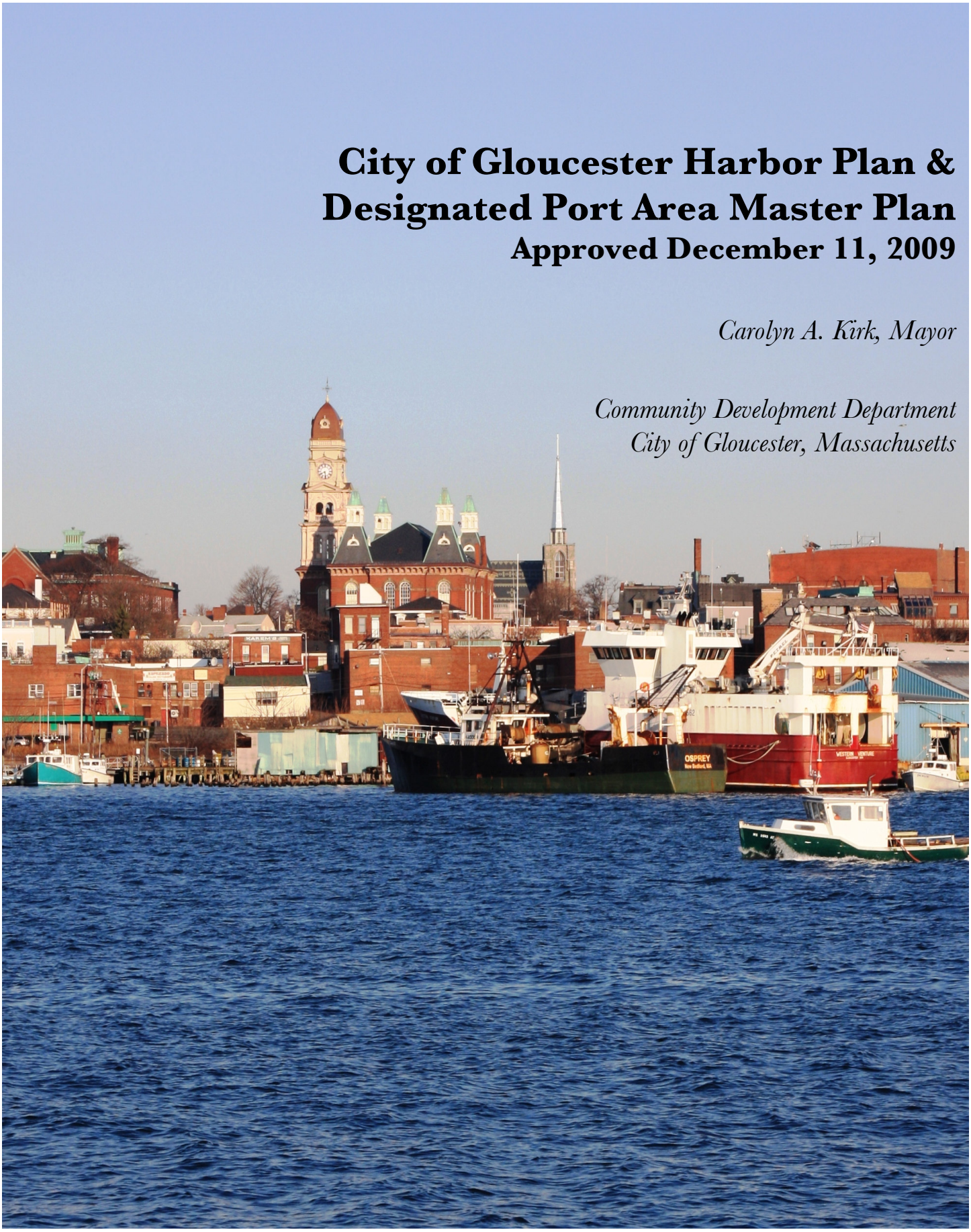
City of Gloucester Harbor Plan & Designated Port Area Master Plan

Approved December 11, 2009

Carolyn A. Kirk, Mayor

Community Development Department
City of Gloucester, Massachusetts



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DECISION ON THE CITY OF GLOUCESTER'S REQUEST FOR APPROVAL OF THE GLOUCESTER MUNICIPAL HARBOR PLAN RENEWAL AND DESIGNATED PORT AREA MASTER PLAN PURSUANT TO 301 CMR 23.00

December 11, 2009

Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs

Ian A. Bowles, Secretary

I. INTRODUCTION

Today, as Secretary of the Massachusetts Executive Office of Energy and Environmental Affairs (EEA), I am approving a renewal to the City of Gloucester's Municipal Harbor Plan ("Plan") dated July 2009. The original Plan was approved by the Secretary on July 6, 1999. This Decision on the renewal to the original 1999 Plan presents a synopsis of the Plan's content and my determinations on how the renewal Plan complies with the standards for approval set forth in the Review and Approval of Municipal Harbor Plan regulations at 301 CMR 23.00 et seq.

Pursuant to the review procedures contained therein, the Plan renewal, along with a separate document addressing compliance with the plan approval statement ("Compliance Statement"), was submitted in August 2009. Following a review for completeness, a notice of public hearing and 30-day opportunity to comment was published in the *Environmental Monitor* dated August 26, 2009. Oral testimony was accepted during a public hearing held in the City of Gloucester on September 1, 2009, and 13 written comment letters were received prior to the close of the public comment period on September 25, 2009. In addition, the review process—led on my behalf by the Massachusetts Office of Coastal Zone Management (CZM)—included formal consultation between CZM, the Waterways Program of the Massachusetts Department of Environmental Protection (DEP), the City of Gloucester ("City"), and the Urban Harbors Institute (as consultants for the City). The Plan review followed the administrative procedures set forth at 301 CMR 23.04 and in accordance with the standards in 301 CMR 23.05. In reaching my approval decision, I have carefully considered the oral and written testimony submitted by the public during these respective comment periods.

As shown in Figure 1, the Harbor Planning Area encompasses the entirety of the Gloucester Inner Harbor and adjacent landside areas extending from the Rocky Neck peninsula to the Fort neighborhood, and including the shoreline of the western side of the outer harbor to Stage Fort Park. On the landside, the area is bounded by Main Street, East Main Street, Rocky Neck Avenue, Commercial Street, and Stacy Boulevard. The main focus of this plan renewal is on the inner harbor properties that lie within the Designated Port Area (DPA) as depicted in Figure 2.

Because of their distinct land use characteristics, the Plan divides the DPA into three parts for the purposes of discussion and analysis (Figure 2). The Harbor Cove area is the traditional center of the fishing port from Fort Point to Harbor Loop and includes portions of the City's downtown. The Industrial Port is characterized by large parcels and buildings dedicated almost

exclusively to marine industrial uses along the western side of the harbor from Harbor Loop to the head of the harbor and includes the State Fish Pier. East Gloucester—which extends from the State Fish Pier to Smith Cove and includes the Gloucester Marine Railway on Rocky Neck—is characterized by a more diverse mix of commercial, residential, water-dependent and marine industrial uses, with roadway conditions that somewhat constrain access for large industrial vehicles.

The 1999 Gloucester Harbor Plan was primarily focused on infrastructure improvements for both maritime and visitor-oriented industries along the waterfront as a means of recharging the harbor economy. The 2009 renewal continues to support traditional port improvements while also seeking to provide expanded opportunities for redevelopment within the Harbor Planning Area. The 2009 Plan identifies a number of key strategies to maintain support for the important commercial fishing industry in the city, and also encourages improved opportunity for economic development on the harbor. These strategies aim to streamline regulatory review, stimulate investment, and improve economic conditions along the waterfront.

Figure 1. Gloucester Harbor Planning Area

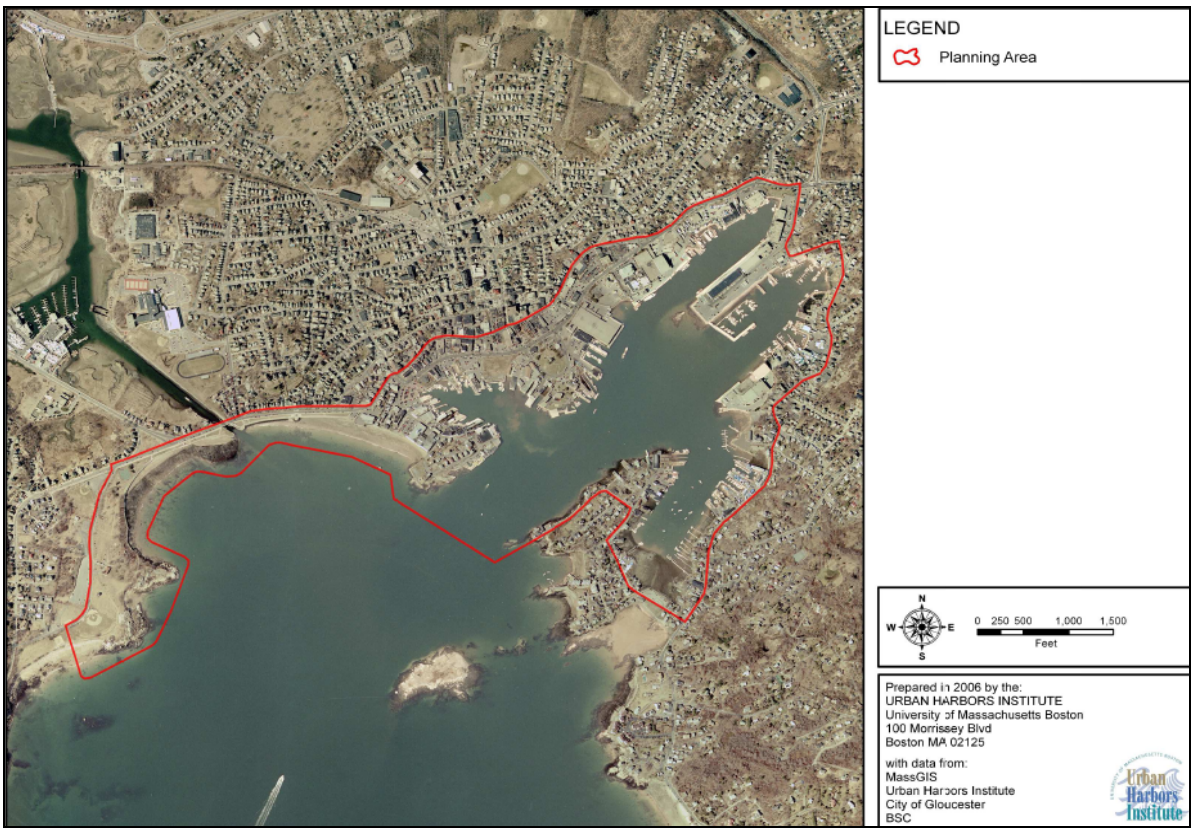
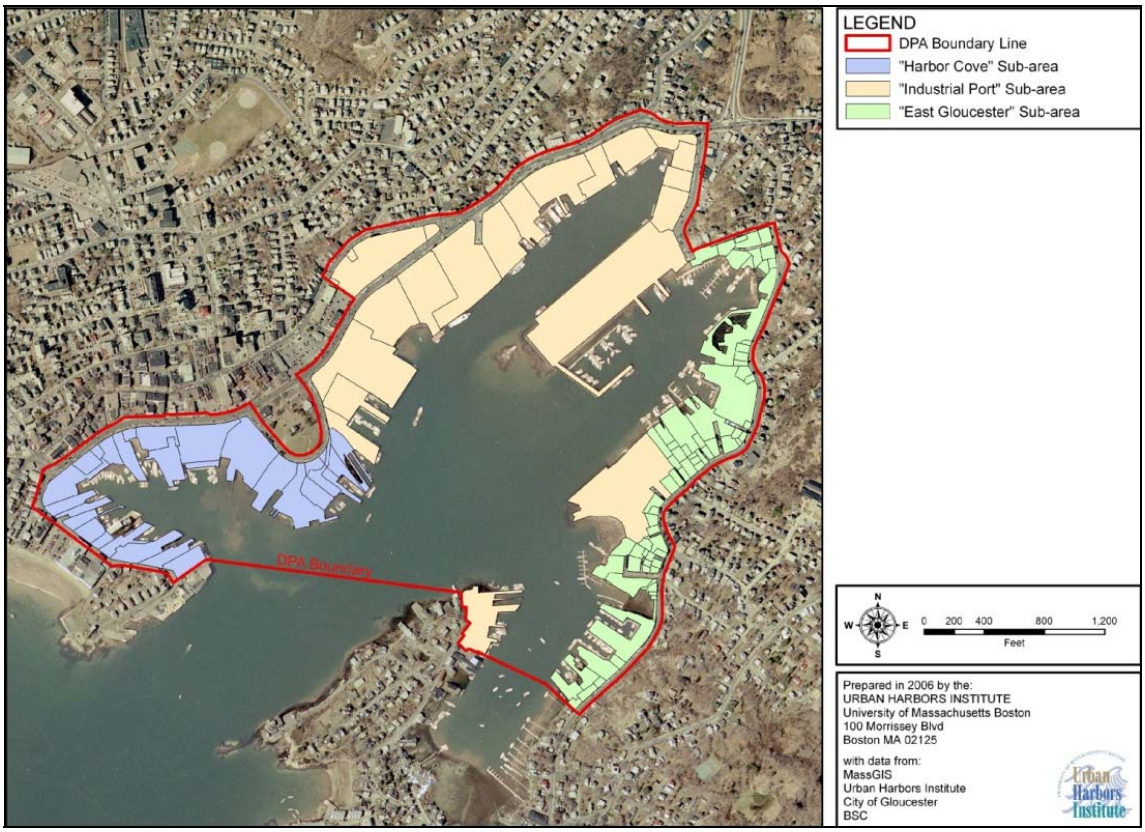


Figure 2. Gloucester DPA and Planning Sub-Areas



The 2009 Plan renewal for Gloucester Harbor reflects a significant effort on the part of the City staff and the many members of the public who participated in the process of plan development. I would like to applaud the City, the members of the Gloucester Harbor Plan Implementation Committee, waterfront property owners, stakeholders throughout the community, and the Gloucester Community Development staff for their time and effort toward development of this Plan. I am aware that over the past four years, a significant amount of public input—including numerous planning meetings, several City Council hearings, and a series of targeted neighborhood-based listening posts—was encouraged and incorporated into the final document. Derived from this extensive public contribution, the following three key strategies were identified as the core focus of the 2009 Gloucester Harbor Plan (and DPA Master Plan):

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.

At the public hearing and in written comments, while thoughtful perspective and concerns were raised in regards to such issues as support for the regional commercial fishing port, dockage for commercial fishing vessels, the need for greater economic diversification, and for limits to recreational boating, there was broad support for the Plan's strategies. In response to the oral and written testimony received during the public comment period and discussion during the formal consultation period, the City made a number of modifications to the Plan. In my approval today, I find that the final 2009 Plan—in concert with the conditions established in this decision—serve to promote and protect the core marine and water-dependent industrial composition of the DPA, while providing for the local goals of enhanced support of the commercial fishing hub and allowances for flexibility in supporting DPA uses. On balance, I am confident that it will function as a clear and effective framework for achieving the City's goals in harmony with state policy governing stewardship of tidelands, including those located within a DPA.

II. PLAN CONTENT

The Municipal Harbor Planning Regulations (301 CMR 23.00 et seq.) establish a voluntary process under which cities and towns may develop and submit Municipal Harbor Plans to the EEA Secretary for approval. These plans serve to promote and implement a community's planning vision for their waterfront and to inform and guide state agency decisions necessary to implement such a vision. Specifically, approved Municipal Harbor Plans provide licensing guidance to DEP in making decisions pursuant to MGL Chapter 91 (c. 91) and the Waterways Regulations (310 CMR 9.00 et seq.). Approved harbor plans may establish alternative numerical and dimensional requirements (i.e., substitute provisions) to the requirements specified by the Waterways Regulations, as well as specify provisions that amplify any of the discretionary requirements of these regulations.

The 2009 Plan lays out the city's vision and comprehensive strategy for maintaining and strengthening the traditional fishing industry and infrastructure in Gloucester Harbor, while encouraging and expanding additional compatible marine industries and supporting uses. The Plan acknowledges the value of the 1999 Municipal Harbor Plan, but recognizes that changes in economy, the fishing industry, and the condition of the harbor's waterfront infrastructure warrant

additional strategies to address these concerns. Current conditions of land use in the harbor planning area are described for each of the three planning sub-areas, existing navigation and waterfront uses and challenges are described, and the current regulatory environment is discussed. The renewal lays out nine major issues for the harbor, and a series of recommendations and strategies to address them. These issue areas include: Growing the Maritime Economy, the Role of Supporting Commercial Use and Public Access, Recreational Boating, the Visitor-Based Economy, Infrastructure Investment and Transportation Links, the Permitting Process, Commercial Berthing, Fresh Fish Processing, and Port Security. Finally, the Plan includes a Designated Port Area Master Plan and an approach to assure successful implementation of the Plan's key recommendations and strategies. Strategies laid out in the 2009 Plan generally aim to streamline regulatory review, stimulate investment, and improve economic conditions along the waterfront.

A central theme of the 2009 Plan is the support of commercial fishing both directly and by seeking to attract and expand businesses and industries that will build upon existing marine assets and knowledge-base within the community. The Plan envisions diversified commerce opportunities such as marine-associated research, off-shore energy support services, and training in the marine trades as uses that would be compatible with, build upon, and even strengthen the commercial fishing community. Key strategies to promote and protect existing and future investment in commercial fishing include: regulatory changes to assure investment in improved waterfront marine industrial infrastructure, fostering maintenance or creation of commercial berthing wherever practicable, and enhancing protection from displacement for commercial fishing vessels. The plan recommends the promotion of local processing and retail sales of fish landed in Gloucester, and identifies key dredging projects that should remain priorities for assuring adequate navigation in Gloucester Harbor.

The 2009 Plan recognizes that new revenues will be needed to achieve the goals of infrastructure improvement and waterfront activation detailed in the Plan. To address this, the Plan takes advantage of the opportunity to provide, through the harbor planning process, greater flexibility for locating supporting commercial uses on waterfront property, such that waterfront properties with the greatest challenges have more mixed-use investment options. Through thoughtful and careful planning and analysis, the Plan lays out a means by which the city can allow more flexibility where it is most needed, while protecting water-dependent industrial uses within the DPA. Further, the Plan creates a means by which properties with particular challenges may work

within the regulatory framework to achieve necessary flexibility while protecting the marine industrial waterfront. Changes that will benefit the downtown and other areas of the city are promoted in this way by fostering a closer link between the waterfront and the commercial business district.

Another key topic in the Plan is to improve, wherever possible, activation of the water's edge and public access in recognition of the harbor's importance to the visitor-based economy and public enjoyment in Gloucester, with an understanding that public safety and port security are important issues to be addressed. In addition to recommendations for expanded water-dependent marine industrial uses such as ferry services, expanded cruise ship opportunities and water shuttles, the Plan calls for promoting public access along the waterfront where appropriate and in ways that do not interfere with industrial uses. This reinvigorated access would create a more appealing environment for investment and would foster more active use of the water's edge around the harbor. Strategies to achieve this include proposed measures (including both c.91 and local zoning) to provide waterfront access whenever practicable, as well as taking advantage of marine industrial locations that are occupied only seasonally for such use.

Strengthening of the visitor-based economy in Gloucester is cited as an important goal in the Plan. Creation of a network of maritime related sites open to the public, as well as specific opportunities for public observation of maritime industry in action, are presented as means to bolster the working harbor by providing a window to the working port. The Plan identifies Rocky Neck as a key destination for visitors and recommends consideration of a water shuttle to link the artist community on Rocky Neck to the downtown area.

The Plan also proposes a local policy to improve access and facilities for transient recreational boating and for public boating access to the waterfront and lays out some recommendations to achieve this goal. Within the context of this concept, it is important to note that current c.91 regulations contain strict prohibitions on the licensing of new recreational boating facilities (marinas) within DPAs. This Decision cannot and does not supersede these regulations, and, as such, it contains no approval findings for such facilities. The Plan does recommend further investigation of the feasibility of using temporary, bottom-anchored floats for rafts for recreational boat berthing as authorized by local 10A harbormaster permits on an annual basis. It also

recommends the consideration of locations outside the DPA that could service the downtown need for access by transient boaters.

In continued support and promotion of port and harbor planning, the Plan recommends continuing the current structure by which the City's administrative resources, provided through the Community Development Department and its Harbor Coordinator position, serve as the primary liaison to waterfront property owners. The Plan also calls for the creation of a Port and Harbor Committee to serve in an advisory capacity to the Community Development Department and to monitor and promote implementation of the 2009 Plan.

Finally, the 2009 Plan includes a Designated Port Area Master Plan that sets out a strategy to preserve and enhance the capacity of the DPA to accommodate water-dependent industry and prevent displacement of these activities by other nonwater-dependent uses. The DPA Master Plan proposes detailed implementation measures to ensure that an extensive area is reserved for water-dependent industrial uses, recommends specific uses be categorized as supporting uses in the DPA, puts forward limits on commercial uses to prevent incompatibility with marine industry, and identifies the city's strategy to guide the ongoing promotion of water-dependent industrial use within the DPA.

III. STANDARDS FOR APPROVAL

The Plan renewal contains the City's planning vision and other specifics to guide use and development of the harbor planning area. It should be noted, however, that while these elements are important to the Plan as a whole, my approval today is bounded by the authority and standards as contained in Review and Approval of Municipal Harbor Plans rules at 301 CMR 23.00 et seq. and is applicable only to those discretionary elements of the c.91 Waterways regulations that are specifically noted in this Decision. This Decision does not supersede separate regulatory review requirements for any activity.

A. Consistency with CZM Program Policies and Management Principles

The federally-approved CZM Program Plan establishes 20 enforceable program policies and 9 management principles which convey the formal coastal program policy of the Commonwealth. The policies and management principles applicable to the 2009 Plan are briefly summarized here:

- Water Quality Policy #1: Ensure that point-source discharges in or affecting the coastal zone are consistent with federally approved state effluent limitations and water quality standards.

- Water Quality Policy #2: Ensure that non-point pollution controls promote the attainment of state surface water quality standards in the coastal zone.

- Habitat Policy #1: Protect coastal resource areas including salt marshes, shellfish beds, dunes, beaches, barrier beaches, salt ponds, eelgrass beds, and fresh water wetlands for their important role as natural habitats.

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

- Ports Policy #1: Ensure that dredging and disposal of dredged material minimize adverse effects on water quality, physical processes, marine productivity and public health.

- Ports Policy #2: Obtain the widest possible public benefit from channel dredging, ensuring that designated ports and developed harbors are given highest priority in the allocation of federal and state dredging funds. Ensure that this dredging is consistent with marine environment policies.

- Ports Policy #3: Preserve and enhance the capacity of Designated Port Areas (DPAs) to accommodate water-dependent industrial uses, and prevent the exclusion of such uses from tidelands and any other DPA lands over which a state agency exerts control by virtue of ownership, regulatory authority, or other legal jurisdiction.

- Ports Management Principle #1: Encourage, through technical and financial assistance, expansion of water-dependent uses in designated ports and developed harbors, re-development of urban waterfronts, and expansion of visual access.

The aforementioned policies are relevant to the major issues identified in the renewal: waterfront revitalization; commercial fishing; maritime commerce and industry; public access; infrastructure investment and transportation links, and fresh fish processing. The Plan presents evidence of its accord with these policies and management principles, and, as required by 301 CMR 23.05(1), CZM has affirmed its consistency. Of particular note in this renewal is that the Plan continues to view protection and promotion of the DPA and water-dependent industry as central to the working waterfront, even as it explores possibilities to expand compatible commercial and industrial uses to support this industry and the economic vitality of the port overall.

B. Consistency with Tidelands Policy Objectives

As required by 301 CMR 23.05(2), I also must find that the Plan renewal is consistent with state tidelands policy objectives and associated regulatory principles set forth in the state Waterways Regulations of DEP (310 CMR 9.00 et seq.). As promulgated, the Waterways Regulations provide a uniform statewide framework for regulating tidelands projects. Municipal Harbor Plans present communities with the opportunity to integrate their local planning goals into state c.91 licensing decisions by proposing modifications to the c.91 regulatory standards through either: 1) the amplification of the discretionary requirements of the Waterways Regulations; or 2) the adoption of provisions that—if approved—are intended to substitute for the minimum use limitations or numerical standards of 310 CMR 9.00 et seq. The approved substitution provisions of Municipal Harbor Plans, in effect, allow DEP to waive specific c.91 use limitations and numerical standards affecting projects in tidelands, in favor of the modified provisions specified in an approved Municipal Harbor Plan.

The Plan sections relating to 301 CMR 23.05(2) have been effectively summarized in the Regulatory Environment section of the Plan and the accompanying Compliance Statement. The Plan proposes guidance that will have a direct bearing on DEP licensing decisions within the Harbor planning Area. Included in this proposed guidance are:

- A provision for a substitution of certain specific minimum numerical standards in the regulations;
- Several provisions that amplify certain discretionary requirements of the Waterways Regulations; and
- A suite of provisions that together comprise a Master Plan for the lands and waters within the Gloucester Harbor DPA.

These provisions are subject to particular approval criteria under 301 CMR 23.05(2)(b) through 301 CMR 23.05(2)(e). The analysis of the proposed provisions is explained below.

Evaluation of Proposed Substitute Provisions

The general framework for evaluating all proposed substitution provisions to the c.91 Waterways requirements is established in the Municipal Harbor Plan Regulations at 301 CMR 23.05(2)(c) and 301 CMR 23.05(2)(d). In effect, the regulations set forth a two-part analysis that must be applied individually to each proposed substitution in order to ensure that the intent of the Waterways requirements with respect to public rights in tidelands is preserved.

Applying part one of the analysis, in accordance with 301 CMR 23.05(2)(c), there can be no waiver of a Waterways requirement unless the Secretary determines that the requested alternative requirements or limitations ensure that certain conditions, specifically applicable to each minimum use limitation or numerical standard, have been met. Part two of the analysis, as specified in 301 CMR 23.05(2)(d), requires that the municipality demonstrate that a proposed substitution provision will promote, with comparable or greater effectiveness, the appropriate state tidelands policy objective.

A municipality may propose alternative use limitations or numerical standards that are less restrictive than the Waterways requirements as applied in individual cases, provided that the plan includes other requirements that—considering the balance of effects on an area-wide basis—will mitigate, compensate for, or otherwise offset adverse effects on water-related public interests.

For substitute provisions relative to the minimum use and numerical standards of 310 CMR 9.51(3)(a) through CMR 9.51(3)(e), any proposal must ensure that nonwater-dependent uses do not unreasonably diminish the capacity of tidelands to accommodate water-dependent uses. Similarly, substitute provisions for nonwater-dependent projects on Commonwealth Tidelands must promote public use and enjoyment of such lands to a degree that is fully commensurate with the proprietary rights of the Commonwealth therein, and which ensures that private advantages of use are not primary but merely incidental to the achievement of public purposes, as provided in 310 CMR 9.53.

Water Dependent Use Zone

To approve any substitution provision to 310 CMR 9.51(3)(c), I must first determine that the Plan specifies alternative distances and other requirements that ensure new or expanded buildings for nonwater-dependent use are not constructed immediately adjacent to a project shoreline, in order that sufficient space along the water's edge will be devoted exclusively to water-dependent use and public access associated therewith as appropriate for Gloucester Harbor. Second, within the context of its Plan, the City must demonstrate that the substitution provision will, *with comparable or greater effectiveness*, meet this objective. My determination relative to whether or not this provision promotes this tideland policy with comparable or greater effectiveness is conducted in accordance with the MHP regulatory guidance is discussed below. A summary of the proposed substitute provision for the 2009 Plan is provided below in Table 1.

Establishment and maintenance of an adequate and functional Water Dependent Use Zone (WDUZ) is critical to assuring necessary waterfront access for water-dependent industrial uses within the DPA, and essential to sustaining these uses. Within the DPA, the Plan endorses the application of the WDUZ requirement at 310 CMR 9.51(3)(c) for the majority of parcels within the DPA. The Plan notes however, that in a few cases strict adherence to the stipulated dimensional requirements of the WDUZ may result in an oddly configured WDUZ and inefficient siting of uses. In these cases, the configuration of the WDUZ as directed by the Waterways standards may be less effective in providing use of the water's edge for water-dependent industrial use than another configuration allowed with flexibility to the existing standards. To address this concern, the Plan proposes a substitution to the WDUZ requirement at 310 CMR 9.51(3)(c) only for those parcels where (1) it can be demonstrated that the application of the c.91 standard would result in inefficient siting of uses without minor modification, and (2) a modified reconfiguration would achieve greater effectiveness in the use of the water's edge for water-dependent industrial use. For these limited properties, the City proposes a minimum width of 25 feet for the WDUZ along the ends of piers and 10 feet minimum along the sides of piers, as long as there is no net loss of WDUZ area on the site. The Plan further clarifies that application of this provision would be applied only upon a clear showing that application of the prescribed dimensions results in a diminished effectiveness of the WDUZ due to unusual configuration of the site itself and not the preferred characteristics in a development proposal.

While the Plan includes parameters to appropriately limit the application of this substitution to only those parcels where such application would provide improved effectiveness in the use of the water's edge for water-dependent industrial use and lays out clear alternative setback distances and appropriate maintenance of the net area of WDUZ, as a condition of my approval, projects proposed for modification of the WDUZ under this provision shall be subject to the review and approval of DEP, prior to the issuance of a Chapter 91 license.

As a result of my review, and with the conditions articulated at the end of this Decision, I believe that the proposed substitute provision has been clearly articulated and has been sufficiently offset by limitations to a modified WDUZ that achieve greater effectiveness of water-dependent use and ensure no net loss of WDUZ, so that the proposed substitute provision promotes the state's tidelands policy objective for guaranteeing that sufficient space along the water's edge will be devoted exclusively to water-dependent industrial use as appropriate for Gloucester Harbor.

Table 1. Summary of Substitute Provisions for Gloucester Harbor Plan

Regulatory Provision	Chapter 91 Standard	Substitution	Offsetting Measures
310 CMR 9.51(3)(c): Establishment of a Water Dependent Use Zone	"…along portions of a project shoreline other than 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."	For project sites that meet the eligibility standard, the required WDUZ dimensions may be modified as long as a minimum width of 25 feet is maintained along the project shore line and the ends of piers and wharfs and a minimum of 10 feet along the sides of piers and wharves, and as long as the modification results in no net loss of WDUZ area.	Substitution provision can only be applied to those project sites where it is shown that application of the Ch. 91 standard would result in an inefficient siting of uses in the WDUZ, and where the resultant reconfiguration achieves greater effectiveness in the use of the water's edge for water-dependent industrial use. The reconfigured zone must be adjacent to the waterfront and result in an increase in WDUZ immediately adjacent to the water. In no case will a reconfigured WDUZ that results in an area separated from the waterfront or in a net loss of WDUZ be allowed.

Evaluation of Proposed Amplification Provisions

The Review and Approval of Municipal Harbor Plans regulations at 301 CMR 23.05(2)(b) require a finding that any provision that amplifies a discretionary requirement of the Waterways regulations will complement the effect of the regulatory principle(s) underlying that requirement. Upon such a finding, DEP is committed to "adhere to the greatest reasonable extent" to the applicable guidance specified in such provisions, pursuant to 310 CMR 9.34(2)(b)(2). The renewal Plan contains five provisions that will have significance to the Chapter 91 licensing process as amplifications, pursuant to 301 CMR 23.05(2)(b). My determination of the relationship of these proposed local amplification provisions to c.91 standards in accordance with the MHP regulatory guidance is discussed below. A summary of the proposed amplification provisions for the 2009 Plan is provided below in Table 2.

Standards to Protect Water-Dependent Uses [9.36(4)(b)]

The c.91 standard at 310 CMR 9.36(4)(b) states that "…the project shall include arrangements determined to be reasonable by the Department for the water-dependent use to be continued at its existing facility, or at a facility at an alternative location having physical attributes,

including proximity to the water, and associated business conditions which equal or surpass those of the original facility as may be identified in a municipal harbor plan…". In the first proposed amplification provision, the Plan specifies that proposed projects with new uses will not displace existing commercial fishing vessel berthing in Gloucester Harbor without providing reasonably equivalent berthing space on site or at a suitable alternative site not already used by commercial fishing vessels.

The Plan recognizes that commercial berthing space on the harbor is limited, specifically for commercial fishing vessels, and seeks to protect these valuable spaces wherever possible. The proposed amplification will specifically protect commercial fishing vessels from displacement from an existing berth without the assurance of reasonable accommodation at a comparable and suitable alternative site, and assures that no commercial fishing vessel will be displaced at the alternative site. As a major stated goal of the 2009 Plan is to improve and protect commercial fishing fleet berthing, I find that this proposal will achieve this local goal while complementing the underlying principle of the c.91 regulatory standard, and I approve this amplification subject to the conditions provided at the end of this Decision.

An additional provision that was presented as an amplification to this standard in the Plan's compliance document which states that "[the] 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" is currently covered by the definition of Supporting DPA Use at 310 CMR 9.02 and does not need to be approved as an amplification in this decision.

Standards to Protect Water-Dependent Uses [9.36(5)(b)4]

The standard at 310 CMR 9.36(5)(b)4 states that "…in the case of supporting DPA use, conditions governing the nature and extent of operational or economic support must be established to ensure that such support will be effectively provided to water-dependent-industrial uses."

The Plan clearly articulates the importance of improving the water-dependent marine industrial infrastructure on the waterfront. Particularly, the Plan specifies certain marine-industrial uses that are critical to preserving Gloucester Harbor as a full-service regional "hub" port for the commercial fishing industry, and recognizes that maintenance of these hub uses (i.e., uses directly

related to commercial fishing) is of utmost importance to the viability of the commercial fishing industry in Gloucester. However, the Plan acknowledges that in some cases, there may be no "hub" marine industrial use on a site or a clear opportunity to directly support such improvements on a given project site. In the second proposed amplification provision, the Plan builds on the current c.91 requirement—where, in the absence of a water-dependent-industrial use on site, DEP identifies financial or other means (e.g., capital waterfront improvements) of direct support for the DPA—by providing specific guidance to DEP in their application of this standard. Specifically, the Plan offers a tiered approach to assure that supporting use funds provided under the above cited c.91 standard will be applied with due consideration for priority water-dependent marine industrial infrastructure. These tiers are set up as follows:

1. For properties with a water-dependent industrial hub port use (i.e., uses directly related to commercial fishing), economic support from the supporting use to the hub use will be presumed.
2. If no water-dependent industrial use exists or is proposed on the site, an investment in on-site waterfront infrastructure (e.g., piers, wharves, or dredging) to improve capacity for water-dependent industrial use will be required. Whenever feasible, maintenance of existing berthing and creation of new berthing for commercial vessels should be required.
3. 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. This fund shall be used only for investment in water-dependent industrial infrastructure within the DPA.

I find that the proposed amplification compliments the underlying principle of the regulatory provision within the local goals and context, and I approve the amplification as described above and subject to conditions below.

Utilization of Shoreline for Water-Dependent Purposes [9.52(1)(a)]

The standard at 310 CMR 9.52(1)(a) states that, for nonwater-dependent projects, "…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. Activation of the waterfront is one of the central themes in the 2009 Plan. The three amplifications proposed for this standard seek to improve public access to the working harbor without interfering with the water-dependent industrial uses that make up the waterfront.

The first amplification to the c.91 standard above proposes to incorporate public access as the open space requirement for nonwater-dependent supporting DPA use projects wherever possible, but only when it can be sited in a manner that is compatible with and not interfere with the water-dependent industrial uses and activities on the site. In this way, the City is able to encourage incorporation of public access into projects and move forward its goal of improved access to the harbor, while assuring that the access is appropriate for the site and use in question. Successful public access in the DPA requires assurance that any such facilities will be designed and sited such that it does not interfere with the primary water-dependent industrial uses of a working waterfront. As this amplification acknowledges this need for balance, I am satisfied that this proposal effectively compliments the regulatory principle of this provision.

The second proposed amplification to the utilization of shoreline for water-dependent purposes standard requires areas of waterfront that are used only seasonally for water-dependent industrial activity be activated for temporary public access. In this way, the Plan allows flexibility in use to meet the City's public access goal, while still promoting the primary use of the waterfront for water-dependent industrial use. Again, because the provision maintains the water-dependent industrial character and use of these areas, while supporting considered shoreline use through public access, I find the proposal compliments the underlying regulatory principle of the standard.

The last requested amplification provision requires that proposed project shall not be approved unless it includes a provision to allow access to water-borne vessels. This provision is intended to improve access to vessel berthing and activate the waterfront to the greatest extent possible. As the Plan clearly articulates the need for additional berthing and access to water-borne vessels as an important municipal priority, I find that the proposed amplification adequately compliments the effect of this regulatory principle.

Evaluation of DPA Master Plan

Because the Plan is intended to serve, in part, as a Master Plan for the DPA, the approval criteria at 301 CMR 23.05(2)(e) requires a finding that the Plan preserves and enhances the capacity of the DPA to accommodate water-dependent industrial use and prevents substantial exclusion of such use by any other use eligible for licensing in the DPA pursuant to 310 CMR 9.32. Specifically, the Plan must ensure that extensive amounts of the total DPA area are reserved for water-dependent

Table 2. Summary of Amplifications

Regulatory Provision	Chapter 91 Standard	Proposed Amplification
9.36(4)(b) Standards to Protect Water-Dependent Uses (displacement)	"…the project shall include arrangements determined to be reasonable by the Department for the water-dependent use to be continued at its existing facility, or at a facility at an alternative location having physical attributes, including proximity to the water, and associated business conditions which equal or surpass those of the original facility and as may be identified in a municipal harbor plan…"	No project will displace existing commercial fishing vessel berthing in Gloucester Harbor without providing reasonably equivalent berthing space on site or at a suitable alternative site not already used by commercial fishing vessels.
9.36(5)(b)(4) Standards to Protect Water-Dependent Uses (operational or economic support)	"…in the case of supporting DPA use, conditions governing the nature and extent of operational or economic support must be established to ensure that such support will be effectively provided to water-dependent-industrial uses…"	For properties with a water-dependent industrial hub port use, economic support from the supporting use to the hub use will be presumed. If no water-dependent industrial use exists or is proposed on the site, an investment in on-site waterfront infrastructure (piers, wharves, dredging) to improve capacity for water-dependent industrial use will be required. Whenever feasible, maintenance of existing berthing and creation of new berthing for commercial vessels should 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. This fund shall be used only for investment in water-dependent industrial infrastructure (piers, wharves, dredging) within the DPA.
9.52(1)(a) Utilization of Shoreline for Water Dependent Purposes	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…"	To the extent practicable for a site, public access facilities shall be integrated into a project to activate the waterfront as part of the open space required with a non water-dependent supporting DPA use but must be sited to be compatible with and not interfere with water-dependent industrial uses and activities. Open areas used to support working waterfront activities seasonally during the year shall accommodate temporary public access when possible. Within the water-dependent use zone no use shall be licensed unless it provides access to water-borne vessels wherever possible.

industrial uses and that commercial uses will not, as a general rule, occupy more than 25% of the DPA land area. The Plan must also set forth reasonable limits on commercial uses that would significantly discourage present or future water-dependent industrial uses and ensure that commercial uses mix compatibly and will not alter the predominantly maritime industrial character of the DPA. The Plan should also identify industrial and commercial uses allowable under local zoning that will qualify as a supporting DPA use, and identify a strategy for the ongoing promotion of water-dependent industrial use.

The DPA Master Plan section of Gloucester's Municipal Harbor Plan describes both its vision of the Inner Harbor as a working waterfront and its perception of the challenges afforded by a broad DPA area. The Plan contains extensive analysis documenting the existing and potential water-dependent industrial and commercial uses in the entire DPA. To address this approvability standard for the DPA, the 2009 Plan proposes an approach that—when compared to the allowed use and development status under the 1999 Plan—decreases the overall percentage of potential commercial uses within the DPA while promoting greater use flexibility for those properties with the greatest challenges for redevelopment in the planning area. The City's proposal is to use revised municipal zoning and special permit standards in concert with specific guidance to DEP for licensing in tidelands to allow up to 50% of the ground area for commercial uses on all parcels within the DPA. Such proposed changes would closely align the allowed uses for the "Marine Industrial" category in the municipal zoning ordinance with c.91 regulation's supporting DPA uses (i.e., industrial or commercial uses that provide direct economic or operational support to water-dependent industry in the DPA).

In terms of limiting commercial uses that would significantly discourage present or future water-dependent industrial uses, the City's proposal, as weighed against the current municipal zoning and c.91 licensing regime, reduces the current potential commercial/supporting uses by 17% in the Industrial Port sub-area and by 22% in East Gloucester sub-area, while increasing commercial/supporting uses by 17% in the Harbor Cove sub-area. Overall, the Plan results in a decrease of commercial use from the current allowed potential of 33.7% to 30.5% (a decrease of 4.39 acres).

The DPA Master Plan prevents commitments of space or facilities that would significantly discourage present or future water-dependent industrial activity, especially on waterfront sites, both through amplifications of state waterways provisions as discussed above, and through proposed revisions to local zoning language that will require special conditions through site plan review to address this standard. The proposed requirements serve to avoid displacement of existing uses, prevent interference of water-dependent industrial uses, assure project compatibility with the working waterfront, and assure preservation of water-dependent uses on adjacent parcels.

The 2009 Plan includes a recommendation to amend the City's Use Regulations Schedule to identify any industrial and commercial uses to be allowable for licensing by DEP as Supporting DPA Uses. As required by the Review and Approval of Municipal Harbor Plans regulations at 301 CMR 23.05(2)(e)(3), these are included as Table 5-3 in the Plan. Although this table includes all uses for the Marine Industrial district, only those identified as a permitted use, or being subject to conditions (superscript numbers 1-4) are proposed to be eligible as DPA supporting uses for the purposes of the DPA Master Plan. Noting that all supporting DPA uses allowable for licensing must comply with the provisions of both the local zoning ordinance and the definition at 310 CMR 9.02, I find the information identifying the allowable industrial and commercial uses to be licensed as Supporting DPA Uses for the Gloucester DPA adequate.

Finally, the DPA Master Plan includes a strategy to guide the on-going promotion of water-dependent industrial use. The strategy includes recommendations for capital and operational improvements to be provided by projects involving DPA supporting uses, including specific recommendations that such improvements or use of funds be directed toward commercial berthing, dredging and improvement of water-dependent industrial infrastructure (wharves, piers) only. Further, the Plan includes recommendations to pursue options for a publicly owned or managed dock for the commercial fleet, expanding cruise ship opportunities, and consider development of domestic and international ferry services. New marine-industrial technologies, such as producing new products from fish processing, are also recommended options, as appropriate. Other recommendations to improve navigation include opportunities to dredge the inner harbor and provide a possible Inner Harbor Water Shuttle. Locally, the management and implementation of the goals of the DPA Master Plan will be handled through a consolidation of port industry and economic development expertise within the City's Community Development Office. These elements

together, will serve as a functional and effective strategy to guide the ongoing promotion of water-dependent industrial use for the Gloucester Harbor DPA.

Based on the information provided in the Plan as discussed above and subject to the conditions at the end of this Decision, I find that the DPA Master Plan components of the Plan are consistent with the requirements of 301 CMR 23.05(2)(e).

C. Relationship to State Agency Plans

The only state-owned property in Gloucester Harbor is the Jodrey State Fish Pier, which is owned by the Department of Conservation and Recreation and managed by MassDevelopment. The 2009 Plan contains two recommendations that are in line with the State's ongoing efforts to revitalize and diversify uses in order on the Pier to expand the harbor's capabilities and support the fishing industry in Gloucester. These recommendations include a plan to dredge the north face of the pier to provide for better vessel access, and a recommendation to allow some marine industrial businesses to utilize existing truck parking on the State Fish Pier so to minimize the number of trucks parking along downtown streets. The City has indicated that it has worked with MassDevelopment in the preparation of the Harbor Plan, and in the absence of any contrary indication I find that no incompatibility exists with agency plans for continued operation.

D. Implementation Strategy

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. The provisions of this Plan will be implemented through proposed amendments to the Gloucester Zoning Ordinance and special permit standards. 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 (maximum potential to occupy no more than 30.5% of the DPA land area covered by the Plan). Further, the amended zoning provisions will 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. Accordingly, I find that this approval standard is

met subject to the condition detailed below which requires local enactment of the implementation commitments.

IV. EFFECTIVE DATE AND TERM OF APPROVAL

This Decision shall take effect immediately upon issuance on December 15, 2009. As requested by the City, the Decision shall expire two (2) years from this effective date unless a renewal request is filed prior to that date in accordance with the procedural provisions of 301 CMR 23.06 (recognizing that the term of approval is now two years). No later than six months prior to such expiration date, in addition to a notice to the City required under 301 CMR 23.06(2)(b), the City shall notify the Secretary in writing of its intent to request a renewal and shall submit therewith a review of implementation experience relative to the promotion of state tidelands policy objectives.

V. STATEMENT OF APPROVAL

Based on the planning information and public comment submitted to me pursuant to 301 CMR 23.04 and evaluated herein pursuant to the standards set forth in 301 CMR 23.05, I hereby approve the 2009 Plan renewal as the Municipal Harbor Plan for the City of Gloucester, subject to the following conditions:

1. DEP shall not license any project seeking substitution of water-dependent industrial use and supporting DPA use standards until the local implementation commitments laid out in the 2009 Plan (amendments to the Gloucester Zoning Ordinance and special permit standards) have been enacted through the City's established governance process. The Plan shall be updated to reflect the final local code and standards accepted.

2. DEP shall apply a substitute reconfigured Water Dependent Use Zone (WDUZ) as described above only when a clear showing has been made that the application of the c.91 standard would result in an inefficient siting of uses in the WDUZ and where the resultant reconfiguration achieves greater effectiveness in the use of the water's edge for water-dependent industrial use. For reconfiguration of any WDUZ the following conditions shall apply:
    a. The reconfiguration shall result in no net loss of WDUZ area;
    b. The reconfigured WDUZ shall be adjacent to the water and must adhere to the following minimum dimensions: 25 feet width maintained along the project shore

line and the ends of piers and wharfs, and 10 feet width along the sides of piers and wharves; and

c. The reconfigured WDUZ shall not result in an area of WDUZ separated from the water.

3. DEP shall not license a project use in the WDUZ zone unless access to water-borne vessels is provided, wherever possible.

4. DEP shall not license any project which will displace any commercial fishing vessel berthing in Gloucester Harbor without reasonable accommodation to provide equivalent berthing space on site or at a suitable alternative site not already used by commercial fishing vessels.

5. During licensing of projects with supporting DPA uses, DEP should establish the extent of operational or economic support provided to water-dependent industrial uses by supporting DPA uses, as follows:

   a. For properties with a water-dependent industrial hub port use (i.e., uses directly related to commercial fishing), economic support from the supporting use to the hub use will be presumed.
   b. If no water-dependent industrial use exists or is proposed on the site, an investment in on-site waterfront infrastructure (piers, wharves, dredging) to improve capacity for water-dependent industrial use will be required. Whenever feasible, maintenance of existing berthing and creation of new berthing for commercial vessels should be required.
   c. 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. This fund shall be used only for investment in water-dependent industrial infrastructure (piers, wharves, dredging) within the DPA.

   In the limited circumstances where a contribution to the Fund is required, DEP will determine the amount of the contribution and will require payment as a condition of licensing, consistent with current practice. The City will be responsible for creating and administering the Fund. Expenditures from the Fund are restricted to investment in water-dependent infrastructure within the DPA (such as, but not limited to: repairs or construction of piers and wharves or for support for marine industrial dredging) and will be made in accordance with a priorities plan to be prepared and maintained by a Port and Harbor Committee to be appointed by the mayor. The City shall submit to DEP an annual report detailing the Fund expenditures and balances.

6. DEP shall, to the extent practicable for a site, integrate public access facilities into a project to activate the waterfront as part of the open space required with a nonwater-dependent supporting DPA use, so long as it is sited to be compatible with and not interfere with water-dependent industrial uses and activities.

7. DEP shall allow open areas used to support working waterfront activities seasonally during the year to accommodate temporary public access when possible.

8. The City shall prepare a final, approved Gloucester Harbor Plan ("Approved Plan") to include:
    a. The Plan dated July 2009 as amended during the consultation period and by City enactment of local zoning and any special permit code;
    b. The Statement of Compliance as amended during the consultation period; and
    c. This Approval Decision.

Copies of the final, approved plan shall be provided to CZM and DEP's Waterways Program, kept on file at the City Clerk and Community Development Offices, and made available to the public through the city's website and copies at the library. For waterways licensing purposes, the Approved Plan shall not be construed to include any of the following:

1. Except as described above, any subsequent addition, deletion, or other revision to the submitted plan dated July 2009, except as may be authorized in writing by the Secretary as a modification unrelated to the approval standards of 301 CMR 23.05 or as a plan amendment in accordance with 301 CMR 23.06(1); and

2. Any provision which, as applied to the project-specific circumstances of an individual license application, is determined by DEP to be inconsistent with the waterways regulations at 310 CMR 9.00 or with any qualification, limitation, or condition stated in this Approval Decision.

In a letter from the Waterways Program Chief dated December 10, 2009, DEP has expressed support for approval of the renewal Plan and stated that the Plan will become operational for waterways licensing for all applications upon the effective date of Plan approval and in accordance with the conditions above. Subsequent to Plan approval, a determination of conformance with the Plan will be required for all proposed projects in accordance with 310 CMR 9.34(2).

Ian A. Bowles
Secretary of Energy and Environmental Affairs

12/11/09
Date

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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.[1] 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 Gloucester Harbor Plan and DPA Master Plan proposes 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.

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[1] 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 dependant industrial uses and to plan for compatibility of uses to ensure their continuation.

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.

An economic development grant from the Seaport Advisory Council will provide support for a concentrated economic development outreach for new investment on the harbor.

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

- The allowance of up to 50% supporting commercial use of DPA properties (increased from 25%)
- Recommending that the city pursue local zoning amendments for site plan review and for use table changes that make local and state permittable uses consistent.

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.

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 DPA 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 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.
- Draft policies and regulations to guide the use and development of Gloucester Harbor and its public waterfront facilities.
- Assist harborfront 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.

It is recommended that this plan be reviewed and, if necessary, revised in two years time. The city is working toward developing a consensus that allows and promotes economic diversification while remaining cautious and protective of its character and its working waterfront.

2 GLOUCESTER: A MARITIME CITY

2-1 20/20 VISION

In the 21st 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.

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 be 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.

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. During 2006, Gloucester unloaded 148 million pounds of fish, ranking as the tenth largest commercial fishery landing port in the nation (NOAA, NMFS data). 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 (2003 Community Panels Project, Gloucester's Commercial Fishing Infrastructure).

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 300 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, which scientists tell us will be six years from now, 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.

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 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.

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.

2-5 THE COMMUNITY VOICE

The Community voice was developed in three 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; and
3. A community-wide visioning process that created the community values that would be used to guide the city's approach to harbor development.

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.

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.

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 the 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.

<u>Community values that will guide harbor development:</u>

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.

2-6 THE HARBOR PLANNING AREA

The area of focus for the Harbor Plan is illustrated in Figure 2-1. 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 process to update the 1999 Harbor Plan was on those Inner Harbor properties that are located within the state-DPA (Figure 2-2).

Unlike the 1999 plan, one of the goals of this Harbor Plan is to adapt local land use regulations affecting the harbor in order to clarify and unify city and state regulations and to stimulate investment in the waterfront.

It is clear that even within the DPA, the land use and character of various areas differ significantly. Therefore, for purposes of analysis and discussion, the harbor planning area

within the DPA is subdivided into 3 regions: Harbor Cove, the Industrial Port, and East Gloucester (Figure 2-3).

- *Harbor Cove* – The traditional heart of the fishing port in Gloucester, extending from Fort Point to Harbor Loop and extending across Commercial Street and Rogers Street to include part of downtown. The waterfront is characterized by a mix of commercial and industrial uses, small parcels, and old finger piers.
- *Industrial Port* – Extending along the western side of the inner Harbor from Harbor Loop to the Head of the Harbor, incorporating the State Fish Pier and parcels between Rogers and Main Street. Major fish processing, cold storage facilities and support services have developed here over the past forty years. The area is characterized by large parcels and buildings, berthing for large vessels, proximity to the main shipping channel and the end of Route 128, and an almost uniform marine industrial use.
- *East Gloucester* – Extending from the southeast corner of State Fish Pier to Smith Cove, inland to East Main Street and including the Gloucester Marine Railway on Rocky Neck. This area features generally poor road access for large commercial vehicles and a diverse mix of uses, building types, and waterfront conditions, including boatyards and marinas that service both recreational and commercial vessels and private homes. This is the only area within the DPA that has "grandfathered" residences and recreational marina.

Areas outside the DPA but within the study area include:

- *Smith Cove* – This encompasses the area of Smith Cove that is outside of the DPA and contains primarily residential and visitor-related commerce interspersed with marine related activities and recreational dockage. The strong character of this area, with its winding streets and water views has attracted artists and visitors to Gloucester for much of its history. Rocky Neck is in this area and is the home of America's oldest continuously operated art colony.
- *Western Harbor* – includes the water edge and Stacy Boulevard from the Fort to Stage Fort Park, an outstanding public amenity and gateway to the city.

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 over the past ten years 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 a new 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 later being the central theme of the 1999 Plan.

The 2009 plan contains a more comprehensive DPA Master Plan and when approved by the city and Massachusetts Executive Office of Energy and Environmental Affairs (EEA) 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.

2-8 ASSUMPTIONS

The 2009 plan is intended to have a review in two 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 our fishing industry.

Figure 2-1. Harbor Planning Area

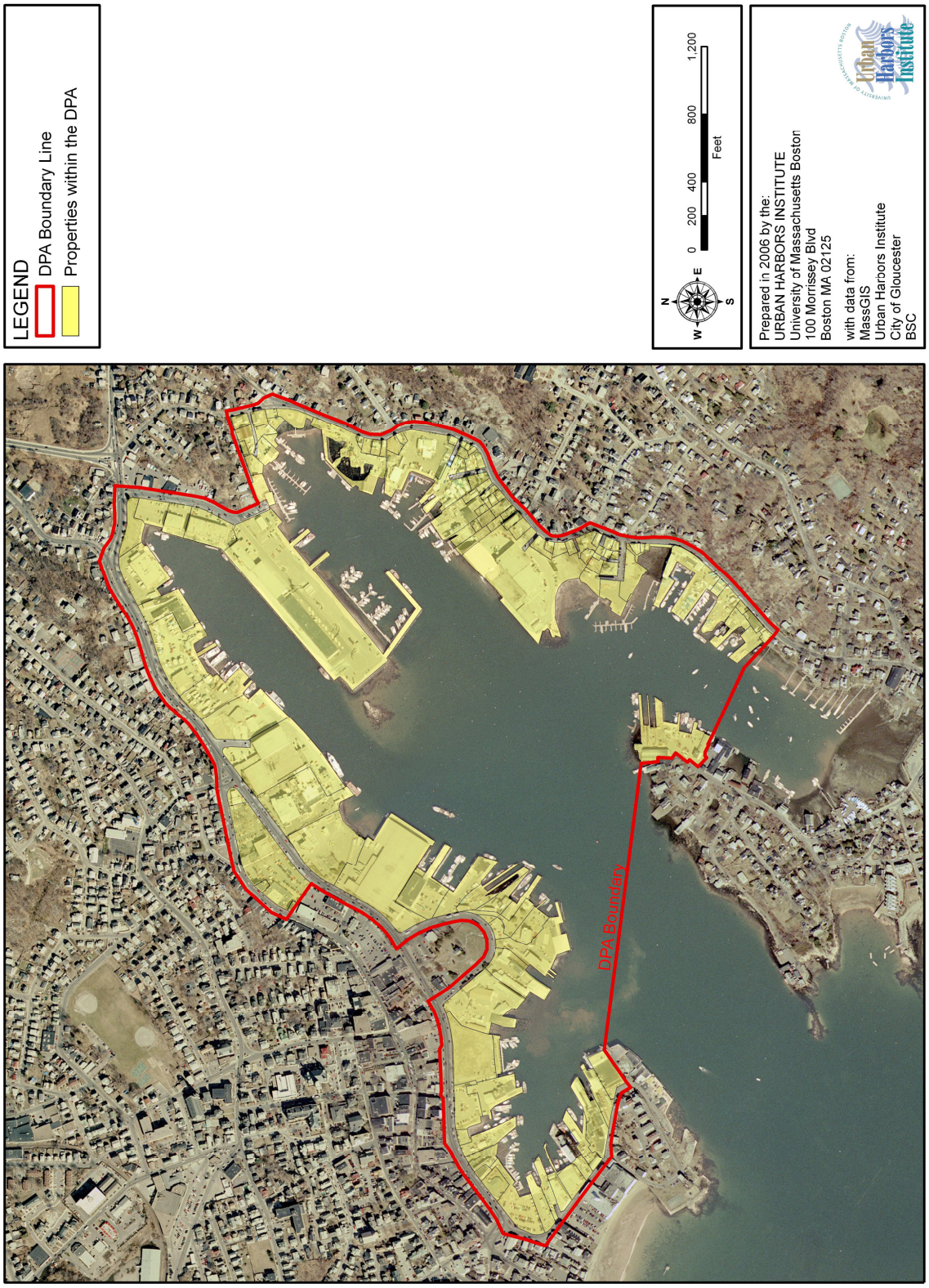


Figure 2-2. Gloucester's Designated Port Area

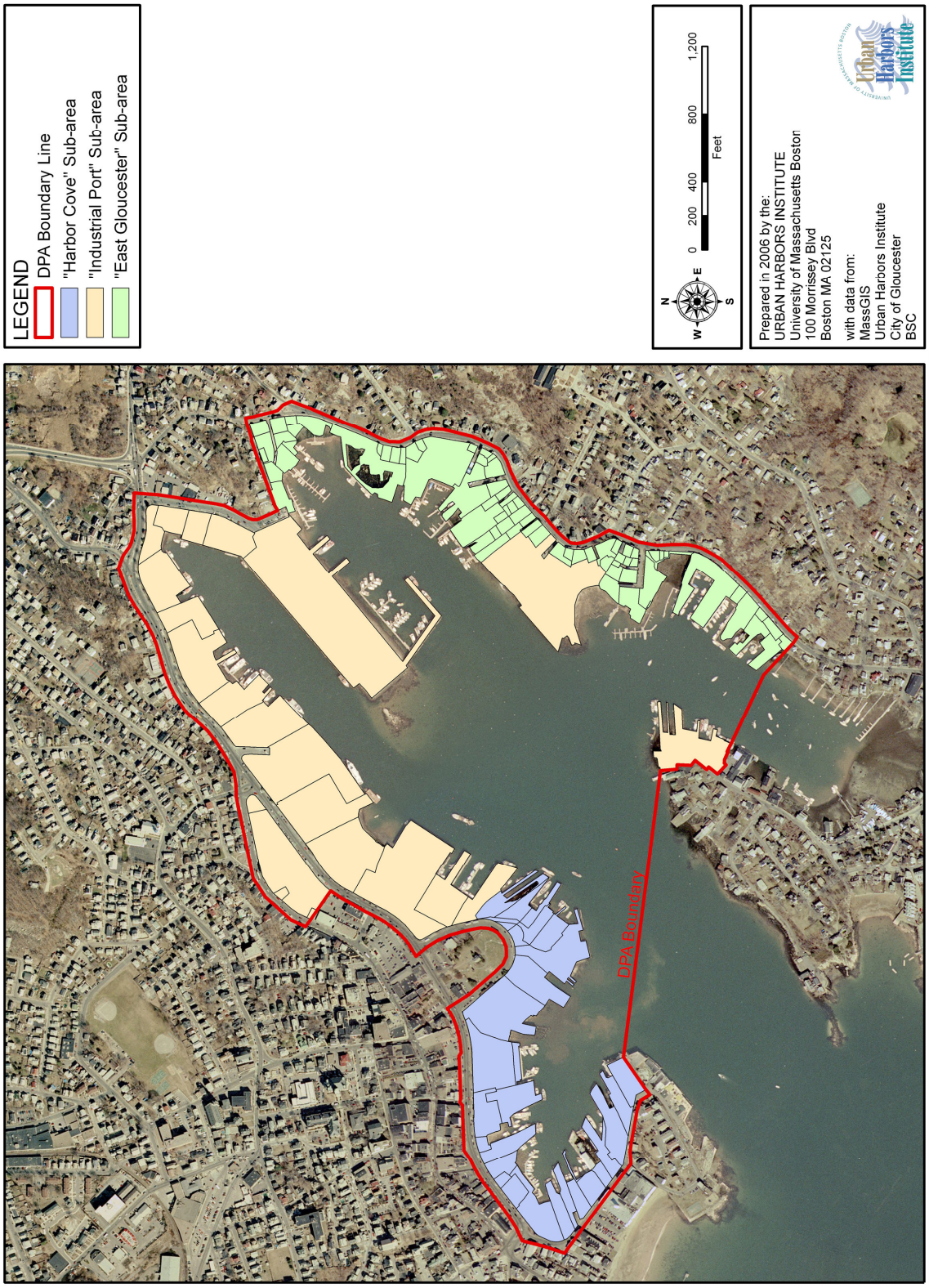


Figure 2-3. DPA Planning Sub-areas

3 KEY FEATURES AND CURRENT CONDITIONS ON THE WATERFRONT

3-1 LAND USE

3-1-1 Overview

Land use around Gloucester Harbor includes a wide range of activities, as indicated in Figures 3-1 to 3-8 *(these can be found at the end of Section 3)*. In general, the west side of the harbor, stretching from the Fort to the Gloucester Maritime Heritage Center, is characterized by mixed industrial and commercial uses with several vacant or underutilized parcels. The area from Harbor Loop to the State Fish Pier has large-sized lots used almost exclusively for industrial activities. The eastern side of the harbor, along East Main Street and around Smith Cove, and Rocky Neck, has very little (less than 5%) vacant or underutilized land and has a balanced mix of commercial, industrial, and residential properties. Most of the waterfront parcels within the harbor's DPA continues to be predominately used for marine industrial activities that directly or indirectly support the commercial fishing industry. However, with the current downturn in the fishing industry, several of these businesses are struggling to survive.

Harbor Cove has been the traditional heart of the commercial fishing industry in Gloucester and still provides essential dock space for fishing vessels and is the home for many important shore-based support services for this industry. There are several underutilized parcels around the cove that have attracted the attention of commercial developers with projects that would not displace nor conflict with existing marine industrial activity. The most important of these is lot I4C2 between the Building Center and the Gloucester House on Rogers Street. There is a general consensus that Commercial Street has become functionally obsolete as an area that can effectively supported most modern marine industries because of the relatively shallow water depths, small parcel sizes, and the difficulty with moving large trucks into and out of this area. Businesses along the east-side of this street that currently serve the commercial fishing industry should be supported, but efforts to attract other marine-industrial activities in this area should not be a priority.

The Industrial Port (Harbor Loop to the State Fish Pier) has become the city's primary marine industrial area with 98% of the land and pile-supported area within this district dedicated to industrial and accessory-to-industrial uses. It has recently experienced several significant changes, including the opening of the Gloucester Seafood Display Auction, modernization of Americold's and Gorton's waterfront infrastructure, and significant expansion of facilities on the Jodrey State Fish Pier. Most recently, the development of the Gloucester Marine Terminal at Rowe Square offers important new opportunities for the port. The district has excellent access to the nearby interstate highway system (Route 128 and I95), deep-water access via the port's main federal shipping channel, and large open outside work areas. The average lot size in the Industrial Port is over 2 acres compared to less than ¾ acre for Harbor Cove and less than ¼ acre in East Gloucester.

East Gloucester's DPA waterfront is a mixture of marine industrial and commercial operations. Interspersed among these are a number of recreational marinas and residential properties (most away from the water's edge), that, while not conforming with DPA regulations, existed before the DPA was established and are therefore "grandfathered." The ability for East Gloucester to support significant intense marine industrial uses is limited by

the dimensions of and uses along East Main Street. Expansion or development of new marine industrial uses that would require frequent large truck access is not practical.

Much of **Smith Cove**, although within the plan's study area, is outside the DPA. It has seen little change in recent years, and continues as primarily a residential and visitor district, home of America's oldest continuously active art colony. There are significant parking limitations within and narrow roadways leading into this area.

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.

On the East Gloucester waterfront, water-dependent and non water-dependent industries are more widely interspersed among various commercial and residential uses. Industrial sites on this side of the harbor are under-utilized as resources that support commercial fishing or other marine industries thus offering opportunities for investment and more contribution to the economic value of the port. Within this section of the harbor, there is a concentration of water-dependent commercial uses, including several facilities catering to recreational boating. Many of these facilities offer boat repair and winter storage, qualifying them as water-dependent industry. Several of these water-dependent facilities are in disrepair and not fully or optimally using the property.

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.

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 3-9 *(this can be found at the end of Section 3)*. They include:

<u>Designated Port Area (DPA)</u> 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. The DPA program is administered by the Massachusetts Coastal Zone Management (CZM) Office.

<u>Municipal Zoning</u> 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 zone, designed with the intent of promoting marine industrial use and requiring that the water's edge be reserved for vessel access.

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 3-9 is an approximation based on available historic maps. The actual limit of Chapter 91 jurisdiction 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.

3-1-4 Existing Uses in the DPA

To understand the existing status of Gloucester Harbor relative to DPA standards, a parcel by parcel analysis was undertaken to determine the current amount of use on the harbor in each of several categories of land use based on DPA classifications (Table 3-1). The analysis was based on site visits and interviews.

Table 3-1: Current Land Use of the Entire DPA. The land use category is based on the predominant use within each parcel. It does not include public roadways but does include pile-supported wharves and buildings over water.

Category of Use	Acres	% of DPA
Water Dependent Industrial	38.4	45.2
Non-Water Dependent Industrial	22.2	26.2
Water Dependent Commercial	4.1	4.8
Non-Water Dependent Commercial	6.5	7.6
Under Utilized/Vacant	5.7	6.7
Other	8.1	9.5
TOTAL	**85.0**	**100.0**

This table confirms that a majority of the DPA, over 70 percent, is in industrial use with over 60% of that land dedicated to industry categorically defined as water-dependent. Commercial activities occupy slightly more than 10 percent of the total DPA area, a percentage well below the limit of 25 percent allowed by the state, indicating that under the DPA regulations and an approved harbor plan, there is latitude for additional commercial growth adjacent to the waterfront if desired by the community.

Much of the commercial activity within the DPA is grandfathered, including water-dependent marinas as well as non water-dependent uses such as the Building Center, many restaurants, and some small retail along the East Gloucester shore.

There are clear differences in land use among the three sub-areas of the DPA: Harbor Cove, the Industrial Port and East Gloucester (Table 3-2 and Figure 3-10).

Table 3-2: The Land Use for the Three Sub-District of the DPA as a Percentage of Area of Each District. The land use category is based on the predominant use within each parcel.

Category of Use	Harbor Cove		Industrial Port		East Gloucester	
	Acres	%	Acres	%	Acres	%
Water-dependent Industrial	8.3	42.3	24.1	51.0	5.9	32.6
Non Water-dependent Industrial	0.0	0.0	22.3	47.1	0.0	0.0
Water-dependent Commercial	0.0	0.0	0.0	0.0	4.1	22.7
Non Water-dependent Commercial	4.6	23.5	0.3	0.6	1.6	8.8
Under Utilized/Vacant	4.9	25.0	0.0	0.0	0.8	4.4
Other	1.8	9.2	0.6	1.3	5.7	31.5
Total	**19.6**		**47.3**		**18.1**	

An objective of this Harbor Plan is to ensure that water-dependent industrial uses are maintained as the primary activity of the harbor while also determining the extent to which supporting commercial activity can grow under the current regulations and without displacing or conflicting with existing or new industrial uses. The data presented above indicate that there is ample opportunity to allow, or even encourage, additional carefully planned and controlled commercial uses and still comfortably remain within the boundaries applicable to DPA properties.

What is also very apparent from even a casual look at the data is that the three sub-districts within the DPA have very different land use patterns, in addition to the physical differences discussed earlier in this plan.

- The Industrial Port district (defined as MI-2 later in this plan and includes Gloucester Marine Railway and the East Gloucester Americold facility) is over 98% dedicated to industrial use.
- Harbor Cove (MI-1) has a strong water-dependent industrial component (mostly serving the local fishermen) but the district also has slightly over 25% of the land area either vacant or underutilized and a relatively high percentage (pushing 25%) of non-water dependent commercial (e.g. restaurants, retail).
- East Gloucester (MI-3) has a balance (roughly a third each) of commercial, industrial and other (mostly residential and neighborhood business). East Gloucester is the only district that currently has recreational marinas and residential units within the DPA. These are pre-existing grandfathered uses as DPA regulations categorically exclude both uses.

3-1-5 *Development on the Waterfront*

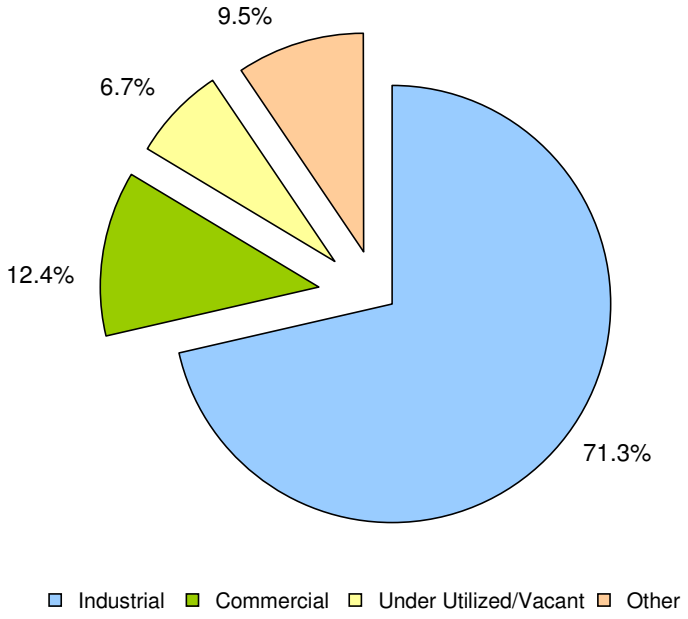
According to the 1994 *Gloucester Waterfront Study, Land Use and Economics*, in the years from 1980 to 1990, there was an increase in the number of parcels supporting marine industrial, commercial fishing-related businesses, marinas, and water-dependent commercial (excursions) uses on Gloucester Harbor. In that period, there were also shifts which reflect the reduced amount of fresh fish landed in Gloucester such as the increased

ratio of wholesalers to processors, half of whom had converted to dealers. In general, however, there have been few major private investments in the harbor in the past two decades. Following completion of the 1999 Gloucester Harbor Plan, a number of publicly funded infrastructure improvements were completed and others are either on-going or in the planning stage (see Appendix E).

Since 1990, the pattern of use on the harbor has not changed significantly: large dockside corporate firms mixed with smaller seafood buyers and processors, ice producers, fuel suppliers and boat docks. However, beginning with the renovation of the State Fish Pier early in the 1990's, a number of individual investments and proposals have been made. Some of these were outlined in the 1999 Plan, but many did not move beyond the conceptual stage. One of the most significant private developments has been the Gloucester Marine Terminal at Rowe Square. This has been designed to cater to proposed international and domestic ferry services and to visiting cruise ships. It also provides function hall and restaurant space, creating economic viability by serving mixed uses. The ferry and cruise ship businesses are expected to add a new economic dimension to the industrial port while also supporting businesses in the city's central district and its large inventory of visitor attractions.

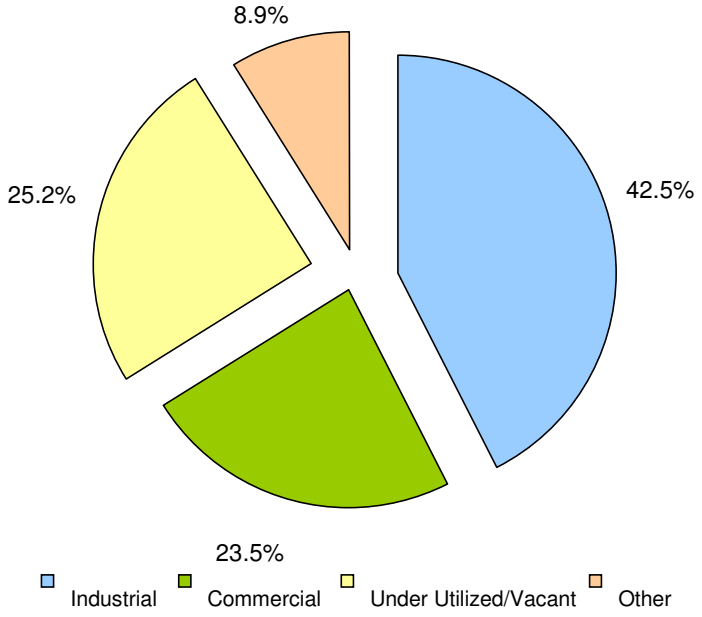
A. Whole DPA

(85 Acres)



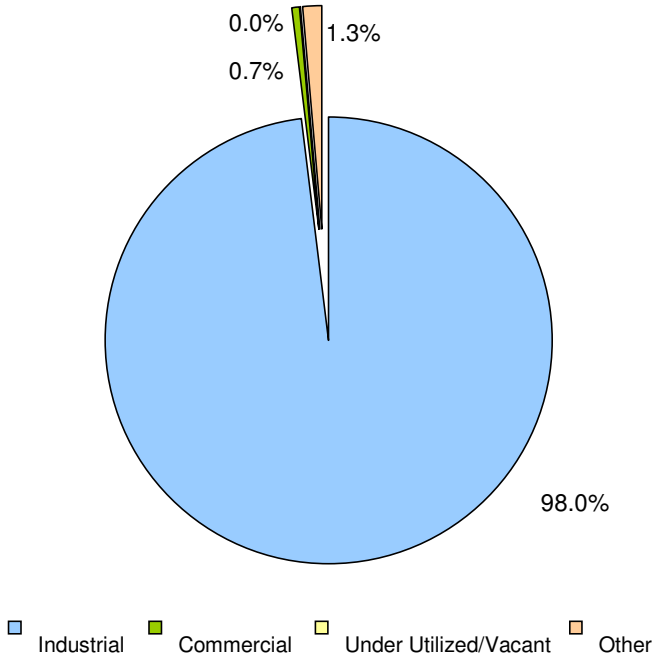
B. Harbor Cove

(19.6 Acres)



C. Industrial Port

(47.3 Acres)



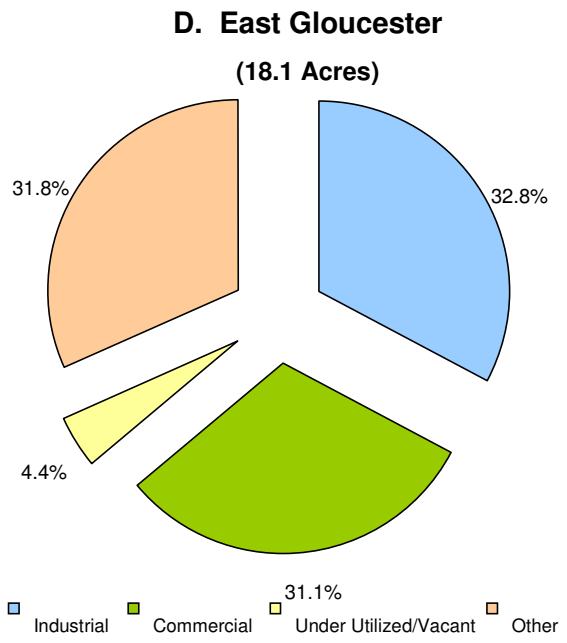


Figure 3-10: Current Land Use as a Percentage of the Whole DPA (A) Compared to the Land Use as a Percentage of Harbor Cove (B), the Industrial Port (C) and East Gloucester (D). The land use category is based on the predominant use within each parcel.

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).

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 3-11).
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 3-11).

Pedestrian access to the shoreline remains limited on the Inner Harbor waterfront.

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.

3-2-2 Vessel Berthing and Moorings

Berthing along open pile-supported wharves is available for large commercial vessels in the Industrial Port area at Rowe Square (Americold and Gloucester Marine Terminal), at Americold's wharves in East Gloucester and on Rogers Street, and at the State Fish Pier. There is a total of about 2,600 linear feet of dock at these facilities ranging in length from 220 to 1000 feet. At the Gloucester Marine Terminal and at the State Fish Pier, this is currently used by large commercial boats harvesting pelagic fish and by merchant or passenger vessels making port calls. A significant portion of this berthing capacity has been made unavailable for use, as referenced below, by security concerns of the industrial property owner which does not require use of the water's edge of its property.

Berthing for smaller commercial boats is scattered throughout the harbor (Figures 3-1 to 3-8 – *these maps can be found at the end of Section 3*) at a variety of public and private docks.

Not including the open wharves mentioned above and based on a survey jointly completed by the Harbor Plan and Harbormaster offices in early 2006, there was dock space for about 260 commercial vessels and 280 recreational vessels in Gloucester's Inner Harbor of a size typical of those now using the harbor (generally between 30 and 60 feet). There are another 50^{+} spaces that have in the past been used for rafting out (i.e. tying up outboard of a vessel berthed at a dock or wharf) by medium to large commercial fishing boats. The inner harbor has 117 mooring buoys for use by both commercial (27) and recreational (86) boats. There are also approximately an additional 20 berths dedicated for use by commercial vessels receiving port services, including on-loading ice or fuel, off-loading fish at the Seafood Display Auction, or receiving/waiting for repair services and 10 berths used exclusively by government boats (US Coast Guard, harbormaster, Massachusetts Environmental Police).

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. 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.)

The 2008 community listening posts identified the need and appropriateness for dockage and for the supporting shoreside facilities for transient boaters, whether visiting for a single day or for many weeks. Needs for community boating locations in the harbor were also strongly identified. As public access and connectivity of industrial and commercial activity

along the waterfront is created, berths for these market sectors are an appropriate mix for the commercial waterfront.

There are currently about 250 commercial vessels (the large majority of which are 30' to 60' fishing/lobster boats) and over 350 recreational boats (all either in East Gloucester or on moorings) that consider Gloucester's Inner Harbor their homeport. The existing recreational boating facilities are at, or very near, capacity, with most its marinas having long waiting lists. No new recreational boat marinas may be built within the DPA / City's MI zone. Those that do exist (all in East Gloucester) are "grandfathered" having received an amnesty license from the state several years ago. The current waiting list for a private mooring is nearly 600 requests long, representing well over a 100% increase since the time of the 1999 Harbor Plan. For commercial vessels, dock space (possibly for more than 50 additional boats including rafting out spots) is available but much of it is in poor and unsafe condition. In addition, as discussed above, 50 or more new berths could be created. With adequate private and/or public investment, Gloucester Harbor could accommodate a commercial fishing vessel fleet roughly 100 boats larger than exists in 2006 (the actual number obviously dependent on the size of the boats). Some of this space is needed to accommodate what hopefully will be a growing number of transient commercial boats using the many services offered by the harbor.

A project to improve the public dock at Solomon Jacobs Park has been approved and is awaiting funds from the Seaport Bond. Pier renovations continue at the Gloucester Maritime Heritage Center with one dock restored in 2006 and another slated for Seaport Bond funding in 2009. While this will not serve the need for berthing, it will provide dock space for commercial and recreational boats to drop off and pick up passengers.

3-2-3 Navigation and Dredging

Navigation channels in Gloucester Harbor are illustrated in Figure 3-9 *(this can be found at the end of Section 3)*. Bathymetry is available on NOAA Chart No. 13281, 18th Edition, Feb 2007. 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, 18.5 feet for the North Channel, 17.5 feet for the South Channel, and 12.5 feet into Smith Cove and Rocky Neck. The North Channel increased to approximately 18.5 feet after several rock obstructions were removed from the channel in mid 2006. 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). 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 four to five areas require additional maintenance dredging throughout the river.

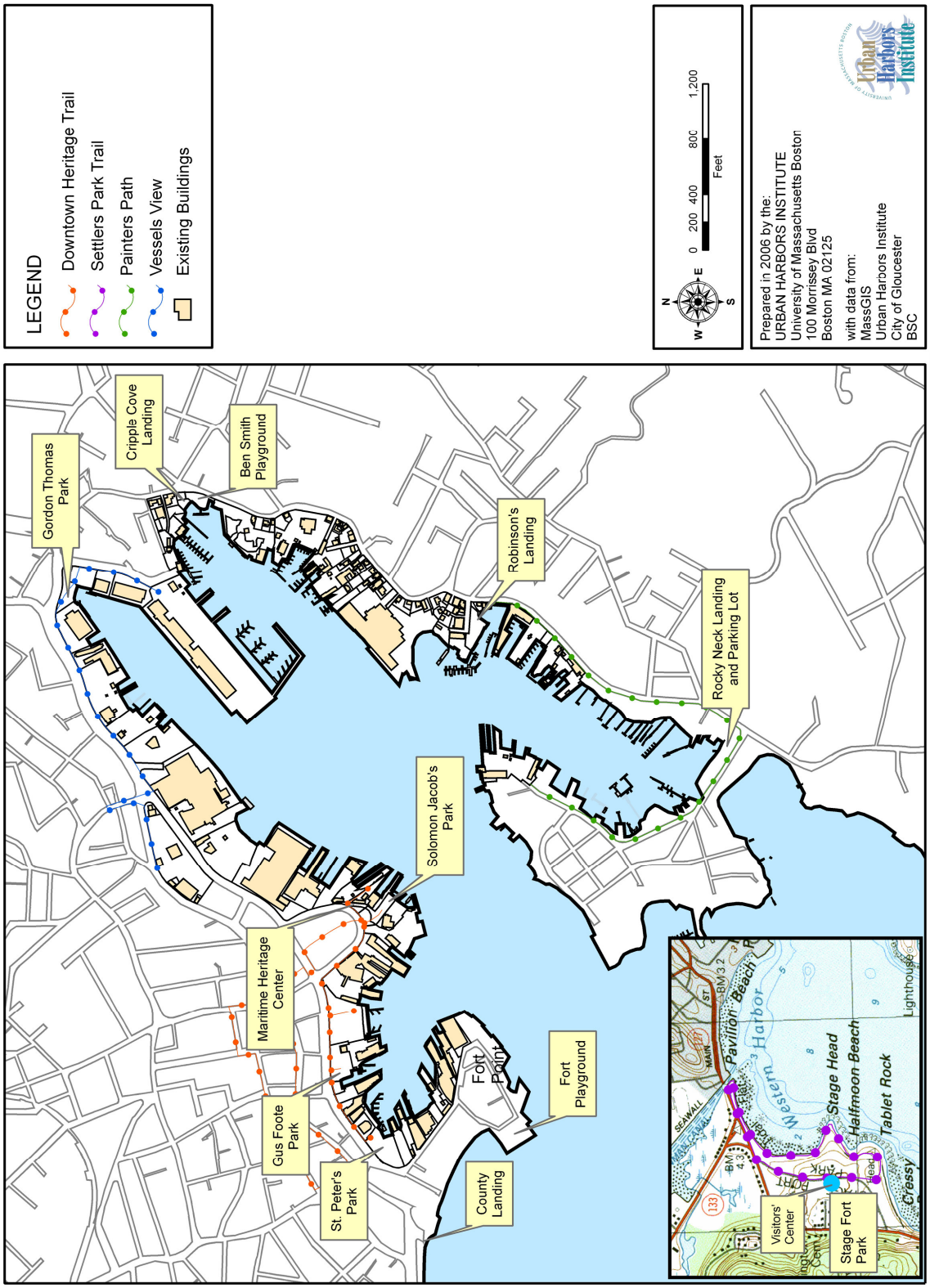


Figure 3-11. Public Access to Gloucester Harbor

3-2-4 Commercial Fishing Industry

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.

As regulations have limited fishing effort, the amount of groundfish being landed in Gloucester has declined significantly from 1985 levels. However, groundfish landings have been fairly consistent since 1994. Based on National Marine Fisheries Service (NMFS) data on all the species that they monitor, there has been an increase in overall landings in Gloucester since 2000 (Figure 3-12). The increase may largely be due to fishermen targeting less traditional species. While the recent increases in overall catch seem significant, the increase in revenue has been less so. This suggests that those species now being targeted are of less value than the traditional groundfish species.

Recent efforts have focused less on groundfish and more on lobster (Hall-Arber et al. 2001). 1,567,145 pounds of lobster were landed by boat in the Port of Gloucester in 2005.

In addition to lobster, other species that were landed include: cod, dabs, winter flounder, yellowtail, haddock, perch, monkfish, pollock, hake, halibut, gray sole, whiting, squid, shrimp, herring, mackerel, crab, bluefin tuna, swordfish, striped bass, dogfish, skate, sea urchins (very few), monkfish, bluefish, slime eels, sea cucumbers, menhaden, and a variety of shellfish (Hall-Arber et al. 2001; New England Fish Exchange Auction 2005).

In 1997, the Gloucester Seafood Display Auction opened, allowing buyers to bid on fish directly, rather than having to rely on a middleman to broker deals between the fishers and the buyers. The higher prices earned for higher quality fish sold at auction helped support the Gloucester fishing community as regulatory pressures increased (Hall-Arber et al. 2001). The auction also attracted boats from outside of Gloucester who then made use of the area's support facilities, again boosting the area's economy. In 2000, the auction was purchased by Global Food Exchange, who expanded the eligible buyers by allowing online bidding (Duchene 2000). Although there is general support for the auction, a few argue that it has disadvantaged smaller wharves and has actually resulted in unfair prices.

Fish processing includes all those activities needed to bring fish from the harvester to the consumer; namely, handling and sorting, de-boning and filleting, buttering/breading/stuffing and packaging, refrigerated storing or freezing, transportation, and/or brokering of fish. Table 3-3 lists the fish processors operating in and around the harbor. The largest fish processors in Gloucester are generally not processing fish landed in Gloucester, but importing frozen fish which they use to produce their consumer products. Nearly all of the groundfish landed in Gloucester is destined for the higher value fresh fish market.

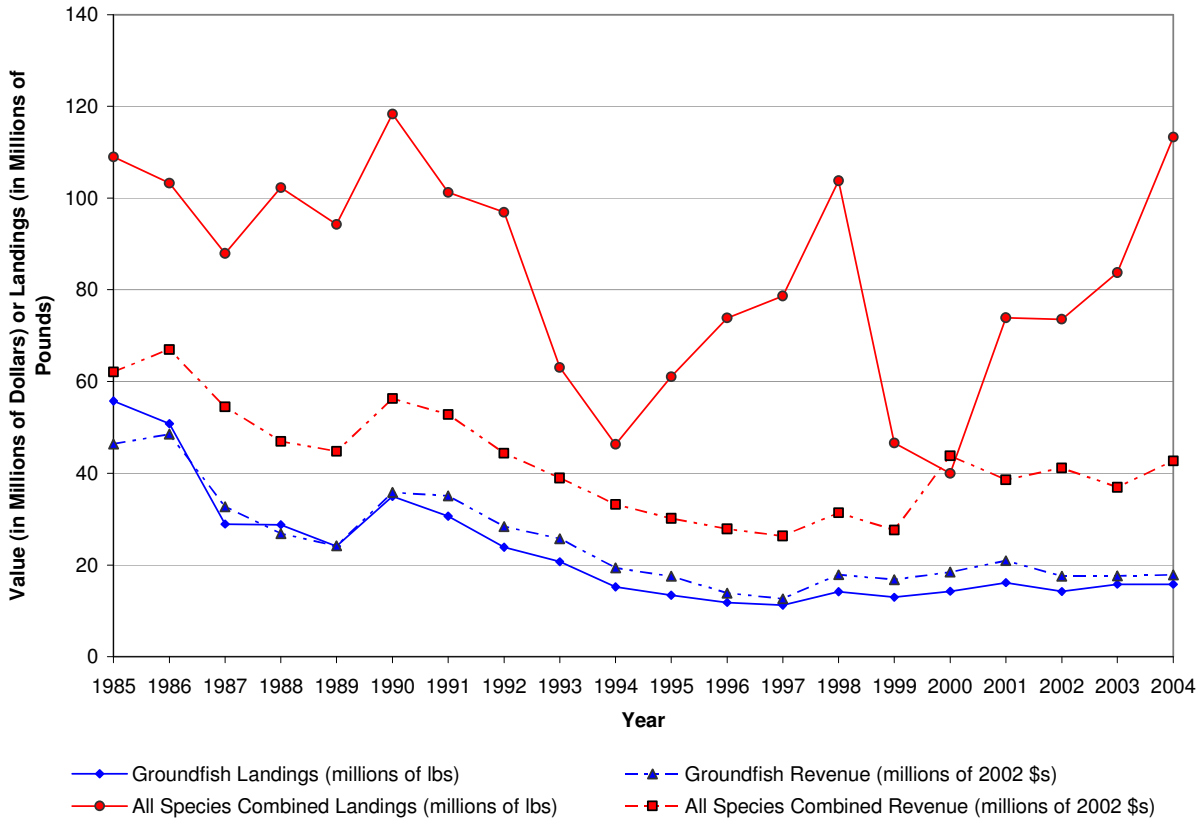


Figure 3-12: Gloucester Annual Landings and Revenues for Groundfish and for All Species Combined from 1985 to 2004. "Groundfish" refers to the twelve different species regulated under the NE Multispecies Management Plan (large mesh multispecies); including cod, flounder, haddock). "All species combined" refers to all species landed in Gloucester for which NMFS collected data.. The data were obtained from the National Marine Fisheries Service's Fishery Statistics website (www.st.nmfs.gov) and from the Statistics Office of the New England Region Office (www.nero.noaa.gov) and analyzed by Sarah Robinson (Gloucester Community Panel, June 2005, in response to requests).

In Figure 3-12, for the past decade, the red **revenue** line primarily responded to the price and weight of lobster landed while the red **landing weight** line primarily reflects changes in the weight of pelagic (herring and mackerel) fish landed. The revenues realized in 1998 and 2004 were the exceptions when a large peak in pelagic landings did have a small but noticeably positive impact on total annual combined fish revenue for Gloucester. Herring generally brings 6¢ to 10¢ per pound while groundfish and lobsters have an off-boat value of over $1 and $4 per pound respectively for the past several years. In 1994, herring and mackerel landings roughly equaled lobster landings by weight state-wide. By 1998, the total weight of herring and mackerel landed had increased by a factor of 5. A modest peak in lobster landings in 2000 more than offset a significant drop in pelagic landings that year. The price of mackerel has been more variable (8 to 38¢ per pound) than other fish landed in Gloucester but, until 2003, mackerel landings were less than 5% of herring by weight. In 2004, the weight of mackerel landed state-wide exceeded the weight of herring landed for the first time. Unfortunately the price for mackerel dropped from an annual average of 31¢ (1998) to 9¢ (2004) per pound. Cape Seafood started landing pelagics in Gloucester in 2001 and much of the increase in combined landing weight depicted in Figure 3-12 since 2000 can be attributed to that operation. By 2004, herring and mackerel landings out weighed lobster landings state-wide by well over an order of magnitude. Gloucester

experienced a similar growth. In the past few years, increased revenues from pelagics in Gloucester have been roughly offset by a drop-off in revenues from tuna, swordfish, and other non-groundfish.

Table 3-3: Fish Processors in Gloucester Harbor.

Name	Handling & Sorting	De-boning & Filleting	Buttering / Breading / Stuffing & Packaging	Freezing	Brokering
Aram Fish	X				
Connolly & Wright		X			X
Gorton's			X	X	X
Intershell					X
International Seafood Company	X	X			
Montilleros	X				X
New England Marine Resources	X	X			X
North Atlantic Fish			X	X	
Ocean Crest	X	X			X
Pigeon Cove	X	X	X		
Cape Seafood	X			X	X

Between the fishers, processors, marketers, and other fishery-related employment opportunities, the fishing industry directly and indirectly impacted an estimated 2,000 Gloucester households in the late 1990s (Hall-Arber et al. 2001). Beyond employment and industrial impacts of the fishing industry, cultural, religious, and familial attributes of Gloucester have also been traced back to the city's reliance on and history steeped in fishing.

3-2-5 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).

Due to a town 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.

The Gloucester lobster fishery is influenced by seasonal fluctuations. Studies show that lobster travel inshore during the spring and back offshore during the late fall, thus reducing the lobster fishing effort in Gloucester Harbor from December to February (Wilbur and Glenn 2004). Additionally, when the water is colder the lobsters are less active and therefore less likely to enter the traps.

3-2-6 Other Water-Dependent Operations

In addition to its reputation as a historically significant fishing port, the Port of Gloucester is also the birthplace of frozen packaging of fish and other products. Since this invention in 1925 by Clarence Birdseye in Gloucester, the port has developed into a major center for frozen seafood products and currently maintains the largest total-capacity of cold storage facilities of any US East Coast port.

Table 3-4: Vessel Service Facilities in Gloucester's Inner Harbor. Data from City of Gloucester website, *Guide to Sailors Visiting Gloucester*.

Name	Marina	Boat Yard/ Ship Repair	Marine Electronics Repairs	Marine Engine Repairs	Marine Supplies	Fuel	Rigging Services	Sail Repair	Pump Out
Beacon Marine		X			X				
Brown's Yacht Yard	X	X		X	X	X	X		
Enos Marine	X	X		X	X				
Gloucester Marine Railways		X				X			
Harbormaster									X
International Seafood Company	X								
Bevins Sail Loft								X	
Lighthouse Marina	X								
Maritime Heritage Center		X							
N. Shore Sport Fishing Dock	X				X	X			
N.E. Marine and Industrial					X		X		
Rose's Marine		X			X	X			
Seatronics			X						

Neptune's Harvest, a Division of Ocean Crest Seafoods, Inc. on Harbor Cove, offers a product developed to use what had been waste from the fresh fish that they process. They recover the parts of the fish (head, skeletons, scales, and fins) previously discarded and convert this into organic liquid fertilizer that has gained an international reputation for quality and value as a plant supplement. In addition to providing an environmentally friendly consumer product, Neptune's Harvest benefits the environment by effectively eliminating the need to dispose of the waste commonly generated in processing fish.

Gloucester also offers a variety of vessel services (Table 3-4).

The Gloucester Marine Terminal is the newest addition to Gloucester's industrial waterfront. Ceremonial groundbreaking for the terminal building occurred in November 2005 and it opened in 2006. Seaborn and Holland America cruise lines made port calls in the fall of 2006 and the number of ship visits is expected to grow steadily over the next several years. The smaller cruise ships (up to the size of the *Seaborn Pride*) are able to enter the Inner Harbor and tie up at the Marine Terminal while larger, deeper draft vessels such as those operated by Holland America anchor in the Outer Harbor and use launches to shuttle their passengers to the terminal. In addition to serving the needs of cruise ship passengers, long-term plans for this facility include ferry service to Nova Scotia, Bar Harbor and/or Provincetown, excursion boat operations, a restaurant and an event space.

A large number of charter boat companies operate out of Gloucester's Inner Harbor. Table 3-5 lists these companies along with the nature of their business.

Table 3-5: Charter Boats Operating in Gloucester's Inner Harbor.

Company	Type	Location
Amanda Marie Fishing Charters	Fishing	3-5 Parker St
Anne Rowe Charters	Fishing	Seven Seas Wharf
Black Pearl Charters	Fishing	Cripple Cove Landing
Cape Ann Charters	Fishing, Whale Watching, Scenic	
Charlie's Charters	Fishing	Roses Warf
Coastal Fishing Charters	Fishing, Whale Watching, Scenic	Roses Warf
Connemara Bay Charters	Fishing, Whale Watching, Scenic, Lobstering, Firework Displays	St. Peter's Square
Defiance Sail Charters	Celebration and Lodging	Beacon Marine Basin
DM Fishing Charters	Fishing	
Harbor Tours Inc.	Scenic	Harbor Loop
Kayman Charters	Fishing	J Dock
Leisure Knot	Fishing, Diving	10 Craft's Rd
Sandy B Fishing Charters	Fishing, Whale Watching	Harbor Loop
Schooner Thomas E. Lannon	Fishing	Seven Seas Wharf
Seven Seas Whale Watch	Whale Watching	Seven Seas Wharf
Striper King Charters	Fishing	St. Peter's Square

3-3 ENVIRONMENTAL CONDITIONS

The information that follows was summarized from a recent report prepared by the Massachusetts Office of Coastal Zone Management (2004):

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.

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 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.

3-4-1 Zoning

Figure 5-1 illustrates the zoning pattern along the harbors' waterfront. The harbor planning area includes Marine Industrial, Neighborhood Business, and Central Business zoning districts.

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.

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.

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 60 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 February 28 of each year.

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).

The benefits that the Chapter 91 program can afford a municipality are best captured in the five basic objectives of the program:

1. *ensure the waterfront is used primarily for water-dependent purposes;*
2. *provide public access;*
3. *facilitate other state programs related to shoreline use and conservation;*
4. *strengthen local controls and encourage harbor planning; and*
5. *ensure accountability to present and future public interests.*

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 (Figure 3-9). Ultimately, jurisdiction will be determined by DEP on a property-by-property basis at the time of licensing.

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). The DPA consists of land, piers, and water area from Cape Pond Ice and extending all round the harbor to the east end of Smith Cove and also includes the Marine Railway on Rocky Neck (Figure 2-2). The DPA includes a federal channel and anchorage leading to the State Fish Pier and all waters of the Inner Harbor.

DPA History: The Gloucester DPA, along with the eleven 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.
- 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 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.

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.

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 area around the Fort, with the exception of the land right on the edge of the water, is classified as X. 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. However, flood studies are time consuming and expensive, so far fewer than needed are done. As an alternative, FEMA has established procedures by which a community may compile appropriate data and request a map revision. Further, if an individual homeowner 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 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.

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.

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.

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 Department

of Environmental Management (DEM) has jurisdiction over the ocean sanctuaries and DEM must approve all activities that occur on, or in, these areas.

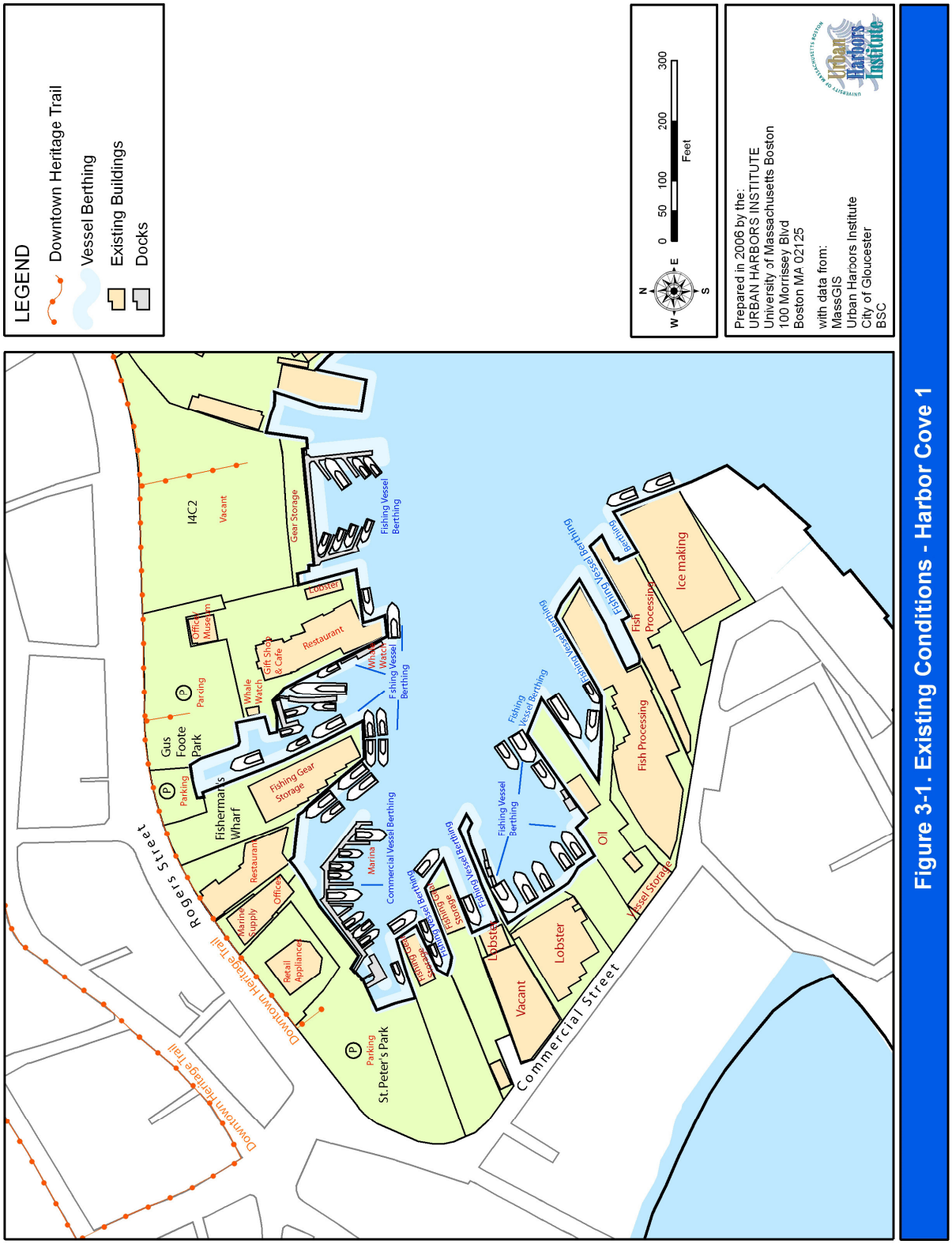


Figure 3-1. Existing Conditions - Harbor Cove 1

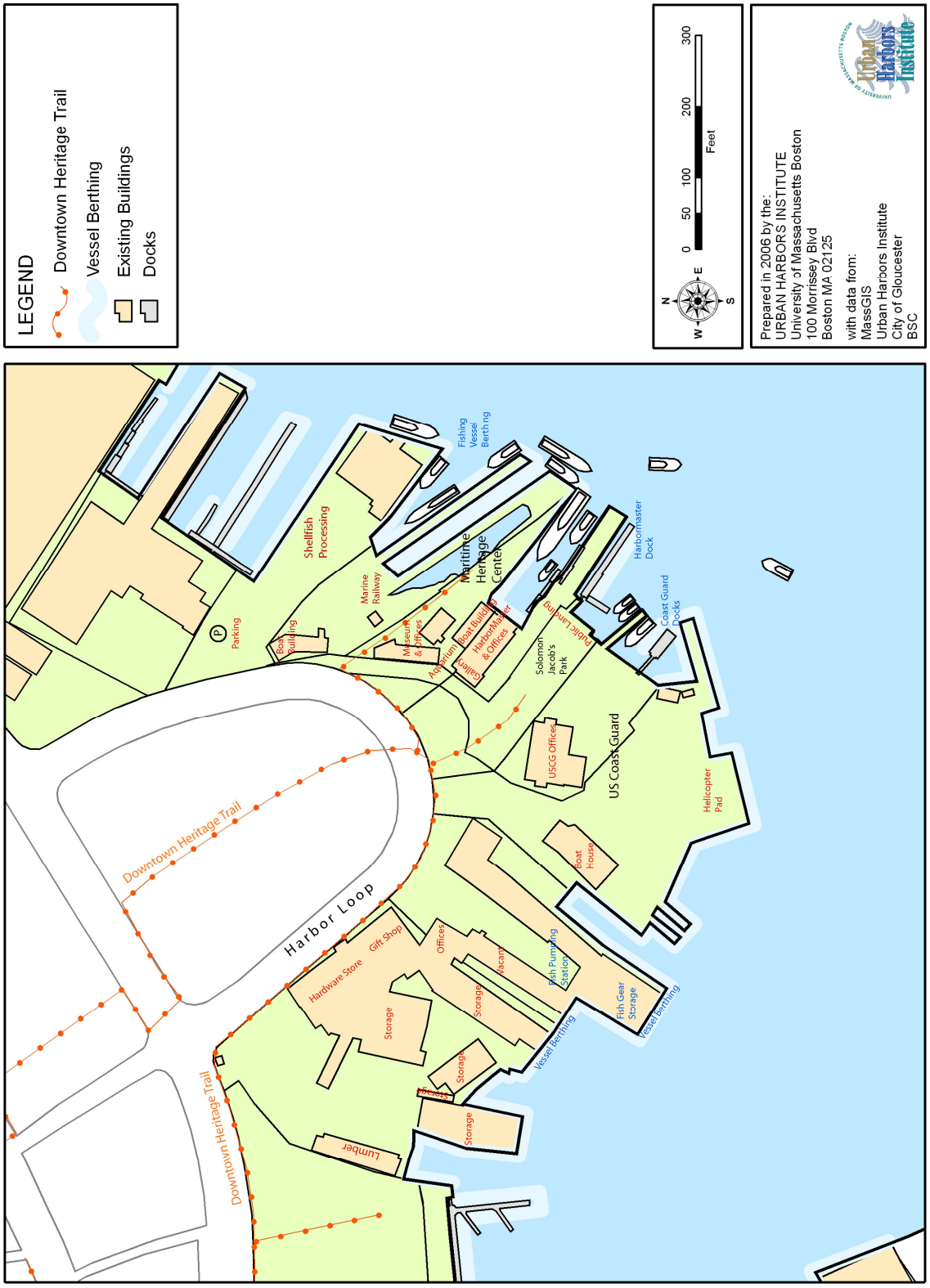


Figure 3-2. Existing Conditions - Harbor Cove 2

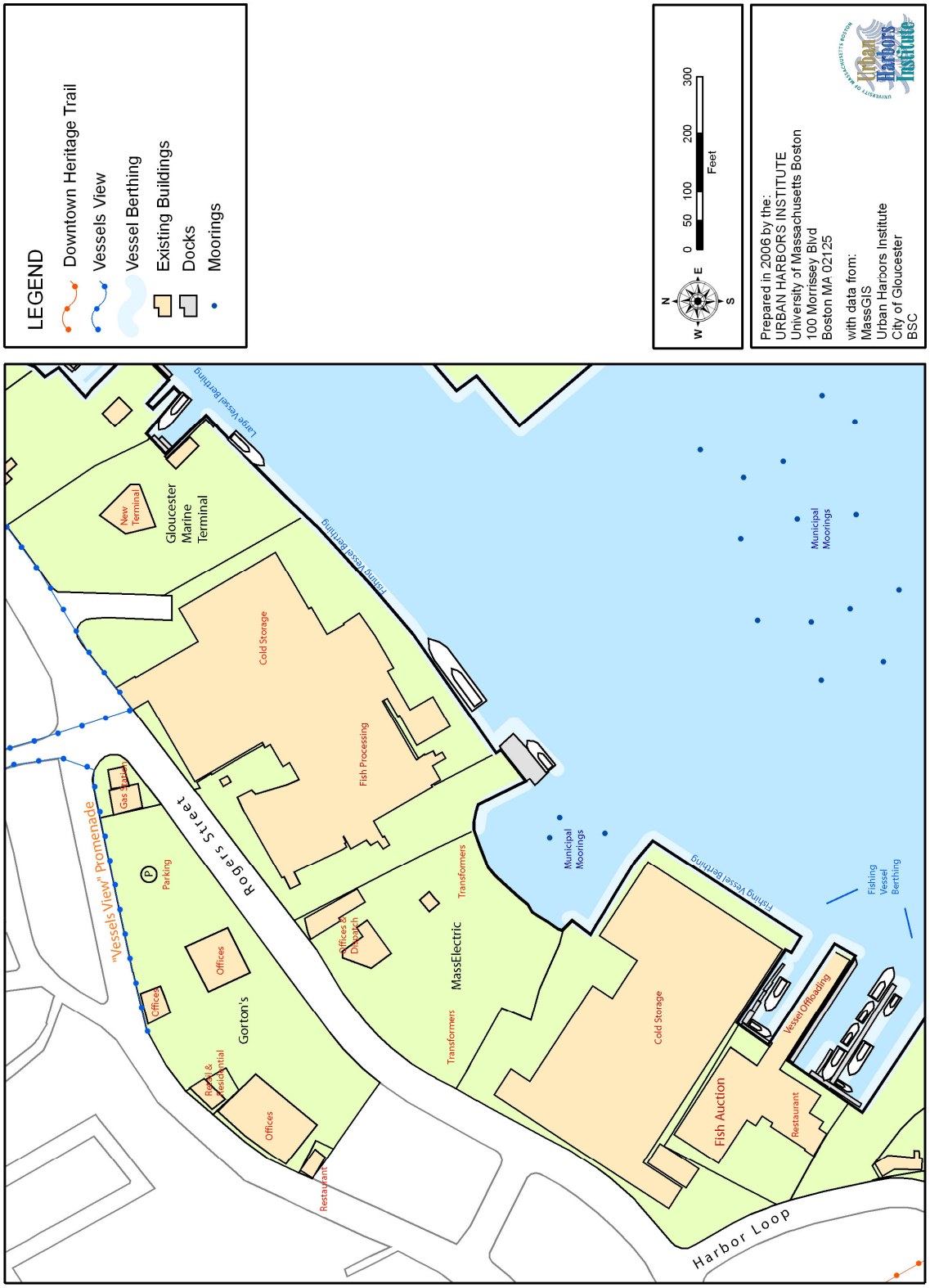


Figure 3-3. Existing Conditions - Industrial Port 1

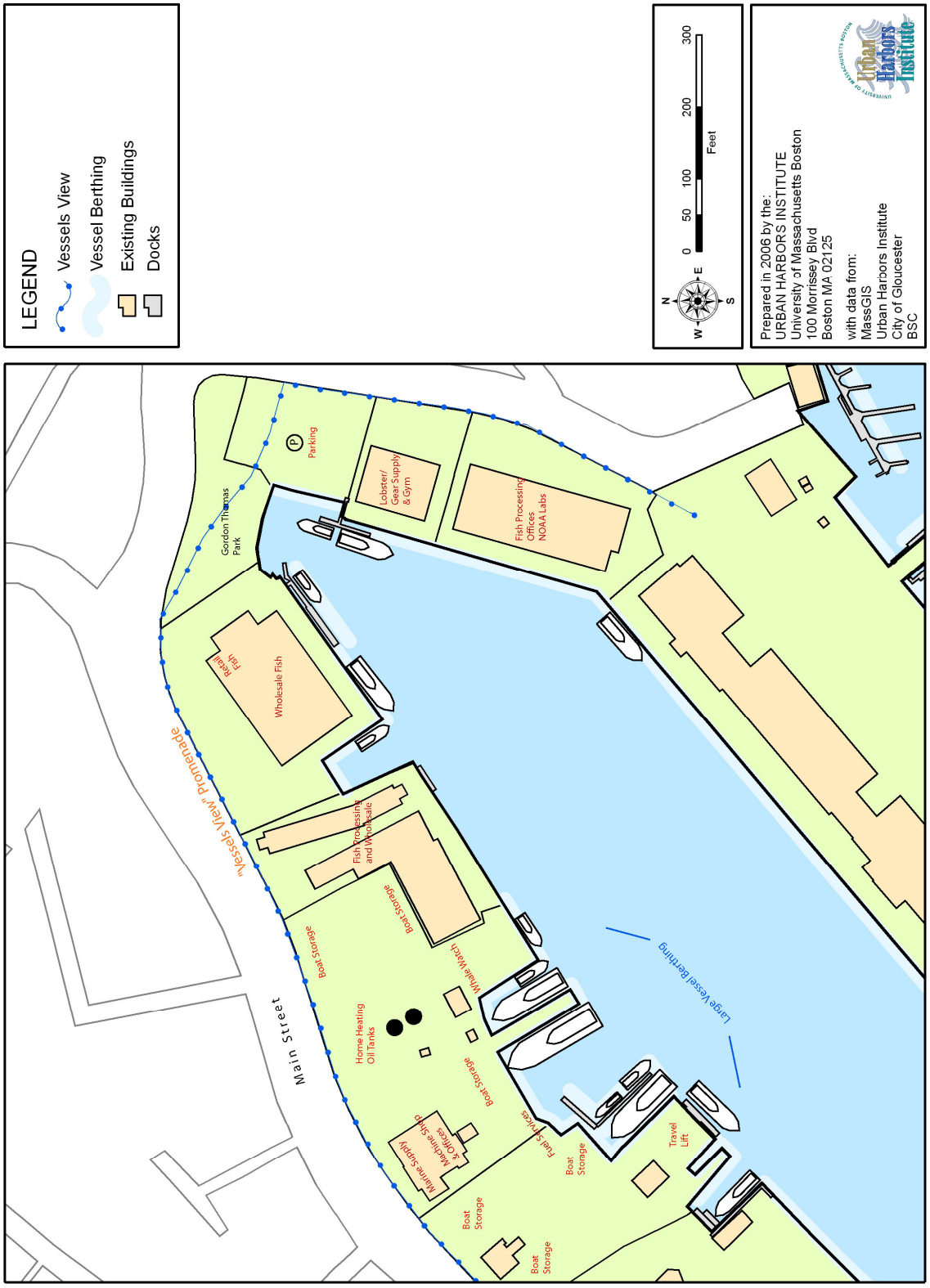


Figure 3-4. Existing Conditions - Industrial Port 2

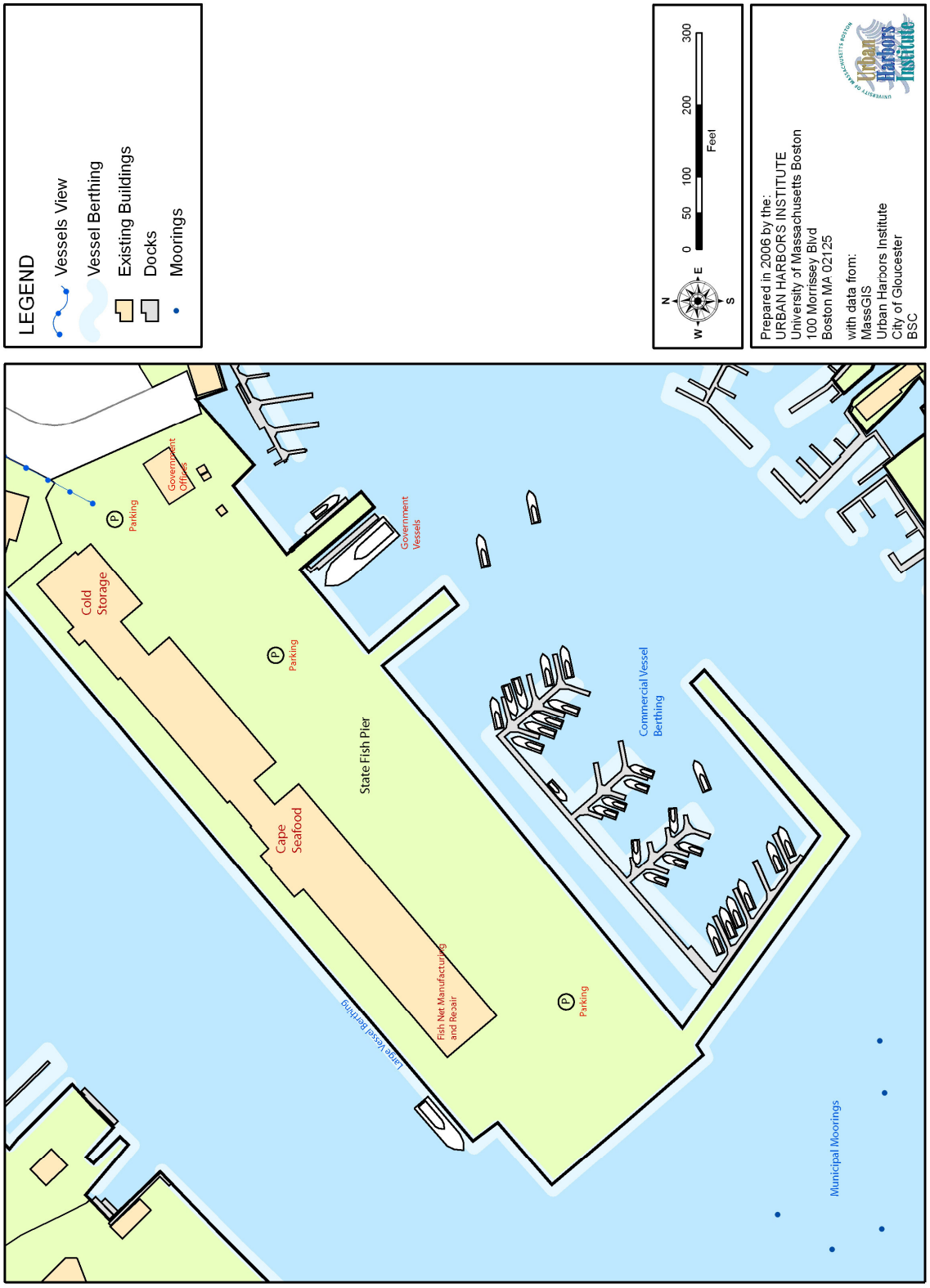


Figure 3-5. Existing Conditions - Industrial Port 3

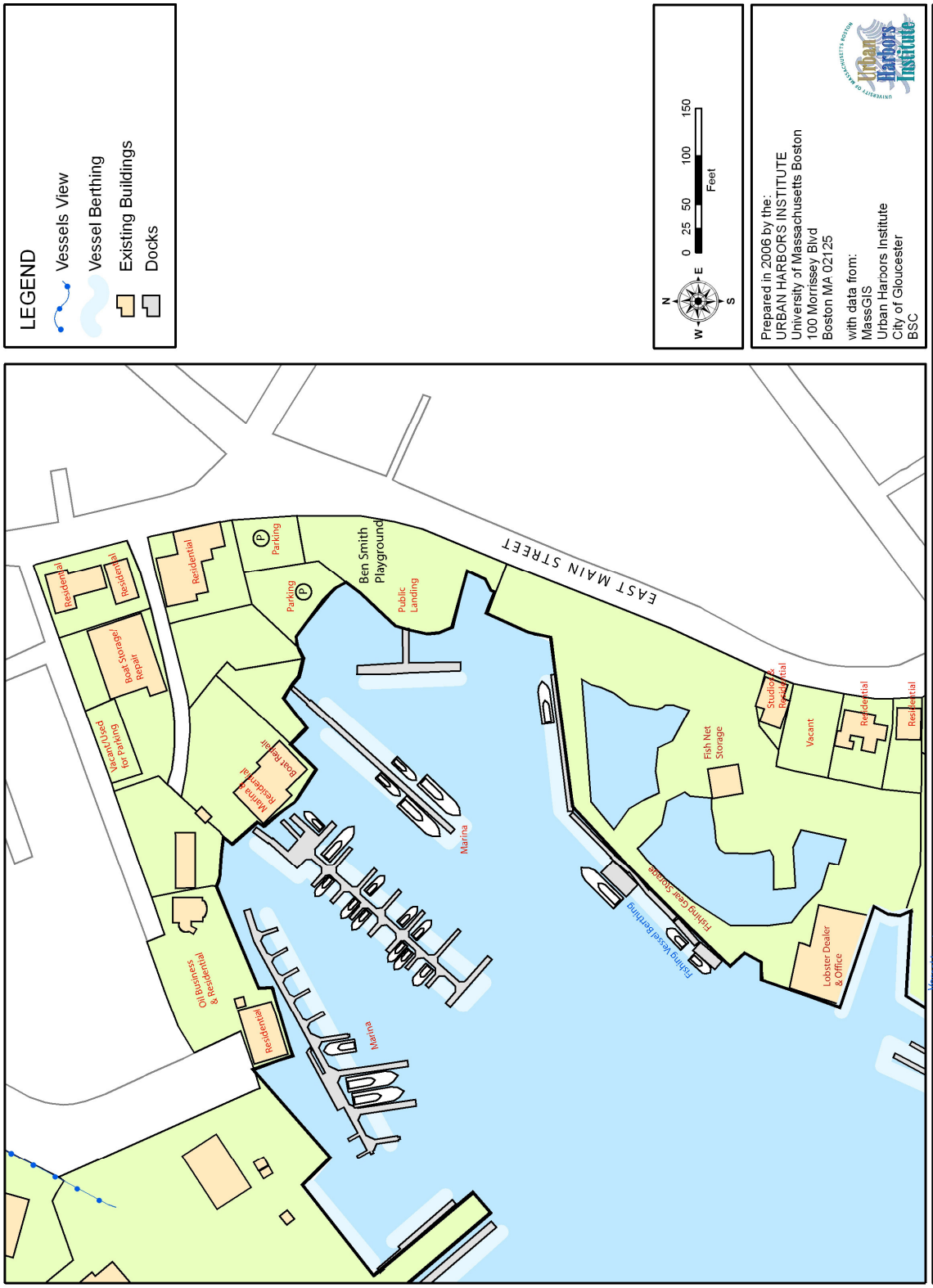


Figure 3-6. Existing Conditions - East Gloucester 1

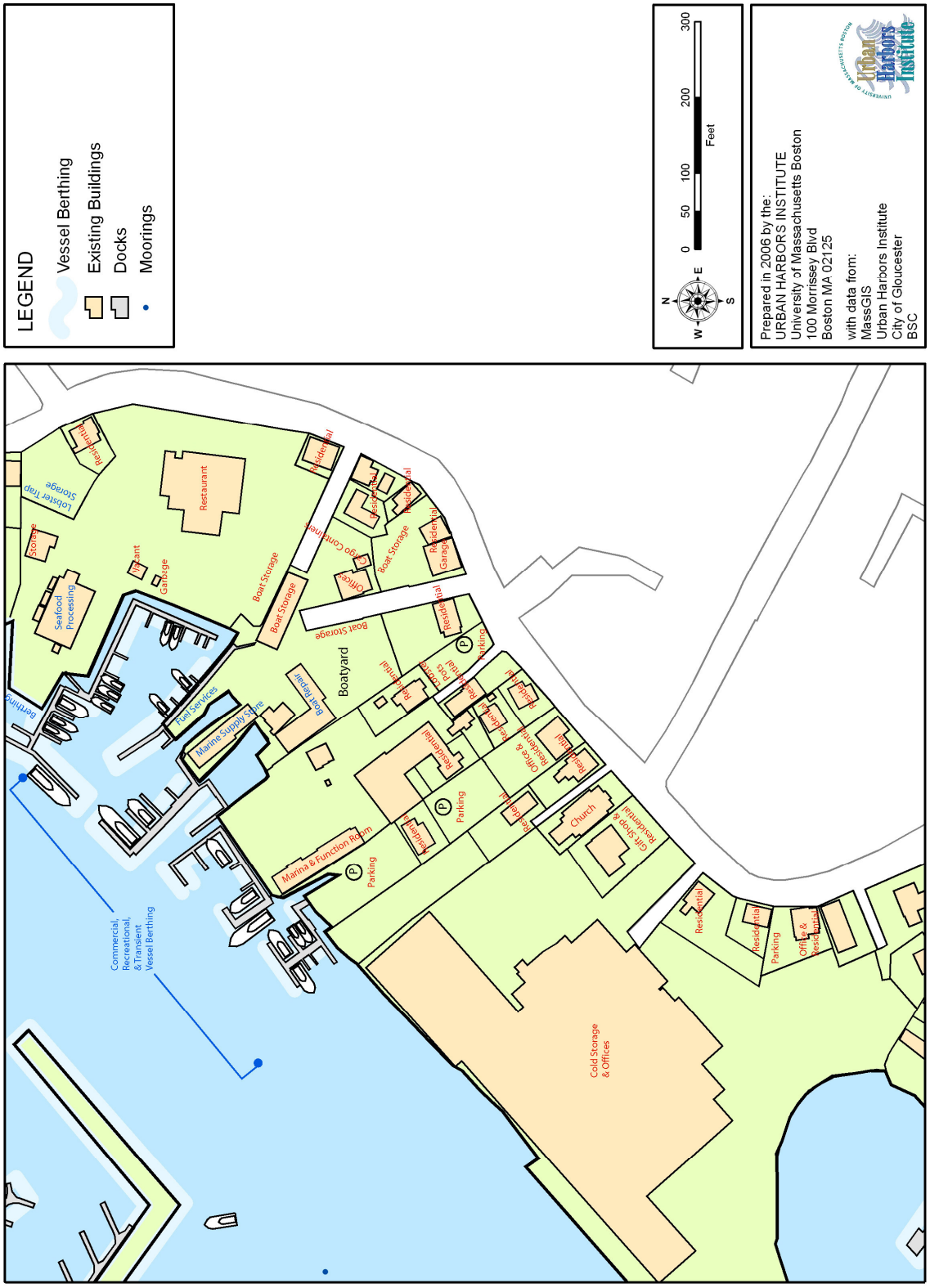


Figure 3-7. Existing Conditions - East Gloucester 2

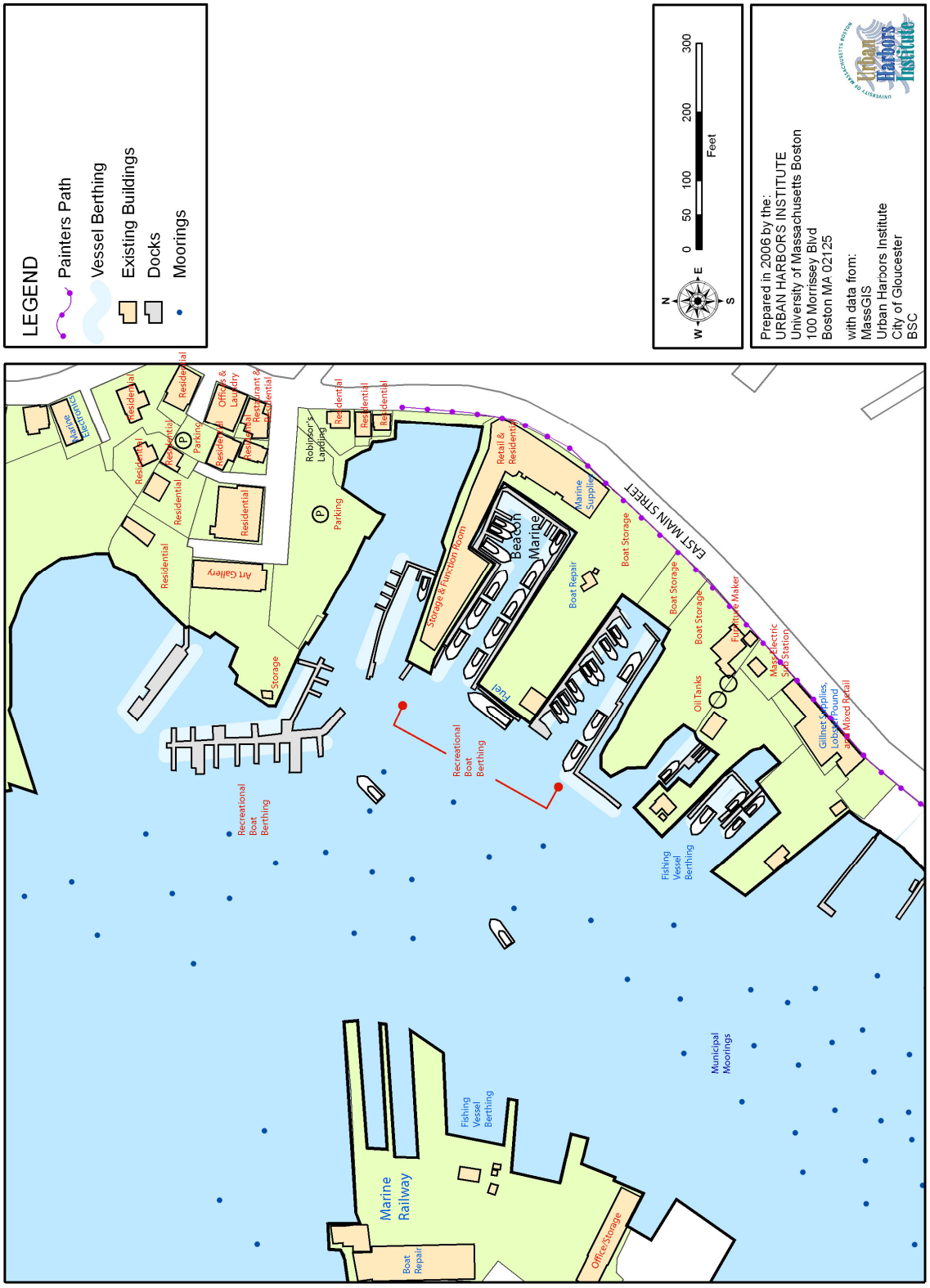


Figure 3-8. Existing Conditions - East Gloucester 3

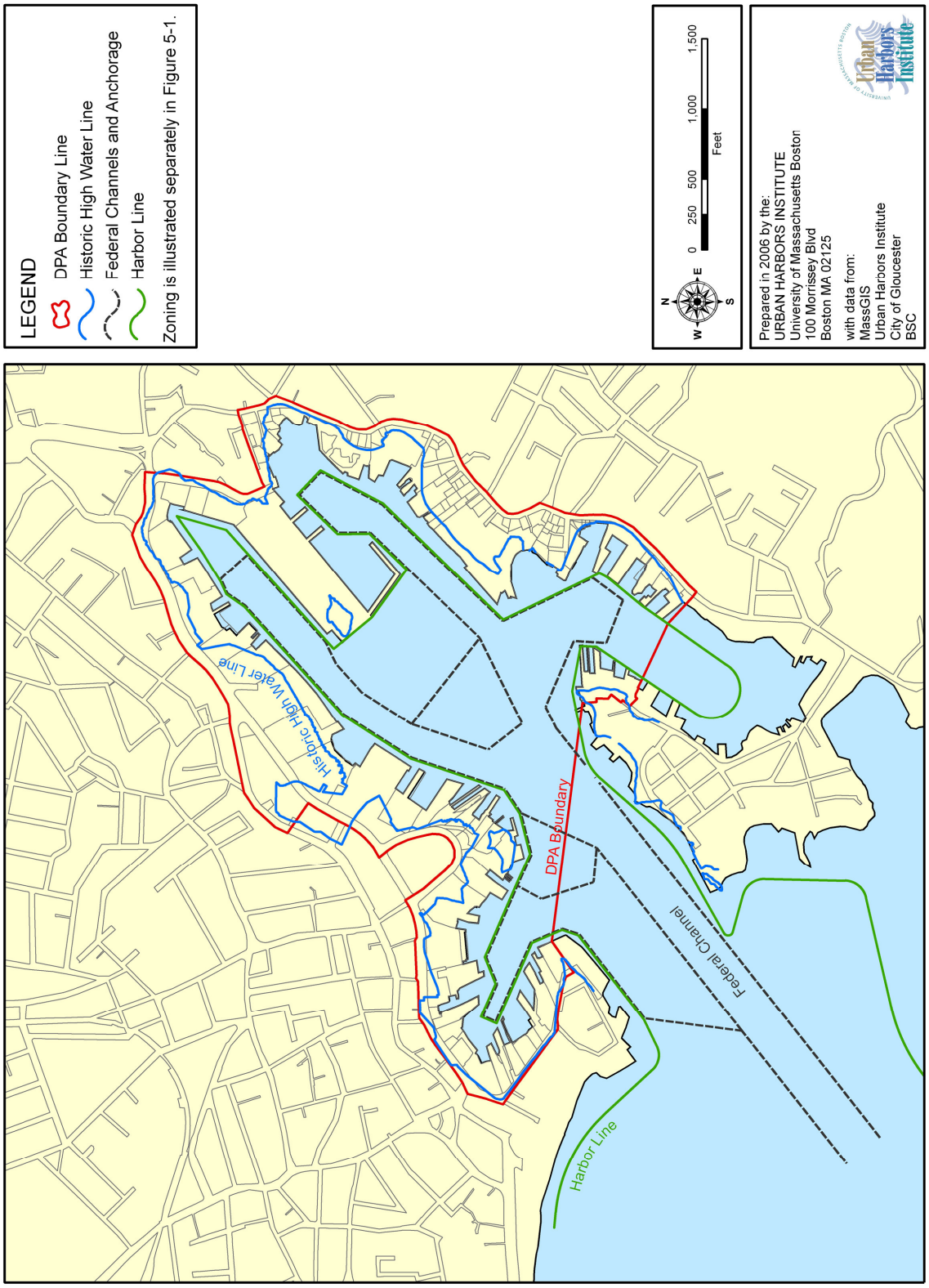


Figure 3-9. Regulatory Jurisdictions

4 ISSUES: DISCUSSION AND RECOMMENDATIONS

During the process of updating the Harbor Plan, issues from the 1999 plan were revised and a number of new issues emerged during a series of community meetings: the 2006 Harbor Plan Implementation Committee meetings, the 2007 input from the Waterfront Property Owners' Task Force, and the 2008 community wide visioning sessions. The specific recommendations from each of these groups are detailed in Chapter 2.

Each of the sections outlined below are interdependent. The strategies that promote one, will have the effect of strengthening the others. The goals are not exclusive and are more than complementary. It is possible, in fact, that progress toward the complete array of goals is necessary to provide the energy for any individual matter.

This chapter provides a detailed discussion of these issues along with specific recommendations. Regulatory issues associated with the DPA are presented in Chapter 5, which serves as the Gloucester DPA Master Plan.

4-1 GROWING THE MARITIME ECONOMY

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 grow the maritime economy in the port is the commercial fishery. Although it 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 foresees using every means possible to support, expand and diversify its maritime economy using its established strong resources. Envisioned expansion includes marine research, maritime professional development and training, growing economies in renewable wind and tidal energies and port support for the predicted increasing demand for off-shore energy needs. 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.

4-1-1 The Commercial Fishing Industry

Although the commercial fishing industry has been adversely affected by reduced catch in recent years, fishing stocks appear to be staged for recovery to levels that existed many decades ago. It is critical that the harbor retain essential infrastructure that will allow it to continue to serve as one of the very few hub service port for the commercial fishing industry remaining in the Northeast. Without adequate berthing space; core services such as boat/gear repair, fueling and ice provisioning; and a display auction and/or other markets for their catch, Gloucester will not be in a position to benefit from healthy fish stocks when they reach sustainable levels that are expected over the next decade. Efforts need to be made to protect against further loss of the businesses that support commercial fishing. In addition to harvesting traditional species with traditional equipment, new opportunities need to be welcomed and supported that employ new technologies such as innovative vessel types and gear, or that may be used for aquaculture or in harvesting and processing non-traditional species.

In 2003 and 2005, two reports were produced by a Gloucester Community Panel comprised of fishing industry representatives that defined the vulnerabilities of and critical infrastructure needed to support commercial fishing. These reports (*A Study of Gloucester's Commercial Fishing Infrastructure* and Commercial *Fishing Needs on Gloucester Harbor, Now and in the Future*) have proven invaluable in revising this Harbor Plan.

Key elements of a full-service regional hub port are:

- Berthing and mooring space for fishing vessels;
- Facilities to maintain and repair vessels;
- Space to maintain and store fishing gear;
- Gear and supply stores;
- Fueling facilities;
- Ice plants;
- Markets for catch (individual fish buyers and/or seafood auction);
- Fish processors;
- Reliable and economical options for transporting fish and fish products; and,
- Port security and emergency response resources.

Having this particular broad mix of businesses/services and skilled workforce is essential to effectively function as a regional hub port for the fishing industry. In Gloucester, with the current downtown in fish harvesting activity, many of the waterfront businesses are struggling to survive. 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.

The fishing community feels strongly that every effort should be made to assist the waterfront property owners to diversify and improve their financial positions, as long as the shore side infrastructure that is absolutely essential to Gloucester's future as a regional hub port is not lost.

Policy: Strengthen the Commercial Fishing Industry

Strategies:

1. **Preserve shoreside infrastructure.** Both the property owners and financial institutions would be more willing to invest in the port's waterfront properties if the investments were at least partially used to develop businesses with greater potential for positive economic return than currently offered by those solely supporting commercial fishing.
2. **Encourage and support maintenance of existing and creation of additional commercial vessel berthing.** The difficulty in assessing the current and future fleet numbers and size composition makes it at least challenging to determine what the berthing requirements will be in the future, or even if they are adequate at the present time. However, maintaining waterfront infrastructure for commercial vessel berthing is a priority of this plan. Therefore, 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 wherever practicable.
3. **Create a city dock(s).** The city should also pursue options for creating more publicly owned and/or managed docks for use by the port's commercial fleet and visiting commercial vessels. This objective could possibly be satisfied by the city renting property for public docks with a 30 year lease-easement agreements. Funding for these new facilities should be sought through the Seaport Advisory Council.
4. **Increased local retailing of fresh fish**. The processing of smaller quantities of quality fresh fish for retail consumption is a relatively untapped market. There are currently only a few places in Gloucester that retail fresh fish. These places are not

easy to find and not well advertised. Existing retailers should do more to make their product available for retail distribution to local residents and visitors.

5. **Support processing of pelagic fish**. Today, pelagic fish landed in Gloucester is either sold locally for bait, or shipped out of the Port whole, in slurry, or packaged and frozen. This is no processing of pelagic fish in Gloucester. There is apparently a strong market for products derived from processing herring and mackerel. This new business could offer a near-term economic boost for the waterfront.
6. **Encourage new technologies**. Protein is potentially an economically important by-product of fish processing that remains relatively underdeveloped. Through a process called protein recovery, fish parts left over from the filleting can be processed into products such as fertilizer, as is being done by Ocean Crest Seafood/Neptune's Harvest, or for production of surimi for human consumption. Other 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. This might also include aquaculture.

4-1-2 Maritime Commerce and Industry

The waterfront infrastructure, maritime expertise and marine resources represent a valuable economic base from which to effectively grow a diversity of marine economies. The Port of Gloucester within its DPA has the maritime resources – knowledge, skill, tools, and vessels, to make logical, though by no means inevitable connections to a wider maritime economy. Such a diverse maritime economy could include marine research, professional maritime trades and training, renewable energy research into wind and tidal resources, and support for off-shore energy production. Expansion into these areas will require proactive governmental support, but offer, in return, the opportunity to stabilize our regional and national interest in the commercial fishery as well as in active port resources.

Policy: Expand and Diversify the Maritime Economy

Strategies:

1. **Attract marine research.** Create a coalition for a collaborative marine research institute in which the practical knowledge of the fisheries is integrated with research into sustainable levels of the fisheries.
2. **Establish a maritime trade school.** Such training would grow the existing intellectual capital from the waterfront for both youth entering the market, and those wishing to reenter the workforce building upon existing skill sets
3. **Attract installations/testing of wind and tidal resources.** Use the existing tidal gates and harbor locations to easily install and test new technologies.
4. **Build shore side infrastructure for off-shore energy.** Examine the ways in which Gloucester's location and existing industries can adapt to the emerging needs of the off-shore gas and potential wind turbine installations.

   Recently there have been several offshore energy-related proposals that would require shore-based support. These include an offshore liquefied natural gas (LNG) terminal and proposals to construct offshore wind turbines. These proposals have generated controversy within the city (and state). The debate continues and will, in time, be resolved through municipal, state and federal regulatory processes.

What is clear is that if any major off-shore marine construction and/or marine industrial operation were to occur off the New England coast in the future, the Port of Gloucester could be ideally positioned to support these activities and capture some of the potential economic benefits of these offshore developments. Even with all the controversy surrounding these projects, what has become apparent is that the Port of Gloucester has the capacity and location to support offshore construction and follow-up operations whether it is for energy production/delivery, aquaculture, marine research, etc.

Shoreside facilities should be encouraged for energy development and capture. Such infrastructure strengthens compatible industry. The next opportunities may be in bottom surveys and testing. Gloucester should play a role in new marine industry.

5. **Support links to the new Massachusetts Ocean Management Plan.** Support planning, policy and infrastructure links between the state's working ports and the activities that will be allowed in the Ocean Management Plan.
6. **Develop an economic development plan** to examine the opportunities and approaches necessary to expand maritime economies in the port. In the analysis, include data that quantifies the potential impacts of new maritime commerce on the existing industrial port activities. Include the impact of the new maritime commerce on the city as a whole, and the public investment required to attract such commerce.
7. **Invest in a hydrographic and topographic survey** of the inner harbor up to the limit of the DPA. Such a survey provides a baseline for new investment possibilities. The survey should include an Initial Conditions Survey to properly identify new infrastructure needs and to provide a baseline metric for evaluation.
8. **Support initiatives to expand the cruise ship market.** 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. It seems very realistic to expect that the Port of Gloucester can attract several dozen cruise ship visits annually. Marketing of the port by the city should be done in concert with a state-sponsored initiative called *The Historic Ports of Massachusetts.* The primary goals are to collectively market Massachusetts ports, emphasizing the variety of opportunities for shore excursions and the existence of consistent high quality services each port.
9. **Pursue opportunities to attract domestic ferry services.** With the private development of the Gloucester Marine Terminal at Rowe Square, the opportunities to establish ferry connections from Gloucester have improved significantly. A seasonal ferry service between Gloucester and Provincetown has been reestablished. Domestic passenger-only ferry services to Salem and possibly "Down-east" also have merit and should be explored. With Salem reestablishing ferry service to Boston, there appears to be an opportunity to offer an attractive connecting service between Salem and Gloucester. A third option is a down-east connection to Bar Harbor (possibly via Portland) that would allow passengers to connect to the existing Bay Ferries catamaran service to Yarmouth. The city should further explore opportunities to establish domestic passenger ferry routes.
10. **Access government assistance.** There are a number of government or government-supported programs and initiatives that provide assistance to maritime business and industry to expand or improve their operations. These include federal

loans, loan guarantees, grants, investments, tax incentives, and other services and benefits; state technical and management assistance, bond financing, debt and equity financing, tax credits and deductions; municipal tax abatements, employment and depreciation tax incentives, special tax assessments and tax increment financing for real estate. A compendium of *DPA Economic Incentives and Funding Sources* was produced in 2004 as part of a study commissioned by the Massachusetts Office of Coastal Zone Management titled *Study of Economic Incentives for Designated Port Areas in Massachusetts*. This information resource is available from the Community Development Department, MCZM, or online at www.uhi.umb.edu/publications.htm.

4-2 THE ROLE OF SUPPORTING COMMERCIAL USE & PUBLIC ACCESS

New investment is clearly needed to ensure that the port can support new opportunities in marine industry and maritime commerce. Absent any new investment in the port's waterfront properties, it is possible that many private DPA businesses will fail, jeopardizing Gloucester's ability to continue functioning as a fishing hub port.

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. This investment can assist in making the waterfront appealing to the new uses. Expanding the percent of the allowable commercial uses is recommended in Section 5 of this plan, while preserving the water's edge of all properties for active waterside use and potential marine industry access.

Policy: ***Bring additional, commercial investment to the waterfront*** *that is compatible with and enhances the maritime economies in the port.*

Strategies:

1. **Activate the Harbor Cove area with more commercial development**. The city should focus on activating Harbor Loop, the west end of Rogers Street, and Commercial Street through appropriate additional commercial development that will effectively support both the Downtown business district and Harbor Cove's working waterfront.
2. **Consider providing loans for wharves and piers** that defer payments to the sale of the property. Such loans would encourage stable ownership and provide the long term payback required for infrastructure investment in a slow moving economic area.
3. **Increase the allowable supporting commercial use** throughout the harbor, although within the guidelines of the DPA so as to make practicable new, mixed-use investment.
4. **Ensure that supporting uses integrate with the marine economy** and an active water's edge so that they contribute to rebuilding the port infrastructure and maritime economies.
5. **Create linked public access segments** that can create a critical mass to attract investment. A continuous, active waterfront corridor can stimulate the new investment needed from emerging maritime commerce as well as serving the widely-expressed desire from citizens for access along the harbor.
6. **Pursue public/private collaborations** in which Chapter 91 easements or other mechanisms can convey the significant public benefit that justifies the public

investment across private property if so desired by the property owner.

Identified potential connections already identified include:

- St. Peter's Park to Harbor Loop;
- The Boulevard to the Fort Playground;
- Harbor Loop eastward toward the Cruiseport Terminal; and
- From the port entrance of the Annisquam River northward to Dunfudgin public landing on the east side of the river, and to Cape Ann Marina on the west side of the river.

7. **Develop a public access plan.** A comprehensive waterfront public access plan should be developed for Gloucester Harbor to serve as an active connector of commerce and industry around the waterfront. The plan would need to incorporate flexibility so that as individual properties redevelop, they can determine the best way to meet the needs for connection.

4-3 RECREATIONAL BOATING

Throughout the harbor planning process, many stakeholders expressed a need or desire for more berthing and services for recreational boaters, offering new opportunities for waterfront property owners and new gateways between the boaters visiting the harbor and the downtown business district. Over the years, the issue of recreational boating within the harbor has been controversial because of a potential conflict between such uses and some of the marine industrial activities in the harbor. The DPA regulations and zoning regulations for the Marine Industrial district specifically prohibit new recreational marinas because of the possibility for conflict with and displacement of marine industry. The DPA regulations do allow for temporary, bottom-anchored floating docks to support recreational boaters, but the city has not been supportive of such uses because of current congestion in the harbor.

While new recreational marinas are prohibited under existing regulations, there are a number of recreational boating facilities in East Gloucester that pre-exist the current regulations. Most of these operate as legal non-conforming uses. These businesses also provide many essential services for the commercial fleet. Some of the waterfront infrastructure associated with these businesses is in need of renovation and upgrading, but the ability to do so is limited by the regulations.

In addition to visitors that come to Gloucester by car or rail, there is also great potential to attract visitors who travel by boat. There are relatively few slips at existing Inner Harbor marinas that are available for visiting/transient boaters and all are on the opposite side of the harbor from the downtown business district. Many recreational boaters are said to by-pass Gloucester entirely because the severe access limitations and, in doing so, take with them potential income for businesses in the city. While this plan does not provide for increasing recreational boating facilities in the harbor, there is still opportunity to attract a greater number of transient boats and to provide the necessary berthing/mooring space for them. What remains essential is that any facility or amenity constructed to provide services to recreational boaters does not displace or conflict with the water dependent activities of the waterfront.

Policy: Improve access and facilities for transient recreational boating and for public boating access to the waterfront

1. **Properly license grandfathered marinas in East Gloucester.** As the recreational boating businesses in East Gloucester are important to the city and to the character of the neighborhood, maintenance of existing waterfront should not suffer because of permitting issues. A coordinated public-private effort should be undertaken to properly license/permit existing development. Doing so will produce benefits for the property owners and for the harbor.

2. **Create a gateway to facilitate recreational boat access to downtown services and attractions**.

   Transient recreational boaters prefer to be berthed near needed services. If improved facilities for transient boaters are to be developed, the logical location would be in or near Harbor Cove. The proximity to downtown suggests that some sort of "gateway" should be developed to direct recreational boaters to the downtown and its shops, services, and restaurants. A dedicated facility for transient recreational boaters is not allowable under state regulations within the DPA. However, the following approaches have been suggested.

   - Since recreational use would occur only on a seasonal basis, a facility built for commercial vessels, but available to transient recreational vessels on a managed basis might work. The harbormaster, for example, could enforce a maximum duration of use (e.g. one night).
   - Investigate the feasibility of using temporary, bottom-anchored floats or rafts for recreational boat berthing. Chapter 91 allows Harbormasters to license bottom anchored floats and rafts on an annual basis. DPA regulations do not prohibit these being used for the berthing of recreational vessels.
   - Create additional dinghy tie-ups at Harbor Cove and/or Solomon Jacobs Landing serving recreational vessels berthed at one of the marinas in East Gloucester.
   - Consider locations just outside the DPA that could service the downtown need for access by transient boaters.
     - Investigate the feasibility of a new public access pier and float at Stage Fort Park. This latter option might also support a water shuttle to downtown.
     - There is also an opportunity to create a small marina for transient boats just outside the DPA at the south end of Commercial Street. The site is difficult because it's exposed to storm waves and vessel wakes but a properly designed wave attenuation system may allow use during much of the summer.

A combination of moorings, dockside berthing, and dinghy tie-ups, might be managed to allow the necessary access for this market to provisioning, showers, laundry and repairs, while keeping the boat time at the dock limited.

4-4 THE VISITOR-BASED ECONOMY

Gloucester offers an appealing mix of an authentic working fishing port and active cultural and artistic community. The city's outstanding characteristic is its 380 years of history as a fishing port. This history, along with the arts and dramatic coastal setting, is largely responsible for the tourism economy that has been important to Gloucester for nearly as long as it has existed as a community. Despite this broad appeal, there is a strong feeling that the city is not adequately capitalizing on the potential of the visitor economy, while others worry additional growth of the tourists industry could negatively impact the working port. In fact, tourism and an active working port could complement and support each other.

Research conducted during the 1999 harbor planning process suggested that there was market potential for additional recreational and visitor-based activities in Gloucester – such as museums and interpretive sites, charter boats, whale watch, and other excursions – and that these could be developed without displacing or interfering with any maritime industrial activities, particularly those important to the fishing industry. Key elements of the strategy proposed included a maritime museum and welcome center, a maritime network of relevant sites, and new downtown hotel. A number of "activity nodes" were proposed around the harbor and key programmatic elements for the museum were recommended.

Since the 1999 Harbor Plan, efforts have been made to improve Gloucester's visitor attractions. The Gloucester Chamber of Commerce has developed a series of four self-guided pedestrian tours around the harbor that focus on history, art and architecture. The Society for the Encouragement of the Arts (SEArts) was formed to promote the very deep Cape Ann arts community. Plans also continue to be developed for one or more new downtown hotel(s) at the west end of the downtown business district. The economy and economic factors permitting, construction is expected to begin within the next five years.

The visitor-based recommendations proposed in the 1999 Harbor Plan have been realized in a mix of offerings. The new Maritime Heritage Center offers exhibits, classes, and real-time boat repair. The existing Cape Ann Museum, the Visitor's Center at Stage Fort Park, the Visitor's Information Booth on Harbor Loop and the Visitor's Welcome Center at the Chamber of Commerce on Commercial Street, provide information and guidance to tourists.

In addition to exposing visitors to Gloucester's maritime past, more effort needs to be made to highlight its history as a renowned art community – once home to such gifted artists as Winslow Homer, Fitz Hugh Lane and Frank Duvaneck – and to promote existing artists and galleries. Most of the art community is concentrated on Rocky Neck in East Gloucester, which presents a number of challenges in terms of increasing tourism and thus traffic flow to the area.

The effort to build a stronger visitor economy will benefit from even greater coordination between the Cape Ann Chamber of Commerce and the city's Tourism Office. Recommendations in this plan support the ability of waterfront property owners in key locations to incorporate uses that will attract and support visitors as well.

As visitors would, for the most part, be on foot, it is essential that public access be well planned. Gloucester is a working port and, as such, there are stretches of waterfront that are not hospitable for visitors. While the waterfront is accessible in certain areas (e.g., St. Peter's Park), in other areas walkways along the water's edge may not be feasible and alternative routes have not been established.

Existing signs indicating points of public access to the harbor are inadequate, with many signs either obstructed from view or difficult to read. There is also a need for additional public restrooms around the Inner Harbor and better signage indicating their location.

Policy: Highlight and make more available the cultural and historical assets of the waterfront.

1. **Create a network of visitor attractions**. The 2009 Harbor Plan proposes a strategy for increased visitation and development involving both existing visitor sites and several new projects around the harbor. The aim of the strategy is to organize these elements so that they work together and are mutually reinforcing, increasing their chances for success. Key elements of the strategy include:

    - A network of maritime related interpretive, recreational, and industrial sites open to the public. Spearheaded by the Maritime Heritage Center, SeArts, and the Cape Ann Museum, such a voluntary network could provide a simple way of organizing sites and visits to the harbor as well as a vehicle to jointly market these sites and experiences.
    - The expansion of the existing pedestrian loops to link visitor attractions.
    - The re-establishment of a water shuttle system linking Harbor Cove to Rocky Neck, and the downtown to parking lots at Stage Fort Park and Gloucester High School.
    - Development in the downtown area, including a new hotel and infill commercial development along the east side of Rogers Street – more attractions/Facilities of Public Access (FPAs) and making it a more pedestrian friendly area.

    To the degree possible, this plan recommends physically clustering projects and improvements to help maximize their benefits. The pedestrian loops could then guide visitors from attraction to attraction while providing them with the opportunity to view the working port. For this reason, suggestions for many visitor-oriented improvements and development should be clustered in the Harbor Cove area – the traditional harbor gateway linking downtown to the waterfront. From here, visitors could access East Gloucester and Rocky Neck via the water shuttle system.

    The 2009 Harbor Plan recognizes the value of the Maritime Heritage Center and acknowledges that a network of existing sites, developed in parallel and marketed in combination with the existing museums, provides a unique opportunity for Gloucester to establish a “distributed history museum” across its waterfront that obviates the need for a new museum to accomplish the same task. The working harbor in Gloucester is an incredible living exhibit in itself.

2. **Increase opportunities to observe the authentic working waterfront.** A number of businesses either allow visitor access (e.g. Cape Pond Ice) or have expressed an interest in allowing some level of access to visitors or providing visitor attractions (e.g. Fishermen’s Wharf, the Display Auction and Gorton’s). As visitor-based attractions are proposed, the city would also benefit from some coordination of both concept and design at individual sites. Cape Pond Ice, for example, already provides tours of their facilities. Fishermen’s Wharf, the Display Auction and Gorton’s have all expressed an interest in showcasing their businesses by catering to visitors to some extent. Because of this interest, there exists a unique opportunity to develop a series of industry-based attractions to expose and educate visitors on the workings of the

Gloucester waterfront. These attractions could include exhibits that capture Gloucester's maritime past (e.g., fishing, fish processing) at Gorton's, access to boat building and reconstruction operations at the Maritime Heritage Center, and tours of Cape Pond Ice, Fishermen's Wharf and the Display Auction that feature the workings of the modern-day fishing industry.

The history of Gloucester is intimately tied to the waterfront and a greater focus on a network of attractions would provide a window into the current functioning of the waterfront and the city itself. Maritime businesses could provide access to their facilities and allow visitors to learn about what they do first-hand. These options should be explored further and a concept and marketing plan for the network should be prepared.

Boat Building – At the Maritime Heritage Center, visitors can see the art of traditional boat building and the repair of historic vessels up on the marine railway (itself of great historic interest). Visitors could then visit the *Schooner Adventure*, preferably located in or near Harbor Cove. Here they could get a feel for what a traditional Gloucester schooner is and perhaps take a cruise. In addition to the *Adventure*, interpretive signage could help visitors to identify other historic vessels in the harbor.

The Fishing Industry – All around Harbor Cove there are fishing boats and fishermen going about their businesses; preparing gear and loading or working on their boats. The greatest attraction of Gloucester is that it continues to be a working port - a museum on its own cannot convey this successfully. There are multiple existing attractions and other potential ones that could guide visitors through various activities of the fishing industry. Cape Pond Ice offers tours of their facility where fishing vessels load up on ice to keep their catch fresh when at sea. The Display Auction has suggested that they may allow some visitor access. Here visitors could see fresh fish being unloaded – packed in ice from Cape Pond. They would be able to see the work going on and the types of fish being landed amidst the smell of fresh fish. If plans for Fishermen's Wharf proceed, visitors would again be able to see fish being landed but may also be able to purchase fresh Gloucester fish and have it filleted for them on site. Vessel owners may be interested in running short excursions aboard their boats to allow visitors to experience the feel of a real Gloucester fishing boat. Other visitors could try their hands at fishing by booking a place on a charter fishing boat.

Gorton's - Gorton's has been an integral part of the Gloucester waterfront since 1849. While initially it was a major processor of locally landed fish, in recent years all the fish that they process is landed elsewhere and trucked to their facility. Gorton's no longer processes Gloucester fish, but they have recently started selling live local lobster through the internet. While Gorton's may never again be as involved in Gloucester's fresh fish industry as it was, the firm and the city are inextricably linked. As such Gorton's could potentially be a visitor attraction and there has been some discussion of them putting some of their archived photographs and other memorabilia on public display.

3. **Promote the local art community** While not associated with the fishing industry, the artist community of Gloucester is a vital part of the city's and the waterfront's past and present. Artists have been coming to Gloucester for over 200 years. Most of the artists and their studios are located in East Gloucester and Rocky Neck and represent a significant visitor attraction. However, these areas are not easily accessible and parking can be difficult. The Rocky Neck area is very walkable, so

visitors would be well served by a water shuttle linking East Gloucester and Rocky Neck to Harbor Cove, Stage Fort Park and other sites. An increase in pedestrian visitors will allow for economic benefits for the artists themselves as well as for the local restaurants and other businesses in these areas.

To inform and attract visitors to the artist colony on Rocky Neck, it may be useful to encourage small galleries in Harbor Cove area. Those galleries could feature the work of local artists and provide information on the location of the colony's studios and how to get there by water shuttle. An artist community pedestrian loop could be developed to guide visitors through Rocky Neck and East Gloucester.

4-5 INFRASTRUCTURE INVESTMENT AND TRANSPORTATION LINKS

4-5-1 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. Although the ACOE is responsible for dredging federal channels and anchorages, they determined current water-dependent marine industrial uses of the harbor could be accommodated by the existing operating water depths and thus that there is currently no economically justifiable need for maintenance dredging of the channels and anchorages within Gloucester's Inner Harbor.

A navigational improvement project to remove several small rock outcrops and other debris from the North Channel was funded by the State Seaport Bond and completed in the summer of 2006. This increased the navigational operating depth of this arm of the federal channel from about 16 feet to 18 ½ feet.

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 complete dredging here within the next couple years to increase to alongside water depth to about 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. When the ACOE performs maintenance dredging of a federal channel, it is often possible for private waterfront property owners to "piggyback" on the federal project, reducing their costs for permitting and equipment staging. Because there are no near term plans for federal dredging in Gloucester Harbor, this option for cost saving is not available to property owners in the Inner Harbor.

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. While only the south entrance to this tidal river falls within the Harbor Plan's study area, this plan recognizes the value of this waterway to the many smaller fishing vessels homeported in Gloucester. The river provides an important protected shortcut for boats en route to and returning from Ipswich Bay and can be a value safe refuge during bad weather. The ACOE is currently supporting a state effort to dredging this waterway with the project underway in 2008.

Finding an acceptable disposal option for the dredged material is a fundamental obstacle to dredging. In 1998, the Gloucester Harbor Dredge Material Management Plan

recommended dredged material be disposed of in contained aquatic disposal (CAD) cells in the outer harbor, but this solution was opposed due to environmental concern. No advances have been made on the issue since that time and dredging remains a priority for the city.

Policy: Maintain navigational channels to support port industry

Strategies:

1. **Complete planned navigational improvement projects**. Dredging of the Annisquam and dredging along the north face of the State Fish Pier are all in the permitting process. Each of these projects should have a significant positive impact on Port operations.
2. **Dredging needs update.** Complete an update survey of harbor users and waterfront property owners to identify current priorities for dredging in the harbor.
3. **Complete the harbor's Dredge Material Management Plan**. Include evaluation of the needs of private property owners to expand opportunities for new dockage and maritime investment. Investigate the possibility of on-site disposal of dredged material.

4-5-2 Traffic and Parking

The 1999 Harbor Plan identified traffic and parking issues as a matter of concern and they remain so today. In fact, the problems may increase with new investment on the waterfront and with potential increases in the number of visitors to the area. Satellite parking at Stage Fort Park, the High School or the MBTA station, coupled with a land or water shuttle, may alleviate some of the increased parking problems during the summer and should be explored. But additional parking facilities will likely be needed. Utilizing waterfront properties largely for parking, however, should not be considered.

Certain areas of Gloucester's waterfront are characterized by small, winding streets. There is growing consensus that any redevelopment or new uses within these areas should be consistent with the design and capacity of these streets. This is particularly true in East Gloucester and on Commercial Street. However, it is important to remember that truck access to the harbor is essential to the operation and survival of many waterfront industries and businesses. Therefore, adequate and acceptable truck access should be one of the key criteria in planning for and siting expanded or upgraded marine industrial uses.

Truck parking continues to be an issue of concern. This may be exacerbated by potential homeland security issues that will require secure parking for trucks involved in the transportation of consumable goods. While it is felt that secure parking can be achieved for the current number of trucks and trailers, this may not be possible if, for example, Gorton's were to significantly increase their productivity at their Gloucester waterfront facility. Therefore the idea of a secure truck parking area near Route 128 should continue to be evaluated.

The parking requirements of the Gloucester Zoning Ordinance may actually hinder some redevelopment of the waterfront and thus limited/targeted changes may need to be considered.

Policy: Promote facilities and operations to ease traffic congestion.

Strategies:

1. **Study Commercial Street** for ways to ease congestion of truck traffic, provide adequate infrastructure, and promote use of Harbor Cove industrial and commercial property.
2. **Reevaluate the feasibility of a parking garage** Serving the downtown but away from the waterfront. Construction of a new parking garage within walking distance of the waterfront would support build out of some of the smaller properties and reduce the amount of automobile parking on waterfront land.
3. **Explore options for creating an Inner Harbor water shuttle**. New strategies for reviving and supporting the water shuttle system need to be explored. The water shuttle is the key to linking Harbor Cove, Stage Fort Park, Rocky Neck, Cripple Cove, Pirates Lane and Solomon Jacobs Landing. The water shuttle's numerous advantages include: allowing visitors to get out onto the water, reducing the number of cars in the downtown and in neighborhoods around the harbor; enabling visitors to explore less accessible areas of the harbor with economic benefit for businesses located in those areas, and encouraging the development of new businesses.
4. **Pursue a public access pier and launch** to the Inner Harbor. Stage Fort Park has been identified as a location for this where ample parking would allow greater access to the downtown without adding to traffic congestion.

4-5-3 Underutilized Land Parcels

Policy: Actively promote investment in key underutilized waterfront locations

Two areas within Harbor Cove appear to be particularly important to the future health of both the harbor and downtown businesses:

I4C2 – This very visible and critically important site has a history of contentious and failed development proposals. Its location offers tremendous opportunity for supporting traditional water-dependent uses and also contributing to the vitality of downtown Gloucester. The waterfront portion of the property has been conveyed from the Gloucester Redevelopment Authority to the city with the city's Waterway's Board managing the commercial fishing vessel berthing and support. Two waterfront parcels just to the east of I4C2 offer the potential for expanding the project area if an appropriate development opportunity requiring more space were identified and these two additional parcels became available for new development. At least one of the property owners has expressed interest in this.

The city should consider purchase of this parcel to meet the current and future needs of maritime commerce and downtown revitalization. The redevelopment of this parcel has been both an impossible challenge and a priority for the city for several decades.

Commercial Street – This Harbor Plan identifies this area as offering great potential for new development and its proximity to the west end of the downtown business district would make it a complementary extension of this district. Several parcels here are vacant or underutilized. The northern side of the street is within the DPA. There are businesses here (such as Cape Pond Ice, Montillaro Lobster, and Ocean Crest/Neptune's Harvest) that are considered critically important to the functioning of the

commercial fishing hub port. Pavilion Beach and Fort Square Park also add to the natural attractiveness of this area.

Cases studies included as appendices to this report offer hypothetical development plans for these two project areas.

4-6 THE PERMITTING PROCESS

1. **Ease permitting by creating a local site plan review process that is aligned with the state regulatory process.** Revise the regulations to make the two sets of regulations more consistent and to allow, in specified areas, a greater percentage of appropriate/non-conflicting commercial use of properties that can support, but not displace, the fishing industry.
2. **Consolidate port, industry, and economic development expertise within the city's Community Development Department.** This move will facilitate the city's ability to offer comprehensive assistance to waterfront property and business owners and coordinate efforts to revitalize and market the Port of Gloucester. Maintain close cooperation with the Waterways Board and the Harbormaster's Office on issues relating to waterways management and waterside port initiatives.

4-7 COMMERCIAL BERTHING

The diminished groundfish landings over the past two decades have altered the demand for commercial vessel berthing in Gloucester Harbor. Table 4-1 provides some rough estimates of how the size of the commercial ground fishing fleet has changed during this period. These numbers were derived from several different sources ranging from National Marine Fisheries Service databases to personal observations by waterfront business owners, regulators and fishermen. Although the numbers from all sources do not match exactly, the trends observed are consistent. Over this period, both the number and average size of active commercial fishing vessels in Gloucester has declined.

Table 4-1: Estimated Size of Gloucester's Groundfishing Fleet over the Past Two Decades.

Period	# Vessels	Type
Mid 1980s	130	Draggers over 55'
	70	Small draggers
Mid 1990s	60	Large draggers
	60	Smaller draggers
Mid 2000s	12	Large dragger
	50	Smaller dragger

** Note that commercial fishing vessels that are not draggers are not included in this table, most notably the fleet of lobster vessels.*

Demand for good quality commercial berthing is high, as many docks in the harbor continue to fall into disrepair. Affordable, safe and efficiently functional berthing is a fundamental need of a productive working port. With reduced days at sea, more vessels remain tied up in port for longer periods of time and, in order to have more days at sea, some families own two or more permitted fishing boats (Hall-Arber 2003). Another change is that, with the loss

of larger vessels, the average crew size is smaller. On large active boats, normally there is at least one crew member on board while the boat is in port. This makes it possible for more vessels to raft out, since outboard boats can be readily moved to allow a boat tied up inside of them to get underway. With smaller crews, rafting out of several boats can often be more difficult to manage. Without this "stacking" of boats along the waterfront, fewer vessels consume greater linear feet of dock space.

Many of the largest groundfish draggers and trawlers (55 – 100 feet) have moved to other ports, been scrapped or converted to other uses. This has had a significant negative impact on the economic health of the port since these larger boats required more shore-based services and supplies than the smaller boats that remain. As discussed in Chapter 3, there are currently about 250 commercial fishing vessels homeported in Gloucester Harbor, including draggers, gill netters, lobster boats, and vessels harvesting a variety of other seafood such as shellfish, sea urchins, hagfish tuna, and pelagics. Data collected by the NMFS Northeast Region office suggest a slightly higher number (268) of permitted fishing vessels in 2004/2005 and another 91 boats with older permits that list Gloucester as their "principal" port. From that database, it is difficult to determine which boats were actively fishing. There were also over 50 vessels from Gloucester with "tuna only" permits, although many or most of these are not commercially harvesting tuna. Some of these boats are docked or moored outside the Inner Harbor or, for smaller boats, are trailered to and from public landings such as Dunfudgin on the Annisquam River. Some commercial fishermen from the region list Gloucester as their principal port although they may tie up their boats in neighboring smaller harbors such as Marblehead, MA or Hampton, NH and use Gloucester just for the services it can provide.

The permit data also include information on the length of vessels that held commercial fishing licenses in 2004/2005. An analysis of the data for those vessels is summarized in Table 4-2 and shows that the majority (56 per cent) of the boats were between 20 and 40 feet in length. Just under 26 percent were between 40 and 60 feet long and only 13 vessels were greater than 80 feet in length. This corresponds with the information provided by local fishermen. Many of the largest boats remaining in Gloucester today are employed for harvesting pelagic species, hag fish and other non-ground fish.

Table 4-2: The Size Distribution of the 268 Fishing Boats in the NMFS Northeast Region Permit Database that Listed Gloucester as their Principal Port and had Commercial Permits for 2004/2005.

Size Class	Number	Percentage of Boats
Less than 20 feet	12	4.5
20 to less than 40 ft	150	56.0
40 to less than 60 ft	69	25.7
60 to less than 80 ft	24	9.0
80 to less than 100 ft	10	3.7
Greater than 100 ft	3	1.1
TOTAL	**268**	**100**

Larger groundfish draggers can stay at sea for longer periods thus can more efficiently harvest stocks from the traditionally more productive offshore fishing grounds such as George's Bank. Many of the current groundfish fleet rarely remain offshore overnight

because of their small size. In the future as groundfish stocks increase to the sustainable levels that many predict and fishing restrictions are eased, the number of larger fishing vessels homeported in Gloucester can be expected to grow appreciably, but only if essential infrastructure and services are in place to support them. Some current estimates predict groundfish landings will return to their early 1980s levels - about three times what they are today. Although difficult, if not impossible, to precisely predict the number and size of the fleet that can be supported by a fully recovered healthy groundfish fishery, conservative estimates suggest that Gloucester's fleet of large draggers (i.e. the traditional family-owned 55 to 80 footers) could grow by more than 30, but is unlikely to return to the 130^{+} large boats that were homeported here twenty years ago. If larger corporate-owned vessels (for example, stern trawlers over 120 feet in length) move into the port, the total number of new vessels would likely be smaller. The number of smaller draggers (i.e. under 55 feet) should also be expected to grow some but most of the increase in near-shore ground fish harvesting opportunities will probably be absorbed by more fully employing Gloucester's existing fleet of small fishing boats.

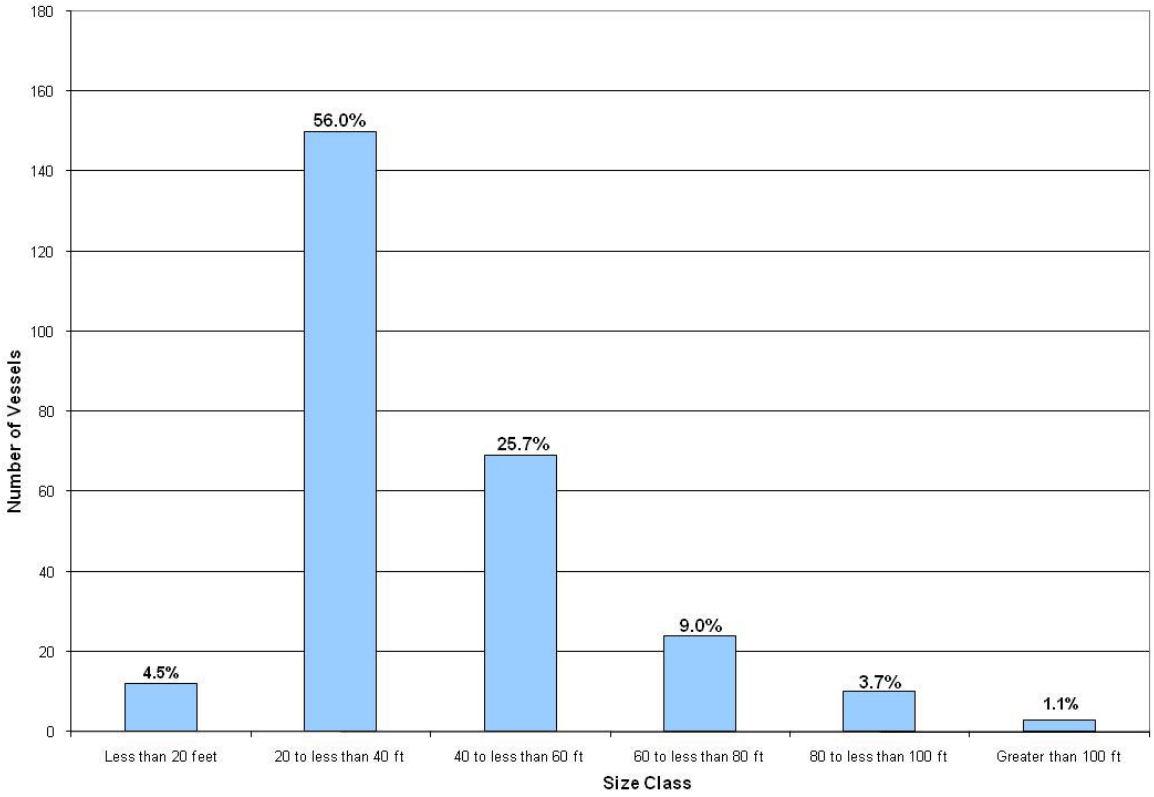


Figure 4-1: The Size Distribution of the 268 Fishing Boats in the NMFS Northeast Region Permit Database that Listed Gloucester as their Principal Port and had Commercial Permits for 2004/2005.

Future demand for commercial vessel berthing space will be dictated by the number and size of the commercial fleet actively harvesting sustainable fishing stocks off New England. As one of the few remaining hub ports in New England, Gloucester is in an excellent position to benefit from the recovering of fish stocks and, as mentioned earlier, currently has the potential capacity to accommodate a much larger commercial fishing fleet. Although there is potential capacity, there will need to be significant private and public investment in the harbor's infrastructure to realize this potential.

There are many different types of vessel berthing needed to accommodate an active fishing port. These include space for vessels homeported here, transient docks for vessels receiving port services and berths for boats from other port visiting between fishing trips or following seasonal migrations of specific species. For visiting/transient boats, the crews will often live on board while in port and will not normally have ready access to ground transportation. For this reason, the western side of Gloucester Harbor is generally more suitable for short-term berthing since this is where many needed services are located such as convenience stores, hardware and gear suppliers, restaurants and recreational attractions. The owners and operators of vessels homeported in Gloucester generally live within driving distance of the city so their need to be close to amenities is less pressing, but nearby parking is essential, thus the State Fish Pier and docks in East Gloucester may be better suited for them.

4-8 FRESH FISH PROCESSING

The fish processing industry in Gloucester includes both fresh fish processors and firms specializing in frozen seafood product. This discussion focuses on fresh fish processing which includes all functions associated with bringing fish from the harvester to the consumer: sorting and handling; de-boning and filleting, packaging, marketing/brokering and transporting. Gloucester's future in fresh fish processing is largely dependent on changes in ground and pelagic fish landed in the port and the city's commitment to restoring this activity. Historically, Gloucester was involved in all aspects of processing but, over time, as the market became more globalized and infrastructure consolidated, Boston became the regional center for fresh-fish processing. Gloucester's success in attracting more processing operations is limited by its inability to effectively handle the large volume of wastewater normally associated with this industry. As fresh fish landings increase, the city will be well positioned to attract some new processing businesses if it can offer a better solution for handling waste water. Even before a recovery in groundfish landings, processing of pelagic fish appears to offer an excellent current opportunity to demonstrate the value of a communal waste water pretreatment facility. Even with a focused effort, recapturing business from the large processors in Boston will be challenging.

A 1996 report on *Water and Wastewater Issues in Developing Gloucester's Seafood Processing Industry* (Metcalf & Eddy et al. 1996) explored the possibility for a pretreatment facility to support processing of large volumes of herring, which has believed to have the potential for significant positive economic impact on the city. The main recommendations of this report were to: (1) start an assistance program to help seafood processors learn new and appropriate technologies in the areas of water conservation, pollution reduction, and solid waste handling; (2) start an advisory group to look at the opportunities and challenges associated with building a herring processing plant in the city; (3) consider creation of a small pretreatment facility at a central location that could accommodate several small processors; and (4) explore aquaculture as an option for the city (use Seaport Bond to fund). New technologies raise the possibility of the industries that reuse the waste by-products of fish processing, thereby addressing the needs for increased fresh fish processing.

Today, most of the groundfish landed in Gloucester is generally sold whole through the Gloucester Seafood Display Auction to supermarket and restaurant chains, fish markets or processors in Boston. Some limited processing is still done by small Gloucester businesses such as Ocean Crest and Pigeon Cove. Pelagic fish (herring and mackerel) landed here is sold as bait, shipping out in a slurry on tanker trucks, or sorted, packaged and frozen for shipment to markets outside the United Sates. No processing of pelagics is currently done in Gloucester.

The potential new opportunities in fish processing for Gloucester will be with high quality fresh groundfish, producing value-added fish products such as surimi (aka fake fish or imitation crab) from pelagics or organic fertilizer from waste generated by fish processing, and attracting new innovative technologies and/or startup ventures.

4-9 PORT SECURITY

Security has always been an integral part of port operations, but prior to the events on September 11th, 2001, local focus in most US ports had been primarily on covert illegal activities of local or regional origin such as vandalism, theft and industrial espionage, on accident prevention, and on emergency response to waterfront industrial accidents. Emphasis has now shifted more to protecting our ports against possible international terrorist actions that target waterfront facilities and operations.

Since the fall of 2001, an ad-hoc working group of Gloucester Harbor port operators and local law enforcement and emergency response officials have been meeting regularly with the goal of improving local port security. They have carefully considered existing waterfront vulnerabilities and taken aggressive steps to improve security against terrorism. Actions have ranged from improving emergency response plans and conducting readiness exercises to upgrading the existing security infrastructure within the harbor.

Although the existence of appropriate levels of port security is essential, care must be taken to ensure that there is a balance between security needs and efficient operation of the working port. "Locking down" the port by severely restricting movement on the water and/or access to waterfront facilities may be appropriate for short periods when specific threats exist, but these actions will likely have a severe detrimental impact on the economic vitality of the harbor if employed frequently or for extended periods. Permanently fencing off sections of the waterfront, for example, that would severely limit or prevent use of any significant portion of commercial dock/wharf space would likely cripple efforts outlined in this Harbor Plan to support a vibrant and productive working waterfront for Gloucester.

Strategies

1. **Officially recognize and support Gloucester's Port Security Ad-hoc Committee**.
2. **Ensure that the waterfront remains accessible**. Over response to perceived security threats needs to be avoided. Although maintaining appropriate security measures is very important, allowing efficient access for port operators to the working waterfront and its facilities is vital if the port is to remain competitive and economically strong. Permanently fencing off large part of waterfront, for example, would be detrimental to effort to revitalize the port.
3. **Acquire additional infrastructure for port security**. Appreciating the caution expressed in the previous recommendation, some new surveillance and response equipment is needed to adequate protect port operations and/or appropriately respond to terrorist threats. Although many changes have been implemented since 9/11, the Port Security Committee should develop a priority list of equipment needs and seek support from appropriate funding sources.

4-10 ADMINISTRATIVE

The 1999 Harbor Plan concluded that the City of Gloucester needs to more effectively encourage the economic development of marine industrial and related uses of the harbor's waterfront. Central to this finding was the creation of a Harbor Coordinator position. A

critical function of the coordinator was to serve as a liaison between property owners and the regulatory authorities to help them realize the full potential of their properties.

This plan further recommends that this coordinating and technical assistance function be imbedded in the Community Development Department where port and harbor issues can benefit from additional and complementary expertise and be fully integrated into to the community and economic development decision making process.

5 DESIGNATED PORT AREA MASTER PLAN – REGULATORY ISSUES IN THE DPA: PROVIDING FOR GLOUCESTER'S MARITIME INDUSTRY

5-1 GOALS AND STRATEGIES

This section of the Gloucester Municipal Harbor Plan is prepared as the Master Plan for the Designated Port Area (DPA) of Gloucester Harbor (Figure 2-2). As discussed in Section 3-4-5, the Gloucester Harbor DPA covers virtually the entire land and water area of the inner harbor. This characteristic makes the Gloucester Harbor DPA unique among the state's 12 DPAs. Whereas these other harbors have waterfront areas outside of the designated port area where community goals other than maritime industry can be achieved, sufficient opportunity must be available within the Gloucester Harbor DPA to accommodate the full range of the community's desires for its waterfront. While the city fully supports the future of Gloucester Harbor as a working waterfront, the essence and elements of this vision may be broader than promoted by the DPA program.

In general, a DPA Master Plan must preserve and enhance the capacity of the DPA to accommodate water-dependent industry and prevent substantial displacement of these activities by other non water-dependent uses. The Gloucester Harbor Plan/DPA Master Plan does this by:

- Promoting, preserving and ensuring the active use of the shorefront of each property. Access to the water shall either be by industrial users, or by public facilities or walkways to preserve the active use of the water's edge;
- Encouraging supporting and related commercial uses that strengthen the economic viability of waterfront property and its ability to maintain important shoreside infrastructure through defining the types and intensity of principal, supporting, and other water-dependent uses and the conditions under which they can be approved; and
- Recommending revisions to both the city and state regulations to codify the plan's recommendations and to achieve "regulatory equivalency," i.e., the greatest degree of consistency and predictability in the regulatory processes.

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 grow the maritime economy in the port is the commercial fishery. Although it 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 foresees using every means possible to expand and diversify its maritime economy using its established strong resources. Envisioned expansion includes marine research, maritime professional development and training, growing economies in renewable wind and tidal energies and port support for the predicted increasing demand for off-shore energy needs. 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.

Currently many waterfront property/business owners feel caught between the limited economic potential from the commercial fisheries and the regulatory restrictions on land use. With diminished revenue streams, property owners have not accessed capital to invest in maintaining and improving their waterfront infrastructure which is essential for the future of the working port.

In response, the Gloucester Harbor Plan/DPA Master Plan proposes the following strategies:

1. Actively seek investment in expanded maritime uses as described herein and as may develop. Focused state or federal assistance may be required to diversify the port for positioning for future economic health.
2. Provide greater flexibility in the types and amount of commercial uses to encourage reinvestment in waterfront property and infrastructure.
3. Promote active public access along the waterfront to contribute to an atmosphere that can attract the expanded maritime economies and diversification of the working waterfront.

5-2 CATEGORIES OF LAND USE IN THE DPA

The Gloucester Harbor Plan and the DPA Master Plan support the following on property in the DPA:

- Water-dependent industrial uses on filled tidelands, pile-supported structures, or upland and accessory uses thereto outside the water-dependent use zone.
- Other water-dependent uses as specified by this plan on filled tidelands, pile-supported structures, or upland.
- Water-dependent and non water-dependent commercial and general industrial uses as supporting uses on filled tidelands or uplands only (prohibited on pile-supported structures by 310 CMR 9.02).

  Supporting commercial and industrial uses are categories of land use defined in 310 CMR 9.02 as uses within a DPA that provide direct economic or operational support to water-dependent industrial uses. See Section 5-3 for further elaboration of "direct economic or operational support."

This DPA Master Plan specifies both the:

- Allowed Uses in Table 5-3 of this section. Table 5-3 is the Use Schedule for the Marine Industrial (MI) district from the Gloucester Zoning Ordinance with proposed amendments to implement the recommendations of this plan. The categories of allowed uses are elaborated below for each category, and
- The conditions for approving an allowed use (in Section 5-4, Recommendations.)

5-2-1 Water-dependent Industrial Uses

Water-dependent industrial is one of the priority land uses for Gloucester Harbor properties that fall within the area covered by both the Gloucester DPA and the MI zoning district. Most water-dependent industrial uses in Table 5-3 of the Gloucester Zoning Ordinance are prioritized by designating them as permitted uses; though some require a special permit. As priority uses, there are relatively few restrictions on the location and intensity of development.

The city's Marine Industrial district has long included a broad range of uses in addition to water-dependent industrial use with the notable exception of residential development. Residential development is similarly prohibited by state Chapter 91 regulations for DPAs because this is the type of use most likely to be incompatible with, out-compete, and displace marine industrial and water-dependent uses.

5-2-2 Water-dependent Uses

The community values process clearly revealed a desire by Gloucester residents to not only support the traditional maritime industries, but to make the harbor more accessible with a broader range of uses that rely on water access and that attract and accommodate the public. Many of these uses, such as harbor tour boats, excursion vessels, fishing charters, cruise ship support facilities are accommodated by city and state regulations. Strong local support was expressed for better public access to the waterfront and along its edge. This plan furthers these goals through conscious promotion of an active water's edge. These types of uses are essential to the continued viability of the DPA in Gloucester Harbor, attracting people and new investment to waterfront properties and infrastructure, which produces operational, financial and community support for the DPA.

Properly designed public access facilities should be included in future projects on the waterfront whenever feasible. The public access facilities must be sited so as to be compatible with and not interfere with the working waterfront activities. Public access facilities can be integrated into a project as part of the open space required with a non water-dependent supporting DPA use or as an amenity to a water-dependent use. As is currently the case in a number of sites around Gloucester Harbor, open areas used to support working waterfront activities during part of the year can accommodate public access at other times. With this arrangement, public access neither interferes with existing maritime activities nor preempts future use of the site for such purposes.

The inclusion of new recreational boat dockage in Gloucester Harbor in support of both permanent and transient boating should be considered in future revisions of this plan if it is allowable under city and state waterfront regulations. While the recommendations of this plan do not include recreational boating as an allowable use, it is a use of Gloucester Harbor that has co-existed (as a grandfathered use) with the traditional marine industries for many years, can contribute to strengthening the economy of the harbor and the city, and its potential expansion should be considered for the future. Properly sited new and improved recreational boating facilities can help not only to activate the harbor, but can be a means to produce additional and upgraded berthing for commercial vessels (e.g., requiring a minimum percentage of new slips be reserved for commercial vessel berthing), without interfering with the operation of water-dependent industrial uses, displacement of existing water-dependent industrial activities, or diminishing of space needed for future water-dependent industrial use.

5-2-3 Supporting DPA Uses

Supporting DPA use is a concept employed by the state's waterways regulations (310 CMR 9.0) and means an industrial or commercial use that provides direct economic or operational support to water-dependent industry in the DPA. The state's waterways regulations allow these uses in a DPA as long as the type, location, scale, duration, operation, and other aspects of the supporting use is compatible with activities characteristic of the working waterfront.

Any industrial or commercial use, other than those posing a severe conflict with port operations, is eligible for licensing as a supporting DPA use. The Chapter 91 regulations suggest small businesses, retail and service facilities; shops of tradespersons, eating and drinking establishments with limited seating, and small offices as examples of supporting commercial uses compatible with the DPA. Administrative offices that are part of an industrial enterprise are categorized as accessory uses (defined below). The Chapter 91 regulations categorically exclude from eligibility as a supporting DPA use hotels/motels,

nursing homes, hospitals, recreational boating facilities, entertainment facilities, and new buildings devoted predominantly to office use.

This DPA Master Plan specifies that the commercial and general industrial uses that are allowable uses in the MI zoning district (amended in accordance with Table 5-3) be eligible for licensing by the DEP as supporting DPA uses.[2] The supporting commercial uses generally must meet the local standards for Special Permits (Section 5.18, revised, as suggested, of the Gloucester zoning code) as well as a new Section 5.8 proposed to be inserted into the Zoning Ordinance. Section 5.8 and revisions to section 5.18 are described herein in section 5-4, Recommendations.

Throughout the DPA, the plan establishes that property owners are eligible to develop up to 50 percent of their land area (the area above and below the historic high water line) for supporting DPA uses. For many properties this is an increase over the current Chapter 91 regulatory limit for supporting commercial uses of 25 percent of the filled tideland and pier area on each project site. Further, and importantly, the plan provides for greater flexibility in siting supporting commercial uses on the filled tidelands and upland portions of a property.

While it would be advantageous in some cases to enable a higher percentage of ground floor area to be occupied by supporting commercial uses, this possibility is constrained by one of the regulatory standards for plan approval as described in the following section.

5-2-4 Standards for State Approval of Proposed Land Uses

The state has two kinds of regulatory authority in the DPA:

- First, up to the Historic High Water mark (HHW), the state has basic property rights, under the doctrine that the waters of the Commonwealth belong to the state. Even though these waters were filled in, the state still has an underlying property right to that area.
- Second, under the standards for state approval of the Municipal Harbor Plan/DPA Master Plan, the upland area of the DPA, from the HHW mark to the DPA boundary line, drawn in 1978 to run along logical physical boundaries such as Rogers Street or Commercial Street, is required to be managed and regulated by the city consistent with DPA policies, even though the state has no authority to regulate land uses landward of HHW.

<u>The “Approvability Standard”</u>

Any DPA is expected to allow “as a general rule, …[no] more than 25% of the total DPA land area” to be commercial or accessory uses thereto. In Gloucester, a significant portion of the DPA is outside the HHW area. In the absence of municipal land use regulations prohibiting commercial uses, it must be assumed that 100 percent of that land *could* be used for commercial purposes. This has the potential effect of reducing the percentage (to less than 25 percent) of each property below the HHW that is eligible for supporting uses under the regulations. The following section and Appendix D provide the details for the Gloucester DPA.

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[2] This is a requirement of DPA Master Plans (301 CMR 23.05(e)3)

Effect of the Approvability Standard on Gloucester

In Gloucester, the land area of the DPA is just over 87 acres. Of this, 40.5 acres (or 46 percent) lie below the historic high water line within Chapter 91 jurisdiction. The remaining area consists of 29 acres of upland and 17.5 acres of roadway. This high percentage of land area within the DPA boundary but outside jurisdiction has the unintended effect of reducing the amount of supporting use that is available for property within jurisdiction.

The standard requires the plan to demonstrate that no more than 25 percent of the land area of the DPA can be used for commercial purposes, including potential, future commercial use.

The simplest way to determine if this standard is being met is to take the sum of all the areas where potential commercial use is either *not* feasible or is in some way restricted and subtract this from the total land area of the DPA. If the result is 25 percent or more of the total land area of the DPA then the standard can be determined to have been met.

Along Gloucester's waterfront there are a number of areas where commercial use is effectively restricted; these include the US Coast Guard property, the State Fish Pier, various public parks, and the roads within the DPA boundary. There are some additional areas where there are deed restrictions on uses and others (such as residential properties) where commercial use can be deemed unfeasible or highly unlikely. In total, these properties comprise 37.5 acres of the DPA land area. Another 18.5 acres of *filled tidelands* can also be deemed to be protected from commercial use based on the fact that a maximum of 25 percent of the area of a parcel within jurisdiction can be used for commercial use based on DPA regulations. Thus, commercial use is not allowed on the remaining 75 percent of the parcel (the 18.5 acres).

An estimated additional 1.8 acres is deemed as being unavailable for commercial uses due to various setbacks and access restrictions.

The sum of these areas shows that, based on existing conditions and regulations, just less than 60 acres of the land area of the DPA cannot be used for commercial uses. Conversely, this means that over 29 acres (33.7 percent) of the land area has the potential to be used for commercial purposes. Therefore the DPA in Gloucester does not meet the approval standard stated above.

In order to achieve this approval standard, the plan needs to restrict from potential commercial use a further 7.6 acres of land within the DPA.

The principal reason that the DPA cannot currently meet the standard is that 33.5 percent of the land area in the DPA consists of upland parcels outside of Chapter 91 jurisdiction. Absent other property-specific use restrictions, the only limitations on the use of this land are the zoning regulations for the MI district, which do not prohibit commercial uses.

The consequence is that some potential for supporting commercial use *within jurisdiction* is sacrificed to meet this approval standard for the whole DPA.

In Gloucester's case, adhering to this approvability standard has an (unintended) adverse affect on the city's ability to take full advantage of the flexibility provided for supporting uses through the development of a DPA Master Plan by the state waterways regulations. This, unfortunately, diminishes the ability of the revised Harbor Plan to achieve its goals of promoting reinvestment and diversification of the waterfront through supporting commercial uses.

Table 5-1: Gloucester DPA Calculations based on the Provisional 2005 Historic High Water Line

	sq. ft.	Acres
TOTAL LAND AREA OF DPA	**3,804,748**	**87.345**
(Roads, upland and filled)		
Maximum Allowable Land Area for Commercial Use	**951,187**	**21.836**
(25% of Land Area)		
Minimum Area where Commercial Use NOT Allowed	**2,853,561**	**65.509**
(75% of Land Area)		
Type of Restriction Limiting Commercial Use		
WHOLE PARCELS	**sq. ft.**	**Acres**
Commercial Use Restricted	1,424,567	32.704
(Federal, state, municipal parks, access, roads, industrial infrastructure)		
Deeded Restriction on Commercial Use	25,013	0.574
Commercial Use Unfeasible / Unlikely	183,956	4.223
(Residential and surrounded by residential)		
FILLED TIDELANDS ONLY	**sq. ft.**	**Acres**
Unrestricted filled tidelands less allowable Commercial use	809,397	18.581
(An area equivalent to 25% of the total fill and pile supported area of a parcel may theoretically be used for Commercial use. However, on some parcels the amount of theoretical Commercial use exceeds the area of filled tidelands. Therefore whichever is the most limiting was calculated at the amount of area of Commercial use on filled tidelands. Commercial use is therefore RESTRICTED on the REMAINING AREA of filled tidelands)		
SETBACK / ACCESS RESTRICTIONS ON UPLAND	**sq. ft.**	**Acres**
20ft Municipal Setback along 833 linear feet of waterfront	16,660	0.382
(Where the current shoreline is at, or landward of the Historic High Water, municipal zoning requires a 20ft setback for upland servicing of vessels).		
10ft Municipal Access Across Uplands to Filled Tidelands	16,480	0.378
UNDEVELOPABLE / UNCONVERTABLE	**sq. ft.**	**Acres**
Estimated Miscellaneous Restrictions	46,102	1.058
(As used by ICON in 1999, this is a miscellaneous area restricted by easements, zoning, configuration, access etc and, as previously, has been calculated at 5% of the upland areas not otherwise excluded)		
TOTAL AREA WHERE COMMERCIAL USE IS RESTRICTED	**2,522,175**	**57.901**
Need an additional are with no Commercial	**331,386**	**7.608**
% of TOTAL LAND AREA RESTRICTED		**66.3**
% of TOTAL LAND AREA UNRESTRICTED		**33.7**

Approvability Standard under this Master Plan

This DPA Master Plan establishes that each property in the DPA be allowed to develop up to 50 percent of the *total land area* for supporting uses. As a significant percentage of the DPA lies above the HHW, allowing for up to 50% of the land area of a parcel to be developed for commercial use actually reduces the total potential area for commercial use by almost 4.4 acres (Table 5-2). This translates to an overall reduction in potential commercial use within the DPA of approximately 5%.

We suggest this conforms to the spirit of the regulation which is "as a general rule, [commercial uses] will not occupy more than 25% of the total DPA land area."

Table 5-2: Current Allowable Potential Supporting Commercial Use (acres) and Consequences of Adopting Alternative Percentage.

Area	Total Parcel Area	Total LAND Area	Current Potential Commercial Use	50 % OPTION	
				New Potential Commercial Use	Gain / Loss
East Gloucester	13.16	9.49	6.57	5.43	-1.14
Harbor Cove	15.23	12.00	4.96	6.00	1.04
Industrial Port	34.20	28.35	19.48	15.19	-4.28
TOTAL	**62.59**	**49.84**	**31.01**	**26.62**	**-4.39**

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.

The following recommendations, if adopted into the Gloucester Zoning Ordinance, would:

1. Promote and facilitate the permitting of water dependent marine industrial uses that are encouraged under the DPA regulations;
2. Strengthen the requirement that new development does not displace or adversely affect water-dependent use of the site; and
3. Adopt a site plan review process to ensure adequate control over the potential allowance of an increased percentage of supporting commercial use on a parcel basis.

These proposed changes to the local permitting processes require amendment of the Gloucester Zoning Ordinance, which may only be achieved by following the procedures of MGL Chapter 40A Section 5 and the Gloucester Zoning Ordinance Section 1.11 and associated public hearings.

5-4 RECOMMENDATIONS

Many of the goals of this Harbor Plan/DPA Master Plan are achieved through the Gloucester Zoning Ordinance. This section presents proposed new and amended zoning provisions designed to implement the objectives of this plan and align the zoning regulations with state waterways regulations to increase consistency among regulatory requirements, improve predictability of decision making, and facilitate the review processes.

5-4-1 Amend Table 2.3 Use Regulation Schedule of the Gloucester Zoning Ordinance to make it explicit that in the MI district, Supporting DPA uses shall not occupy more than 50% of the ground level area on filled tidelands and uplands of a lot within the DPA. Reference will also be made that such uses are also subject to the dimensional requirements and limitations in the Water Dependent Use Zone and 310 CMR 9.0. Introductions of Supporting DPA uses in new structures or within existing structures will be subject to a new site plan review process outlined in amended Section 5.8 of the Zoning Ordinance. Most water-dependent industrial, general industrial, and related uses and commercial uses continue to be allowable as-of-right or, in some cases, by special permit. Depending on their extent some may also be subject to site plan review to ensure compatibility and integration of projects to their surrounds. These amendments will:

1. Expedite and simplify the permitting of proposed development and
2. Provide a mechanism for applying the (amended) water-dependent use standards of Section 5.18 and the supporting DPA use conditions of the (proposed new) Section 5.8. See related recommendations 2 and 3 below.

5-4-1 Strengthen the provisions of Section 5.18 by establishing the existing "factors" as *standards for approval* for *MI special permitted uses*.

Amend Section 5.18 of the ordinance which stipulates that, "For all uses requiring a special permit in the MI zone, and located within 200 feet of the water's edge, the Special Permit Granting Authority in approving the 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;
5. The proposed use will not adversely affect the preservation of water-dependent uses on surrounding properties.

In exercising its power under this section, the Special Permit Granting Authority may impose reasonable modifications, conditions,-or limitations as are necessary or appropriate to ensure that the presence of the proposed development does not result

in any of the above adverse impacts or otherwise adversely affect the primary character of the area as a working waterfront.

5-4-2 Add a new Section 5.8 in the Gloucester Zoning Ordinance requiring site plan review for new and expansion of existing uses in the MI district. In addition to the requirements of the zoning ordinance, uses must comply with the standards in the Chapter 91 regulations (310 CMR 9.0).

Supporting DPA uses whether in new structures or introduced as a change of use in an existing structure will be subject to site plan review. As suggested, the Use Schedule, Section 2.3, will contain a revised footnote on the MI district columns that will state the percentage restriction of Supporting DPA use of a lot as follows:

1. In the MI district, Supporting Designated Port Area (DPA) Uses, as defined in Section 6 Definitions, shall not in the aggregate occupy more than 50% of the ground level area of filled tidelands and uplands on a lot. Such uses shall also be subject to the dimensional requirements of 310 CMR 9.0.

However, it is the site plan review process of Section 5.8 that will require such use to be quantified and submitted for review and approval. Such restriction may also be a finding and referenced in decisions, should such use require a special permit.

Use Schedule footnote on the MI district will also contain reference to the need to follow the dimensional standards of the Chapter 91 regulations (310 CMR 9.0)

The following general information will be provided in application materials for site plan review to guide proposals for supporting commercial uses in the MI district to meet eligibility requirements for licensing by DEP.

1. An area of open space must be maintained at ground level within the portion of a property below the historic high water line equal to the footprint of buildings containing non water-dependent commercial supporting use within the area below the historic high water line.
2. Cannot be located on pile-supported piers.
3. If in new building, cannot be located in the water-dependent use zone of filled tidelands (See section 5-4-4 for definition of water-dependent use zone.)
4. Must provide water-dependent industrial use on the property with direct economic and/or operational support.

Incorporate the Chapter 91 standards into the application or guidance material for site plan review. Change makes this zoning ordinance standard minimally consistent with the water-dependent use zone requirement of the waterways regulations 310 CMR 9.51(c)(3).

5-4-3 Move the note designated with an asterisk in Section 2.3 Use Regulations Schedule to a new Section 2.2.6 and amend it to read

"Water-dependent use zone: an area delineated as follows:

- on filled shorelands, the area within a distance of the lesser of 100 feet or 25 percent of the average depth of the property measured from the present high water mark to the landward lot line of the property but not less than 25 feet;

- along the ends of piers and wharfs the area within a distance of the lesser of 100 feet or 25 percent of the distance from the edge to the base of the pier or wharf, but not less than 25 feet; and
- along the sides of piers and wharves the area within a distance of the lesser of 50 feet or 15 percent of the distance to the opposite edge of the pier or wharf, but not less than 10 feet.

The above dimensions may be modified as described below on a property upon a showing that the application of these prescribed standards results in a hardship due to unusual configuration of the site itself and not the preferred characteristics of a development proposal and:

- 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;
- the modification results in no net loss of area within the water-dependent use zone as prescribed by this section; and
- the resultant reconfiguration achieves greater effectiveness in the use of the water's edge for water-dependent industrial use.

Within the water-dependent use zone in the MI district no use shall be permitted unless it provides access to water-borne vessels.

5-4-5 Amend Section VI, Definitions to include:

- Designated Port Area
- Supporting Designated Port Area Use

5-4-6 Alternative provision to the numerical standards of 310 CMR 9.51(3)(c)

The configuration of the water-dependent use zone as described by 310 CMR 9.51(3)(c) 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 the regulations.

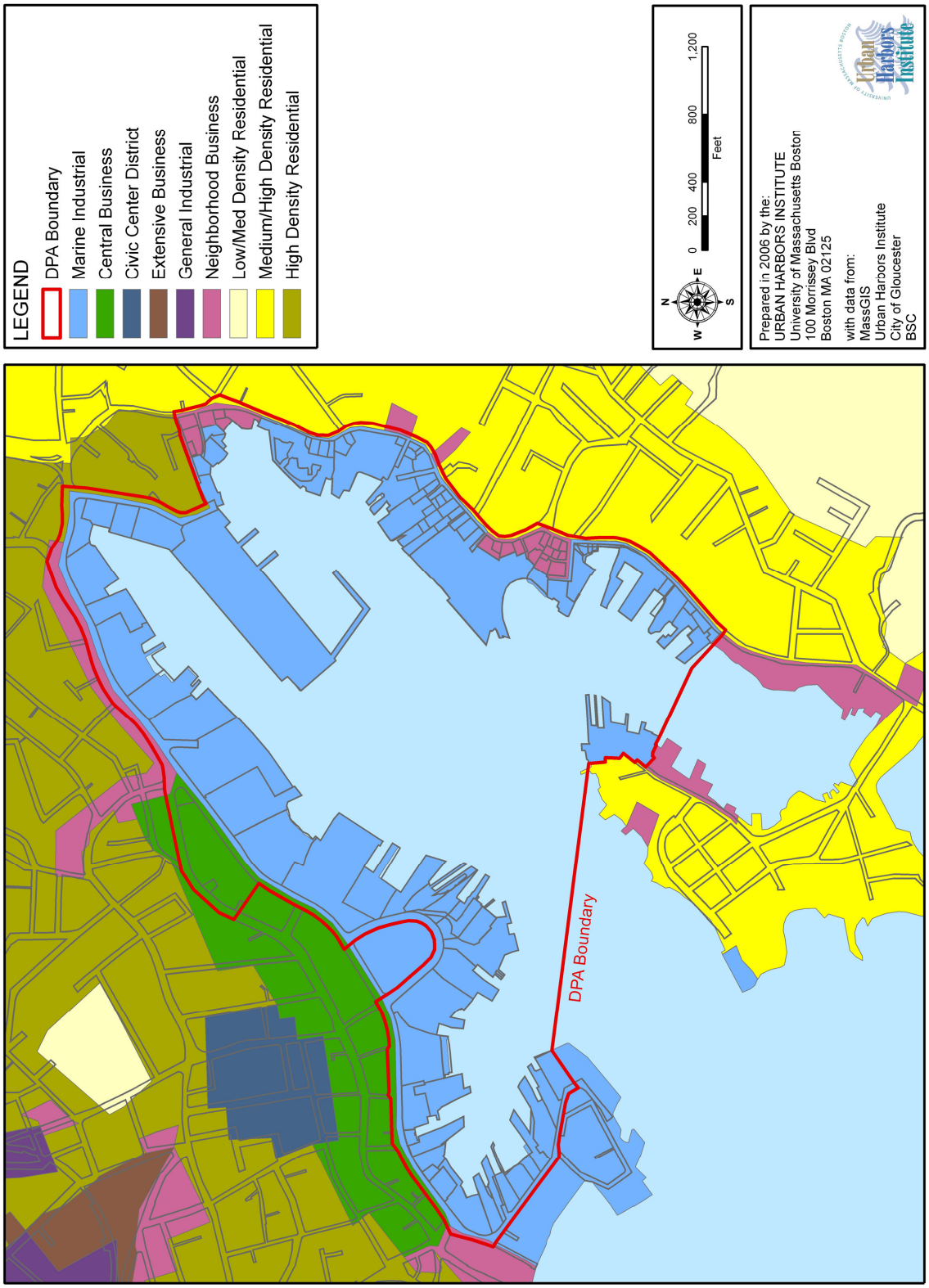


Figure 5-1. Gloucester Harbor Zoning

Table 5-3: Proposed Use Regulation Schedule for the new MI district. Columns 1, 2 and 3 are the current Use Regulations Schedule for the MI district in Section 2.3 of the Gloucester Zoning Ordinance. Column 4 is the proposed Use Regulations Schedule.

SECTION	LIST OF USES	CURRENT MI	PROPOSED MI *[5]
Residential Uses			
2.3.1(1)	One-family detached	N	N
2.3.1(2)	Convert one to two family dwelling (without change to exterior)	N	N
2.3.1(3)	Convert one to two family dwelling (without change to exterior)		
2.3.1(4)	New 2-family dwelling	N	N
2.3.1(5)	Conversion to or new multifamily or apartment dwelling, up to two dwelling units	N	N
2.3.1(6)	Conversion to or new multifamily or apartment dwelling, up to three dwelling units	N	N
2.3.1(7)	Conversion to or new multifamily or apartment dwelling, four to six dwelling units	N	N
2.3.1(8)	Conversion to or new multifamily or apartment dwelling, seven or more dwelling units (see Section 5.7.1)	N	N
2.3.1(9)	Cluster development	N	N
2.3.1(10)	Boarding, lodging or guest house	SPS	SPS[1, 4]
2.3.1(11)	Hotel, motel, motor inn, under 30 guest units	N	N
2.3.1(12)	Hotel, motel, motor inn, 30 or more guest units (see Section 5.7.1)	N	N
2.3.1(13)	Mobile Home Park	N	N
2.3.1(14)	Mobile homes, except those at mobile home parks or campgrounds	N	N
2.3.1(15)	Campground	N	N
2.3.1(16)	Camping or tenting, except within a campground or by children in their own yard	N	N
2.3.1(17)	Temporary use of mobile home following fire or other natural disaster (see Section 5.1.5)	Y	Y
2.3.1(18)	Assisted Living Residences, up to 10 units (see Section 5.14)	N	N
2.3.1(19)	Assisted Living Residences, 11 or more units (see Sections 5.7 and 5.14)	N	N
2.3.1(20)	Open Space Residential Development (see Section 5.15)	N	N
2.3.1(21)	Village Development Project (see Section 5.16)	N	N
Community Service Uses			
2.3.2(1)	Public, religious, other nonprofit schools, building or use	Y	Y[4]
2.3.2.(2)	Municipal use not elsewhere more specifically covered	Y	Y[4]
2.3.2(3)	Personal Wireless Service Facility (see Section 5.13)	CCS	CCS

SECTION	LIST OF USES	CURRENT MI	PROPOSED MI *[5]
2.3.2.(4)	Public utility facility exclusively servicing the immediate neighborhood (5 square miles or less)	CCS	CCS
2.3.2(5)	Public utility facility exclusively serving a broader area	Y	Y
2.3.2.(6)	Nursing Home, hospital	N	N
2.3.2.(7)	Cemetery	N	N
2.3.2(8)	Club or lodge, registered as a nonprofit organization under Section 501 (c) 3 of the Internal Revenue Code	CC	N
2.3.2(9)	Animal hospital, animal shelter	N	N
2.3.2(10)	Nursery school, day care centers [a]	Y	Y [4]
2.3.2(11)	Trade school, industrial training center	Y	Y
2.3.2(12)	Business or commercial school	Y	Y
2.3.2(13)	Philanthropic institutions	CCS	CCS [4]
2.3.2(14)	Airport, heliport	CCS	N
Open Uses			
2.3.3(1)	Agriculture, horticulture on lots less than 5 acres	Y	N
2.3.3(2)	Agriculture, horticulture on lots greater than 5 acres	N	N
2.3.3(3)	Sale of products grown pursuant Use No. 1& 2 above	Y	N
2.3.3(4)	Wildlife area, reservation	N	N
2.3.3(5)	Riding school, stable	N	N
2.3.3(6)	Golf driving range, drive in theater, amusement park, race track, or similar commercial outdoor recreational use	N	N
2.3.3(7)	Miniature golf and baseball or softball batting cages	N	N
2.3.3(8)	Golf course, standard or par three	N	N
2.3.3(9)	Commercial picnic/outing area	N	N
2.3.3(10)	Supervised camping	N	N
2.3.3(11)	Outdoor recreation other than above operated by a governmental agency or authority	Y	Y
2.3.3(12)	Boat launching, docking or docking structure	SP	SP
2.3.3(13)	Docking and operation of casino ships	CCS	CCS
2.3.3(14)	Other commercial outdoor recreational activities	Y	Y
2.3.3(15)	Seasonal sale of Christmas trees	Y	Y
Business Uses			
2.3.4(1)	Office building containing less than 2500 square feet of floor area, either new or conversion of dwelling	N	N
2.3.4(2)	Office building containing more than 2500 square feet of floor area, and less than 6,000 square feet, either new or conversion of dwelling	Y	Y [2]

SECTION	LIST OF USES	CURRENT MI	PROPOSED MI *[5]
2.3.4(3)	Office building containing more than 6,000 square feet of floor area, either new or conversion of dwelling	Y	Y [2]
2.3.4(4)	Banks, ATM	CC	CC
2.3.4(5)	Funeral Home	N	N
2.3.4(6)	Animal daycare, animal grooming – daytime only	N	N
2.3.4(7)	Animal boarding, kennel – 24 hour operations	N	N
2.3.4(8)	Restaurant, without outdoor seating and with takeout constituting no more than 20% of total business	CCS	CCS
2.3.4(9)	Restaurant, with outdoor seating or with takeout constituting more than 20% of total business, or both	CCS	CCS
2.3.4(10)	Motor vehicle sales or rental (see Section 5.19)	CCS	N
2.3.4(11)	Motor vehicle service, fueling, storage or repair (see Section 5.19)	CC	N
2.3.4(12)	Marine related sales, rental, limited primarily in MI districts to commercial vessels and recreational vessels	Y	Y
2.3.4(13)	Marine related service, storage or repair, limited primarily in MI districts to commercial vessels and recreational vessels	CC	Y
2.3.4(14)	Protein Recovery Plant	CCS	CCS
2.3.4(15)	Building tradesman or contractor, without outdoor storage of materials or heavy equipment other than one truck with a GVW of not more than 12,000 pounds	CC	CC
2.3.4(16)	Contractor's yard	Y	Y
2.3.4(17)	Stone mason's yard	CC	CC [3]
2.3.4(18)	Fuel or ice establishment, other than gas stations	CC	CC [3]
2.3.4(19)	Feed, building materials establishment	Y	Y
2.3.4(20)	Laundry, Laundromat or dry cleaning establishment under 4,000 square feet	N	N
2.3.4(21)	Laundry, or dry cleaning plant over 4,000 square feet	N	N
2.3.4(22)	Shopping center (see Section 3.2.4 &5.7)	CCS	CCS
2.3.4(23)	Automatic amusement devices, five or more	N	N
2.3.4(24)	Drive-through facility	CCS	CCS
2.3.4(25)	Retail, consumer service or other non-industrial business use, other than those set forth in Section 3.2.4, Use Nos. 1-24	Y	Y
	Facilities for water transportation passenger loading/unloading		Y
Industrial Uses			
2.3.5(1)	Junk Yard	N	N
2.3.5(2)	Fill or removal of soil, stone, or other earth products (see Section 5.2)	N	N
2.3.5(3)	Manufacturing, processing or research	Y	Y
2.3.5(4)	Processing or cooling not conforming to the performance criteria of Section 4.4	Y	Y
2.3.5(5)	Trailer truck park, freight ~~or~~ transportation terminal facilities	CCS	CCS

SECTION	LIST OF USES	CURRENT MI	PROPOSED MI *[5]
2.3.5(6)	Bulk storage, warehousing	Y	Y
2.3.5(7)	Storage of toxic or hazardous materials or wastes incidental to industrial operations conducted on-site, as authorized by the Massachusetts DEP pursuant to MGL Chapter 21C	CCS	CCS
Other Principal Uses			
2.3.6(1)	Parking of motor vehicles to services a use permitted in the same district	CC	CC [4]
2.3.6(2)	Parking of motor vehicles to services a use located and permitted in the NB district	Y	Y [4]
2.3.6(3)	Temporary structures or temporary uses not conforming to this ordinance	SP	SP
2.3.6(4)	Arts, crafts and sale of arts and crafts if made on premises	Y	Y
2.3.6(5)	Commercial radio transmission	SP	SP
2.3.6(6)	Noncommercial radio transmission, with wire antenna or roof mounted tower extending no higher than 10 feet above the roofline	Y	Y
2.3.6(7)	Noncommercial radio transmission, with free standing tower extending or roof-mounted tower extending higher than 10 feet above the roofline	SP	SP
Accessory Uses			
2.3.7(1)	Garage or storage shed, accessory to allowed or permitted use	Y	Y
2.3.7(2)	Parking for storage of agricultural machinery used on the premises	Y	N
2.3.7(3)	Signs (see Section 4.3)	Y	Y
2.3.7(4)	Manufacturing accessory to retailing, employing up to ten persons, with major portion of products sold on the premises	Y	Y
2.3.7(5)	Manufacturing accessory to retailing, employing more than ten persons, with major portion of products sold on the premises	Y	Y
2.3.7(6)	Employee dwelling accessory to industry	Y	Y [1]
2.3.7(7)	Office for one professional in his or her residence (see Section 5.3)	Y	Y
2.3.7(8)	Home occupation (see Section 5.3)	SP	SP
2.3.7(9)	Home office, including use of computer, telephone and other such devices, but excluding employment of others, exterior signs and visits by customers, clients or other persons in conjunction with the business	Y	Y
2.3.7(10)	In dwellings of 2,000 square feet of gross floor area or more, the renting of not more than three rooms as lodging, without separate cooking facilities, to not more than three lodgers	N	N
2.3.7(11)	In dwellings of less than 2,000 square feet of gross floor area, the renting of not more than three rooms as lodging, without separate cooking facilities, to not more than three lodgers	N	N
2.3.7(12)	Dining halls, shops, wholly within motel or hotel	N	N
2.3.7(13)	Automatic amusement device limited to 4 or less	N	N
2.3.7(14)	Recreational use accessory to a dwelling, for use of residents and nonpaying guests	N	N

SECTION	LIST OF USES	CURRENT MI	PROPOSED MI *[5]
2.3.7(15)	Commercial land-based wind energy conversion facilities (see Section 5.22)	CCS	CCS
2.3.7(16)	Commercial land-based wind energy conversion facilities on city owned land (see Section 5.22)	CCS	CCS
2.3.7(17)	Monitoring tower for use No.15 above (see Section 5.22)	Y	Y
2.3.7(18)	Residential land-based wind energy conversion facilities (see Section 5.23)	N	N
2.3.7(19)	Yard sales lasting no more than two days, including setup and take down time, conducted no more than two times in a calendar year	Y	Y
2.3.7(20)	Accessory In-law Apartments (see Section 5.24)	N	N
2.3.7(21)	Customary accessory uses other than those listed in this Section 2.3.7	SP	SP

* These proposed changes to the local permitting processes require amendment of the Gloucester Zoning Ordinance, which may only be achieved by following the procedures of MGL Chapter 40A Section 5 and the Gloucester Zoning Ordinance Section 1.11 and associated public hearings.

Key to notations used in the table

Y Permitted use

N An excluded or prohibited use

SP Use which may be authorized under special permit by the Board of Appeals as provided for in Section 1.4.1.

SPS Use which may be authorized under special permit by the Board of Appeals. Application must be accompanied by plans as required in section 1.4.1.2(b), second paragraph.

CC Use which may be authorized under special permit by the City Council as provided for in Section 1.4.2.

CCS Use which may be authorized under special permit by the City Council. Application must be accompanied by plans as required in section 1.4.1.2(b), second paragraph.

Conditions applicable to certain commercial uses to make them eligible for licensing as supporting DPA uses:

1 limited to short-term living quarters for persons engaged in commercial fishing or other marine passenger or cargo business.

2. Note that Chapter 91 regulations for DPAs prohibit new buildings primarily devoted to office space below the historic high water line.

3. Y if water-dependent or marine-related

4. These are not Supporting Designated Port (DPA) Uses. The location and dimensions are to be in accordance with Chapter 91 regulations (310 CMR 9.0).

5. Supporting Designated Port Area (DPA) Uses, as defined in Section 6 Definitions, shall not in the aggregate occupy more than 50% of the ground level area of filled tidelands and uplands on a lot. Such uses shall also be subject to the dimensional requirements of 310 CMR 9.0.

6 MAKING THE VISION HAPPEN

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 harborfront 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.

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.

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 two 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.

APPENDIX A – COMMITTEES AND PANEL MEMBERS, INTERVIEWS AND MEETINGS

Committee and Panel Members

2004 Harbor Plan Implementation Committee

- Ab Khambaty, Chairman
- Kirk Noyes
- Pat Scalli
- Damon Cummings
- Frank Elliott
- Tom Brancaleone
- Art Socolow
- Lenny Linquata
- Fara Courtney
- Mike MacMahon

2008 Listening Post Community Panel

- Tom Balf
- Doug Cook
- Phil Cusumano
- Rob Foley
- Roz Frontiera
- Paul Frontiero
- David Marsh
- Scott Memhard
- Fayette Severance

Interviews

Municipal officials

- Jim Caulkett, Gloucester Harbormaster
- Sarah Buck, Community Development Director & Harbor Plan Coordinator
- Gregg Cademartori, Planning Director
- Dale Brown, 2006 Community Development Director, City of Gloucester
- Steve Magoon, 2006 Planning Director, City of Gloucester
- Barry MacKay, Chief, Gloucester Fire Department
- Alan Colby, Gloucester Tourism Board
- Nancy Ryder, Conservation Agent
- Suzanne Silveira, Gloucester Tourism Coordinator

Business interests

- Lenny Linquata, Gloucester House Restaurant
- Michael Costello, Cape Ann Chamber of Commerce

- Andrew Page, Citizen
- Frank Elliott, Gloucester Marine Terminal
- David Weber, VP Operations, Gorton's
- Viking Gustafson, Gloucester Marine Railway
- Chris Kennedy, General manager, Americold
- Mac Bell, MMRT
- Jim and Mary Jo Montagnino, Gloucester Dispatch
- Joe Macarone, Gloucester State Fish Pier
- Jay Enos, Enos Marine

Cultural interests

- Harriet Webster, Executive Director, Gloucester Maritime Heritage Center
- Maggie Rosa, Gloucester Historical Commission

Fishing industry

- Vito Giacolone, Fishermen's Wharf
- Joe Ciaramitaro, Captain Joe's Lobster
- Yang Cho, New England Marine Resources
- Angela Sanfilippo, President, Gloucester Fishermen's Wives Association
- Jackie Odell, Executive Director, Northeast Seafood Coalition
- Larry Ciulla, Gloucester Display Auction
- David Bergeron, Massachusetts Fishermen's Partnership
- David Ellenton, Cape Seafood
- Steve Pardee, East Gloucester Marine
- Lenny Parco, Ocean Crest
- Peter Mullen, ARAM Fish

Research

- Sarah Robinson, Ph.D. candidate, Department of Anthropology, Harvard University, and principal author of the Gloucester Community Panel's reports *A Study of Gloucester's Commercial Fishing Infrastructure: Interim Report* (2003) and *Commercial Fishing Industry Needs on Gloucester Harbor, Now and in the Future* (2005).

State and federal government

- Bill Kavanaugh and Maureen Murray, ACOE, NE District
- CWO Gene Gibson, US Coast Guard Station Gloucester
- Bob Blair, Harbor pilot
- Dennis Ducsik, Massachusetts Office of Coastal Zone Management (MCZM).
- Katherine Glenn, North Shore Regional Coordinator, MCZM
- Ben Lynch and Alex Strysky, Massachusetts Department of Environmental Protection

Public Meetings

Harbor Plan Implementation Committee Meeting	September 22, 2004
Harbor Plan Implementation Committee Meeting	October 25, 2004
Public Meeting at Gloucester High School	November 15, 2004
To collect information and input from the public	
Harbor Plan Implementation Committee Meeting	December 13, 2004
Harbor Plan Implementation Committee Meeting	January 11, 2005
Focused on marine industrial activities	
Harbor Plan Implementation Committee Meeting	February 8, 2005
Public Meeting at Legion Hall	March 28, 2005
Harbor Plan Implementation Committee Meeting	April 7, 2005
Harbor Plan Implementation Committee Meeting	May 9, 2005
Public Meeting at the Senior Center	June 6, 2005
Harbor Plan Implementation Committee Meeting	July 25, 2005
Discussion of Draft Harbor Plan	
Harbor Plan Implementation Committee Meeting	December 1, 2005
Public Meeting at City Hall	April 3, 2006
Presentation of Draft 2006 Harbor Plan	
Harbor Plan Implementation Committee Meeting	June 5, 2006
Harbor Plan Implementation Committee Meeting	June 27, 2006
City Council Workshop at City Hall	July 18, 2006
Development of Community Values & Consensus	
Listening Post Community Meeting, City Hall	June 2, 2008
Listening Post Community Meeting, East Gloucester	June 3, 2008
Listening Post Community Meeting, Lanesville	June 5, 2008
Listening Post Community Meeting, Annisquam	June 9, 2008
Listening Post Community Meeting, Magnolia	June 10, 2008
Publication of draft Community Values and Themes	June 20, 2008
Final Statement – Values and Themes w/all public comment	June 30, 2008
Draft 2009 Harbor Plan	
City Council Meeting, City Hall – presentation of draft plan	January 27, 2009
Public Workshop, City Hall	March 7, 2009
City Council Meeting, City Hall – endorsement of the plan	May 5, 2009

APPENDIX B – CASE STUDIES

As part of the planning process, two areas of Harbor Cove were used as case studies to illustrate the types of uses that might be appropriate. The first case study area includes the area from Mac Bell's to Doug Lemle's properties and includes the old Birdseye factory. The second case study area includes I4C2, the Building Supply Center and Peter Mullen's property.

These two case studies are designed to illustrate how the potential increase in supporting commercial uses in these areas might be sited. Each case study shows:

- potential new docks and piers;
- potential ground floor supporting commercial uses in either existing or new buildings;
- potential parking needed for the supporting commercial uses;
- existing water-dependent marine industrial uses;
- potential new water-dependent marine industrial uses in either existing or new buildings; and,
- potential expansion of the existing pedestrian loops.

It is envisaged that ground floor supporting commercial uses would generally be retail and service activities such as shops, restaurants and similar businesses. Additionally, where possible, these would be located away from the waterfront and would not displace existing marine industrial uses. The case studies also maintain access to the waterfront from the road

As the properties that are the focus of this effort are under private ownership, these case studies are simply illustrative and should not be taken as specific recommendations or suggestions.

The second case study includes a theoretical building on I4C2. This is not intended as a design for a future building but simply represents one possible way of developing mixed uses of the site.

The Harbor Plan's policies and recommendations for the Harbor Cove area are designed to enhance the economic viability and mixed-use character of this district. The Plan's regulatory recommendations enable new investment on private property in the district to support needed improvements in waterfront infrastructure and introduce new uses that, together with improvements to the public realm, will activate this area for Gloucester residents and visitors.

The anticipated investment will be in new uses that can co-exist with and support water-dependent industrial uses (commercial fishing and similar vessel-based activities) which will operate along the waterfront portion of all parcels and continue to be the principal use of a number of properties. The purpose of enabling the new uses is to:

1. allow property owners additional revenue-generating opportunities to invest in improving their properties;
2. foster a stronger linkage between the downtown business district and the waterfront;
3. create an environment that will attract people to Gloucester's working waterfront, and
4. generate increased tax revenue for the city.

The emphasis in this area is on small- to medium-scale water-dependent industry with additional commercial and pedestrian-oriented uses as opposed to increased large-scale industrial activities as in MI-2.

To accomplish this, the Harbor Plan's recommended changes to the state's Chapter 91 regulations and the city's Zoning Ordinance simplify and increase consistency between the two sets of rules. Specifically, the regulatory recommendations for Harbor Cove:

- reserves the water area exclusively for vessel berthing and the immediate waterfront for water-dependent industrial use, and
- allows supporting commercial uses to occupy up to 50 percent of the ground-level area of properties.

Case Study 1: Commercial Street

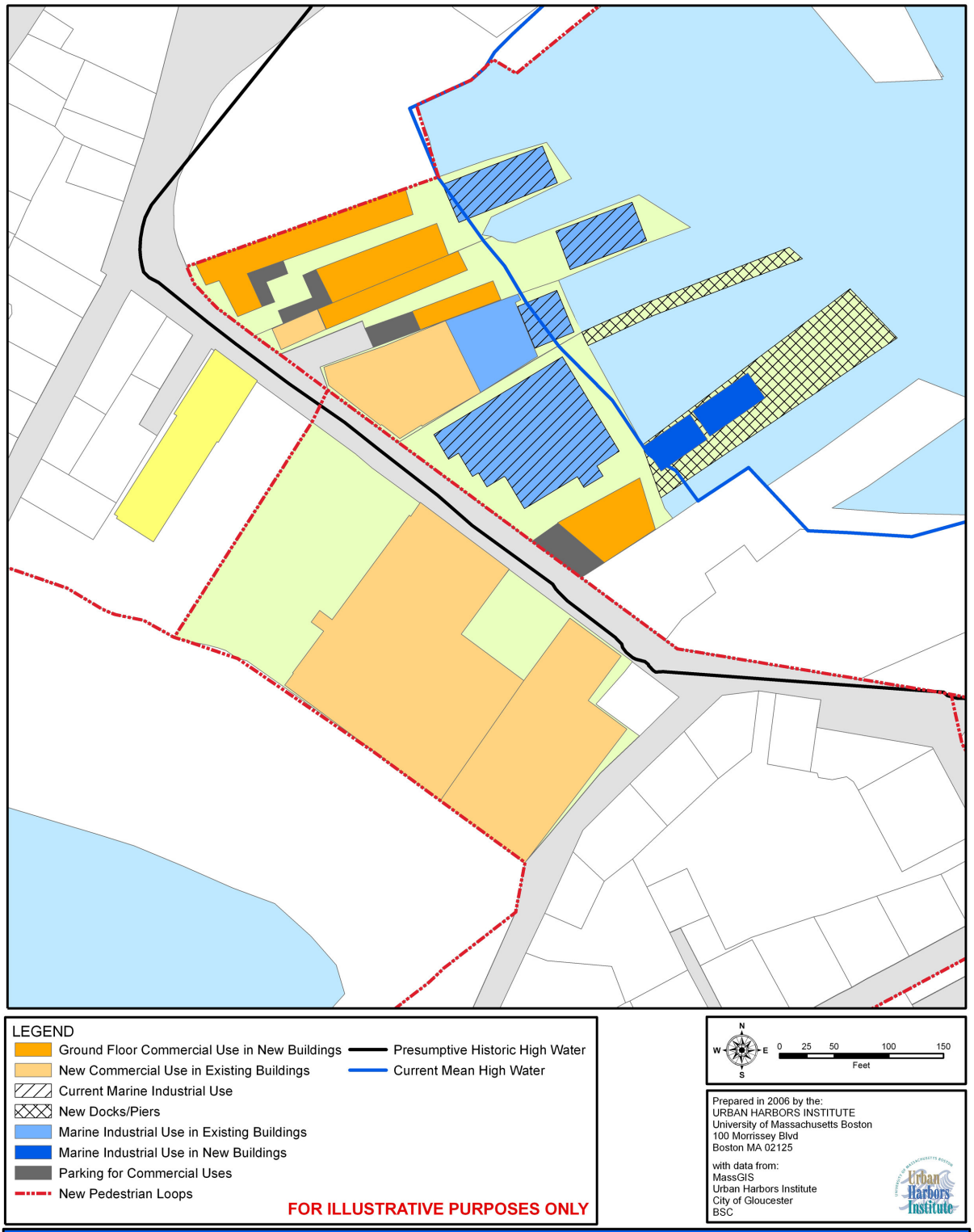
The amount of ground floor supporting commercial use illustrated in Case Study 1 is approximately equivalent to that which would be allowed if the property also contained a hub port, marine industrial use.

The Harbor Plan also recommends capital improvements to Commercial Street that would support existing commercial traffic, but more safely accommodate increased pedestrian traffic. This would include streetscape improvements (underground utilities, plantings) to complement commercial development fronting on the street. Additional public or shared parking in the area is desirable. Pedestrian improvements could include a walkway along the top of Pavilion Beach connecting Stacy Boulevard with Fort Square Park.

A key to revitalizing this area of Commercial Street and attracting more visitors to the area is the extension of the existing pedestrian loops. The case study figure shows an additional pedestrian loop running from the Eastern end of Stacey Boulevard around the Fort and along Commercial Street. This loop would tie into the Downtown Heritage Trail at St. Peter's Park. Figure 4-3 also shows potential viewing areas that should be clearly signposted and perhaps include further information for visitors.

Drawing increased numbers of visitors to the Commercial Street area is seen as key to helping new commercial uses be economically viable.

The case study for Commercial Street also shows the Chamber of Commerce as this is felt to be an important service that draws visitors to the area. While the old Birdseye factory lies outside the DPA, it has great potential for redevelopment. Additionally, the use options will be increased once the area of the Fort that lies outside the DPA is removed from the MI zoning district.



Commercial Street Project Area - Theoretical Use

Case Study 2: Downtown Waterfront

Of the three properties in Case Study 2, the most significant is I4C2. This property has been vacant for decades yet lies adjacent to the downtown and is large enough to so have great potential. Even if the property were developed and did not offer a hub port service, there is still the potential for almost 40,000 sq. ft. of ground floor supporting commercial use.

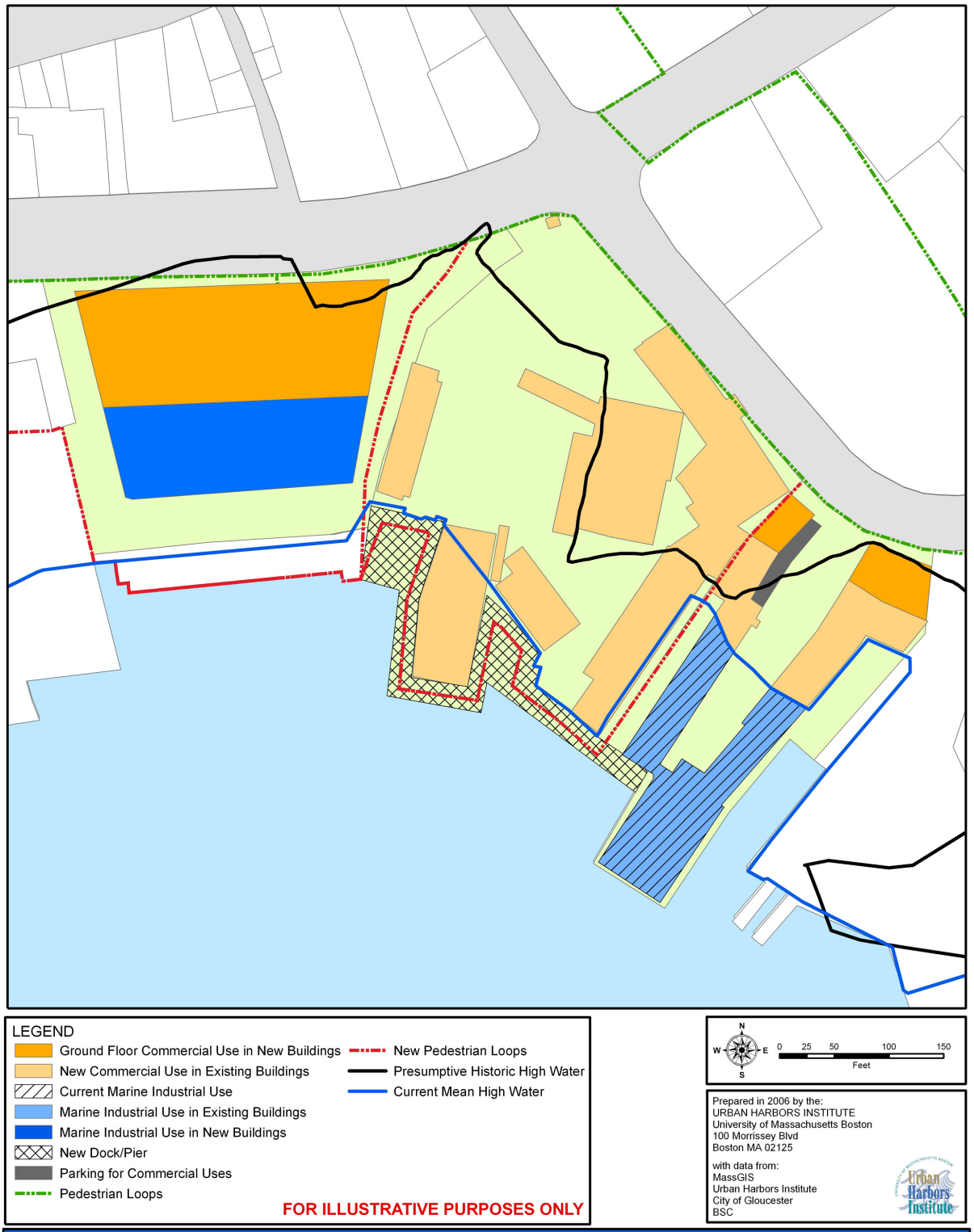
The case study shows a 27,000 sq. ft. building along Rogers Street. This illustrative two floor building might have retail and service activities on the ground floor and offices on the upper floor. The case study also shows a building between this and the waterfront. In this scenario, this building is reserved for water-dependent industrial use on the ground floor, as is the area between it and the I4C2 dock. This area is currently used by those fishermen that berth at this dock and this case study maintains this use.

The 2nd floor of this building could potentially be used for parking for the commercial businesses in the building along Rogers Street. The roof top could be also be used for parking but this theoretical design incorporates an observation deck as well.

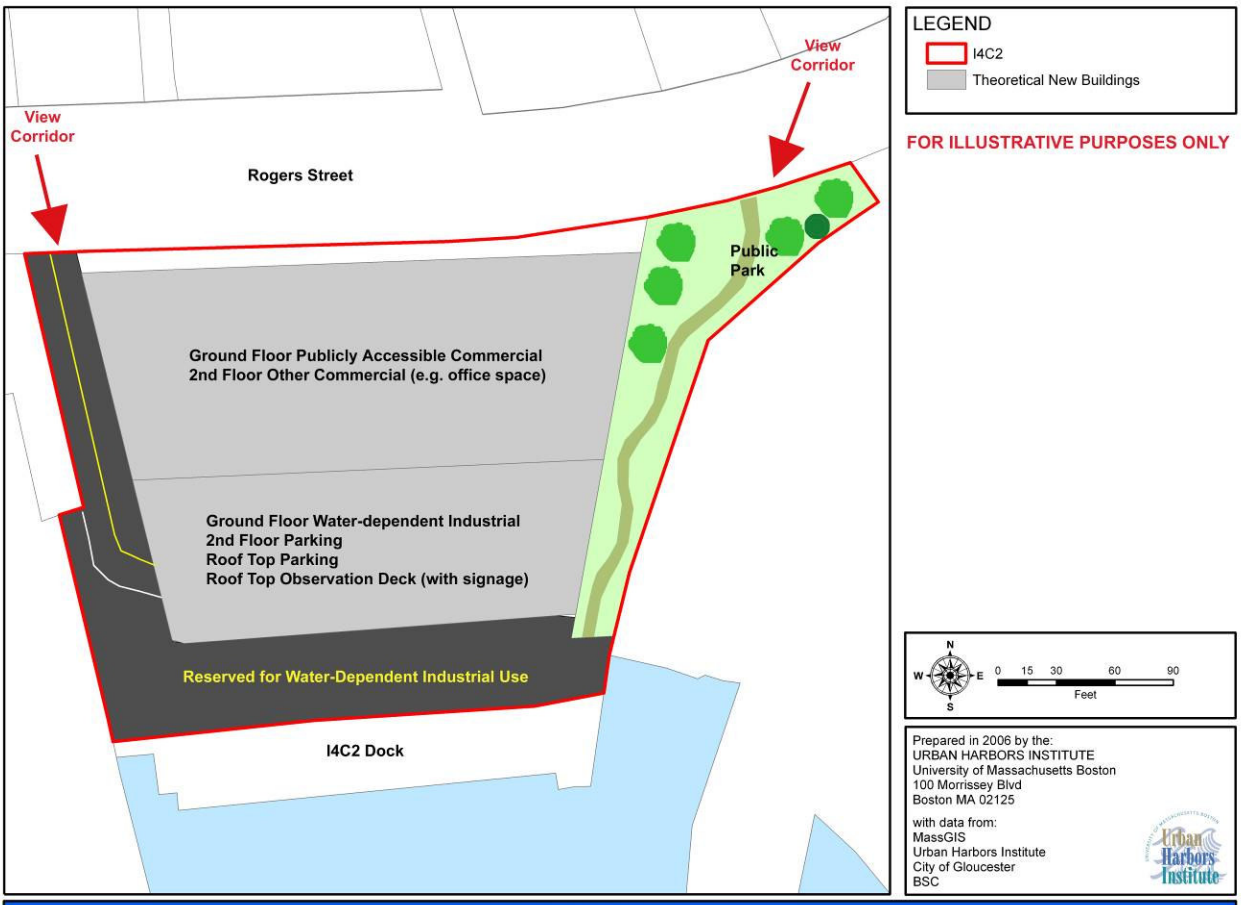
Another aim of this case study was to illustrate reactivating the waterfront along the Building Supply Center. One way to do this might be to rebuild the docks over the area current filled with old piles.

In this scenario, the Building Supply Center itself remains as it is. Some new supporting commercial use is also shown on Peter Mullen's property. However, Supporting Uses are prohibited on pile-supported structures.

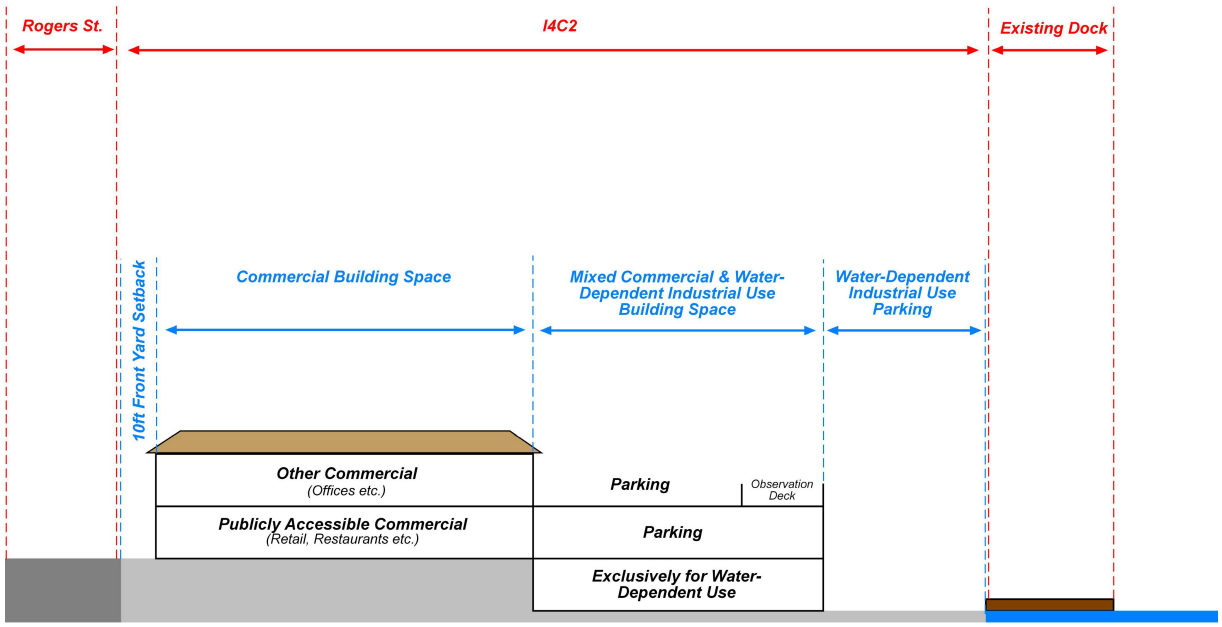
Once again, the case study includes an extension of the current pedestrian walks. The new pedestrian loop might tie into the one suggested in Case Study 1 and again link to the Downtown Heritage Trail.



Downtown Waterfront Project Area - Theoretical Use



Theoretical Development of I4C2



Cross-Section of Theoretical Building on I4C2 - for illustrative purposes only

APPENDIX C – SUPPORTING DOCUMENTS

Gloucester Community Panel (2005). "*Commercial Fishing Industry Needs on Gloucester Harbor Now and in the Future".* A Supplement to *"A Study of Gloucester's Commercial Fishing Infrastructure: Interim Report".*

In the summer of 2004, the Gloucester Panel met to discuss shoreside infrastructure. The meeting was occasioned by the fact that the City of Gloucester was planning a 2004 update and revision of the city's Harbor Plan. The Community Panel sought to use its combined fishing industry expertise to provide considered input to this harbor planning process. Moreover, the panel is aware that the city's aim is to write a detailed Designated Port Area ('DPA') Master Plan as part of this revised Harbor Plan, and the panel wishes to have its views known and taken into account in this DPA Master Plan process. The present document focuses on fishing industry needs on Gloucester Harbor, now and in the future. This report is a supplement to the October 2003 report, and should be read in conjunction with that earlier report.

Anthony R. Wilbur, Fara Courtney & Robert P. Glenn (2004). "*Gloucester Harbor Characterization: Environmental History, Human Influences and Status of Marine Resources".*

This report is a resource guide that described human and natural resources of Gloucester Harbor. The resource guide is a tool to support resource management strategies and interdisciplinary planning by investigating and characterizing historic and current anthropogenic alterations and influences, present-day environmental quality and marine resources in the Harbor.

Gloucester Community Panel (2003). *"A Study of Gloucester's Commercial Fishing Infrastructure: Interim Report".*

This is an interim report on Gloucester's shoreside infrastructure produced as part of an ongoing cooperative social science research project. The purpose of the project is to set up community panels in six fishing ports along the New England coast, and for the community panels to identify and develop critically needed social and economic information about their ports. This project is one of only a few social science cooperative research projects regarding the fisheries, and it is predicated on the idea that members of the fishing industry (including the allied support industries) are experts in their fields and that their expertise is essential to developing accurate and useful information about the social and economic side of the fisheries. In Gloucester, the panel is composed of fishermen (owners and operators of small, medium, and large draggers, small and medium gillnet boats, and one small long-lining vessel), owners and operators of shoreside businesses (the seafood display auction, fish processing facilities, the ice company, gear shops, the marine railways), a settlement agent, a maritime attorney, representatives of fishing industry organizations (the Gloucester Fishermen's Wives Association and the Northeast Seafood Coalition), Gloucester's Harbor Plan Implementation Coordinator, and others. Some members represent both the shoreside and the harvesting sector: One fisherman is also a wharf owner, and one gear shop owner is also a lobsterman. Thirty-four people contributed to this study, either as panel members or through interviews with the panel coordinator.

Greiner Environmental, Inc. & Perlmutter & Associates (2003). *"Increasing Economic Development Through Recycling in the Gloucester Designated Port Area".*

In an effort to uncover potential economic develop opportunities in the Gloucester waterfront, and to reduce operating costs for local companies, the City of Gloucester contracted with Greiner Environmental to identify the type and volume of waste materials generated by Gloucester marine industries, explore economic development opportunities, and develop a strategy to economically increase recycling rates and reduce spending on waste disposal. This effort is one of several initiatives by the City of Gloucester to help sustain economic growth in the local marine industry.

The project had two main goals. First, the effort focused on exploring economic development opportunities based on waste products generated by the marine industry located within Gloucester's Designated Port Area (DPA). This includes both the expansion of existing businesses as well as the identification of new business opportunities. Second, the effort focused on identifying opportunities to increase recycling – both for cost savings on waste disposal and for improved environmental stewardship. The project examined all significant waste streams generated by marine industries, plastics (e.g. shrink wrap used for winter protection of boats), waste oil from commercial and recreational boats, other excess materials (e.g. cable, nets, pallets, cardboard) from fishing vessels, and organic material currently generated and then discarded as waste by a variety of marine industrial processes.

TEC Infrastructure Consultants, LLC (2002). *"Gloucester to Shelburne International Ferry Study".*

In January of 2002, the City of Gloucester commissioned an operations development scoping and evaluation study for a proposed international ferry service between Gloucester, Massachusetts and Shelburne, Nova Scotia.

Gloucester Fishermen's Wives Association (1998). *"Vision 2020: for the Gloucester Fishing Industry in Northwest Atlantic Fisheries".* Working Draft.

This working draft recommends the goals, objectives and strategies for the Northwest Atlantic Fisheries to pursue to ensure viability in the year 2020.

Metcalf & Eddy, Inc. & Center for Applied Regional Studies (1996). *"Water and Wastewater Issues in Developing Gloucester's Seafood Processing Industry".*

This report investigates various water and wastewater issues with respect to developing Gloucester's seafood processing industry and attempts to link those issues with related concepts that might be useful to the city in cultivating itself as a "Port of Choice", a place where both the fishing and seafood processing industry would choose to locate.

APPENDIX D – APPROVABILITY CALCULATIONS

In order for a DPA Master Plan to be approvable, it must ensure that no more than 25 percent of the land area within the DPA Boundary can be used for commercial use. The following table calculates what area **cannot** currently be used for commercial activities. Tables 1 and 2 feed into this calculation. As the current situation means that over 25 percent can become commercial use, the DPA Master Plan is designed to reduce the potential amount of commercial use to below 25 percent of the land area. Thus achieving approvability.

	sq. ft.	Acres	Comments
TOTAL LAND AREA OF DPA (Roads, upland and filled)	**3,804,748**	**87.345**	Calculated from GIS
Maximum Allowable Land Area for Commercial Use (25% of Land Area)	**951,187**	**21.836**	25% of Row 5
Minimum Area where Commercial Use NOT Allowed (75% of Land Area)	**2,853,561**	**65.509**	75% of Row 5
Type of Restriction Limiting Commercial Use			
WHOLE PARCELS	**sq. ft.**	**Acres**	
Commercial Use Restricted (Federal, state, municipal parks, access, roads, industrial infrastructure)	1,424,567	32.704	Roads & Commercial Use Not Allowed (Table 1, Row 24)
Deeded Restriction on Commercial Use	25,013	0.574	Deeded Restriction (Table 1, Row 26)
Commercial Use Unfeasible / Unlikely (Residential and surrounded by residential)	183,956	4.223	Commercial Unfeasible (Table 1, Row 68) - as used in 1999
FILLED TIDELANDS ONLY	**sq. ft.**	**Acres**	
Unrestricted filled tidelands less allowable Commercial use	809,397	18.581	Table 2, Row 76
(An area equivalent to 25% of the total fill and pile supported area of a parcel may theoretically be used for Commercial use. However, on some parcels the amount of theoretical Commercial use exceeds the area of filled tidelands. Therefore whichever is the most limiting was calculated at the amount of area of Commercial use on filled tidelands. Commercial use is therefore RESTRICTED on the REMAINING AREA of filled tidelands)			
SETBACK / ACCESS RESTRICTIONS ON UPLAND	**sq. ft.**	**Acres**	
20ft Municipal Setback along 833 linear feet of waterfront (Where the current shoreline is at, or landward of the Historic High Water, municipal zoning requires a 20ft setback for upland servicing of vessels).	16,660	0.382	Measured from GIS
10ft Municipal Access Across Uplands to Filled Tidelands	16,480	0.378	Measured from GIS
UNDEVELOPABLE / UNCONVERTABLE	**sq. ft.**	**Acres**	
Estimated Miscellaneous Restrictions	46,102	1.058	as used in 1999

(As used by ICON in 1999, this is a miscellaneous area restricted by easements, zoning, configuration, access etc and, as previously, has been calculated at 5% of the upland areas not otherwise excluded)

TOTAL AREA WHERE COMMERCIAL USE IS RESTRICTED	**2,522,175**	**57.901**	Sum of above restrictions
Need an additional area with no Commercial	**331,386**	**7.608**	**Row 9 - Row 33**
% of TOTAL LAND AREA RESTRICTED		**66.3**	
% of TOTAL LAND AREA UNRESTRICTED		**33.7**	

CONCLUSION: The total land area within the DPA where Commercial Use is currently restricted is 57.90 acres. This is 66.3% of the total land area of the DPA. This is means that at this time, 33.7% COULD be used for Commercial Use.

Table 1: Parcels with Restrictions Limiting Commercial Use

Restriction	Location	Name	UPLAND	FILLED	TOTAL LAND AREA	
			Acres	Acres	Acres	sq. ft.
Roads		**Roads**	**17.571**	**0.000**	**17.571**	**765,393**
Dedicated Restriction	PIRATES LN	Pirates Lane Landing	0.071	0.035	0.105	4,586
Dedicated Restriction	STATE FISH PIER	State Pier fishing operations	0.692	6.821	7.514	327,294
Critical Infrastructure	109 ROGERS ST	Mass Electric	1.884	0.691	2.575	112,174
Dedicated Restriction	17 HARBOR LP	US Coast Guard	0.593	0.706	1.299	56,598
Dedicated Restriction	19 HARBOR LP	Access to Landing	0.192	0.002	0.194	8,449
Dedicated Restriction	19R HARBOR LP	US Coast Guard	0.207	0.356	0.563	24,528
Dedicated Restriction	19R HARBOR LP	City of Gloucester Park	0.129	0.284	0.413	17,980
Dedicated Restriction	2 COMMERCIAL ST	St. Peter's Park	0.031	1.019	1.050	45,718
Critical Infrastructure	229 EAST MAIN ST	Utility Sub-Station	0.033	0.047	0.080	3,476
Dedicated Restriction	23 HARBOR LP	Access to Landing	0.067	0.000	0.067	2,918
Dedicated Restriction	27 HARBOR LP	Access to Landing	0.104	0.000	0.104	4,511
Dedicated Restriction	5 EAST MAIN ST	City of Gloucester Park		0.595	0.595	25,909
Dedicated Restriction	61R PARKER ST	Cripple Cove Landing		0.115	0.115	5,021
Dedicated Restriction	65R ROGERS ST	I4C2 Dock		0.046	0.046	2,013
Dedicated Restriction	73 EAST MAIN ST	Access to Landing		0.080	0.080	3,484
Dedicated Restriction	79 EAST MAIN ST	City of Gloucester Park	0.007	0.326	0.333	14,514
TOTAL AREA OF DEDICATED RESTRICTIONS ON COMMERCIAL USE					**32.704**	**1,424,567**
Deeded Restriction	3 PARKER ST	Deeded Parking Lot		0.574	0.574	25,013
TOTAL AREA OF DEEDED RESTRICTIONS ON COMMERCIAL USE					**0.574**	**25,013**
EG Unfeasible		Residential	0.188	0.000	0.188	8,176
EG Unfeasible	1 PIRATES LN	Residential	0.049	0.000	0.049	2,154
EG Unfeasible	10 AVON CT	Residential	0.074	0.000	0.074	3,210
EG Unfeasible	101 EAST MAIN ST	Residential	0.117	0.000	0.117	5,115
EG Unfeasible	103 EAST MAIN ST	Residential	0.076	0.000	0.076	3,332
EG Unfeasible	109 EAST MAIN ST	Residential	0.064	0.010	0.074	3,207

EG Unfeasible	123 EAST MAIN ST	Residential	0.052	0.000	0.052	2,254
EG Unfeasible	125 EAST MAIN ST	Residential	0.058	0.000	0.058	2,508
EG Unfeasible	131 EAST MAIN ST	Residential	0.033	0.000	0.033	1,434
EG Unfeasible	133 EAST MAIN ST	Residential	0.231	0.000	0.231	10,077
EG Unfeasible	139 EAST MAIN ST	Residential	0.177	0.000	0.177	7,713
EG Unfeasible	145 EAST MAIN ST	Residential	0.068	0.000	0.068	2,944
EG Unfeasible	147 EAST MAIN ST	Residential	0.174	0.000	0.174	7,565
EG Unfeasible	147R EAST MAIN ST	Private Parking	0.147	0.000	0.147	6,421
EG Unfeasible	149 EAST MAIN ST	Residential	0.090	0.000	0.090	3,916
EG Unfeasible	151R EAST MAIN ST	Residential	0.111	0.000	0.111	4,851
EG Unfeasible	153 EAST MAIN ST	Church	0.130	0.000	0.130	5,642
EG Unfeasible	161 EAST MAIN ST	Residential	0.186	0.000	0.186	8,119
EG Unfeasible	165 EAST MAIN ST	Residential	0.074	0.000	0.074	3,203
EG Unfeasible	173 EAST MAIN ST	Residential	0.242	0.000	0.242	10,542
EG Unfeasible	183R EAST MAIN ST	Residential	0.112	0.000	0.112	4,881
EG Unfeasible	187 EAST MAIN ST	Residential	0.074	0.000	0.074	3,220
EG Unfeasible	191R EAST MAIN ST	Private Parking	0.064	0.000	0.064	2,796
EG Unfeasible	191R EAST MAIN ST	Residential	0.033	0.000	0.033	1,449
EG Unfeasible	199 EAST MAIN ST	Residential	0.071	0.001	0.072	3,146
EG Unfeasible	199H EAST MAIN ST	Residential	0.024	0.006	0.030	1,328
EG Unfeasible	2 NORWOOD CT	Residential	0.081	0.000	0.081	3,526
EG Unfeasible	201 EAST MAIN ST	Residential	0.020	0.004	0.025	1,071
EG Unfeasible	239 East Main St	Residential	0.113	0.000	0.113	4,914
EG Unfeasible	3 AVON CT	Residential	0.066	0.000	0.066	2,871
EG Unfeasible	3 PIRATES LN	Residential	0.047	0.000	0.047	2,043
EG Unfeasible	3A AVON CT	Residential	0.040	0.000	0.040	1,731
EG Unfeasible	4 CLAY CT	Residential	0.078	0.000	0.078	3,407
EG Unfeasible	4 PIRATES LN	Residential	0.148	0.000	0.148	6,448
EG Unfeasible	5 AVON CT	Residential	0.073	0.000	0.073	3,184
EG Unfeasible	5 NORWOOD CT	Residential	0.105	0.000	0.105	4,558
EG Unfeasible	6 PIRATES LN	Residential	0.247	0.034	0.281	12,222
EG Unfeasible	65 EAST MAIN ST	Residential	0.181	0.000	0.181	7,884
EG Unfeasible	67 EAST MAIN ST	Residential	0.102	0.086	0.188	8,188
EG Unfeasible	8 WALL ST	Private Parking	0.062	0.000	0.062	2,703
TOTAL AREA WHERE COMMERCIAL USE IN UNFEASIBLE					**4.223**	**183,956**

Table 2: Area of Filled Tidelands Remaining After 25% Commercial Use

			UPLAND AREA	AREA BELOW 2005 HHW	25% AREA BELOW HHW	FILLED AREA	MAXIMUM SUPPORTING[1]	REMAINING AFTER 25%
Lot	**Location**	**Name**	**Acres**	**Acres**	**Acres**	**Acres**	**Acres**	**Acres**
11 5	1 ROWE SQ	Americold	2.459	1.386	0.346	0.752	0.346	0.406
10 30	69 ROGERS ST	Americold	1.224	3.346	0.837	1.882	0.837	1.046
63 26	155 EAST MAIN ST	Americold	3.079	2.401	0.600	1.601	0.600	1.001
79 2	211 EAST MAIN ST	Beacon Marine	0.032	1.582	0.396	0.350	0.350	0.000
79 21	221A EAST MAIN ST	Boat Storage	0.021	0.108	0.027	0.106	0.027	0.079
79 22	227 EAST MAIN ST	Boat Storage	0.046	0.586	0.146	0.513	0.146	0.367
54 54	59 PARKER ST	Boat Storage	0.041	0.128	0.032	0.126	0.032	0.094
54 53	59R PARKER ST	Boat Storage	0.000	0.094	0.024	0.060	0.024	0.036
59 87	6 MONTGOMERY PL	Brown's Yacht Haven	0.564	0.528	0.132	0.306	0.132	0.174
9 3	1 HARBOR LP	Building Supply Center	0.924	1.507	0.377	1.301	0.377	0.924
	104 COMMERCIAL ST	Cape Pond Ice	0.057	0.627	0.157	0.591	0.157	0.434
58 39	95 EAST MAIN ST	Captain Joe's Lobster	0.172	1.424	0.356	0.836	0.356	0.480
7 4	45 ROGERS ST	Parking	0.251	0.566	0.142	0.566	0.142	0.424
53 17	427 MAIN ST	Connolly and Wright	0.026	1.529	0.382	1.307	0.382	0.925
54 109	61R EAST MAIN ST	Cripple Cove Marine	0.279	0.000	0.000	0.000	0.000	0.000
58 38	97 EAST MAIN ST	Studio / Residential	0.044	0.000	0.000	0.000	0.000	0.000
1 14	52 COMMERCIAL ST	D & B Bait	0.000	0.369	0.092	0.327	0.092	0.235
63 29	169A EAST MAIN ST	Dentist / Residential	0.130	0.000	0.000	0.000	0.000	0.000
7 15	9 ROGERS ST	Doyan's Appliances	0.000	0.394	0.099	0.394	0.099	0.296
59 91	8 NORWOOD CT	East Gloucester Marine	0.575	0.355	0.089	0.034	0.034	0.000
1 12	78 COMMERCIAL ST	Felicia Oil	0.000	0.575	0.144	0.295	0.144	0.151
7 7	37R ROGERS ST	Fishermen's Wharf	0.000	0.676	0.169	0.446	0.169	0.277
7 5	39 ROGERS ST	Parking	0.000	0.140	0.035	0.137	0.035	0.102
11 4	6 ROWE SQ	Marine Terminal	1.528	0.585	0.146	0.349	0.146	0.203
10 31	37 HARBOR LP	Display Auction	0.178	1.257	0.314	1.040	0.314	0.725
7 1	63 ROGERS ST	Gloucester House	0.000	0.949	0.237	0.581	0.237	0.344
128 40	63 ROCKY NECK AV	Marine Railway	0.395	1.129	0.282	0.432	0.282	0.149
9 17	27R HARBOR LP	Marine Railways	0.116	0.330	0.082	0.199	0.082	0.116
9 18	31R HARBOR LP	Marine Railways	0.080	0.582	0.146	0.258	0.146	0.112
1 15	46 COMMERCIAL ST	GMF Corp Lobsters	0.000	0.387	0.097	0.224	0.097	0.127
10 25	289 MAIN ST	Gorton's (Commercial)	0.024	0.018	0.000	0.018	0.000	0.018
10 18	311 MAIN ST	Gorton's (Commercial)	0.085	0.000	0.000	0.000	0.000	0.000
11 7	1 FLANNAGAN SQ	Gorton's (gas station)	0.186	0.000	0.000	0.000	0.000	0.000
10 3	128 ROGERS ST	Gorton's Offices	2.244	0.941	0.235	0.941	0.235	0.706
11 6	127 ROGERS ST	Gorton's processing	2.078	0.506	0.126	0.342	0.126	0.215

9 1	65 ROGERS ST	I4C2-Vacant	0.122	1.691	0.423	1.687	0.423	1.264
59 77	115 EAST MAIN ST	International Seafood	0.445	1.722	0.431	1.542	0.431	1.111
9 21	33 HARBOR LP	International Shellfish	0.049	0.935	0.234	0.631	0.234	0.398
54 107	47 PARKER ST	Lighthouse	0.245	0.121	0.030	0.033	0.030	0.003
79 6	229R EAST MAIN ST	Lobster dealer & dock	0.000	0.410	0.103	0.196	0.103	0.094
79 8	237 EAST MAIN ST	Lobster dealer & dock	0.020	0.394	0.098	0.000	0.000	0.000
7 17	44 COMMERCIAL ST	MacBell	0.000	0.526	0.131	0.413	0.131	0.282
9 16	19R HARBOR LP	Harbor Master	0.041	0.254	0.063	0.150	0.063	0.086
79 7	233 EAST MAIN ST	Mixed commercial use	0.125	0.039	0.010	0.039	0.010	0.029
53 20	11 PARKER ST	Montagnino	0.108	1.055	0.264	0.824	0.264	0.560
1 73	58 COMMERCIAL ST	Montillaros Lobster	0.000	0.454	0.113	0.453	0.113	0.340
9 9	11 HARBOR LP	Mullins Property	0.174	1.095	0.274	0.407	0.274	0.133
1 13	60 COMMERCIAL ST	Neptune	0.000	0.265	0.066	0.204	0.066	0.138
53 4	417 MAIN ST	New England Marine	0.066	0.991	0.248	0.742	0.248	0.495
1 11	80 COMMERCIAL ST	North Atlantic Fish	0.000	0.988	0.247	0.744	0.247	0.497
63 47	197R EAST MAIN ST	North Shore Art	0.305	0.162	0.041	0.144	0.041	0.104
1 10	88 COMMERCIAL ST	Ocean Crest	0.000	0.555	0.139	0.365	0.139	0.227
63 36	195 EAST MAIN ST	Office / Laundry	0.077	0.000	0.000	0.000	0.000	0.000
54 61	47R PARKER ST	Office / Residential	0.187	0.022	0.006	0.006	0.006	0.000
7 11	23 ROGERS ST	Office / McTee's	0.000	0.410	0.102	0.374	0.102	0.272
53 19	7 PARKER ST	Parisi and Montagnino	0.001	0.561	0.140	0.477	0.140	0.337
63 48	197R EAST MAIN ST	Parking for residents	0.160	0.418	0.105	0.408	0.105	0.303
54 60	51 PARKER ST	Pier 7	0.013	0.315	0.079	0.274	0.079	0.195
63 37	197 EAST MAIN ST	Restaurant / Residential	0.057	0.000	0.000	0.000	0.000	0.000
53 3	393R MAIN ST	Rose's Marine	0.589	1.773	0.443	1.567	0.443	1.124
11 1	377 MAIN ST	Rose's Marine	0.571	0.898	0.225	0.551	0.225	0.327
63 30	171 EAST MAIN ST	Seatronics	0.102	0.000	0.000	0.000	0.000	0.000
63 24	155 EAST MAIN ST	Shop & Residential	0.204	0.000	0.000	0.000	0.000	0.000
59 89	1 NORWOOD CT	Vacant lot	0.091	0.000	0.000	0.000	0.000	0.000
63 16	10 AVON CT	Vacant lot	0.128	0.102	0.026	0.000	0.000	0.000
59 72	105 EAST MAIN ST	Vacant Lot	0.164	0.008	0.002	0.008	0.002	0.006
63 18	149R EAST MAIN ST	Vacant lot	0.173	0.103	0.026	0.000	0.000	0.000
58 37	99 EAST MAIN ST	Vacant lot	0.111	0.001	0.000	0.001	0.000	0.001
7 12	17 ROGERS ST	West Marine & Office	0.000	0.120	0.030	0.120	0.030	0.090
TOTAL AREA REMAINING AFTER 25% COMMERCIAL			acres	**41.396**	**10.344**	**28.677**	**10.095**	**18.581**
TOTAL AREA REMAINING AFTER 25% COMMERCIAL			sq ft	**1,803,226**	**450,605**	**1,249,153**	**439,756**	**809,397**
Total Unrestricted Upland Area			21.167					
5% of Total Unrestricted Upland			1.058	[1] minimum of Column H and I				

APPENDIX E – WHAT WAS ACHIEVED AS A RESULT OF THE 1999 PLAN?

The 1999 Plan recommended a number of improvement projects and other initiatives that should be undertaken. The table below summarizes the implementation status of these recommendations.

INFRASTRUCTURE IMPROVEMENTS	Suggested Year of Completion from 1999 Plan	Status in 2006
Maintenance Dredging in Gloucester Inner Harbor - ACOE responsible for dredging of federal channels	2001 2004 2006	From 1999 to 2001, significant progress was made in efforts to complete preliminary pre-dredge environmental testing and to develop a Dredge Material Maintenance Plan (DMMP) for the Harbor. In 2001, the City Council voted not to accept the DMMP's preferred and most affordable option for disposal (i.e. Confined Aquatic Disposal {CAD} cells). Under this restriction and with the Army Corps of Engineers (ACOE) indicating that they did not plan to undertake this project in the foreseeable future, dredging of the Main Shipping Channel was put on hold and the city's priority shifted to the removal of navigation hazards (rocks and other debris) in the shipping channel and to dredging of the Annisquam River and north side Jodrey State Fish Pier. In 2004, a "Gloucester Harbor Characterization" report was completed. Funding to support three of the priorities has been received through the Seaport Advisory Council (SAC). The first project (Nav Haz Removal) was completed prior to 2006, and Annisquam dredging of the northern entrance to Ipswich Bay was completed in 2007. Four other locations along the river still require maintenance dredging. Final studies for dredging of the North Channel and the State Pier are taking place in the fall of 2009.
Dredging Needs Study - New bathymetric study of the Harbor & River to determine present and estimate future needs for dredging	2001 2004 2006	ACOE completed surveys of the Inner Harbor North Channel in 1999, the Main Entrance and South Channels in 2000, and partial surveys of the Annisquam River in 2001 and 2003. ACOE resurveyed the entire entrance, Harbor Cove, North/South Channel in 2004. NOAA completed a bathymetric survey of the inner and outer Harbor in 2003. An update of the dredging needs study was completed in 2002. A 2003 Commercial Fishing Infrastructure Report identified critical services and infrastructure needed to support the commercial fishing industry in Gloucester Harbor. This report has proven very useful in identifying where dredging is needed to support the Harbor's role as a "full-service hub port" for this industry.
Private/Public "Piggyback" Dredging - Coordinated dredging involving multiple public & private sites. Develop "piggyback" dredging plan to reduce costs and overall effort	2001 2004 2006	With no current plans for federal dredging in the Harbor, piggy-backing on a federal project is not currently an option. In 2005 the city began exploring new opportunities for funding support from the state with matching funds from the city and/or private property owners.
Derelict Vessel Removal - Remove derelict / sunken vessels	2001	Seven boats were removed in 2001, 2 boats in 2007 and 1 boat in 2009. All funded through SAC.
Removal / Repair of Other Navigation Hazards - Removal or repair of derelict / dilapidated wharfs and pilings	2001	Additional deterioration has occurred at several wharfs since 1999. In 2005, the city created new building regulations requiring regular inspections and repair of pile-supported structures over water. Derelict piling fields have been removed at the old FBI property and a few other isolated spots but still remain in several locations Over the past five years, piers have been rebuilt at a number of sites including the Gloucester Marine Terminal, Gloucester Maritime Heritage Center, Fishermen's Wharf, and at St. Peters and Cripple Cove Parks. Engineering has been completed and funding approved by the SAC for a complete rebuild of the main wharfs at Solomon Jacobs Landing and the Maritime Heritage Center.

INFRASTRUCTURE IMPROVEMENTS	Suggested Year of Completion from 1999 Plan	Status in 2006
Removal of Other Navigation Hazards - Develop strategy to resolve navigational hazards problem in Harbor.	2001	ACOE surveyed these problem areas in 1999 including inspections by divers. Several more surveys were subsequently done including a focused geophysical survey in 2005 to identify the sub-bottom character of the hazards. St. Peters Public Landing and Commercial Floats were completed in 1999, 80% SAC funded, 20% Waterways Enterprise funds. Cripple Cove and Solomon Jacobs Public Landing Floats were completed in 2000 and funded entirely by Waterways Enterprise funds.
Seawall Repair - Various locations needing attention including Cripple Cove Landing, Robinson's Landing, Fort Square, Stacy Blvd. and Lucy Davis walkway	2001 2004	Five seawalls completely rebuilt. Unplanned emergency repairs of the seawall on the east side of the Blynman Canal were completed in 2007.
Mooring Study - Ways to expand resident, transient and commercial moorings (Smith Cove, off State Fish Pier)	2001	Project anticipated federal dredging in the Inner Harbor's Smith Cove which was not done. In 2009, the city's Waterways Board approved an increase in moorings in SE Harbor. Thirty-three additional moorings have been issued including 3 for vessels 120 feet in length.
Water Transportation Study - Study of better landings for all types of boats and water shuttle (Solomon Jacobs Landing. MA Electric and others) with improved shoreside infrastructure	2001	International Ferry Study completed 12/02 including identifying docking and shore-side support requirements. Proposals for domestic ferry connections to Provincetown, Salem and "downeast" introduced in 2005. Following the construction of the Cruiseport terminal in 2007, Boston Harbor Cruises introduced a daily ferry to Provincetown in 2008. The ferry did not run in 2009. Floating docks replaced/added at St. Peters, Cripple Cove and Solomon Jacobs landings. Funding secured to improve Solomon Jacobs and Maritime Heritage Center wharfs. In 2009, two private citizens have approached the Waterways Board expressing their desire to run a shuttle. They have purchased a boat and the Board is looking into the legalities of signage for advertising on city property.
Blynman Bridge Replacement Study - Study issue associated with bridge, assess staging areas for boats etc. Engineering study to determine feasibility of options (new bridge, extra bridge etc)	2001	No longer considered a top funding priority and no further action currently planned.
Smith Cove Improvement - Dredging of federal channel. Resolution to Smith Cove dredging project, which was approved by ACOE in 1990, through state's Dredge Material Management Plan.	2004	ACOE's dredging priorities do not include Smith Cove in the foreseeable future.
Moorings / **Floats in Smith Cove** - Expand mooring area at head of the Cove consistent with 1993 Harbor Plan.	2004	The city's Waterways Board is looking at the possibly of floats in Smith Cove off the parking lot on the causeway to Rocky Neck.
Solomon Jacobs Landing - Develop a gateway for visiting boats at Solomon Jacobs Landing. Pier can service excursion and transient boats, water taxi, and transient boats.	2004	Floats added/replaced allowing landing to partially meet this goal – Funding from SAC approved to complete improvements to the landing.

INFRASTRUCTURE IMPROVEMENTS	Suggested Year of Completion from 1999 Plan	Status in 2006
Pre-Treatment Demonstration - Further study and coordination needed to identify a location for demonstration project for fish processing wastewater pretreatment facility.	2004	Remains under consideration - the general consensus is that a pre-treatment facility should initially be developed on, or in the vicinity of, State Fish Pier (see Metcalf & Eddy *et al.* 1996 and Gloucester Harbor Recycling Study 2003).
Processing Water Study - Cost and trade-offs of using fresh versus seawater and potential new technologies to recycle water used in fish processing.	2004	Recycling Study completed 8/03. Because of a significant downturn in groundfish landings due to federally mandated fishing restrictions, fresh fish processing operations in Gloucester have been in a down cycle and thus the availability of processing water has not received much attention. As fishing stocks (hopefully) return to sustainable levels over the next 5 to 10 years, the issue of processing water is expected to receive renewed emphasis.
Commercial Street - Reconstruction to facilitate truck movement, improve service to existing businesses and buffer residences.	2004	Major changes in the Street's business mix since the 1999 Plan include loss of pile-supported FBI building, move of Good Harbor Fillet processing facility to Blackburn Industrial Park, closing of D&B Bait company, and the foreclosure sale of the Allied Cold Storage building. New investment includes the move and expansion of the Intershell brokerage and processing facility to Commercial Street, expansion of the Neptunes Harvest plant, and a new building adjacent to St. Peters Park at the base of Commercial Street now housing a R&D firm, Freeflow Power. The current driving force on the street are the community conversations hosted by the new owner wishing to develop the 50,000 s.f. site of the former Allied Cold Storage. Improvement to the infrastructure on Commercial Street will be an important component of this redevelopment.
Harbor Loop - Redesigned to reduce traffic conflict and expand parking.	2004	Several proposals have been considered and debated but no significant changes have yet been made.
Blynman Bridge Signage - Variable message system to alert boaters. Make street improvements at Blynman Bridge.	2004	There has been no public interest expressed in this project since 1999 and it has not been considered a funding priority.
Intercept Parking - Use existing lots at Stage Fort Park, MBTA Station or Gloucester High School during peak season with shuttle bus or water shuttle to downtown.	2004	Grant requests have been submitted to the state but none have been approved to date. Creating water shuttle service from Harbor Cove to Rocky Neck and Stage Fort Park continues to be a priority. In 2008, a grant from the Seaport Advisory Council supported a feasibility study for a pier at Stage Fort Park. While environmental issues still remain to be resolved, the study showed excellent potential for a pier to support a harbor shuttle and a mix of recreational boating.

The 1999 Harbor Plan was strongly focused on infrastructure improvements to remedy what was perceived as an increasingly deteriorating Gloucester waterfront. The Plan recommended a number of infrastructure improvements on land and water considered to be essential to maintaining a viable port for both maritime and visitor-oriented industries.

OTHER	Suggested Year of Completion from 1999 Plan	Status in 2006
City Harbor Task Force - Convene Harbor Task Force to oversee implementing infrastructure improvements	1999 onwards	Nine-member Harbor Plan Implementation Committee formed in 1999. .Responsibility assigned to Harbor Plan Implementation Committee through 2006. As recommended in the draft 2006 Harbor Plan, responsibility for harbor planning was integrated into the Community Development Department, leading to community consensus building and widespread local endorsement of the 2009 Harbor Plan. In 2009 the city launched an Economic Development Planning process, supported by a $150,000 grant from the Seaport Advisory Council. Recommendations for processes to support the ensuing recommendations are expected with the completion of the report in 2010.
City Harbor Task Force - Create new city staff position to oversee Task Force	1999 onwards	Part-time Harbor Plan Coordinator position created by city in 1999. In January 2008, the Harbor Coordinator position was given top priority by making it the job of the Director of the Community Development Department. This position receives direct leadership from the Mayor's Office, keeping harbor development at the forefront of city priorities.
Gloucester Harbor Partnership - Create Gloucester Harbor Partnership group to assist business and property owners	1999 onwards	This non-profit, volunteer group was formed in 1999. Last met in early 2001 – no longer active. (see discussion below).
New Development Opportunities - Use existing city incentives such as tax increment financing to promote these projects	1999 onwards	Very limited use in decade of city incentives for development within the DPA. With the assistance of identified opportunities and strategies from the Economic Development Plan, the city expects to use a mix of public incentives. In 2009 the city applied for EPA Brownfields Assessment grant funding to complement its Brownfields Loan Program. The City offers TIFs and would consider state grants such as CDAGs and PWEDs on behalf of significant development projects.
New Development Opportunities - Explore opportunities for greater flexibility for property owners within the DPA to support continued economic viability.	1999 onwards	The City is working closely with potential new developers and existing business/property owners within the DPA (with support of MCZM) to identify opportunities. Specific technical assistance has been provided in collaboration with DEP. In October 2009, the city and its Harbor Economic Plan consultants hosted three public lyceums on market opportunities in core marine industries. In addition, CAM and DEP have convened a task force to address serious concerns regarding the Designated Port Area regulations.

One of the central recommendations of the 1999 Plan was the formation of a Gloucester Harbor Partnership, a group comprised of property and business owners around the Harbor who would advocate for its revitalization. By pooling energy and resources, the Partnership was intended to enable these stakeholders to locate financing for improvements, prepare redevelopment plans, obtain permits, and address property contamination concerns. The 1999 Plan laid out what the function of the Partnership should be, but fell short of recommending a specific organizational structure for the Partnership. While the Partnership concept was initiated and members met on several occasions, it did not prevail. It has been suggested that interest in the Partnership failed because of a lack of both well-defined purpose and short-term direction, and because it was a volunteer group that did not have grass-roots origins, no funding support (private or public) and lacked strong leadership.

CULTURAL AND VISITOR FACILITY IMPROVEMENTS	Suggested Year of Completion from 1999 Plan	Status in 2006
Maritime Museum - Create Maritime Museum as a gateway to the waterfront and downtown	2001 2004	Gloucester Maritime Heritage Center (GMHC) was created and achieved extraordinary success based on the vision outlined in the 1999 Plan for a maritime museum. It offers exhibits of Gloucester's maritime history, a gift shop, aquarium, public restrooms, a classroom available for use by community groups and students, and several demonstration and training programs with a maritime focus. The GMHC has been effective in attracting collaborations and funding from research institutions such as MIT's Seagrant Lab and integrating these opportunities with educational opportunities. The GMHC has been fostering small craft boat building on the waterfront. In the spring of 2010, it will host the construction of a prototype vessel for the Navy.
Visitor Center - Create Visitor Center as a gateway to the waterfront and downtown	2001 2004	The City's Visitor Center at Stage Fort Park offers information and a place for visitors to orient themselves. However, it does not have a good way to get visitors into the downtown. Parking is difficult downtown and the roadway from the Park to downtown is often blocked in the summer by the drawbridge. A harbor shuttle from the Park would address this issue. The Chamber of Commerce offers visitor information downtown, but no place to park and no clear way to have the visitor get around the waterfront comfortably. The city envisions creating clear and positive connections between the excellent attractions that exist so that the visitor can more easily access these amenities which include several parks, the Maritime Heritage Center, and embarkation points for the Whalewatch operations, Schooner tours, and charter fishing boat operations.
Visitor Facilities - Create a network of related interpretive, recreational and industrial sites open to the public	2001 2004	Some businesses are offering tours and others have indicated that they intend to offer interpretation and other visitor services. Cape Ann's Society for Encouragement of the Arts (SEArts) participates in downtown and harbor events to enhance this network by introducing works by local artists and interpretive and directional signs at sites along the waterfront. Gloucester ("America's Oldest Seaport') was designated a "Preserve America" community in 2005 which led to a grant for attractive signage that now helps guide the visitor to the City.
Maritime Museum Piers and Berths - Develop berths and piers at the Maritime Museum to service water shuttles, excursions etc.	2001 2004	Seaport Bond funds were used to improve the main pier at the GMHC, with an additional grant to be used for the adjacent pier. The GMHC gives the public access and tours to historic schooners and interesting vessels that come to the port. Seaport funding will be requested for the neighboring Solomon Jacobs public landing at the Harbormaster's Office once the environmental dredging is complete by National Grid.
Recreation and Tourism Improvements - Develop waterborne tours of the Harbor and fishery and opportunities for visitors to spend time on lobster and fishing boats	2001 2004	Some private investment and entrepreneurial initiatives during the last several years have supported this recommendation. A renewed emphasis is anticipated with the expected growth in cruise ship visits and start up of ferry services, possibly to both domestic and international ports.

Studies conducted during the 1999 planning process revealed considerable market potential for more recreational and visitor activities. As a result, the 1999 Plan proposed a series of strategic infrastructure and programmatic changes to take advantage of Gloucester's historical, cultural, and natural assets. The main goal of the proposed cultural improvement strategy was to increase visitation and provide opportunities for redevelopment, clustering these improvements as much as possible to create "activity nodes" around the Harbor and also improving connections between the Harbor and downtown business district.

The Maritime Network proposed in 1999 focused on upgrading the quality of visitor experience in Gloucester through shared marketing, promoting conservation of traditional harbor areas and natural resources by all the local visitor attractions, and

showcasing the story of Gloucester to a regional and national audience. Key strategies for enhancing visitation relied upon combined ticketing to two or more sites at a reduced rate; the development of maritime industry observation sites; and water shuttle transportation. So far, there has been only minimal private interest in developing the network. A State subsidized water shuttle service was available for a limited time in Gloucester Harbor, but did not prove profitable once the subsidy stopped.

While there has been very limited buy-in to the idea of a Maritime Network to date, a number of property owners have, or expressed an interest in, incorporating visitor access to their businesses. These include Cape Pond Ice, Seafood Display Auction, Gorton's and Fisherman's Wharf.

DOWNTOWN IMPROVEMENTS	Suggested Year of Completion from 1999 Plan	Status in 2006
Downtown Hotel - Develop a new hotel downtown	2006	The City considers to strongly support the development of a downtown hotel. One multi-parcel site has been under planning for several years. Another site, the former Allied Cold Storage, incited neighborhood opposition to a hotel. Other sites have been discussed as more suitable, and the City continues to support this potential.
Rogers Street - Infill commercial development on the east side of Rogers Street. Develop nodes of activity at both ends of Rogers and Main Streets to draw visitors to the area.	2006	Some progress. New building at west intersection of Rogers and Main Streets with facilities that are open to the public located on the ground floor. A Cruise ship terminal and function hall was built in 2006 near the east intersection of these same two streets. Fishermen's Wharf building on Roger Street was replaced after it burned down. The City is actively pursuing the acquisition of the vacant I4 C2 lot between Gloucester House and Building Center with a $800,000 grant from the Seaport Advisory Council. When developed, this parcel will serve as a significant stimulant for a Rogers Street renaissance.
Rogers Street - Complete 1995 pedestrian and streetscape recommendations. Safety improvements to crossings and linking downtown to the Harbor	2001	Some conversions have occurred. Several Main Street businesses have created windows onto Rogers Street, and the full-block expansion of Cape Ann Savings Bank includes a retail level on Rogers Street with parking above. The development at 1 Main Street of a multi-story retail and residential building on a long-vacant lot provides an essential connection at this intersection of Main and Rogers. City acquisition of I4-C2 will be important to creating a hospitable walking environment along Rogers Street where currently a rusted and broken chain link fence and weeds mar this roadway.