

# 2014 Gloucester Municipal Harbor Plan and DPA Master Plan



An Amendment to the 2009 MHP and DPA Master Plan

July 30, 2014



**The City of Gloucester**

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July 30, 2014

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## Chapter 1: Executive Summary

A harbor plan is a waterfront land and water use plan intended to establish the community's objectives, standards, and policies for guiding public and private utilization of land and of water within and adjacent to the commonwealth's jurisdiction. This plan was prepared by the city under the Massachusetts Office of Coastal Zone Management regulations (301 CMR 23.00) and is implemented under Chapter 91 regulations (301 CMR 9.00). In addition, the Gloucester Harbor Plan serves as a designated port area (DPA) master plan, whose purpose is to preserve land for water dependent industrial uses and to plan for compatibility of uses to ensure their continuation.

The 1999 Gloucester Harbor Plan was chiefly focused on infrastructure improvements for both maritime and visitor-oriented industries along the waterfront as a central means of recharging the harbor's economic engine. Many of the improvements have been completed in the wake of this plan. However, it largely ignored the confusing web of land use regulations that has since emerged as the central force stagnating much of the waterfront's revitalization.

Gloucester Harbor is the center of one of the country's most important commercial fishing communities; its docks lined with vessels of various types and its waterfront dominated by facilities and services associated with seafood industry. In recent decades, as the groundfish stocks have declined and management measures designed to rebuild the stocks have reduced the size and effort of the fleet, the infrastructure has deteriorated and businesses that depend on groundfish have struggled.

City and state regulations effectively protect the commercial fishing industry, but consolidation of the shoreside infrastructure that supports the industry raises the question of what are the economically viable uses for the remaining waterfront property in the Designated Port Area (DPA) and do the regulations allow enough diversity of uses for a prosperous harbor.

Some waterfront property/business owners feel caught between the currently limited economic potential from the commercial fisheries and the regulatory restrictions on land use. With a diminished revenue stream, property owners do not have and are unable or unwilling to access capital to invest in maintaining and improving their waterfront infrastructure, which is essential for the future of the working port.

In response, the 2009 Gloucester Harbor Plan and DPA Master Plan and its 2014 Amendment propose the following strategies:

1. Support commercial fishing both directly, and by seeking to attract and expand the kind of businesses and industries that might build upon the existing marine assets and knowledge base of the community. Such commerce might include research, off-shore energy support services, or training in the maritime trades. This is an effort to diversify on the waterfront in ways that build upon and strengthen the fishing community.
2. Provide greater flexibility for supporting commercial uses on waterfront property so that waterfront properties have more mixed-use investment options.
3. Promote public access along the waterfront in ways that do not interfere with industrial uses so as to create a more appealing environment for investment and to ensure the active use of the water's edge around the harbor.
4. Promote change that will benefit the downtown and other areas of the city.

5. Provide infrastructure and navigation improvements.
6. Enhance and focus the administrative resources of the city to support and strengthen the viability of the port.

The DPA Master Plan (Chapter 5) includes a series of regulatory changes to support economic diversification and clarity of permitting. These changes include:

- Retains the allowance of up to 50% supporting commercial use of DPA properties
- Recommending that the city pursue local zoning amendments to better align DPA uses with zoning allowances

The plan also provides guidance to Department of Environmental Protection (DEP) regarding the economic support that commercial uses must provide to water-dependent industrial use in the DPA. If there is no water-dependent industrial use on the site at the time of licensing, the required economic support is to be invested in the site's shorefront infrastructure (wharves, piers, docks, bulkhead); if such investment is not needed on-site, the plan recommends that the funds be contributed to a newly-established Port Maintenance and Improvement Fund for investments in water-dependent industrial uses in the DPA (see Section 6-2).

While the Harbor Plan envisions an emerging maritime economy as the foundation of the working port, economic diversification and flexibility for property development are essential.

Gloucester Harbor is and always has been an important part of the city's economic base. The complexities, conditions and issues affecting use, development and redevelopment of the waterfront and harbor require the capabilities and resources of the Community Development Department. For reinvestment and revitalization of the harbor to succeed, the department must develop or secure capabilities specific to the working waterfront: an understanding of the requirements and operational characteristics of port and waterfront industries, particularly commercial fishing; knowledge of the public and private programs and incentives supporting the industrial waterfront; and knowledge of the multiple regulatory authorities with jurisdiction over the waterfront and waters of the harbor. The department's efforts in the harbor will be guided by the Gloucester Harbor Plan and DPA Master Plan.

Responsibilities of the Community Development Department with respect to Gloucester Harbor will be to:

- Encourage and coordinate investment in and revitalization of the waterfront infrastructure and businesses contributing to the economic vitality of Gloucester.
- Work with other city boards, commissions, and authorities to coordinate the activities related to the harbor and adjacent shorefront.
- Prepare proposals seeking financial support from state and federal sources in support of port development.
- Serve as a source, repository and clearinghouse for information on the harbor and port including: condition of the navigable waterways and port-related infrastructure, investment opportunities, and permitting.
- Serve as liaison with state and federal agencies on harbor programs, and regulatory and funding activities.



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- Draft policies and regulations to guide the use and development of Gloucester Harbor and its public waterfront facilities.
- Assist harbor front property owners with regulatory matters, potential funding sources, and business partnerships.
- Foster and support partnerships between private property owners and government to improve and expand appropriate port uses and activities.
- Work with the commercial fishermen's associations and fishing-related businesses to help ensure this industry continues to be a vital part of the Port of Gloucester.

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## Chapter 2: Gloucester: A Maritime City

### Section 2.1: 20/20 Vision

In the 21<sup>st</sup> century...

Gloucester redefines its urban identity. Long known beyond the community for its fishing fleets, its fiesta, its toughness and spirit and glorious beaches, it has quietly offered a collection of villages, magical coves, and generational continuity to those who have stayed longer. As a center of commerce, the harbor has been the premier village. While retaining their own centers and identity, the citizens of the Cape traveled to the center for work, for shopping, for celebrations and to walk the waterfront and see the extraordinary sights thereon. When industry flourished, many immigrants came to the heart of the city and stayed within walking distance of the bustling activity upon which their livelihood depended. The local joke about failing to venture “over the bridge” and “down the line” is based in the self-sufficiency found in the Gloucester community.

By the year 2020...

The skills and physical resources of the Gloucester community have provided the natural building blocks for new maritime economies. Long-time fishermen, tradesmen, sailors, boatwrights, divers and researchers supply the generational knowledge of ocean habitats, which serves as a catalyst for the expansion of commercial ocean harvesting. In addition to such staples as groundfish and lobsters, we bring in ocean products that create new protein and biofuel resources, and we bioprospect for species with DNA sequences that provide new drug discoveries and products, and we are a leader in marine science and technology.

The children of Gloucester return from college and trade schools to find lucrative opportunities offered in the professional maritime trades: marine engineering, marine transportation, facilities and environmental engineering and marine safety. Gloucester grows its fame as its citizens become leaders in large ocean vessels and port management.

A thriving applied research community, which includes collaborative ventures between schools, institutes, business and industry, supports the local economy through:

- Sustainable fisheries research which yields superior stock management when timely and credible research is combined with pragmatic marine knowledge;
- Servicing and supporting the development of renewable energy technologies, including wind and tidal, and harnessing these resources for the benefit of a self-sufficient Gloucester;
- Coastal climate change research which draws from the complex mix of ocean professionals found in the city and coastal urban environment of the harbor.

Gloucester school children benefit from harbor commerce as their parents work in and around the waterfront in growing numbers, as streets and public walkways connect more directly the city to the harbor, as the schools find new opportunities to connect classroom lessons with the maritime capital found on the docks and the boats and the labs that support the harbor economy.

Businesses and maritime services are designed to respond quickly to marketplace changes to capitalize on new maritime business opportunities. The creation of maritime business success is supported by

flexible regulations, buildings and physical assets that are appropriately sized and modularized to support changing business needs and multi-purpose boats that fish some days, and service and support other industries, such as research or energy enterprises, on other days.

Bustling maritime commerce requires hotels, restaurants, and retail shops for the workers and the many visitors who seek the experiential connection to a vibrant working waterfront and visitor amenities. Along the waterfront an esplanade weaves in and along and through the myriad industries and commerce. Artists open galleries in nooks and crannies on Main Street and along the esplanade when they can afford it. Shops fill in the gaps along Rogers Street as businesses look to grow and the waterfront has become the logical edge of the downtown. Many of these visitors come by boat, rather than automobile. The port welcomes those who arrive by boat.

The downtown is busy and engaging. Gloucester residents shop downtown because they work downtown. Others come to shop because they also want to sit for a few minutes at one of the cafes on Main Street, visit the library, the YMCA or City Hall, or go down to see the activity on the waterfront. Fishermen mingle with researchers and business people on the dock or over a coffee or sandwich. At night, the city is alive with restaurants, music, and city or merchant sponsored events, whether they are block parties on Main Street or concerts and markets on Harbor Loop. As activity increases along Main Street and the waterfront, the links between the event locations strengthen with both the esplanade and the shops and businesses that surround it.

In the year 2020, Gloucester is prospering.

## **Section 2.2: Building upon the Fishing Industry**

Fishing has been a way of life in Gloucester since the Dorchester Company of Puritans landed here in 1623. For almost 400 years, Gloucester Harbor has been the center of one of the country's most important commercial fishing communities. Even with the strictest federal regulations ever imposed on the groundfish industry, Gloucester is still a vital working port. Boats from other ports in Massachusetts, New Hampshire, Maine, and Rhode Island are unloading in Gloucester, some seeking temporary dockage here, to fish from Gloucester for periods during the year. Despite the city's continued function as a regional hub for commercial fishing, the severe federal fishing restrictions have put at risk the critical mass of shoreside infrastructure that sustains the port's commercial fishery base. The port economy will be built upon strengthening its existing industry and infrastructure with compatible businesses and industry while allowing the many supporting uses that comprise a healthy urban environment. The port faces the challenge of providing increased economic opportunity for the various components of a healthy fishing industry and also for the needs of a strong urban center. The city is increasingly identifying compatible industries for the commercial fishery such as the professional maritime trades as well as marine research, the renewable energy industry, and climate change research. Such industries would provide additional work for the existing 210 commercial vessels in the harbor, would increase demand for shore side property, and create synergy between the existing knowledge base of the community and the emerging industries.

When groundfish stocks rebound, we want Gloucester people fishing for them, landing, and processing them, not some other community or country. Gloucester's large natural harbor, its proximity to Georges Bank and the Gulf of Maine, the extent and variety of the marine know-how of its residents and

the people it draws to it, the work ethic prized and practiced here: all these and more are elements from which to forge highly successful collaborations between fisheries, marine science and technology, and the professional maritime trades.

### Section 2.3: State and Local Regulations on the Harbor

The state regulates harbor properties under the Designated Port Area program. This program is designed to protect the marine industrial areas of the state from encroachment by other uses. Within a DPA, no new hotels, residences or recreational marinas may be developed; the amount of commercial uses is limited; and there are dimensional and other requirements to carefully guide development. Regulations pertaining to the DPA are part of the Chapter 91 Waterways Regulations (310 CMR 9.00). Chapter 91 preserves and protects the public's rights in tidelands – the area seaward of the historic high water line – by ensuring that tidelands are used only for water-dependent uses or otherwise serve a proper public purpose.

On the local level, much of the study area and virtually all of the DPA (except for the sliver of DPA between Rogers and Main Streets, which is Central Business) falls within the city's Marine Industrial (MI) zoning district designed to protect and promote marine industrial use of the harbor, similar in intent to Chapter 91. Like the state's DPA regulations, the Marine Industrial zone prohibits residential development, hotels, and motels (although MI zoning does allow limited boarding or guest housing), reserves the immediate waterfront for vessel-related activities and, through special permit requirements, discourages displacement of existing marine industrial uses.

The 2014 Gloucester Harbor Plan and DPA Master Plan Amendment proposes to maintain existing MI zoning and clarify the permitting process in the DPA. Although the DPA Boundary extends from the waterfront up to the adjacent roadways, the underlying state jurisdiction only extends to the Historic High Water Mark (HHW.) In some areas, such as along Commercial Street, the boundary and the HHW match. In other locations, properties have only a portion of their area below the HHW (in jurisdiction), while the remaining part of the property (the upland) is within the DPA but not within jurisdiction. Within the State's jurisdiction (HHW) the State permits no more than 25% supporting commercial uses unless modified by a Master Plan. The State's ability to condition the upland portions only comes from the MHP and DPA Master Plan, which, in order to be approved must:

“...ensure that commercial uses and any accessory uses thereto will not, as a general rule, occupy more than 25% of the total DPA land area covered by the master plan.”(301 CMR 23.05 (2) (e) 1.)

In Chapter 5, the city's regulatory approach to the MHP and DPA Master Plan, the city shows that the above condition is met, even with the allowance of up to 50% supporting commercial use within jurisdiction. Further the city/state partnership established by the 2009 Plan, in which the city strengthened its MI zoning, if modified slightly further, will provide sufficient protection of the uplands for water dependent industrial (WDI) uses in the DPA. In addition, the city will no longer require the restriction of 50% supporting uses in its MI zoning, as that will now be conditioned by the new approach in this MHP.

Concerns that local zoning could be modified in ways incompatible with the State DPA zoning and protection of WDI uses will be mitigated by the acknowledgement that the city and state are in

partnership in this Master Plan. If the city were to choose to modify its MI zoning in areas within the DPA, the city would lose the flexibility offered by this Master Plan such as 50% supporting commercial uses and amplification for water dependent industrial uses.

## **Section 2.4: Evolution of the Designated Port Area**

In 1978, the Gloucester harbor became a “Designated Port Area” in order to protect the viability of the harbor for marine industrial use. Since that time, fundamental changes in marine industry have introduced inconsistency between the regulations and the intent of preserving an active waterfront.

One fundamental disconnect is that significant marine industries on the waterfront no longer use the dockage or waterside access to the property. With the decline of fish landings, East Coast groundfish has become too valuable to be used for the frozen seafood for which Clarence Birdseye made Gloucester famous. The frozen fish packaged and stored in Gloucester comes in by truck from the Pacific coast.

A second unintended impact has been the exclusion of significant public access from the waterfront. In the introduction to the 1994 DPA regulations, the state agencies emphasize that:

“judicious planning of the use mix in the DPA and its environs together with compatible incorporation of public access facilities into the design of individual projects can advance the quality-of-life objectives of the surrounding community without significant interference with maritime activities at or near the waterfront.”

The DPA regulations are not currently encouraging this development approach.

A third unintended impact has been that the provision of low-cost commercial berthing has created a lack of investment in new dockage at the same time that vessel days at sea have been so seriously reduced that vessels require much more time at the dock. The result has been a current shortage of commercial dockage in the city.

A strong Designated Port Area will build the assets of the marine industry and also find ways to promote active use of the water’s edge. Such uses could include different forms of water-dependent marine activity or simply public access and dockage. As part of an active urban center, the harbor properties would connect to the downtown by allowing the flow of the citizens in and around downtown and harbor commerce. Gloucester faces new challenges and opportunities.

## **Section 2.5: The Community Voice**

The Community voice was developed in five stages for this Harbor Plan:

1. The 2006 Harbor Plan update planning process which produced the first draft plan;
2. A review and comment period in which waterfront property owners met and organized to protest the lack of flexibility of uses allowed in the draft plan;
3. A community-wide visioning process that created the community values that would be used to guide the city’s approach to harbor development;
4. The 2009 Harbor Plan, endorsed by multiple city stakeholders, and formally accepted by the State on December 9, 2009, and

5. A community-wide discussion beginning in 2012 to update the 2009 Gloucester Harbor Plan and DPA Master Plan with an amendment in 2014.

### ***Section 2.5.1: 2006 Harbor Plan Update***

The draft 2006 Harbor Plan adopted unchanged the goals developed for Gloucester harbor in 1998. The goals responded to the local desire to maintain marine industrial use of the harbor, while also developing new and innovative uses that do not depend on traditional fishing.

Economic goals:

- To stimulate the general economy of the City of Gloucester, emphasizing family-supporting jobs.
- To encourage revitalization of the commercial fishing industry, expansion of commercial shipping and seafood processing, and other water-dependent industrial uses.
- To promote existing and new marine-related research, development, and technology.
- To increase visitor and the recreational opportunities the harbor affords.

Supporting goals:

- To maximize state and federal resources and assistance that may be available to the city.
- To attract private investment to the harbor, consistent with the city's vision.
- To integrate proposed dredging projects with overall harbor planning.
- To enhance harbor management and operations.

General civic goals:

- To integrate the waterfront with downtown Gloucester and surrounding areas, to increase the accessibility and attractiveness of the harbor for residents and visitors, and to enhance economic development.
- To preserve and promote the harbor's and city's historic assets.
- To preserve and protect the natural environment.

During the public hearings held on the Harbor Plan in August 2006 by the Gloucester City Council, questions were raised about whether or not the plan enabled sufficient opportunities to generate new development and the desired changes along the waterfront. Over the succeeding months, alternatives to address these concerns were proposed and considered, but adoption of the plan stalled.

### ***Section 2.5.2: 2007 Participating Waterfront Property Owners Comment***

Over a period of several months, about twelve waterfront property owners met to discuss the draft Harbor Plan proposal, followed up by a wider meeting of about 30-35 waterfront business and property owners who "expressed unanimous concerns about the plan as proposed and urged its amendment." The property owners expressed the belief that a healthy harbor economy required significant expansion of allowable uses within the DPA. In addition to recommending additional allowable uses, they also developed an innovative approach to the prohibited and controversial use of recreational boating in the DPA. Their proposal was that recreational berthing be allowed for new dockage only, and carry with it the requirement that 25% of the new dockage be reserved for commercial vessels, thereby addressing the lack of commercial dockage capacity in the harbor.

The waterfront property owners group submitted these comments in full and in writing to then Mayor John Bell on July 25, 2007.

### ***Section 2.5.3: 2008 Community Panel Process***

Upon taking office in January 2008, Mayor Kirk who had made the harbor an early priority for her administration, initiated a public process to elicit from the community its values and visions for the future of Gloucester Harbor. She established a Community Panel of nine citizens and held five listening posts in different neighborhoods of the city during the first two weeks of June 2008. The panel listened to all the public comment and distilled common themes into core community values to guide decisions on harbor development to be reflected in revisions to the Harbor Plan.

Community values that will guide harbor development:

- Make the harbor a hub of economic activity. Be flexible while respecting the working character of the port.
- Support the fishing industry and adding value shoreside to the catch.
- Support mixed industrial and commercial uses that provide year round jobs on the waterfront.
- Create flexibility that promotes investment in harbor properties.
- Make Gloucester a welcoming port for the transient boating community. Provide the required complete range of services.
- Encourage uses that rely upon water access.
- Support family owned and operated businesses.
- Proactively seek new marine related industries and research centers to locate in the harbor.
- Create linkages to educational institutions.
- Provide direction for Gloucester's economic development based on evolving world realities.
- Integrate water shuttles and water taxis into the harbor economy.
- The creative economy is a legitimate supporting commercial use for the working waterfront.

Make the harbor a hub of community activity. Provide access to, along, and across the water.

- Create public access along the waterfront as shown by harbor walks and connections.
- Provide ways that citizens, especially our youth, can both get to and onto the water.
- Increase citizen access to boating: increase moorings, dinghy docks.
- Mix recreational and commercial boating in ways that would create compatible boating activity in the harbor.
- Encourage access by water with abundant temporary public slips.

Ensure that harbor development respects the heritage of Gloucester: fishing, arts, the scale of the community, preservation.

- Develop effective design and architectural review.
- Make the harbor accessible to the public.
- Consider traffic and parking needs.
- Recognize and link historic focal points.

Approach harbor development recognizing that

- We want and need investment in our harbor.



- Clarify the complex regulatory and permitting environment.
- Make bureaucracies accountable to realistic permitting timeframes.
- Use caution so as not to lose our character.
- Diverse uses provide added economic stability.
- Maintain a balance between development and preservation.

#### ***Section 2.5.4: 2009 Municipal Harbor Plan and DPA Master Plan***

Following the values and principles established from the listening posts, the Mayor committed to pursuing all opportunities to achieve the community's vision for the harbor. Fundamental support was expressed for the working waterfront, which provided a foundation for city/state partnership.

The first step was to submit an approvable MHP to the State, and thereby achieve what could be achieved under the existing regulations. In 2009, the 2006 drafted plan (that had not been submitted to the State) was revised to reflect the community voice, to achieve 50% allowable supporting commercial uses within the DPA, and express a vision for diversifying and expanding opportunity for the maritime economy. The city's 2009 MHP and DPA Master Plan was accepted by the State on December 9, 2009.

Other opportunities that have been explored to achieve the community vision have included:

- Working in partnership with the State and other DPA communities to explore potential modifications to the DPA regulations consistent with the limited and targeted opportunities identified by the Waterfront Property Owners' Task Force
- Providing technical assistance to waterfront property owners
- Developing opportunity for diversified maritime port industry: hosting 2 Maritime Summits, purchasing property and developing a concept for an Ocean Development Center, supporting new ocean-centric research waterfront development, marketing the city and developing relationships with ocean science businesses and research organizations.
- Developing the Gloucester HarborWalk and cultural district.

For a full review of the results of the 2009 MHP, refer to the Report on the 2009 Plan, Review and Status Report, Appendix B.

For a full review of strengthening and diversifying the fishing industry, reference the 2014 Groundfish Port Recovery and Revitalization Plan:

<http://www.gloucester-ma.gov/DocumentCenter/View/2860>

#### ***Section 2.5.5: 2012 - 2014 Community Process***

The Harbor Plan Committee has met monthly from November, 2012 to July, 2014 in the development of the 2014 Harbor Plan.

Prior to engaging a consultant, the HPC held eight committee meetings between November 2012 and August 2013, including the following discussions:

- A review of the 2009 Plan and its recommendations
- Presentation of outcomes from the 2009 Plan (see Appendix B)
- Meetings with the Fisheries Commission, the Waterways Board, and the Maritime Economy Working Partnership

- Briefing from Coastal Zone Management on the Designated Port Area regulations
- Briefing from Coastal Zone Management on the Municipal Harbor Plan process
- Discussion of mission and scope for 2014 Plan Amendment.

The scope for the 2014 HP is the development of an economic strategic plan, accompanied by a proposed regulatory and institutional framework that will support reinvestment in waterfront properties.

In August, 2013, a consultant team led by Ninigret Partners, in partnership with Utile and Durand & Anastas, was selected to accomplish these objectives. In collaboration with the consultant team, the city's Harbor Planning Committee (HPC) met for the following additional meetings in the development of this Amendment.

- 9/18/13: HPC Meeting: Economic and Planning Baseline
- 9/25/13: General Public Meeting 1
- 10/9/13: HPC Meeting: Review of March 2010 DPA Technical Advisory Committee Report
- 11/13/13: HPC Meeting: Assessment of Economic Opportunities
- 11/19/13: General Public Meeting 2
- 12/9/13: HPC Meeting: Test Fit Workshop
- 4/23/14: HPC Meeting: Proposed Regulatory Framework
- 5/14/14: HPC Meeting: Proposed Economic Strategy
- 6/4/14: HPC Meeting: Regulatory Workshop
- 6/9/14: General Public Meeting 3
- 7/9/14: HPC: Comments on Proposed Harbor Plan

During the development of this Harbor Plan the city was also engaged in a public Dockage Study, Groundfish Port Recovery Planning process, and site planning and programming for the city-owned I4-C2 site at 65 Rogers Street.

## **Section 2.6: The Harbor Planning Area**

The area of focus for the Harbor Plan is illustrated in Figure 1. It encompasses the entirety of the Gloucester's Inner Harbor and adjacent landside areas extending from the Rocky Neck peninsula to the Fort and including the shoreline of the western side of the harbor to Stage Fort Park. On the landside, the area is bounded by Main Street in downtown, East Main Street, Rocky Neck Avenue, Commercial Street, and Stacy Boulevard. The main focus of the 2014 Amendment is to update the 2009 Harbor Plan by incorporating the DPA Boundary Review completed by the Office of Coastal Zone Management (CZM) in May, 2014, and to restructure the method of calculating Water Dependent Industrial Uses (WDIUs) and Supporting Uses (SU) within the DPA area subject to Chapter 91. (Figure 2)

One of the goals of this Harbor Plan is to adopt local land use regulations affecting the harbor in order to clarify and unify city and state regulations and to stimulate investment in the waterfront.

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Figure 1 - Harbor Planning Area

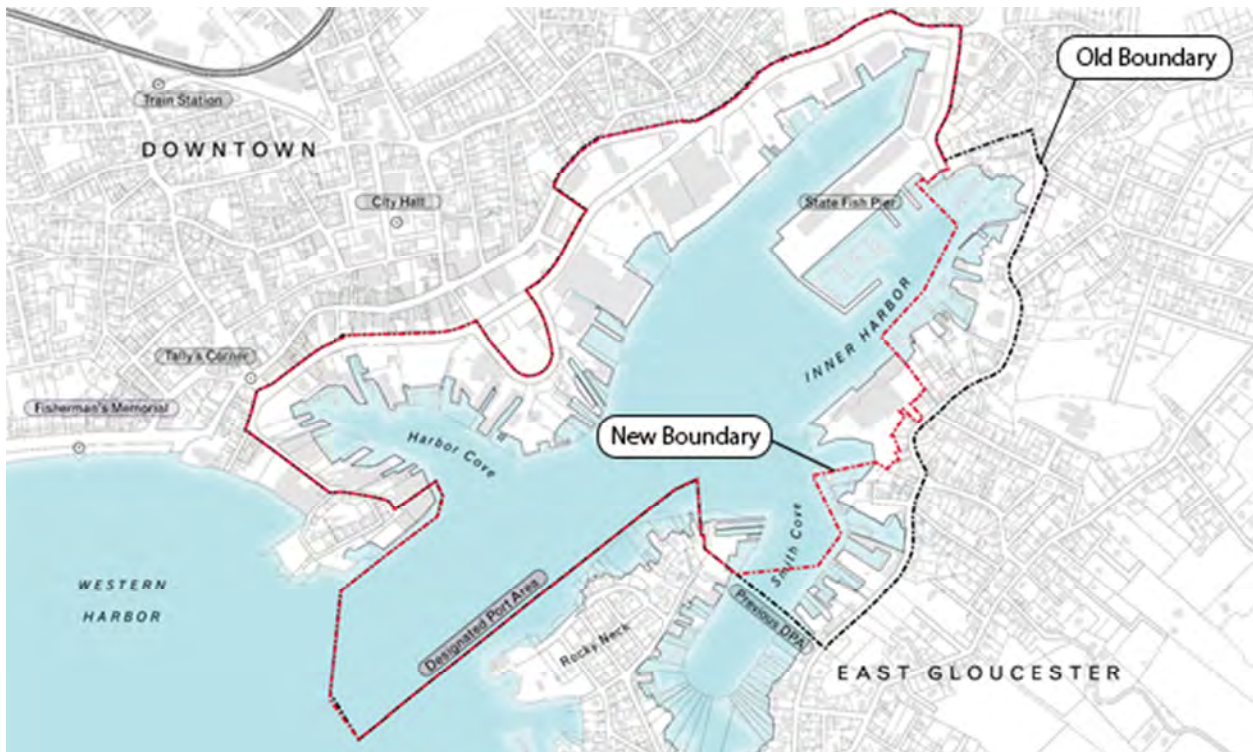


Figure 2 - Designated Port Area Boundaries

## **Section 2.7: Why is the plan being revised?**

Like any comprehensive plan, a harbor plan is intended to serve as a road map to guide a community in its decision-making. To be truly effective, a plan has to reflect the current status and needs of the community, both of which evolve over time. Changes in the regional economy, in the maritime industry (particularly fish harvesting and processing), and in the condition of the harbor's infrastructure, all contribute to the need for revising a key planning document for Gloucester Harbor.

In addition, there have been growing community concerns over underutilized waterfront properties and further decay of some parts of the port. Many believe that this is more the result of over regulation and lack of economic flexibility rather than directly tied to the poor condition of the port's public infrastructure, the latter being the central theme of the 1999 Plan.

The 2014 Amendment maintains many of the DPA goals established in the 2009 plan but uses a new methodology that results in an easy-to-administer and fair approach for calculating allowable supporting commercial uses within the area of the DPA subject to Chapter 91. The Amendment also provides local zoning restrictions for the DPA area outside of Chapter 91 jurisdiction, to ensure appropriate land uses that are compatible with water dependent industrial uses (WDIUs), and provides an Amplification of allowable DPA WDIUs in order to encourage new and emerging industries that may not have been envisioned when the DPA regulations were promulgated. This Amendment will provide guidance to developers and to the state's DEP that will prove helpful in their review and approval of Chapter 91 permits within Gloucester's DPA. The DPA Master Plan will also implement changes in the existing regulations and controls that should stimulate investment in the port and help to revitalize the waterfront.

## **Section 2.8: Assumptions**

The 2014 Amendment is intended to have a review in five years to ensure that sufficient flexibility has been introduced, whether by the plan and by any other means, to attract investment to the city's waterfront.

The envisioned growth of the maritime sectors in this port will require sustained effort on the part of both the city and the state to encourage development of these economies. Both the professional maritime industries and the research and renewable energy sectors, while compatible and synergistic with the fishing industry, may not grow without concerted assistance from state and federal economic development professionals. These economic sectors will be an asset to not only the city, but to the state and the nation, both in and of themselves, as well as for the continued national importance of the health of the fishing industry.

## Chapter 3: Key Features and Current Conditions on the Waterfront and the Regulatory Context

### Section 3.1: Land Use

#### Section 3.1.1: Overview

This Plan Amendment revises the 2009 approach to planning area and descriptions within Gloucester Harbor and, for consistency, utilizes in the following paragraphs the planning units and characterizations that appeared in the CZM document, Boundary Review of the Gloucester Inner Harbor Designated Port Area, dated February 3, 2014.

One of the key planning considerations for the Gloucester DPA is parcel size. (Figure 3) 33 of the 58 parcels are less than 1 acre in size. 21 parcels are less than a ½ acre. Only 13 parcels are greater than 2 acres. Average parcel size in the DPA (excluding roads) is 1.32 acres. By comparison:

- Average parcel size in Gloucester is 1.5 acres
- Average parcel size for the BP (business park) zone is 5.8 acres
- Average parcel size for GI (general industry zone) is 3.5 acres

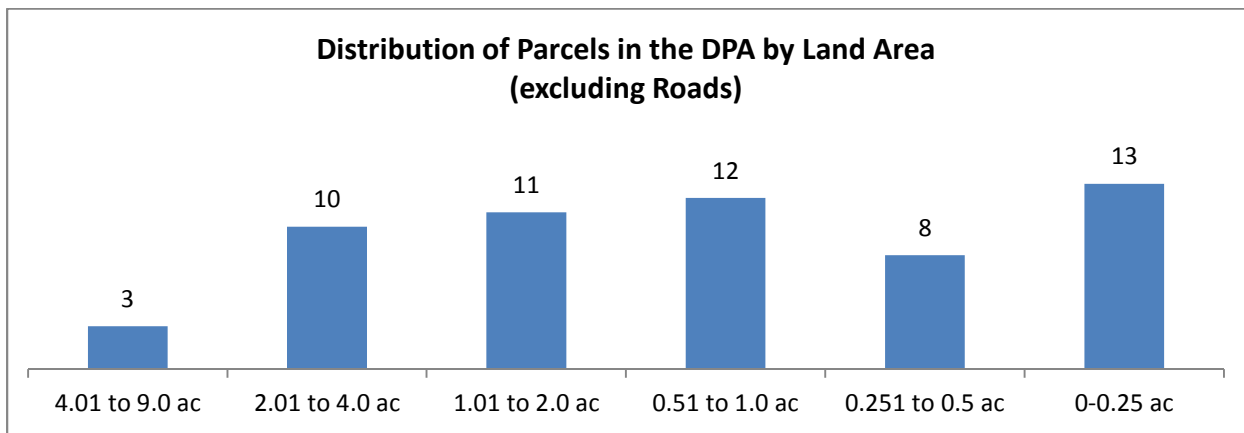


Figure 3 - Distribution of Parcels in DPA by Land Area

#### Harbor Cove

The Harbor Cove planning unit comprises fifteen-and-a-half acres and includes the entire DPA land area that encompasses Harbor Cove, from Cape Pond Ice on Commercial Street to the U.S. Coast Guard station on Harbor Loop. The Harbor Cove area is locationally and functionally distinct in that its geography is distinguished as a cove between the Fort Square neck on the southwest side of the harbor entrance and the small peninsula at Harbor Loop that protrudes into the harbor. The planning unit area is central to the Gloucester fishing fleet's ice, fueling, and processing facilities. Most of the land area here is in water dependent industrial use. There are some minor areas of non- water dependent uses, such as retail, office and restaurants, but the substantial portion (73%) of the land area is devoted to water dependent industrial uses, and the majority of the waterfront is used to provide berthing and services to commercial vessels, primarily the city's fishing fleet.



The City of Gloucester Harbor Plan and Designated Port Area Master Plan (2009) describes Harbor Cove as “the traditional heart of the fishing industry” (p15). The area provides significant and essential docking space for fishing vessels, and many of the fleet’s core support services are located here, including Cape Pond Ice and Felicia Oil fueling services. The City’s key public commercial vessel facilities are located within the Harbor Cove area, including both the St. Peter’s Landing and the waterfront at 65 Rogers Street. These facilities are licensed to provide berthing as well as parking, lay down, and storage space for gear. Important processing facilities, including Ocean Crest, Neptune’s Harvest fertilizer, Intershell, Mortillaro Lobster, Fishermen’s Wharf, and Aran Fisheries are all located in the Harbor Cove review area. Many of these uses have invested significant resources to improve operations and/or waterfront facilities. Coast Guard Station Gloucester is located at the edge of Harbor Cove on Harbor Loop, and provides essential port safety and support for the harbor and the region.

There are non-water dependent uses in Harbor Cove, but these constitute only a minor overall use of this planning unit. Restaurants such as the Brew Pub, Lat 43, and the Gloucester House, while non-water dependent uses, are licensed to accommodate the primary water dependent industrial uses on the waterfront, and many have made recent improvements to these areas. The Brew Pub is required by license to preserve space for water dependent industrial uses, while also providing financial support to the Gloucester Port Maintenance fund, as required by the City of Gloucester Harbor Plan and Designated Port Area Master Plan. Latitude 43 and the Coughlin office building are licensed to provide access to the waterfront for vehicles to support water dependent industrial waterfront uses. In addition to the Gloucester House Restaurant, the Seven Seas Wharf also hosts excursion vessels such as the schooner Thomas E. Lannon, Seven Seas Whale Watch, and Wejack Fishing Charters. The Building Center is a non-conforming, non-water dependent industrial commercial use that continues to function in this capacity as it did before the establishment of the Gloucester Inner Harbor DPA.

The city-owned parcel at 65 Rogers Street is currently licensed as public parking as a temporary use for a term of five years, while the city’s Planning and Development Office works with the Gulf of Maine Research Institute to assess the viability of a multi-tenant facility designed for water dependent industrial uses for the site. This parcel is directly landward of a city-owned waterfront parcel that functions as one of the city’s key berthing areas.

### North Channel

The North Channel planning unit extends along the length of the North Channel and runs from the Harbormaster building on Harbor Loop to Gordon Thomas Park at the head of the North Channel. This 27- acre area is one of the most substantially industrial sections of Gloucester’s DPA, both on the land and along the developed shoreline. This area includes the harbormaster offices; Maritime Gloucester’s marine railway; Americold’s two key cold storage facilities; several fish processing facilities, including Gorton’s of Gloucester, Zeus Packing, and Steve Connolly Seafood, Inc.; the Cape Ann Seafood Exchange; and large commercial boat repair facilities at Rose’s Marine. While there are some vacant buildings in this area that have supported water dependent industrial uses in the recent past, these areas remain viable for these uses. The Cruiseport cruise terminal site receives and accommodates both cruise ships and freight, with the ability to accommodate ships up to 500 feet drawing up to 20 feet. The city’s large-scale wind turbines were landed at the site’s docking facilities in early 2013. In addition to these primary water dependent industrial uses on the waterfront, Gorton’s maintains a large parking area and office

facilities accessory to its primary water dependent industrial fish processing use between Rogers and Main Streets. While this area is zoned Central Business, these functions are integral to this water dependent industrial use. With its entirely developed shoreline, over 89% of the land area in the North Channel review area is primarily devoted to and licensed for water dependent industrial uses. The few, minor areas of non-water dependent industrial use in this planning unit support, but are largely incidental to, the predominantly water dependent industrial nature of this area. Approximately 10% of the North Channel review area is occupied by the National Grid substation, Halibut Point restaurant, Solomon Jacob and Gordon Thomas Parks, and Flannigan's service station.

#### State Fish Pier

The State Fish Pier planning unit is located at the head of the harbor and includes the entire Jodrey State Fish Pier and the area along the North Channel on Parker Street. This 10-acre area is focused specifically on landing and processing of fish and the support of commercial fishing vessels. The Jodrey State Fish Pier, maintained by Mass Development, is 100% dedicated to commercial fishing needs. Facilities here include berthing for the commercial fleet, Coast Guard and Massachusetts Environmental Police vessels, and large herring vessels, as well as a fish processing plant, a cold storage facility and an office building that supports Mass Development, Massachusetts Environmental Police, and CZM regional offices. Most of the land area on Parker Street is also primarily dedicated to water dependent industrial uses, including processing facilities for National Fish and Seafood, as well as office space and parking accessory to these. A mixed use facility supports Three Lantern Marine and Fishing, which supplies fishing gear, as well as a yoga studio and charter vessels. Over 94% of the State Fish Pier review area is substantially dedicated to water dependent industrial uses.

#### Cold Storage East Gloucester

The Cold Storage East Gloucester planning unit is comprised of the four-and-a-half-acre peninsula that includes the extensive cold storage facility property in East Gloucester (Americold). This property is currently used by multiple fish processing companies in the Gloucester DPA for both storage and processing of fish. The City considers this facility to be very important to the continued functioning of these water dependent industrial facilities. The waterfront is currently underutilized, but Americold is currently investing in maintenance and improvements of the facility. This review area is functionally distinct from the surrounding areas primarily because of its substantially industrial character and large scale, both on land and on the developed waterfront. One hundred percent of the Cold Storage East Gloucester planning unit is currently in water dependent industrial use.

#### Smith Cove

The Smith Cove planning unit includes the nine-acre area from the Cold Storage East peninsula to the limit of the DPA on East Main Street in Smith Cove, and is largely residential, with commercial, recreational and residential mixed uses occupying the waterfront. The waterfront in this area is generally developed with wharves, piers and floats which primarily accommodate smaller, mostly recreational vessels. The North Shore Arts Association hosts a licensed recreational boating facility, and Beacon Marine functions as a mixed-use recreational, residential and retail facility. There is limited commercial dockage here, primarily at the Santapaola wharf, and other mixed waterfront uses including boat storage and some boat repair, but these are incidental to the predominantly residential,

recreational and commercial uses in the area. Uses along East Main Street are single family residential as well as mixed residential and commercial, with the section from Americold to Pirates Lane, including a dentist, a laundromat, a restaurant, and a retail store, zoned by the city as Neighborhood Business. Approximately ninety-five percent of the Smith Cove planning unit is primarily dedicated to a mix of residential, commercial, and recreational uses.

#### Rocky Neck

The Rocky Neck planning unit is the area of Rocky Neck within the DPA and includes the Gloucester Marine Railways, which is the oldest continuously operating marine railway in the country. This area is primarily engaged in repair and maintenance of larger vessels in dry-dock, and accommodates the largest of fishing vessels, tugboats, ferries, excursion vessels, and schooners in addition to smaller vessels. The developed shoreline includes two marine railways and an 85-ton travel lift, and also provides services and berthing for commercial vessels. This planning unit fully functions as water dependent industrial use and is distinct from adjacent areas based on the scale of the industrial operations on site.

#### Additional areas

The harbor planning area also includes the area between the inner harbor and Stage Fort Park, along the boulevard.

### ***Section 3.1.2: Water-Dependent Uses***

Water-dependent industries of varying sizes abound in the harbor. The Industrial Port is dominated by both water-dependent and non water-dependent industry, with lesser concentrations of these activities in Harbor Cove and along the East Gloucester waterfront. While Gorton's and Americold have been traditionally classified as water-dependent and continue to own a large part of the existing waterfront industrial infrastructure in the harbor's DPA, these companies are no longer dependent on fish stocks landed in Gloucester or on local marine transportation to carry their products to market. Their fish supplies and products they produce or store now arrive and are shipped out by truck.

A particularly interesting and valuable collection of water-dependent industries exists in Harbor Cove, the oldest portion of the harbor. Although these businesses tend to be relatively small, most directly support the commercial fishing fleet and utilize the few remaining historic finger piers, thus retain some of the traditional character of Gloucester Harbor.

Along the East Gloucester waterfront is a concentration of water-dependent commercial uses, including several facilities catering to recreational boating. Several of these water-dependent facilities are in disrepair and not fully or optimally using the property.

At the request of the City, the Executive Office of Energy and Environmental Affairs, through its Office of Coastal Zone Management, conducted a DPA Boundary Review to ensure that the DPA accurately reflected the boundary of the industrial port. The result of that investigation was the April 27, 2014 Decision by the Director of Coastal Zone Management to remove two study areas along the East Gloucester waterfront from the DPA. These two areas include all of the recreational marinas that had been in the DPA under grandfathering status.



Two large properties in East Gloucester remain in the DPA: the Americold 100,000 s.f. cold storage facility on East Main Street, and the Gloucester Marine Railways facility on Rocky Neck. Each of these properties host significant water dependent industrial uses in the DPA.

The continuing strength of the waterfront is evidenced by the overall use patterns of the harbor with only a few, though significant, parcels standing vacant. Most of these are in Harbor Cove, most notably I4C2. Although not vacant, some areas are clearly underutilized, particularly along the East Gloucester waterfront, although most parcels are home to functioning businesses that should be positioned to capitalize on improvements in the local economy.

### **Section 3.1.3: Regulatory Jurisdictions**

There are a number of key jurisdictions and regulations which affect land use around the harbor as is illustrated in Figure 4. They include:

Designated Port Area (DPA) is the area of developed waterfront designated by the state under 301 CMR 25.00 in which policies and regulatory authorities are directed toward preserving water-dependent maritime industry and supporting uses.

Municipal Zoning controls use, density and dimensions of site development within the city. The area subject to this Municipal Harbor Plan falls within several zoning districts. The majority of land adjacent to the harbor falls within the Marine Industrial (MI) zone, designed with the intent of promoting marine industrial use and requiring that the water's edge be reserved for vessel access. This Plan Amendment proposes two types of MI zoning, as detailed in Section 5.

Historic High Water line (HHW) is the inland limit of the state's jurisdiction under Chapter 91, the Public Waterfront Act, administered by the DEP. The HHW depicted on Figure 4 is an approximation based on available historic maps. The actual location of HHW may be more landward or seaward, and is determined by the DEP on a case-by-case basis, but the HHW used for this plan is based on survey and research recently completed under a CZM contract and is the best available general estimate of the line.

Board of State Harbor Commissioner's Line (also refer to as the Harbor Line), is a line proposed by the city and approved by the state legislature and defines the seaward limit beyond which no structures can be built.

Note: The U.S. Army Corps of Engineers' jurisdiction in the harbor for Section 10 (Rivers and Harbors Act) is up to the mean high water line and for Section 404 (Clean Water Act) is up to the spring high (i.e. highest astronomical) tide line including wetlands.

These and other regulatory programs are discussed in greater detail in Section 3.4.

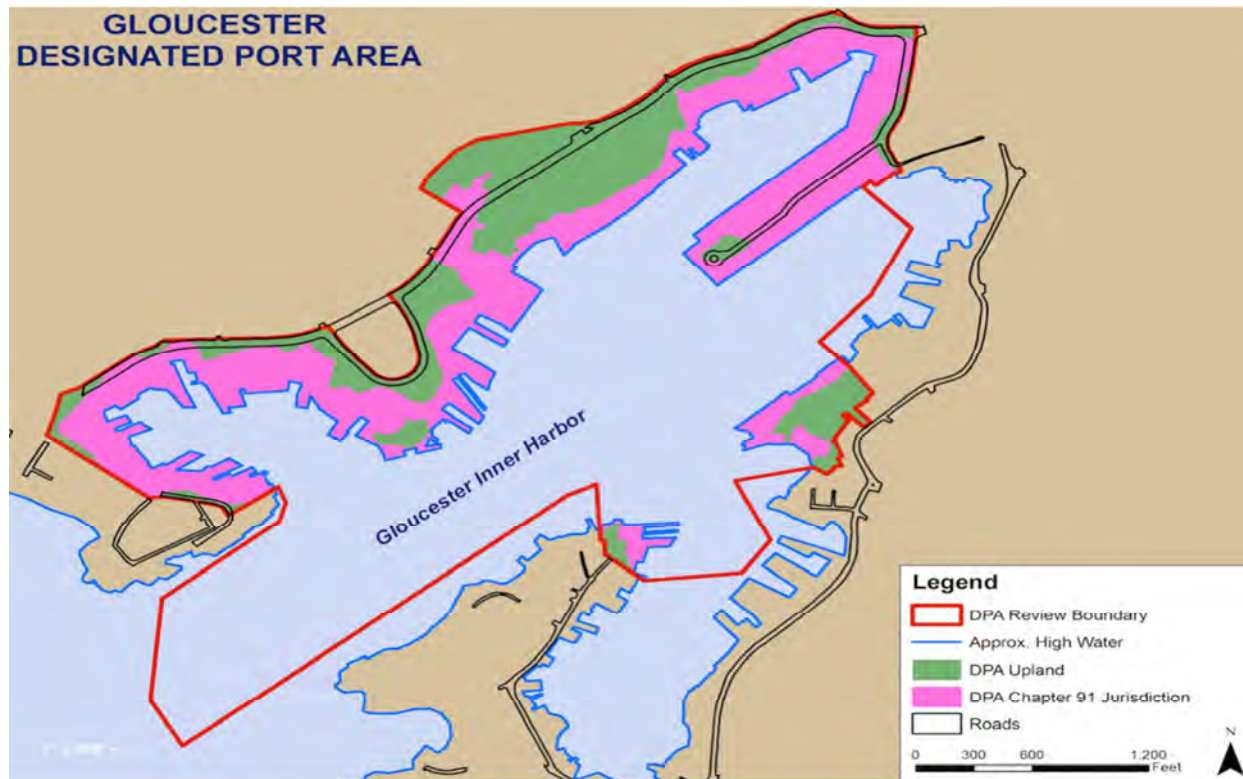


Figure 4 - Key DPA Jurisdictions

### Section 3.2: Navigation and Water Use

Gloucester Harbor is used for a variety of purposes, including marine shipping, commercial and recreational fishing, boating tourism, and a mix of other commercial, industrial and recreational uses. The operating depth of the shipping channel at mean low water is 18.5 feet and the relatively small size of the harbor make it impractical for use by very large ships (generally not greater than 450 feet and with drafts of over 20 feet).

#### Section 3.2.1: Harbor Access and Recreational Areas

Over the years, Gloucester has made improvements to enhance the experience for pedestrians along the harbor shoreline.

1. The Gloucester Tourism Commission developed a Gloucester Maritime Trail comprised of four distinct thematic routes:
  - Settler's Walk through the Stage Fort Park area;
  - Downtown Heritage Trail through the downtown Gloucester Historic district;
  - Vessel's View through the State Fish Pier; and
  - Painter's Path through the Rocky Neck Avenue artist's colony (Figure 5).
2. Six small public parks: Gemmellaro/Ciaramitaro Playground, St. Peter's Park, Gus Foote Park, Solomon Jacobs Park, Gordan Thomas Park, and Ben Smith Playground.
3. Four public landings allow boating access: Solomon Jacobs, Cripple Cove, Robinson's and Rocky Neck (Figure 5).

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**Figure 5 - Public Access Points**

Despite these enhancements, the city found from the 2008 Listening Post community meetings that citizens continued to find the harbor inaccessible. “People overwhelmingly support public access along the waterfront, noting the inaccessibility of the harbor to its citizens, especially its youth.” (July 7, 2008 Community Values that will guide harbor development, (ref: <http://www.gloucester-ma.gov/DocumentCenter/View/843>))

In 2009, the Seaport Advisory Council granted \$800,000 toward the \$1.5 million acquisition of the key I4-C2 parcel located on the Harbor Cove portion of the DPA. The City was then positioned to connect the I4-C2 public wharves easterly to the downtown and the Maritime Gloucester and westerly to St. Peters Park and the Visitors Center with a unified core harbor walk. The 2009 Harbor Plan and the 2010 Harbor Economic Development Study identified the connections necessary for this harbor walk and the City’s Community Development Department developed detailed alternatives for each section of the proposed walk.

Mayor Kirk was joined by Lieutenant Governor Timothy Murray, Senator Tarr, and Representative Ferrante, to cut the ribbon on the City's new \$1.2 million HarborWalk. Designed by Cambridge Seven Associates, the new HarborWalk weaves between the wharves of the waterfront and the brick alleys of Main Street, telling the stories of Gloucester and unveiling the layered richness of this port city.

A primary goal of the HarborWalk is to reunite the City’s working waterfront with its historical Main Street and cultural institutions to create destination in the downtown/harbor area. Its success in bringing together the partnerships and elements for this unity is made visible by the May 2013 designation from the MA Cultural Council for The City of Gloucester Harbortown Cultural District. The HarborWalk has received four state and national awards for excellence.

Stage Fort Park, located outside the DPA in the Western Harbor is home to Gloucester's Visitor and Welcoming Center. It was the site of the city's first settlement in 1623. Stage Fort Park offers parking, a beaches, picnic areas, playground, and excellent views of the harbor. Stacy Boulevard, also in the Western Harbor, features a promenade overlooking Gloucester Harbor, the Gloucester Fishermen's Monument (Man at the Wheel), and the Fishermen's Wives Memorial Statue.

Peak season tourist traffic can at times exceed the capacity of the available roadway and parking infrastructure around the Inner Harbor. East Main Street, which provides access to Rocky Neck and the artist colony, is narrow, winding, and can be difficult to negotiate, particularly when truck traffic and visitor traffic combine.

### ***Section 3.2.2: Vessel Berthing and Moorings***

#### **The 2014 Dockage Study**

In February, 2014 the city of Gloucester completed a comprehensive dockage study to determine the amount of berthing capacity across the harbor.

From review of property owner questionnaire responses, supplemented by detailed 3-D Pictometry mapping, the Dockage Subcommittee, the Harbor Planning Director and the Harbormaster, were able to review and estimate dockage on a property by property basis throughout the inner harbor, to get reasonable totals for the various kinds of dockage available in Gloucester's Inner Harbor. (See table below). From an analysis of multiple databases and survey responses from vessel owners, the Dockage Study showed that of the 734 vessels with federal and or state permits whose homeport or principal port is Gloucester or that landed fish in Gloucester in 2011, 210 commercial fishing vessels currently berth at docks/wharves in Gloucester Inner Harbor. This is a decrease from the 250 commercial vessels that considered Gloucester's Inner Harbor their homeport in 2009.

**Table 1 - Amount (linear feet) of dockage in Gloucester Inner Harbor by use category**

Total length of commercial dockage <sup>a</sup>	16,955 lf
Total length of recreational dockage	5,920 lf
Total length of other (government, shallow, transient, loading)	1,540 lf
Total length of dockage in the inner harbor	24,415 lf
Potential for expansion of dockage	2,960 lf
Existing and potential	27,375 lf
The total length of commercial fishing vessels at berths in the inner harbor <sup>b</sup>	9,754 lf

<sup>a</sup> The Gloucester Harbor Characterization, 2004 estimated commercial wharves and piers in the inner harbor at 13,195 linear feet. No methodology or source was cited.

<sup>b</sup> There is no direct correlation between total dockage length and total vessel length as many vessels are not berthed broadside, but it is a useful number.

Thirty-eight percent (38%) of the commercial vessels are docked at "protected" berthing, defined here as dockage at publicly-owned facilities. Most of the harbor's publicly owned docks and wharves used by the commercial fleet and the privately owned marinas used for recreational boats are in reasonably good condition. It is believed that there is another category of dockage protected or reserved for



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commercial fishing vessels by virtue of the terms of existing Chapter 91 licenses at private facilities, though the amount has not been systematically determined.

Unfortunately, many of the harbor's private-owned docks and wharves used by commercial vessels are badly deteriorated and in need of major renovation or a complete rebuild. There are at least four areas in the harbor (i.e. the Americold East Gloucester, MassElectric, the Building Center, and the old FBI properties) where berthing has been available in the past but the docks and/or wharves have been completely removed or where the property owners no longer permit access to the water's edge. The 2006 survey estimated that another 50 or more berths could be created in these four areas (the number obviously dependent on the size of vessels for which the docks would be designed.)

In response to the question is there an expectation to expand dockage, only 8 of the 34 respondents indicated that they were considering expansion of dockage. However, concerns about lack of demand and the city's commitment to supporting marine industrial business were expressed. Of the 26 respondents who are not considering expansion reasons provided included: proximity of harbor line; need for dredging; fully utilized watersheet, exposure to south wind, property lines of neighbors. Another comment from a private property owner noted the challenge presented by the competition from the state pier and city-owned facilities. For private landowners, the combination of competing with these rates, the seasonality of the industry, and current low demand makes maintaining dockage for commercial fishing vessels difficult.

Seventy-one (71%) of the berthed vessels and all except two (located at Rocky Neck) of the largest vessels are accommodated at facilities on the northwest side of the harbor from Harbor Cove to the State Fish Pier. East Gloucester and Smith Cove sub-areas do berth about one-fourth of the small and mid- size commercial fleet.

**Table 2 - Dockage Locations by Size of Vessel**

<b>Sub-area</b>	<b>&lt; 45 feet</b>	<b>45 – 65 feet</b>	<b>&gt; 65 feet</b>	<b>Totals</b>	<b>Percent</b>
Harbor Cove	27	5	8	<b>40</b>	<i>19</i>
North Channel	26	18	4	<b>48</b>	<i>23</i>
State Fish Pier	41	11	8	<b>60</b>	<i>29</i>
East Gloucester	16	7		<b>23</b>	<i>11</i>
Smith Cove	25	1		<b>26</b>	<i>12</i>
Rocky Neck	8	3	2	<b>13</b>	<i>6</i>
<b>Totals</b>	<b>143</b>	<b>45</b>	<b>22</b>	<b>210</b>	<i>100</i>

Vessels of 100 feet or more are currently berthed at K&J Fisheries and Jodrey State Fish Pier. Other properties with the capacity to support larger vessels based on the size of currently-berthed vessels are Felicia Oil, Fishermen's Wharf, the Gloucester Marine Terminal, Roses Marine, New England Marine Resources, and Gloucester Marine Railway. The number possible depends on configuration.

Several other sites in the inner harbor have wharves that would be ideal for vessels of this size: Americold's properties at 69 Rogers Street (390 foot wharf), 1 Rowe Square (546 foot wharf) and

Gorton's 125-foot wharf at 127 Rogers Street. Mass Electric owns property between the Americold sites that with improvement could also support large vessel berthing. Americold's property on the east side of the harbor at 155 East Main Street has 350 feet of wharf with the potential for an additional 660 feet. Dockage at these sites is currently unavailable because of security concerns of the property owners.

#### Recommendations from the Dockage Study for Gloucester's Designated Port Area

- Review existing Chapter 91 licenses and zoning approvals for DPA properties for requirements that waterfront facilities be reserved for commercial/fishing vessel dockage and support.
- The unused wharves at the Americold, Gorton and, possibly, the Mass Electric properties, represent ideal opportunities for expansion of commercial berthing, especially for larger vessels because of the long straight bulkheads and ready access to navigable water. These features were designed and permitted for such use, which is not needed by the current use of the upland businesses
- Work with the property owners in an effort to overcome concerns about security of the sites.
- Ensure commercial vessel berthing is part of any permitting for new development or improvements on the property.
- Explore appropriate mechanisms that would enable public investment in the repair and upgrade of waterfront infrastructure in support of the commercial fishing fleet on private property.
- Support MassDevelopment's proposal to increase dockage at the Jodrey State Fish Pier.

#### Other Dockage and Berthing

Engineering and plans are complete for reconstruction of dockage at the Harbormaster's office at Solomon Jacob's Park. The new facility will have a float system to accommodate Harbormaster's vessels, increase dinghy dock space, and provide a shoreside pump out facility. The project now awaits completion of remediation and cleanup of this property, which is owned by National Grid, and was a former gasification plant. Adjacent to the Harbormaster's site, Maritime Gloucester has completed renovations to its extensive wharves, assisted in part with state funding awarded by the Seaport Advisory Council.

The current waiting list for a private mooring issued by the City is about 460 people. That list has been significantly reduced from 1342 in 1999. To reduce the list, the city initiated a small (\$10) administrative fee and it expanded its available moorings.

The Waterways Board continues this work and has a potential location identified in the southeast outer harbor.

At the request of the City, the Executive Office of Energy and Environmental Affairs, through its Office of Coastal Zone Management, conducted a DPA Boundary Review to ensure that the DPA accurately reflected the boundary of the industrial port. The result of that investigation was the April 27, 2014 Decision by the Director of Coastal Zone Management to remove two study areas along the East Gloucester waterfront from the DPA. These two areas include all of the recreational marinas that had been in the DPA under grandfathering status.

### ***Section 3.2.3: Navigation and Dredging***

Navigation channels and bathymetry are available on NOAA Chart No. 13281, 19th Edition, Feb 2010. The average tidal range is 8.7 feet, but frequently exceeds 10 feet. The current controlling water depths at mean low water (MLW) in the main channels leading into different section of the harbor are 15.5 feet for Harbor Cove, 17 feet for the North Channel, 18 feet for the South Channel, and 15 feet into Smith Cove and Rocky Neck. The North Channel increased to 18 feet after several rock obstructions were removed from the channel in 2006.

Aside from the channel, approximately 250,000 cubic yards of dredged material needs to be removed from the Inner Harbor and the Annisquam River, roughly 150,000 cubic yards of which are likely too contaminated to be disposed of offshore. Confined Aquatic Disposal (CAD) cells were identified as the most economical option for disposing of this material (MCZM 1998) but public opposition to this method has prevented this project from advancing. The north entrance to the Annisquam River was restored to a depth of 8 feet in 2008, but eleven areas require additional maintenance dredging throughout the river. However, a 1995 study prepared by the Army Corps of Engineers (ACOE) found that maintenance dredging of the Federal Channel could not be economically justified (ACOE 1995).

In 2013, the MA Department of Transportation developed the Ports of MA Strategic Plan. The need for regular maintenance dredging of areas like the Annisquam River is highlighted in this Plan as a priority for the MA ports. It is clear that the Army Corps of Engineers is not funded for projects the size of the maintenance needs in the MA ports. The Ports Strategic Plan directs the Commonwealth to develop a dredge maintenance plan for the north shore communities and to look at the possibility of investing in a dredge that could support these regular and important needs.

Based on 2012 survey responses received from a number of property owners around the harbor, water depths at berths are:

- Harbor Cove: Berths along the outer portion have 14-16 feet at MLW. Berths at properties deeper in to the cove are shallower with nearshore depths at 2 feet or less, increasing to a minimum of 10 feet.
- Depths along the western shoreline adjacent to the North Channel are currently -21 feet at Americold and -18 feet surrounding the Jodrey State Fish Pier.
- Permits have been approved to dredge the berthing areas between the North Channel and adjacent bulkheads/piers. About 20,700 c.y. will be removed between the North Channel and the State Pier to a depth of 26 feet to accommodate the 400 foot vessels. Another 51,200 cy is to be removed from the berthing areas along the opposite side of the North Channel from the USCG station north. This latter portion is contingent on completion of National Grid's remediation project which includes dredging the top layer of sediment from about seven acres of sub-tidal area in front of its property and adjacent Coast Guard and harbormaster properties. This project is due to begin in October 2015 and will take three years.
- Water depths at berths at the far end of the South Channel are -5 feet at high tide. Along the eastern side depths range from -3 feet near shore to -12 feet toward the channel.
- Depths near Beacon marine range from -8 feet to -15 feet MLW.

### ***Section 3.2.4: Gloucester's Maritime Economy***

Gloucester's maritime economy represents roughly one third of all jobs and 21 percent of the total wage base of the city. The total employment base of the city is approximately 10,000 jobs of which 2,909 are categorized as maritime employment.

Other key industries in Gloucester include durable manufacturing, which accounts for 1,618 jobs, healthcare which accounts for 659 jobs, construction which accounts for 258 jobs and financial services which accounts for 216 jobs. Gloucester's proximity to the sea continues to be a large driver of employment in the city.

Gloucester's total wage base is approximately \$609 million of which \$129 million is attributed to the maritime economy. This is second only to durable manufacturing, which accounts for \$197 million of the total wage base. Healthcare follows with \$32 million and financial services and construction account for \$27 million and \$11 million of the total wage base, respectively.

Gloucester's maritime economy consists of series of major clusters. The major clusters of Gloucester's maritime economy include:

- Fishing Fleet: 717 jobs; \$28.7 million payroll
- Seafood industry (seafood processing/brokering/distribution): 670 jobs; \$59.9 million payroll
- Tourism (hospitality/recreation/amusements): 890 jobs; \$19.7 million payroll
- Research/Science and Education: 632 jobs; \$20.8 million payroll
- Government (NOAA, MA DMF, USCG, MA Env. Police, MA Dev Fish Pier Mgmt, CZM, city Harbormaster and Asst Harbormasters): 315 jobs; \$22 million payroll

Several key findings were realized during the analysis of the maritime economic baseline:

- Gloucester is subject to greater seasonal swings than other tourism dependent communities in Massachusetts – the peak to baseline employment swing in hospitality employment is equal to a 94% increase compared to communities like Newburyport or Lenox where the seasonal increase is only 32% and 68% respectively
- Gloucester's historic fisheries market position (and port) has been built on large volume, relatively low price realization fish product. Of the four major fishing ports in New England Gloucester has historically lagged in price per landed pound due to its product mix of groundfish. The historic product of the fishery has been substituted by other species and locations and as volume drops the ability to sustain core support services becomes more difficult. For example, Gloucester represented 52% of the landed fish pounds in 1981. Today Gloucester represents 25% of the volume.

The city understands the critical role that maritime activities play in Gloucester's overall economic well-being and is committed to maintaining, strengthening and diversifying that economy.

### ***Section 3.2.5: Commercial Fishing Industry Status***

Founded in 1623 by fish companies from Dorchester and Gloucester, England, the City of Gloucester has a history, culture, physical structure, and economy inextricably linked to the fishing industry (Hall-Arber et al. 2001). Abundant stocks of key species such as cod flourished off the coast of Cape Ann, making



Gloucester Harbor an ideal place not only to dock ships, but also to develop the infrastructure necessary to process and sell the catches.

As the fishing fleet grew, so did the support infrastructure, leading to a harbor dominated by fishing-related businesses. Despite recent regulations closing certain areas to fishing and limiting the number of days at sea, Gloucester Harbor continues to support the needs of the fishing industry. Cold storage/freezing facilities, bait and ice suppliers, oil companies specializing in the sale of fuel for fishing vessels, fish brokers, marine supply, vessel repair, and the Gloucester Seafood Display Auction line the harbor's wharves.

In 2010, NMFS enacted a radical shift in management of the fishery, shifting from Days at Sea allocations to Catch Shares. Fishermen were given the option of forming and joining into a sector, and thereby receive a preferential amount of the available quota. Each sector receives an amount of quota based on the permits held by members of the sector. In Gloucester, three sectors were established: sector 2 representing trawlers, sector 3 representing gillnetters and other fixed gear, and a nonfishing sector for the Gloucester Fishing Community Preservation Fund. The latter is a private nonprofit sector formed to purchase quota to keep ownership of quota being sold off to highest bidders, potentially market investors with little connection and allegiance to the health of the fishing community. Fishermen were allowed to stay in the common pool, the alternative to joining a sector, but it was clear that the sectors would receive the bulk of the quota that would be necessary for fishermen to protect the value of their permit. Recent economic analysis in New Bedford, for example, shows that as of 2011, there were no fish being caught any longer by fishermen in the common pool.

In 2012, NMFS radically altered its estimates of the cod stocks, and instituted severe cuts in allocations of quota for Gulf of Maine Cod and Georges Bank Cod to take effect on May 1, 2013, for a period of not less than two years.

On September 13, 2012, based on the severity of the projected impacts on the groundfish industry (harvesters and shoreside businesses), the U.S. Department of Commerce declared the Northeast Multispecies Fishery a disaster. Throughout the winter of 2013, fishermen and their representatives sought relief from the proposed regulatory limits, but were unsuccessful.

In January, 2014, Congress appropriated \$75 million in fishery disaster aid nationwide. The New England states and New York will receive approximately \$11 million. These states have reached an agreement to allocate \$32,463 in direct aid to fishermen -336 eligible permit holders.

The disaster aid will also be allocated to two other relief measures: \$11 million in state-specific grants which the individual states can distribute with "some flexibility to determine the most appropriate way to address the unique and varied needs of their fishing communities," and another \$11 million to fund a potential vessel buyout or buyback plan.

The disaster aid is expected to be distributed in the Fall, 2014.

The port has seen a shift to greater reliance on lobster harvesting (Hall-Arber et al. 2001). 1,567,145 pounds of lobster were landed by boat in the Port of Gloucester in 2005, and continued to rise reaching 2,179,315 in 2013. (Source, NOAA, Landings of all Species, Gloucester MA. From dealer weighout database.)

### **Section 3.2.6: Commercial Lobster Industry**

American Lobster (*Homarus americanus*) is Massachusetts' most valuable single-species fishery (Wilbur and Glenn 2004). Gloucester supports a very active lobster fishery in the waters surrounding Cape Ann - including the shoreline, Outer Harbor, and open coastal waters. In fact, in 2002, the port of Gloucester landed the most total pounds (1,851,633 pounds) and had the highest number of active lobster fishers (195 fishers) of any port in the Commonwealth of Massachusetts (Dean et al. 2002). Landings of lobster reached 2,179,315 pounds in Gloucester in 2013. (NOAA.)

Due to a city ordinance created in part to help maintain a safe navigation channel, lobstering is not permitted within Gloucester's Inner Harbor. The line for this closed area extends from Cape Pond Ice, located on Fort Point, to a point on Rocky Neck at the northwest corner of the Gloucester Marine Railway.

### **Section 3.3: Environmental Conditions**

Typical of any working port, environmental conditions in Gloucester's Inner Harbor have been adversely impacted over time by a number of anthropogenic activities including:

1. Contamination of the water column and seafloor from land-based sources (storm water, raw and treated sewage, toxic spills, fish processing, incomplete combustion of fuel, etc.) and vessels (sewage, petroleum and fuel spills).
2. Degraded and lost habitat due to dredging, seafloor scouring from mooring chains and vessel traffic, pollution from vessels and land-based sources, filling of coastal and intertidal habitats, and rising sea levels.
3. Loss of biodiversity due to episodic low concentrations of dissolved oxygen, the introduction of non-indigenous species (via commercial and recreational boating), contaminated sediments and habitat degradation.

Sediment samples taken a number of years ago revealed low levels of heavy metals in Gloucester Harbor, typical of older industrial ports. Copper and lead were prevalent in the Federal Channel. Elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) were measured in the North, South, and Federal Channels and detectable levels of polychromated biphenyls (PCBs) were found throughout the Federal Channel and in Harbor Cove. Although much of the sediment in the Annisquam River was clean, some areas were characterized by low levels of PAHs, PCBs, copper and lead.

### **Section 3.4: Regulatory Conditions**

Gloucester Harbor is subject to regulatory authorities of local, state, and federal governments. The city regulates land use and the density and dimensions of new development through its Zoning Ordinance. It also regulates wetlands through its General Wetlands Ordinance.

The commonwealth has regulatory authority over the use and alteration of filled and flowed tidelands under Massachusetts General Law Chapter 91. The purpose of this law and its corresponding waterways regulations (310 CMR 9.00) are to protect the public's rights to use the state's waterways for the purposes of fishing, fowling, and navigation. Chapter 91 applies to structures such as piers, wharves, floats, retaining walls, revetments, pilings, and some waterfront buildings. All existing structures not

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previously authorized and any new construction or change of use of a structure requires Chapter 91 authorization.

The US Army Corps of Engineers (ACOE) regulates shorefront activities including dredging and filling in or near coastal waters below the High Water Mark (Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act). The Federal Emergency Management Agency (FEMA) is the federal agency responsible for overseeing recovery and relief from natural disasters. FEMA administers the National Flood Insurance Program, which produces Flood Insurance Rate Maps (FIRMs). FIRM is the official map of a community on which FEMA has delineated both the special flood hazard areas and the flood risk premium zones applicable to the community.

### Section 3.4.1: Zoning

Figure 6 illustrates the zoning pattern along the harbors' waterfront. The harbor planning area includes Marine Industrial, Neighborhood Business, and Central Business zoning districts.

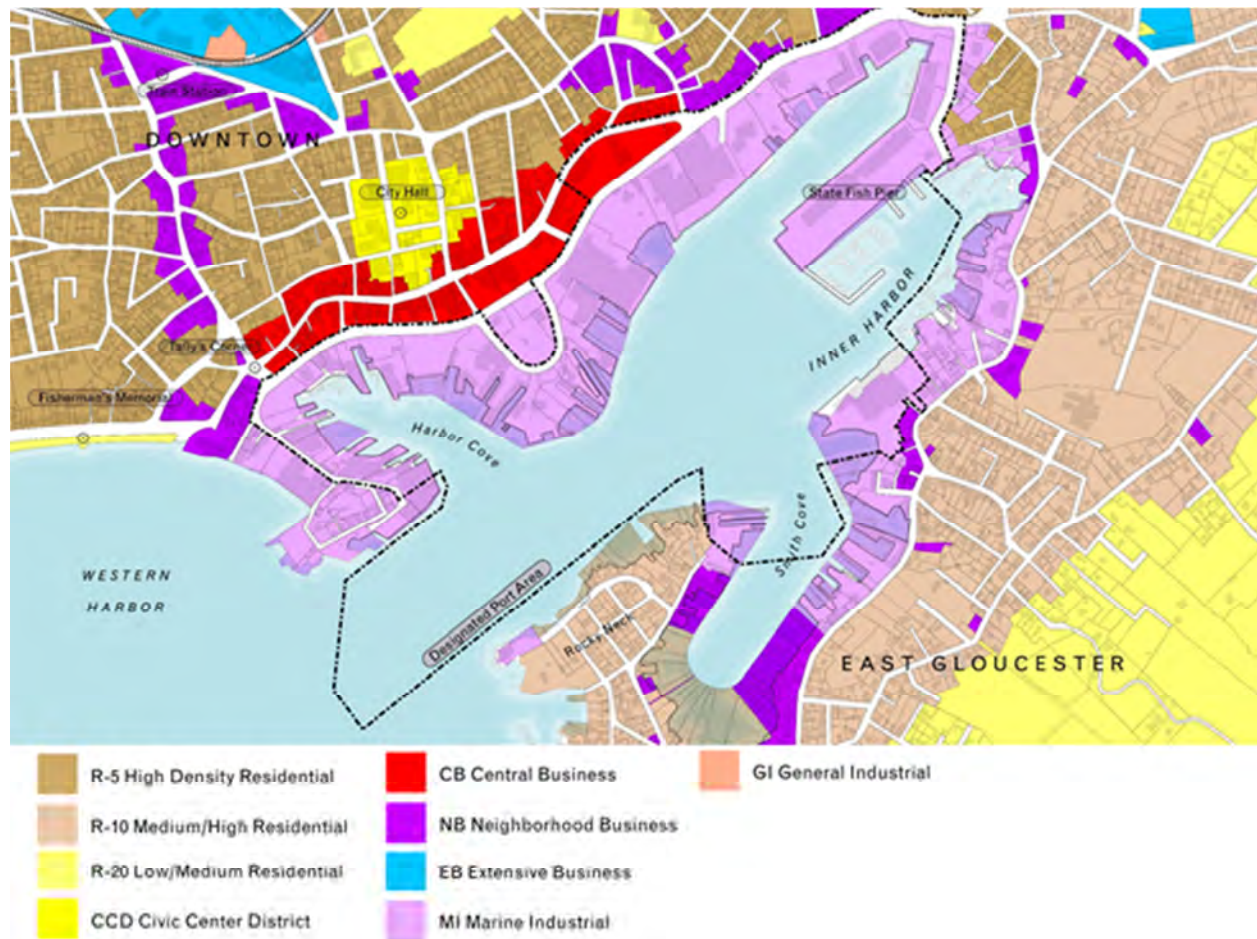


Figure 6 - Zoning

The bulk of the Harbor Plan area falls within the Marine Industrial (MI) District; the only area in the city zoned as MI is the inner harbor waterfront. As stated in section 2.1 of the Zoning Ordinance, the zone was “established only where the district borders coastal and tidal waters, and where the access and utilities roads can support high-intensity, industrial and commercial development that is primarily

marine-related.” Within the Marine Industrial District, the only allowable uses of the water's edge and of an area at ground level 20 feet back from the water's edge are those that require access to water-borne vessels.

The Central Business District's purpose is to accommodate a combination of retail and business uses, residential uses, office uses, and institutional uses - all of which make up the city's central core. Gorton's headquarters building is located in this district.

The Neighborhood Business District allows a variety of retail business uses consisting primarily of convenience shopping for the surrounding residential areas.

Local Maritime Industrial (MI) zoning was an integral component of the 2009 Gloucester Inner Harbor DPA Master Plan and is an important tool for promoting WDIUs. Section 5 of the 2009 Harbor Plan included a strategic implementation strategy calling for zoning modifications:

- To promote water dependent industrial uses,
- To restrict incompatible uses, and
- To make local special permit approvability standards entirely consistent with the goals of the DPA program by enacting Site Plan Review and Marine Industrial district.

Following the favorable Decision on December 9, 2009 from the State on the city's request for approval of the 2009 MHP and DPA Master Plan, these zoning changes were enacted by the Gloucester City Council on March 30, 2010. As adopted the Gloucester Zoning Ordinance now requires that any new or expanded use in the MI district, that exceeds Site Plan Review thresholds, must:

“comply with the standards and requirements with regard to the placement and dimensions of structures as regulated by G.L. c.91 and 310 CMR 9.00 et seq.”

Additionally, many uses which would be characterized as “supporting uses” require the review and approval by special permit of the City Council, which must make the following findings:

1. “The proposed use will not displace an existing water-dependent use with a non-water-dependent use;
2. The proposed use will not, by virtue of its location, scale, duration, operation, or other aspects, pre-empt or interfere with existing or future development of water-dependent uses of the project site or surrounding property;
3. The proposed use is compatible with the working waterfront character of the zone;
4. The proposed project will not displace existing commercial fishing vessel berthing in Gloucester Harbor, without providing equivalent space and draft at a suitable alternative site not already used by commercial fishing vessels;
5. The proposed use will not adversely affect the preservation of water-dependent uses on surrounding properties.”

In addition, the use codes of the local zoning ordinance were revised for consistency with DPA permitted uses.

It is by these provisions the local zoning continues to strengthen and support the goals and objectives of the DPA program.

#### ***Section 3.4.2: Wetlands***

One of the primary responsibilities of the Gloucester Conservation Commission is the administration and enforcement of the Massachusetts Wetlands Protection Act (MGL Ch. 131, sec. 40) along with its corresponding Wetlands Regulations (310 CMR 10.00). In addition, Gloucester has adopted under general Home Rule powers a municipal wetlands by-law (Article II, Sec. 12.10 – 12.21).

Under the Wetlands Act and local by-law, the Conservation Commission has authority over projects in or affecting any categories of resource areas: bank, beach, dune, flat, marsh, swamp, freshwater, or coastal wetlands which border on the ocean or any estuary, creek, river, stream, pond, or lake. The commission also has jurisdiction for land under water bodies, land subject to tidal action, land subject to coastal storm flowage, and land subject to flooding. Activities within these resource areas subject to jurisdiction include activities that would remove, fill, dredge, or alter the resource. The commission also has the right of review for activities within a 100-foot buffer zone around wetlands bordering waterbodies, banks, beaches, and dunes.

#### ***Section 3.4.3: Gloucester Waterways Regulations***

Gloucester's Waterways Regulations outline the procedures and rules regarding moorings, boat ramps and public landings, traffic, and safety. No one can moor, anchor or set any moored vessel or float within the limits of Gloucester Harbor without obtaining a permit from the harbormaster. Permits are issued on a first come, first serve basis. The harbormaster has the authority to reassign mooring locations of any permitted vessels at anytime. If there is no room for an applicant's vessel, the person's name will be put on a waiting list that is maintained by the harbormaster. No mooring is allowed in any navigational channel or where it might interfere with the public's rights of fishing, fowling and navigating on tidelands. Mooring holders may transfer their mooring permits only to a member of their immediate family.

If an assigned mooring is not used for at least 30 consecutive days in a boating season, the location is considered abandoned and may be reassigned unless the permit holder has arranged special conditions with the harbormaster. The boat owner has a one-year grace period to not have a boat on the mooring, but this year off must be agreed to by the harbormaster. Transient moorings may be issued by the harbormaster for use by vessels visiting Gloucester for no more than 14 days. An anchorage is available in the Inner Harbor for use by vessels as a safe refuge.

It is the responsibility of the permit holder to install and maintain appropriate mooring gear or tackle. Mooring gear should be inspected by the permit holder every three years and lifted out of the water for inspection if necessary.

Mooring fees are established annually by the City Council based on vessel length and permits may be revoked by the harbormaster if any fee is not paid in full by the last work day of February each year.

#### ***Section 3.4.4: Chapter 91 (Public Waterways Act) and the Waterways Regulations (310 CMR 9.00)***

Massachusetts' principal waterfront regulatory program in tidelands and other waterways is Massachusetts G.L. Chapter 91 (Public Waterways Act, 1866). Chapter 91 and the corresponding



Waterways Regulations (310 CMR 9.00) are administered by the Division of Wetlands and Waterways of the Massachusetts Department of Environmental Protection.

As clarified by the 1983 amendments to the waterways regulations, Chapter 91 jurisdiction extends landward to the historic high water line and seaward three miles to the limit of state jurisdiction. The historic high water line is the farthest landward tide line which existed “prior to human alteration” by filling, dredging, impoundment or other means (310 CMR 9.02). Thus, Chapter 91 applies to filled as well as flowed tidelands, so that any filled areas, moving inland to the point of the historic high tide line, are subject to Chapter 91 jurisdiction.

Chapter 91 authorization is generally required for any fill, structure, or use not previously authorized in tidelands, including any changes of use and structural alterations. Types of structures include: piers, wharves, floats, retaining walls, revetments, pilings, bridges, dams, and waterfront buildings (if located on filled lands or over the water).

For planning purposes, the location of the historic high water line (i.e., upland limits of Chapter 91 jurisdiction) must be established through a review of maps that may reliably show the original natural shoreline or through engineering studies. Previously issued Chapter 91 licenses are also a source of information on the historic high tide line for specific parcels. The Office of Coastal Zone Management initiated a project to map the historic shoreline of the commonwealth, including Gloucester Harbor. The historic high water line on these maps may be used by DEP and waterfront property owners as presumptive lines of Chapter 91 jurisdiction. Ultimately, jurisdiction will be determined by DEP on a property-by-property basis at the time of licensing.

#### ***Section 3.4.5: Designated Port Area (301 CMR 25.00)***

Much of Gloucester’s Inner Harbor has been identified by the state as a Designated Port Area (DPA), modified on April 23, 2014, as a result of the CZM Boundary Review Decision described in general below in this section and attached to this Plan Amendment as Appendix B.

DPA History: The Gloucester DPA, along with the ten other DPAs in the state, was first identified in the 1978 Massachusetts Coastal Management Plan. This designation complemented CZM program policies that water-dependent industrial uses should be accommodated and encouraged in areas suited for these purposes. Subsequently, these areas were included in the original Waterways Regulations (effective September 15, 1978). A DPA is defined as “an area of contiguous lands and waters in the coastal zone that has been designated in accordance with [the regulations,]” (301 CMR 25.02).

The segment of Gloucester’s waterfront described above was designated a DPA because it fulfilled the eligibility requirements of the regulations, in short: navigable channels of 20 foot depth or more at mean low water, tidelands and associated lands abutting such channels that are suited for maritime-dependent industrial uses, availability of appropriate road and/or rail links, and the availability of water and sewer services capable of supporting maritime-dependent industrial uses.

Until 1984, the DPA provisions only applied in the waterway itself. In that year, the legislature amended the statute to expand licensing authority of DEP to include filled tidelands. In DPAs, all historically-filled tidelands are within the regulatory jurisdiction of Chapter 91 even if separated by a public way and more than 250 feet from any flowed tidelands.

In 1990, the Waterways Regulations underwent major revisions that included a prohibition on most non-industrial uses in DPAs and limited the extent to which non water-dependent industrial activities were allowed to occur. Most recently, in 1994, Executive Office of Environmental Affairs (EOEA) revised the CZM regulations and the Waterways Regulations related to DPAs. Among the changes, a new section of EOEA regulations (301 CMR 25.00), Designated Port Areas, was created, setting forth the procedure for establishing and modifying the boundaries of DPAs.

These latest regulatory amendments included important changes intended to enhance the flexibility and economic viability of DPAs. The most significant change was to make most non water-dependent industrial uses and commercial uses eligible for licensing as “Supporting DPA Uses” if they provide direct economic or operational support to the water-dependent industrial use in the DPA. Non water-dependent industrial uses and commercial uses (both water-dependent and non water-dependent) that qualify as Supporting Uses may occupy an area of DPA property equal to 25 percent of all filled tidelands and piers on the project site. Larger amounts of the site may be developed for supporting use if authorized by an approved DPA master plan.

The licensing of certain non water-dependent industrial uses as a temporary use is another means to increase economic utilization of DPA lands. Warehousing, trucking, parking, and other similar uses on otherwise vacant land can be licensed for up to ten years.

Regulatory Criteria: A critical measure of the status of the harbor is the degree to which it has maintained its water- dependent uses and, particularly in the DPA, water-dependent industrial uses. Such uses are encouraged or required by Chapter 91 and by the city’s zoning Marine Industrial zoning. Chapter 91 broadly defines a water-dependent use as one that requires direct access to or location in tidal waters and cannot be located away from tidal waters [310 CMR 9.12 (2)]. Despite their intent, the regulations no longer protect the water’s edge for water-dependent industry. This dichotomy was introduced by categorically considering the following uses water dependent, which meant that such dependency would be assumed rather than required. The uses which are categorically considered water dependent include:

- Industrial uses such as
  - marine terminals
  - commercial passenger vessel operations
  - manufacturing facilities which rely on water borne transport of goods
  - commercial fishing and fish processing
  - boatyards and facilities for vessels engaged in port activities;
- Marinas, commercial or recreational boating facilities;
- Facilities for water-based recreation;
- Pedestrian access facilities open to the general public;
- Aquariums and other educational facilities dedicated primarily to marine purposes;
- Waterborne transportation facilities;
- Wildlife refuges;
- Disposal sites sponsored or required by public agency for contaminated dredge sediment.

In the DPA, the only category of water-dependent uses that are allowed are the industrial water-dependent uses. In the DPA, the following uses are allowed:

- Industrial uses categorically defined as water-dependent (see first bullet above)
- General industrial.
- Supporting commercial uses. Commercial uses can be classified as “supporting” when they provide direct economic or operational support for a water dependent industrial use in the DPA. The amount of supporting commercial use below the Historic High Water Line cannot exceed a maximum area equivalent to 25 percent of the area of filled tidelands and pile supported structures, unless otherwise provided in a DPA Master Plan.
- Accessory Uses. These include uses that are commonly associated with a water-dependent industrial use, such as parking for fish processing employees, on-site food outlets for employees, administrative offices supporting that use, or perhaps a small fresh fish retail business associated with a processing facility. An accessory use must be of a scale that is appropriate to the size of the facility with which it is associated.

A number of uses are specifically prohibited within a DPA including residential, hotel/motel facilities, and recreational boating marinas.

The MHP and DPA Master Plan: The existence of the DPA on the Gloucester waterfront is significant. Within DPAs, it is the intent of state policy and programs to encourage water-dependent industrial use and to prohibit, on tidelands subject to the jurisdiction of Chapter 91, other uses except for supporting uses, compatible public access and certain industrial, commercial, and transportation activities that can occur on an interim basis if it is found that this would not be a significant detriment to the capacity of DPAs to accommodate water-dependent industrial uses in the future.

A DPA master plan can provide some flexibility in calculating the amount of supporting uses that may be allowed and in siting these uses within the DPA. If authorized by the master plan, the area of a project site that can be devoted to supporting commercial uses can be allowed to exceed the 25 percent limitation of the Chapter 91 regulations. However, the plan must ensure that, as a general rule, commercial uses may occupy no more than 25 percent of the entire land area of the DPA. Supporting industrial uses may occupy an even greater area (though other siting requirements of the regulations would impose a practical limitation). Further, the plan may specify where in the DPA these uses could or should be sited or concentrated.

The provisions of a municipal harbor plan can be effective in providing guidance for DEP in applying the numerous discretionary requirements of the Waterways Regulations. One form of guidance could be to restrict the list of uses allowed by DEP on tidelands or in the DPA to those the community wishes to promote. For example, in the DPA, the master plan could present a list of eligible supporting uses to guide DEP in future licensing.

2014 DPA Boundary Review: In March 2013, at the request of the Gloucester Harbor Plan Committee, Gloucester Mayor Carolyn Kirk formally requested that CZM initiate a review of the entire boundary of the Gloucester Inner Harbor DPA. CZM accepted the request in April 2013, and notices of the review were published in the Environmental Monitor and the Gloucester Daily Times. A public meeting was held on May 20, 2013 in Gloucester, and the formal public comment period closed on June 7, 2013. To inform the boundary review process, CZM reviewed comments submitted, attended Harbor Plan Committee meetings, met with property owners, city officials, Department of Environmental Protection (DEP) staff, and interested citizens. CZM also conducted a review of available plans, permits, and



licenses applicable to the DPA review. A detailed boundary review designation report was issued on February 3, 2014. The report concluded with the finding that the DPA boundary should be modified. Pursuant to 301 CMR 25.03(4), the commencement of a 30-day comment period was noticed in the February 5, 2014 Environmental Monitor and a public hearing was held on February 24, 2014. Thirteen people provided oral testimony at the public hearing, and CZM received six comment letters on the designation report during the public comment period.

As detailed in the boundary review designation report, CZM defined seven planning units within the existing Gloucester Inner Harbor DPA that formed coherent areas with groups of parcels that are delineated by shared physical, geographical, and land use characteristics. These planning units were sized and configured in a manner that allowed for consideration of all relevant factors affecting overall suitability to accommodate water dependent industrial use.

Pursuant to the criteria at 301 CMR 25.03(2), certain areas within the DPA were not eligible for review. Specifically, the Harbor Cove, North Channel, State Fish Pier, Cold Storage East Gloucester, and Rocky Neck planning units, and their adjacent waterways, did not meet all of the criteria for eligibility for review, and therefore were not further analyzed for substantial conformance with the criteria governing suitability to accommodate water dependent industrial use.

The DPA regulations direct that an area of land or water reviewed under 301 CMR 25.00 shall be included or remain in a DPA if and only if CZM finds that the area is in substantial conformance with each of the criteria governing suitability to accommodate water dependent industrial use. As detailed in the boundary designation report, CZM determined that the East Gloucester and Smith Cove planning units are dominated by residential and non-industrial buildings that in most cases existed in this area before the establishment of the DPA and have not been removed or converted to industrial use to date. The predominant uses here, including residential, commercial, recreational boating facilities, small public boating facilities, and public recreational areas, are largely incompatible with activities characteristic of a water dependent industry, because of the inherent functional conflicts and destabilization that may arise. Therefore, CZM found that these two planning units did not meet the criteria for inclusion in a DPA boundary as required by 301 CMR 25.04(2)(d) and concluded that they should be removed from the Gloucester Inner Harbor DPA. In addition, as the shorelines in these areas no longer establish a functional connection to a DPA land area, CZM found that the waterways adjacent to these areas did not meet the criteria for inclusion at 25.04(1) and concluded they should also be removed from the DPA. This decision became effective on April 23, 2014.

#### ***Section 3.4.6: Special Acts of the Legislature***

Prior to 1866 when Chapter 91 was first promulgated, the Massachusetts legislature issued special acts to transfer title of a property from the commonwealth to a waterfront landowner and to enable particular types of development to take place on the property as specified in the act. The rights granted within a special act are transferred to each successor at the time of sale, but they do not exempt a property owner from Chapter 91 review for a new or modified use of the property.

#### ***Section 3.4.7: Federal Emergency Management Act Regulations***

The FEMA Flood Zones Map provides a plan for the various Flood Insurance Zones along the shoreline as established by the Flood Insurance Study of the City of Gloucester.

The majority of the study area, including all properties along the water's edge beyond the mouth of the harbor, is subject to the 100-year flood, meaning that the annual probability of flooding in the area is one percent.

The entire Fort area, and all of Commercial Street, is within the floodplain based on the FIRM that will be in effect when this plan is submitted, with the exception of the residences and road at the top of the hill (Fort Square). This classification describes areas outside of the 500-year flood plain. Properties in this area have less than a 0.2% chance of flooding each year.

The land most vulnerable to flooding is located at the mouth of the harbor, and is classified as a velocity zone (VE). This classification suggests that properties in this area not only have a one percent chance of annual flooding, but that they are also subject to additional hazards associated with storm waves.

FEMA periodically updates flood hazard maps by conducting a detailed reevaluation of flood hazards, referred to as a flood study. FEMA has made a final determination based on such a reevaluation, and released new flood maps for all of Essex County Massachusetts early 2014. In order to maintain its standing in the Nation Flood Insurance Program the City of Gloucester has adopted the newly released flood maps that will become effective July 16, 2014. In many areas of the community the base flood elevation has been projected to increase. This will have a definite impact on the design on any substantial building renovation or new construction in the study area.

There may be instances where site-specific information may demonstrate that the flood risk has been incorrectly mapped. FEMA has established procedures by which a community may compile appropriate data and request a map revision. Further, if an individual homeowner/property owner has technical information to indicate that his or her home has been inadvertently shown within the Special Flood Hazard Area on a Flood Insurance Rate Map, the homeowner/property owner may submit that information to FEMA and request that FEMA remove the flood zone designation from the home by issuing a Letter of Map Amendment (LOMA) or a Letter of Map Revision Based on Fill (LOMR-F). Requests for LOMAs/LOMR-F must include the surveyed elevation of the lowest grade adjacent to the structure or the lowest enclosed level of the structure along with certain other information.

#### ***Section 3.4.8: US Army Corps of Engineers Regulations***

Section 404 of the Clean Water Act authorizes the ACOE to regulate the discharge of dredged or fill material into "waters of the United States" which are all navigable waters, tributaries to navigable waters, wetlands adjacent to those waters. The limit of jurisdiction is the high tide line in tidal waters; where adjacent wetlands are present, it is the limit of the wetland. Regulated activities include the placement of fill for construction, site-development fill, riprap, seawalls, and beach nourishment.

Section 10 of the Rivers and Harbors Act of 1989 authorizes the ACOE to regulate structures and work in navigable waters of the US. Jurisdiction extends shoreward to the mean high water line. Regulated activities include construction of piers and wharves, permanent mooring structures such as pilings, intake and outfall pipes, boat ramps, and dredging and disposal of dredged material, excavation, and filling.

The ACOE's other major responsibility is to plan and carry out water resources projects such as improvements to navigation. Since 1986, the cost for such projects is shared between the federal government and the nonfederal sponsors. An important consideration in the ACOE's decision to

undertake a project is that its benefits exceed the cost. For projects such as dredging of harbors and navigation channels, highest priority goes to projects that benefit maritime industry such as shipping and fishing.

The channel into Gloucester Harbor is a federally created and maintained navigation channel.

#### ***Section 3.4.9: Phase II NPDES Storm Water Program***

The US EPA's storm water management program, initiated in 1990 under the Clean Water Act, is aimed at preserving, protecting and improving the nation's water resources from polluted storm water runoff. The first phase of the program focused on using the National Pollutant Discharge Elimination System (NPDES) permits to address storm water runoff from larger storm sewer systems serving populations of 100,000 or more and construction activities disturbing five acres or more and certain industrial activities. Phase II, which began in 1999, extended the NPDES permit coverage for storm water discharges from smaller storm sewer systems (under 100,000 population) in urbanized areas and smaller construction sites (activities disturbing between one and five acres of land).

Phase II is an attempt to further reduce adverse impacts to water quality and aquatic habitat through the use of controls such as public educational programs, storm sewer inspections for illegal connections, and ordinances to control construction site runoff.

#### ***Section 3.4.10: Massachusetts Ocean Sanctuary Program***

In 1970, Massachusetts passed the Ocean Sanctuaries Act (Ch. 132A, Section 12A) which applies to the area between the mean low water line and three miles offshore, except for the area between Lynn and Marshfield. The act is designed to protect coastal waters by prohibiting activities that could be environmentally or aesthetically damaging. The act prohibits exploitation or development that would seriously alter or endanger the ecology or appearance of the ocean, seabed or the subsoil. Some of these prohibited activities include building on the seabed, drilling, dumping wastes, and commercial advertising. However, fishing, sand extraction, and special projects are still allowed under the act. The Office of Coastal Zone Management (CZM) has jurisdiction over the ocean sanctuaries and CZM must approve all activities that occur on, or in, these areas.

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## Chapter 4: An Opportunity Analysis for the Maritime Economy

The 2014 Harbor Plan focus is on economic development – on quantifying the port’s economic base, identifying a complete universe of both traditional and emerging maritime industries, and looking at where Gloucester has the best opportunities to expand and make more resilient the port economy. In support of this goal, the regulatory framework of the Designated Port Area is examined (Chapter 5) to determine how the city might best guide state permitting to support a healthy port economy.

In the words of Thomas Jefferson:

"I am not an advocate for frequent changes in laws and constitutions, but laws and institutions must go hand in hand with the progress of the human mind. As that becomes more developed, more enlightened, as new discoveries are made, new truths discovered and manners and opinions change, with the change of circumstances, institutions must advance also to keep pace with the times."

The existing maritime expertise, resources, knowledge, skill, tools and waterfront infrastructure in Gloucester represent a valuable base from which the community is effectively making connections to a contemporized maritime economy.

### The 2014 Groundfish Port Recovery and Revitalization Plan

Concurrently with the development of the 2014 Harbor Plan, the city has produced a working document in the 2014 Groundfish Port Recovery and Revitalization Plan that focuses on interim measures to ensure the survival of the fishing and shore side processors dependent on groundfish; and investment into retooling markets and value chains for the fresh product, and leveraging port expertise for innovative management and economic stability within the harvesting sector.

The 2014 Harbor Plan includes analysis of the opportunities in these segments as well as in other maritime economic sectors.

### The 2014 Harbor Plan Economic Opportunity Analysis

The Harbor Planning Committee, in conjunction with city staff and its consultants, performed an opportunity analysis of the Gloucester Maritime economy. A variety of industries within the maritime economy were evaluated in an effort to understand industry trends, anticipated growth rates, organization, value chains, where current companies and activity are concentrated, the physical requirements of each industry and whether a water side location is required to support the industry. This analysis is the critical next step in understanding whether or not the envisioned expansion and growth into the areas of marine research, technology, and energy are feasible for Gloucester.

This chapter provides a detailed discussion of the opportunities and realities for the Port of Gloucester within five sectors of the maritime economy. The identified sectors are marine tech, marine research, marine resources, fisheries and seafood, and tourism.

## Section 4.1: Marine Sector Opportunities

As part of the Harbor Planning process, the Gloucester Harbor Planning committee sought to gain a better understanding of marine sector opportunities that may present opportunities for Gloucester. The committee asked a series of questions:

- What are the trends in the industry?
- What are the anticipated growth rates?
- How is the industry organized?
- What is its value chain?
- Where are the current concentrations of companies and research activity?
- What are the physical requirements? How vital is a water-side location?

The marine economy consists of five major sectors. The identified sectors are marine tech (including vessels), marine research, marine resources & renewables, fisheries and seafood, and coastal tourism. For each sector, major segments were identified based on interests and potential fit with Gloucester and the regional economy.

### Section 4.1.1: Marine Tech

Marine tech consists of three primary categories Ocean Observation, Undersea Vehicles, and Marine Biotech.

#### Ocean Observation

Ocean Observation is currently a \$2.2 billion dollar global industry, \$700 million of which is US based. The industry is almost completely driven by US and European research. Increased interest in monitoring pollution coupled with new emphasis on marine spatial planning is spurring activity. Technology plays a significant role in this industry through the fabrication of sensors, particularly major sensor arrays that take the form of deployed research vessels or specialized marine engineering support vessels. Sensor fabrication is largely concentrated in tech centers and marine engineering centers.

A variety of sites can be used for sensor deployment but at present it is envisioned that deployment will be centered around major seaports.

Observation centers are typically based in close proximity to marine schools or marine research centers such as the Gulf of Maine research Institute or the University of New Hampshire's School of Marine Science and Ocean Engineering that has spun off the Coastal Ocean Observing Center. (It is worthy of note, that UNH has also created within the last decade the Center for Coastal and Ocean Mapping, the Coastal Response Research Center, and the Tidal Energy Test Platform v1 at the University of New Hampshire Center for Ocean Renewable Energy (UNH-CORE))

There has been an increase in the use of Voluntary Observing Ship Schemes (VOSS) and Ship of Opportunity programs (SHOOP) to provide real-time monitoring and reporting. Ships that participate in these programs tend to be ocean going cargo vessels. Currently, ship design is a problem limiting deployment potential.

Ifremer (French Research Institute for Exploitation of the Sea) fitted a small number of voluntary fishing vessels with sensors to record data on factors that impact fishing efforts and Ecotrust Canada has used

on-board monitoring for managing crab fisheries but these examples are limited. The National Oceanic and Atmospheric Administration (NOAA) has created a study fleet program with fishing vessels, from which ocean data is collected during fishing trips. The program has grown in the Mid-Atlantic region. A historically-based mistrust from Gloucester fishermen on having their information used to justify closures of fishing grounds has kept Gloucester fishermen from enrolling in the “Study Fleet.”

#### Opportunity for Gloucester

Gloucester’s ability to play a role in Ocean Observation will depend on fleet participation and the advancement of equipment. On the shore side, the most likely scenario for Gloucester is as a satellite for a preexisting observation center or a new fisheries observation center built in conjunction with The National Marine Fisheries Service.

#### Unmanned Undersea Vehicles (UUV)

Remotely operated vehicles (ROV) and autonomous unmanned vehicles (AUV) are a \$3.2 billion dollar global industry driven largely by naval requirements and the needs of offshore oil and gas industries. It is comprised of just 35 companies.

Location of these companies can be anywhere. Many locate in technology hubs; others locate near large industry customers or clusters of customers and others are located where the founder of the company lives. While access to controlled and open water for testing and training is needed, a waterfront location is not required. Of the 35 existing companies only four have waterfront locations.

The ROV/AUV business is about systems integration. Suppliers are specialized in marine parts manufacturing and software capability is critical. Deployment of the vehicles is typically handled by ROV operators with vessels with cranes and room for deployment of a mobile control room.

Technology development in this industry is driven mainly by the US Office of Naval Research and the offshore energy industry. The maritime provinces of Canada as well as Ireland have made major research investments into this technology. Falmouth, MA is a national hub for this industry based on of naval and oceanic research that developed from the Woods Hole Oceanographic Institute small submersible research programs.

#### Opportunity for Gloucester

There already exists a substantial in-state presence in Falmouth, MA. Growth in offshore marine renewable energy and use in fisheries monitoring could serve as a catalyst for location of deployment capability. The Greater Boston area represents 43% of marine technology related companies according to the Donohue Institute. These companies located along Route 128 (America’s Technology Highway) can access the Gloucester port in half the time as Falmouth and with public in addition to private transportation. Active support for this linkage will be required, however, if this opportunity is to be catalyzed.

An emerging industry related to Ocean Observation Systems (OOS) and ROV data use is marine geomatics. Geomatics involves the gathering, storing, processing and utilization of geospatial data.



### Marine Biotech

Marine Biotech is a \$3.7 billion dollar global industry. One area of marine biotech is marine biopharmaceuticals, the identification of medicinal compounds. The second area is marine biomaterials used as additives, catalysts or other inputs from marine derived compounds.

- Marine biopharmaceuticals is an emerging area. Presently there are 13 products in the clinical trial phase within the biopharma industry. Marine genomics (the study of the genetic make-up of marine organisms) is an emerging field based on preexisting technologies applied to marine life. There are currently six identified Marine Genomic research centers across the country.
- Marine biomaterials are much more advanced in terms of product development than marine biopharma. The industry generates \$3.7 billion in product, of which roughly \$1.1 comes from products based on alginates. Alginates are refined from brown seaweeds and have a wide use across a variety of industries including food, textile printing and pharmaceutical. \$481 million comes from work being done with marine chitin. Numerous applications for chitin are being explored in areas ranging from wastewater treatment to agrochemical, environmental, industrial uses as well as in the pharmaceutical and medical fields. There are relatively few producers of Marine Biomaterials. Some of them are: FMC Biopolymer with facilities in Maine, Dungeness Environmental located in Bothell, WA and AgraTech in Pittsburg, CA.

The Marine Biotech Industry value chain has a series of components or stages. For this industry, the stages are discovery, cultivation, extraction/synthesis, manufacture research, basic science, and tech transfer from universities and research institutes.

Location of companies within this industry depends on the company's position in the value chain. Companies in the marine biomaterial value chain, which involves cultivation and extraction activities, tend to be closely tied to each other particularly for seaweed/algae-based products while marine biosensors/biopharma research tends to be co-located with marine science programs.

### Opportunity for Gloucester

The MA cluster of biotechnology on the North Shore creates a potential for the emergence of marine biotech. Entry in to the field of biopharmaceuticals for Gloucester would strictly be opportunistic. Biomaterials, however, is a high potential area for Gloucester due to existing processing infrastructure. Linkages to research programs will need strengthening to build this sector. Marine genomics is an emerging field with no established leadership and there is the potential to build on the existing genomics capabilities of the greater Boston area. The Gloucester Marine Genomics Institute founded in 2013 is an important first step.

### ***Section 4.1.2: Marine Research***

The federal government is the dominant source of marine research funding. In 2012, Federal research dollars supporting marine technology and fisheries development, excluding defense, totaled \$2.5 billion. These resources flowed through the following agencies, departments and foundations: National Science Foundation (NSF) \$1,673 billion, National Oceanic and Atmospheric Administration (NOAA) excluding The National Marine Fisheries Service (NMSF) \$528 million, NMSF \$52 million, US Geological Survey (USGS) \$23 million, Ocean Energy Management \$39 million, Environmental Protection Agency \$114

million, National Institute of Health \$118 million. The Office of Naval Research applied research budget was \$4.7 billion.

Massachusetts ranks third in NSF funded marine-related research receiving \$117 million dollars. The largest recipient of federal NSF research funding is in the Woods Hole Oceanographic Institution with \$83 million. The remaining research funds are spread over nineteen other research institutions, each receiving more than \$200,000. Several of these institutions lack a seaside campus.

#### Opportunities for Gloucester

The opportunity for Gloucester in the marine research industry is to serve as a sea-side campus for universities without such infrastructure and private individuals or institutions looking to establish or support marine research. Just as the University of NH created multiple Centers for targeted ocean research needs, UMass might consider how an expanded Gloucester center could complement its existing marine sciences research activities. UMass Amherst holds a small presence by virtue of owning property in Hodgkins Cove, and sponsors the Large Pelagics Research Center.

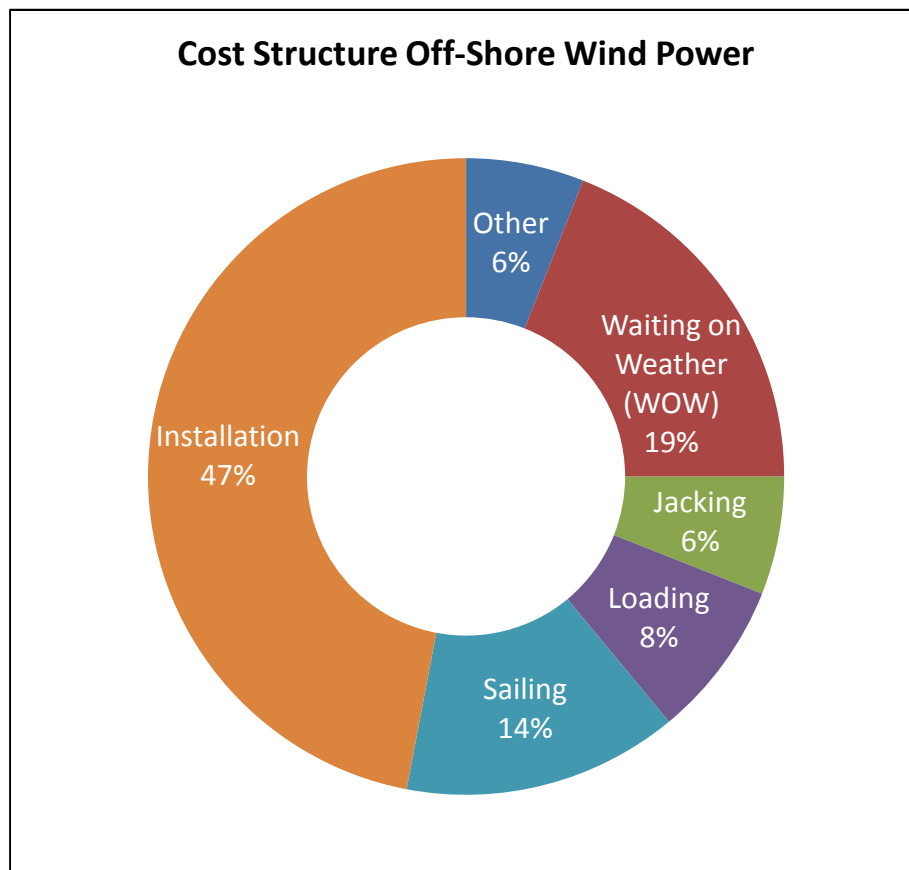
The I4C2 property can serve as the anchor location for an Ocean Development Center that facilitates the continued diversification of the Harbor. In 2013 the City of Gloucester convened a stakeholder / planning group to conceptualize a programming mix to leverage the practical knowledge of the fishing fleet with advances in research and technology to enhance the sustainability of the fishery and associated industries. The Gloucester I4C2 Ocean Innovation Center Concept Study is included as Appendix C to this report and represents a necessary step towards bringing forth the growth of this sector.

#### ***Section 4.1.3: Marine Resources***

Massachusetts Renewable Energy Portfolio Standard requires that by 2020, 15% of the state's power supply has to be derived from renewable sources. This requirement sets the stage for potential market opportunities to meet this standard.

Offshore renewable energy generation from either wind or hydrokinetic sources is one potential source of supply. The opportunity for a port would be to serve as a staging and support area for these offshore power generation sources. An analysis of data from Northeast Ocean Data.org indicates that Gloucester serving as a center for offshore energy generation support has mixed potential. Based on wind analysis Gloucester could have the potential to support offshore wind. It is less likely to be a support location for wave or tidal energy due to insufficient wave action.

Offshore wind farm support is considered an opportunity for Gloucester's fishing fleet. Vessel costs are a critical piece of the cost structure for offshore wind power. An offshore wind power development cost structure breaks down as follows: (Figure 7)



**Figure 7 - Cost Structure: Off-Shore Wind Power**

Use of vessels is critical to support offshore wind and a major component of the cost structure. For a 1 GigaWatt offshore turbine field, 20 vessels would be needed to install pods, 14 vessels would be needed to install turbines, and eight vessels would be needed to support maintenance of the turbine field.

Research into this area however, suggests that wind farm support is not an opportunity for the fishing fleet if there was an active development proposal. A 1 GW wind farm would utilize a small fraction of the existing Gloucester fleet. Moreover, a study of the vessel design and requirements to support the fleet suggests that the existing Gloucester fleet may require substantial modification to be used effectively for offshore support. (Figure 8)

July 30, 2014



Figure 8 - Shipping Vessels

At present, the closest potential project is the HyWind 12 megawatt project 12 miles off the shore of Portland, Me. The project covers 22 square miles. In December of 2012, the Bureau of Ocean Energy Management issued a finding of no competitive interest meaning that there were no bidders for the lease rights. The likelihood of a project in the near term is very low.

#### ***Section 4.1.4: Fisheries and Seafood***

The Fishery and Seafood industry is a critical industry for the City of Gloucester. Although its fresh fish harvesting and processing sectors have been under severe catch restrictions, the city lands nearly half the groundfish in MA. Its hub services and infrastructure, if supported through the environmental and regulatory crisis, provide one of the few remaining locations in the Northeast to harvest fresh fish. In addition, the city retains a processing sector built upon the fresh fish catch, but that now imports frozen fish to process and export as frozen value-added product. Companies such as Gorton's of Gloucester, National Fish, and Whole Foods process significant product in the city.

Concurrently with this report, the city commissioned the 2013 Dockage Study. As discussed in Chapter 3, 210 vessels berth or dock in Gloucester Harbor. Table 3— shows the distribution of boats by size and gear type. Lobster boats represent 44% of the fleet.

July 30, 2014

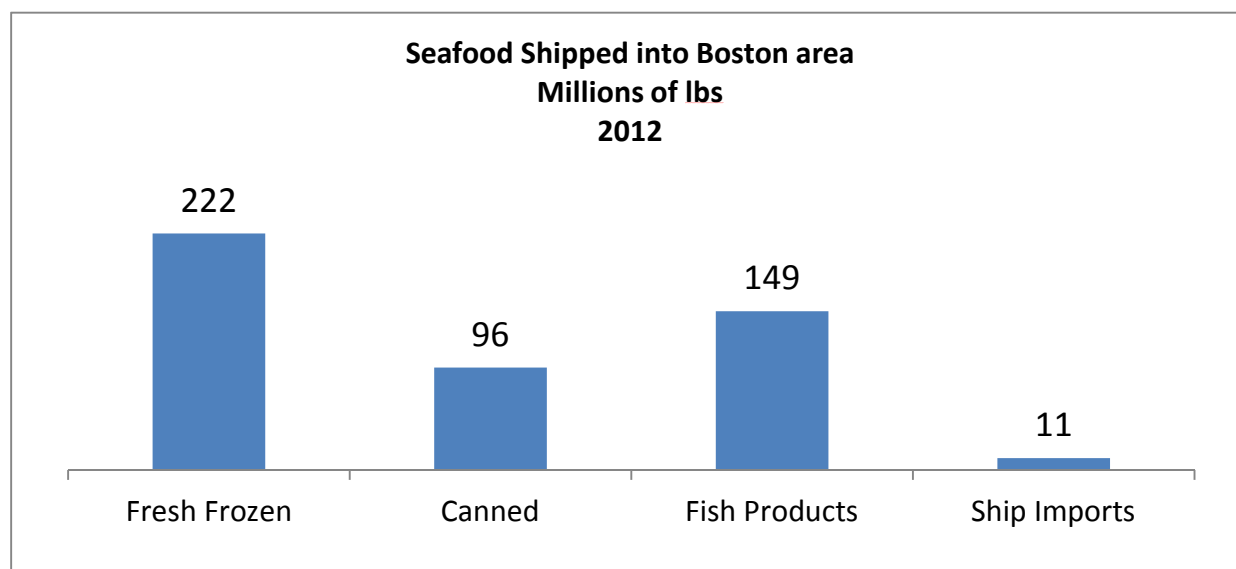
**Table 3 - Commercial Fishing Vessels Berth at Dockage at Gloucester Inner Harbor by Fishery/gear type and size (not all great types included)**

	Less than 45 feet	45 to 65 feet	Greater than 65 feet	Total
<b>Lobster</b>	72	11	1	84
<b>Trawl</b>	13	18	14	45
<b>Gillnet</b>	23	14		37
<b>Tuna</b>	16	1		17
<b>MW Trawl</b>			4	4
<b>Seine</b>			2	2

16,955 linear feet of dock space exists in the inner harbor for the fishing fleet – approximately 69% of the total dockage space in the inner harbor.

Gloucester seafood businesses are impacted by national trends. In 2012, the seafood industry produced 4.5 billion pounds of seafood within the US. Total US seafood consumption has been rising but on a per capita basis consumption is flat, with shellfish representing a growing share.

In 2012, Massachusetts landed 298 million pounds of fish and shellfish, 195 million pounds of which were fish and 103 million pounds were shellfish. Additionally, 478 million pounds of seafood and fish products were brought in by rail or truck to the greater Boston area and 11 million pounds by ship. 46 percent was fresh frozen product. (Figure 9)

**Figure 9 - Seafood Shipped into Boston Area**

Although seafood is an industry that is flat in terms of its penetration into US food consumption, there is a substantial amount of local demand based on the amount of shipments into the Boston area. Gloucester at its height could not meet all the demand for seafood products in the Boston region.

The 2014 Groundfish Port Recovery and Revitalization Plan explores in great depth methods to retool the value chain for fresh wild caught fish. The city is making the connection to movements for sustainably grown and harvested foods, traceable product, and diversification of food product. The Cape Ann Fresh Catch program, with over 600 regional customers, shows the market potential for this type of seafood product.

Most importantly, the fleet assets and diversity must be maintained in the belief that the management convulsions of the catch share program can be corrected and an economic stability plan be put in place. To remain a hub port, it is important that critical infrastructure remains in place, available and in a condition to be used by and to support commercial fishermen. However, basic fleet requirements such as fuel and ice are becoming harder to maintain as the fleet shrinks from a continued dependence on low yielding (price and volume) fisheries. The 2014 Port Recovery Plan recommends measures to support these businesses, and are incorporated by reference herein.

#### Opportunities for Gloucester

For the fleet and core support services to survive, several things need to be considered to move the fishery into increased volumes and higher margin products:

- Catch diversification, collaborative research and management innovation, nimble management, and economic stability planning and implementation.
- Capturing a larger percentage of the value added in the seafood value chain which may require branding and positioning, product development, distribution channel development, and demonstrated sustainability including food-mile carbon footprint impacts.

#### ***Section 4.1.5: Tourism***

Tourism is a vital part of the Gloucester maritime economy and Massachusetts overall. The coastal tourism industry in Massachusetts generated \$1.6 billion dollars in Barnstable and Essex counties in 2012.

The Gloucester hospitality industry generates at least \$76 million in revenue of which an estimated \$41 million is tourism related based on the seasonality adjustments.

Gloucester's tourism economy was compared to other tourism communities (Plymouth, Salem, Lenox and Newburyport). Using leisure and hospitality industry employment indicators shows that Gloucester's tourism sector is smaller than the other tourism communities. Gloucester (2085 employees) for example is approximately 50% of the size of the Plymouth tourist sector (4482 employees). However, Gloucester's hospitality industry is more dependent on tourism than other communities. Examining peak tourism seasons from the low point in employment in those sectors shows that Gloucester's employment nearly doubles while communities such as Salem, Newburyport and Plymouth only increase between 30% and 40%. Only Lenox increases by more than 60%.

Gloucester's tourism product attributes include unique sightseeing opportunities within an active fishing port, access to 21 percent of all whale-watching offerings in the New England region, charter fishing,



schooner, and dinner boat excursions, the Cape Ann Museum, Maritime Gloucester, and unique destinations such as Hammond Castle and the Beauport Sleeper-McCann House. The city offers two state-designated cultural districts, including the Gloucester HarborTown Cultural District inclusive of the DPA and recognizing the cultural importance of the maritime industry. Gloucester is also strategically located in a major center of recreational boating. Visitor center surveys indicate that Gloucester's beaches and summertime events are also important draws.

Tourism is a growth opportunity for Gloucester. Of the 12 million visitors to Massachusetts annually, 24 percent categorize their trip's primary purpose as a trip for "cultural, sightseeing, and/or outdoor recreation." This equals the potential for 2.8 million visitors with a primary interest in Gloucester's type of tourism product mix.

#### Opportunities for Gloucester

Options to increase tourism activity and revenue include:

- Programming to extend the length of the traditional summer tourism season by adding additional activity during the "shoulder" seasons of spring and fall.
- Making the fishing port more sight-seeing friendly
- Enhancing the visitor experience of the existing harbor and downtown sites and attractions
- Increasing opportunities for more eco/ocean-related tourism

### **Section 4.2: Marine Sector Opportunity Assessment**

After this economic review several potential opportunities stand out for Gloucester to consider:

- Capturing activity in the marine tech and marine research industries is likely to be highly opportunistic. The lack of a major anchor plus established centers limits growth potential in these areas. Gloucester's location coupled with a flexible/adaptive regulatory structure could create the right "serendipity."
- The marine biomaterials industry, particularly activities in the areas of research, translational science and product manufacturing, is a sector Gloucester should target for growth. There currently exists interest and investment by the private sector in this space. It is also a point differentiation from most existing marine science in Massachusetts.
- Strengthen through innovative product development the tourism and fisheries/seafood industries because they are fundamental components of the city's economy. Opportunities exist to stabilize and generate some growth within these industries through diversification and product development should be pursued.

### **Section 4.3: Capturing the Opportunities**

For Gloucester to move forward on these potential industry sectors and create the diversified harbor economy necessary for an economically healthy community, a series of priorities have been identified.

An action vehicle or organization is necessary: Gloucester presently lacks sufficient staff and financial capacity within the government/nonprofit sector to execute a number of the projects proposed in the various reports and studies that have been commissioned over the years.

Infrastructure to match ambitions: Gloucester needs investment in parcels that are generally too small to accommodate contemporary industrial and research buildings, reinvestment in the piers, pilings, berths and associated maritime infrastructure to maintain support the commercial fishing industry as well as other DPA compliant vessel dependent industries such as cruise ships or whale vessels. It needs to plan for ongoing sewer treatment capacity and telecom bandwidth capacity to support research and development programs.

Clearly defined regulatory environment: Gloucester needs to clarify a series of zoning related issues that influence building envelope size and public access (physical or visual) to one of its prime tourist attraction, its 350 year old working fishing port. These issues include height limitations, setbacks, view corridors, public access, and parking requirements.

Measurement of changes in the Harbor and Harbor Economy: Gloucester presently has limited capacity to monitor and measure the city's maritime economy that could inform policies and programs that require changes or increased resources.

#### ***Section 4.3.1: An Action Vehicle or Organization is Necessary***

Any "action vehicle" whether it's a new entity or an existing entity that has substantially increased resources should have in its portfolio the following capabilities:

- Ability to execute or directly assist in real estate development and programming
- Define and start initiatives through grant writing, providing seed funding, creating business plans, technical support through launch
- Manage and deploy financial capital resources
- Marketing and institutional partnership development

The specific structural form is not as important as ensuring that Gloucester has each of these capabilities present, properly resourced and has flexibility to act at the speed of the market. Without them much of the concepts contained in the economic initiatives section of the Harbor Plan and the concurrent Port Recovery Plan will have difficulty being implemented.

#### ***Section 4.3.2: Infrastructure to Match Ambitions***

A range of infrastructure needs must be met for Gloucester to fully develop its potential as a 21st Century diversified marine port and innovation center.

Land: Gloucester needs to consider options to facilitate the assembly and disposition of larger parcels consistent with the proposed 50% limitation on supporting uses. A variety of mechanisms are available to the city, some of which would require city council action.

Maritime infrastructure: Incentive or direct financial support is needed to maintain the publicly owned bulkheads and seawalls that support the industrial port as well as the properties directly owned by the city.

- The Stacy Boulevard/Blynman Canal project is currently in the pipeline with over \$6 million in funding allocated from state and local funds. The project will reconstruct two collapsing sections of seawall that support the Boulevard connecting the city's primary visitor's welcoming center at Stage Fort Park to the new Inner Harbor/Downtown Harbor Walk. The seawall also

protects the city's primary water trunk line from the West Gloucester reservoirs and the Canal provides vessel access from Gloucester's Inner Harbor through the Annisquam River to Ipswich Bay to the north.

During the reconstruction, the project will also provide public restroom facilities in conjunction with the private facility that now serves the bridge tender, consistent with the city's attraction of significant visitors from the Stage Fort Park Visitor's Center, across the bridge and boulevard, and to the new HarborWalk in the downtown harbor district.

- The city owns two vacant properties it is working to redevelop in the Inner Harbor. In addition to soliciting private interests, the city has pursued the potential of a Marine Innovation Center at the I4C2 parcel at 65 Rogers Street. The other parcel at 112 Commercial Street was taken by tax title foreclosure. The city removed debris from the property, and used its EPA Brownfield's Revolving Loan Fund to both inspect the property and remove underground oil tanks. As redevelopment work progresses, inspections and reconstructions of the bulkheads on these properties will be necessary to enable returning these properties to productive use.

Dredging: The need for dredging in Gloucester Harbor is most acute in fringe regions of the main ship navigation or berthing areas. Recent surveys by the ACOE and by the National Oceanographic and Atmospheric Administration (NOAA) confirmed that the harbor had operating water depths at mean low water that were less than authorized, with several isolated high points in mid channel.

There are many other areas of the Inner Harbor that require dredging. The depth along the north face of the State Fish Pier is about 20 feet but freezer ships that use the pier to load frozen herring and mackerel typically draw about 23 feet when fully laden. Massachusetts Development Agency, the pier manager, is seeking funds to dredge for an increase in depth to 25 feet. Some other areas in need of dredging include areas around public landings, as well as the berthing areas for commercial vessels at a number of privately-owned waterfront properties. The cost of dredging is a significant issue for these private businesses.

There is also significant shoaling at a number of spots in the Annisquam River. The river is a federal navigational channel and part of the East Coast's intercoastal waterway. This waterway provides an important connection between the inner harbor and the northern harbors.

In 2013, the MA Department of Transportation developed the Ports of MA Strategic Plan. Gloucester needs regular maintenance dredging of the inner harbor for both channel depths and adequate berthing depths, and needs the critical Annisquam River link between the inner harbor and Ipswich Bay to remain clear of shoaling. Dredging is highlighted in the State Plan as a priority for the MA ports. The Army Corps of Engineers can be a partner in assisting the state develop a maintenance dredging plan. The Ports Strategic Plan directs the Commonwealth to develop a dredge maintenance plan for the north shore communities and to look at the possibility of investing in a dredge that could support these regular and important needs.

Sewer: Pre-treatment is an additional cost to the fish processing and by extension biomaterial processing industries.

The city's sewer treatment plant only provides primary treatment. However, the plant currently retains sufficient capacity to accommodate new demand. Detailed permit levels and allocation availability is documented in the 2014 Groundfish Port Recovery Plan, (<http://www.gloucester-ma.gov/DocumentCenter/View/2860>, p. 12). The city has the ability to ask for additional allocation as well, as the existing limits were set in 1994, and the city has prepared justifications for increased allocations and will pursue when needed. The city does not at this time expect to build costly secondary treatment.

Primary treatment places an additional financial and technical burden on processors, as they must provide pretreatment on-site, which requires equipment and an onsite operator to monitor treatments and provide reporting to the local and state agencies. Some companies do this with a half-time position; others have a full-time staff person. The city's Environmental Engineer and its wastewater treatment plant operator, Veolia Environmental Services, monitor allocations, permits, and reporting.

Telecom: The City of Gloucester supports the continued expansion and improvement of telecommunications services throughout the city. Fiber optic capacity is supported with new conduit across the Blynman Canal. Both Comcast and Verizon have some fiber optics already deployed in Gloucester.

Comcast runs fiber optics through these conduits to two Point of Purchase locations:

- the Joan of Arc Statue on Washington Street at the west end of Main Street and
- At Brown's Mall at the intersection of Pleasant Street and Main Street (centrally located in the harbor) accessed from the east end of Main Street.

Verizon now runs fiber optics to the Head of the Harbor at the east end of Main Street.

Comcast offers a wide portfolio of business broadband services in Gloucester, including high speed (up to 10gbs) service. Verizon does not offer any services at this time.

#### ***Section 4.3.3: Clearly Defined Regulatory Environment***

Uncertainty contributes to the hesitation or reluctance to invest. The city of Gloucester needs to consider clarifying a series of regulatory issues that have a direct impact on both the DPA area of the Harbor and the newly released non-DPA areas of the Harbor.

Specific areas of emphasis include:

- Height: The present height standard of 40 ft may need to be revisited given the need to meet flood plain / storm surge elevation requirements as the likely condition for achieving conventional development financing and insurance. A 40 ft limit without adjustments for flood plain may make any potential development (including contemporary industrial building seeking 25-28ft ceilings with equipment located on the roof) difficult or impracticable. Consideration should be given regarding the view corridors, shadowing and other impacts. Additional consideration should be given to the flexibility accorded height in the MI district. Only in the MI district does a request for additional height require a variance rather than a special permit as is the case in the other districts.
- Parking: How much parking should be required given the size of most of the parcels along the Harbor? Can alternative approaches such as shared parking arrangements be used to preserve land in the harbor for public access ways and development footprints? Should parking

requirements vary by the mix of uses that may occur on these sites with a 50% supporting use allowance?

- Public Access: How much and where should public access be required? Should it be physical (the ability to walk along the water's edge or to the water's edge)? Or visual (the ability to see the activity of the harbor)? Or a mix of both?
- Setbacks & Buffering: What is the appropriate level of setback and buffering given the small parcel sizes of most of the Harbor?
- Design and Performance Standards: Should quiet design be part of the requirement for non-industrial uses that may occur adjacent to marine industrial areas? Should deed notifications and rental notifications also be required?
- Zoning for East Gloucester: With the release from the DPA is the present zoning still appropriate?

#### ***Section 4.3.4: Measurements of Changes in the Harbor and Harbor Economy***

A measurement system is an important component of monitoring and providing transparency to the public about the state of the Harbor. Critical to development of an indicator set is data that is easily obtainable (meaning readily collected) and have some "line of sight" to economic activity and economic value of the harbor. The measures should reflect the 3 key factors of the harbor economy (real estate asset investment; fishery activity; tourism levels) to show the health of the segments and take a balanced approach to the economic potential of the Harbor.

Proposed measurements include the following:

- Fish landings by species
- Fishing vessel calls
- Harbor property sales / property tax revenues
- Building improvement permits within DPA
- Seasonal local meals tax revenues
- Downtown summer parking revenues
- # of Moorings & utilization rates
- Public dockage & utilization rates
- Boat excise tax
- Cruise ship visits / passengers

## **Chapter 5: Designated Port Area Master Plan – Regulatory Issues in the DPA: Providing for Gloucester’s Maritime Industry**

### **Section 5.1: Introduction**

This section of the Gloucester Municipal Harbor Plan amends the Master Plan for the Designated Port Area (DPA) of Gloucester Inner Harbor to conform to the boundary modifications approved in the recent DPA Boundary Review conducted by CZM (Designation Decision for the Gloucester Inner Harbor Designated Port Area, April 23, 2014), below as Appendix C. The 2014 Gloucester Inner Harbor DPA Master Plan maintains the approach of the existing DPA Master Plan and provides a new, streamlined method to allow for a simple accounting of uses within the DPA and greater flexibility within the DPA regulations. The goals of the 2014 Gloucester Inner Harbor DPA Master Plan is to:

1. Strengthen Gloucester’s maritime industries;
2. Update the Plan and its provisions to reflect the revised DPA boundary; and
3. Help build a flexible future for Gloucester’s waterfront that is responsive to emerging maritime uses and industries.

To meet these goals, the specific objectives of the 2014 Gloucester Inner Harbor DPA Master Plan is to:

1. Simplify state Chapter 91 licensing for land owners;
2. Clarify local versus state licensing jurisdiction;
3. Maintain the goal of having up to 50% supporting uses for most DPA properties within Chapter 91 jurisdiction;
4. Develop a system for DPA supporting uses that is equitable among DPA landowners and easy to administer; and
5. Clarify the types of emerging marine science and technology activities that may be considered Water Dependent Industrial Uses.

Both the City and the State are committed to maintaining and strengthening Gloucester Harbor as a working waterfront. The heart and base from which to expand and strengthen the maritime economy in the port is the commercial fishery. Although the commercial fleet has been greatly reduced while fish stocks have been regulated for sustainability, the fishery is competitive and the port’s hub infrastructure has grown in regional importance as the industry has consolidated.

The City is promoting multiple possibilities to expand and diversify its maritime economy using its established and emerging resources. Envisioned expansion includes marine research, maritime professional development and training, and technology companies with a marine product focus. The City foresees an expansion of commercial and public uses as well, with these diverse mixed uses creating a fabric of economic health and activity.

To make the Gloucester Harbor DPA Master Plan effective, the City has examined the specific jurisdictional characteristics of the DPA to ensure maximum flexibility. Currently, the Gloucester Harbor DPA consists of: flowed tidelands, including the water sheet and pile-supported piers, both of which are subject to Chapter 91; filled tidelands, which are subject to Chapter 91; and upland areas that have always been landward of normal tidal action, which are not subject to Chapter 91. Because Chapter 91



jurisdiction extends only to filled and flowed tidelands, DPA land use regulations do not apply to upland areas within the boundary of the larger DPA.

## **Section 5.2: DPA Master Plan Framework**

### ***Section 5.2.1: Approach to DPA Land Use Determinations***

In the 2009 Gloucester Inner Harbor DPA Master Plan, upland DPA areas (i.e., areas within the boundary of the DPA but landward of chapter 91 licensing jurisdiction) were used to implement an innovative approach to provide flexibility for all DPA landowners, enabling them to use up to 50% of their property for Supporting Uses (SUs). However, because of complications associated with the Plan's implementation, the 2009 Master Plan may prove difficult to administer and could subject the DPA to future unintended decreases in WDIUs.

For the 2014 DPA Master Plan, the City will only consider those properties that are both within the DPA, as amended by the 2014 DPA Boundary Review, and on filled and flowed tidelands (i.e., within Chapter 91 jurisdiction). While this approach achieves the same flexibility with regard to SUs, it also distributes that flexibility more evenly and without the need to update and recalculate property use changes. The 2014 Gloucester Inner Harbor DPA Master Plan has the following components:

- Focuses only on those properties that are both within the DPA and on filled tidelands;
- Removes upland (non-filled tidelands) portions of the DPA and those areas excluded from the DPA by the 2014 CZM DPA Boundary Review from the SU calculations;
- Uses an amplification to expand upon the discretionary provisions of 310 CMR 9.12(b), providing DEP with guidance in the contemporary determinations to tailor the scope and the types of WDIUs allowed in the Gloucester Harbor DPA;
- Maintains the 2009 Gloucester Inner Harbor DPA Master Plan ratio of 72% WDIU and 28% SU area by reserving specific properties for WDIU and requiring a minimum of 50% WDIU on the remaining DPA properties within Chapter 91 jurisdiction;
- Establishes a presumption that 100% WDIUs continue on the following properties:
  - The State Fish Pier
  - The U.S. Coast Guard facility;
  - The portion of the Cruiseport that is within Chapter 91 jurisdiction;
  - All DPA roadways; and
  - All pile-supported piers;
- Requires a minimum of 50% WDIUs, and a maximum of 50% SUs, on the remaining DPA properties within Chapter 91 jurisdiction; and
- Maintains existing Maritime Industrial (MI) local zoning with minimum requirements on properties within the DPA.

The State Fish Pier, the U.S. Coast Guard facility, and the portion of the Cruiseport that is within Chapter 91 jurisdiction were identified because they currently provide acreage for key WDIUs and are unlikely to change use in the foreseeable future. A change to a non-WDIU on any of these properties would alter the maritime economy of the port and would require an amendment to the Gloucester Harbor MHP and DPA Master Plan, complete with full public involvement. DPA roadways that are located within Chapter 91 jurisdiction are essential to maintain access to WDIUs and are also included in the calculation to ensure their primary use is directly tied to the working waterfront. Under Chapter 91, pile-supported

piers within a DPA must be used for WDIUs and are therefore the fifth component of the areas set aside in this Plan for 100% WDIUs.

### ***Section 5.2.2: DPA Land Use Context and Calculations***

As amended by the 2014 CZM DPA Boundary Review, the combined area of pile-supported piers and filled tidelands within the Gloucester DPA is now approximately 49 acres. To maintain the 2009 requirement for a maximum of 28% Commercial Supporting Uses within the DPA, 35 acres within the new DPA Master Planning Area – approximately 72% of 49 acres – must be reserved for WDIUs.

Specific areas that are currently and will likely remain as WDIUs were identified, reducing the 35-acre requirement for WDIUs. These properties and areas, 100% of which are WDIUs, comprise:

- |                                  |                    |
|----------------------------------|--------------------|
| ▪ The State Fish Pier:           | approx. 8.0 acres  |
| ▪ The U.S. Coast Guard facility: | approx. 2.0 acres  |
| ▪ The Cruiseport (in ch.91):     | approx. 0.3 acres  |
| ▪ All DPA roadways               | approx. 2.7 acres  |
| ▪ All pile-supported piers:      | approx. 8.0 acres  |
| ▪ Total                          | approx. 21.0 acres |

Of the 49 acres, these parcels and areas provide approximately 21 acres toward the 35 acres required for WDIUs. If a minimum of 50% of the remaining 28 acres of DPA filled tidelands is required to be WDIU, the minimum WDIU requirement for the Gloucester DPA is met:

21 acres (100% reserved WDIU) + 14 acres (50% of remaining 28 acres) = 35 acres

This approach maintains the existing 72% land area requirement for WDIUs within the Gloucester DPA, and up to 28% for SUs across the entire DPA. However, because some areas have been designated as 100% WDIU, the remaining DPA parcels may have up to 50% SU. No complex process to track future uses is required, and the conversion from WDIU to a SU by a large land owner will not affect the amount of SUs that other DPA property owners may have. City zoning becomes the operative land use mechanism for DPA properties outside Chapter 91 jurisdiction.

While the City anticipates that 50% SUs will be allowed on all filled tidelands within the DPA, with the exception of those properties and areas listed above, this Plan does not preclude the aggregation of parcels, or a process using transfer of development rights, to achieve the same goals. If a system using an aggregation of parcels or the transfer of development rights is adopted by the City, the City shall provide notification and details to the Department of Environmental Protection and the Office of Coastal Zone Management on the new system, an explanation as to how a minimum of 72% of the DPA area will be maintained as WDIUs, and if necessary amend the MHP.

### ***Section 5.2.3: Local DPA Zoning and Buffers Between DPA Industrial Uses and Other Community Uses (301 CMR 23.05(2)(e)(4)(c))***

Local Maritime Industrial (MI) zoning was an integral component of the 2009 Gloucester Inner Harbor DPA Master Plan and in this Plan remains an important tool for promoting WDIUs. The 2009 Plan recommended zoning changes to make the local zoning consistent with State DPA regulations, and to strengthen protections for the commercial fishing industry. Following the favorable Decision on

December 9, 2009, from the State on the city's request for approval of the 2009 MHP and DPA Master Plan, these zoning changes were enacted by the Gloucester City Council on March 30, 2010.

Two components for further local zoning changes are recommended in this plan. First, the local zoning restriction that no more than 50% of any property in the Marine Industrial (MI) district can be supporting commercial use is no longer a required component of the MHP and DPA Master Plan. Second, the use table requires several additional restrictions to ensure consistency on the upland portion of property within the DPA planning area.

To avoid interference or conflicts with both traditional WDIUs and more contemporary WDIUs envisioned in this Master Plan, and to ensure the DPA Master Plan preserves and enhances the capacity of the DPA to accommodate WDIUs, the City commits to MI zoning in the upland portion of the DPA that, at a minimum, excludes new developments or conversions, unless considered accessory to a WDIU, for: (1) housing units and other residential facilities; (2) hotels, motels, and other facilities for transient lodging; (3) hospitals, nursing homes, and other care facilities; and (4) day-care centers, primary schools, and secondary schools, or other schools unrelated to maritime trades or marine science and technology.

The City believes this cooperative MI zoning approach also satisfies the provisions of 301 CMR 23.05(2)(e)(4)(c), which states that the Plan shall set forth a strategy that commits to maintaining "...a surrounding land development pattern that provides an appropriate buffer between industrial uses in the DPA and community uses that require separation therefrom in order to avoid significant operational conflict." The City further commits to move cautiously and judiciously, with full public involvement, so that any changes to MI zoning in the upland portions of the DPA do not interfere or conflict with WDIUs in the DPA.

#### ***Section 5.2.4: Continuation of Approved Amplifications and the Substitute Provision included in the 2009 Gloucester Harbor Plan and DPA Master Plan Supplement***

This Amendment includes and continues the approved Amplifications and the Substitute Provision that were included in a supplement to the 2009 Gloucester Harbor Plan and DPA Master Plan (Sections (2)(b) – (d), pp. 7 – 10).

As a result of a deepening economic recession following the approval of the 2009 Plan on December 11, 2009, and further restrictions on commercial fisheries, the anticipated benefits of the 2009 Amplifications and the Substitute Provision have not yet been fully realized. However, the City considers these Amplifications and the Substitute Provision as core components to its harbor planning efforts and the current Plan Amendment's focus on a diversified maritime economy. The Amplifications and the Substitute Provision are included here for reference and to clarify the City's intent to continue their provisions through the MHP and DPA Master Plan approval process.

The 2009 Supplement, Sections (2)(b) – (d), pp. 7 – 10, contained the following language:

(b) Provisions which amplify discretionary requirements of 310 CMR 9.00 must be complementary in effect to the underlying regulatory principles.

Requirements of the Waterways Regulations are considered "discretionary" if they do not specify numeric limitations and thus allow DEP the ability to determine which project elements do or do not comply with the regulatory principle of the regulation. A municipal harbor plan may include

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Amplifications that provide direction to DEP on how to apply such discretionary regulations. These amplifications must fulfill both the policy objectives of the waterways regulations and the goals of the Gloucester Harbor Plan.

The following table lists those discretionary requirements of 310 CMR 9.00 that are amplified in the Harbor Plan:

**Table 4 - Discretionary Requirements of 310 CMR 9.00**

	<b>Regulation</b>	<b>Amplification</b>
9.36(4)(b)	Within a DPA, reasonable arrangements shall be made to prevent commitments of space or facilities that would significantly discourage present or future water-dependent industrial activity.	In addition to the specified requirements of 9.36(4)(b): the city enacted proposed revisions to the Zoning Ordinance (in accordance with the 2009 plan section 5-4-2) which require (1) The proposed use will not, by virtue of its location, scale, duration, operation, or other aspects, pre-empt or interfere with existing or future development of water-dependent uses of the project site or surrounding property and (2) no project will displace existing commercial fishing vessel berthing in Gloucester Harbor without providing equivalent space at a suitable alternative site not already used by commercial fishing vessels.
9.52(1)(a)	When there is a water-dependent use zone, the project shall include one or more facilities that generate water-dependent activity of a kind and to a degree appropriate for the site given the nature of the project, conditions of the adjacent water body and other relevant circumstances.	For any project located along the water's edge of the DPA, the priority land use is water-dependent industrial. The plan recommends that <ul style="list-style-type: none"> <li>public access facilities be accommodated where feasible to activate the waterfront, but must be sited to be compatible with and not interfere with water-dependent industrial</li> </ul>

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		<p>uses and activities.</p> <ul style="list-style-type: none"> <li>Public access facilities can be integrated into a project as part of the open space required with a nonwater-dependent supporting DPA use.</li> <li>As is currently the case in a number of sites around Gloucester Harbor, open areas used to support working waterfront activities during much of the year can accommodate public access at other times.</li> </ul> <p>Within the water-dependent use zone in the MI district no use shall be permitted unless it provides access to water-borne vessels</p>
9.36(5)(b)(4)	DEP may consider measures provided by the applicant to provide benefits elsewhere in the harbor or in the vicinity of the site if the water-related public benefits that can reasonably be provided on-site are not appropriate or sufficient.	If a project site does not have existing water-dependent industrial uses on-site, DEP will consider commensurate investment in on-site waterfront infrastructure or an appropriate contribution to the Gloucester Port Maintenance and Improvement Fund as mitigation.

(c) Provisions which are substitutes for requirements of 310 CMR 9.00 must be complementary in effect to the underlying regulatory principles.

The proposed 2009 Harbor Plan includes only one proposed substitution for the provisions of 310 CMR 9.51(3)(c).

310 CMR 9.51(3)(c) defines the dimensions of the water-dependent use zone as:

- along portions of a project shoreline other than the edges of piers and wharves, the zone extends for the lesser of 100 feet or 25% of the weighted average distance from the present high water mark to the landward lot line of the property, but no less than 25 feet; and

- along the ends of piers and wharves, the zone extends for the lesser of 100 feet or 25% of the distance from the edges in question to the base of the pier or wharf, but no less than 25 feet; and
- along all sides of piers and wharves, the zone extends for the lesser of 50 feet or 15% of the distance from the edges in question to the edges immediately opposite, but no less than ten feet.

The Gloucester Harbor Plan endorses this water-dependent use zone. The city zoning ordinance includes a water-dependent use zone with the same dimensions as part of the municipal zoning regulations. This zoning revision includes a provision that “These above dimensions may be modified on any property as long as a minimum width of 25 feet is maintained along the project shoreline and the ends of piers and wharfs and a minimum of 10 feet along the sides of piers and wharfs, and the modification results in no net loss of area within the water-dependent use zone as prescribed by this section.

The potential to modify the water-dependent use zone in accordance with this provision is a proposed substitution of one of the discretionary requirements of the Waterways Regulations. The basis for including this potential flexibility in the dimensions of the water-dependent use zone is the widely varying sizes and configurations of waterfront parcels and wharves in the DPA. Strict adherence to the stipulated dimensions will in some cases result in odd and inefficient siting of uses on properties. Proposed conditions of any modification ensure that the intent of the water-dependent use zone is maintained. Conditions include: a minimum width of 25 feet is maintained along the project shoreline and the ends of piers and wharfs and a minimum of 10 feet along the sides of piers and wharfs; there is no net loss of area within the water-dependent use zone, and the reconfiguration achieves greater effectiveness in the use of the water’s edge for water-dependent industrial use.

Modification of the water-dependent use zone is not to be arbitrary, but only upon a showing that application of the prescribed dimensions results in a hardship due to unusual configuration of the site itself and not the preferred characteristics of a development proposal.

(d) Substitute provisions will promote, with comparable or greater effectiveness, the state tidelands policy objectives.

The conditions described above ensure that the substitute provisions will promote state tidelands policy objectives with comparable or greater effectiveness.

#### ***Section 5.2.5: Amplification of DPA Water Dependent Industrial Uses (310 CMR 9.12 (2)(b))***

As the 21st century maritime economy evolves, Gloucester is poised to continue traditional commercial fishing and other maritime activities while positioning itself to be on the cutting edge of new industries and technologies that rely on and benefit from direct access to the water. In accordance with the provisions of 301 CMR 23.05, this Plan provides an Amplification to the discretionary portions of the Waterways regulations at 310 CMR 9.12 that provides additional details on the characteristics of these contemporary maritime industries and uses. It is based in part on the unique land characteristics found in the Gloucester DPA and is developed to complement and modernize the regulatory principles that inform the discretionary aspects of WDIU determinations by DEP. It is designed to promote additional



opportunities within the Gloucester DPA, support the City's marine economy diversification goals, and provide indirect support for commercial fishing.

Diversification of Gloucester's working waterfront has been, and continues to be, a cornerstone of the City's economic development and port development strategies. Given the harbor's traditional reliance on the commercial fishing industry, the predominance of small, privately-held parcels along the waterfront, and some land and water transport access issues, Gloucester is unique among Massachusetts ports in terms of limited viable WDIUs that the City is able to attract to its waterfront. To further Gloucester's port development goals and clarify and streamline Chapter 91 licensing, the DPA Master Plan includes an Amplification under 301 CMR 23.05 (2)(b) of 310 CMR 9.12 (2)(b), the Chapter 91 section on WDI activities, to include marine science and technology activities that have equivalent characteristics to those listed under 310 CMR 9.12 (2)(b).

In order to be authorized as a water dependent use under Chapter 91, a use must "...require direct access to or location in tidal or inland waters, and therefore cannot be located away from said waters" [310 CMR 9.12(2)]. Within this definition, the Chapter 91 regulations provide specific examples of the types of activities that were considered WDIUs when the regulations were promulgated in the 1990s but with no further guidance. In addition, 310 CMR 9.12(2)(b) has not been updated to consider potential new marine-based industries that may also qualify as WDIUs. While the City is hopeful that 310 CMR 9.12(2)(b) is updated to include more contemporary uses that qualify as WDIUs at some point in the future, it includes this Amplification to promote more immediate marine industrial diversification to the City.

The standards for Amplifications in the Municipal Harbor Plan regulations require that the Amplification:

1. Does not contradict the corresponding provisions of 310 CMR 9.00, meaning, for example, that the Amplification may neither require that which is prohibited nor prohibit that which is required in 310 CMR 9.00;
2. Does not significantly alter the substantive nature of the requirement, narrow the range of factors that may be considered, or otherwise unreasonably affect the ability of DEP to exercise discretion in the interpretation and application of all relevant provisions of 310 CMR 9.00; and
3. Is consistent with the provisions of any memorandum of understanding with other state agencies as provided in 310 CMR 9.00 that may govern the way in which DEP licenses and permits incorporate the requirements of other statutes and regulations.

The Gloucester Amplification of 310 CMR 9.12(2)(b) focuses on the regulation's ambiguous definition, its reliance on listing the types of activities that were envisioned as appropriate for DPAs in the 1990s, and the water-related characteristics of those activities. Using those same characteristics, this Amplification clarifies that marine research, testing, or development activities, with the following characteristics, may be considered WDIUs:

1. A requirement to access coastal waters for research, testing, or development (310 CMR 9.12(2)); and
2. Commercial fishing facilities, including those engaged in research, testing, or development related to commercial fishing safety, conservation, and sustainability (310 CMR 9.12(2)(b)(4)); or

3. Boatyards, dry docks, and other facilities related to the construction, serving, maintenance, repair, or storage of vessels or other marine structures engaged in marine science and technology, including research, development, or testing (310 CMR 9.12(2)(b)(5)); or
4. Facilities for tug boats, barges, dredges, or other vessels engaged in port operations or marine construction, including those related to marine research, development, or testing (310 CMR 9.12(2)(b)(6)).

This Amplification meets the principal requirement for a WD determination – a requirement for direct access to water – and meets the approval standards in the MHP regulations that require consistency with Chapter 91, consistency with other regulations and statutes, and the need to protect DEP’s licensing discretion in the interpretation of its regulations while promoting and establishing the means to accommodate characteristics of emerging WDIUs.

### **Section 5.3: Economic Support for DPA Supporting Uses**

Supporting DPA use projects seeking approval must provide economic and/or operational support to water-dependent industrial uses on-site. If the property has an existing or proposed hub port use, economic support from the supporting use to the hub port use will be presumed. For other water-dependent industrial uses, the level and nature of economic support must be specified. If no water-dependent industrial exists on or is proposed for the site, a commensurate investment in on-site waterfront infrastructure (piers, wharfs, dredging) to improve the site’s capacity for water-dependent industrial use will be required. If, and only if, none of the above can be achieved adequately, a contribution to the Gloucester Port Maintenance and Improvement Fund will be required as mitigation.

### **Section 5.4: Implementation Strategy and Timeline**

Pursuant to 301 CMR 23.05(4), the Plan must include enforceable implementation commitments to ensure that, among other things, all measures will be taken in a timely and coordinated manner to offset the effect of any plan requirement less restrictive than that contained in 310 CMR 9.00. Zoning amendments were enacted in accordance with recommendations in the 2009 Plan to bring the local zoning into consistency with the DPA. Two components for further local zoning changes are recommended in Section 5.2.3, to be enacted within six months of the approval date of this Plan Amendment. These local rule revisions will permit a more flexible application of limitations on supporting DPA uses, while ensuring that an extensive amount of the total DPA land area in close proximity to the water will be reserved for water-dependent industrial use and that commercial uses and any accessory uses thereto would be limited in the DPA. The amended zoning provisions assure that permitted uses are consistent with the approved substitute provision, offsetting measures, and amplifications described in the Plan. The Plan further provides additional direction in the application and issuance of Chapter 91 licenses for sites in the planning area.

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## Chapter 6: Making the Vision Happen

### Section 6.1: Harbor Administration

Specific authority and responsibility for harbor economic development and Gloucester Harbor Plan and DPA Master Plan implementation should be assigned to the Community Development Department.

The Community Development Department is part of the executive branch of city government and has overall responsibility for coordinating the physical growth and economic development of the city, as well as the development of municipal facilities. Gloucester Harbor is and always has been an important part of the city's economic base. The complexities, conditions and issues affecting use, development and redevelopment of the waterfront and harbor require the capabilities and resources of the Community Development Department. For this to succeed, the Community Development Department must develop or secure capabilities specific to the working waterfront: an understanding of the requirements and operational characteristics of port and waterfront industries, particularly commercial fishing; knowledge of the public and private programs and incentives supporting the industrial waterfront; and knowledge of the multiple regulatory authorities with jurisdiction over the waterfront and waters of the harbor.

The Community Development Department's efforts in the harbor will be guided by the Gloucester Harbor Plan and DPA Master Plan. A Port and Harbor Committee, appointed by the Mayor, should be created to serve in an advisory capacity to the Community Development Department and monitor and promote implementation of the Harbor Plan and Master Plan. Membership on the committee should include representatives from the various waterfront businesses and industry and property owners.

Responsibilities of the Community Development Department with respect to Gloucester Harbor will be to:

- Encourage and coordinate investment in and revitalization of the waterfront infrastructure and businesses contributing to the economic vitality of Gloucester.
- Work with other city boards, commissions, and authorities to coordinate the activities related to Gloucester Harbor and adjacent shorefront.
- Be responsible for review and recommendations on Chapter 91 license applications.
- Prepare proposals seeking financial support from state and federal sources in support of port development.
- Serve as a source, repository and clearinghouse for information on the harbor and port including: condition of the navigable waterways and port-related infrastructure, investment opportunities, and permitting.
- Serve as liaison with state and federal agencies on harbor programs, and regulatory and funding activities.
- Draft policies and regulations to guide the use and development of Gloucester Harbor and its public waterfront facilities.
- Assist harbor front property owners with regulatory matters, potential funding sources, and business partnerships.
- Foster and support partnerships between private property owners and government to improve and expand appropriate port uses and activities.

- Work with the commercial fishermen's associations and fishing-related businesses to help ensure this industry continue to be a vital part of the Port of Gloucester.

## Section 6.2: Gloucester Port Maintenance and Improvement Fund

The DPA Master Plan recommends that the Gloucester City Council establish a Port Maintenance and Improvement Fund. The purpose of the fund is to receive money from Chapter 91 mitigation, grants, gifts, and other sources to be used for dredging or improving waterfront infrastructure critical to the Gloucester DPA and for other purposes consistent with the Gloucester Harbor Plan and DPA Master Plan. Expenditures are to be made in accordance with a priorities plan adopted and revised from time to time by the Port and Harbor Committee.

Chapter 91 mitigation funds may be generated if, and only if, no water-dependent industrial use exists on or is proposed for a site and a commensurate investment in on-site waterfront infrastructure (piers, wharfs, dredging) cannot be adequately achieved. The DEP will be responsible for determining the contribution as a condition of Chapter 91 licensing and will require payment as a condition of licensing. The city will be responsible for collecting the money and administering the fund.

In those instances where a contribution to the fund will be made as a condition of Chapter 91 licensing, this plan recommends that the licensee be given the option of making a lump sum contribution to the fund or making annual payments amortized over the standard license term for a water-dependent or non-water-dependent use project. Upon recommendation of the Port and Harbor Committee, an alternative payment schedule involving partial deferments may be authorized.

## Section 6.3: Duration of the Harbor Plan/DPA Master Plan

The City of Gloucester proposes to submit the Gloucester Harbor Plan and DPA Master Plan for renewal to the Secretary of Energy and Environmental Affairs five years from the date this plan is approved.

It is noted, however, that in recognition of the variety of factors that affect the economic outlook of the commercial fishing industry (the harbor's primary marine industrial activity) which in turn impacts the viability of many businesses on the harbor, there may be a need, possibly even in the short-term, to seek amendments or revision of certain provisions of this plan, including the regulatory boundaries at both the state and municipal levels.

## Section 6.4: Approval Standards

The 2009 Gloucester Harbor Plan and Designated Port Area Master Plan and the 2014 Amendment were prepared in accordance with the standards and processes for Municipal Harbor Plans established by state regulations (301 CMR 23.00). To be approved by the Secretary of Energy and Environmental Affairs and Office of Coastal Zone Management, the Harbor Plan must conform with a set of standards detailed in 301 CMR 23.05 (Standards for Plan Approval). To facilitate review of the Harbor Plan, this document provides the information necessary to support its approvability, organized according to the standards in section 23.05.

Compliance with the Standards for Plan Approval (301 CMR 23.05)

***(1) The Plan must be consistent with all CZM Policies, as applicable.***

The following is a discussion of the applicable October 2011 CZM Policy Standards, based on revisions effective October, 2011, based on previous Gloucester MHPs and DPA Master Plans, and of the Plan's conformance to them.

**Water Quality Policy #1** – Ensure that point-source discharges and withdrawals in or affecting the coastal zone do not compromise water quality standards and protect designated uses and other interests.

The Harbor Plan recommends that the City explore business opportunities that employ new fish processing technologies, such as protein recovery. These processes help minimize the volume of waste normally generated during fish processing, which in turn would have a positive effect on the quantity and quality of wastewater requiring treatment.

**Water Quality Policy #2** – Ensure the implementation of nonpoint source pollution controls to promote the attainment of water quality standards and protect designated uses and other interests.

The 2009 Gloucester Harbor Plan recommends a number of commercial, industrial, and visitor-based improvements, providing opportunities to upgrade non-point pollution controls. These improvements would be designed and constructed in conformance with current stormwater management requirements (City of Gloucester Code of Ordinances Sec. 23), state standards for stormwater discharges (310 CRM 10.00, 314 CMR 3.00, 314 CMR 4.00, and 314 CMR 9.00) and the City's CSO Long Term Control Plan, all of which provide for non-point source pollution control and improvements to existing stormwater infrastructure. Potential development and redevelopment along the harbor would be designed to meet current stormwater standards. Repairs to deteriorated wharves and piers and the removal of derelict pilings, which are anticipated as part of the harbor's revitalization, will reduce pollutant loading into the waterway.

**Habitat Policy #1** – Protect coastal, estuarine, and marine habitats—including salt marshes, shellfish beds, submerged aquatic vegetation, dunes, beaches, barrier beaches, banks, salt ponds, eelgrass beds, tidal flats, rocky shores, bays, sounds, and other ocean habitats—and coastal freshwater streams, ponds, and wetlands to preserve critical wildlife habitat and other important functions and services including nutrient and sediment attenuation, wave and storm damage protection, and landform movement and processes.

The 2009 Plan recommends dredging of several areas of Gloucester's Inner Harbor. These projects will be subject to local, state and federal environmental reviews, including impacts to coastal resource areas, such as shellfish beds, eelgrass beds, and beaches.

Finding an economically and environmentally acceptable option for the disposal of dredge material is an ongoing obstacle to dredging in Gloucester that will need to be resolved before any projects can begin.

**Protected Areas Policy #3** – Ensure that proposed developments in or near designated or registered historic places respect the preservation intent of the designation and that potential adverse effects are minimized.

The 2009 Harbor Plan includes recommendations centered on improving Gloucester's visitor-based economy (Section 4-1-5). These recommendations define an important role for the traditional marine-dependent uses located around Gloucester Harbor and other historic sites throughout the City. The Plan

recommends highlighting these facilities through a network of visitor attractions and a series of industry-based attractions, increasing opportunities to visit and promote these sites.

The Plan respects the traditional and historical arrangement of a working port, whereby shoreside facilities service maritime industries. To this end, the Plan recommends that waterfront property owners maintain water-dependent businesses along the water's edge, provide for continued and increased vessel berthing and invest in the infrastructure on their properties deemed critical for the maintenance of a water-dependent industry.

By suggesting a network of existing historic structures and sites along the waterfront and encouraging the rehabilitation of existing infrastructure, the Plan is in keeping with the intent of Gloucester's Historic Commission, which is "to promote educational, cultural, economic and general welfare of the public through preservation and protection of the distinctive characteristics of buildings and places significant in the history or architecture of the city, and through the maintenance and improvement of settings for such buildings and places..." (Gloucester Code of Ordinances Sec. 16).

Ports and Harbors Policy #1 – Ensure that dredging and disposal of dredged material minimize adverse effects on water quality, physical processes, marine productivity, and public health and take full advantage of opportunities for beneficial re-use.

There are a number of safeguards in the dredging planning and permitting processes aimed at protecting water quality, physical processes, marine productivity and public health. The 2009 Harbor Plan does not make any recommendations that could in any way circumvent these safeguards or are in any way counterproductive to the intended purposes of dredge material planning and permitting in the state.

The rigorous permit review process for dredging projects, involving multiple agencies at the local, state, and federal levels, is in part designed to protect environmental quality and public health. The outstanding dredging projects in Gloucester's Inner Harbor will require a Category III regulatory review, which is the most stringent level of review that requires project-specific review, public review and comment, and possible preparation of an Environmental Impact Statement. In addition, Category III permitting requires prior approval from DEP (401 Water Quality Certification) and from CZM (that the project is consistent with state coastal policies). In terms of disposal, the Dredge Material Management Plan, which is a necessary precursor to dredging, includes the preparation of an Environmental Impact Report to ensure that the disposal of dredge material has minimal environmental impacts.

Ports and Harbors Policy #2 – Obtain the widest possible public benefit from channel dredging and ensure that Designated Port Areas and developed harbors are given highest priority in the allocation of resources.

The Plan recommends that Gloucester complete some of the dredging projects that are outstanding from 1999 Harbor Plan's recommendations, including along the north face of the State Fish Pier.

The Section 10, Section 404, Section 103 are administered by the US Army Corps of Engineers through a single permit application. As discussed above, there are a number of safeguards in place in the permit process to protect environmental integrity. This Harbor Plan does not propose anything to the contrary.



Ports and Harbors Policy #3 – Preserve and enhance the capacity of Designated Port Areas to accommodate water-dependent industrial uses and prevent the exclusion of such uses from tidelands and any other DPA lands over which an EEA agency exerts control by virtue of ownership or other legal authority.

The plan's provisions and recommendations require water-dependent industrial use of the waterfront and prevent the preemption and exclusion of water-dependent industrial uses by other uses.

Protection and promotion of the DPA and water-dependent industry is central to the 2014 MHP and DPA Master Plan Amendment.

The 2014 MHP and DPA Master Plan Amendment both encourage that improvements to waterfront infrastructure be made to enhance the harbor's capacity to accommodate water-dependent industrial uses, ensuring their continued presence. The proposed Gloucester Port Maintenance and Improvement Fund will be implemented through the Chapter 91 permit process. These will ensure that, as a condition of licensing, property owners be required to make on-site improvements to their waterfronts or, if such improvements are not needed, to make a contribution to the Fund in exchange for certain development privileges.

Ports and Harbors Policy #5 – Encourage, through technical and financial assistance, expansion of water-dependent uses in Designated Port Areas and developed harbors, re-development of urban waterfronts, and expansion of physical and visual access.

The proposed Gloucester Port Maintenance and Improvement Fund is proposed to be created to receive money from Chapter 91 mitigation, grants, gifts, and other sources to be used for waterfront infrastructure improvements, such as repairing wharves, building new docks and piers, increasing vessel berthing, dredging, etc. In addition to this financial mechanism, the Plan recommends that the coordinating and technical assistance functions relating to the implementation of the 2014 MHP and DPA Master Plan Amendment be embedded in the City's Community Development Office. This will help to encourage more effectively the economic development of marine industrial and related uses in the Harbor and to serve as a liaison between property owners and the regulatory authorities to help them realize the full potential of their properties.

All the elements of the 2009 Harbor Plan, from rebuilding waterfront infrastructure, to promoting the development of compatible commercial Supporting DPA Uses, to the visitor-based improvements, represent redevelopment of the Gloucester waterfront in a way that is compatible with the nature and purpose of an industrial port environment.

The proposed network of visitor attractions (Section 4-4) includes expansion of pedestrian loops and re-establishment of the water shuttle between downtown and Rocky Neck. The purpose is to provide for better opportunities to observe an authentic working waterfront and to provide for more visual access and, where appropriate, physical access to the harbor's industrial and artistic attractions.

***(2) The Plan must be consistent with state tidelands policy objectives and associated regulatory principles.***

(a) The Plan must be consistent with the state tidelands policy objectives, including:

1. Ensure that the development of all tidelands complies with all applicable environmental regulatory programs and is protective of Aquatic Resources and coastal Areas of Critical Environmental Concern.

Conformance with all applicable local, state and federal environmental regulatory requirements will be required for all new development proposed on tidelands as part of this Harbor Plan, including the Public Waterfront Act (Chapter 91) and its corresponding Waterways Regulations, the Massachusetts Flood Hazard Management Program, Gloucester's Wetlands Protection Bylaw, Federal Water Pollution Control Act (Section 401, 403 and 404), Massachusetts Clean Water Act and its corresponding Water Quality Standards, Massachusetts Surface Water Discharge Permit Program, and the Coastal Zone Management Act (Federal Consistency Review). There are no Areas of Critical Environmental Concern in the Gloucester Harbor Plan study area.

2. Preserve Commonwealth-held rights of public use of tidelands including access.

The preservation of these rights is ensured through the requirements of Chapter 91, which applies to any proposed project in or on state tidelands. Because it is a working port, public access is not a priority use for the tidelands of Gloucester's Inner Harbor. However, the Plan makes a number of recommendations to maximize physical and visual access to the harbor where feasible.

3. Preserve the availability and suitability of tidelands for water-dependent purposes or tidelands reserved primarily for maritime industry.

A number of recommendations in the 2014 MHP and DPA Master Plan Amendment serve to preserve the availability and suitability of tidelands for water-dependent purposes.

Much of Gloucester Harbor is in a DPA. Protection and promotion of the DPA and its attendant water-dependent industry is central to the 2014 MHP and DPA Master Plan Amendment, which are both explicit that water-dependent industry is a priority land use for properties within the Gloucester DPA. To achieve this goal, the Plan proposes that the City adopt a number of revisions to its zoning ordinance as detailed above.

The 2014 MHP and DPA Master Plan Amendment encourage that improvements to waterfront infrastructure be made to enhance the harbor's capacity to accommodate water-dependent industrial uses. The proposed Gloucester Port Maintenance and Improvement Fund will be implemented through the Chapter 91 permit process to help achieve this goal.

With regards to vessel navigation and berthing, a principal use of flowed tidelands, the Plan includes recommendations for dredging and the removal of navigational hazards to improve vessel access to waterfront properties. The Plan encourages the City to seek funding to create more public docks for use by local and visiting commercial vessels. As guidance to DEP, the Plan also suggests that the maintenance of existing berthing and the creation of new berthing for commercial vessels be a condition of all Chapter 91 licenses issued for industrial and commercial waterfront properties in the DPA.

To oversee much of what the Harbor Plan proposes with regards to preserving and promoting water-dependent uses on tidelands, the Plan recommends that the responsibility for implementing the 2014 MHP and DPA Master Plan Amendment be embedded in the City's Community Development Office. Its primary function would be to encourage more effectively the economic development of water-

dependent and related uses in the Harbor and to serve as a liaison between property owners and the regulatory authorities to help them realize the full potential of their properties.

4. Ensure patronage of public recreational boating facilities by the general public, prevent undue privatization in the patronage of private recreational boating facilities, and ensure fair assignment of municipal moorings.

Opportunities for recreational boating in Gloucester Harbor are restricted by the DPA designation and local zoning and for this reason the Plan is limited in its ability to address the wants and needs of the recreational boating community. However, it does recognize that access to downtown Gloucester is highly desired by transient boaters and to this end recommends several possible solutions for improving access by transient boaters within the harbor: managed sharing of facilities built for commercial vessels by transient recreational vessels; use of temporary, bottom-anchored floats; additional dinghy tie-ups; and/or siting facilities for transients at location outside of the DPA.

The Plan does not address the issue of mooring allocation, leaving unchanged current City policies and procedures as implemented by the Harbormaster.

5. Ensure proper engineering and design practices for marinas, boatyards and ramps, and include pump-out facilities.

The Plan does not make any recommendations regarding the development of new marinas, boatyards, or boat launching ramps. However, to the extent that they are allowed under existing regulations, they would be subject to local and state review, which includes sound design, mitigation, and provisions for pump-out facilities.

6. Ensure proper dredging practices.

All dredging projects recommended in the Plan would be subject to local, state, and federal permitting and review requirements, ensuring that environmental impacts would be analyzed and minimized. Disposal of the dredged material would be determined through the Dredge Material Management planning process, which requires an environmental impact report and an exhaustive review of alternative sites and disposal methods to determine the environmentally preferred alternative.

7. Minimize impacts of non-water dependent uses on qualifying water-dependent uses.

In the DPA, which includes approximately half of the Harbor Plan study area (if the harbor plan study area remains the same as the 2009 plan), existing regulations under Chapter 91 will ensure that the capacity of tidelands to accommodate water-dependent uses will be protected.

Recommended revisions to the City's Zoning Ordinance will help minimize impacts of no water-dependent projects on existing or future water-dependent uses. These proposed revisions make the following required findings for approval of site plan review: (1) the proposed use will not displace existing water-dependent use with a non-water-dependent use; (2) the proposed use will not, by virtue of its location, scale, duration, operation, or other aspects, pre-empt or interfere with existing or future development of water-dependent uses of the project site or surrounding property; (3) the proposed use is compatible with the working waterfront character of the zone; (4) the proposed project will not displace existing commercial fishing vessel berthing in Gloucester Harbor, without [the applicant]

providing equivalent space at a suitable alternative site not already used by commercial fishing vessels; and (5) the proposed use will not adversely affect the preservation of water-dependent uses on surrounding properties.

The Plan promotes development of commercial Supporting Uses in the DPA, particularly on underutilized or derelict properties. These commercial Supporting Uses may be either water-dependent or no water-dependent. But consistent with the Chapter 91 regulations, Supporting Uses must not interfere with existing water-dependent industry, they must be commensurate in scale with any water-dependent industrial use on the site, and they must provide economic or operational support to water-dependent uses on- or off-site. The Plan lays out an alternative for the latter requirement if it is not feasible. The goal is not to limit commercial Supporting Uses to the detriment of the property owner, but rather to enable property owners to benefit from additional business while simultaneously providing a stream of revenue to provide for infrastructure improvements that are critical to the water-dependent industry of Gloucester Harbor.

8. Ensure reasonable apportionment of water-dependent and no water-dependent uses in qualifying projects.

Specific setbacks in both Chapter 91 and the zoning ordinance ensure that those lands directly abutting the water are prioritized for water-dependent industrial uses. The Harbor Plan accommodates both water-dependent and no water-dependent Supporting Uses and includes provisions that both apportion the amount and determine the location of water-dependent and no water-dependent uses including industrial and supporting commercial uses (sections 5-2-3 and 5-2-4).

9. Ensure no water-dependent use projects on Commonwealth tidelands, except in DPAs, promote public use and enjoyment.

Approximately half of the identified Harbor Plan area is within the DPA. Areas now outside of the DPA include East Gloucester, Smith Cove and everything outside the inner harbor. There are no recommendations for private development that would affect Commonwealth tidelands outside of the study area.

(b) Provisions which amplify discretionary requirements of 310 CMR 9.00 must be complementary in effect to the underlying regulatory principles.

Requirements of the Waterways Regulations are considered “discretionary” if they do not specify numeric limitations and thus allow DEP the ability to determine which project elements do or do not comply with the regulatory principle of the regulation. A municipal harbor plan may include Amplifications that provide direction to DEP on how to apply such discretionary regulations. These amplifications must fulfill both the policy objectives of the waterways regulations and the goals of the Gloucester Harbor Plan.

The Amplifications included as a Supplement to the 2009 Plan were included in the Secretary’s Approval of December 11, 2009, and included above in Section 5-2-4. The 2014 Amendment provides an additional Amplification that clarifies existing regulatory language as to the characteristics of WDIUs and is designed to further encourage and expand such uses within Gloucester Harbor.

(c) Provisions which are substitutes for requirements of 310 CMR 9.00 must be complementary in effect to the underlying regulatory principles.

The 2009 Harbor Plan included only one Substitute Provision to 310 CMR 9.51(3) (c) regarding water dependent use zones. This Substitute Provision was included in the Secretary's Approval dated December 11, 2009, the relevant text of which is above in Section 5-2-4.

(d) Substitute provisions will promote, with comparable or greater effectiveness, the state tidelands policy objectives.

The conditions described above ensure that the substitute provisions will promote state tidelands policy objectives with comparable or greater effectiveness.

(e) The following criteria are applicable to the DPA Master Plan.

10. An extensive amount of total DPA land area in close proximity to the water will be reserved for water-dependent industrial uses. In general, commercial uses and accessory uses thereto will not occupy more than 25 percent of the total DPA land area covered by the Master Plan.

The 2009 Plan limited the amount of Commercial Supporting Uses in the DPA Master Plan to 28% of the total area. The 2014 Amendment uses a DPA Master Planning Area which excludes the non-jurisdictional portions of the DPA and that portion of the DPA removed in the April 2013 DPA Boundary Review. There are three general impacts that this redefined DPA Master Planning area have: (1) the total DPA Master Planning area is smaller in the 2014 Amendment; (2) the maximum allowable percentage of Commercial Supporting Uses in the DPA Master Planning Area remains at 28%; and (3) the maximum allowable percentage of Commercial Supporting Uses in the DPA subject to Chapter 91 jurisdiction increases slightly from 25% to 28%. However, given the commitments the City shall make in terms of excluding uses in the non-jurisdictional portion of the DPA as detailed in Section 5 above, the City believes this change will not materially affect current or new WDIUs in the DPA.

11. Prevent commitments of space or facilities that would significantly discourage present or future water-dependent industrial activity, especially on waterfront sites. In addition, specify limits on the type, scale, duration, operation, or other relevant aspects of commercial use to ensure that such uses will mix compatibly and not significantly alter the predominantly maritime industrial character of the DPA. Specify reasonable limitations on any uses in the DPA, if necessary to mitigate conflict with existing residential uses on properties abutting the DPA.

Section 5-4-2 of the 2009 Gloucester Harbor Plan recommended that the Gloucester Zoning Ordinance be amended to include a new Site Plan Review section. Site Plan Review is now required for new development and expansion of existing uses in the MI district. The Special permit granting authority, in approving a proposed project must find that: (1) the proposed use will not displace existing water-dependent use with a non water-dependent use; (2) the proposed use will not, by virtue of its location, scale, duration, operation, or other aspects, pre-empt or interfere with existing or future development of water-dependent uses of the project site or surrounding property; (3) the proposed use is compatible with the working waterfront character of the zone; (4) the proposed project will not displace existing commercial fishing vessel berthing in Gloucester Harbor, without [the applicant] providing equivalent

space at a suitable alternative site not already used by commercial fishing vessels; and (5) the proposed use will not adversely affect the preservation of water-dependent uses on surrounding properties.

The plan also recommends conditions on uses subject to Site Plan Review that ensure proposals are developed consistent with the dimensional standards of the Waterways Regulations.

No additional limitations on DPA uses are considered necessary to mitigate conflict with existing residential uses abutting the DPA.

12. Identify any industrial or commercial uses allowable under the municipal zoning that qualify as supporting DPA uses, provided such uses comply with provisions of the definition of supporting DPA uses (310 CMR 9.02).

310 CMR 9.02 defines Supporting Use as an industrial or commercial use that provides direct economic or operational support to a water-dependent industrial use. In the case of commercial uses, hotels/motels, recreational boating facilities, residential, major entertainment and new office buildings are not considered Supporting DPA Uses.

13. Identify a strategy to guide the ongoing promotion of water-dependent industrial use, including (a) recommendations for capital improvements or other benefits to be provided by projects involving supporting DPA uses, (b) preserving and enhancing transportation infrastructure and facilities providing user access to the working waterfront and its backlands from both water and landside, (c) committing to a surrounding land development pattern that provides an appropriate buffer between industrial uses in the DPA and community uses that require some separation to avoid conflict.

The 2014 Municipal Harbor Plan & DPA Master Plan Amendment continues a number of recommendations made in the 2009 Harbor Plan specifically designed to promote water-dependent industrial use:

- Dredging. In 2013, the MA Department of Transportation developed the Ports of MA Strategic Plan. Gloucester needs regular maintenance dredging of the inner harbor for both channel depths and adequate berthing depths, and needs the critical Annisquam River link between the inner harbor and Ipswich Bay to remain clear of shoaling. Dredging is highlighted in the State Plan as a priority for the MA ports. It is clear that the Army Corps of Engineers is not funded for projects the size of the maintenance needs in the MA ports. The Ports Strategic Plan directs the Commonwealth to develop a dredge maintenance plan for the north shore communities and to look at the possibility of investing in a dredge that could support these regular and important needs.
- Commercial berthing. The Plan recommends that every effort should be made to ensure that existing berthing is adequately maintained and that additional commercial berthing is created. To this end, the Plan recommends that, as guidance to DEP, maintenance of existing berthing and creation of new berthing for commercial vessels should be a requirement of all Chapter 91 licenses issued for industrial and commercial properties in the DPA. Those owners who wish to avail themselves of the increase in potential commercial use on their property will have to ensure that they repair or improve their waterfront so that it is capable of providing safe berthing for commercial vessels. On those properties where commercial berthing is either fully

developed or unfeasible, the owner will be able to fulfill the requirement that a “commercial use that provides direct economic or operational support to a water-dependent industrial use” by contributing to a Gloucester Port Maintenance and Improvement Fund.

- Gloucester Port Maintenance and Improvement Fund. The Plan recommends that Gloucester City Council establish a Port Maintenance and Improvement Fund. The purpose of the fund is to receive Chapter 91 DPA mitigation funds, grants and gifts, the proceeds of which will be used to dredge or improve waterfront infrastructure deemed critical to the Gloucester DPA. Expenditures are to be made in accordance with a priorities plan adopted and revised from time to time by the Port and Harbor Committee. In the event of a contribution to the fund is to be made as a condition of Chapter 91 licensing, the licensee has the option of making a lump sum contribution to the Fund or making annual payments amortized over the standard license term for a water-dependent or no water-dependent use project. In addition, upon recommendation of the Port and Harbor Committee, an alternative payment schedule involving partial deferments may be authorized in unusual cases.
- Support initiatives to bring more cruise ships to Gloucester. Several cruise ship lines have expressed a strong desire to include Gloucester as a port call on their ships’ future itineraries. Port calls to Gloucester since 2001 have been very well received both by the passengers and the City’s merchants and attraction operators.
- Encourage new technologies. The Plan recommends that entrepreneurial initiatives employing new technologies or processes for producing new products from fish or other organic materials harvested from local waters should be encouraged and, if appropriate, supported.

The 2014 Municipal Harbor Plan & DPA Master Plan Amendment also includes a number of recommendations specifically designed to preserve and enhance transportation infrastructure and facilities providing user access to the working waterfront and its backlands from both water and landside:

***(3) The Plan must be compatible with all plans and planned activities associated with state agencies owning real property or otherwise responsible for implementation of plans in the area.***

The Jodrey State Fish Pier, the only state-owned property in Gloucester, is a prominent feature in the harbor. The State Pier is owned by the Department of Conservation and Recreation and managed by Mass Development. In the 2014 Municipal Harbor Plan & DPA Master Plan Amendment, there are three recommendations that will affect activities on the State Fish Pier. These recommendations are in line with the State’s ongoing efforts to revitalize and diversify uses in order to expand the harbor’s capabilities and retain the fishing industry in Gloucester.

The first recommendation concerning the State Pier calls for dredging along the north face of the pier to provide for better vessel access. The second recommendation is that some marine industrial businesses should utilize existing truck parking on the State Fish Pier so that there are fewer trucks parked along downtown streets. The third recommendation is that 100% of the State Pier be designated for WDIUs.

***(4) For plan requirements less restrictive than contained in 310 CMR 9.00, an enforceable implementation plan must be provided.***

See Section 5-4 above.



## Appendix A: Committee Membership and Public Meetings

### Harbor Plan Committee:

Rick Noonan, Chairman (Planning Board representative)

Paul McGeary, Vice-chairman

Paul Vitale (Fisheries Commission representative)

Bob Gillis (Waterways Board representative)

Greg Verga (City Council representative)

Jeffrey Amero

Ann Molloy

Marcy Pregent

Mike Potter

Steve Cefalo

Staff: Sarah Garcia, Harbor Planning Director

### Public Meetings:

- 11/19/12: Committee Meeting: Introductions, Harbor Plan Process, Report on 2009 Plan
- 12/17/12: Committee Meeting: DPA Regulations, Maritime Econ Working Group
- 01/28/13: Committee Meeting: Fisheries Commission, Waterways Board
- 02/25/13: Committee Meeting: DPA Boundary Review process
- 03/19/13: Committee Meeting: Mission for this Harbor Plan
- 04/30/13: Committee Meeting: Scope for consultant, review of 2009 recommendations
- 05/21/13: Committee Meeting: Review of 2009 recommendations [Consultants hired]
- 08/15/13: Committee Meeting: Presentation and discussion with consultant team
- 09/18/13: Committee Meeting: Economic and Planning Baseline
- 09/25/13: General Public Meeting 1
- 10/09/13: Committee Meeting: Review of March 2010 DPA Technical Advisory Committee Report
- 11/13/13: Committee Meeting: Assessment of Economic Opportunities
- 11/19/13: General Public Meeting 2
- 12/09/13: Committee Meeting: Test Fit Workshop
- 04/23/14: Committee Meeting: Proposed Regulatory Framework
- 05/14/14: Committee Meeting: Proposed Economic Strategy
- 06/04/14: Committee Meeting: Regulatory Workshop
- 06/09/14: General Public Meeting 3
- 7/9/14: Committee Meeting: Consideration of Draft 2014 MHP and Review of Public Comments

## Appendix B: Report on process and outcomes from the 2009 Master Plan



### **2009 Harbor Plan and Designated Port Area Master Plan Gloucester, MA**

**Review & Status Report  
November 19, 2012**

## **Plan Evolution**

### **2006 Committee Plan:**

- 3 Districts: M1, M2, M3
- Greater flexibility for commercial supporting use in M1 (Harbor Cove) & and M2 (East Glouc.)

### **2007 Property Owners:**

- Allow more uses for all
- Allow mixed recreational & commercial dockage

### **2008 Listening Posts:**

- Diversify uses. Create public access and uses.
- Allow mix of recreational boating



Figure 2-3. DPA Planning Sub-areas

## Treatment of Requirements

- What could go into the Plan and still be approvable went into the Plan.
- The City would offer Technical Assistance
- What could not go into the Plan



- Rule Change
- Legislative Action

## How to read the 2009 Plan

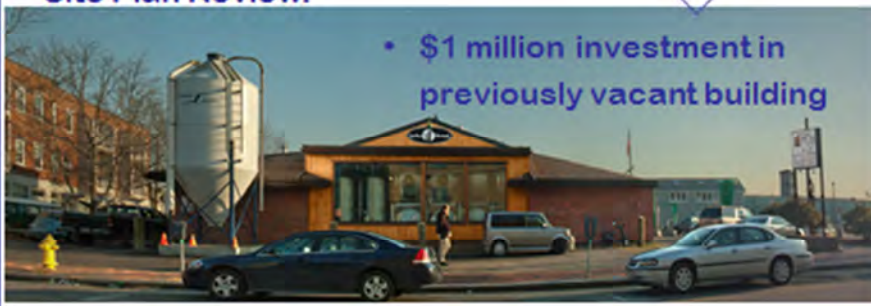
- **Decision on the City of Gloucester's Request for Approval of Plan**
  - 24 page statement from EOEEA placed in front of the Plan
  - Find the Table of Contents after the Decision
- **Chapter 1 – 3 page Executive Summary**
- **Chapter 2 – Vision and process**
- **Chapter 3 – Current Conditions**
- **Chapter 4 – Issues & Recommendations**
- **Chapter 5 – DPA regulatory calculations**
- **Chapter 6 - Implementation**

## Chapter 4: Issues, recommendations ...and outcomes.



## Recommendation for 50%

- All properties are allowed a higher (50%) percentage of supporting commercial use
- The City changed local zoning to make this possible: Site Plan Review.





## Strengthen the Commercial Fishing Industry (sec 4-1-1)



Preserve  
Shoreside  
Infrastruc-  
ture  
(Strat. 1)

### Reestablished the Fisheries Commission

- Dockage study (Strat. 2)
- Processing study (Sec 4-8)
- Voice for fishing interests



## Strengthen the Commercial Fishing Industry (sec 4-1-1)



New  
Fish  
Auction

### Increased local retailing of fresh fish (Strat. 4)

- Cape Ann Fresh Catch – serving over 600 members. Featured 10/1/12 NYT



July 30, 2014

## Expand, Diversify Maritime Economy

Attract marine  
research (Sec. 4-1-2)  
(Strategy 1)



## Expand, Diversify Maritime Economy

Attract marine  
research (Sec. 4-1-2)  
(Strategy 1)



December 2, 2011

[A marine research center's rebirth](#)  
By Steven Fletcher [Staff Writer](#)



July 30, 2014

## Expand, Diversify Maritime Economy



Attract installations/testing  
of wind and tidal resources

(Strategy 3)



Build shore side infrastructure for off-shore energy (St. 4)

## Expand, Diversify Maritime Economy

- Develop an  
Economic  
Development Plan  
(Sec 4-1-2, Strategy 6)



- Support initiatives to  
expand the cruise  
ship market (Strategy 8)  
– 22 cruise ships in 2012



CATA trolley meets the ships



July 30, 2014

## Expand, Diversify Maritime Economy

- **Access government assistance** (Sec 4-1-2, Strategy 10)



## The Visitor-based Economy (Sec 4-4)

- **Create a network of attractions** (Strategy 1)
- **Provide opportunities to observe working waterfront** (Strategy 2)
- **Promote the local art community** (Strategy 3)



*Gloucester Harbor Water Shuttle & Tour*  
Hop on / Hop off - Ticket valid all day!

July 30, 2014

## Increase Supporting Commercial Uses

(Section 4-2)



*"Supporting commercial uses can contribute to the diversity that infuses capital into the waterfront properties and infrastructure at this time of transition of the maritime economy."*



## Underutilized Land Parcels

Two Parcels  
called out  
for assistance:



– I4-C2

– Birds-Eye



## **Recreational Boating (sec 4-3)**

### **Facilitate recreational boat access to downtown**

- Transient dockage
- Access to downtown by boat
- Launch service
- Dinghy dock tie-ups
- Temporary, bottom-anchored floats

**(New recreational wharves only possible with legislative action or favorable rule change)**

## **Treatment of Requirements**

- What could go into the Plan and still be approvable went into the Plan.
- The City would offer Technical Assistance
- What could not go into the Plan



- Rule Change
- Legislative Action



## Potential regulatory change

- **Suggested specific, limited regulatory change**
  - To allow new wharves to include a mix of recreational and commercial dockage
  - To allow supporting commercial use over pile-supported piers
- **EOEEA agreed to review – set up Task Force with Gloucester representation**
- **State agency drafted potential changes**
- **This was a two year process**

### Next Steps

#### **Request briefings on current initiatives**

- The Fisheries Commission
- The Waterways Board
- The Maritime Economy Working Group
- The Tourism Commission

#### **Choose where to focus our efforts**

#### **Develop strategies for effective change**



July 30, 2014

## Appendix C: Gloucester I4C2 Marine Innovation Center Concept Study



Dangermond Keane Architecture



# Marine Innovation Center

Concept Study

*Draft 6 May 2014*



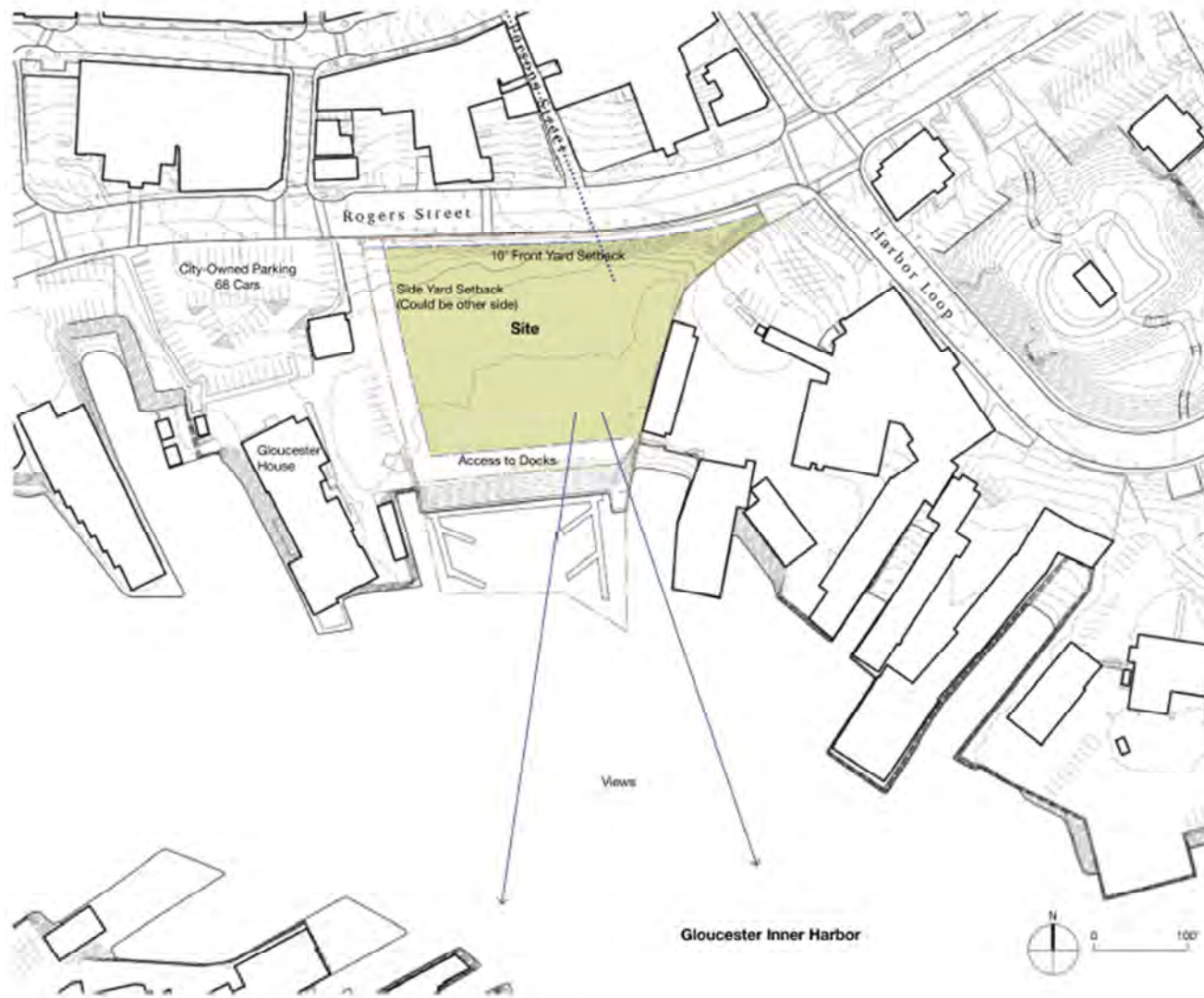


## Site Overview



July 30, 2014

## Site Analysis



### Gloucester I4C2

#### Initial Assumptions/Findings

- Neither sunken nor structured parking are feasible in this location for the size of the project. All off-street parking must be accommodated at grade.
- The City owns an adjacent parking lot of 68 cars immediately to the west of the property. This lot may be available as a parking offset.
- The requirements for parking are sufficient that unless the new building is quite small, some parking will be under the structure, which will be on a platform.
- Considerations of economy will drive schemes that have less structured deck than more – a smaller footprint over parking will be less expensive and therefore more feasible.
- FEMA Base Elevation will change soon to Base Elevation 14. Ground floor elevation for the new development must be at 15 or higher. Area beneath the building can be used for parking, storage, and not much else.
- It is desirable to configure the harbor walk in a loop through the site rather than doubling back on itself.
- Configurations that parallel the wharf fingers are more desirable than configurations that run perpendicular. This is the pattern of the waterfront.
- Public space and public access are desirable, but will need to be limited in scope – large exterior plazas and parks will be expensive to develop and maintain, and may actually be less desirable in bad weather than small spaces.
- Uses immediately to the west are generally more attractive than uses immediately to the east; the eastern side is better suited for services, etc.
- Whenever access to the docks and to a parking lot at grade will be easier on the west side where there is less slope, as it is at present.
- The 40' height limit and the waterfront pattern both suggest that the building will not be more than two stories above the street.
- The amount of parking that can be accommodated on-site tops out at around 150 cars. 120 or so cars is a more likely outcome, as some of the site will need to be devoted to other uses than parking. If parking on the adjacent city lot is factored in, the development envelope is limited to what will require around 180 cars.
- The parking limitations suggest that the developer size will be around 40,000 to 45,000 sq ft if the adjacent lot can be used, and around 30,000 to 35,000 sq ft if not used.



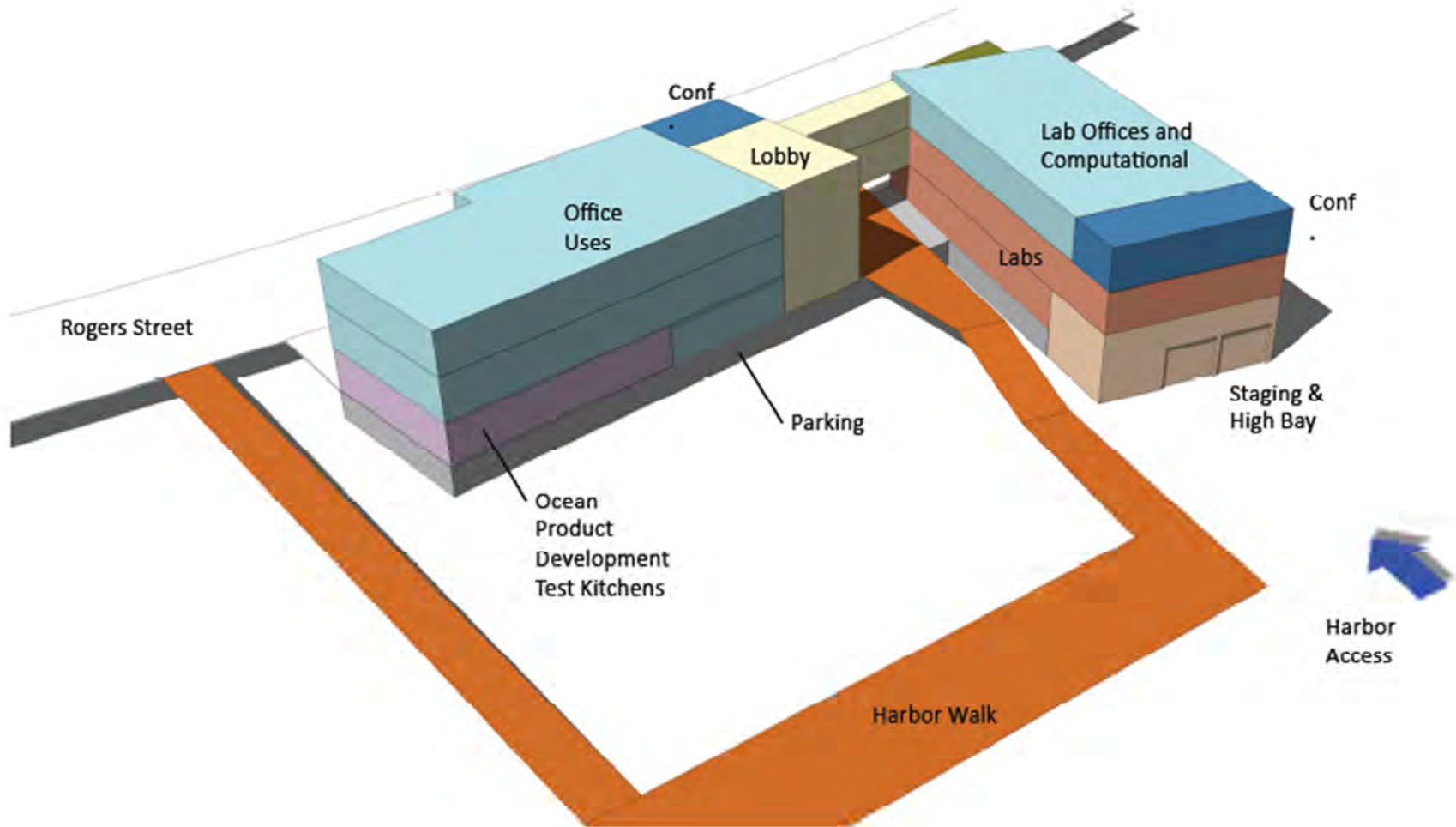
July 30, 2014

## Program of Requirements

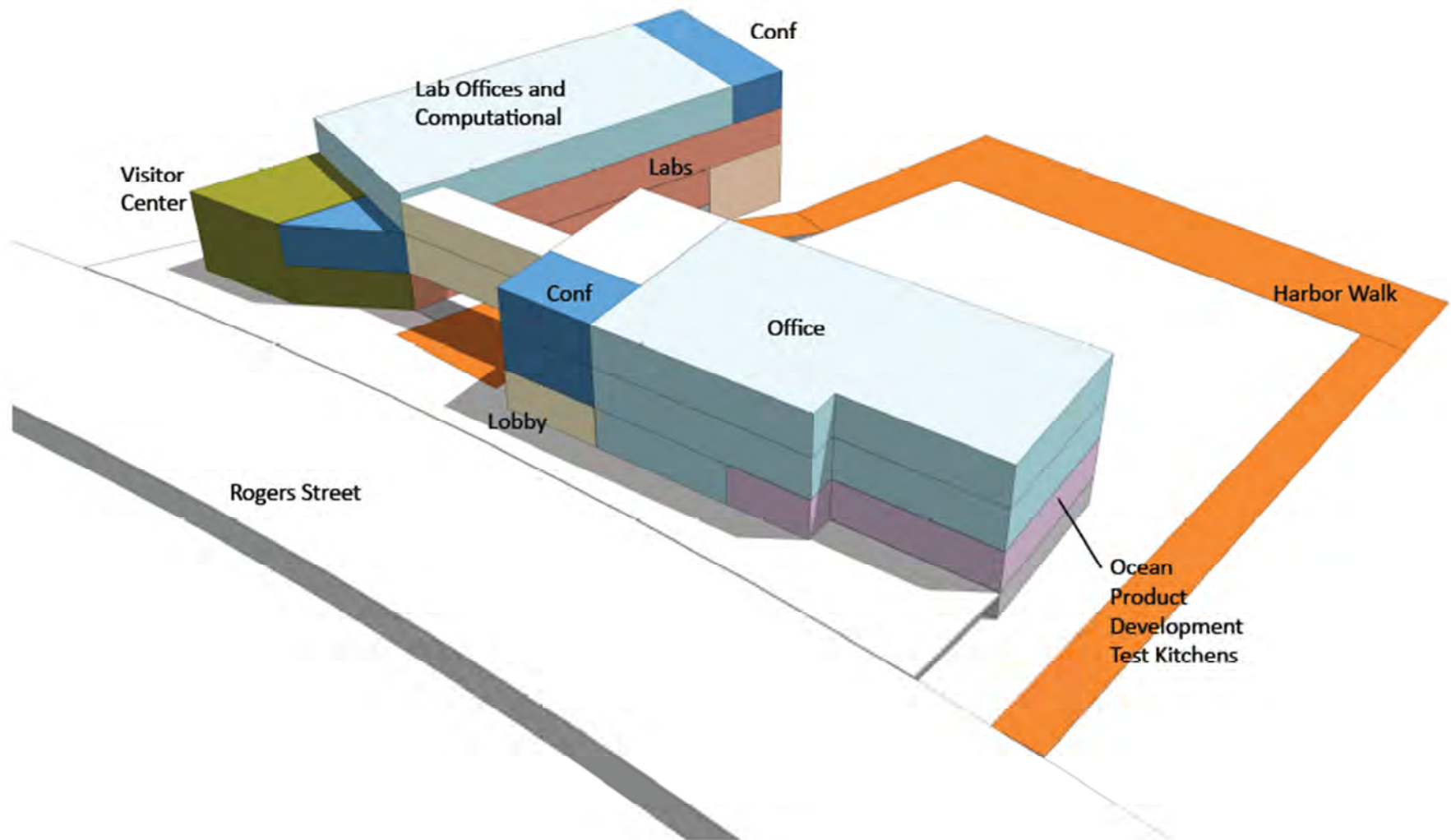
	Net Area	Ea	Quan	Total Net SF	Notes
Vessel Service					
Secure Storage	400	1		400	Individual cages
Interior Staging	2000	1		2,000	Covered staging and prep space
Covered general storage	2000	1		2,000	
Shared Shop/Wet Space				-	
Small Machine Shop	400	1		400	
Small Electronics Shop	400	1		400	
Procedure space w/hood	400	2		800	
Workshop/Lab Suites				-	
Workshop	1000			-	Workshop/Lab space for five groups
Procedure	200			-	
Secure Storage	200			-	
	1400	5		7,000	
Office Suites				-	
Offices (5 @150)	750			-	Small office suites for 10 different groups
Huddle spaces (2@150)	300			-	
Open office (6*80)	480			-	
Storage/copier	120			-	
	1650	10		16,500	
Shared Interaction				-	
Lg Conference/Classroom	900	1		900	Seats 40
Sm Cont/Breakout	200	4		800	
Break Room/Kitchen	250	1		250	
Library	200	1		200	
Prep Kitchen				-	
Kitchen	1500	2		3,000	
Storage/Office	1000	2		2,000	
Demonstration/Education	1000	1		1,000	Shared
Lobby	1500	1		1,500	
Visitor Center	1500	1		1,500	
Service dock/staging	500	1		500	
				-	
				41,150	
Grossing factor	0.65			14,403	
				55,553 SF	

Assumes that a variance will be granted from the current 40' height limit and stringent parking requirements

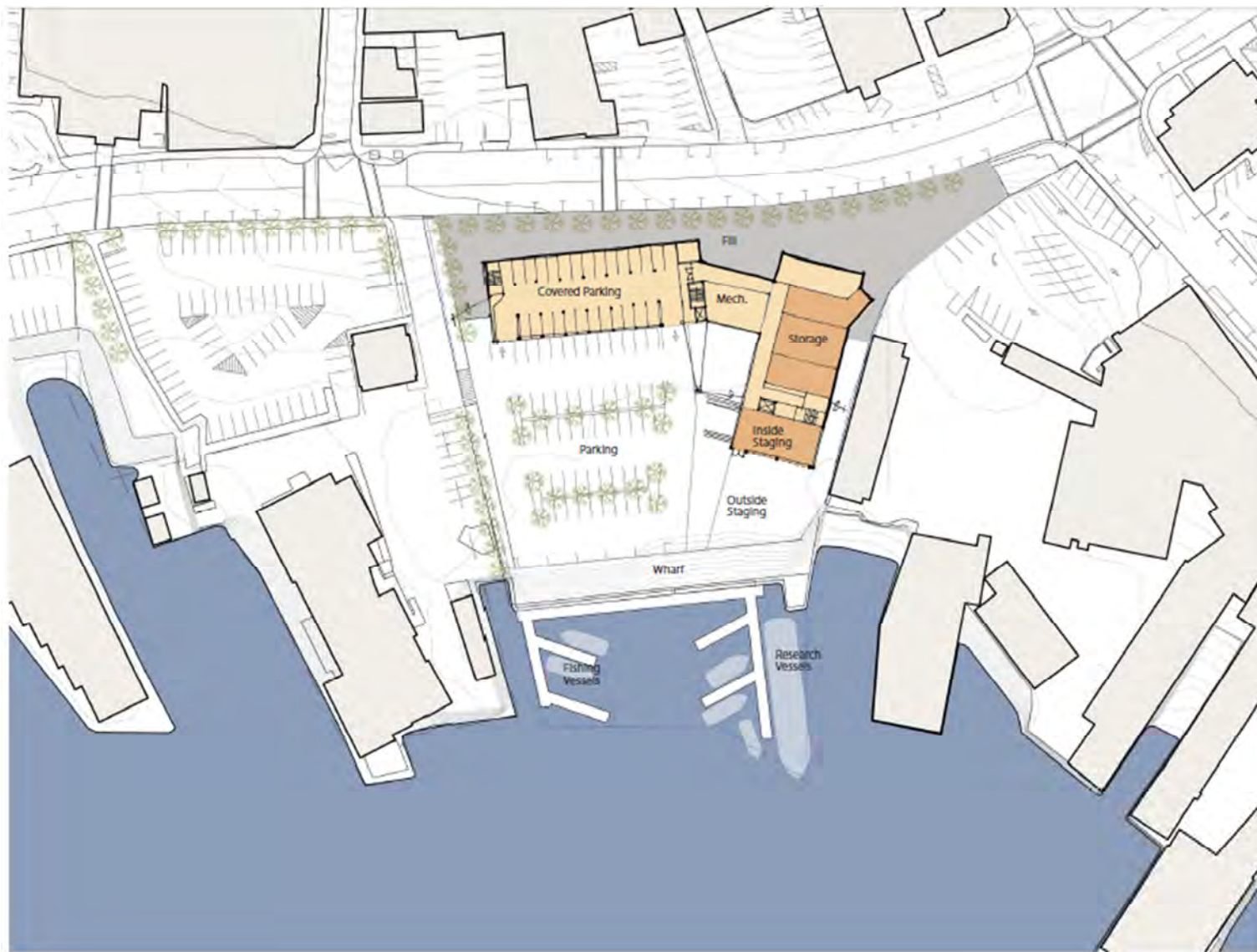
## Program Stack Diagrams



## Program Stack Diagrams



## Harbor-Level Plan

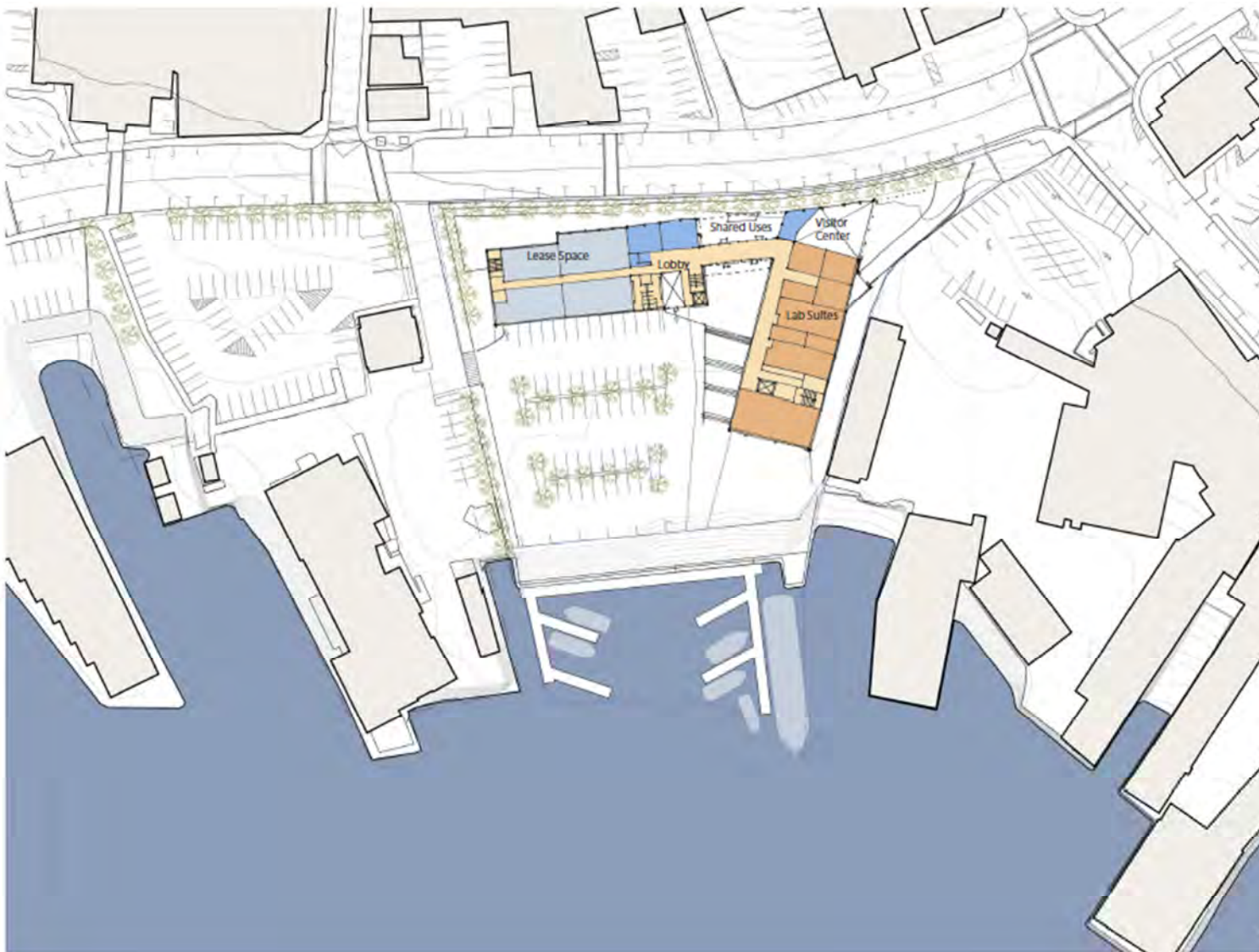




## Street-Level Plan

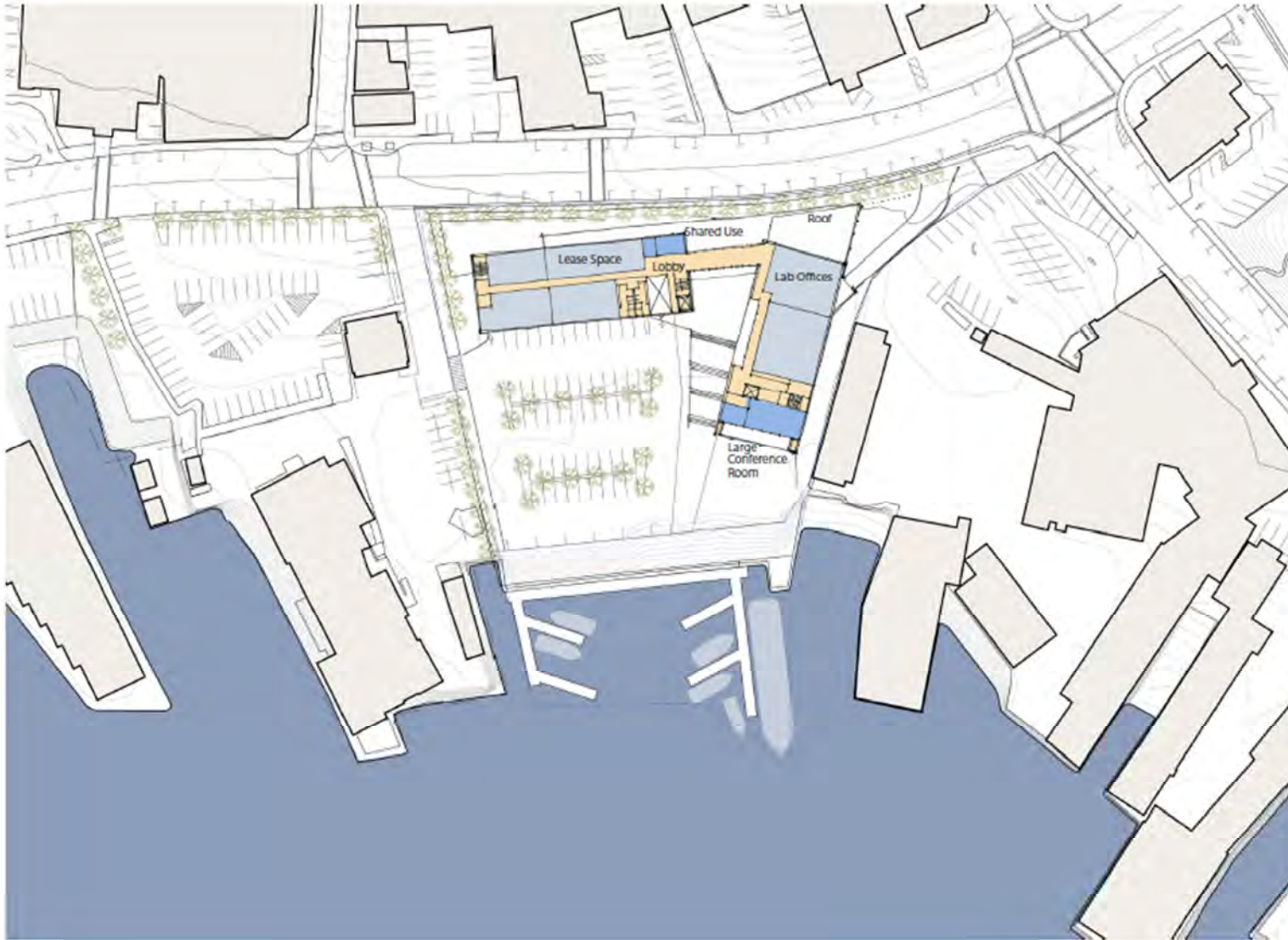


## Second Floor Plan





## Third Floor Plan





July 30, 2014

## Site History



## Rogers Street View

“





## Rogers Street View



## Rogers Street View

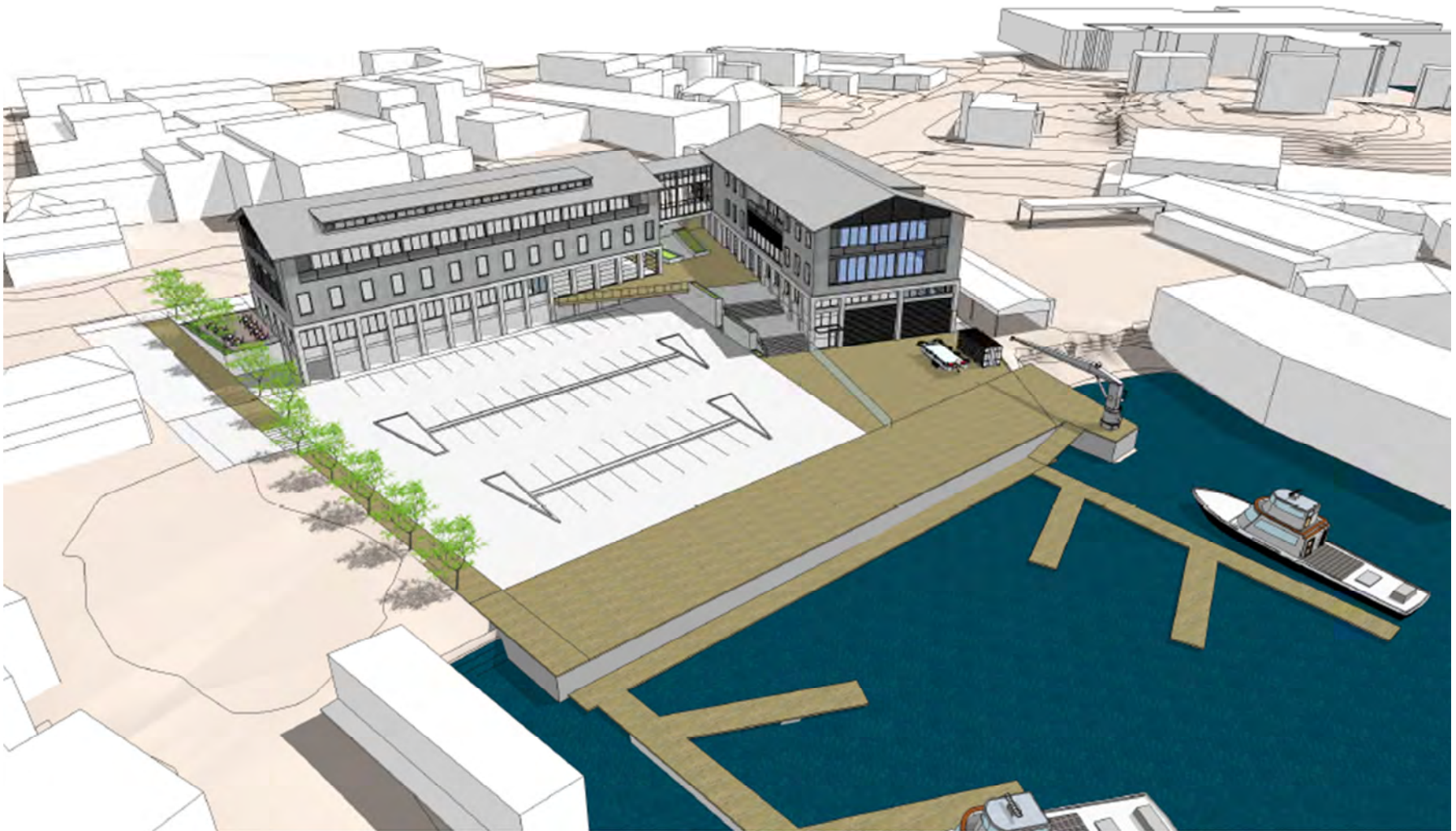




## Rogers Street View

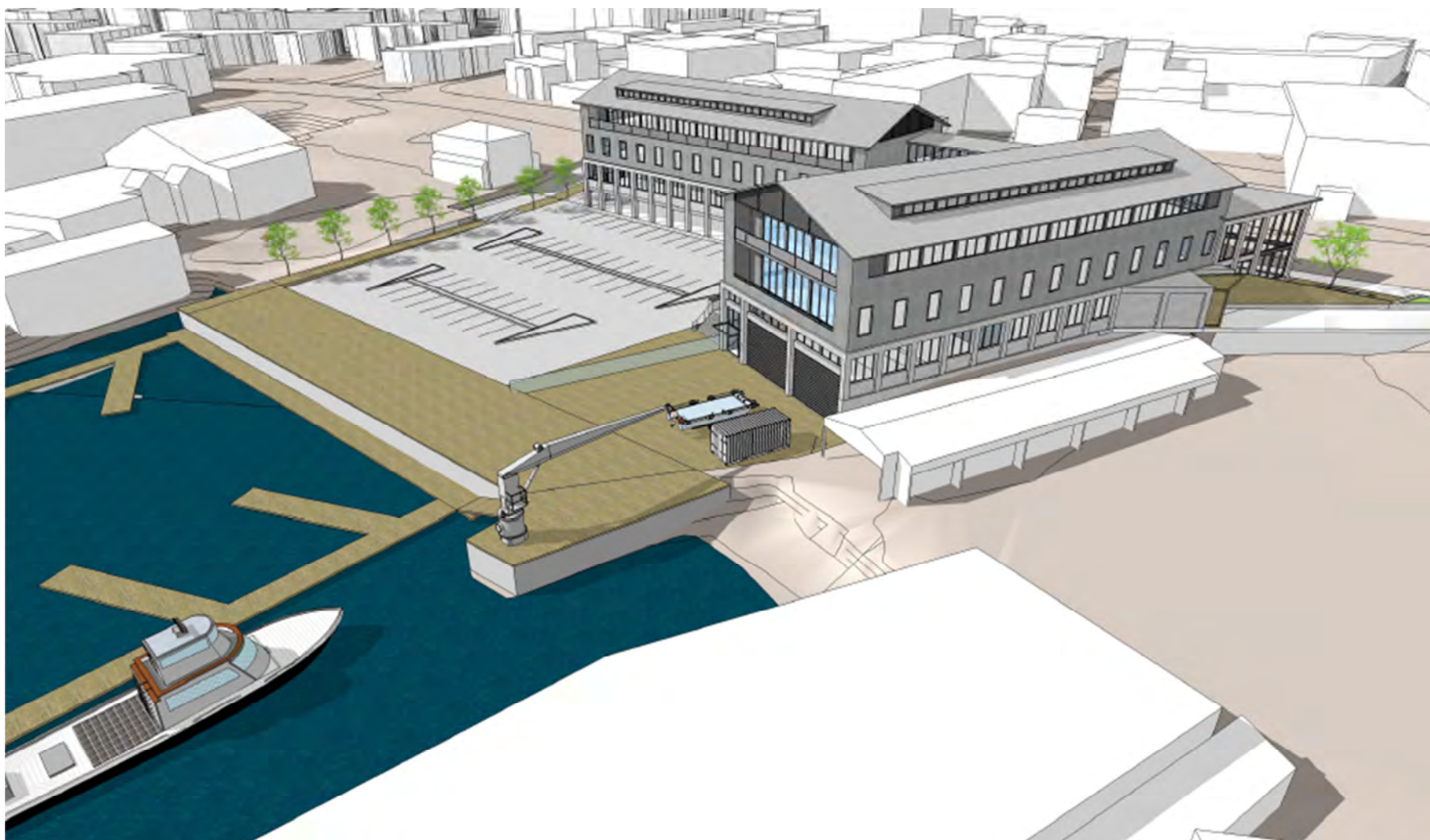


## Aerial View





## Aerial View





## Appendix D: CZM Boundary Review Decision

### Designation Decision for the Gloucester Inner Harbor Designated Port Area

Executive Office of Energy and Environmental Affairs Office of Coastal Zone Management – April 23, 2014

Designation Decision for the Gloucester Inner Harbor Designated Port Area – April 23, 2014

#### I. Introduction

Pursuant to the Designated Port Area (DPA) regulations at 301 CMR 25.00, today, as Director of the Office of Coastal Zone Management (CZM), I hereby issue this designation decision for the boundary review of the Gloucester Inner Harbor DPA. This decision affirms the findings and proposed DPA boundary modifications in CZM's February 3, 2014 designation report, Boundary Review of the Gloucester Inner Harbor Designated Port Area, and its issuance concludes the review and decision-making process, as described below.

In March 2013, at the request of the Gloucester Harbor Plan Committee, the Mayor of Gloucester formally requested that CZM initiate a review of the entire boundary of the Gloucester Inner Harbor DPA. CZM accepted the request in April 2013, and notices of the review were published in the Environmental Monitor and the Gloucester Daily Times. A public meeting was held on May 20, 2013 in Gloucester, and the formal public comment period closed on June 7, 2013. To inform the boundary review process, CZM reviewed comments submitted, attended Harbor Plan Committee meetings, met with property owners, city officials, Department of Environmental Protection (DEP) staff, and interested citizens. CZM also conducted an intensive review of available plans, permits, and licenses applicable to the DPA review. A detailed boundary review designation report was issued on February 3, 2014. The report concluded with the finding that the DPA boundary should be modified. Pursuant to 301 CMR 25.03(4), the commencement of a 30-day comment period was noticed in the February 5, 2014 Environmental Monitor and a public hearing were held on February 24, 2014. Thirteen people provided oral testimony at the public hearing, and CZM received six comment letters on the designation report during the public comment period.

This designation decision summarizes and responds to key issues that have been raised by commenters and formally designates the DPA boundary. I have carefully considered all of the oral and written comments received in response to the boundary review report. I want to recognize the time and effort taken by those who provided comments and thank you for the valuable input you have provided in this boundary review process.

#### II. Summary of Boundary Review Designation Report

As detailed in the boundary review designation report, CZM defined seven planning units within the existing Gloucester Inner Harbor DPA that formed coherent areas with groups of parcels that are delineated by shared physical, geographical, and land use characteristics. These planning units were sized and configured in a manner that allowed for consideration of all relevant factors affecting overall suitability to accommodate water dependent industrial use.

Pursuant to the criteria at 301 CMR 25.03(2), certain areas within the DPA is not eligible for review. Based on a thorough assessment, the Harbor Cove, North Channel, State Fish Pier, Cold Storage East Gloucester, and Rocky Neck planning units, and their adjacent waterways, did not meet all of the criteria for eligibility for review, and therefore were not further analyzed for substantial conformance with the criteria governing suitability to accommodate water dependent industrial use.

The DPA regulations direct that an area of land or water reviewed under 301 CMR 25.00 shall be included or remain in a DPA if and only if CZM finds that the area is in substantial conformance with each of the criteria governing suitability to accommodate water dependent industrial use. As detailed in the boundary designation report, CZM determined that the East Gloucester and Smith Cove planning units are dominated by residential and non-industrial buildings, that in most cases existed in this area before the establishment of the DPA and have not been removed or converted to industrial use to date. The predominant uses here, including residential, commercial, recreational boating facilities, small public boating facilities, and public recreational areas, are largely incompatible with activities characteristic of a water dependent industry, because of the inherent functional conflicts and destabilization that may arise. Therefore, CZM found that these two planning units did not meet the criteria for inclusion in a DPA boundary as required by 301 CMR 25.04(2) (d) and concluded that they should be removed from the Gloucester Inner Harbor DPA. As the shorelines in these areas no longer establish a functional connection to a DPA land area, CZM found that the waterways adjacent to these areas did not meet the criteria for inclusion at 25.04(1) and concluded they should also be removed from the DPA.

### III. Response to Comments on the Boundary Review Designation Report

The large majority of oral and written public comments received on the designation report were supportive of the process and the outcome of the study. There were a number of concerns specific to the designation report that were raised, as well as comments related to the DPA program in general.

Comments on issues specific to the Gloucester boundary review process and report included concerns regarding the delineation of the East Gloucester Cold Storage planning unit. A few suggested that this planning unit should not have been considered separately from the adjacent areas and should therefore also have been considered for removal from the DPA. As detailed in the boundary review designation report, the DPA planning units were delineated by their distinctive physical, geographic, and land use characteristics. The East Gloucester Cold Storage planning unit was determined to be discrete from the adjacent East Gloucester and Smith Cove planning units in each of these categories. Physically, the entire unit, and particularly the waterfront, is extensively developed for intensive industrial use, which sets it apart from its neighbors on either side, which are primarily developed for recreational and commercial uses. Geographically, this planning unit sits out on a peninsula that functionally separates it from operations on either side. Finally, the land use on the property is entirely water-dependent industrial, in contrast to the smaller-scale, residential, commercial and recreational uses that characterize the surrounding planning units. After carefully considering this determination, CZM affirms that the delineation of East Gloucester Cold Storage should be viewed as a discrete planning unit.

With respect to the East Gloucester Cold Storage planning unit, there were also a few comments questioning why the area was not recommended for removal from the DPA designation, with references to an underutilized waterfront. CZM notes that this area is currently functioning entirely as a water-

dependent industrial use, as defined in DEP's Chapter 91 Waterways regulations. As such, the East Gloucester Cold Storage planning unit did not meet all the eligibility criteria for review required pursuant to 301 CMR 25.03(2) and was therefore not further analyzed for substantial conformance with the criteria governing suitability to accommodate water-dependent industrial use.

Other comments suggested that East Main Street in East Gloucester is not appropriate for truck traffic and should not qualify as a road sufficient to support marine industrial uses. In the boundary review designation report, CZM acknowledged that East Main Street is the primary public road that links East Gloucester to Route 127A and Route 128, which is the main route into and out of the city. East Main Street is generally a narrow road flanked by residential and commercial properties in this area. While not ideally suited for large commercial vehicles, CZM determined that the road does currently meet the criteria of an established road link leading to a major route, and large trucks routinely use the road to serve commercial and water-dependent industrial businesses in the area. Therefore, CZM affirms the finding that the road does adequately meet the criteria of an established road link leading to a major route.

Another comment concerned the depth of the entrance channel for Gloucester Harbor. The concern was that on a recent NOAA chart for the harbor, the depth was shown as 19 feet, and therefore did not meet designation standard criteria for inclusion in the DPA. With respect to this concern, it is important to point out that the relevant criterion for designation or continued inclusion of waters in a DPA (301 CMR 25.04(1) (a) 1) specifies that the water area must include, or be contiguous with other DPA waters that include, "a navigable entrance or main channel with a design depth of at least 20 feet" [emphasis added]. CZM has confirmed with the U.S. Army Corps of Engineers that the design depth for the Gloucester Harbor entrance channel is 20 feet<sup>1</sup>, and the most recent NOAA chart<sup>2</sup> for Gloucester Harbor reflects this depth. CZM therefore affirms the inclusion of the Gloucester Harbor entrance channel in the DPA.

Several comments reflected concerns for continued support and protection of the existing water-dependent industrial users, particularly with respect to commercial fishing vessel dockage in the harbor and especially East Gloucester and Smith Cove. CZM recognizes, and the City's recent commercial vessel study confirms, that a number of commercial vessels are currently berthed in these areas. The City of Gloucester's current Municipal Harbor Plan and Designated Port Area Master Plan, which was approved by the Executive Office of Energy and Environmental Affairs in

1 Pers. communication with E. O'Donnell, Army Corps New England District, March 6, 2013

2 U.S. Departments of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Coast Survey (OCS). Gloucester Harbor and Annisquam River [nautical chart]. 19th ed. 1:10,000. Chart #13281. Washington, D.C.: DOC, NOAA, NOS, OCS, Oct. 2010.

December 2009, recognizes that berthing space for commercial vessels on the harbor is limited, specifically for commercial fishing boats, and seeks to protect these important spaces. The 2009 plan includes an approved provision that guides DEP in its Chapter 91 licensing to specifically protect commercial fishing vessels. The plan requires that any proposed change to a Chapter 91 license that would result in the displacement of a commercial vessel from an existing berth must include the assurance of reasonable accommodation at a comparable and suitable alternative site, assuring that no

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commercial fishing vessel will be displaced at the alternative site. The 2009 plan also includes a commitment from the City to adopt similar language in local zoning and to reflect this protection through local permitting. At least one comment specifically recommended that the City include these provisions in its upcoming renewal of the Municipal Harbor Plan and Designated Port Area Master Plan. CZM supports this approach as an important mechanism for the City to continue to provide the desired protection for this valuable asset.

Many comments noted that the areas that are to remain in the DPA are facing significant infrastructure, function, and disrepair issues that must be addressed in order for these areas to remain viable for water-dependent industrial uses, including dredging needs to address navigation issues, both in channels and alongside piers and wharves; derelict pilings that hamper navigation and limit reconfiguration options for the waterfront; and significant underutilization of large areas of the waterfront. Most of these comments strongly encouraged the Commonwealth to provide focused investment in DPA harbor infrastructure and port uses, including making financial investment and assistance available to properties still in the DPA for dredging and infrastructure improvements. Comments also called for a comprehensive and meaningful reevaluation of the DPA program in general, including expansion of definitions of water-dependent industrial uses, reevaluation of regulations, and reassessment of financial assistance provided to DPA communities. With respect to the DPA program and policies, CZM is working with other state agencies and stakeholders on a number of initiatives to review boundaries in other ports, examine definitions related to water-dependent industrial uses, and modernize regulations. With respect to the financial and infrastructure issues, CZM supports the significant work underway on the implementation of the Commonwealth's Ports Compact, an agreement between the cities of Boston, New Bedford, Fall River, Gloucester and Salem; the Executive Offices of Transportation, Energy and Environmental Affairs, Housing and Economic Development; Massport; and the Legislature's Joint Committee on Transportation. A Ports of Massachusetts Strategic Plan is being developed by MassDOT and will include: strategies for further increasing the economic development potential of the ports in Massachusetts, including the re-use of port infrastructure and increasing port commerce; recommending financing sources, programs, and strategies to fund improvements in maritime port infrastructure and operations in Massachusetts; and the identification and evaluation of potential investment opportunities to help the Commonwealth's ports achieve the stated strategic goals. The City of Gloucester is also working on its own local port revitalization plan, and CZM looks forward to working with the City, MassDOT, the Seaport Advisory Council, other agencies, and other port communities on efforts to support investment in DPA harbor infrastructure and port uses.

#### IV. Designation Decision

In conclusion, effective today, I affirm the findings and proposed boundary modifications in CZM's February 3, 2014 designation report, and hereby determine that, pursuant to 301 CMR 25.03(5), the Gloucester Inner Harbor DPA boundary shall be modified, and that the East Gloucester and Smith Cove planning units, as well as the water areas associated with these, will no longer be included in the Gloucester Inner Harbor DPA. The new boundary of the Gloucester Inner Harbor DPA is depicted on the attached map and available in electronic format from CZM.

Bruce K. Carlisle, Director

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