

PORT BY PORT:

Profiles and Analysis of the Massachusetts Commercial Fishery

A report prepared by the Massachusetts Division of Marine Fisheries, the Urban Harbors Institute at the University of Massachusetts Boston, and the Cape Cod Commercial Fishermen's Alliance for the Massachusetts Division of Marine Fisheries

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URBAN HARBORS INSTITUTE
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EXECUTIVE SUMMARY

Port by Port: Profiles and Analysis of the Massachusetts Commercial Fishery provides an overview of commercial fishing in Massachusetts and, for the first time, describes conditions in each municipality with a commercial homeport. The report highlights both the important role that commercial fishing plays in the state’s economy, as well as the access and infrastructure challenges that limit the industry’s current operations as well as its growth.

Commercial Fishing is an Increasingly Important Part of the State’s Economy

Data analyzed for this report show that, though the significance of certain species has changed over time, the value of seafood brought in to (or “landed” in) Massachusetts ports between 2009 and 2018 has risen nearly 38 percent, when adjusted for inflation^{1, 2}

In 2018, total landings (in whole pounds) amounted to 734 million pounds, valued at \$647 million at the first point of sale (*i.e.*, the “ex-vessel” value).

More than half (approximately 55%) of that value was from the harvest and sale of a single species—the sea scallop. The American lobster, eastern oyster, surf clam, and Jonah crab rounded-out the top five most valuable species for 2018, though several species each brought in more than \$3 million in ex-vessel value, showing a varied commercial fishing industry in Massachusetts.

Landings of groundfish species declined by approximately 20 percent from 2009 to 2018. Much of this can be attributed to landings of cod, which dropped 90 percent during that time period. Haddock, however, showed a slight increase in landings, and redfish landings were up 300 percent.

Eastern oysters also increased dramatically, nearly quadrupling from \$6.4 million in ex-vessel value in 2009 to \$28.3 million in 2018. This increase can be attributed to the proliferation of aquaculture operations primarily on Cape Cod, and rising consumer demand.

Top Species, by Ex-Vessel Value, Landed in Massachusetts in 2018

SPECIES	2018 EX-VESSEL VALUE
SEA SCALLOP	\$373,826,248
AMERICAN LOBSTER	\$88,799,297
EASTERN OYSTER	\$28,388,055
ATLANTIC SURF CLAM	\$17,247,917
JONAH CRAB	\$12,475,573
HADDOCK	\$12,304,940
OCEAN QUAHOG	*
MONKFISH	\$8,452,835
SOFT SHELL CLAM	\$6,200,167
WINTER FLOUNDER	\$5,082,703
ATLANTIC SEA HERRING	\$5,058,901
BLUEFIN TUNA	\$4,967,832
ACADIAN REDFISH	\$4,905,766
NORTHERN QUAHOG	\$4,885,144
CHANNELED WHELK	\$4,652,272
SILVER HAKE (WHITING)	\$4,379,900
ATLANTIC COD	\$4,172,340
AMERICAN PLAICE (DAB)	\$4,108,288
POLLOCK	\$4,055,134
STRIPED BASS	\$3,849,610

SOURCE: ACCSP Data Warehouse, 2020 ED

* Confidential

¹ NOAA. 2017. Fisheries Economics of the United States. <https://www.fisheries.noaa.gov/national/sustainable-fisheries/fisheries-economics-united-states>

² Numbers elsewhere in this report are not adjusted for inflation.

Lobsters landings from the Gulf of Maine increased as well, rising from 8.4 million pounds in 2009 to 13.1 million pounds in 2018. This increase has been seen primarily in ports north of Cape Cod where environmental conditions are optimal for growth. South of Cape Cod, warming waters are negatively impacting lobster abundance³.

Commercial Fishing is an Important Part of Municipal Economies and Cultures

The top five ports in Massachusetts in terms of overall ex-vessel value are New Bedford, Gloucester, Chatham, Barnstable, and Boston. Moreover, New Bedford is the top-ranked port in the United States in terms of ex-vessel value due to its role in the sea scallop fishery.⁴

Gloucester and New Bedford are the top-ranked lobster landing ports in the state and Gloucester also continues to be the top groundfish⁵ port in Massachusetts. Barnstable’s landings are driven by shellfish, primarily oyster, while Boston’s landings are driven by groundfish. Chatham’s landings are a mixture of groundfish, shellfish, lobster, and other finfish.

Within the top three species landed in MA, other important ports that landed in excess of \$4 million for the species include Rockport, Sandwich, Plymouth, and Provincetown for lobster, Duxbury and Wellfleet for oysters, and Fairhaven and Chatham for sea scallops. Please refer to Appendix B for more details on top ports and top ports by species in terms of ex-vessel value.

Though the ex-vessel values seen in other ports may not rise to the levels of New Bedford or Gloucester, commercial fishing plays an important role in the economies and cultures of smaller ports and the region as a whole. In fact, commercial fishing provides part-time and full-time employment for thousands of residents, though Massachusetts commercial permit data indicate that the median age of fishermen is increasing, which suggests that fewer young people are pursuing a career in commercial fishing.

Efforts are Needed to Address Access and Infrastructure Challenges

Surveys of harbormasters and commercial fishermen indicate that, despite the industry’s successes, many access and infrastructure challenges limit growth—and in some cases, impair operations.⁶ Among the most frequently cited issues were shallow water and the need for dredging, a lack of affordable berthing for commercial users, the need for more space to load and unload catches and gear, and a lack

Top Commercial Fishing Ports, by Ex-Vessel Value, in 2018

PORT	2018 EX-VESSEL VALUE
NEW BEDFORD	\$431,038,042
GLOUCESTER	\$53,210,608
CHATHAM	\$18,967,799
BARNSTABLE	\$16,982,115
BOSTON†	\$16,416,184
FAIRHAVEN	\$8,413,362
WELLFLEET	\$7,728,102
PROVINCETOWN	\$7,721,452
DUXBURY†	\$6,789,874
SANDWICH	\$6,769,995

SOURCE: SAFIS Dealer Database & ACCSP Data Warehouse, 2020 TH

† Exact total value cannot be displayed due to data limitations; see individual port profile in Appendix A for more information. The displayed value is > 80% of the total value for the port.

³ Atlantic States Marine Fisheries Commission. 2021. American Lobster Management. <http://www.asmfcr.org/species/american-lobster>

⁴ NOAA. 2017. Fisheries Economics of the United States. <https://www.fisheries.noaa.gov/national/sustainable-fisheries/fisheries-economics-united-states>

⁵ Defined in 322 CMR 6.03(1) as American plaice, cod, haddock, halibut, monkfish, ocean pout, pollock, redfish, windowpane flounder, winter flounder, witch flounder, wolfish and yellowtail flounder.

⁶ This study did not take into consideration fisheries regulations, but rather focused on challenges related to physical access to/from the water and coastal infrastructure.

of parking. Specific needs varied by municipality and are documented in the Port Profiles in Appendix A of the report.

The report includes a series of recommendations to address the needs and opportunities identified by harbormasters and the commercial fishing community. Implementing many of this report's recommendations to improve access and infrastructure will require funding, *e.g.*, for dredging, installing new docks and moorings, conducting planning exercises to increase parking. The port profiles in Appendix A can be used by commercial fishers, harbormasters, waterways committees, select boards, and others to help illustrate the importance of local commercial fishing activities and to advocate for additional funding.



I. INTRODUCTION

Massachusetts is known worldwide for its commercial fisheries, a significant part of the region's history and culture that help drive the state's economy. In 2018, for example, the total value of fish purchased from vessels in Massachusetts ports was \$647 million.

Activities related to commercial fishing, including seafood processing, seafood markets, fish hatcheries, and aquaculture, contributed \$687.9 million to the Massachusetts Gross State Product in 2015, employing more than 5,700 people and generating \$321.1 million in total wages.⁷

Increased demand for local seafood during the COVID-19 pandemic underscores the important and growing role the Massachusetts commercial fishing industry plays in supplying sustainable protein to local residents.

Despite the industry's significance, Massachusetts fishermen report that they are being displaced from harbors and struggle to obtain access to essential or important port infrastructure such as dockage, ice, parking, and hoists.

As communities work to balance competing uses for their waterfronts, information about existing conditions (for example the size of local fleets), challenges (such as dredging and parking), and

⁷ Public Policy Center, UMass Dartmouth. 2018. Navigating the Global Economy: A comprehensive analysis of the Massachusetts Maritime Economy.

opportunities (including regional collaborations) can help decision-makers ensure that the needs of fishing communities are met.

To that end, in 2019 the Massachusetts Division of Marine Fisheries (DMF), with support from its Seafood Marketing Program and Steering Committee, initiated this inventory and assessment of the Commonwealth's commercial fishing activity and infrastructure. Project partners include the Urban Harbors Institute (UHI) at the University of Massachusetts Boston, which led survey implementation, data analysis, and report writing, and the Cape Cod Commercial Fishermen's Alliance, which assisted with survey and report development and review.

This report draws on the results of harbormaster and commercial fishing surveys to highlight access and infrastructure needs along the coast of Massachusetts. In addition, this report details levels of fishing effort and values of landings at state, regional, and municipal levels, based on data collected by the Massachusetts Division of Marine Fisheries. The information is presented at the state-level in the main report, along with recommendations intended to preserve or enhance access and infrastructure for the commercial fishing industry. Recommendations included are those of the authors.

In addition to statewide data, profiles of each municipality found in Appendix A highlight local fisheries, including values of landed catches, numbers of licensed fishermen, and specific needs within municipal harbor(s). This detail is intended to serve as useful reference for those looking to understand commercial fisheries community by community. This report focuses on commercial fishing infrastructure and access challenges and needs. It does not directly address other issues facing the commercial fishing industry including regulations, overfishing, climate change, pollution, and impacts of COVID-19.



II. METHODOLOGY

Information on commercial fishing records, trends, access challenges, and infrastructure needs came from three sources:

- A. *Massachusetts commercial fishing landings and permit data*: DMF analyzed these data to develop descriptions of current and historical fishing activity.
- B. *Harbormaster surveys*: Harbormasters volunteered information about existing infrastructure and fishing activity through an online survey.
- C. *Fishing community surveys*: Commercial fishermen volunteered information on commercial infrastructure and access through an online survey.



A. Commercial Fishing Landings and Permit Data

DMF fisheries statistics and data were used to generate descriptive information and characterize commercial fishing activity and landings at state and municipal levels.

DMF issues commercial fishing and seafood dealer permits, as well as permits to the for-hire charter and head boat industry and all recreational fishermen. Additionally, DMF requires commercial harvesters (including aquaculturists) and seafood dealers to report catch, effort, and value for all commercial trips in Massachusetts. These data streams create a two-ticket system that identifies key elements of a trip, starting with departure time to activity at sea to sale of fish, shellfish, or invertebrates brought to shore (“landed”) and provides the ability to cross-check reports. This reporting system has been in place since 2010, with older iterations dating back many years.

For this exercise, dealer-reported data were used because dealer reporting is used to determine “ex-vessel” value (the price paid to the harvester at the first point of sale, often thought of as harvest “exiting the vessel”). Specific reported elements used were date of purchase, port landed, species, quantity, and price paid per unit.

When a price was not supplied by a dealer, intentionally or by mistake, an average annual price paid per unit was applied to the record.

Specific caveats to the data are:

1. “Port landed” as reported by dealers was assumed to be accurate, though there are uncertainties with that element. Specifically, for shellfish species, the data were reviewed more stringently and likely show a marked improvement in accuracy in later years of the time series.
2. Anomalies in price, species, and unit were reviewed for accuracy before summaries were produced, but errors may remain.

3. Prices are not adjusted for inflation within the 5-year timeline.

The data were analyzed at state and municipal levels for the years 2014-2018 and are presented in Appendix A with a focus on top species or species groups, defined either as landed amount (live lbs.) or value (USD).

In some cases, data cannot be displayed due to issues of confidentiality. DMF is governed by state law (M.G.L. C. 130 Sec. 21) that does not allow public sharing of data, for example annual compilations of landings for municipalities, which represent fewer than three harvesters, vessels, or dealers.

B. Harbormaster Survey

The project team developed a 25-question online survey for harbormasters, delivered through SurveyMonkey. Questions addressed included:

1. the current type(s) of commercial fishing activity;
2. growth or decline in commercial fishing activity over time;
3. infrastructure available to the commercial fishing industry;
4. infrastructure needs of the commercial fishing industry, including upgrades or repairs.

All survey questions can be found in Appendix C.

In early 2019, UHI distributed the survey to all 73 coastal harbormasters. These harbormasters manage activities in 164 harbors⁸. Of the 73 harbormasters surveyed, 55 responded (75%). Additional outreach to harbormasters occurred following the development and review of the port profile pages.

C. Fishermen Survey

The project team also developed a 21-question online survey for commercial fishermen, delivered through SurveyMonkey. Similar to the harbormaster survey, questions included:

1. current commercial fishing activities;
2. growth or decline in commercial fishing activity;
3. infrastructure available to commercial fishermen;
4. infrastructure needed by commercial fishermen, including upgrades or repairs.

The survey also asked questions such as the primary type of fish harvested and details about fishing operations.

In March of 2019, DMF distributed the survey to an email list of approximately 2,800 fishermen who hold Massachusetts commercial or for-hire fishing permits. A reminder email was sent in early April of 2019. Three hundred and forty-nine commercial fishermen with Massachusetts homeports responded. Demographic details on survey respondents are available in Appendix D.

⁸ Urban Harbors Institute. 2015. 2015 State of Our Harbors: An Examination of Massachusetts Coastal Harbor Conditions and Related Economic Parameters



III. RESULTS

A. Changes in Commercial Fishing Activity in Massachusetts (2009-2018)

The seafood industry remains an important piece of the Massachusetts economy. In 2017, NOAA Fisheries reported that Massachusetts had a total of approximately 128,000 commercial seafood industry-related jobs.⁹ Adjusted for inflation, the ex-vessel value of seafood landed in Massachusetts rose nearly 38 percent between 2009 and 2018.¹⁰ Analysis of the Massachusetts commercial landings data also shows fluctuations in landings and value by species, reflecting factors such as changes in species abundance, changes in regulations, environmental conditions, and market demand.

In 2018, total landings (in whole pounds) amounted to 734 million pounds, valued at \$647 million (ex-vessel). The five most valuable species were sea scallops, lobster, oyster, surf clam, and Jonah crab, totaling \$520 million in ex-vessel value. Sea scallops account for more than half of the total ex-vessel value of seafood landed in Massachusetts, harvested mainly in federal waters (more than three miles offshore), as are surf clams and Jonah crab. Lobster and oyster are the two most valuable species harvested mainly in state waters.

The top five ports in Massachusetts in terms of ex-vessel value in 2018 were New Bedford, Gloucester, Chatham, Barnstable and Boston. The high value of sea scallop landings consistently makes New Bedford the top-ranked port in the United States in terms of ex-vessel value of seafood landed.¹¹ Gloucester and New Bedford are the top-ranked lobster landing ports in the state and Gloucester also continues to be one of the top groundfish¹² ports in the state. Barnstable's landings are driven by shellfish, primarily oyster, while Boston's landings are driven by groundfish. Chatham's landings are a mixture of groundfish, shellfish, lobster, and other finfish.

⁹ NOAA. 2017. Fisheries Economics of the United States. <https://www.fisheries.noaa.gov/national/sustainable-fisheries/fisheries-economics-united-states>

¹⁰ NOAA. 2017. Fisheries Economics of the United States. <https://www.fisheries.noaa.gov/national/sustainable-fisheries/fisheries-economics-united-states>

¹¹ NOAA. 2017. Fisheries Economics of the United States. <https://www.fisheries.noaa.gov/national/sustainable-fisheries/fisheries-economics-united-states>

¹² Defined in 322 CMR 6.03(1) as American plaice, cod, haddock, halibut, monkfish, ocean pout, pollock, redfish, windowpane flounder, winter flounder, witch flounder, wolfish and yellowtail flounder.

Table 1: The top 20 species harvested in Massachusetts in 2018 by ex-vessel value

SPECIES	2018 EX-VESSEL VALUE
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AMERICAN LOBSTER	\$88,799,297
EASTERN OYSTER	\$28,388,055
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POLLOCK	\$4,055,134
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SOURCE: ACCSP Data Warehouse, 2020 ED

* Confidential

Smaller ports up and down the coast play integral roles and make major contributions to the local and regional economy, providing job opportunities and harvests. All of these ports are highlighted in the individual port profiles found in Appendix A.

Massachusetts' unique geographic location with warmer waters south of Cape Cod, cooler waters north of Cape Cod in the Gulf of Maine, and access to productive fishing grounds such as Stellwagen Bank, Jeffreys Ledge, and Georges Bank, creates varying landings in different ports and regions. For example, lobster makes up a much larger portion of the landings on the North Shore compared to the South Coast and Cape Cod. Soft shell clam landings also are more prevalent on the North Shore though there is a pocket harvested in Chatham. Most oyster landings occur on the South Shore and Cape Cod. Southern finfish species, such as black sea bass, tautog, and fluke are primarily landed in ports with access to waters south of Cape Cod. The diversity of landings is evident when reviewing individual port profiles in Appendix A.

Table 2: Top ports in 2018, by ex-vessel value

PORT	2018 EX-VESSEL VALUE
NEW BEDFORD	\$431,038,042
GLOUCESTER	\$53,210,608
CHATHAM	\$18,967,799
BARNSTABLE	\$16,982,115
BOSTON ¹	\$16,416,184
FAIRHAVEN	\$8,413,362
WELLFLEET	\$7,728,102
PROVINCETOWN	\$7,721,452
DUXBURY ¹	\$6,789,874
SANDWICH	\$6,769,995

SOURCE: SAFIS Dealer Database & ACCSP Data Warehouse, 2020 TH

¹ Exact total value cannot be displayed due to data limitations; see individual port profile in Appendix A for more information. The displayed value is greater than 80% of the total value for the port.

Commercial fishing and seafood dealer permit counts have remained relatively stable over the past 10 years. Many commercial fisheries are limited entry, meaning new permits are not available and those seeking to enter a fishery must obtain an existing permit from someone seeking to leave the fishery. The general trend in limited entry fisheries is a steady decline in the number of permits and a slowly rising median age of permit holders. However, there are new permits being issued for open entry fisheries that result in a stable number of permits being issued overall.

The largest limited entry fishery in state waters is the coastal lobster fishery. In 2018, there were 1,082 Coastal Lobster permits issued and the median age of the permit holders was 58. This compares to 1,314 Coastal Lobster permits issued in 2009 with a median permit holder age of 53.

An aging demographic is important to note when considering future infrastructure needs. For example, as older permit holders retire and transfer their commercial permits to younger fishermen, new entrants will need access to infrastructure like moorings and dockage.

Several shifts in commercial fishing activity and landings in Massachusetts have occurred in the last ten years. These changes are reflected in the individual port profiles.

One notable increase is landings of Eastern oysters, which nearly quadrupled from 2009 to 2018. Ex-vessel value of oysters rose from \$6.4 million to \$28.3 million over the time period. This increase can be attributed to the proliferation of aquaculture operations primarily on Cape Cod, and rising consumer demand.

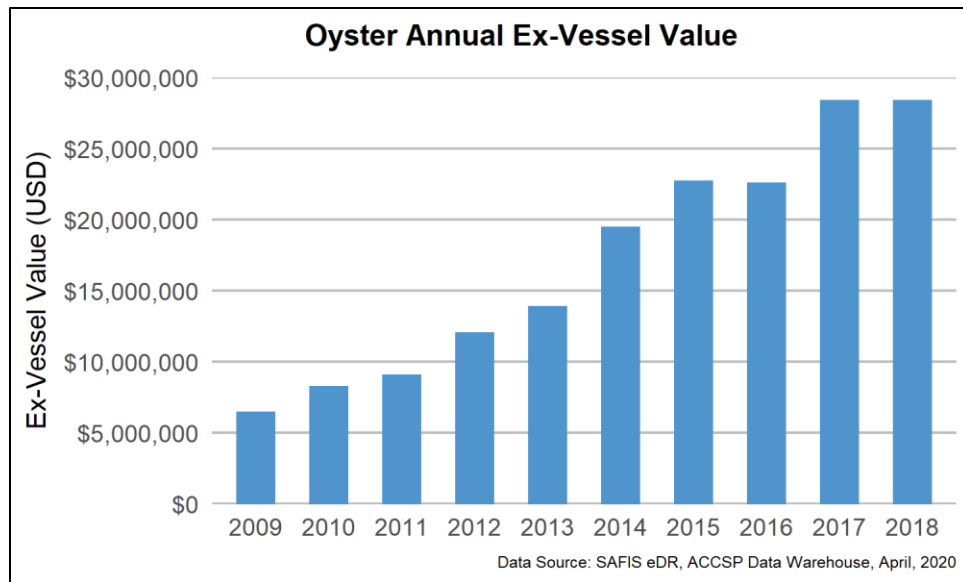


Figure 1: 2009-2018 Annual Eastern oyster ex-vessel value by year

Lobsters landings from the Gulf of Maine have also increased significantly over the past ten years, from 8.4 million pounds in 2009 to 13.1 million pounds in 2018. Gulf of Maine lobster stock has seen optimal environmental conditions, and this is reflected in landings for ports primarily north of Cape Cod. In 2018, the top five lobster ports in the state were Gloucester, New Bedford, Rockport, Sandwich, and Plymouth. While lobster landings in Gulf of Maine ports are at all-time highs, lobster landings south of Cape Cod have remained low, peaking more than 20 years ago. Ocean warming is negatively impacting lobster abundance off Southern New England.¹³

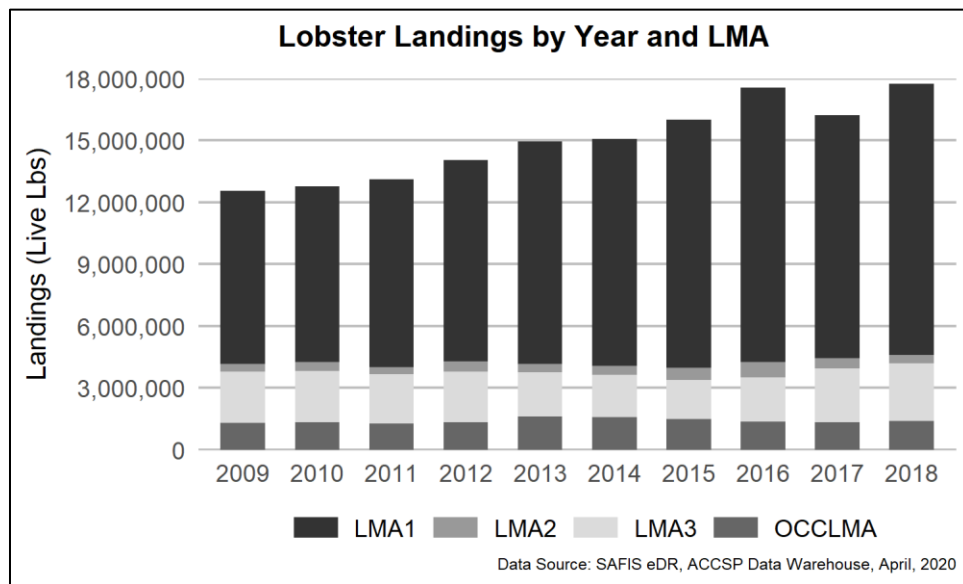


Figure 2: Lobster Landings by Year and Lobster Management Area

¹³ Atlantic States Marine Fisheries Commission. 2021. American Lobster Management. <http://www.asmfmc.org/species/american-lobster>

Landings of groundfish species, including cod, haddock, redfish, pollock and flounders, declined by approximately 20 percent from 2009 to 2018. Within this overall decline, there have been more pronounced fluctuations in landings of certain species. Landings of haddock have shown a slight increase over the period, and redfish landings are up 300 percent. Landings of cod, however, are down nearly 90 percent. New groundfish regulations and species availability have contributed to these fluctuations. Haddock abundance has reached a near all-time high, while cod abundance has been at or near an all-time low. The fishing industry has had to adjust accordingly. The largest groundfish ports in the state, in terms of landings, are Gloucester, Boston, and New Bedford.

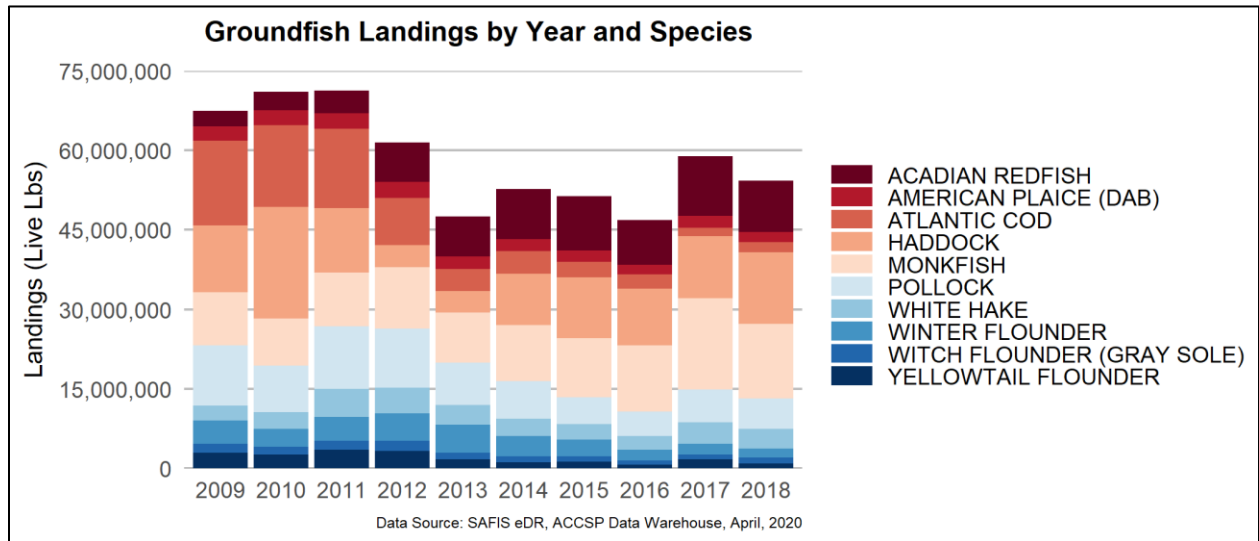


Figure 3: Groundfish value by year and species (2009-2018)

There are times when it appears harbormaster observations and DMF statistical data are conflicting; harbormasters report a decrease in certain fishing activity, while DMF data show steady or increasing landings in the same fishery. Both data points are correct. For example, there are some ports north of Cape Cod that have a slight decline in the number of active lobster harvesters, but the landings remain steady or increase because the remaining harvesters are catching more lobsters than in the past.



B. Commercial Fishing Infrastructure and Services

Harbormasters identified a range of infrastructure and services present in coastal harbors. Parking, launch ramp(s), fueling stations, and trash disposal were the most commonly identified types of infrastructure and services, while ice, gear storage, and bait storage were the least present (Table 3). Note: the presence of infrastructure and services does not necessarily equate with adequacy.

Table 3: Infrastructure and services available to support commercial fishing, identified through harbormaster surveys

Infrastructure	Harbormaster % (n = 73 harbors)
Parking for fishermen	73%
Launch ramp	72%
Fueling stations	60%
Commercial offloading	55%
Trash disposal	49%
Dock space	48%
Mooring space	45%
Vessel repair	40%
Hoist	37%
Parking for dealers	36%
Ice	33%
Bait storage	15%
Gear storage	15%

Fishermen reported infrastructure repairs or upgrades in homeports that have benefitted their operations in the last 10 years, primarily:

- New docks/repairs
- New ramps/repairs
- Dredging
- Floats
- Parking



C. Commercial Fishing Infrastructure and Access Challenges

Data presented in part B, above, focused on infrastructure and services, not on their *adequacy*. Statewide, harbormaster and fishing industry survey results showed that the largest infrastructure challenges facing the Massachusetts commercial fishing community include:

- 1) shallow water/the need for dredging
- 2) lack of dockage
- 3) lack of parking (Table 4).

The data also point to limited availability of infrastructure dedicated specifically for the commercial fishing industry, a concern that varied by harbor. Harbormaster survey results indicated that 18 of 57 municipalities (35 percent) had moorings dedicated for commercial fishing, while 11 of 57 (39 percent) had slips dedicated for commercial fishing.

Given these challenges, most fishermen (64 percent, 301n respondents) reported that their fishing operations could benefit from infrastructure improvements to their homeports.

Table 4: Most common access and infrastructure challenges identified by harbormasters¹⁴ (Note: Harbormasters selected from a pre-identified list that may not have included all harbor challenges.)

Challenges	Harbormaster % (n = 73 harbors)
Shallow water/need for dredging	62%
Lack of dock space	51%
Lack of parking	48%
Permitting process for infrastructure	34%
Conflicts with other users	33%
Lack of moorings	18%
Lack of transient port accommodations	N/A

Below is an overview of commercial fishing infrastructure challenges and potential improvements noted by survey respondents. Details on specific harbors can be found in Appendix A, Port Profiles.

Shallow water/need for dredging: Sixty-two percent of harbormasters noted that their harbors are in need of dredging. One response from the commercial fishing community noted that “dredging is the biggest obstacle” to commercial fishing. Dredging needs were not limited to channels; they included areas near launch ramps, moorings, docks, floating docks, and marinas.

Respondents identified challenges related to dredging harbors including funding, permitting, impacts to productive shellfishing grounds, and reoccurring sedimentation/shoaling (*e.g.*, some harbors need to be dredged every few years, or after major storms). Permitting for dredging activities restricts the activity during late winter and early spring months to protect certain species during spawning times (winter flounder, smelt, and river herring). One respondent noted that, “[the cost of] dredging and permitting [is] outpacing funding.”

To address dredging needs, respondents recommended dedicating additional funding to dredging, and streamlining the permitting process.

Docks and moorings: Fifty-one percent of harbormasters reported a significant demand for additional dockage and moorings for commercial vessels.

Specific issues noted by harbormasters and members of the fishing industry include:

- Lack of on-water vessel storage, resulting in long waitlists for docks and moorings, some decades-long
- Lack of temporary dock space and poor conditions for activities such as loading and unloading catches, storing supplies, fueling, dinghy storage, and meeting customers
- Lack of docks and moorings designated for commercial fishing vessels
- High dockage fees

¹⁴ Survey respondents could select from these issues in a drop-down list in the survey, and add any additional issues through an “other” line. Certain issues (*e.g.*, lack of launch ramps) were not provided as an option for this question, and may explain why other issues are not included in this list.

In some harbors, fishermen reported that the space available for docks and moorings is impacted by the depth of the harbor. One fisherman noted that his/her harbor “only has two small docks, and the entrance to the docks has shoaled up over the years and needs to be dredged.”

Some fishermen reported that they trailer their vessels due to a lack of affordable dockage and/or space for dinghy storage at landings, a hardship for many.

Some respondents also stated that their harbors’ docks lack conditions necessary for efficient offloading (for example narrow, small, docks unable to support significant weight), which means only small trucks can be accommodated. In some cases, “loading and unloading is often handled twice, as trucks have to park in the road, unload off the boat to a small truck, [and] drive ... to the street to load into larger trucks.”

Parking:

Forty-eight percent of harbormaster survey responses identified parking as a challenge for the commercial fishing industry. Parking was the primary challenge identified by members of the commercial fishing industry responding to the survey.

Parking requirements include fishermen’s vehicles, boat trailers, dealer trucks, and customer access (some charter boat operators shuttle customers to and from launch sites due to a lack of parking). Parking can impact a fisherman’s ability to get his/her catch on ice in a timely manner and creates logistical challenges for loading and offloading gear and catches. Specific issues noted include:

- High parking fees
- Competition for spaces, especially during summer months and where there is a commuter ferry
- Restrictions on overnight parking, especially at state-owned ramps
- Narrow streets unable to accommodate parking and/or trucks and trailers

Launch Ramps:

Commercial fishermen identified ramp-related challenges in more than 20 harbors. These include:

- Crowded ramps (especially May through September), resulting in long wait times and unsafe conditions
- Poor structural condition
- Ramps inaccessible/unusable at low tide
- The lack of available ramps
- Restricted access based on factors such as type of fishery and residency

Conflicts with other users:

Thirty-three percent of harbormasters¹⁵ noted that commercial fishermen experience conflicts with other harbor uses. These conflicts stem from seasonal tourism, municipal policies and priorities, and the high cost of limited waterfront property. Specific issues noted include:

- A lack of gear and bait storage

¹⁵ This question was not asked of the commercial fishing industry, however user conflict was raised in commercial fishing industry responses in 18 different harbors.

- Congested waterways, especially during summer months
- Congested roadways which can impact the transport of live bait and other commercial fishing operations
- Public objections to smells produced by commercial work

Other infrastructure challenges:

Harbormasters and fishermen identified several additional challenges related to access and infrastructure. Some apply to specific harbors (see port profiles in Appendix A), while others are more general challenges:

- Lack of port accommodations for transient vessels seeking to participate in seasonal or migratory fisheries, including dock space, parking, ice, and electricity
- Lengthy and complex permitting processes for constructing infrastructure
- Lack of security surveillance cameras at docks, which can result in the theft of dinghies, fishing gear, and other items
- Lack of ice available
- Lack of cranes and/or hoists to unload catches, and need for repairs of existing cranes and hoists
- Limited space for gear and bait storage
- Need for electricity, fresh water, and onsite trash disposal for the fishing fleet

Recommendations to improve these infrastructure challenges include providing the following services and/or infrastructure at select harbors:

- Hoists/cranes (build or repair)
- Gear and bait storage areas
- Fresh water rinse area
- Fish cleaning station (for the for-hire fleet)
- Surveillance cameras on boats, piers, and shellfish beds
- Year-round transient space
- Additional lighting
- Public bathrooms
- Used oil disposal



IV. DISCUSSION AND RECOMMENDATIONS

Drawing from these findings, this section describes strategies to support and enhance the commercial fishing industry in Massachusetts. Topics include dredging, berthing, loading and offloading vessels, parking, ramps, funding, and other infrastructure needs.

A. Dredging

Difficulty navigating safely from harbors to open water is the primary infrastructure concern identified in Massachusetts. These findings are consistent with anecdotal reports as well as the 2015 State of Our Harbor Report, which focused solely on public dredging projects, identifying at least 115 channels and 32 mooring areas in need of dredging along the Massachusetts coast.¹⁶

Channels to and from ports are in essence small highways, and like terrestrial roads require maintenance, repair, and periodic widening at points of congestion. Lack of dredging availability, especially because annual windows to accomplish dredging are restricted to a few months, is a serious issue that can be resolved by strategic public investment. Strategies outlined below may be useful to help keep waterways open and confront new challenges associated with climate change.

Recommendation 1. Secure funding for dredging from existing sources

As noted in the 2015 State of Our Harbors study, securing adequate funding is the largest impediment to completing dredging projects in Massachusetts¹⁷. However, given major economic benefits created by

¹⁶ Urban Harbors Institute & Apex Companies, LLC. 2016. 2015 State of Our Harbors: An examination of Massachusetts Coastal Harbor Conditions and Related Economic Parameters.

¹⁷ *Ibid.*

safe navigable waterways, dredging is an obvious investment deserving of public support as much as any paving or bridge project.

As communities look to secure funding for dredging activities, they should consider quantifying the economic values of their harbors. This report helps in that respect by providing ex-vessel values of landed catches for each community. In addition, the National Oceanic and Atmospheric Administration (NOAA) can provide economic data and technical assistance for communities looking to demonstrate the economic value of their harbor(s). More information about NOAA's tools and resources is available at: <https://coast.noaa.gov/digitalcoast/data/enow.html>.

The Cape Cod Commission has also done work to quantify the economic value of a sample of Cape Cod harbors. That report is available on the Cape Cod Commission's website and includes a methodology suitable for other communities.¹⁸

Federal, state, and municipal governments provide most funding for dredging activities¹⁹, yet funding is limited, and given high rates of sedimentation, competition for funds is strong.²⁰ Climate change is likely to compound dredging needs. For projects where beneficial re-use of dredged sediment is possible, additional funding opportunities may be available. Municipalities can also establish a waterways improvement fund, as described in recommendation two, below.

Existing funding sources include:

Federal

- United States Army Corps of Engineers (USACE): This is the lead agency in most federal projects involving dredging. The Corps has completed approximately 50 navigation projects in Massachusetts to dredge rivers, bays, coves, and harbors. A list of the Corps' navigation projects in Massachusetts can be found here: <https://www.nae.usace.army.mil/Missions/Navigation/Massachusetts-Projects/>. USACE maintains authorized navigation projects using funds from the Harbor Maintenance Trust. These funds are only available to harbors that support large volumes of waterborne cargo. In addition, USACE also funds dredging to reduce risks from floods and storm damage (including beneficial re-use of sediment), as well as ecosystem restoration and recreation. Federal funds are appropriated, and a non-federal match is required.
- United States Environmental Protection Agency (USEPA): USEPA works closely with USACE to manage and regulate the disposal of dredged sediment. USEPA also initiates projects and contributes funding for dredge projects that improve water quality and environmental conditions (for example, projects that remove contaminated sediments).

¹⁸ Cape Cod Commission. 2020. Economic Impact of Cape Cod Harbors. Online at: <https://capecodcommission.org/our-work/harbor-study/>

¹⁹ Urban Harbors Institute & Apex Companies, LLC. 2016. 2015 State of Our Harbors: An examination of Massachusetts Coastal Harbor Conditions and Related Economic Parameters.

²⁰ *Ibid.*

State

- Executive Office of Energy and Environmental Affairs (EEA): EEA oversees the Massachusetts Dredging Program, offering competitive grants for construction-phase funding for marine dredging. This program typically funds projects that contribute to the economy, improve public safety, add recreational value, and/or promote coastal resiliency. Communities cannot request more than \$2.5 million, and the program requires a non-state match equal to at least 50 percent of the project cost.
- Seaport Economic Council (SEC): SEC grants help coastal communities grow the economy and create jobs. The Council provides funding to construct piers, wharfs, walkways, and other structures, and dredging may be a part of a larger project.
- Massachusetts Clean Energy Center (MassCEC): MassCEC provides grants to promote clean energy, which may require dredging.
- The Massachusetts Office of Coastal Zone Management (CZM): CZM administers the Coastal Resilience Grant Program, which provides financial and technical support to enhance coastal resilience. Municipalities can apply to conduct planning projects, public outreach, and analyze shoreline vulnerability. Municipalities should consider shoreline management, sediment accumulation, and dredging.

Recommendation 2. Develop new sources of funding for dredging

Given strong competition for dredge funds, there is a need to provide new opportunities to reduce the cost of dredging and/or to provide new funding sources. This could be accomplished through new fees, a public dredging program (see recommendation number 4), and bond bills.

The Commonwealth could increase boating-related fees (for vessel registration and titling) to provide additional funding for dredging. Consideration should be given to ensure that fees do not negatively impact waterways users. Several states have such funds, for example North Carolina's Shallow Draft Navigation Channel Dredging and Aquatic Weed Fund²¹, which obtains funds from a gas tax and boater registration fees. Additional funds could be raised or secured through the following means:

- Waterways Improvement Fund: Massachusetts General Laws, Chapter 40, section 5G allows municipalities to establish waterways improvement and maintenance funds. These can be used for maintenance dredging and other harbor and waterways-related activities. These funds are generated through harbor-related fees such as mooring fees and boat excise tax.
- District Improvement Financing: Massachusetts General Laws, Chapter 40Q, and 402 CMR 3.00 et. Seq. authorize and provide implementing regulations for District Improvement Financing. A town can establish a development district and development program that is certified by the State Economic Assistance Coordinating Council. Within a development district, tax revenue generated by the increased assessed value of new private development could be used to finance municipal infrastructure improvements, e.g., dredging, that support this new private investment.

²¹ Water Resources Development Grant Program (WRDGP) Shallow Draft Navigation Channel Dredging and Aquatic Weed Fund Guidelines FY 2019-2020. Online at: <https://files.nc.gov/ncdeq/Water%20Resources/files/grants/2019-2020-Guidelines-Shallow-Draft-Navigation-Channel-Dredging-Final.pdf>.

- Community Benefits Agreements (CBAs): CBAs are contracts negotiated between developers and communities. CBAs specify benefits provided to the community in return for development rights. Benefits are wide ranging (job creation, funding for non-profits, infrastructure upgrades). For some projects, it might be appropriate to secure dredging funds as part of a CBA.
- A non-profit organization could be established to raise funds for dredging through activities such as donations, gifts, and fundraisers.
- Bond Bills: Interested parties should work together to secure a state bond bill for waterways access and dredging, much like transportation, environmental, housing, and other bond bills advanced on a regular schedule. Cities and towns would submit proposals via their legislators to be included in legislation that would be sent to the administration for prioritized funding. This bond bill could be linked to other state initiatives such as growing the blue economy or mitigating impacts of climate change.

Recommendation 3. Develop dredge management plans

Municipalities should consider developing a dredge management plan. Such a plan should include areas in need of dredging (prioritized), timeline and frequency for needed dredging, potential disposal sites including beneficial re-use, funding options, permits required, monitoring needed, and stakeholder impacts. The plan could consider public and private dredging projects, developed by a municipality or multiple municipalities.

Recommendation 4. Develop a public dredging program

The Commonwealth should investigate the feasibility of investing in public dredges or an expanded public program that hires private dredges. This investment would enhance the Massachusetts Dredging Program already in existence. Purchasing shared dredging equipment or entering into inter-municipal contracts for regional dredging might reduce costs as well as the time needed to complete dredging projects.

As an example of one regional collaboration, in 1994 Barnstable County purchased a shared dredge that provides services to municipalities on Cape Cod (15 towns) at up to 70 percent below market rate (the shared dredge cost is between \$3 and \$13 per cubic yard, with average market rate more than \$18 per cubic yard)²². The county has dredged 1,856,254 cubic yards of material from waterways in the last 20 years.²³ In 2017, the County purchased an additional dredge to try to keep up with demand.

The Woods Hole Group recently conducted a dredge purchase feasibility study for communities on the upper north shore of Massachusetts.²⁴ This 2019 study presented pros and cons of purchasing and operating different types of dredging equipment as well as developing an inter-municipal agreement to retain a private dredge contractor for multiple dredging projects (a minimum of five projects a year for three years).²⁵ The paper concluded that an inter-municipal agreement to retain a private contractor

²² Woods Hole Group. 2019. Upper North Shore Dredge Purchase Feasibility Study: Evaluating alternatives to support the need for dredging services on the upper North Shore of Massachusetts.

²³ Ibid.

²⁴ Ibid.

²⁵ Ibid.

would be more cost effective than purchasing and operating shared equipment. The report outlines additional steps communities can take to evaluate options.

The federal government is exploring a regional approach to dredging “to respond more effectively to critical national dredging requirements resulting from significant recurring storm events, in combination with routine annual dredging demands²⁶.” The federal regional dredging program, included in 2020 federal appropriations, will be piloted in the central Gulf Coast region and will explore strategies to improve efficiencies and cost savings. Communities should monitor the progress of this pilot and consider other examples of regional collaboration to identify best practices.

Recommendation 5. Maximize the time of year available to conduct dredging

Dredging is known to have adverse impacts to marine life, including direct mortality, burial of eggs, release of pollutants in sediment, and changes in bathymetry/water flow. One way dredging impacts are minimized is through the use of Time of Year (TOY) restrictions, when dredging is not allowed to protect certain vulnerable animals. Some TOY restrictions encompass several months, since there has been limited recent research into the spatial and temporal distribution of vulnerable marine life. Therefore, some TOY restrictions have been an impediment to the efficiency of dredge projects that might not be specific or even necessary. We recommend conducting research to update our understanding of where and when vulnerable or spawning marine life may be present. This could reduce the need for broad TOY restrictions.



B. Berthing

As reported by survey respondents, many harbors lack sufficient vessel berthing to meet the needs of the commercial fishing industry. Berthing includes long-term dock or mooring space, short-term space for vessels home-ported elsewhere, and space for temporary berthing to load and offload people, gear, and catches. The shortage of berthing relates to a complex suite of factors including physical limitations, competing needs, and the range of costs for dock and mooring space.

Strategies to address berthing needs are identified below.

²⁶ Energy and Water Development and Related Agencies Appropriations Act, 2020: Joint Explanatory Statement.

Recommendation 1. Determine supply and demand in each harbor

Municipalities should identify the supply of docks and moorings for commercial fishing vessels, and the demand for additional options. Determining supply and demand can be difficult due to annual and seasonal fluctuations in fishing effort and fleet size and structure, lack of clear guidance on spaces reserved for commercial users, and other factors.²⁷ Nevertheless, municipalities, working independently or pooling resources, should:

- Conduct inventories of berthing options, including vessel sizes accommodated, services, rates, and periods of availability²⁸
- Develop and implement a method to monitor the use of berths and identify where supply and demand are not balanced²⁹
- Consider ways to better match supply to demand

Recommendation 2. Dedicate berthing for commercial fishermen where needed

Some municipalities including Marblehead, Wareham, Chatham, Manchester, Harwich, Cohasset, Scituate, Nantucket, Chilmark, and Sandwich, dedicate berthing space and other facilities to the commercial fishing industry. Strategies for doing so include providing preference when assigning berthing, providing designated berthing areas, and/or developing a separate waiting list or selection process for commercial fishermen.

Other facilities that may be dedicated to the commercial fishing industry include commercial fish piers, marinas, floating docks, and cranes or hoists. One example is Provincetown Harbor, where the town's 2016 Municipal Harbor Regulations dedicated floating docks on the eastern side of MacMillan Pier for small boat commercial fishing vessels and referenced special use rates for commercial fishing vessels. More examples of dedicated commercial fishing berthing space and facilities can be found in Appendix G.

Towns without designated space should consider allocating areas to the commercial fishing industry, including aquaculture grant holders. Dedicated space might be seasonal or annual. Designations could be made informally (by a harbormaster or an owner of a private facility) or formally (through a memorandum of understanding, in municipal regulations, in a municipal harbor plan, or in the conditions of a Chapter 91 license). Berthing locations could be used to attract visitors to watch vessels load and unload (presently the case in Plymouth and Chatham, for example).

Municipalities also should develop appropriate standards to identify commercial fishing operations. DMF's permitting and reporting programs can provide verification of fishing performance to ensure berths are reserved for vessels that meet established standards.

Recommendation 3. Provide new berthing options

The demand for berthing—recreational and commercial—outpaces supply in most Massachusetts municipalities. In some harbors, it may be possible to increase the overall supply through steps such as:

²⁷ Gloucester Harbor Economic Development Plan. 2010. Online at: <https://gloucester-ma.gov/DocumentCenter/Home/View/481>

²⁸ Ibid.

²⁹ Ibid.

- Installing new municipal docks and moorings, which may include re-gridding existing mooring fields to maximize capacity while considering shellfish growing areas and other environmental concerns. Communities might consider using conservation moorings that require less space between vessels. If communities explore revisions to mooring field densities, they should also consider cumulative impacts to the natural resources (water quality associated with a larger number of vessels, increased shading of benthic habitats); impacts to other harbor uses (encroachment on shellfishing grounds); modifications needed to address climate change impacts.
- Developing new recreational, transient dockage may also help reduce berthing pressure for the commercial fleet. The Boating Infrastructure Grant (BIG) program, offered by the US Fish and Wildlife Service and administered in Massachusetts by MA DMF, is a funding source that could be used. BIG-funded projects are required to be for construction or renovation of boating facilities for transient recreational boaters in vessels 26 feet or more in length. In addition to its potential to free up existing dock space for commercial use, BIG funding could be used to supplement funding as part of a larger project with both commercial and recreational components. Interested applicants must apply to MA DMF in advance of the annual USFWS BIG application deadline. Successful projects are then included in an annual MA DMF application to the USFWS for funding. More details can be found here: <https://www.mass.gov/service-details/boating-infrastructure-grant-funding-opportunities> <https://wsfrprograms.fws.gov/Subpages/GrantPrograms/BIG/BIG.htm>
- Installing new public berthing options as part of private waterfront development projects. Municipalities should work with private developers and the Commonwealth to maximize berthing options. Public berthing may be secured through mechanisms such as Chapter 91 license conditions.

Recommendation 4. Improve existing berthing

In some harbors, it may be feasible to increase berthing capacity by making repairs to existing infrastructure such as reinforcing wharves, reorganizing dinghy storage, or repairing broken docks. Municipalities could apply to the Seaport Economic Council for funding. In addition to infrastructure repairs, dredging may also make moorings and docks more accessible. Any berthing improvements should take into consideration impacts of climate change.

Recommendation 5. Promote efficient use of existing dock and mooring space

Dock managers can use online reservation systems (such as Dockwa) to identify empty berths suitable for transient use by the commercial fishing industry.

Recommendation 6. Reduce fees for commercial fishermen

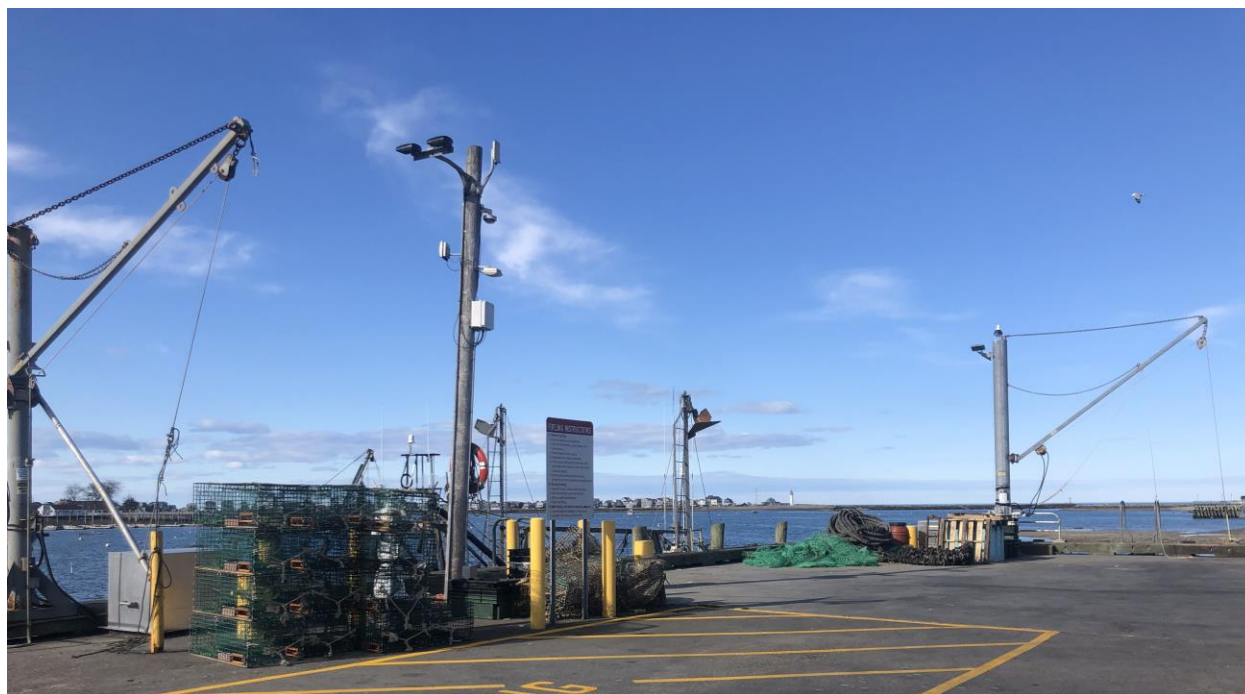
Municipalities should consider offering commercial fishermen less expensive berthing, waterways, ramp, and vessel storage fees. Some municipalities already offer reduced fees to commercial fishermen, including but not limited to Harwich, Provincetown, Marblehead, Chatham, Orleans, Eastham, Manchester, and Nantucket.

For example, in Nantucket 2018 mooring fees for commercial fishing vessels were \$80, which is the same rate as moorings for recreational vessels up to 16 feet. By comparison, the mooring fee in Nantucket for a 24-32-foot recreational vessel was \$200.³⁰ Provincetown offers recreational boaters a fee of \$160.78 per foot for a slip, while commercial fishermen can acquire an annual commercial fisher dockage permit for \$61.73 per foot. Eastham provides vessel storage for commercial shellfishermen at no cost. Additional examples of Massachusetts municipalities with reduced fees for commercial fishermen can be found in Appendix F.

If commercial fishermen are offered reduced berthing fees, municipalities need to assess how reduced fees will shift financial burdens.

Recommendation 6. Secure historic rights of access for commercial fishing

Working with the Division of Marine Fisheries, and cognizant of all applicable regulations contained in Chapter 91 and elsewhere, harbormasters should work with town officials to ensure that historic rights of access for commercial fishing are guaranteed. This includes physical access to slips, moorings and parking areas, and infrastructure to assure offloading and other necessary activity.



C. Loading and Offloading

Many commercial fishermen identified issues with loading gear and customers, and offloading products and catch. This section will focus on the need for hoists and cranes, as well as additional ways to increase space and efficiency.

Recommendation 1. Install and/or repair hoists and cranes

³⁰ Town & County of Nantucket, MA. Mooring Renewal Fees. Online at: <https://www.nantucket-ma.gov/143/Fee-Schedule>

Municipalities should consider repairing or installing hoists and cranes. Hoists and cranes could be installed at current fish offloading sites, or in a separate area created for commercial offloading.

As an example, the town of Orleans, with funding from the Seaport Economic Council, is currently planning improvements to Rock Harbor including installation of a high-capacity electrical hoist system for offloading.

Recommendation 2. Consider reconfiguring dock or shoreside space, building additional space, and/or repairing areas to increase commercial opportunities

Municipalities should consider ways to increase space for loading and offloading, and space for trucks to access loading and offloading sites. This might include re-positioning equipment and hoists, designating areas for loading and offloading, considering restrictions on public parking during loading and offloading, building additional dock space, and/or repairing existing docks.

Recommendation 3. Provide staff to facilitate loading, offloading and movement

Loading and offloading challenges may be alleviated by hiring a dock manager or wharfinger. This person may be responsible for taking reservations for the use of space, collecting user fees, and enforcing rules such as time limits and appropriate use of space.



D. Parking

Parking includes space for boat trailers, dealer trucks, fishermen's vehicles, and clients of party and charter boats. More than half of survey respondents noted that parking is a challenge. Below are recommendations on how to improve parking for the commercial fishing industry.

Recommendation 1. Determine supply and demand

Each municipality should consider conducting a parking survey to determine how much parking (for vehicles as well as trailers) is available during different times of day and year, how parking is being used

and by whom (commercial fishermen, recreational users, tourists), and if demand exceeds capacity.³¹ The Metropolitan Area Planning Council provides details on how to conduct a parking study on its website (<https://www.mapc.org/resource-library/how-to-do-a-parking-study/>).

Recommendation 2. Create additional parking

Municipalities could explore opportunities to increase parking spaces for vehicles and/or trailers. This parking may be near sites for berthing, loading, and offloading, or in other strategic locations to alleviate competition for sites closer to the waterfront. Municipalities should consider space availability, cost, demand, funds, environmental impacts, and other factors.

Recommendation 3. Dedicate parking for the commercial fishing industry

Landowners could reallocate existing parking and/or construct additional parking spaces for commercial fishing vehicles as well as trailers. These spaces could be restricted by user type (commercial fishermen, charter boat customers), season, activity (loading and unloading), length of time (two-hour parking), and other factors. Parking areas could be reserved for the fishing industry, or spaces could be assigned to specific users (a commercial dockage user might receive a dedicated parking space along with his/her permit for the berth). One example of dedicated parking is in Provincetown, which provides a MacMillan Pier Permit Parking Area. This parking areas contains spaces for owners and captains of the commercial fishing fleet.

Dedicated parking for commercial fishing uses could be secured in Chapter 91 license conditions or Community Benefit Agreements.

Municipalities should consider other user groups that may be impacted by dedicated commercial fishing parking, and whether the tradeoff is appropriate.

Recommendation 4: Change or create parking fees

Municipalities could assess current parking fee structures and determine whether changing fees is appropriate. Some fishermen noted the need for reduced parking fees and/or free parking. New Bedford offers parking at a reduced rate at public ramps; recreational boaters pay \$55 per season for a parking pass, while commercial fishermen pay \$25 per season.

Some strategies for changing parking fees include:

- Permit parking: Municipalities may wish to offer the commercial fishing community a reduced fee parking permit. In Bar Harbor, Maine, permits are available at different rates depending on the type of user (resident, non-resident, commercial fishing, municipal employee, bed and breakfast guest).³² These permits could be extended to other waterfront users such as charter boat guests.
- Free and metered parking: If free or metered parking is available, municipalities could dedicate a portion of those spaces to the commercial fishing industry. In metered areas, municipalities could set aside free parking spaces to accommodate commercial fishing users. It should be

³¹ <https://www.mapc.org/resource-library/how-to-do-a-parking-study/>

³² Town of Bar Harbor, Maine. Permit and Paid Parking Policy. Online at: <https://www.barharbormaine.gov/DocumentCenter/View/3156/Permit-and-Paid-Parking-Policy>

noted that some survey respondents believe free public parking can be detrimental to the commercial fishing industry, as other users often take free spaces quickly.

See Appendix H for how some municipalities have provided the commercial fishing industry with parking alternatives.

Recommendation 5. Expand opportunities for overnight parking

A small number of survey respondents identified limits on overnight parking as a barrier to operations. Where possible, limits on overnight parking should be extended, or off-site parking should be developed to accommodate longer parking periods for commercial users.



E. Ramps

Launch ramps provide important access for commercial users who cannot or do not wish to keep their vessels on moorings or at docks. Many ramps serving both recreational and commercial users experience seasonal congestion, tidal restrictions, and are in need of improvements.

Recommendation 1. Employ staff to facilitate use of highly congested ramps

At congested ramps, staff can help direct traffic, enforce rules for parking spaces and limits on how long someone can tie up alongside a ramp, and provide safety information to help reduce conflicts.

Recommendation 2. Increase the number of launch ramps available for commercial use

Access to the water is a key challenge for many commercial fishermen who trailer their vessels. This could be addressed through the installation of new ramps, or expansion of existing ramps to add lanes. In some municipalities it may be feasible to designate launching sites or lanes for commercial use only and recreational use only. These designations could be seasonal, daily, or otherwise determined. Potential funding from sources such as the Seaport Economic Council could be used to improve launching opportunities for commercial users. In addition, some commercial fishermen launch and retrieve their vessels at ramps developed with funding from the Office of Fishing and Boating Access. These ramps are not designed to support commercial fishing activity, such as, loading/off-loading gear, the launching/hauling of non-traditional trailered commercial fishing vessels and other commercial

activities; however, strategically planned infrastructure located off-site but nearby (e.g., parking for commercial users, docks to load and unload gear) could provide benefits for commercial users launching at these site. As new ramps are constructed and existing ramps are reconstructed, designs should consider rising sea levels and impacts to water quality.

Recommendation 3. Ensure ramps are maintained

Fishermen noted that some ramps they use are in disrepair, and/or dredging is needed. These ramps should be repaired, taking into consideration opportunities to make them more pervious, resilient to the impacts of climate change, and efficient (providing better signage and lane markings, including a dock for tie-ups).

Recommendation 4. Extend the season for ramp use

In some communities, ramps are only available for seasonal use; those who fish year-round would benefit from year-round access. Communities should consider revising policies to allow for year-round use for the commercial fishing industry.

V. CONCLUSION

COVID-19 revealed the vulnerability of commercial fisheries in ways previously unimagined. Shuttered restaurants, limited gatherings, and other factors led to a surplus of fish and shellfish, heralding a call for innovation. The industry rose to the challenge and developed new products, new markets, and new ways of selling directly to consumers. Many consumers also pivoted, seeking out mail-order seafood, farmer's markets, and other novel ways to purchase locally caught fish and shellfish. While the impacts of COVID-19 will not be fully understood for years to come, these changes reflect the important role that commercial fishing plays in Massachusetts as a source of local protein, jobs, and pride. This should be a strong consideration for those with the ability to improve access and infrastructure in the state's harbors.

Port by Port: Profiles and Analysis of the Massachusetts Commercial Fishery—including fisheries statistics compiled by the Massachusetts Division of Marine Fisheries and survey responses from harbormasters and commercial fishers—provides data to quantify the economic and cultural importance of the commercial fishing industry in the Commonwealth. These data also highlight the widespread need to better maintain, and improve, access and infrastructure for the commercial fishing industry.

Champions at the local, state, and federal levels will need to advocate for and implement a range of actions in order to maintain jobs, working waterfronts, and a way of life that has been part of the fabric of Massachusetts for generations. Priorities should include dredging, increasing berthing options, improving parking conditions, reducing conflicts with other users, and enhancing shoreside amenities. Implementing these will require the investment of both funds and effort. The port profiles in Appendix A can assist with these efforts by identifying specific needs in each municipality as well as information about the economic significance of the local commercial fishing activity.

APPENDIX A: PORT PROFILES

Port Profiles are available as a separate document on the Massachusetts Division of Marine Fisheries website:
<https://www.mass.gov/lists/port-profile-project>.

APPENDIX B: STATEWIDE 2018 COMMERCIAL LANDINGS VALUE

Compiled by the Massachusetts Division of Marine Fisheries.

Table B1: Ports ranked by 2018 ex-vessel value. Data source: SAFIS Dealer Database & ACCSP Data Warehouse, 2020 TH.

RANK	PORT	EX- VESSEL VALUE	RANK	PORT	EX- VESSEL VALUE
1	NEW BEDFORD	\$431,038,042	42	MASHPEE	\$375,519
2	GLOUCESTER	\$53,210,608	43	KINGSTON ¹	\$347,711
3	CHATHAM	\$18,967,799	44	TRURO	\$341,460
4	BARNSTABLE	\$16,982,115	45	MARION	\$323,745
5	BOSTON ¹	\$16,416,184	46	MANCHESTER	\$278,787
6	FAIRHAVEN	\$8,413,362	47	OAK BLUFFS	\$246,824
7	WELLFLEET	\$7,728,102	48	SALEM ¹	\$188,261
8	PROVINCETOWN	\$7,721,452	49	BOURNE ¹	\$161,307
9	DUXBURY ¹	\$6,789,874	50	GOSNOLD	<\$150,000
10	SANDWICH	\$6,769,995	51	DANVERS	<\$150,000
11	ROCKPORT	\$6,641,393	52	LYNN ¹	<\$150,000
12	PLYMOUTH	\$6,319,145	53	AQUINNAH	<\$150,000
13	MARSHFIELD	\$4,842,002	54	ROWLEY	<\$150,000
14	SCITUATE	\$4,528,224	55	MATTAPOISETT	<\$50,000
15	BEVERLY ¹	\$3,621,568	56	DARTMOUTH	<\$50,000
16	MARBLEHEAD ¹	\$3,283,939	57	WEST TISBURY	<\$50,000
17	HARWICH	\$3,218,701	58	QUINCY	<\$50,000
18	DENNIS	\$3,006,213	59	REVERE	<\$50,000
19	IPSWICH	\$2,955,464	60	SALISBURY	<\$50,000
20	FALMOUTH	\$2,988,313	61	WEYMOUTH	<\$50,000
21	ORLEANS	\$2,661,203	62	PEABODY	<\$50,000
22	EDGARTOWN	\$2,388,214	63	SWANSEA	<\$50,000
23	WESTPORT	\$2,243,472	64	AMESBURY	<\$50,000
24	CHILMARK	\$2,143,642	65	ACUSHNET	NO LANDINGS
25	NAHANT ¹	\$2,073,717	65	BERKLEY	NO LANDINGS
26	COHASSET	\$1,903,315	65	BRAINTREE	NO LANDINGS
27	ESSEX ¹	\$1,838,377	65	CAMBRIDGE	NO LANDINGS
28	HULL	\$1,826,866	65	CHELSEA	NO LANDINGS
29	NANTUCKET	\$1,521,642	65	DIGHTON	NO LANDINGS
30	YARMOUTH	\$1,452,372	65	EVERETT	NO LANDINGS
31	WAREHAM	\$1,442,185	65	FREETOWN	NO LANDINGS
32	EASTHAM	\$1,250,591	65	HAVERHILL	NO LANDINGS
33	NEWBURYPORT	\$1,159,821	65	MEDFORD	NO LANDINGS
34	SAUGUS ¹	\$987,671	65	MILTON	NO LANDINGS
35	HINGHAM ¹	\$960,519	65	NORWELL	NO LANDINGS
36	SWAMPSCOTT ¹	\$675,561	65	REHOBOTH	NO LANDINGS
37	BREWSTER	\$671,026	65	SOMERSET	NO LANDINGS
38	NEWBURY ¹	\$487,154	65	SOMERVILLE	NO LANDINGS
39	FALL RIVER	\$577,435	65	TAUNTON	NO LANDINGS
40	TISBURY	\$522,464	65	WATERTOWN	NO LANDINGS
41	WINTHROP	\$400,468			

¹ Exact total value cannot be displayed due to data limitations; see individual port profile in Appendix A for more information. The displayed value is greater than 80% of the total value for the port.

Table B2: Top 10 ports ranked by 2018 ex-vessel value for each of the three highest valued fisheries landed in Massachusetts. Data source: SAFIS Dealer Database & ACCSP Data Warehouse, 2020 TH.

A) TOP 10 PORTS BY EX-VESSEL VALUE FOR SEA SCALLOP IN 2018				
RANK	PORT	EX- VESSEL VALUE	# ACTIVE DEALERS	# ACTIVE HARVESTERS
1	NEW BEDFORD	\$358,174,626	16	152
2	FAIRHAVEN	\$4,071,268	3	3
3	CHATHAM	\$4,025,084	10	30
4	PROVINCETOWN	\$2,524,977	12	31
5	GLOUCESTER	\$1,458,653	11	28
6	BARNSTABLE	\$1,129,415	6	12
7	HARWICH	\$1,118,296	6	8
8	SANDWICH	\$376,524	5	11
9	TRURO	*	2	2
10	MARSHFIELD	\$166,540	4	4

B) TOP 10 PORTS BY EX-VESSEL VALUE FOR AMERICAN LOBSTER & JONAH CRAB IN 2018				
RANK	PORT	EX- VESSEL VALUE	# ACTIVE DEALERS	# ACTIVE HARVESTERS
1	NEW BEDFORD	\$21,704,482	19	78
2	GLOUCESTER	\$21,328,830	26	190
3	ROCKPORT ¹	\$6,559,212	8	51
4	SANDWICH	\$4,877,676	10	29
5	PLYMOUTH	\$4,691,102	13	63
6	PROVINCETOWN ¹	\$4,663,832	9	67
7	MARSHFIELD ¹	\$3,855,770	15	51
8	CHATHAM	\$3,726,182	13	59
9	BEVERLY ¹	\$3,621,568	11	38
10	MARBLEHEAD ¹	\$3,201,335	4	53

¹ Exact total value cannot be displayed due to data limitations; see individual port profile in Appendix A for more information. The displayed value is > 80% of the total value for the port.

C) TOP 10 PORTS BY EX-VESSEL VALUE FOR EASTERN OYSTER IN 2018				
RANK	PORT	EX- VESSEL VALUE	# ACTIVE DEALERS	# ACTIVE HARVESTERS
1	DUXBURY	\$6,528,935	18	42
2	WELLFLEET	\$6,129,017	27	146
3	BARNSTABLE	\$5,952,199	21	54
4	EDGARTOWN	\$1,299,558	12	16
5	DENNIS	\$1,247,574	10	36
6	PLYMOUTH	\$1,207,366	8	32
7	WAREHAM	\$897,363	5	9
8	CHATHAM	\$594,947	10	27

9	WESTPORT	\$737,858	6	11
10	ORLEANS	\$632,402	14	27

Table B3: Top 5 ports ranked by 2018 ex-vessel value for sample finfish species landed in Massachusetts. Data source: SAFIS Dealer Database & ACCSP Data Warehouse, 2020 TH.

A) TOP 5 PORTS BY EX-VESSEL VALUE FOR BLACK SEA BASS IN 2018

RANK	PORT	EX- VESSEL VALUE	# ACTIVE DEALERS	# ACTIVE HARVESTERS
1	NEW BEDFORD	\$647,278	11	200
2	CHILMARK	\$184,030	5	42
3	FALMOUTH	\$151,106	6	65
4	CHATHAM	\$138,405	8	46
5	WESTPORT	\$123,610	9	37

B) TOP 5 PORTS BY EX-VESSEL VALUE FOR GROUND FISH¹ IN 2018

RANK	PORT	EX- VESSEL VALUE	# ACTIVE DEALERS	# ACTIVE HARVESTERS
1	GLOUCESTER	\$20,102,852	17	91
2	NEW BEDFORD	\$13,968,932	22	129
3	BOSTON	\$12,820,332	3	20
4	CHATHAM	\$1,274,179	11	43
5	SCITUATE	\$1,142,124	7	16

¹Includes American plaice (Dab), Atlantic cod, haddock, Atlantic halibut, monkfish, pollock, Acadian redfish, white hake, and winter, witch (gray sole), and yellowtail flounder.

C) TOP 5 PORTS BY EX-VESSEL VALUE FOR SCUP IN 2018

RANK	PORT	EX- VESSEL VALUE	# ACTIVE DEALERS	# ACTIVE HARVESTERS
1	NEW BEDFORD	\$1,064,712	16	184
2	BARNSTABLE	\$114,976	8	25
3	WESTPORT	\$40,230	9	20
4	FALMOUTH	\$14,591	7	45
5	CHILMARK	\$12,003	4	33

D) TOP 5 PORTS BY EX-VESSEL VALUE FOR STRIPED BASS IN 2018

RANK	PORT	EX- VESSEL VALUE	# ACTIVE DEALERS	# ACTIVE HARVESTERS
1	SANDWICH	\$1,192,278	11	561
2	YARMOUTH	\$566,864	3	198
3	NEW BEDFORD	\$417,578	8	158
4	CHATHAM	\$354,700	12	205
5	FALMOUTH	\$130,958	9	71

E) TOP 5 PORTS BY EX-VESSEL VALUE FOR SUMMER FLOUNDER (FLUKE) IN 2018

RANK	PORT	EX- VESSEL VALUE	# ACTIVE DEALERS	# ACTIVE HARVESTERS
1	NEW BEDFORD	\$656,082	11	92
2	BARNSTABLE	\$491,487	5	23
3	FALMOUTH	\$300,235	4	20
4	CHATHAM	\$239,952	5	25

5 CHILMARK \$203,288 3 7

Table B4: Top 5 ports ranked by 2018 ex-vessel value for sample shellfish species landed in Massachusetts. Data source: SAFIS Dealer Database & ACCSP Data Warehouse, 2020 TH.

A) TOP 5 PORTS BY EX-VESSEL VALUE FOR NORTHERN QUAHOG IN 2018

RANK	PORT	EX- VESSEL VALUE	# ACTIVE DEALERS	# ACTIVE HARVESTERS
1	CHATHAM	\$1,212,462	17	209
2	FALMOUTH	\$959,064	9	88
3	WELLFLEET	\$895,978	21	99
4	ORLEANS	\$356,383	7	53
5	BARNSTABLE	\$338,865	15	45

B) TOP 5 PORTS BY EX-VESSEL VALUE FOR SOFT SHELL CLAM IN 2018

RANK	PORT	EX- VESSEL VALUE	# ACTIVE DEALERS	# ACTIVE HARVESTERS
1	IPSWICH	\$2,232,864	9	161
2	ESSEX	\$1,838,377	8	141
3	GLOUCESTER	\$829,135	5	94
4	CHATHAM	\$495,374	12	81
5	NEWBURY	\$487,154	6	51

APPENDIX C: HARBORMASTER SURVEY QUESTIONS

(See following pages)



Survey on Massachusetts Commercial Fishing Infrastructure: Harbormaster

SURVEY INSTRUCTIONS

The Massachusetts Division of Marine Fisheries (DMF) has launched a state-wide municipal port profile project, focused on commercial fishing activity and infrastructure. The purpose of this survey is to take stock of the commercial fishing activity and infrastructure in the Commonwealth to help promote and maintain this important industry. Other partners include the Urban Harbors Institute at the University of Massachusetts Boston, which is leading survey implementation and data analysis, and the Cape Cod Commercial Fishermen's Alliance, which is assisting with survey development, outreach, and engagement.

The success of this study depends on statewide participation to be a fully representative assessment of the conditions of our commercial fishing ports and harbors.

Estimated Time Length: 20 minutes

For more information on the project, please see: <https://www.mass.gov/info-details/port-profile-project>

We recognize you may work in multiple harbors within your jurisdiction. Please complete one survey per harbor that supports commercial fishing activity. You do not need to fill out a survey for harbors that do not offer commercial fishing opportunities.

Questions on the survey? Contact the Urban Harbors Institute for guidance.

Contact name: Kimberly Starbuck, Senior Research Associate

Phone: 617-287-5570 (Monday - Friday, 9AM - 5PM) or

Email: Kimberly.Starbuck@umb.edu

1. What is the name of the harbor that you are responding about?
2. Name:
3. Title:
4. E-Mail:

Note: Please complete one survey per harbor that supports commercial fishing activity. You do not need to fill out a survey for harbors that do not offer commercial fishing opportunities.

Please complete the following survey based on the harbor you specify in this question.

STATUS OF COMMERCIAL FISHING IN HARBOR

Please complete the questions based on the harbor you specified on the first page of this survey.

5. Please select the type of commercial fishing industries that operate out of this harbor.

- Lobster Pot
- Shellfish (By hand, non-mechanized)
- Dragger
- Gillnetter
- Clam Dredge
- Scallop Dredge
- Rod & Reel
- Aquaculture
- For Hire/Charter
- Purse Seine
- OTHER: Please list any other commercial fisheries that operate out of this harbor.

6. Have you noted any change (growth or decline) of specific fishing industries operating out of this harbor in the last ten years?

Yes No

If yes, please describe which fisheries have shown growth or decline.

NUMBER OF VESSELS (TRAILERED AND NON-TRAILERED)

7. Please estimate the number of commercial fishing vessels that operated out of this harbor in 2018, excluding trailered vessels?

8. Have the number of commercial fishing vessels increased, decreased, or remained the same in the last 10 years, excluding trailered vessels?

Increased Decreased Remain the Same

If applicable, what is the main cause of this change?

9. Please estimate the number of trailered commercial fishing vessels that operated out of this harbor in 2018?

10. Have the number of trailered commercial fishing vessels increased, decreased, or remained the same in the last 10 years?

Increased Decreased Remained the same

If applicable, what is the main cause of this change?

STATUS OF COMMERCIAL FISHING INFRASTRUCTURE

11. Are there moorings within the harbor that are dedicated **solely** for commercial fishing?

Yes No

If yes, please provide additional details on the moorings dedicated solely for commercial fishing (e.g., location, number of moorings, whether or not they are off-season only).

12. Are there slips within the harbor that are dedicated **solely** for commercial fishing?

Yes No

If yes, please provide additional details on the slips dedicated solely for commercial fishing (e.g., location, number of slips, whether or not they are off-season only).

13. Is there broadside berthing in the harbor that is dedicated **solely** for commercial fishing?

Yes No

If yes, please provide additional details on the berthing dedicated solely for commercial fishing (e.g., location, amount of berthing, whether or not it is for off-season use only).

STATUS OF COMMERCIAL FISHING INFRASTRUCTURE

14. Is your broadside berthing temporary or permanently assigned?

Temporary Permanently Assigned Other (please specify)

15. Is the method for allocating docking/mooring space to commercial fishermen within this harbor by discretion or by mandate?

By discretion By mandate Other (please specify)

Based on your answer to the question above, please describe how space is designated for commercial fishing vessels within this harbor.

DOCKAGE AVAILABILITY & PRIVATE FACILITIES

17. Is the availability of dockage in this harbor impacting the local commercial fisheries?

Yes No Don't know

Please describe your answer.

18. Are there private boating facilities in your harbor?

Yes No

If you answered YES to the question above, are commercial fishermen using moorings or docking space at the private facility(ies)?

Yes No Not applicable

If yes, please provide the name of the private facility(ies), and any contact information.

STATUS OF COMMERCIAL FISHING INFRASTRUCTURE

20. How much do commercial fishermen pay for fees in this harbor?

*Please list cost estimates below and **specify their measurement (per day/per foot)**. If there is no cost, please put zero (0).*

- Moorings
- Slips
- Anchoring
- Broadside Berthing
- Unloading
- Transient Dockage
- Launching for Ramp

Which of the following infrastructure is available in this harbor to support commercial fishing operations?

Please check all boxes next to the infrastructure that is available.

- Ice
- Bait storage
- Trash disposal
- Commercial offloading
- Hoist
- Dock space
- Gear storage
- Mooring space
- Fueling stations
- Vessel repair
- Launch ramp
- Parking: For fishermen
- Parking: For dealers
- Other

Please provide comments on any of the services or infrastructure noted above, or any additional infrastructure that are not in the list above.

CHALLENGES AND POLICY RECOMMENDATIONS

Please complete the questions based on the harbor you specified on the first page of this survey.

22. What are the infrastructure/access challenges facing the commercial fishing industry (including for-hire vessels) in this harbor:

- Lack of docking space
- Lack of moorings
- Shallow water/need for dredging
- Permitting process for infrastructure
- Parking
- Conflicts with other users
- Other

Please describe the challenges checked above.

23. Please list 3-5 infrastructure upgrades or repairs that would be needed specifically in this harbor in the next 10 years to support the commercial fishing industry, ranked by need.

Rank #1:

Rank #2:

Rank #3:

Rank #4:

Rank #5:

24. Successful Models/ Recommendations

Are there any lessons learned from other harbors or municipalities that would help with commercial fishing infrastructure issues in this harbor? (Projects, Programs, etc.)

Yes No Don't know

If yes, please describe.

Please click "DONE" below to submit your survey.

Thank you for completing this survey! Have more comments?

After submitting the survey, participants are encouraged to contact the Urban Harbors Institute for an on-phone discussion. Feel free to schedule a time with Amanda DeGrace, Research Assistant at Amanda.DeGrace001@umb.edu.

APPENDIX D: COMMERCIAL FISHERMEN SURVEY QUESTIONS

Survey on Massachusetts Commercial Fishing Infrastructure: Fishermen SURVEY INSTRUCTIONS

The Massachusetts Division of Marine Fisheries (DMF) has launched a state-wide municipal port profile project, focused on commercial fishing activity and infrastructure. The purpose of this survey is to take stock of the commercial fishing activity and infrastructure in the Commonwealth to help promote and maintain this important industry.

The success of this study depends on statewide participation to be a fully representative assessment of the conditions of our commercial ports and harbors. This survey is voluntary for all commercial fishermen, though we hope to attract fishermen from as many fisheries and regions as possible to assess your needs, challenges, and recommendations.

We will also be holding regional meetings with members of the commercial fishing community in the spring (2019) to gather further input on the topics of infrastructure and access. If you are interested in participating in one of those meetings, please contact Kim Starbuck at Kimberly.Starbuck@umb.edu.

Other partners in this study include the Urban Harbors Institute at the University of Massachusetts Boston, which is leading survey implementation and data analysis, and the Cape Cod Commercial Fishermen's Alliance, which is assisting with survey development, outreach, and engagement. For more information on the project, please see: <https://www.mass.gov/info-details/port-profile-project>

Estimated Time Length: 15 minutes

Questions on the survey? Contact the Urban Harbors Institute for guidance.

Contact name: Kimberly Starbuck, Senior Research Associate

Phone: 617-287-5570 (Monday - Friday, 9AM-5 PM) or

Email: Kimberly.Starbuck@umb.edu

PARTICIPANT INFORMATION

1. Your Name:
2. Title & Fishing Company:
3. Email Address:
4. What is the name of your homeport and city/town that you operated * out of in 2018?

Homeport name

City/Town

5. Did you operate out of any other harbors in Massachusetts in 2018? yes no
 - a. If yes, which ones?

INFORMATION ON YOUR FISHING OPERATIONS

6. What is the length of your primary fishing vessel (in Feet)?

7. What is the length of your secondary fishing vessel (in Feet)?

If you do not own a second vessel, please write N/A (not applicable).

8. What type of gear did you use to harvest your catch in 2018?

- Lobster Pot
- Shellfish (By hand, non-mechanized)
- Dragger
- Gillnetter
- Clam Dredge
- Scallop Dredge
- Rod & Reel
- Aquaculture
- For Hire/Charter
- Purse Seine
- Other

9. Please provide any details on the gear and fisheries checked above, and/or any other gear used that is not listed above.

10. Please provide any other details about your fishing operations, if applicable.

For example, number of boats in your fleet, etc.

STATUS OF COMMERCIAL FISHING INFRASTRUCTURE IN YOUR HOMEPORT

11. Is the following infrastructure available in your homeport to support your commercial fishing operations?

	Yes	No	Don't know
Ice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bait storage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trash disposal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Commercial Offloading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hoist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dock space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gear storage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mooring space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fueling stations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Launch ramp	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking: for fishermen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking: for seafood trucks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Please briefly describe the checked supportive services, and any other infrastructure available in your homeport that is not listed above. Also, please describe any infrastructure not available, but needed.

13. What infrastructure and access challenges is your fishing operation currently facing?

- Lack of docking space
- Lack of moorings
- Shallow water/need for dredging
- Parking
- Lack of transient port accommodations
- Other

14. Based on your response above, please briefly describe your current checked obstacles within your industry, and any other infrastructure challenges not listed.

15. Do you think your fishing operation could benefit from improvements to your homeport's infrastructure, fees, and/or access?

Yes

No

16. If yes to question above, what **TOP 5** improvements would you recommend to your homeport over the next ten years, ranked by importance?

If no to question above, please skip this question.

Recommendation #1

Recommendation #2

Recommendation #3

Recommendation #4

Recommendation #5

17. In other harbors you use (not your homeport), what type of infrastructure/access improvements are needed that would benefit your fishing operations?

Please list town and port.

STATUS OF COMMERCIAL FISHING INFRASTRUCTURE

Please complete the following questions based on your HOMEPORT.

18. Is your homeport dockage public or private?

- Public
- Private
- Other

19. Why did you choose this harbor as your homeport?

20. Has your homeport experienced any infrastructure repair or upgrade that has benefited your fishing operation in the last ten years?

Repairs and/or upgrades could consist of new docks, etc.

- Yes
- No
- I don't know

21. If yes to question above, please list the repairs or upgrades that specifically benefited your fishing operations:

OBSERVATIONS AND POLICY RECOMMENDATIONS FOR INFRASTRUCTURE

22. Are there any municipal, county, state, or federal policies that would improve access and/or the infrastructure in your homeport?

For example, standardized fee structure, dredging policy, tax credit programs etc.

- Yes
- No
- I don't know

Please click "DONE" below to submit your survey.

Thank you for completing this survey! Have more comments?

After submitting the survey, participants are encouraged to contact the Urban Harbors Institute for an on-phone discussion. Feel free to schedule a time with Amanda DeGrace, Research Assistant at Amanda.DeGrace001@umb.edu.

APPENDIX E: DETAILS ON COMMERCIAL FISHERMEN SURVEY RESPONDENTS

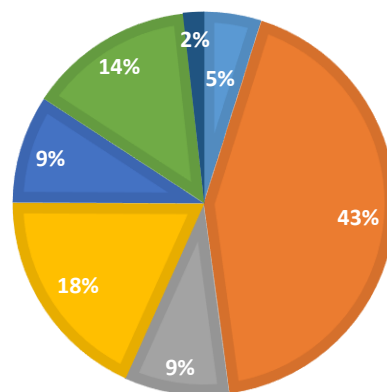
Below are demographic details about commercial fishermen who responded to the survey, including the respondents' homeport, vessel size, and type of fishing gear.

1. Homeport

349 commercial fishermen responded to the survey, with most (43%) identifying their homeport as Cape Cod.

SURVEY RESPONDENT'S HOMEPORT (N=349)

■ Boston Harbor ■ Cape Cod ■ Islands ■ North Shore
■ South Coast ■ South Shore ■ N/A



More details on the number of commercial fishermen responding by municipality can be found in Appendix xx [Port Profiles].

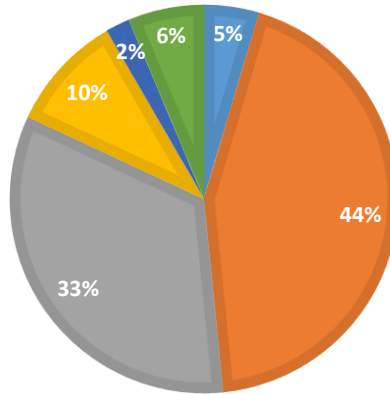
Most fishermen (56%, n= 275) responded that they chose their port because of proximity to home, while some (31%) noted location to fishing grounds and available infrastructure (15%) as primary factors.

2. Size of Vessel

Most fishermen reported that they owned either a 16-25 foot vessel (44%), or a 26-40 foot vessel (33%) (Figure xx).

FISHERMAN'S LENGTH OF VESSEL (N = 349)

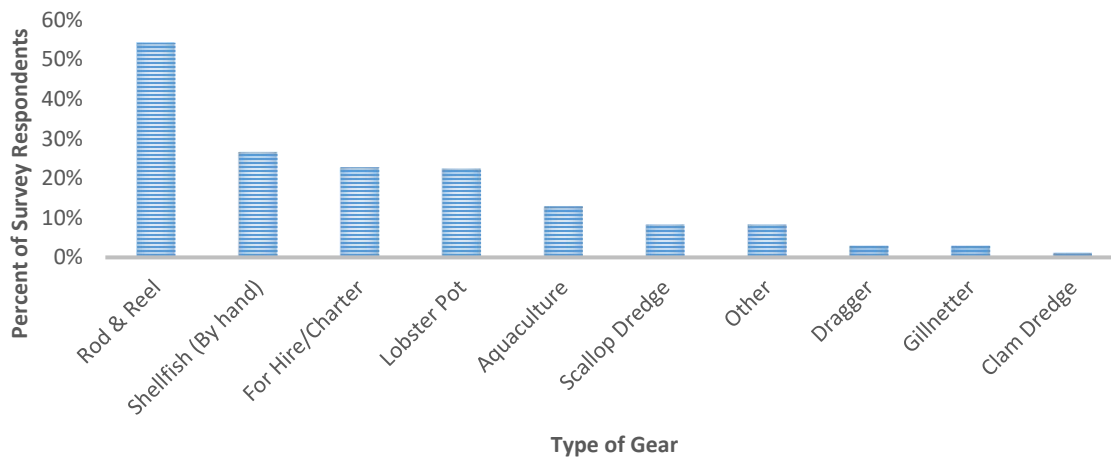
■ ≤ 15 feet
 ■ 16 - 25 feet
 ■ 26 - 40 feet
 ■ 41 - 60 feet
 ■ ≥ 61 feet
 ■ N/A



3. Fishing Gear

Most fishermen (54%) used rod & reel to harvest in 2018 (Figure xx).

GEAR USED BY SURVEY RESPONDENTS TO HARVEST CATCH IN 2018 (N = 334)



The following table displays the type of gear used by fishermen by region.

	Boston Harbor	Cape Cod	Islands	North Shore	South Coast	South Shore
	n=17	n=150	n=31	n=64	n=32	n=49
Lobster Pot	24%	12%	19%	38%	13%	39%
Shellfish	0%	38%	13%	20%	28%	10%
Dragger	0%	3%	9%	2%	6%	0%
Gillnetter	12%	3%	0%	5%	0%	2%
Clam Dredge	0%	2%	3%	0%	0%	0%
Scallop Dredge	0%	1%	34%	5%	9%	0%
Rod & Reel	82%	54%	44%	52%	53%	41%
Aquaculture	0%	19%	9%	2%	9%	12%
For Hire/Charter	53%	21%	13%	25%	13%	22%
Purse Seine	0%	0%	0%	0%	0%	2%
Other	0%	8%	16%	6%	9%	8%

APPENDIX F: EXAMPLES OF MUNICIPALITIES WITH REDUCED FEES FOR COMMERCIAL FISHERMEN

Reduced Mooring Permit Fees

Marblehead, MA³³

Mooring permit fee of eight dollars (\$8.00) per foot for Marblehead Harbor, Little Harbor, and Doliber's Cove. All other locations in Marblehead anchorage assessed seven dollars (\$7.00) per foot. Working Commercial Fishermen have their permit fee abated to a rate of three dollars (\$3.50) per foot upon approval of the Harbormaster.

Chatham, MA³⁴

Private Moorings: \$3.50/foot

Commercial Fishing Vessel Classification: \$2.50/foot

Renters of commercial moorings/slip: \$3.50/foot

Orleans, MA³⁵

Mooring Permit \$100 as of 9/1/19 (Type 1 Resident or Non-Resident)

Commercial Mooring \$30 (Type 1 Resident Commercial)

Marina Mooring \$200 as of 7/1/09 (Type 2)

Eastham, MA³⁶

Length of Vessel	Fee Amount	Fee Amount for Eastham Commercial Shellfish Permit Holder
Less than Sixteen (16) feet	Fifty Dollars (\$50)	Twenty-five Dollars (\$25)
Sixteen (16) feet to Twenty-five (25) feet	Seventy-five Dollars (\$75)	Fifty Dollars (\$50)
Greater than Twenty-five (25) feet	One Hundred Dollars (\$100)	Seventy-five Dollars (\$75)

³³ https://www.marblehead.org/sites/marbleheadma/files/uploads/2019_manual_for_marbelhead_waters.pdf

³⁴ https://www.chatham-ma.gov/sites/chathamma/files/uploads/waterways_regulations_oct_2019.pdf

³⁵ https://www.town.orleans.ma.us/sites/orleansma/files/uploads/waterwaysbylaw_amended_5-8-17_final.pdf and <https://www.town.orleans.ma.us/shellfish-and-harbormaster/pages/department-fee-list>

³⁶ https://www.eastham-ma.gov/sites/easthamma/files/uploads/mooring_regulations.pdf

Nantucket, MA³⁷

Mooring Renewal Fees

Dimension	Cost
Up to 16 feet	\$80
17 feet by 23 feet	\$100
24 feet by 32 feet	\$200
33 feet by 49 feet	\$300
Over 50 feet	\$500
Commercial Fishing	\$80
Livery/Rental	\$200
Boat Handler/Repair	\$175

Reduced Slip Fees

Harwich, MA³⁸

Town-Owned Slip Rates

Type	Fee
Recreational Boats * (5/1 to 11/15)	20' - \$85/ft. 30' - \$105/ft. 40' - \$130/ft. 50' - \$160/ft
Commercial Fishing Boats * (1/01/-12/31)	30' - \$94/ft. 40' - \$124/ft
Charter Boats * (1/01 – 12/31)	20' - \$85/ft. 30' - \$105/ft. 40' - \$130/ft. 50' - \$160/ft.

Orleans, MA³⁹

Rock Harbor Dockage:

Back-in Resident \$46 / ft. as of 7/1/08

Back-in Non Resident \$62 / ft. as of 7/1/08

Commercial Resident \$10 / ft.

Commercial Non-Resident \$12 / ft.

Transient \$1/ft./night

Provincetown, MA⁴⁰

Annual Commercial Fisher Dockage Permit \$61.73 per foot

³⁷ <https://www.nantucket-ma.gov/143/Fee-Schedule>

³⁸ https://www.harwich-ma.gov/sites/harwichma/files/uploads/marine_fee_schedule_0.pdf

³⁹ <https://www.town.orleans.ma.us/shellfish-and-harbormaster/pages/department-fee-list>

⁴⁰ <https://www.provincetown-ma.gov/DocumentCenter/View/218/Harbor-Regs>

Limited Commercial Fisher \$128.62 per foot

Charter Fishing Boat \$109.44 per foot

All Other Commercial \$139.34 per foot

All Other Recreational \$160.78 per foot

Seasonal Recreational Permit \$100.00 per foot per season

Reduced Waterways Fee

Manchester, MA⁴¹

Recreational Waterway permit: \$12.50/foot

Commercial Service Waterway permit: \$12.50/foot based on maximum length the mooring can accommodate.

Commercial Fisheries Waterway Permit: \$6.00/ft. commercial fisheries as defined by Massachusetts code of regulation.

Chatham, MA⁴²

Waterways User Permit

The following commercial activities with two or more vessels will only be accessed a fee for two vessels. Additional vessels, above two in number, are required to obtain a Waterways User Permit at no charge.

1.) Commercial fishermen who are residents or non-resident taxpayers who qualify for the commercial rate listed in the Town of Chatham Waterways Regulations.

Reduced Ring Float Fees

Marblehead, MA⁴³

Permits issued for available rings to the persons selected upon the payment of a seasonal fee of one hundred and fifty dollars (\$150.00). Working Commercial Fishermen shall have their ring fee abated to a rate of forty dollars (\$40.00) upon approval of the Harbormaster.

Reduced Tender Fees

Manchester, MA⁴⁴

Tender fee: \$75.00 All Town Piers, Floats and Ramps \$56.25 Commercial.

⁴¹ <https://www.manchester.ma.us/DocumentCenter/View/1331/Manchester-Harbor-Regs-2018-11-12>

⁴² https://www.chatham-ma.gov/sites/chathamma/files/uploads/town_ramps_2017.pdf

⁴³

https://www.marblehead.org/sites/marbleheadma/files/uploads/2019_manual_for_marblehead_waters.pdf

⁴⁴ <https://www.manchester.ma.us/DocumentCenter/View/1331/Manchester-Harbor-Regs-2018-11-12>

Reduced Vessel Storage Fees

Eastham, MA⁴⁵

An Eastham Commercial Shellfish permit holder with a valid mooring permit may obtain a vessel storage permit for one vessel at no cost, subject to availability.

⁴⁵ https://www.eastham-ma.gov/sites/easthamma/files/uploads/mooring_regulations.pdf

APPENDIX G: EXAMPLES OF DEDICATING BERTHING SPACE AND FACILITIES FOR COMMERCIAL FISHERMEN

Preference in Assigning Mooring Space

Marblehead, MA⁴⁶

Commercial Fishermen Vessels of residents engaged exclusively in fishing and lobstering may be given a preference to assignment of mooring space over recreational vessels. Subject to the Harbormaster's approval, mooring permit fees for working commercial fishermen shall be abated to three dollars and fifty cents (\$3.50) per foot.

Wareham, MA⁴⁷

Applications for mooring space for commercial boats owned by a Wareham resident shall be given preference. All other applications shall be considered by the date of filing.

Chatham, MA⁴⁸

The Harbormaster shall annually update and publish by category the number and general mooring location of all moorings as follows: (1) Town controlled and unassigned; (2) Commercial fishing vessels; (3) Recreational private; (4) Boatyards and marinas; and (5) Clubs, nonprofits, sailing schools. The Harbormaster shall endeavor to maintain the percentages mix of the above categories as they existed on April 1, 2008 (percentage mix and date may be changed under §265-14.1F). In the event a mooring assigned to a commercial fishing vessel is converted by the mooring permit holder to a recreational private status, the Harbormaster shall assign the next available, suitable mooring to a commercial fishing vessel applicant.

Stonington, ME⁴⁹ and Vinalhaven, ME⁵⁰

Assignments for the privilege of maintaining a mooring in Vinalhaven Harbor shall be made in the order received according to the following ordered priorities:

1. Fulltime commercial fishing vessel
2. Part-time commercial fishing vessel
3. Commercial Vessel
4. Pleasure Vessel
5. Guest Mooring/Rental Mooring

⁴⁶ https://www.marblehead.org/sites/marbleheadma/files/uploads/2019_manual_for_marbelhead_waters.pdf

⁴⁷ https://www.wareham.ma.us/sites/warehamma/files/uploads/water_way_regulations.pdf

⁴⁸ https://www.chatham-ma.gov/sites/chathamma/files/uploads/chapter_265.pdf

⁴⁹ <https://www.stoningtonmaine.org/cmsupl/brd/harbor-ordinance-final.pdf>

⁵⁰ <https://www.townofvinalhaven.org/sites/vinalhavenme/files/uploads/harbor.pdf>

Rockland, ME⁵¹

Mooring Site Assignment Priorities

1. Rockland Harbor shall be managed with equal and open access to all persons and entities. Mooring sites in each mooring area shall be assigned by the Harbor Master on a first come, first served basis, subject to the application requirements and conditions. Assignment priorities may exist when providing access to all, as prescribed by current state and federal regulations. These priority assignments are:

- A. First, to riparian owners is granted the right to one mooring site in waters as reasonably close to their property as is safe for the vessel or use applied for by the property owner. A riparian owner must have a boat to place on the mooring. Simple shoreline ownership does not meet the requirements for having a mooring. Exception: Marinas which are riparian owners may have one rental mooring which is not required to have a vessel assigned.
- B. Second, to commercial fishing vessels owned by residents of the City of Rockland.
- C. Third, to pleasure vessels and other commercial vessels owned by residents of the City of Rockland.
- D. Fourth, to recreational vessels or commercial fishing vessels owned by non-residents.
- E. Fifth, to entities or persons seeking to establish rental moorings or service moorings.
- F. Sixth, to other commercial vessels owned by non-residents.
- G. Seventh, to vessel owners seeking multiple mooring sites or seeking to move their existing mooring to a new site.

Portland, ME⁵²

Moorings will be assigned by the Harbor Master according to the following order of priority:

- (i) Up to three moorings to the owner of the frontage abutting the area in which the moorings are to be located (personal use, including guest moorings for commercial establishments, not for hire), provided that in congested areas the Harbor Master may reduce the number of moorings allocated to owners of frontage to one;
- (ii) To commercial fishing vessels owned and used by residents;
- (iii) To pleasure vessels owned or used by residents;
- (iv) To moorings for hire or guest moorings for commercial establishments;
- (v) To other commercial vessels owned or used by residents;
- (vi) To commercial fishing vessels owned or used by non-residents;

⁵¹ https://rocklandmaine.gov/documents/charter-code/#chapter_105_anchor

⁵² <https://www.portlandharbor.org/new-page>

- (vii) To pleasure boats owned or used by non-residents; or
- (viii) To other commercial vessels owned or used by non-residents.

Designated Mooring Areas

Manchester, MA⁵³

Area 2 is a designated commercial area where boat length will be limited at the discretion of the Harbormaster. Active commercial fishermen receive priority for mooring locations that become available in Area “B”. Other commercial enterprises receive no such priority in Area “B”

Commercial Fishermen Wait List – for commercial fishermen seeking moorings located in Area B. A tender space accompanies a commercial fisherman’s mooring permit.

Harwich, MA⁵⁴

Mooring, Commercial Fishing Vessel: Established to ensure that the long history of commercial fishing vessels operating out of Harwich remains in the years to come. These moorings are permitted from the appropriate waitlists to persons who have indicated their intent to commercially fish. Federal and/or State Commercial Fishing license and a Class E offloading permit are required to be eligible.

Commercial Fishing Vessel Mooring Requirements and Regulations. As of May 9, 2016 a small number of moorings have been designated to commercial fishing vessels operating out of Harwich. There are two moorings in the Inner Harbor and four moorings in the Outer Harbor, see Appendix A. The following regulations apply to Commercial Fishing Vessel Moorings:

1. There will be no separate waitlist for the commercial fishing vessel moorings; intent to commercially fish from a mooring must be indicated on initial waitlist application.
2. When a designated commercial fishing vessel mooring becomes available, the Harbormaster will go to the respective waitlist and select the first person on the waitlist that intends to commercially fish. All persons on the waitlist that are recreational boaters will be bypassed.
3. In order to accept an offer for a commercial fishing vessel mooring, the applicant must have a commercial fishing license and must purchase a Class E offloading permit from this office, and comply with permit requirements as outlined in Section 8.0.
4. If the permit holder of a commercial fishing vessel mooring decides to stop commercially fishing and fails to renew the required Class E permit, the mooring permit will be revoked and assigned to the next licensed commercial fishermen on the waitlist.
5. A licensed commercial fisherman who is on the waitlist is not prohibited from accepting an offer for a non-designated commercial fishing mooring as long as there is a Class E permit

⁵³ <https://www.manchester.ma.us/DocumentCenter/View/1331/Manchester-Harbor-Regs-2018-11-12>

⁵⁴ https://www.harwich-ma.gov/sites/harwichma/files/uploads/harbor_mgmt_plan_march_9_2020.pdf

available to allow commercial fishing. However, the mooring does not become a designated commercial fishing mooring, when vacated.

Newport, RI⁵⁵

Green Bridge Cove Area mooring permits and yearly renewals will be issued only to an individual holding a valid Rhode Island commercial fishing license, for use only by their commercial fishing vessel, or to a riparian property owner. These permits will be issued only as permits for private mooring spaces.

Separate Waiting List for Commercial Moorings

Cohasset, MA⁵⁶

The Harbor Master may assign mooring under the following classifications: (i) commercial fishing fleet (ii) All other recreational boats

Separate mooring lists are maintained for recreational moorings⁵⁷ and commercial moorings.⁵⁸

Scituate, MA⁵⁹

The following method will be used for mooring assignment. Commercial (fishing) and recreational/ commercial (non fishing) vessel waiting lists will be established and managed by the Harbormaster.

Sandwich, MA⁶⁰

Any person wishing to be included on the Waiting List for a Slip shall complete an application on an approved form provided by the Harbormaster. The names of new applications will be added to the one of the two waiting lists, which is updated and posted twice each year in the Spring and Fall. The new recreational and commercial lists are posted in the marina office, the Sandwich Marina website and the Sandwich Town Hall for public review by all interested parties.

Mooring Transfers

Stonington, ME⁶¹

Mooring assignments may not be transferred except for the following specific circumstance: at the request or death of the assignee, only to a member of the assignee's family and only if the mooring will

⁵⁵

https://library.municode.com/ri/newport/codes/code_of_ordinances?nodeId=COOR_TIT12STSIUPL_CH12.28CIH_A

⁵⁶ <https://www.cohassetma.org/DocumentCenter/View/161/Cohasset-Harbor-Rules-and-Regulations-PDF>

⁵⁷ <https://www.cohassetma.org/DocumentCenter/View/1481/2018-Recreation-Mooring-Waiting-List>

⁵⁸ <https://www.cohassetma.org/DocumentCenter/View/1480/2018-Commercial-Mooring-Waiting-List>

⁵⁹ <https://www.scituatema.gov/harbormaster/pages/mooring-rules-regs-by-laws-revised-july-2013>

⁶⁰ <https://sandwichmarina.com/wp-content/uploads/SANDWICH-MARINA-RULES-AND-REGS-FINAL-APPROVED.pdf>

⁶¹ <https://www.stoningtonmaine.org/cmsupl/brd/harbor-ordinance-final.pdf?1588013349>

continue to be used for commercial fishing purposes. For the purpose of this section, "member of assignee's family" means an assignee's parent, child or sibling, by birth or adoption, including a relation of the half blood or an assignee's spouse

Separate Waiting List or Selection Process for Commercial Slips

Harwich, MA⁶²

Separate waiting lists are maintained for recreational slips and commercial slips.

Nantucket, MA⁶³

Commercial Use/Fishing Vessels slips are divided into two categories, 'A' and 'B'.

Category A – applicant spends a major portion of their annual work time in water-based commercial industry and that greater than 60% of their annual income is derived from the commercial business.

Six (6) Available spaces: Initial slip space is drawn at lottery. The revocable license will be renewable each year without participation in the lottery as long as the slip holder remains current with payments and is in compliance with all applicable rules, regulations and by-laws or unless otherwise cancelled by the Town of Nantucket or the license holder.

Category B – applicant spends a portion of their annual work time in the water- based commercial industry and that a portion of their annual income is derived from the commercial business.

Six (6) Available spaces: Category 'B' Vessel is drawn in the lottery annually pursuant to the procedures in paragraph 250.4.3.3 and 250.4.3.4. The revocable license is for one year.

For Category B Commercial Use Vessels, a waitlist of three (3) will be drawn at the annual slip lottery.

Designated Facilities for Commercial Fishing Use (Docking and/or Offloading)

Manchester, MA⁶⁴

The Manchester Harbor Department is responsible for management of and access to Morss Pier. The Northeast finger of the Morss Pier is intended for the primary purpose of supporting commercial fishermen and their activities. Other waterfront interests shall have access to the pier only if such access does not interfere with commercial fishing operations.

The crane and hoist at Morss Pier is intended for the primary purpose of supporting commercial fishermen and their activities. Other waterfront interests shall have access to the crane and hoist only if such access does not interfere with commercial fishing operations.

⁶² <https://www.harwich-ma.gov/harbormaster/pages/harwich-wait-lists> and https://www.harwich-ma.gov/sites/harwichma/files/uploads/harbor_mgmt_plan_march_9_2020.pdf

⁶³ <https://www.nantucket-ma.gov/DocumentCenter/View/8848/Harbors-and-Town-Pier-Regulations---Amended-12212016-PDF>

⁶⁴ <https://www.manchester.ma.us/DocumentCenter/View/1331/Manchester-Harbor-Regs-2018-11-12>

Gloucester, MA⁶⁵

City Owned Commercial Marina - A marina created by the City of Gloucester for use by commercial fishing vessels. Two such facilities are St. Peter's Marina, accessed from the Public Parking lot on St Peter's Public Landing and Harbor Cove Marina, located at 65R Rogers Street. One of the missions of the Waterways Board is to protect and promote dockage for commercial fishing vessels. The Waterways Board may expand or create new facilities if the space becomes available.

The rental fee for dockage at city owned commercial marinas is established by the City Council on recommendation from the Waterways Board.

The Harbormaster shall keep one waiting list to serve all city owned commercial marinas.

Newburyport, MA⁶⁶

Commercial fish pier or "fish pier" shall mean that property fronting on the Merrimack River improved with a Coastal Facilities Improvement Grant abutting the Newburyport Waterfront Trust property, recorded as book 239, plan 62 to the East. See City Assessor's map # 12, lot # 9.

Generally. The general operating policy of the municipal pier/embayment facility shall be that the property is intended primarily for the berthing and loading/unloading of the Newburyport commercial fishing fleet.

Embayment area dockage

The embayment area dockage shall be designated for commercial fishing vessels only.

The harbor master will maintain a waiting list for any additional vessels wishing to secure space at the embayment area should a space become available.

Pier and bulkhead usage

Only commercial fishing vessels shall be allowed to dock at the pier

All vessels docked for use of pier services shall do so at designated areas only and shall be subject to time limitations set by the harbor commission.

Because of the limited amount of docking/berthing space available, tie-up space is limited to the amount of time it takes to load or unload a cargo plus a length of time as determined by the dock master

Sandwich, MA⁶⁷

"Commercial Pier" or "Commercial Dock" shall mean E dock and the area between F-1 and the U. S. Coast Guard Dock, being 147 feet in length and running north and south, and including adjacent waters.

⁶⁵ <http://gloucester-ma.gov/DocumentCenter/View/3776/Policies-Rules-and-Regulations-March-8-2016?bidId=>

⁶⁶

https://library.municode.com/ma/newburyport/codes/code_of_ordinances?nodeld=PTIICOOR_CH4BODOWA_AR_TIIHA_DIV4USRE_SDDSPUSAR_S4-98COFIP

⁶⁷ <https://sandwichmarina.com/wp-content/uploads/SANDWICH-MARINA-RULES-AND-REGS-FINAL-APPROVED.pdf>

The small size and limited space of the Commercial Dock requires that its use be limited to annual commercial Slip Holders or Slip Users. Monthly and Six Month Commercial Slip Users may use the dock provided they have obtained a Commercial Docking Permit from the Harbormaster. Use by vessels not leasing a commercial Slip at the Sandwich Marina is strictly prohibited.

Off-loading of catch shall take priority over any other use of the Commercial Dock.

Harwich, MA⁶⁸

The Harwich commercial offloading permits represent the authorization of actively Harwich-based commercial fishing boats (in good standing with Town of Harwich) to use specified Boat Offloading Zones at Wychmere Harbor Town Pier, Allen Harbor Town Dock, and Saquatucket Harbor Bulkhead.

Provincetown, MA⁶⁹

MacMillan Pier is primarily for the general use and benefit of commercial fishing vessels and commercial passenger vessels, and for passive enjoyment by the general public.

Use of the east-facing finger piers shall be restricted to active, full-time, year-round commercial fishing vessels. Any other uses of these finger piers must be approved by the PPPC.

The “floating docks” located on the eastern side of MacMillan Pier are dedicated primarily for use by small-boat commercial fishing vessels in accordance with Massachusetts Department of Environmental Protection “Chapter 91” License #8621 as may be amended. Accordingly, space at the floating docks shall be leased first to “commercial fisherman” for the docking of “small-boat commercial fishing vessels,” as such terms are defined in these regulations.

Nantucket, MA⁷⁰

Commercial Use/Fishing Vessels slips are divided into two categories, ‘A’ and ‘B’. Six (6) slips on the floating dock will be designated for each category for Vessels less than 40’. Commercial fishing Vessels 40’ and greater and transient fishing Vessels will Moor at the end of the fixed pier and will not participate in the lottery. There is no guarantee of space on the fixed pier for commercial fishing Vessels 40’ and greater or transient fishing Vessels. Accommodation of space for these Vessels will be made upon the determination of availability by the Harbor Master

Portsmouth, Rye, and Hampton Harbor, NH⁷¹

Commercial fishing from state-owned piers and facilities falls under the jurisdiction of the Division of Ports and Harbors. They maintain jurisdiction over the state-owned commercial fishing piers and facilities at Portsmouth, Rye Harbor and Hampton Harbor. Berths and slips are only available at

⁶⁸ https://www.harwich-ma.gov/sites/harwichma/files/uploads/harbor_mgmt_plan_march_9_2020.pdf

⁶⁹ <https://www.provincetown-ma.gov/DocumentCenter/View/218/Harbor-Regs>

⁷⁰ <https://www.nantucket-ma.gov/DocumentCenter/View/8848/Harbors-and-Town-Pier-Regulations---Amended-12212016-PDF>

⁷¹ <https://peasedev.org/division-of-ports-harbors/#commercialFishing> and http://www.gencourt.state.nh.us/rules/state_agencies/pda100-700.html

Portsmouth; no long-term or overnight berthing is available at Rye or Hampton harbors due to physical limitations. Commercial fishermen wishing to use the facilities must obtain a “Pier Use” permit.

“Business-use pier”:

- (a) The fixed piers, wharves, docks, and attached floats in Hampton Harbor located southeast of the year-round concrete floats of the Hampton Harbor recreational-use pier;
- (b) All fixed piers and attached floats located on Pierce Island in Portsmouth owned by the authority; and
- (c) The fixed piers, wharves, docks, and attached floats south of the state administration building in Rye Harbor.

Pier Use Permit Required at Business-Use Piers. An annual pier use permit shall allow: (1) A commercial fishing vessel to be secured to the Portsmouth, Rye Harbor, and Hampton Harbor business-use piers and to use division hoists on these piers. The loading or unloading of a commercial cargo vessel shall be allowed only in accordance with the terms of a written contractual agreement with the authority.

Granting of Annual Berthing Permits. Only the owner or operator of a commercial fishing vessel who has obtained an annual pier use permit shall be permitted to apply for an annual berthing permit. An annual berthing permit shall allow a commercial fishing vessel to be secured, unattended and for any length of time during the permit term, in the Portsmouth pier berthing area at a location designated by the division in accordance with the LOA, width and draft of the vessel, and the potential for storms, wind, waves, tides, currents, and wash at the berthing location.

Galilee, Jerusalem, Narragansett, and Newport, RI⁷²

The Rhode Island Department of Environmental Management (RIDEM) is responsible for the development, management, and maintenance of several major commercial fishing piers, including the Port of Galilee, State Pier #9 (Newport), State Pier #4 (Jerusalem), and State Pier #5 (Narragansett).

Rockland, ME⁷³

Rockland Municipal Fish Pier. This facility is to serve the commercial fishing industry, on a year-round basis. Permit, dockage, storage, utility, and other fees and charges shall be established by Order of the City Council and are available only to those vessels and companies possessing current commercial fishing licenses or commercial fishing industry licenses.

⁷² <http://www.dem.ri.gov/programs/coastal/#section1>

⁷³ https://rocklandmaine.gov/documents/charter-code/#chapter_105_anchor and <https://rocklandmaine.gov/municipal/departments/harbor/permits/#fish-pier-fees>

APPENDIX H: EXAMPLES OF PARKING BENEFITS FOR COMMERCIAL FISHERMEN

New Bedford, MA⁷⁴

The Parking Program on NBPA Piers and Wharves is overseen by Marine Superintendents. All Vessel Owners and fishermen must obtain a parking permit from NBPA personnel. All other users are charged parking fees as voted by the Commission currently set at \$1 dollar per space per day. Violators of NBPA parking rules are fined \$50 and can be towed.

For public boat ramp locations at Gifford Street, West Rodney French Boulevard, and East Rodney French Boulevard, recreational boaters pay \$7/day and \$55/season for a parking pass, whereas commercial fishermen pay \$7/day and \$25/season for a parking pass.

Dennis, MA⁷⁵

A slip or mooring permit holder authorized to berth or moor their vessel in Sesuit Harbor may, if said vessel is used exclusively for commercial purposes, purchase one (1) or more crew passes for their employees.

Provincetown, MA⁷⁶

Parking is prohibited on MacMillan Pier except in the following designated areas and under the conditions specified. Vehicles which do not follow these rules will be subject to ticketing and towing.

- a) Pier Permit Parking Area The spaces designated by "Pier Permit Parking Only" signs shall be primarily used by the Owner/Captains of the commercial fishing fleet who need access to their vehicles while working on their vessel and licensed MacMillan Pier business tenants. These are not permanent parking spaces for tenants but are only to be used while they are actively working their vessels.
- d) Seafood Off-Loading Spaces The area inside the yellow lines, which delineate Off-Loading Spaces (Loading Zones), shall be reserved for vehicles actively engaged in off-loading or loading of seafood. Any other uses must be approved in advance.

Portsmouth, Rye, Hampton Harbor, NH⁷⁷

Business-use pier vehicle stickers shall be issued without an additional fee to:

- (1) The holder of an annual pier use permit for a commercial fishing vessel, commercial cargo vessel, or charter boat, for:

⁷⁴ <https://portofnewbedford.org/regulations-and-fees/> and <https://portofnewbedford.org/mooring-regulations/> and <http://portofnewbedfo.wpengine.com/facilities-infrastructure/>

⁷⁵

https://www.town.dennis.ma.us/sites/dennisma/files/uploads/waterways_regulations_town_of_dennis_as_amended_1-7-2020.pdf

⁷⁶ <https://www.provincetown-ma.gov/DocumentCenter/View/218/Harbor-Regs>

⁷⁷ http://www.gencourt.state.nh.us/rules/state_agencies/pda100-700.html

- a. A vehicle owned or leased by the permit holder; and
- b. Up to 10 vehicles of vessel crew members or employees, as needed; and

(2) The holder of an annual pier use permit for an off-site business, for vehicle(s) owned or leased by the permit holder or by an employee of the permit holder and used for the business purposes for which the pier use permit was issued.

Vinalhaven, ME⁷⁸

Fish Plant Wharf

Parking – A person possessing a current commercial fishing license, a commercial fishing industry license, or working for a company that supports the fishing industry may obtain a parking permit for a dedicated parking spot by applying at the Town Office. They will be issued on a first come, first serve basis and will be for the period January 1 to December 31 of the calendar year. If there are still parking spaces available after all commercial fishing related applications have been processed, applications will be accepted from other businesses and individuals.

⁷⁸ <https://www.townofvinalhaven.org/sites/vinalhavenme/files/uploads/harbor.pdf>