maintain some local control over who was using the data and for what purposes. Information gathered through this study is available in the following ways:

- Each participating coastal community received their local access data in the form of large format maps as well as copies of all digital data created through the project to be used for local planning.
- Project fact sheets and data summaries are available for dissemination and are found online at [www.islandinstitute.org](http://www.islandinstitute.org)

- Spatial data for all public access points identified, with permission from participating communities, will be available through the Maine Office of GIS, a statewide catalog for spatial information.
- The entire dataset for each participating community, including all publicly owned and accessible points as well as privately owned and accessed points, is housed at the Island Institute and will be made available to interested organizations and individuals by request. In order to help community leaders maintain local control over the data which they felt was critical, anyone interested in obtaining the full inventory dataset must first obtain permission from the local community before the Island Institute will release the data. While we understand that this is a potentially cumbersome process for those outside of the town that are interested in using the data, community members felt very strongly that they remain informed about who has access to the data and for what purpose. Therefore, this data-release procedure provides a means to keep communities informed while also providing the benefit of beginning local conversations about waterfront access with interested partnering conservation and planning organizations.

### **Success and Challenges**

Throughout project development, methodology design, data collection and analysis there have been a number of challenges and successes. The first major challenge was ensuring, before data collection began, that we understood exactly what types of data would be useful to inform local, regional as well as statewide planning efforts. This was accomplished by convening a working group of stakeholders to identify the type of data that was critical to each group. Not only was it important to gather information meaningful for each type of stakeholder, but it was also critical to structure the data collection in such a way as to capture the very large range of the type of access points across the entire coastline. This challenge was met through well thought-out survey questions for each access location.

During stakeholder meetings, the largest question was how to gather enough access information for meaningful planning without advertising and potentially exploiting the use of privately owned access points. We found the best way to resolve this sensitivity issue was to ensure local community buy-in and participation. The overwhelmingly positive response from communities across the coast is a testament to the gravity of the access situation in Maine. Because local public participation was so critical to information gathering, making sure that all of the right stakeholders from each community were involved in the process was a slow but very important process. While this meant a slower process, it also created a higher-quality product as a result.

In fact, we found that the conversations happening between community leaders during data collection meetings were just as important as the information we were collecting. In many cases everyone had been thinking about how to protect the waterfront access in their community, but it was the first time a group had sat down together to discuss the current access situation in their town and how potential strategies for ensuring access would remain viable in the future. In some cases this meant identifying additional public

access points to secure, and in others it meant considering employing water-dependent land-use zoning to protect access currently being used.

Ultimately the project was accomplished by working hand-in-hand with local community leaders in each of the participating coastal communities. The data collected were around critical-access infrastructure on a local level and from a community perspective. Creating both strong relationships with community leaders and delivering a meaningful data product were critical to the successful implementation of this project in Maine, and would be necessary for similar projects undertaken in other coastal states.

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