

SALEM HARBOR PLAN



The City of Salem, Massachusetts

Mayor Kimberley Driscoll

January 2008



Fort Point Associates, Inc

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ACKNOWLEDGEMENTS

This document is not a new, completely rewritten Salem Harbor Plan but an update of the original Plan approved in 2000. Much of the text and graphics prepared by The Cecil Group, Inc for the 2000 Plan remains as part of this document. The contributions in the form of time, energy, research and thoughtful dialog made by those who participated in creating the original Plan have proven to be an invaluable foundation for this Update. Their vision for the future of Salem Harbor remains largely on target, reaffirmed by those involved in reviewing their work more than seven years after the original document was approved. For the 2008 Salem Harbor Plan Update, the support and efforts of the following are noteworthy:

Mayor, City of Salem

Kimberley Driscoll

Salem Harbor Plan Implementation Committee (HPIC)

Chair - Fred Atkins (Salem Partnership/Dions Yacht Yard)

Vice Chair - Barbara Warren (Salem Sound Coast Watch)

Craig Burnham, (Marine Professional/Ward 6 Resident)

Malia Griffin (Dominion Energy)

Walter Power (Planning Board)

Patricia Trap (U.S. National Park Service)

Annie Harris (Essex National Heritage/Salem Zoning Board of Appeals)

Kevin Cornacchio (Conservation Commission)

Lt. Conrad Prosniewski (Assistant Harbormaster/Police Dept)

Claudia Chuber (Salem Harbor Community Development Corp)

Lucy Corchado (City Councilor/Point Neighborhood Association)

Douglas Haley (Ward 1 Resident)

Peg Harrington (Ward 1 Resident)

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Kathleen Winn (Deputy Director)

Frank Taormina (Planner/Harbor Coordinator)

Consultant Team

Fort Point Associates, Inc (urban planning, environmental consulting)

Apex Companies, LLC (environmental and marine engineering)

The participation and contributions of City Council members, key harbor stakeholders and community residents during public meetings, in one-on-one interviews and with submitted comments proved to be very helpful. Research, facilitation of the public process and preparation of this Harbor Plan Update were funded by a grant from the Governor's Seaport Advisory Council (Seaport Bond Bill).

HARBOR PLAN UPDATE OVERVIEW

Attached is an Update of the 2000 Salem Municipal Harbor Plan. At the beginning of this process of updating the Plan, the City of Salem expressed a strong interest in refocusing on the waterfront's potential and presenting a strategy for improvements that would provide both near-term and long-term benefits for the City and the Commonwealth. There was general consensus from the Harbor Plan Implementation Committee, from the City, and during major stakeholder interviews completed for this Update that the 2000 Plan was a good planning document and that it still provided valuable guidance and vision for future development around Salem Harbor. There was also agreement that the Plan needed some adjustments and amplifications based on economic, port security and community/region changes that have occurred over the past seven years and in consideration of new waterfront development recently completed or proposed.

The main text and graphics used for the 2000 Plan (produced by The Cecil Group, Inc) have been updated and adjusted as necessary and remain as Chapters I through VII of this Plan. To avoid a need for a complete rewrite, recommendations in the main body of the Plan have continued to be grouped by planning area as they were in 2000. In developing this Update, the preferred approach for listing recommendations was to group the recommendations into seven general themes. This allowed for some consolidation, permitted easy comparison of similar recommendations, and demonstrated how individual initiatives supported common themes.

Following is a summary of the Updated Plan's recommendations grouped into themes:

Infrastructure

Public Access

Activation of the Harbor's Edge and Watersheet

Governance

Transportation and Marine Commerce

New Revenues

Environmental Resources

1. INFRASTRUCTURE

DREDGING

- **Develop a Salem Harbor Dredge Material Management Plan (DMMP).** *Continue efforts to locate appropriate disposal and/or reuse sites for contaminated dredged material as part of a locally sponsored DMMP.*
- **Seek U.S. Army Corps of Engineers Support.** *Continue efforts to obtain federal support for maintaining federal channels leading to and through Salem Harbor.*

- **Pending Dredging Priorities:**

***Salem Wharf / Hawthorne Cove.** To create a fully functional commercial wharf facility supporting commercial vessel operations.*

***South River.** To allow access by small boat and other water-based uses to activate the South River Basin.*

***Derby Street Flats.** To create access to new docks at the end of Kosciusko, Turner and Hardy Streets for use by dinghies and water taxi/shuttle. Expand dredged area around the conceptual idea of the Ingersoll/Tucker Wharf (see next page) for access by local residents and transient recreational boaters.*

***Winter Island.** To improve recreational boat access to this city park allowing expanded use as a fully functional hub service center.*

***Palmer Cove and Forest Park.** To improve access through the Palmer Cove Channel and the South Palmer Point Channel for Shetland Park wharf/ docks, Pioneer Village and other waterfront activities in the Area.*

UTILITIES

- **Comprehensive Survey.** *Complete a survey of all Salem Harbor seawalls & storm drains to determine current condition and set priorities for repairs and/or upgrades.*
- **Utility Infrastructure.** *Promote measures that will ensure adequate utility infrastructure exist along the City's waterfront to support existing and proposed activities. Among the top priorities are sewer connections on Winter Island and utilities for the Salem Wharf.*
- **Stormwater Drainage.** *Support the City's efforts in improve drainage during and after severe storms that impact the waterfront area. (Areas of specific concern - Winter Island, South River Basin)*

DOCKING FACILITIES

- **Salem Wharf.** Create a facility to support commercial vessel operations. See separate report on the Salem Port Expansion Plan
- **Add New Boat Docking/Landing Facilities including:**

Floating docks in South River Basin for use by dinghies and small boats.

Expanded multipurpose mooring and berthing facility on NPS's Central Wharf to accommodate visiting historic and marine education/research vessels, harbor tours, and possibly some larger transient private vessels.

Additional wharves/docks on Winter Island for recreational boat services including pump out and refueling, dinghy dock for boats using WI moorings, water shuttle, and, if it can serve as a revenue source for the City, a public marina.

Landing and floats at end of Hardy and Turner Streets for water shuttle/taxi and dinghies.

Water shuttle landing at Forest River Park (Pioneer Village).

- **Construct Ingersoll/Tucker Wharf.** *Explore the feasibility of constructing a new publicly owned wharf or dock off National Park Service (NPS) property near the water end of Kosciusko Street extending out to the north end of the Derby Wharf anchorage.*
- **Construct Shetland Park Wharf.** *Explore the feasibility of constructing a new wharf off the Palmer Cove Channel with floats running north along the seawall into the South River.*

WINTER ISLAND

- **Renovate and Reuse former U.S. Coast Guard Barracks Building.** *Act on findings from the 2007 Reuse Study to restore the former barracks building for public, non-commercial use(s).*
- **Renovate and Reuse former U.S. Coast Guard Hangar Building.** *Determine cost/benefit of repairing/restoring the old hangar building and identifying uses that would provide new revenue for the City giving priority consideration to recreational boat services.*

- **Add More Facilities for Recreational Boats.** As outlined in other recommendations these could include dredging, docking facilities, utilities, rest rooms with outdoor showers, and other infrastructure that will support efforts to create a full service port for recreational boats.
- **Consolidate Space Used for Recreational Vehicle (RV) Camping and Tenting.** Move RV and camping area to a consolidated location on Cat Cove side of Island.
- **Upgrade Park Landscaping.** *Implement a program of landscaping improvements throughout the park, including site furniture at appropriate locations (e.g. picnic area), improved lighting and landscape buffers visually separating other park uses from the camping area and from views of power plant and waste treatment facility.*
- **Construct a new Covered Stage.** *Add a performance stage and backdrop taking advantage of the natural amphitheater near the hangar.*
- **Expand Electrical Service.** *Add new electrical service to the trellis area to broaden the types of activities able to be accommodated there and to other park areas that could effectively support expanded uses by recreational boats.*
- **Upgrade Beach Facilities.** *Make improvements, such as outdoor showers, to promote the continued enjoyment of swimming at Winter Island. Reconstruct the path between the Fort Pickering and the beach.*
- **Protect, Preserve and Improve Appeal of Fort Pickering**
 - *Stabilize the transition between the ramparts of Fort Pickering and the shore.*
 - *Erect an exclusion fence to prevent uncontrolled access from damaging the fragile fort structures and landscape.*
 - *Erect a safety fence at the top of the earthworks and at the perimeter of the Fort to protect the public from the thirty-foot drop to the shore.*
 - *Repair/replace historic interpretative and directional signs around the fort.*
 - *Recreate the original moat around Fort Pickering, which was filled during the 1930's, including a replica of the original timber bridge that crossed the moat.*
 - *Create a sharper definition of the earthworks at the Fort.*
 - *Rehabilitate the entrance to the ammunitions bunker and add lighting to the underground portions of the bunker to make this historic site accessible to visitors.*
- **Restore and Repair the Winter Island Lighthouse.**

2. PUBLIC ACCESS

- **Expand the “Salem Harborwalk”.** *Continue to pursue every opportunity to create a continuous walkway along the harbor’s edge from Forest River Park to Winter Island and the Willows. In the near term, use City and Seaport Bond funds to complete the Harborwalk along the west end and south side of the South River Basin. Where links are missing, define safe and inviting inland routes using existing sidewalks/pathways to connect completed Harborwalk sections. Through Chapter 91 licensing, ensure that Harborwalk sections are completed as part of private development. On Winter Island, construct a safe and pleasant walkway and bikeway, separate and buffered from the existing park access road.*
- **Create Public Accessways and View Corridors to the Water’s Edge.** *Support new construction that is consistent with the character of the neighborhood and respectful of existing views or creates new views to the water. Promote inviting and easily accessible pedestrian connections between the waterfront and both the downtown and near-waterfront neighborhoods at various points within the planning area. In the South River Basin, this should include new connections across Derby Street to the waterfront as approximate extensions of both Liberty and Central Streets and, where feasible, these connections should be included as integral parts of new development. Pleasant pedestrian walkways and open spaces at the Salem Wharf site should be created to provide a clear and pleasant route for both residents and visitors between Derby Street and the Wharf.*
- **Improve Waterside Access to Salem’s Waterfront.** *Develop and promote Salem Harbor as a **Welcoming Full Service Port for Recreational Boats**. Add services and facilities that will attract more boaters including mooring and dock space, repair and supply services, landside transportation, and a generally welcoming atmosphere. Promote those services already available including boat yards, marinas and waterfront attractions. Also promote the expansion of ferry services to encourage more visitors to arrive by water routes.*
- **Develop and Implement a Streetscape Improvement Program.** *These improvements should be for both vehicular and pedestrian routes through the waterfront planning area and should also promote connections to downtown and to local neighborhood attractions and businesses. They should have a consistent design establishing an identity for the waterfront and a sense of continuity. Elements should include appropriate sidewalk paving, street furniture, trash and recycling receptacles, lighting and planting. These improvements should extend through the east end of Derby Street and along Fort Avenue to promote pedestrian and bicycle access between downtown and the Salem Wharf and on to Winter Island and the Willows. Attention should also be given to side streets connecting to the water’s edge including Kosciusko Street, Daniels Street/Court, Hardy Street and Turner Street.*

- **Create Waterfront “Gateways”.** Establish two new “gateways” to the waterfront as symbols of welcoming and to reinforce the identity of the area. The first leading into the South River Basin near the corner of Derby and Lafayette Streets and the second at the northeast corner of the Congress Street Bridge inviting visitors out onto Pickering Wharf and beyond to outer Salem Harbor.
- **Establish a System of Informational and Directional Signs.**

A comprehensive citywide sign program has been developed for the City. Efforts should continue to implement the program.

Directional signs should lead vehicular traffic to the Salem waterfront and harbor attractions.

A “path finding” sign strategy oriented toward pedestrians and people on bicycles should allow visitors to easily find their way through downtown Salem and along the waterfront.

Directional signs should be complemented with site information and historic interpretative signs that support the theme of a waterfront distributed maritime history museum.

- **Create “Pocket Parks” on Publicly-owned Parcels.** *The immediate focus should be on a park around the South River including 15 Peabody Street and improvements to City-owned land near the corner of Derby and Lafayette Streets to create a gateway to the waterfront. Should also create small park-like outlooks at the ends of streets extending south from Derby Street in the Tourist Historic Harbor planning area.*
- **Improve Vehicular Access and Parking.** *This should be accomplished through intersection redesign, street improvements and balancing the provision of community amenities, such as parks, with the need for parking for neighborhood residents and businesses.*
- **Provide Visual Buffers or Improve Appearance of Port’s Industrial Elements.** *Create landscape buffers and other aesthetic improvements to mask less attractive elements of the power plant, electric substation, and waste water treatment plant infrastructure. At the South River site, this should include encouraging the removal of the existing “prison-like” barbed-wire fencing, replacing it with a more attractive security perimeter soften by a landscaped buffer. This Plan also recommends that operations on the site be moved to the building’s interior, to the extent feasible. Green space should also be integrated into the existing parking space on the National Grid site at Congress and Peabody Streets. Promote and support a graphic design program to improve the appearance of the oil tanks and other infrastructure in the DPA, where practicable, that detract from the visual appeal of the district.*

LONGER TERM INITIATIVES

- **Increase Public Access around Shetland Park.** *Create a Harborwalk along the water's edge connecting Pickering Wharf to the South River Basin and Palmer Cove.*
- **Improve and Enhance Public Access to Palmer Cove.** *This should include improvements to the beach and park.*
- **Create Facilities to Support Water Taxi/Shuttle Service to Forest River Park.** *Construct landside support for a water shuttle service at Pioneer Village, and conduct necessary dredging to facilitate this service.*
- **Encourage Appropriate Private Development along the South River.** *This would include the redevelopment of the substation site, with public open space and buildings consistent with neighborhood character.*
- **Use Chapter 91 Licensing to Realize Long-term vision for Harbor.** *Provide for additional public access to the waterfront through Chapter 91, easements, acquisition of properties, or use of existing public areas.*

3. ACTIVATION OF HARBOR'S EDGE AND WATERSHEET

- **Support National Park Service (NPS) Programs and Improvements.** *Cooperate with NPS in their current and ongoing initiatives to activate the Salem waterfront. NPS plans include constructing interpretive exhibits for visitors, improving accommodations for visiting historic and recreational vessels, restoring a number of historic buildings and gardens, cleaning Derby Beach, completing various streetscape improvements, and more active use of their tall ship "Friendship".*
- **Encourage Businesses that Promote the Public's Enjoyment of the Harbor and its Waterfront.** *These should include waterfront businesses that help activate the Harbor and the water's edge. On the north-side of the South River, for example, the Plan supports an increase in the number of facilities of public accommodation. Efforts should be made to attract water-dependent ventures such as the Schooner "Fame", kayak rentals and whale-watch boats.*
- **Develop and Promote a Distributed Salem Maritime History Museum.** *This includes connecting sites through transportation links (e.g. water shuttle, trolley) and pedestrian pathways well marked with both directional and interpretive signs.*
- **Celebrate the Maritime Heritage of Salem's Waterfront.** *Promote events, programs and design elements that recognize and promote the rich maritime history of Salem Harbor, encourage community participation, and strengthen neighborhood identity and pride in this legacy.*

- **Celebrate Waterfront Neighborhoods' Cultural Identity.** *Promote programs that will serve to reinforce and celebrate the identity of the waterfront neighborhoods. This should include expressing the rich cultural heritage of the community in design efforts, such as murals, paving and other public art projects that involve the collaboration of residents, artists and designers. For example, annual waterside events, such as a parade of floats or celebrations linked to the annual Hispanic festival, might serve this purpose.*
- **Encourage More Public Water-dependent Activities.** *This is supported by several other recommendations in this Plan. Particularly important are facilities and services that cater to transient boaters allowing boaters easy access to waterfront attractions, events and retail establishments. In addition to private recreational boats, activities should include sailing programs, harbor tours, water shuttles/taxi services, and others that will draw the public out onto the water.*
- **Add a Variety of Public Amenities along the Waterfront.** These amenities should enhance the public enjoyment of the harbor and include public restrooms, benches, observation platforms, water access points, telescopes and a mix of facilities of public accommodation including outside dining, spaces to escape adverse weather, etc.
- **Add a Performance Barge on the South River.** *This floating platform would offer a stage for live concerts, community events and even outdoor movies, envisioned primarily to attract local residents to the waterfront during the summer. Ideally this would be positioned off the new park at 15 Peabody Street to be viewed from this park and so as not to interfere with boating traffic in the east end of the South River Basin.*

4. GOVERNANCE

- **Continue the Staff Position of Harbor Coordinator in Department of Planning and Community Development (DCPD).** *Provide required management structures that will ensure resources and staff support for implementing and, as needed, updating/amending the Harbor Plan. A full Update should be completed at least every ten years.*
- **Continue the Harbor Plan Implementation Committee.** *This standing committee should track and encourage Harbor Plan implementation efforts, review waterfront development proposals, and lead future initiatives to amend or update the Salem Harbor Plan.*

- **Create a Salem Wharf Development and Management Entity.** *Options and recommendations will be presented to the City and the Port Management Committee as part of the Salem Port Expansion study expected to be completed in early 2008.*
- **Create a Winter Island Development and Management Entity.** *This entity could either be a new management body or carried out by the City Parks, Recreation and Community Services Department.*
- **Enhance Strategic Maritime, Historic, Arts, Cultural, Tourist and Business Cooperation.** *Through the efforts of Destination Salem and DPCD continue cooperative efforts to improve the visitor experience on the Harbor and along the waterfront and maximize the potential public benefits associated with tourism. Develop funding mechanisms for the operations of tourist business alliances to ensure their effectiveness in the long-term including the Distributed Maritime History Museum initiative.*
- **Create a Port Security Task Force.** *This group should be comprised of representatives from local, state and federal law enforcement and emergency response agencies and organizations with areas of responsibility that include Salem Harbor. The group should meet regularly to coordinate possible response scenarios and develop/update a Port Security Plan.*

5. TRANSPORTATION AND MARINE COMMERCE

- **Construct Salem Wharf.** *This facility is planned to be located off of 10 Blaney Street and would support a variety of commercial water-dependent uses offering deep water access to ocean going vessels such as cruise ship and off-shore operations support vessels while potentially offering berthing for local excursion boats, head boats, commercial fishing boats, inner harbor shuttles, water shuttles and taxis, marine construction and mooring service operations, and other commercial boating activities.*
- **Support and Encourage Water Transportation.** *In addition to the Salem Ferry connecting Boston and Salem, this initiative should explore other regional ferry connection opportunities, cruise ships, excursion boats, harbor tour boats and water shuttle/water taxi service. The economic feasibility of a harbor water shuttle or Loop should be explored. The shuttle would be a critical element for the success of the distributed history museum initiative connecting historic and recreational sites including offshore island such as Misery and Bakers. Trips could originate from Winter Island and/or Forest River Park where extensive parking exists.*
- **Support Continued Present and Future Marine Industrial Uses in the Designated Port Area (DPA).** *The creation of the Salem Wharf is considered to be the single most important opportunity to attract new and expand existing marine industry in the Port of Salem. For the foreseeable future, electric energy production is anticipated to be the primary marine industry within the remainder of the DPA.*

- **Prohibit Operation of Gambling Cruises out of Salem Harbor.** *This is a continuation of a restriction includes in the 2000 Plan. This does not include cruise ships, ferries or other marine businesses whose main purpose is not to offer opportunities for gambling.*
- **Develop an Overall Transportation Strategy for the Waterfront.** *This should include parking needs, optimal traffic circulation, alternate transportation options, links to both land and water-based public transit, and satellite parking facilities. Parking for and vehicular access to the Salem Wharf site are particularly important to address. Two-way traffic on Derby Street east of Blaney Street will likely be needed to allow vehicles to access the Salem Wharf site without using the narrow streets within the historic Derby Street Neighborhood.*
- **Consider Flexibility in Future Dock Space for Commercial Fishing Vessels.** *With the offshore stocks of commercial valuable ground fish expected to return to sustainable levels by 2014, the Port of Salem may be in a position to serve as homeport for some of the new vessels expected to enter the New England fleet with nearby Gloucester, Massachusetts providing primary North Shore support services (e.g. auction, bait, gear, ice, etc). Lobster boats will also continue to be part of the local commercial fishing fleet.*

6. NEW REVENUES

- **Use the Waterfront as a Unique Asset to Attract More Visitors to Salem.** *Promote the many improvements made, the Harbor's rich maritime heritage, new waterfront programs and resources, and outstanding access to the water's edge.*
- **Provide Expanded Services for Recreational Boats.** *Winter Island and the South River Basin offer the best opportunity for increasing the number of visitors arriving by recreational boats. Additional and expanded services should provide new revenue streams for the City as the Harbor becomes known as welcoming port for recreational boaters*
- **Pursue Opportunities to Generate New Revenues from Salem Wharf Operations**
- **Continue to Allow R/V Camping on Winter Island.** *Create a design for the Island Park that continues to attract these users and the revenues they provide but does not impact views from and aesthetics of island for other park visitors. Continue to offer quality services to RV customers to ensure that adjustments do not negatively impact this revenue source.*

7. ENVIRONMENTAL RESOURCE

- **Promote Measures that will improve and enhance the Environmental Quality of Salem Harbor.**
- **Encourage and Support Eco-Friendly Forms of Transportation.** *These should include bicycles, pedi-vehicles and walking rather than just adding more parking and widening streets.*
- **Support Environmental Impact Improvements and Alternative Forms of Energy Production (long term) within the DPA.** *The Industrial Port planning area with its DPA is envisioned to continue to be a site suitable and appropriate for energy production into the foreseeable future. As new/alternative energy sources evolve (e.g. solar, wind, geothermal, tidal), this site should continue to be consider for supporting different energy production technologies and operations.*

I. SUMMARY



I. SUMMARY

Introduction

The City of Salem and its citizens have created this Plan to guide the future use and character of its central waterfront. Salem seeks to enhance the maritime orientation of the area and to enhance the harbor's contribution to the quality of the community for residents and visitors alike. This Plan for Salem Harbor is a framework for guiding development and preservation choices facing the City. The Salem Harbor Plan provides an important basis for the City and the Commonwealth of Massachusetts to employ shared approaches to the development and regulation of waterfront areas that are subject to public rights and interests. Importantly, the Harbor Plan outlines the implementation requirements associated with achieving a vision for Salem Harbor.

This Plan has been prepared under the guidance of the Harbor Plan Implementation Committee (HPIC) appointed by the Mayor. It has been developed through a process that included extensive citizen participation and the involvement of landowners and waterfront interests. Numerous agencies, private institutions and associations have contributed to the development of the Harbor Plan.

The Vision

Just as Salem Harbor was at the center of the City's illustrious past, it holds great potential for shaping its future. The Harbor Plan describes opportunities to unlock the significant potential benefits that such a resource represents for the City and its residents. The Harbor Plan outlines a *comprehensive strategy* for protecting and enhancing the economic, environmental, historic and cultural resources related to Salem Harbor. This effort has sought to achieve a balance between the residential and business needs of the adjacent neighborhoods, opportunities for the entire city, and the potential of the waterfront as a regional resource.

A number of exciting initiatives already underway in the City will serve as building blocks for future opportunities. The success of the Salem Ferry has brought interest to and enlivened the site proposed for the Salem Wharf. The arrival of the vessel *Friendship* and other National Park Service projects are serving to highlight the waterfront's rich heritage and its potential for transformation. The recently completed and proposed privately funded development on Pickering Wharf and along Derby Street and publicly funded projects that will create a new park at 15 Peabody Street and a Harborwalk along the south side of the South River have and/or promise to stimulate activation the South River. Salem State College's initiatives at the Northeast Massachusetts Aquaculture Center underscore the educational and research potential of Salem Harbor.

The vision for the future of Salem Harbor sees a *vibrant seaport* affording a high quality of life for residents while maximizing the public benefits inherent in this unique resource. The original Harbor Planning Committee's mission statement guided the creation of this vision:

Reclaim Salem's identity as a vibrant seaport, which makes use of its waterfront for a variety of commercial and recreational waterside activities, and has high quality landside facilities necessary to support these activities at an environmentally beneficial and economically sustainable level. Such waterside activities and landside facilities should preserve the City's distinguishing historic character and ultimately enhance the quality of life in the City for residents, visitors and businesses.

In this Plan, connections between the downtown and the waterfront are clear and opportunities to enjoy the harbor are plentiful, both at its edges and on the water. The City is able to realize the economic potential of such a resource and the resultant public benefits enhance the quality of life for those who live and work there. The harbor is seen as a lively source of activity throughout the year, a place where the waterfront's heritage is celebrated in many ways. Every improvement called for in the vision is considered in terms of its potential to meet the highest standards of environmental quality. Within the context of this overall vision, the Harbor Plan is tailored to the specific qualities of the diverse areas along its edges.

This vision sees Salem Harbor re-invigorated throughout the central waterfront area in a manner that ensures *environmental excellence*. Potential for new waterside activities is abundant throughout the area. The South River can be reclaimed as a source of public enjoyment both on the water and along its edges. In the vicinity of Derby Wharf, the National Park Service improvements set the tone for an emphasis on tourism that celebrates the City's rich cultural and historic maritime heritage. The Salem Wharf proposed for the site of the new ferry service will bring opportunities for a broad range of new waterside activities of the highest quality, ranging from cruise ships to a broad mix of smaller commercial vessels. The vision for the area around the power plant calls for supporting the continuation of water-dependent industrial uses and promoting environmental impact improvements at the site. In the Winter Island area, the vision proposes a beautifully landscaped park offering the community and visitors new opportunities for recreational boating as well as passive enjoyment of the park.

New water transportation opportunities are identified throughout the waterfront. In addition to seasonal ferry service to Boston and possibly to Gloucester and even Provincetown, a new water shuttle service on a defined route between waterfront attractions could connect Winter Island / Fort Pickering, the Salem Wharf / House of Seven Gables, Central Wharf / National Historic Maritime Site, Forest River Park / Pioneer Village, and even some of Salem's offshore islands. This would complement an existing private water taxi service. As dredging is completed and float docks are added in the South River, recreational boaters will be attracted to this area allowing visitors arriving by small boat to land close to downtown attractions/restaurant and the City's retail. In the vicinity of the power plant, existing ocean-going commercial vessels will continue to make port calls supporting the district's marine industry.

In line with all of the new activity on the water, the vision calls for establishing *new view and public access corridors* connecting the waterfront with nearby existing walkways and other inland public spaces and popular attractions. The long-term vision for Salem Harbor is to create a continuous "Salem Harborwalk" along the entire water's edge from Palmer Cove to Winter Island including a

segment encircling the South River Basin. Such a goal recalls Salem's early days when "ye sea" was as widely embraced a concept as "ye common", and the public was assured access to the water.

Missing segments of the proposed Salem Harborwalk in the central waterfront should be developed in the near future wherever public right-of-ways currently exist. Connections between existing and newly created segments should be enhanced by streetscape improvements along Derby Street and connecting side streets. A comprehensive sign and streetscape system would also serve to strengthen connections between the waterfront and both the downtown and adjacent residential neighborhoods. Over the long-term, the Plan proposes that missing links in the system be completed as requirements under the Chapter 91 license process.

In the Blaney Street area, pedestrian access to the waterfront will be increased significantly through a series of pathways as part of the overall Harborwalk, leading to the site of the Salem Wharf. The Harborwalk to Winter Island will be clearly indicated with sign and streetscape improvements along Derby Street and Fort Avenue on the northern edge of the power plant site. At Winter Island, the Harborwalk and a pleasant bikeway will wind along adjacent to the existing access road to bring pedestrians and cyclists down to the water's edge. In addition to improved pedestrian and bicycle access through the waterfront planning area, the Plan supports the need for a public trolley service, many of the elements currently provided by two private trolley services already in available to the public.

This vision for Salem Harbor also calls for creating *new public open spaces* as well as improving existing parks along the waterfront. Recommendations include developing a series of pocket parks along the South River, supporting National Park Service initiatives and creating a number of new scenic lookouts within the central waterfront area (e.g. Pickering Wharf, Turner, Blaney and Kosciusko Streets, Shetland Park). Pleasant new open spaces will be an integral element in the design of the Salem Wharf area. A program of improvements at Winter Island Park is intended to enhance community enjoyment of this unique waterside amenity.

Finally, the Plan seeks to ensure that the quality of life in Salem's neighborhoods is enhanced by the improvements proposed. Recommendations include a streetscape program to improve the public realm in the vicinity of the harbor; utility upgrades to ensure there is adequate capacity to accommodate new uses; and a transportation and parking strategy that will address issues associated with increased traffic and demands for parking.

II. INTRODUCTION



View of Salem Harbor

II. INTRODUCTION

Overview

This Plan was prepared in compliance with the requirements for a Municipal Harbor Plan as stipulated by the Commonwealth of Massachusetts Office of Coastal Zone Management (MCZM). As a Municipal Harbor Plan, this document is intended to establish a consistent regulatory approach to those lands and waters subject to Commonwealth jurisdiction. The Commonwealth retains specific interests in the future of the harbor for public access and water-dependent uses through M.G.L. Chapter 91 (Public Waterways Act, 1866), and through the implementing regulations (310 CMR 9.00). The Commonwealth has also identified a segment of Salem Harbor as a Designated Port Area (DPA). Within the DPA, the intent of state policy and programs is to encourage water-dependent industrial uses. This Harbor Plan also serves as a DPA Master Plan, establishing specific local goals, objectives and actions to achieve state policies.

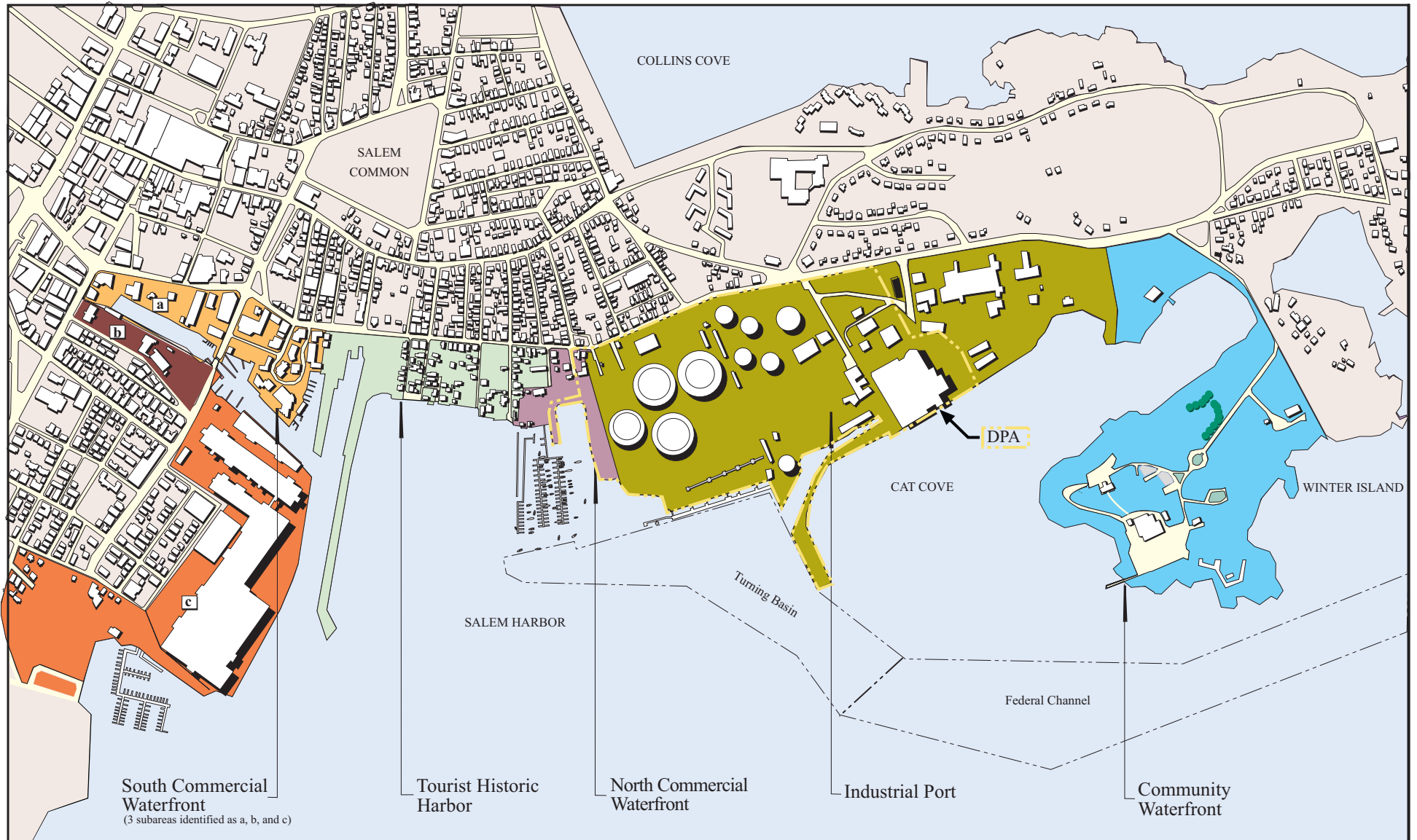
The Harbor Planning Area

The Harbor Planning Area encompasses the Salem shoreline and adjacent landside areas between Winter Island and Palmer Cove. The upland boundary is defined by the public roadway closest to the water's edge, which for most of the planning area is Derby Street and Fort Avenue. The southwest part of planning area has been expanded slightly from the area used in the 2000 Plan to encompass more of the Harbor's filled tidelands.

The overall Harbor Planning Area is divided into five districts as shown on Figure 1 and defined below.

1. The South Commercial Waterfront. This portion of the waterfront is adjacent to and on the waterside of the Point Neighborhood. It includes Pickering Wharf, the South River Basin (defined by Congress, Peabody, Lafayette and Derby Streets), Shetland Park, Palmer Cove Yacht Club and the Palmer Cove Playground out to the public streets immediately surrounding the playground. Because of the complex mix of uses within this sub-district, it has been further divided into three sub-areas: "A" - Pickering Wharf and the north and west side of the South River Basin; "B" - the south side of the South River Basin, primarily comprised of a parcel owned by National Grid, and "C" - Shetland Park and Palmer Cove.
2. The Tourist Historic Harbor. The Tourist Historic Harbor centers around Derby Wharf and includes waterfront historic sites, such as the Salem Maritime National Historic Site to the House of the Seven Gables. Landward, this sub-area extends to Derby Street and the adjacent waterfront neighborhood.

Figure 1: PLANNING AREAS



SALEM HARBOR PLAN



3. The North Commercial Waterfront. This part of the planning area extends from Hawthorne Cove Marina to the edge of the power plant, and includes parcels proposed for the public or public/private construction of the new Salem Wharf. The DPA extends into this planning district and encompasses the site of the proposed wharf.
4. The Industrial Port. Located at the end of the deep-water channel that leads into Salem Harbor, the Industrial Port encompasses the Dominion Energy Salem Station Power Plant, the former Northeast Petroleum fuel oil distribution facility, the South Essex Sewage District Treatment Plant (SESD), and the Federal Channel. The DPA comprises most of this district with the exception of the SESD.
5. Community Waterfront. This area occupies the northernmost portion of Salem Harbor and includes Cat Cove, Winter Island and Smith's Pool. Winter Island is the largest recreational space on the inner harbor and is used for such activities as camping, picnicking and walking by residents and visitors alike. With its pier and boat ramp, it is also the site of numerous marine related activities mostly supporting recreational boats. Sharing the island with the public park and within this planning district is the Plummer Home for Boys. Bordering the Community Waterfront are the South Essex Sewage District treatment plant, the west end of the Salem Willows Park, the Winter Island neighborhood and Juniper Cove.

In addition to consideration of these five districts, the Harbor Plan has taken into account the relationship between the Harbor Planning area and the surrounding harbor and community context to ensure proper coordination with other issues and initiatives that are linked to the Harbor and the recommendations of this Plan.

The Planning Process

The planning initiative that produced the original Salem's Harbor Plan was formally started in 1996 through a public process that served to establish the key issues that would need to be addressed by the Plan. A Harbor Planning Committee was appointed by the Mayor to create a Scope for the Plan. This committee worked closely with MCZM to fulfill the procedural requirements associated with a Municipal Harbor Plan. A consultant team led by ICON architecture, Inc. assisted in this process through funding provided by MCZM. Initial research of existing conditions was undertaken to establish key issues. Discussions were held to identify the geographical limits of planning area. Surveys of the public were conducted and public meetings were held to valid the project's Scope. In June 1997, the Scope for the Salem Harbor Plan was completed and approved by the City. This was subsequently approved by the Secretary of Environmental Affairs.

The final Salem Harbor Plan was developed by the Harbor Planning Committee during a year-long process that officially began in January 1998. The planning process was managed by the Planning Department of the City of Salem with assistance from a consultant planning team led by The Cecil Group, Inc.

The development of the original Harbor Plan involved several preliminary studies that produced separate reports. This effort began with the *Salem Harbor Today* initiative which focused on gathering information from existing studies and from residents of Salem to provide insights into the key harbor-related issues facing the City. This was followed by the *Salem Harbor Tomorrow* study that identified potential opportunities for change as well as acknowledging those characteristics and resources that the community would like to preserve and enhance. The report from this phase of the harbor planning process produced a set of goals and objectives, as well as criteria to be used in evaluating proposed alternative concepts. Working with the Harbor Planning Committee, the consultant team then prepared a report on *Strategic Alternatives* that presented a set of baseline improvements including projects and policies that should definitely be pursued. Then, alternative scenarios were created to explore the potential of various public and private improvement options for the Harbor. These included:

- Alternative One: Strategic Investment to Reclaim the Waterfront - This strategy would concentrate investment in particularly promising locations within the harbor planning area. This program of improvements included the minimal levels of investment in opportunities necessary to initiate reclaiming Salem's waterfront as a resource and re-establish connections to the Harbor.
- Alternative Two: Maximum Investment to Reinvigorate the Waterfront - This option built upon improvements outlined under Alternative One, calling for an ambitious program of public and private investment and mixed-use development at the harbor. Alternative Two saw the harbor as a vibrant source of both waterside and landside activities which would accommodate a wide array of active uses.
- Long-Term Improvements - These improvements are desirable in the long term, but may not be practical in the short-term, or may require substantial investment that may be difficult to achieve. These proposed changes would nevertheless represent worthwhile improvements that should be clearly encouraged through public policy for future consideration and action.

The fourth and final step completed prior to developing the Salem Harbor Plan included an extensive evaluation of the proposed alternatives to fully inform the Harbor Planning Committee's decisions. Using the Committee's Evaluation Criteria, each alternative was evaluated for its economic implications, regulatory requirements, transportation impacts, infrastructure requirements, and marine infrastructure impacts. This effort included development of a preferred approach and the report *Feasibility Assessment*.

Each of these four studies produced separate, stand-alone documents that served as the basis for the development of the Salem Harbor Plan as it was approved in 2000.

An economic analysis of the feasibility of creating a new Salem Wharf also contributed to the preparation of the Harbor Plan. This study reviewed the economic market conditions that could contribute to the development of a mixed-use maritime facility. The study investigated the conditions at a preferred site on the west end of the Harbor's DPA. Site plan options were explored and economic feasibility projections were created. The results of this analysis were presented to the Harbor Planning Committee and the relevant conclusions were incorporated into

a separately bound Appendix: *Report on the New Salem Wharf* that was included as part of the 2000 Plan.

The 2000 Harbor Plan was prepared in close coordination with a parallel effort intended to resolve important issues concerning potential future dredging and dredged material disposal in Salem Harbor. MCZM completed a major statewide effort that produced a Dredged Material Management Plan (DMMP) for key ports, including Salem. This effort focused on identifying long-term disposal sites for dredged material unsuitable for unconfined ocean disposal. Taking a long-term comprehensive approach to solving these issues is intended to minimize costs and streamline the planning process for future projects over the long run. A Dredging Committee, with overlapping membership with the Harbor Plan Implementation Committee, was formed to help ensure close coordination between the Harbor Plan and the DMMP.

The state-approved 2000 Salem Harbor Plan served to guide waterfront development and public infrastructure projects in the Harbor through 2006. At that time Salem's mayor began the process of updating the Plan by first appointing a new 16-member Harbor Plan Implementation Committee with continuity provided by several members who served on this committee in the 1990s when the original Plan was created. Funding for this work was provided by the Seaport Advisory Council, a scope of work was developed and accepted by the State. In early 2007, the City selected a consultant team to lead this project. A contract was awarded in March and work officially began.

The scope included:

1. Completing an analysis of the 2000 Salem Harbor Plan
 - Identifying accomplishment since 2000
 - Identifying parts of the Plan that are no longer applicable
2. Developing recommendations to update the Plan
 - Analyzing current and prospective development in the Plan area
 - Identifying and correcting inconsistencies within the Plan and updating charts/maps and figures as needed.
 - Updating the Action Plan with next steps and entities responsible for implementation
3. Supporting/facilitating discussions of the Harbor Plan in a variety of public forums including Harbor Plan Implementation Committee and general Public meetings.
4. Preparing an update for the Plan and then providing necessary technical support during review and approval at the local and State level including preparation of an updated compliance document.

In addition to a dozen meetings/workshops with the Harbor Plan Committee and a number of separate sessions with City and State officials and with waterfront developers, the consultants completed several individual interviews with key waterfront stakeholders. A summary of stakeholder comments is included as an appendix to this Plan. The consultant team also completed a planning level bathymetric survey of the Harbor which has also be included in this Updated Plan.

A Guide to the Planning Recommendations

The following graphic summary is presented to help navigate through this document. The report includes summaries of the key issues which are listed within boxes in each of the planning area sections. The recommendations are found in sections discussing area-wide issues and implementation of the Plan as well as each of the planning districts: South Commercial Waterfront, Tourist Historic Harbor, North Commercial Waterfront, Industrial Port, and Community Waterfront. The location of each section and the issue boxes are identified by page number.

Area-Wide Recommendations

see page 24

Navigation and Waterside Use

- *Maintenance dredging and local Dredged Material Management Program.*
- *Environmental quality in Salem Harbor.*
- *A full service port supporting recreational boating*

Landside Use

- *Waterfront distributed maritime history museum*
- *Pedestrian access along the harbor's edge.*
- *Prohibition of gambling boats.*

Infrastructure

- *A consistent and coordinated streetscape program.*
- *Informational signs and a citywide sign strategy.*
- *Pedestrian connections between the waterfront and the downtown.*
- *A transportation management strategy.*
- *Comprehensive engineering survey of waterfront infrastructure.*

South Commercial Waterfront

see page 38

Navigation and Waterside Use

- *Activate the South River.*
- *Water-dependent uses of the Shetland Park waterfront.*
- *Dredging of the South River.*

Landside Use

- *"Gateways" to the waterfront.*
- *Connections between downtown and the South River.*
- *New public open spaces and Harbor Walk around South River.*
- *Additional parking to support new development and Point neighborhood.*
- *National Grid substation.*
- *Community identity and celebration of its cultural heritage.*

Infrastructure

- *Vehicular and pedestrian access.*
- *Sign and streetscape improvements.*
- *Stormwater drainage and seawall*

Long-Term Recommendations

- *Continuous public access along entire water's edge.*
- *Water shuttle service to waterfront attractions.*
- *Commercial Wharf at entrance to Palmer Cove (Shetland Park).*
- *Private development along the South River.*

Tourist Historic Harbor

see page 49

Navigation and Waterside Use

- *Additional floats and docks.*
- *Water shuttle service and other boating activities.*

Landside Use

- *Streetscape improvements.*
- *Harbor outlooks at ends of streets.*
- *Walkway improvements along public rights-of-way and other public access.*
- *National Park Service (NPS) programs and improvements.*
- *Landside support facilities for a water taxi and shuttle service.*
- *Activities and design elements that celebrate the cultural and maritime heritage.*
- *Facade improvement programs.*

Infrastructure

- *Dredging.*
- *Public infrastructure (stormwater drains, seawalls).*

Long-Term Recommendations

- *Additional docks and wharves replicating 19th century conditions*

North Commercial Waterfront

see page 56

Navigation and Waterside Use

- *Dredging*
- *New vessel berthing for commercial water-dependent activities (new Salem Wharf).*
- *Excursion boats, water shuttle, ferries, cruise ships and other commercial vessel operations*

Landside Use

- *Consistency of uses with Designated Port Area requirements.*
- *Shoreside support for water-dependent uses.*
- *Streetscape improvements along Derby Street.*

- *Pedestrian connections, walkways and open spaces.*
- *Neighborhood identity, local history and cultural identity.*

Infrastructure

- *Managing increased traffic and parking.*
- *Adequate and safe vehicular and pedestrian access.*
- *Public infrastructure (stormwater drains, seawalls).*

Industrial Port	see page 60
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Navigation and Waterside Use

- *Support existing and future marine industrial uses.*

Landside Use

- *Streetscape and landscape improvements along the Dominion Energy site.*
- *Improve or mask appearance of oil tanks and other unappealing industrial infrastructure.*
- *Continue environmental improvements.*

Community Waterfront	see page 63
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Navigation and Waterside Use

- *A water shuttle service and harbor tours.*
- *Floats at the existing pier.*
- *Expanded services for recreational boats.*
- *On-water programs (sailing, kayaking)*

Landside Use

- *Streetscape improvements along Fort Avenue*
- *Separate walkway/bike path out to Winter Island.*
- *Facility improvements throughout the park.*
- *Recreational vehicle (RV) camping and tenting.*
- *Landside support facilities for water shuttle service and harbor tours.*
- *Swimming at Winter Island.*
- *Re-use of the former Coast Guard hangar and barracks.*
- *Fort Pickering and lighthouse improvements.*
- *Public marine science education and tours at Cat Cove Lab*

Infrastructure

- *Sewer improvements for Winter Island.*

Implementation Plan

see page 71

Management

- *Port Operations authority or commission.*
- *Open Space and Recreation Oversight Committee.*

Coordination

- *Harbor Plan Implementation Committee.*
- *Port Security Group*
- *Improving the visitor experience and maximizing public benefits.*
- *Strategic marketing to promote Salem as a visitor destination.*
- *Funding mechanisms for the operation of tourist businesses.*

Economic Development

- *A new management entity for the development of the New Salem Wharf.*
- *Financing mechanisms to support the New Salem Wharf.*
- *Redevelopment and operation of Winter Island.*

Resources

- *Waterfront Enterprise Fund.*

Regulatory Environment

see page 101

Chapter 91

- *Substitutions and offsets for development standards around South River*
- *Public access, view corridors and Harbor Walk*
- *Increased waterfront and on-water activity.*
- *Support for a Designated Port Area (DPA).*
- *Expanded planning area*

III. FRAMEWORK FOR PLANNING



Existing and Proposed South River Harborwalk

III. FRAMEWORK FOR PLANNING

Summary of Existing Conditions

An extensive analysis of existing conditions was undertaken as the first step of the planning process. The following brief summary provides a general overview and reference for the recommendations that follow. While many of the issues and conditions in the Planning Area are associated with individual sites or districts, there are several topics of common concern. These area-wide conditions are discussed first, followed by a review of the district conditions.

Area-wide Conditions in the Harbor Planning Area

Chapter 91 and the Designated Port Area

An important common consideration for planning is the regulatory framework, with particular emphasis on existing state regulations. Much of the planning area is subject to Commonwealth laws and regulations collectively called “Chapter 91”. These laws and regulations secure important public access and water use rights on qualifying lands and within the harbor. In general, the areas within the jurisdiction of Chapter 91 consist of the harbor areas and lands that have been filled but were once below the mean high water mark.

Salem Harbor includes a Designated Port Area (DPA) that was created as part of the Chapter 91 regulatory framework. The DPA consists of both land and water areas in two of the planning districts, the North Commercial Waterfront and the Industrial Waterfront. The DPA generally directs future water use and land use decisions to protect the needs of marine industrial uses as a statewide priority.

Area-wide Transportation and Infrastructure Conditions

Key issues affecting transportation in downtown Salem and along the waterfront include the lack of adequate convenient parking and narrow, congested streets passing through residential neighborhood that serve as the primary access routes to the harbor. Circulation is confusing and ineffective because of the configuration of streets and intersections inherited from the historic development patterns although recent improvements at the intersection of Derby and Congress Streets have helped. There are poor pedestrian connections between local attractions, and generally inadequate and confusing local signage. There is a potential for increased traffic and parking impacts, as the local attractions become more popular. These issues affect all of the harbor planning districts in varying degrees and will need to be addressed.

Past transportation studies and master plans conducted for the City of Salem have identified the need for additional parking facilities.

Area-Wide Waterside Conditions

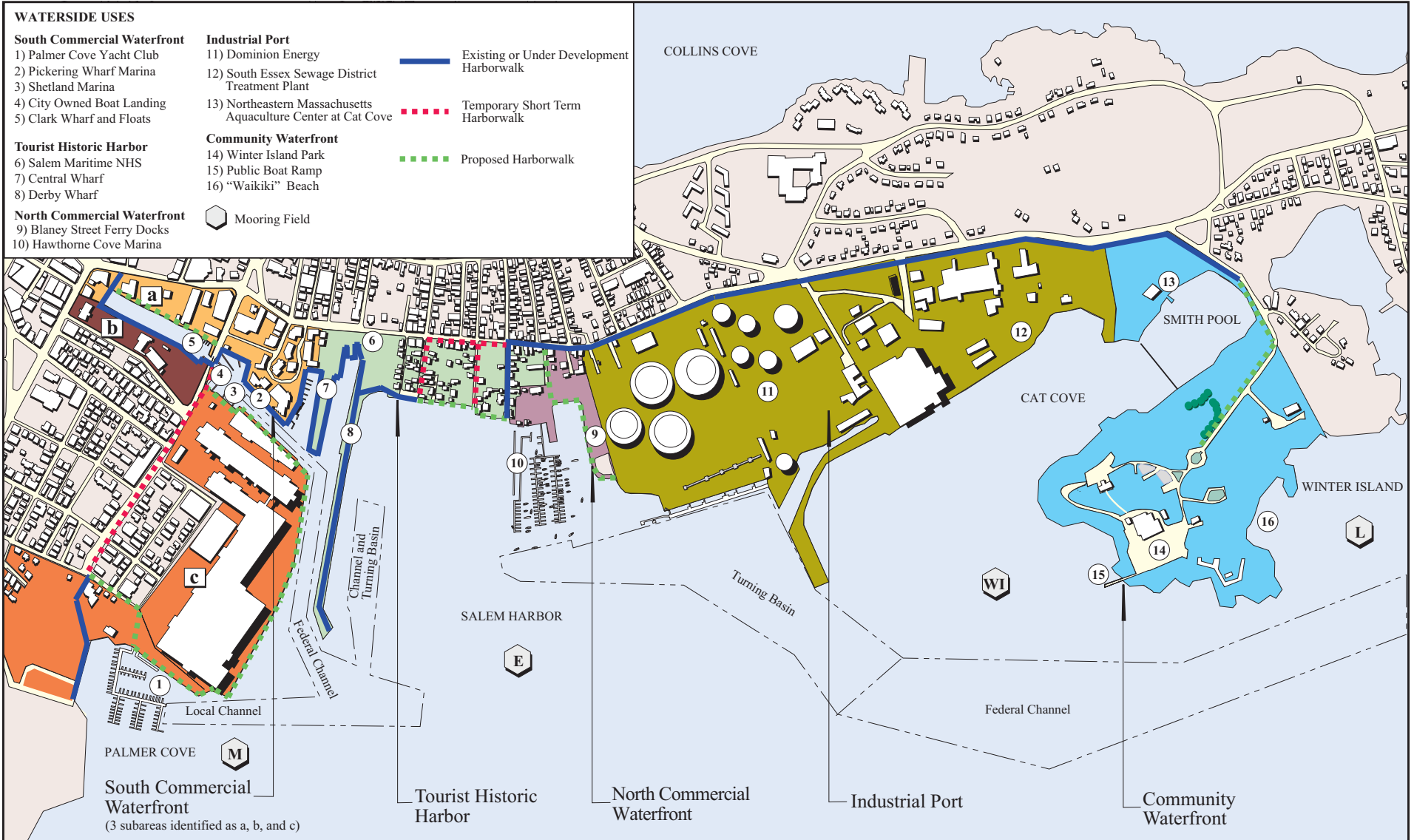
Salem Harbor is one of the region's largest natural harbors. The main ship entrance into the port is via a federally maintained channel leading from the northeast and, with a depth of 32 feet at mean low water, is one of the deepest in the state. Ocean-going vessels visiting Salem proceed from Massachusetts Bay through Salem Sound and then Salem's Winter Island and Marblehead's Naugus Head to the turning basin and docks at southwest corner of the DPA. The dredged portion of this shipping channel is approximately 8,500 feet long (1.5 miles) with a width of 300 feet, widening to 400 feet at the turns. It was constructed by the U.S. Army Corps of Engineers in 1905 and currently provides water access to the power plant terminal and the new Salem Wharf. The most recent maintenance dredging of this channel was completed in early 2007 under a contract funded and managed by the Corps. Five years earlier, the power plant had completed dredging of the turning basin off their docks.

In addition, there is a less formally defined South (or Marblehead) Channel leading through the south west portion of Salem Sound. It merges with the main federal channel near the entrance to Beverly Harbor. Another shallow channel used by small boats is located east of Salem Harbor and only a short distance off the Marblehead peninsula.

Within Salem's inner harbor, there is another federal channel beginning at the approach to and up into the South River (see Figure 2). There is also a federally maintained 8-foot deep channel and anchorage area to the northeast of Derby Wharf. The approach channel to the South River is maintained to a depth of 10 feet, decreasing to 8 feet at the river entrance and then to 6 feet just south of Pickering Wharf. It provides access for recreational boats and smaller commercial vessels into the South River including Pickering, Central and Derby Wharves. With its low overhead clearance of only 6 feet at mean high water, the Congress Street Bridge limits access to the South River Basin located just to the west of the bridge. The National Park Service completed maintenance dredging of the channel between Central and Derby Wharf in 1994. The Army Corps completed maintenance dredging of the Derby Wharf anchorage and both the approach and entrance to the South River in early 2007. Because of contaminants in the inner South River sediments, permitting and dredged material disposal is more challenging. Efforts are ongoing to complete maintenance dredging of the South River Channel including the South River Basin. Activation of the South River Basin for water-dependent uses is a high priority for the City, but is dependant on completion of dredging of the River.

Cat Cove is located just north of Winter Island in the northwest corner of Salem Harbor. It covers an area of nearly 30 acres. The 5 acre Smith Pool is at the head of Cat Cove and separated from the rest of the harbor by a dam. The entire Cove is very shallow with mean low water depths of only a ½ foot at its head and 3 feet at its mouth. An outfall pipe crosses the Cove on the eastern side. Several mud flats and rock outcrops are exposed at low tide and making the area largely unusable for boating. Fortunately the isolation protects this environmentally sensitive section of the harbor. A recent natural resources study revealed the presence of European Oysters along its entire perimeter and eelgrass beds by Halftide Rock at the southeast end of the Cove.

Figure 2: WATERSIDE USES



SALEM HARBOR PLAN



Palmer Cove is located on the western side of Salem Harbor just south of Shetland Park and the South River. It too is a relatively shallow area but with two channels passing through it that allow access to shore side water-dependent facilities. The first channel stretches along Long Point to the Palmer Cove Yacht Club. The second, just to the south of the Harbor Plan area and defined by timber pilings, extends into Dion's Yacht Yard. This second channel is reported to have been dredged by the Corps of Engineers in the mid-20th century when the yacht yard served as a federal vessel repair facility

The southwestern edge of Palmer Cove is characterized by an intertidal mudflat and the central area between the two channels is very shallow, with water depth of 1 to 3 feet at mean low water. The north and western edges of the Cove are lined by a granite block seawall. In addition to the yacht yard and yacht club, a small boat mooring field is located in the Cove.

In 2007, there were over 1,600 permitted recreational boats in Salem waters. In the larger area of Salem Sound including the waters of Beverly, Marblehead, Danvers and Salem, there are an estimated 8,000 recreational boats at moorings or tied up to slips during the summer. The City of Salem has approximately 1,400 boat moorings in 6 mooring fields (identified as "S", "A", "L", "E", "M" and "WI"). Three of these fields are located to the east and north of Salem Neck and thus outside the Harbor Plan area. The "WI" field located around Winter Island has about 230 moorings while the "E" field (east of Derby Wharf) has 320 moorings and the "M" field (from Palmer Cove south to Forest River) has about 230. There is space available for additional moorings in both the "WI" and "M" fields. The "E" field off the downtown waterfront has very limited if any available space. Some moorings are available for use by transient boats through the Salem Harbormaster. There are currently two mooring service companies registered with the Harbormaster to maintain the moorings. Mooring fees are collected by the Harbormaster and these along with half the boat excise taxes collected by the City are used to fund the Harbormaster's operations.

The South Commercial Waterfront

The South Commercial Waterfront extends from Palmer Cove to the western edge of Central Wharf and includes the South River Basin into Lafayette Street.

Landside uses within this district largely consist of a mix of commercial enterprises with a small amount of housing. A large residential area (the "Point") lies immediately to the south and west of this planning district. Along the South River west of Congress Street, several uses are oriented to automobile service and access: two gas stations, a tire center, a bank and fast food restaurant – both with drive thru service, two parking lots and a new 205-space public parking garage at the corner of Congress and Derby Streets.

The thirty-acre Shetland Park complex in the middle of this planning area dominates the west end of the Harbor. This industrial and office park has a collection of renovated mill buildings from the early 20th century. About fifty years ago, Shetland Mills was converted from a facility that had previously supported water-dependent marine industry to a facility supporting its current uses. The available 1.5 million square feet of floor space is currently used for office space, research and development, warehousing and light industry. Water-dependent activities that may

have existed here in the past have gradually moved on. With the exception of a marina on the South River along the north boundary of this property, there are currently no water-dependent businesses located within Shetland Park. The marina provides berthing for recreational vessels and some commercial vessels including a few supporting a marine construction business.

Pickering Wharf is located across the South River from Shetland Park. There are a mix of uses here including restaurants, retail businesses and multi-family housing. A new hotel opened here shortly after completion of the 2000 Salem Harbor and the addition of a “Waterfront Complex” is now planned with hotel and condominium space, a restaurant and a conference center. National Grid maintains a transformer sub-station on a land parcel along the southern edge of the South River. Other land uses in this planning district include the recreational areas of Palmer Playground and Palmer Cove Yacht Club.

In addition to the Shetland Park Marina previously mentioned, waterside uses along the South River include the Pickering Wharf Marina offering slips for power and sail boats up to 55 feet in length including both recreational and commercial vessels (e.g. fishing, whale watch, excursion). They can also accommodate transient boats up to 120 feet long. The “Fame”, a full-scale replica of an early 19th century schooner tie up at Pickering Wharf. The City owns a small boat landing dock at the foot of the Congress Street Bridge which is used as a water taxi stop and for boats taking people to and from the Rockmore, a floating restaurant in Salem Harbor. There is also a pump out station at this city facility. With the exception of a dock and floats accommodating a handful of small boats near the Congress Street Bridge, the properties along the South River west of Congress Street provide no uses oriented towards the waterfront.

For the most part, the businesses within the South Commercial Waterfront District do not take advantage of their waterfront location. None of the land-based businesses within the South River Basin or Shetland Park are water dependent except for Warren Light Craft. Warren Light Craft is a kayak manufacturing and sales business found at 283 Derby Street Rear fronting the South River Basin. Access to the South River and harbor are instrumental for product development and demonstration paddles. Aside from Warren Light Craft, water-dependent activities are primarily limited to the Palmer Cove Yacht Club, the two marinas previously mentioned at Pickering Wharf and Shetland Park and the small dock in the South River Basin.

Waterside infrastructure along the shoreline within the South Commercial Waterfront consists of granite seawalls, steel sheet and vinyl pile bulkheads, stone rip rap, piers and wharves, as well as marina structures. The majority of this infrastructure appears to be in fair to good condition. At the Palmer Cove Yacht Club, the bulkhead that had been in very poor condition with two failed sections was replaced in 2006. Other sections of bulkhead/seawall in the district will need attention in the near future including a failed section of seawall in the southwest corner of the South River Basin. The future of all the seawalls in the Harbor need to be evaluated in the context of anticipated rise of sea level.

The Tourist Historic Harbor

The Tourist Historic Harbor extends northeastward from Pickering Wharf to Hawthorne Cove Marina with the House of the Seven Gables on the east end and the historic Central and Derby Wharves on the west end. Single and multi-family residences characterize portions of this waterfront. This district is dominated by the National Park Service's (NPS) Salem Maritime National Historic Site, which provides one of the most important open space elements along the Salem waterfront. Derby Wharf allows for panoramic vistas of the Salem and Marblehead shorelines, accommodates tens of thousands of visitors and residents who walk, fish, and recreate along its length, and also serves as the berth for NPS's *Friendship*, a reproduction of a tall ship that was built in Salem in 1797. Central Wharf is also part of the NPS Salem Maritime National Historical Site and is used to moor a range of visiting vessels. The visiting vessels support the important aspect of Salem's tourist economy focused on and highlighting Salem's rich maritime history.

Waterside infrastructure in the Tourist Historic District consists of Central Wharf and Derby Wharf (both of which are federally owned and maintained), and several privately owned seawalls and bulkheads. Central Wharf has been observed to be in good condition, while Derby Wharf appears to be in fair to good condition. The seawalls and bulkheads appear to range from poor to good condition. Two sections of seawall near the end of Kosciusko Street have been recently repaired and/or reconstructed.

The North Commercial Waterfront

The North Commercial Waterfront extends east from the Tourist Historic Harbor district to the tank field owned by Dominion Energy. With the exception of a handful of private residences on or just a short distance off Derby Street, this district is comprised of two water-dependent sites. The first is the Hawthorne Cove Marina with over 100 boat slips and 135 off-shore moorings and facilities to haul and launch boats. They offer marine services ranging from mechanical and electric repairs to rigging. Blaney Street leads into the district's second major site owned by Dominion Energy. This property is leased by the City to support the Salem Ferry operations. Temporary docks and floats were installed here in 2006 and seasonal ferry service to and from Boston was restarted. Annual ridership had grown to nearly 73,000 passengers in 2007. This site is the proposed location for the new Salem Wharf that will support not only the ferry operations but cruise ships, excursion boats and a mix of other commercial vessels. This Blaney Street property is located within the boundaries of the Salem Harbor DPA.

Waterside edge treatments include stone, steel-sheet pile, concrete and timber wall bulkheads with areas of riprap revetment. The edge in the area of Hawthorne Cove Marina is primarily a combination of stone, steel-sheet pile and timber wall bulkheads in good to fair condition with a small section of riprap. The edge in the area of the proposed Salem Wharf is comprised mostly of riprap and a small length of deteriorating stone and concrete bulkhead.

The Industrial Port

The Industrial Port includes most of the Salem Harbor DPA and extends from the site of the proposed new Salem Wharf northeastward to the property line of the Northeastern Massachusetts Aquaculture Center at Cat Cove. The entire land area of the Industrial Port is used for water-dependent industrial uses. It is comprised of the former Northeast Oil Terminal and Tank Farm, the Dominion Energy Power Plant, and the South Essex Sewage District Treatment Plant. A berthing facility for off-loading oil and coal is at the southern end of the parcel.

The waterside infrastructure in this sub-area consists of structures that are part of the Dominion Energy facility, including cut stone and concrete seawalls, steel sheet-pile wall, timber and concrete dolphins, timber piers, stone revetments, gangways and floats and stone and fill jetty. The edge of the South Essex Sewage District Treatment Plant is formed by stone revetment and concrete seawall, both of which are in good condition.

Community Waterfront

The Community Waterfront is comprised of Winter Island and Cat Cove including Smith Pool. It is bounded on the landside by Fort Avenue and Winter Island Road. Most of the uses within the district are water-dependent and water-enhanced. Major uses include the City-owned Winter Island Park and Fort Pickering. Recreational uses on the island's waterfront include Winter Island Park, a large public boat ramp, camping facilities, and a small bathing beach locally known as "Waikiki". Other uses in this district include the Plummer Home for Boys and the Northeastern Massachusetts Aquaculture Center at Cat Cove operated by Salem State College. The Salem State College facility was created to provide a research environment to study marine life in a simulated ocean environment.

Waterside infrastructure located within the Community Waterfront includes the Smith Pool dam, seawalls, stone revetments, concrete piers, a boat ramp and wooden piers. Most of the structures at the water's edge in the planning area are in good condition. The concrete public boat ramp, sloped stone revetment and concrete and wooden piers are relatively new and well maintained. The one exception to the good condition appraisal is the bulkhead on the south side of the road connecting the island to Salem Neck. This appears to be in very poor condition. Failure of this bulkhead would likely limit or prevent safe vehicle access to Winter Island.

Other Sites and Resources

Salem Willows

Just outside the eastern end of the harbor planning area at the northeast end of Salem Neck lies the Salem Willows Amusement Park. The Willows has two pier structures, one which is City-owned and another timber pier used by the Willows Yacht Club. The park includes facilities for active and passive uses. Active facilities include ballfields, ball courts and a public beach. Other facilities include docking facilities, picnic areas, a walkable waterfront and a band shell with permanent seating. The Willows also offers a range of waterside activities, including kayak

rentals, harbor and charter cruises and deep-sea fishing. Adjacent to the Willows is a strip of seasonally operating businesses, including arcades, souvenir shops and eating establishments. Until recently, there had been a privately run boat service here that would carry people out to Misery Island. The two pier structures are in generally poor condition.

Forest River Park

Located just to the south of the harbor planning area, Forest River Park overlooks Salem Harbor and features picnic areas, playground, ball field, tennis court, swimming pool, and two beaches with lifeguards. Pioneer Village, also in Forest River Park, offers a recreation of a 17th century fishing village and is one of America's oldest living history museums. Many harbor stakeholders and committee members expressed strong feelings that this park has great unrealized potential and efforts should be made to activate its waterfront and offer water-borne transportation links from the park to downtown Salem and Winter Island.

Goals and Objectives

The development of the Salem Harbor Plan has been guided by goals and objectives that were established by the 2000 Harbor Planning Committee and refined throughout their planning process. Associated with each goal is a series of objectives that illustrates how that goal might be achieved. This list of goals and objectives underlies the rationale for the recommendations that have been included in this Harbor Plan. The validity of these goals was reaffirmed by those involved in the 2008 Update of the Plan.

Goal 1: Re-establish the identity of Salem as an active seaport by developing new and improved facilities serving many types of vessels on the waterside, and by enhancing access to, and visibility of the harbor on the landside for residents and visitors alike. This should be done by defining a specific program of activities to intensify use of the harbor, as well as funding to implement priority projects.

- Expand services for cruise ships, transient vessels, including yachts, commercial ships and ferries.
- Increase berthing and mooring capacity for industrial, private recreational and commercial vessels such as fishing and yacht charters, in a manner consistent with MCZM water quality policies.
- Enhance facilities for local fisherman.
- Develop landside and waterside public amenities to enhance the harbor experience.
- Explore opportunities for activating the harbor that do not conflict with the marine industrial activities.
- Assess opportunities for increased maritime industrial activities within the Harbor's DPA that are environmentally sound and sustainable.

Goal 2: Maximize the economic potential of the harbor in the context of the economic development goals of the City as a whole, while enhancing the quality of life for residents in adjacent areas.

- Expand tax base and economic activities in general.
- Promote private commercial development that will take advantage of increased visitations, as a result of public investments (such as the establishment of the Essex National Heritage Area) in this area.
- Ensure the integrity of historic resources and quality of life in residential neighborhoods near areas with intensified harbor uses.
- Promote private uses that reinforce public goals on Winter Island, with priority given to the quality of life in the small residential neighborhood along Winter Island Road.
- Encourage and support highest, long-term economic value from the Industrial Port.

Goal 3: Promote the waterfront as a focal point for Salem's visitor economy, emphasizing cultural tourism, high quality recreational experiences and longer visitor stays.

- Promote Salem as a vacation destination through a coordinated strategy employing a variety of means, including advertising.
- Develop and promote a Salem maritime distributed history museum with connections between waterfront historic sites/attractions, without compromising the integrity of these valuable resources.
- Promote improved pedestrian connections, such as the proposed Harbor Walk and both view and access corridors that will draw people to the water's edge.
- Develop landside and waterside public amenities to enhance the year-round experience of the harbor and the City as a whole for both visitors and residents.
- Develop amenities to sustain visitor interest and accommodate longer visitor stays.
- Develop and promote facilities and services that will define Salem as a full service port for recreational boats and a welcoming waterfront for transient vessels.
- Increase dollars expended per visitor.
- Develop programs and services to encourage public enjoyment of Winter Island.
- Support private tourism activities on Winter Island that are consistent with the provision of public amenities.
- Encourage and support economic activities, which extend beyond the peak seasons.

Goal 4: Protect and enhance access to the waterfront and on the water for the Salem community for passive and active recreation; reconnect the community to its waterfront where the connection does not currently exist.

- Develop water taxi/shuttle and ferry links among attractions on the harbor and to Boston.
- Promote improved pedestrian connections, such as the proposed Harbor Walk.
- Develop waterside public amenities to enhance the experience of the harbor.
- Maximize the potential public benefits to residential neighborhoods throughout the waterfront.
- Improve public access along the waterfront, in particular along Pickering Wharf and along Shetland Mills property.
- Maximize amenities and opportunities for recreational boaters.

Goal 5: Identify and preserve those aspects of Salem's waterfront experience that should be preserved and protected from change.

- Promote programs and projects that are consistent with the rich maritime cultural and architectural character of Salem's waterfront.
- Support events and programs which celebrate the rich cultural heritage of the harbor's residential neighborhoods and reinforce their identity and character.
- Support programs and projects which see the harbor master plan as a catalyst for community building among the neighborhoods along Salem's waterfront.

Goal 6: Protect and preserve those aspects of Salem's waterfront experience which can beneficially link the City to its maritime past.

- Support programs and projects which heighten public awareness of the historic maritime resources and the exceptional rich history of the waterfront as vital to Salem's identity and well being.
- Enhance incentives for preservation of historic waterfront resources.

Goal 7: Ensure that public investment in waterfront infrastructure will support and encourage private investment. Develop long-term capital maintenance/management strategies to ensure that public investment will result in infrastructure that is sustainable over the long-term.

- Promote water-related commercial development by leveraging public investments in the area.

- Develop an access plan that maximizes the effective management of traffic associated with any proposed improvements and develops appropriate solutions to the parking demand that exists and will be created by any improvements associated with improved waterfront access.

Goal 8: Protect and enhance the environmental quality of the harbor and its environs as an integral component of any proposed development or revitalization efforts.

- Support programs and projects which heighten public awareness of the harbor as an important and unique natural resource.
- Promote programs and projects which reinforce environmentally sound and appropriate use of the harbor, such as the Northeast Massachusetts Aquaculture Center, natural history trips and environmental awareness outreach programs.
- Provide for adequate waste handling facilities, for trash, waste oil, marine pump-out, recycling, etc., in promoting increased waterside and landside use.
- Minimize the potential negative impacts of intensified harbor use and development on the harbor's natural resources.
- Explore opportunities for alternative production of energy (possibly solar and wind) that will have direct positive economic and/or ecologically impact on the harbor and the region.

IV. PLANNING RECOMMENDATIONS



Fort Pickering Lighthouse on Winter Island

IV. PLANNING RECOMMENDATIONS

Area-Wide Recommendations

This section describes the principal recommendations proposed in the Salem Harbor Plan. These have evolved in response to current conditions and concerns within the waterfront area and to achieve the City's overall goals and objectives for its waterfront.

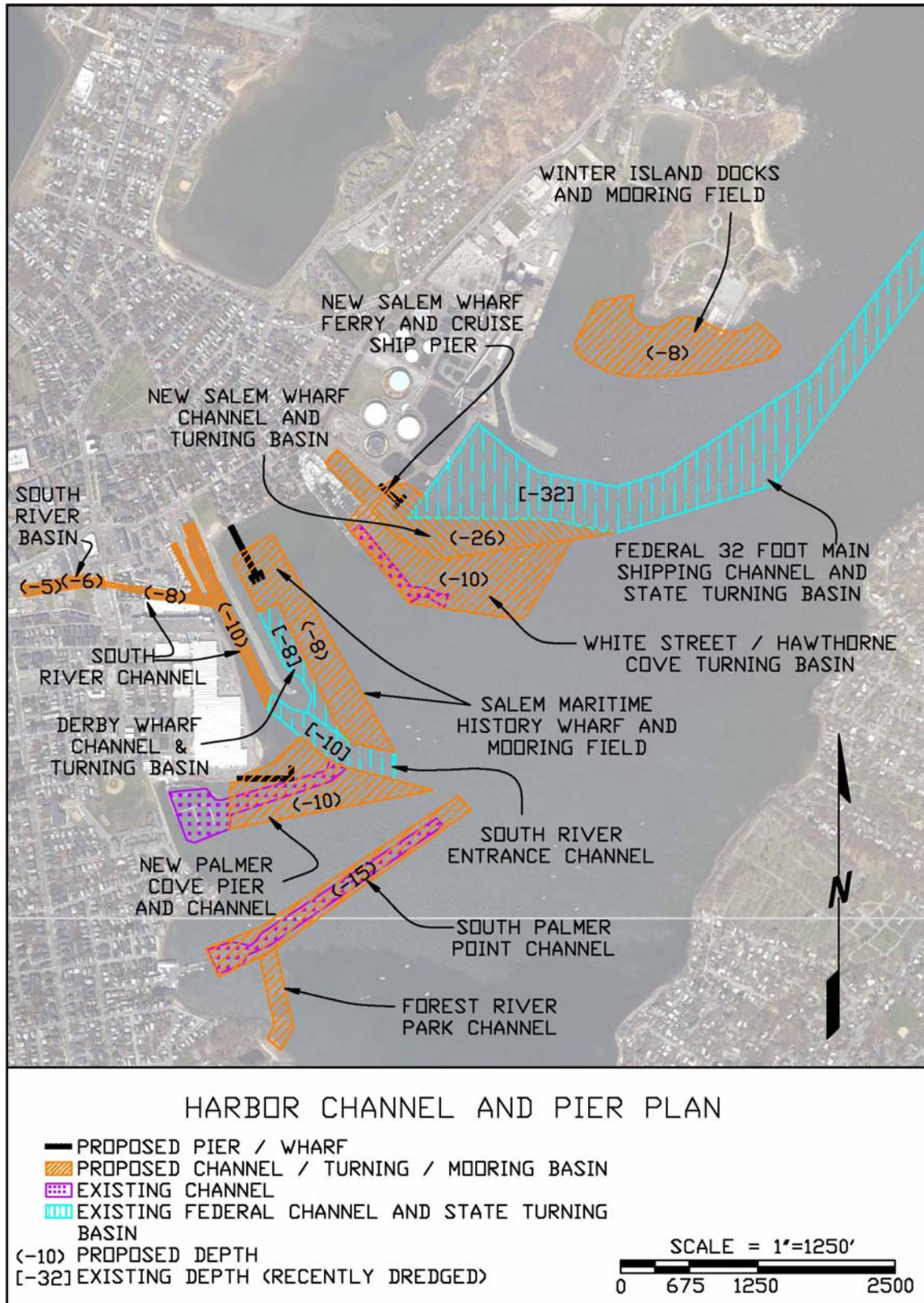
The area-wide recommendations convey key considerations that would serve the entire planning area. They are followed by recommendations for each of the five sub-areas encompassed by the Plan. Within each discussion, recommendations are organized according to the proposed waterside improvements, Landside Improvements and Infrastructure Requirements. In some cases, the discussion also considers long-term recommendations to guide future decision-making in line with the Harbor Plan's vision.

Area-wide Recommendations for Navigation and Waterside Use

- *Continue efforts to locate appropriate disposal and/or reuse sites for contaminated dredged material as part of a locally sponsored DMMP.*
- *Continue initiatives to obtain Army Corps support for maintaining federal channels leading to and through Salem Harbor.*
- *Support dredging required to create a fully functional Salem Wharf facility.*
- *Support completion of South River dredging including the South River Basin and areas between Derby and Central Wharves.*
- *Support maintenance dredging for all active public and private facilities between Winter Island and Forest River Park.*

Safe navigable waters are essential for the Port of Salem to be a welcoming full- service port. Dredging projects are a necessary part of harbor maintenance and improvement, which the Plan recognizes as important for both navigational as well as environmental benefits. This Harbor Plan centers on the notion of a reinvigorated harbor, one that offers a broad variety of recreational, commercial and water-dependent industrial waterside activities. Central to the plan is the Salem Wharf, which is proposed for the North Commercial Waterfront area, serving a specific set of water-dependent uses, including cruise ships, lobster boats, ferries and water shuttles. Throughout Salem's waterfront, steps will be taken to increase water transportation opportunities.

Figure 3: DREDGING AREAS



In late 2006 and early 2007, the main federal shipping channel leading into Salem Harbor from Salem Sound was dredged. In addition some dredging was completed around Derby Wharf included the approach and entrance to the South River and the federal channel and anchorage located just east of Derby Wharf. Five years earlier, the power plant completed some maintenance dredging in the turning basin off the DPA and around their docking facilities.

Beside the continued maintenance of federal channels, dredging priorities for the harbor are the area in the vicinity of the proposed Salem Wharf and the entire South River including the South River Basin and extension between Derby and Central Wharves. Other maintenance and improvement projects around marinas, yacht clubs, the Winter Island facilities, the Palmer Cove Channel/Shetland Park, shuttle and dinghy landings in the Tourist Historic Harbor, and Forest River Park/Pioneer Village have been identified as potential future projects, which will be more feasible and cost-effective, after City's DMMP was been developed and disposal or reuse opportunities identified and developed. The possibility of additional dredging off the Tourist Historic Harbor District will depend on the findings from a more comprehensive feasibility analysis of adding wharf(s) to this section of the waterfront. Figure 3 shows the locations of the specified dredging areas.

The proposed Salem Wharf will likely need to be dredged to a depth of at least twenty feet (20.0') below Mean Low Water (MLW) to facilitate the slated uses. Additional dredging beyond the pier will likely be necessary for a turning basin if the pier is to be a viable cruise ship dockage point as well as continuing to serve the existing ferry and taxi services. (Actual dredge requirements will be defined by the ongoing port expansion study.)

Adjacent to the proposed Salem Wharf is a proposed Blaney Street Turning Basin. This turning basin provides additional maneuvering space for the area around the pier as well as improved access to the Hawthorne Cove Marina. Dredging this area to at least ten feet (10.0') will increase access to the marina, encouraging existing harbor users to use this full service facility thus increase its appeal to transient boaters.

This Plan suggests that the Winter Island pier and mooring field should be dredged to a consistent depth of at least eight feet (8.0') below MLW where ever possible. The improvement of the access to, and the variety of mooring available at the Winter Island area would encourage the use of the seasonal pump-out service available at the dock, and allow the further development of this area as a community park.

Of preeminent importance is the dredging of the South River Channel and the South River Basin, and the construction of a system of docks within the South River Basin. In order for the envisioned marina and dinghy docks to be realized the South River Channel and the South River Basin will need to be dredged. The South River Basin will require dredging to an average depth of six feet (6.0') below MLW in order to provide safe passage for small power craft and dinghies in all tide ranges. The sediments in this area bear the burdens of Salem's industrial past and their removal benefits both the historic port area and is in the interest of the health of the harbor as a whole.

Complimentary to the South River Basin Project, the South River Channel from the Derby Wharf Light House to the Congress Street Bridge should be dredged. The portions of the channel along Derby Wharf should be dredged to the authorized federal channel limit of eight feet (8.0) below MLW, while the portion from Central Wharf currently authorized for six feet (6.0') the Plan suggests should be increased to a depth of eight feet (8.0') below MLW. This increase in channel depth would allow greater use of the services available at the Congress Street docks, and greater access to the land based services and businesses in the area.

Appendix D contains graphic survey findings from bathymetric surveys of Salem Harbor completed as part of this Harbor Plan update.

Dredge Material Management Program

Inseparable from the necessary dredging projects is a need to develop a comprehensive Dredge Material Management Plan (DMMP). The Harbor Plan calls for a full review of potential disposal options with a complementary cost benefit analysis. All available options for contaminated dredge materials (unsuitable materials) should be reviewed including; in water Confined Aquatic Disposal (CAD) Cells, shoreline Confined Disposal Facilities (sCDF), upland disposal at beneficial re-use sites, and landfills. The Plan encourages the use of safe in-water or shore-side disposal where possible, as these options conserve valuable landfill space. Clean dredge materials should be considered for off shore disposal and beach nourishment beneficial reuse.

The Harbor Plan calls for a new effort to develop a viable DMMP. With many other communities having used CAD cells with great success, the Plan suggests the technology be fully investigated in the DMMP. Options such as Cells within channel bottoms should not be overlooked nor, should the investigation focus solely that particular technology. The viability of Salem Harbor relies to a large degree on developing and implementing a DMMP, and this crucial element cannot be overlooked.

Promote measures that will improve and enhance the environmental quality of Salem Harbor.

The Harbor Plan seeks to establish a forward looking environmental stewardship program which encourages the interrelation of city wide initiatives to improve the well being of the community and the harbor. The program would involve using existing regulations and initiatives to improve the harbor and increase its accessibility and productivity for the public and commercial interests. The goal of the stewardship program is to establish the City of Salem as a champion of environmental interests in a manner which promotes economic growth. The pursuit of this program helps to attain the Harbor Plan's overall goal of promoting the Port of Salem as a clean Friendly Full Service Port.

Storm- and Waste-Water Discharge Elimination

In order to achieve this goal, the Plan calls for continued support and implementation of EPA Stormwater regulations under the National Pollution Discharge Elimination System (NPDES), as well as Department of Environmental Protection and local Conservation Commission Regulations and Guidelines regarding water quality and pollution mitigation. Accordingly, the following is recommended:

- **Survey of Existing Discharge Sources:** Existing discharges to the harbor should be surveyed and identified, including open flow, piped, and seepage discharges. The survey will provide a comprehensive inventory of the discharge sources and allow for the identification of potential sources of untreated or insufficiently treated stormwater or other discharges entering the harbor waters. The inventory would then be used to develop a plan to bring the discharges into compliance with Stormwater regulations, Federal NPDES requirements, State Stormwater Management regulations, and local regulations.
- **Use of Engineering and Source Controls:** Through the use of engineered stormwater controls, the discharges entering the harbor may be controlled and improved. These improvements should be a priority. Technologies including settling tanks and ponds, oil-water separators, clarifiers, as well as deep-sump catch basins and other Best Management Practices (BMPs), must be used throughout the harbor to improve water quality.

Efforts by the SESD to improve harbor water quality by addressing discharge sources are noteworthy and should continue. The Plan commends their efforts to reduce the amount of base flow through the elimination of inflow and infiltration, including sump pump discharges and roof leader tie-ins. Work should continue to decrease the frequency and volume of sewer overflow events and to continue to implement minimal treatment strategies for these events.

Vessel Sewage Discharge Elimination

The Plan supports existing efforts to deal with boat and vessel sewage, including the City-run pump-out boat and pump-out station. The work of the Salem Harbormaster and the City of Salem to address the issue of vessel discharge is noteworthy. The demand for facilities is expected to increase with expected designation of Salem Sound as a no-discharge area and efforts to attract more recreational boats to the Salem waterfront. The key to an effective vessel sewage discharge elimination program is to make boat pump-out stations convenient, quick, clean, easy-to-use, and available with minimal waiting. Additional pump-out facilities are needed and should be considered for the following sites:

- Winter Island
- The South River
- Salem Wharf (for commercial vessels)
- Potential future docks/piers in Tourist Historic Harbor and/or the Shetland Mill/Palmers Cove Area

Discharge Elimination Education

As a companion to the development of additional vessel pump-out facilities, the Plan supports efforts to educate the boating public as to the effects of discharges and what boaters can do to eliminate discharges, including using the pump-out facilities. As part of a public awareness campaign, the Plan recommends that an informational brochure be developed on an annual basis that explains the location, schedules, and rules associated with the facilities. This information could be delivered to boaters by:

- A mailing that would go out to all registered mooring and slip users for both Salem and Marblehead;
- Direct delivery to all boats moored in the harbor (drop-off in the cockpit);
- As a hand-out displayed in City Hall, City Hall Annex, the Harbormaster's Office, Winter Island facilities, at the pump-out facilities, and at boat chandleries around the City.

Natural Resource Protection and Pollution Prevention

The Harbor Plan as part of the stewardship program supports all efforts to improve the natural resources in the harbor including but not limited to:

- Cleanup or remediation of contaminated beaches and properties adjacent to or within the harbor, especially efforts to restore contaminated land or properties to a level that allows public uses.
- Habitat restoration or enhancement: Projects with the goal of restoring habitat or enhancing existing habitats are fully endorsed by the Plan. Projects which improve or restore historic fisheries such as anadromous fish runs, ground fish stocks and shell fish beds are of particular interest to the Plan.
- Water Quality Enhancement: Projects or initiatives which seek to improve the general water quality of the harbor are endorsed by the plan, as well as any that would encourage a more robust and diverse harbor ecosystem.

Environmental Resource Enhancement

Opportunities to enhance the Harbor's water quality were explored during the course of developing this Harbor Plan. Although not developed to a level appropriate to include in the main body of this Plan, the findings should be of some value in future port development and thus are included as Appendix C at the end of the Plan.

Develop and promote Salem Harbor as a welcoming full service port for recreational boaters

Salem Harbor falls short of being a welcoming destination for recreational boats. This is not due to the attitude of its citizens or local businesses. Needed are improved waterfront infrastructure and the availability of services to support this important user of the waterfront. The increased presence of a variety of power and sail recreational boats would be a major step in the goal of activating the waterfront and would provide an economic boost for many of the businesses located on or near the Harbor. Transient boaters should be a particular focus including small boats wanting to just pick up/off load passengers or visit Salem for a few hours to those wanting to stay in port for several days possible to participate in event(s) such as a regatta. Additional convenient and safe dock and mooring space is a critical need and is addressed in this Plan. Also needed are services including pump out and fueling facilities, places to purchase supplies (e.g. food and beverages, boat parts, navigational charts, ice, bait, etc), repair facilities, restrooms and showers, and boat storage space. Many of these services could and should be offered at Winter Island although docking spaces for transient boats closer to downtown may better serve some boaters.

Making changes that will create a more welcoming port should be accomplished in concert with a marketing effort to the regional boating community indicating that Salem has become a better destination. This can begin immediately with the marketing of existing high quality services and facilities within Salem Harbor including boat yards located just outside the planning area offering high end services such as sail making, naval architects, yacht brokers and marine technicians.

Area-wide Recommendations for Landside Use

- ***Establish the notion of the “Salem Harborwalk” and chart its route as part of a long-term program to maximize pedestrian access along the harbor's edge.***

Landside improvements proposed in the Harbor Plan seek to provide the necessary support to promote and complement the range of new waterside activities on Salem Harbor. These ends would be achieved through a variety of means, including the Salem Harborwalk. The Harborwalk is a long-term initiative designed to offer continuous pedestrian access along the edge of the Harbor between Winter Island to Palmer Cove. The Plan recognizes that while complete implementation of the vision for a continuous “Salem Harborwalk” may take a long time in light of private development patterns, this public policy direction should be instituted in the short term to lay the groundwork for future decision making. While the public currently enjoys considerable access to the Harbor’s edge in Salem, significant impediments exist to help realize the vision of a continuous waterfront public walkway. Consequently, the City must be in a position to take advantage of opportunities as they arise; either through purchase, easements, the Chapter 91 licensing process or other approaches. The proposed route of the Harborwalk is shown on the various district plans included throughout this Harbor Plan. Inland routes are shown when the water’s edge is not accessible. It is important to note that these inland routes have a special character of their own, and can make an important contribution to the pedestrian

experience along Salem Harbor. The Harborwalk will comply with all relevant American with Disabilities Act (ADA) requirements.

The Harborwalk, while traversing areas of differing character, will have a distinct and recognizable design character of its own. This will be achieved through the use of consistent paving, lighting, benches, plantings and other streetscape elements from one end of the harbor to the other. The interpretive potential of the area will be expressed in a number of streetscape design elements throughout the waterfront.

The Harborwalk will run along both sides of the South River wherever physically feasible, making a pleasant waterside connection from the Congress Street Bridge to Pickering Wharf. Elements of the Harborwalk are planned wherever public rights-of-way currently exist from the Congress Street Bridge to the House of the Seven Gables. The City will explore ways to complete missing links in the system over the long-term. MCZM has published a handbook, “Preserving Historic Rights of Way to the Sea,” which clearly lays out the steps that communities need to take to reclaim access to the sea. Sign and streetscape treatments will be used to indicate areas where the Harborwalk follows an inland course, encouraging pedestrians to enjoy the historic maritime experience along Derby Street and several side streets, including Kosciusko, Daniels, Hardy and Turner Streets. These streets will terminate in opportunities for passive enjoyment of the waterfront, either from a new wharf extending out onto the water (Kosciusko Street), a pleasant landscaped lookout (Daniels Street), or a landing (Turner) or dinghy dock (Hardy Street) with plantings and seating provided. After this inland course, the walk will run toward the harbor again.

In the North Commercial Waterfront, a network of pathways will lead to the site of the Salem Wharf. Sign and streetscape improvements along Derby Street and Fort Avenue at the edge of the power plant site will indicate the continuation of the Harborwalk to Winter Island. The Harborwalk and a bikeway will wind along adjacent to the existing access road completing its course at Winter Island.

• ***Develop and promote a Distributed Salem Maritime History Museum.***

The City’s exceptionally rich maritime heritage should serve to attract people down to its waterfront. With one of the highest concentration of historic sites, museums, and cultural activities in Massachusetts, Salem is well positioned to create a distributed history museum that would be engaging and appealing to a broad range of tourists, residents and students. The story could include the natural resource history of the harbor, its marine ecology and interactive exhibits to engage visitors. Several of the existing attractions and sites that document and celebrate the Harbor’s history are widely distributed along the water’s edge. This presents both challenges and opportunities. One of the challenges is moving, or convincing people to move, between sites. The Harborwalk, water shuttle, bicycle paths and trolleys supported by this Harbor Plan all serve as appealing ways to move residents and visitors from one attraction to another. These connections allow the public to complete their “journey of discovery” and to learn the whole story of Salem’s past links to the sea stretching over nearly four centuries. The advantage of a distributing museum is that it would activate the waterfront by requiring people to move through and around the harbor while also allowing these visitors to observe and enjoy the

natural beauty of the harbor, the grand collection of Federal style architecture, the various water-dependent activities, and the many shops and restaurants.

The sea-based story could begin with the 17th century Pioneer Village; move to Winter Island with a tour of Fort Pickering and stories of the Coast Guard Air Station; then on to the House of Seven Gables, and to Derby Wharf and the *Friendship*. Inland attractions such as the Peabody Essex Museum would add to the mix of destinations along the waterfront. “A little history in every step” - from fishing to revolution to shipbuilding and international trade to literature and the visual arts.

• ***Exclude gambling cruises as an acceptable use within the Harbor Planning Area.***

Institution of gambling cruises would be inconsistent with many of the goals and objectives of this Harbor Plan. As such, the Plan specifically excludes the docking of gambling boats within the harbor planning area as an acceptable use. This exclusion is intended to consist of both landside and waterside uses, and was recommended and adopted by the Harbor Planning Committee for several reasons.

- Parking is scarce within the planning area and traffic congestion is a significant community concern. The limited ability to provide for adequate circulation and parking is such that the development of a gambling cruise would preclude other water-dependent uses that are more beneficial to the goals and objectives of this Plan.
- Gambling cruises¹ do not tend to provide direct and indirect economic and quality-of-life benefits to Salem. Frequently they would contribute to traffic congestion, which will exacerbate the shortage of parking needed for several of the other uses promoted in this Plan. It is therefore the conclusion of this plan that the detriments of gambling cruises far exceed the benefits to the community to an extent that justifies their exclusion in accordance with Section 9.31 (3)(b) of the Waterways Regulations.

Area-wide Recommendations for Infrastructure Requirements

Several recommendations focus on making Salem’s waterfront more recognizable as a distinct city district to both residents and visitors and more easily accessible by foot, by water, by transit and by automobile. A comprehensive informational system of sign, which would guide visitors to the waterfront, could also strengthen its identity as a special district. The area’s character would be reinforced by a consistent approach to streetscape and landscape treatments throughout the waterfront. Developing a transportation management plan to effectively deal with parking and circulation would aid movement throughout the area, and improvements to the publicly-

¹ This plan defines a gambling cruise as any excursion vessel outfitted essentially for gambling, excluding cruise ships, ferries, and other vessels dedicated primarily for marine transportation.

owned and maintained water and sewer utilities and seawall infrastructure in the study area would ensure that needs for any new development are met.

- ***Implement a consistent and coordinated streetscape program of sidewalk paving, signs, street furniture, trash and recycling receptacles, lighting and planting throughout the waterfront.***
- ***Establish an informational sign system to provide multiple reference points and orientation for visitors within the waterfront.***
- ***Initiate a citywide "path finding" sign strategy to allow visitors to easily find their way to and from the waterfront, coordinated with other destinations.***
- ***Promote easy pedestrian connections between the waterfront and the downtown at various points within the planning area.***
- ***Develop an overall parking and circulation strategy for the waterfront and the downtown, including comprehensive planning for public transit links by land and water and satellite parking facilities.***
- ***Encourage and support eco-friendly forms of transportation such as bicycles, pedi-vehicles and walking rather than just adding more parking and widening streets.***
- ***Promote measures that will ensure adequate provision of utility infrastructure in the City including a comprehensive survey of all seawalls and storm drains along the waterfront.***

A comprehensive directional sign and information system will not only guide visitors to, from, and between the Harbor and its attractions, but will reinforce the presence of the harbor in the minds of visitors and residents alike. A city-wide “path finding” strategy will provide direction to visitors not only to harbor attractions but to parking and other points of interest in the City as well. Such a “path finding strategy” might employ a variety of means -- signs, markers, pavers and banners -- to make such connections understood and easily followed. A central component of this informational system will be a system of signs and markers that guide and orient visitors within the waterfront district. A series of informational kiosks will be located at strategic points throughout the waterfront providing directions and current scheduling information. Plaques and markers will be used to indicate key links to the downtown and other local attractions.

Such a sign program would need to be carried out by the City as a city-wide initiative, with the waterfront as one district within the larger urban context. Frequently, such an effort is contracted out to a private consultant with specific expertise in identity and informational graphic design. Although the sign system developed by PEM several years ago was attractive, it proved to be both expensive and difficult to read.

A consistent approach to streetscape elements, including paving, lighting, trees and other planting, benches, bicycle racks and trash and recycling receptacles, will also serve to mark paths along the waterfront and its amenities. Such treatments will reinforce connections throughout the

waterfront, as well as with the downtown. These streetscape improvements should extend outside the limits of the Harbor Planning Area to provide continuity within adjacent neighborhoods. Liberty Street and Congress Street are seen as the primary links to the downtown from the waterfront. The connections with Liberty Street and Congress Street should be strengthened. The City of Salem should contract with a private landscape consultant with particular expertise in streetscape design for the development of a master plan for the streetscape design throughout the waterfront area. In addition to these physical improvements, a pleasant and safe pedestrian environment, particularly with increased foot traffic, requires frequent trash and recycling services, as well as snow removal. The Harbor Plan calls for the adequate provision of these public services.

Traffic Management Program

Inherent in any plan to attract more visitors to an area is the increase in vehicular and pedestrian traffic. Many of the proposed recommendations would generate a significant level of new traffic and parking demand in the harbor area. It is an important priority of the Harbor Plan, nonetheless, that the quality of life for Salem's residents not be eroded as a result of any of these recommendations. Access for business should be preserved as well. Increased traffic and greater difficulty finding parking spots, however, do just that. The Harbor Plan recognizes that one of the key issues to be addressed in the implementation of the Harbor Plan will be the effective management of increased traffic and parking demand.

An important key to minimizing such impacts of these new uses is the development of a comprehensive transportation management plan. This plan should include enhanced public transit services, a traffic and parking management program, and a pedestrian management program. Such a plan, however, cannot consider the waterfront in isolation; any transportation management plan must treat the City in a comprehensive manner. This transportation management plan will be critical in ensuring that Salem's citizens do not bear the burden of increased activity on Salem's waterfront.

The City of Salem is presently well served by public transportation to and from the City, but internal and regional connections are lacking. Commuter rail, express bus, local bus, and water ferry services are all available to access the City. During the summer months, two local trolley services are available to connect a number of the harbor and downtown tourist destinations. In addition, the Harbor Plan proposes to add water shuttle to the public transit services for local mobility. Key to the success of the Harbor Plan will be linking these existing and proposed services to provide a seamless, convenient transportation system that does not rely on the automobile. This local link can be provided by an expanded and enhanced local shuttle system. Also, the existing public transit services should be highlighted in promotional materials developed for the city. Figure 3 shows existing and proposed trolley routes, transportation terminals, and parking lots/garages.

Figure 4: TROLLEY ROUTES



SALEM HARBOR PLAN



In lieu of just added more parking and widening/altering streets and intersections, the Plan also supports encouraging and supporting ecologically friendly forms of transportation such as bicycles, pedi-vehicle, kayaks, canoes and just walking. Paths need to be modified, facilities provided, and sign installed to stimulate more of these activities. Streetscape improvements could make pathways more inviting. Visitors should be encouraged to park and walk. Water taxis and harbor water shuttles would also help to ease land-side vehicle congestion.

Satellite Parking Program

Throughout the country, tourist areas like Salem manage seasonal traffic influxes by developing a program of remote parking facilities. These facilities are linked to the local tourist destinations by shuttle buses. Motorists are directed to these remote parking facilities by signs and then shuttled to the tourist district(s). This action keeps tourist-generated vehicle trips on the perimeter of the area, reducing traffic impacts on the downtown. The City presently has employed such a program during the month of October for the *Haunted Happenings* event. In seasonally attractive areas like Salem, these remote parking facilities can include publicly-owned properties such as schools. The demands of the school (which are generally weekdays from September to June) alternate well with the demands of the tourist trade (which are generally daily in July and August and late spring and early fall weekends). In the general area, locations such as Salem High School, the Bentley School and Salem State College could be designated as remote facilities. The development of additional remote parking should also be considered. There may also be opportunities to utilize the MBTA commuter rail parking on weekends. Having shuttle buses that operate via the MBTA commuter rail station would also encourage more people to use the available public transit system.

To implement an effective satellite parking program, a well defined shuttle or trolley system must be developed. The existing seasonal trolley services offer a base from which a more comprehensive service plan can be developed. This plan should include an efficient system of trolley routes that keep delays at a minimum and strategically placed stops to capture a high volume of passengers. The trolley system must be attractive, easy to use, offer frequent service, and be well advertised to be effective. Links should be provided to all the public transit services, the water taxi, existing private trolleys and the tourist districts. One potential route worthy of future assessment is illustrated in Figure 3, which follows. Any consideration of off-site parking for attractions within the waterfront must be part of a citywide strategy.

Other Considerations

Another critical element in a transportation management plan for the City of Salem is consideration of access to waterside activities, in particular the harbor's mooring fields, ferry and water taxi landings. The Harbor Plan recommends that the citywide transportation management plan include a strategy to link moorings, water taxi landings and ferry facilities to parking facilities citywide; one means of mitigating traffic impacts on the City's residential neighborhoods could be a water shuttle system.

Pedestrian management is a concern in an area like the Salem Harbor waterfront. Adequate sidewalks and walking paths must be provided for the safe movement of pedestrians. The streetscape enhancements, new public parks, the Liberty Street path, and the Harborwalk are the primary pedestrian components of the overall plan, and each component contributes toward an improved experience of Salem on foot. The Harborwalk will help to divert some pedestrian traffic from area streets reducing sidewalk congestion.

The City recognizes that the continued economic viability of the area is dependent on improvements being made in both the sanitary sewer and the water systems, as any future developments will rely on Salem's capacity to support this growth.

The City continues to work on addressing existing deficiencies in the sanitary sewer system. Efforts have included elimination of all Combined Sewer Outfalls (CSOs) and upgrades in the South Essex Sewer District (SESD) Wastewater Treatment Facility. Another element of a long-term improvement program identified by the City is the continued reduction in inflow and infiltration to the system. The discontinuation of many roof leader and sump pump discharges into the sanitary system have further reduced overflow conditions in and around downtown Salem. This will also reduce excess flow payments to SESD and reduce the size of the overflow treatment facility.

Water system deficiencies in all harbor planning districts are at least partially caused by excessive tuberculation of cast iron pipes, and defective valves and fire hydrants. The South Commercial Waterfront district is less affected because of its proximity to the relined Lafayette Street twenty-inch main. Service to the North Commercial Waterfront, Community Waterfront and Industrial Port districts was improved several years ago by relining a 16-inch main in Fort Avenue. Some additional work on the Fort Avenue feeder mains is needed. To upgrade service to and support new development within the entire harbor district, twelve-inch and sixteen-inch mains in Derby Street, Essex Street, Webb Street and Bridge Street will need to be maintained.

South Commercial Waterfront

There are several outstanding opportunities to activate the South Commercial Waterfront and substantively improve the public's use and enjoyment of this important part of Salem Harbor. A Harborwalk along the water's edge, gateway connections to main thoroughfares and existing attractions, facilities of public accommodations within waterfront buildings overlooking the harbor such as restaurants, observation decks, and activity/class rooms all would serve to improve this section of waterfront. The proximity of the South River Basin to downtown Salem attractions make it ideally suited to serve as a Gateway to the Harbor.

Aesthetic quality is an issue at the South Commercial Waterfront. The National Grid transformer substation, with its large parking lot, has been cited as an eyesore on the South River by both residents and business owners in the vicinity. The prevalence of derelict, vacant lots and non-water related uses serve to cut off the nearby residential Point Neighborhood from the rest of the waterfront and present an effective barrier between the neighborhood and the rest of the City. In contrast, Pickering Wharf has the character of a lively waterside area, with boating facilities, waterside restaurants, a waterfront boardwalk and open space.

At present the water depth within the South River and clearance beneath the Congress Street Bridge (only 5 ½ feet at mean low water) severely limits most boating activities.

The Harbor Plan recommends an incremental approach to improvements in the South Commercial Waterfront rather than any single, large-scale redevelopment approach. The ultimate goal is to bring increased activity on the waterside, as well as to create new opportunities for the community to enjoy the water's edge, transforming the South River from an unappealing barrier into a pleasant transition area (see Figure 4). Implementation of all landside and waterside improvements in this planning area will be in compliance with the Americans with Disabilities Act (ADA) and the regulations of the Massachusetts Architectural Access Board (521 CMR).

The strategy calls for a variety of streetscape and other public infrastructure improvements aimed at enhancing the quality of life for residents and businesses, establishing connections with the downtown and the rest of the waterfront, and promoting visual and physical access to the water. The Salem Harborwalk, a range of streetscape improvements, new neighborhood parks and improved parking form the core of the proposal for this area. Also, dredging the South River will open up new opportunities for recreation on the water. The Plan anticipates that the public involvement brought by these amenities will be a critical factor in encouraging private sector investment in the future. It is hoped that any new development would be oriented toward both the water and bordering streets, and would contribute to an active mixed-use environment. It is important to note that some of these objectives along the South Commercial Waterfront will be realized through Chapter 91 licensing, and are subject to state guidelines, which will be discussed in a later section (see Figures 13 and 14).

Recommendations for Navigation and Waterside Use

- *Promote activity on the water at the South River through a number of improvements including necessary repairs to the sea wall and bulkhead, and the provision of additional floats and slips.*
- *Add a dinghy dock for local recreational boaters and dinghy from visiting vessels.*
- *Encourage uses that will animate the area along Pickering Wharf in the vicinity of Central Wharf, such as transient boat docks for visiting recreational boaters or berthing for excursion boats, in the place of the predominance of private recreational boats now docked there.*
- *Add a floating performance barge on the South River next to the new park at 15 Peabody for live performances or free outdoor movies during the summer*
- *Conduct dredging of the South River to increase opportunities for small boating.*

In support of increasing opportunities for public enjoyment on the water, the Harbor Plan calls for adding 5 finger floats accommodating 10 boats and a linear float for 17 boats on the north side of the South River. There would also be a linear float accommodating 26 boats on the opposite side. The intention of these additions is to encourage boaters in the harbor to tie up at the South River to enjoy the area's open space and restaurants, or to visit downtown attractions, easily accessible on foot from the South River.

A dinghy dock is recommended to provide waterside access for boaters to mooring fields in the vicinity, including the moorings at Palmer Cove. The dinghy dock would be located at the southwestern corner of the Congress Street Bridge, allowing relatively close access to parking.

The Harbor Plan also recommends encouraging development of berthing facilities for transient boaters and for excursion boats. These would serve to bring a flow of visitors, thus enlivening the waterfront. It would allow transient boaters to dock in convenient proximity to the Salem Maritime National Historic Site and other attractions in the Tourist Historic Harbor, as well as the restaurants and shops at Pickering Wharf and on Derby Street.

Dredging of the South River is required to provide suitable water depths for navigation of small vessels. Typically, a dredge grade of approximately 6 feet below mean low water is sufficient for smaller vessels up to 30 feet in length (see Figure 5). Dredging operations would be kept back from the existing bulkheads, as their condition and capacity is questionable. The resulting "no-cut" zone lends itself well to a marginal or perimeter Harborwalk, with floats and water access gangways attached to this walkway.

Locating a performance barge off the 15 Peabody Street Park would bring waterfront activities out onto the water with live performances and even free movies as neighborhood events.

Figure 5: SOUTH COMMERCIAL WATERFRONT



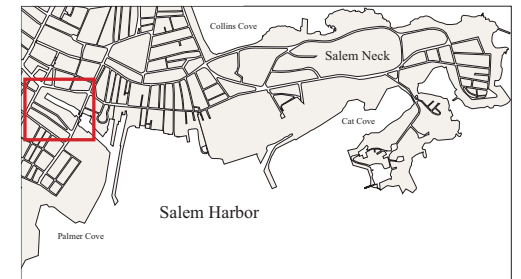
Recommendations

- (1) “Gateway” to the waterfront
- (2) Pocket Parks
- (3) Waterfront access
- (4) Harbor Walk
- (5) Pedestrian links with downtown
- (6) Streetscape and signage improvements
- (7) Gatehouse restoration
- (8) Boat float and slips for small crafts
- (9) Improvements to float and accessway

Key Benefits

- Stronger neighborhood identity
- Landscaped streets and new neighborhood parks
- More waterside activities
- Incentives for private development
- Enhanced connections with downtown
- Increased neighborhood parking

 Gateways



SALEM HARBOR PLAN



Recommendations for Landside Use

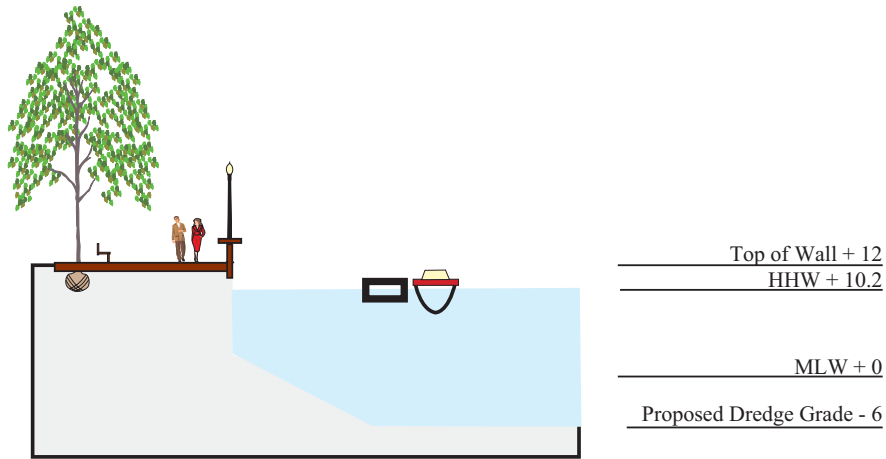
- *Establish the image of a “gateway” to the waterfront at the corner of Derby and Lafayette Streets and on the north east corner of the Congress Street Bridge (leading onto to Pickering Wharf) as a symbol of welcoming and to reinforce the identity of the area.*
- *Reinforce through streetscape improvements a series of connections, including Liberty Street, Central Street and Peabody Street.*
- *Promote connections between the downtown and the waterfront through streetscape improvements.*
- *Promote access to the water's edge and orientation out to the river as an integral element of any new development on the South River.*
- *Construct the Salem Harborwalk along the South River to the maximum extent feasible, indicating alternative paths on existing sidewalks wherever links in the system are missing.*
- *Make waterfront access improvements in the vicinity of the Congress Street Bridge.*
- *Establish a clear waterfront pedestrian connection between Congress Street and Pickering Wharf.*
- *Encourage uses that promote enjoyment of the water, such as small restaurants, small boat rental shops and other related retail uses, along both sides of the South River.*

Create “gateways” on Derby Street (using existing City-owned land near the intersection with Lafayette Street) and on Congress Street (at the bridge crossing the South River). The design should not necessarily be a literal gateway, but rather a visual element signifying arrival at the waterfront. A sense of welcoming might be conveyed with some type of appropriate landmark or landscaping, as shown previously on Figure 4. The Derby Street gateway would serve as an entrance to the South River Basin while the Congress Street gateway would welcome people out onto Pickering Wharf and led them to the historic waterfront amenities beyond.

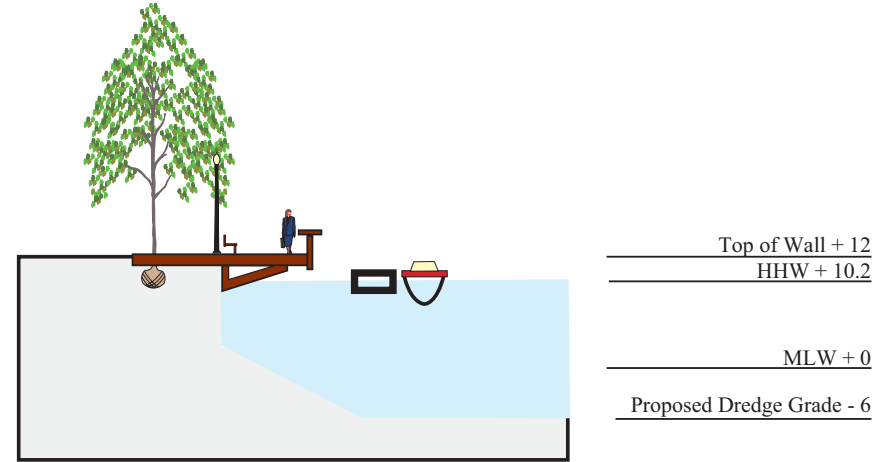
Connections between the waterfront and the downtown will be strengthened by sign and streetscape improvements on Liberty Street, Central Street and Congress Street (to Hawthorne Boulevard). The Liberty Street connection will be coordinated with the streetscape design of the Peabody Essex Museum. Streetscape improvements along Peabody Street are intended to strengthen the connection between the residential Point Neighborhood and the waterfront district.

In support of the long-term goal of continuous public access along the entire waterfront from Palmer Cove to Hawthorne Cove, the Harbor Plan recommends that segments of the Harborwalk be constructed either as part of new waterfront development or, wherever the opportunity exists, using public funds as they become available. A public accessway will run at a width of 20 feet whenever possible, but with the clear, unobstructed Harborwalk portion of this never less than 10 feet. Public access amenities and elements accessory to water-dependent uses can occupy not

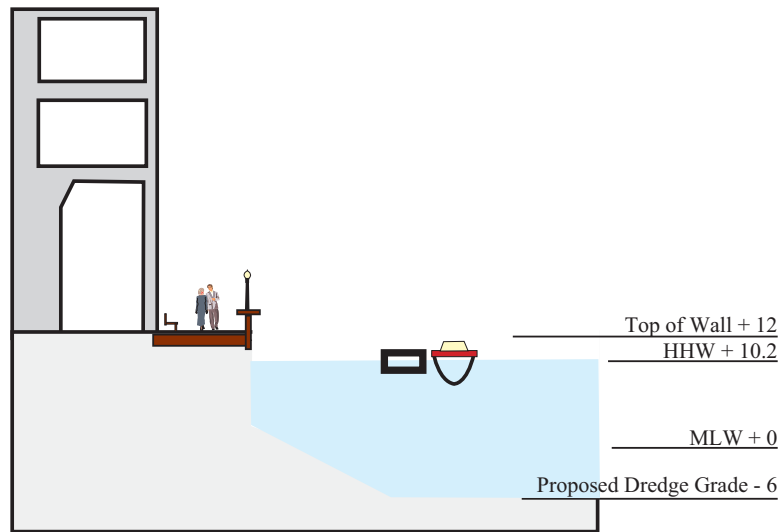
Figure 6: SOUTH RIVER DREDGING AND HARBOR WALK SECTIONS



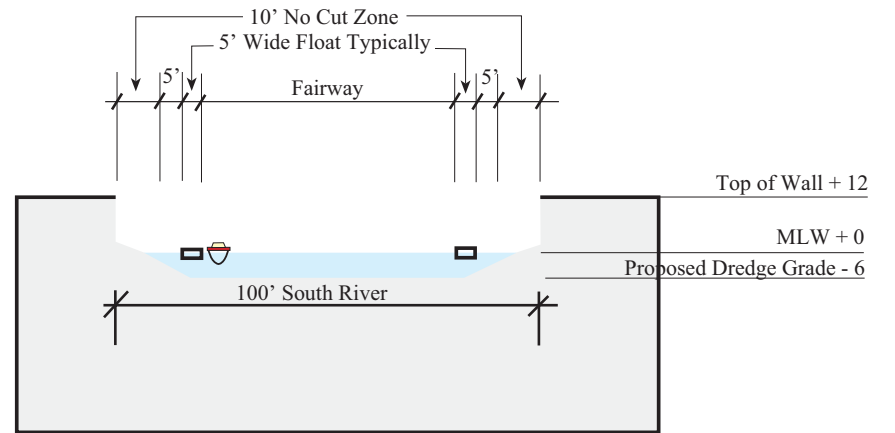
Landside Walkway



Cantilevered Walkway



Passageway Created Through Existing Building



South River Dredging Section

more than 10 feet of the public accessway width; they must be kept back from the water's edge; and they are not permitted if they reduce the width of the Harborwalk to less than 10 feet wide. As illustrated in Figure 6, the Harborwalk may run on land along the waterfront or, where there are difficult and unavoidable site constraints, through a passageway created in an existing building or, as a last resort, cantilevered off of the bulkhead over the water. All future development along the South Commercial Waterfront would be required to provide, whenever feasible, the minimum 20-foot public accessway along the water's edge. Where links are missing, alternative routes should be indicated on existing sidewalks using pavers, signs and other means to provide a sense of continuity and continuation. Certain extensions of street corridors would be created as paths and open space.

The Harbor Plan calls for a number of improvements to the Congress Street Bridge. Steps or ramps will be introduced to provide easy pedestrian access to the Harborwalk at all four potential connections, as well as to the floats, slips and a dinghy dock at water level. As the Pickering Wharf site is redeveloped, the Harbor Plan requires that the Harborwalk be linked along the water's edge and connected directly to the Congress Street Bridge.

In support of reinforcing and enhancing the waterfront character of the South Commercial Waterfront area, the Harbor Plan encourages water-dependent and water-enhanced uses whenever feasible, as discussed above. Such ancillary uses as small boat rental shops and small restaurants would provide support to the additional floats and slips to attract boaters to the South River and enliven the waterside. While water-dependent uses would be preferred, the Plan would clearly allow for other active uses that would contribute to public access and enjoyment of the waterfront.

For properties on the north side of the South River, new development should be designed and constructed to complete the "streetscape" of adjacent structures along Derby Street to restore the historical character of this neighborhood.

- ***Create "pocket parks" on publicly-owned, vacant parcels along the South River and on Peabody Street.***
- ***Balance the provision of community amenities, such as parks, with the need for parking in the Point Neighborhood by creating additional parking for residents whenever possible. Green space should be integrated in the existing parking space on the National Grid site at Congress and Peabody Streets.***
- ***Encourage the removal of the existing "prison-like" fencing at the National Grid site replacing it with a more pleasant landscaped buffer. The Plan also recommends that operation on site be moved to the building's interior, to the extent feasible.***
- ***Promote programs that will serve to reinforce and celebrate the identity of the community in the South Commercial Area. Annual waterside events, such as a parade of floats, or celebrations linked to the annual Hispanic festival, might serve this purpose.***

-
- *Express the rich cultural heritage of the community in design efforts, such as murals, paving and other public art projects that involve the collaboration of residents, artists and designers.*
 - *Support the plans for the redevelopment of Pickering Wharf to increase facilities of public accommodation and public access.*

The Harbor Plan calls for transforming property currently owned by the City within the South River Basin into landscaped open spaces. The process has already begun at 15 Peabody Street with funding received to convert this parcel into an attractive waterfront park open space. This will complement a companion project scheduled to begin in 2008 to construct a section of Harborwalk along the entire west and south shores of the South River Basin. Additional open space recommendations are shown in Figure 5. This investment in the quality of the public realm should serve as an incentive to the private sector to make improvements in the area.

There are many ways in which the cultural heritage and history of the community can be expressed in design elements in the parks. At the same time, an additional level of meaning can be achieved by actually involving community groups, school children and other residents in collaborative design and public art projects targeted for these parks. This might include the production of murals featuring local scenes or community members, the design of tiles or other pavers, community planting projects, a timeline of important neighborhood historical events inlaid in the pavement, or any number of other projects. Programs located in these parks or on the South River can also play a meaningful role in celebrating the heritage of the community. This area has the particular advantage of being able to accommodate events that actually occur waterside, such as a parade of floats. Events such as a Hispanic Festival, which occur on an annual basis, can also reinforce the identity of the neighborhood.

The Harbor Plan calls for the ambitious treatment of the National Grid site to mitigate its current deleterious effects on its context. The barbed wire and chain link fencing should be removed and replaced with a landscape buffer, and if needed fencing, more appropriate to the character of a residential neighborhood. The Plan calls for encouraging the reconfiguration of the facility to accommodate its operations indoors to the maximum extent feasible.

The Harbor Plan also calls for the provision of increased parking to meet the needs of the neighborhood.

Recommendations for Infrastructure Requirements

- *Improve vehicular and pedestrian access as well as parking for neighborhood residents and businesses through intersection redesign and streetscape improvements.*
- *Implement a program of sign and streetscape improvements along Derby Street, Liberty Street, Congress Street, Peabody Street and the South River.*
- *Support the City's efforts in implementing programs to address stormwater drainage problems in this area.*

Increases in traffic and increases in the supply of parking can have a negative impact on function of nearby intersections. Actions necessary to improve traffic flow might include traffic signal timing and intersection striping adjustments, minor roadway widening and new traffic control devices. Intersection improvements would also improve pedestrian safety by providing large well defined crosswalks and exclusive pedestrian signal phases. The work recently completed at the intersection of Congress and Derby Streets and work planned at the intersection of Ward, Peabody and Congress Streets are significant steps toward this goal. Parking for neighborhood residents would be improved with the construction of adequate visitor parking facilities, as well as the new proposed surface parking lot. Restricted residential parking locations would be identified and enforced.

A coordinated system of sign and streetscape improvements is recommended for the entire planning area, and in this district, such a network could serve to link Derby, Liberty, Congress and Peabody Streets to the South River. A consistent approach to these design elements, such as signs, lighting, trees, paving, benches, trash and recycling receptacles and bike racks, will serve to establish the identity of the area as a distinct district with a unique character, and to reinforce connections with other areas.

Parts of this district, especially low lying areas including Lafayette Street, Derby Street and Congress Street, as well as local basements, are subject to stormwater and sanitary sewage overflows during severe storms. This situation is not uncommon in older cities and towns such as Salem. To address this condition, both the inflow/infiltration and overflow treatment facility programs need to continue to be implemented. Improvements to the water system include main line cleaning, relining of existing pipes, and valve and hydrant replacements.

Long-term Recommendations for the South Commercial Area

- *Increase public access around Shetland Mills, connecting the South River Basin and Pickering Wharf with Palmer Cove.*
- *Improve and enhance public access to Palmer Cove along with improvements to the beach and park.*

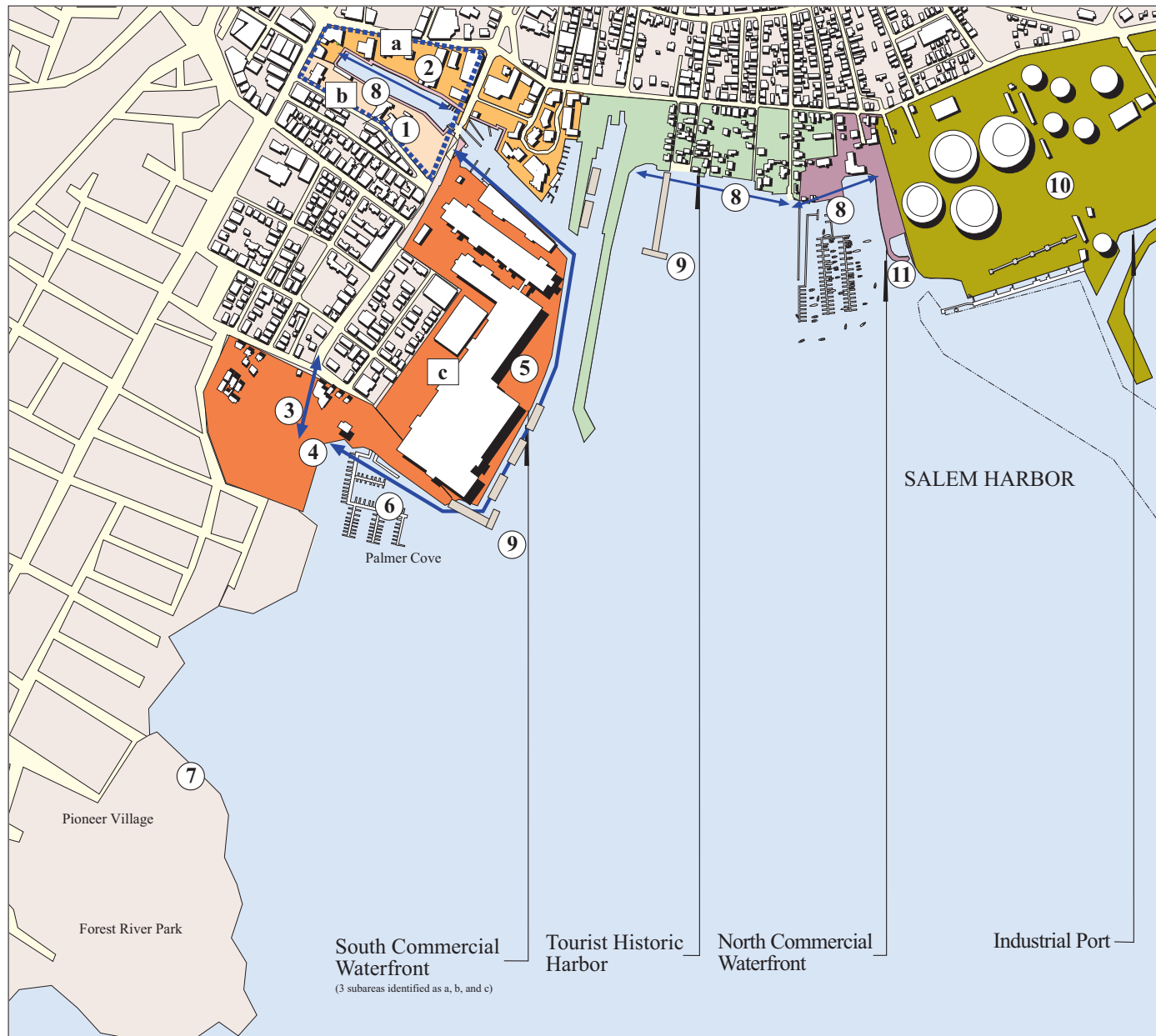
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- *Explore feasibility of added a commercial wharf at the southeast corner of the Shetland Property near the Palmer Cove Channel and floating docks running parallel to the northeast facing Shetland seawall opposite Derby Wharf.*
 - *Construct landside support for a water shuttle service at Pioneer Village, and conduct necessary dredging to facilitate the provision of this service.*
 - *Dredge and expand the docking capacity at Palmer Cove to promote waterside access and activities.*
 - *Promote private development along the South River, including the redevelopment of the substation site, with public open space and buildings consistent with neighborhood character.*

In addition to the incremental, near-term improvements proposed for the South Commercial Waterfront, the Harbor Plan also recommends a vision for the long-term transformation of the area (see Figure). As such, the Harbor Plan proposes that the following long-term recommendations be used to guide future policy related decisions.

The long-term vision for this area calls for continuous public access along the harbor's edge from the South River to Palmer Cove. The most significant impediment to the realization of this vision is the area along the privately-owned Shetland Mills property, which effectively blocks access to that portion of the harbor's edge. The Harbor Plan recognizes the great potential benefit for improving public access to the waterfront around the Shetland Park property. The area offers spectacular, uninterrupted views of Salem Harbor and a waterfront that can support a variety of water dependent activities that would increase the general public's use and enjoyment of Salem Harbor. The Plan recommends that future activation of the Shetland waterfront include a continuous public accessway around the entire perimeter of site, plus the addition of amenities that will enhance the visitor experience when using this section of waterfront. In the long-term, changes in property ownership, changes in land use, or the Chapter 91 re-licensing process may offer opportunities to require that these changes be made. Access and water-dependent facility improvements along this section of the waterfront would offer new opportunities for the public to enjoy Salem Harbor while also allowing the property owner to further benefit from the property's valuable location on the water's edge.

The Shetland site does not currently have deep water access (i.e. water depth less than 8' at MLW) and the cost of dredging to create a deep-water channel to the site would likely not be justifiable, particularly with deep-water port facilities already available and additional facilities proposed within the Designated Port Area (DPA) on the opposite side of the Harbor. Appreciating this, other infrastructure improvements that need further evaluation but that should be seriously considered for the Shetland Park site are (1) a wharf on the southeast corner of the site (i.e. at the eastern end of the Palmer Cove Channel) and (2) seasonal floating docks running parallel to part of the northeast facing seawall, across the South River from Derby Wharf. These would be for use by transient recreational boats and small commercial vessels including excursion boats and those offering local water transportation.

Figure 7: LONG-TERM RECOMMENDATIONS



- ① Redevelopment of the substation site
- ② Redevelopment of buildings and sites consistent with public open spaces and neighborhood characters
- ③ Public access to Palmer Cove
- ④ Improvement of the beach and park at Palmer Cove
- ⑤ Public access along Shetland Mills & floating docks for small boats
- ⑥ Dredging and expansion of docking capacity at Palmer Cove
- ⑦ Landside support for water taxi at Pioneer Village & dredged channel extension off South Palmer Point Channel
- ⑧ Public access along the water edge through Chapter 91 licensing, acquisition easement or properties, or through construction along public areas
- ⑨ Additional wharves/docks for use by recreational and small commercial vessels
- ⑩ Support for long term consideration of alternative energy sources at the Industrial Port, as well as continued activation of the waterside for marine industrial uses, and continued concern with the environmental quality of the harbor
- ⑪ Future location of proposed Salem Wharf

SALEM HARBOR PLAN



Palmer Cove lies at the southernmost end of the South Commercial Waterfront. The Palmer Cove Playground contains ball fields, outdoor tennis and basketball courts, a play area for smaller children, a small beach and a small boat ramp accessible only by foot. An asphalt walkway runs alongside the water's edge at the playground. Public access to Palmer Cove will be enhanced by creating a pedestrian path along the edge of the playground connecting to Leavitt Street.

Improvements to the beach would include replenishing the area with fresh sand, as well as providing other amenities such as benches and trash receptacles. The landscaping at the playground playing fields would be refurbished, and amenities such as drinking fountains and restrooms would be added to service this area.

The Plan encourages the extension of water shuttle service to Pioneer Village from other points in the harbor. Landside support facilities would include the provision of a float to serve as a shuttle landing, as well as a small kiosk for the sale of tickets and distribution of service schedules.

Presently, water access to Pioneer Village is restricted by tidal shorelines without any access structures. There is an existing navigation channel and boat yard near the north end of the site, which would be the closest navigable water. Maintenance dredging of the existing channel and a relatively short (probably about 100 yards) section of improvement dredging to reach Pioneer Village would be required for water shuttle access along with the addition of an access pier and float. The practicality of dredging and final site selection will require a subsoil survey due to the observed presence of rock and ledge in the area. As rock excavation is substantially more costly than sediment dredging, the siting of the proposed dredging, as well as the orientation and length of an access pier, will have a major impact on the overall cost of the project. Once sited, further design and permitting of land and water infrastructure and site amenities will need to be undertaken by the City.

Palmer Cove Yacht Club and the City should review prior dredge projects at the entrance channel and mooring site and investigate the need for additional dredging. Following determination of project requirements, the applicant should provide necessary engineering and permitting for the proposed work. Pending sediment quality findings, disposal of dredged material which cannot meet unconfined offshore disposal requirements may be disposed of employing disposal or reuse opportunities identified in the City DMMP. The long-term vision of creating a wharf on Shetland Park near the mouth of the entrance channel to Palmer Cove may eventually offer a critical mass of boating activity to, if necessary, justify dredging here.

In addition to providing the community with increased amenities, the program of public investment in open space and other infrastructure is anticipated to attract private development to the area. Numerous opportunities exist, particularly along the South River, for water-dependent and water-enhanced development to occur over time, replacing uses which might easily and more appropriately be located elsewhere.

Discussions should be initiated with National Grid regarding the reconfiguration and/or relocation of the substation. As currently configured it has a significant negative impact on the appearance of the area. The relocation of the facility would enable the redevelopment of the sizable parcel for uses more appropriate to this waterfront location. All new development and renovations should be consistent in scale and in character with the surrounding waterfront neighborhoods.

Tourist Historic Harbor

The section of the waterfront referred to as the Tourist Historic Harbor lies at the center of the Harbor Planning Area and is comprised largely of the historic Derby Street Neighborhood and the 9-acre Salem Maritime National Historic Site (SMNHS), a unit of the National Park Service (NPS). The NPS Site was established in 1938 as the nation's first National Historic Site to preserve and interpret the maritime history of New England and the United States, showcasing the period between 1760 and 1830. In the mid-1980's, as a result of significant local pressure, Congress appropriated funding for the physical redevelopment of the site. At the same time, Congress established the Essex National Heritage Area to preserve and interpret maritime history, early settlement, and industrial development of not only Salem but all of Essex County. The amenities existing on the site now, such as the Visitor Center, as well as those improvements discussed herein, are all part of this ongoing effort to maximize the public benefit of such invaluable historic resources by taking full advantage of their educational and interpretive potential. Recent improvements include a \$5.5 million rehabilitation of Derby and Central Wharves. This included dredging to a depth sufficient to allow historic and traditional sailing ships, such as the recently berthed *Friendship*, to tie up at the wharves.

The House of the Seven Gables, made famous in the writings of Nathaniel Hawthorne, is managed by a separate non-profit and is located on the second largest parcel along the Tourist Historic Harbor waterfront. Plans for the House of the Seven Gables exist to recreate Turner Wharf to provide docking facilities for smaller historic vessels and to provide water transportation access to the site.

The Harbor Plan calls to enrich a visitor's experience and enhance tourism in Salem through the continued support for NPS plans, while at the same time enhancing the quality of life for residents of this unique waterfront neighborhood. Improvements focus on enhancing the historic character of the area and providing more pleasant public access to the water's edge. This approach also calls for strengthening coordination citywide among relevant tourism and cultural organizations (see Figure 7).). Implementation of all landside and waterside improvements in this planning area will be in compliance with the Americans with Disabilities Act (ADA) and the regulations of the Massachusetts Architectural Access Board (521 CMR).

Recommendations for Navigation and Waterside Use

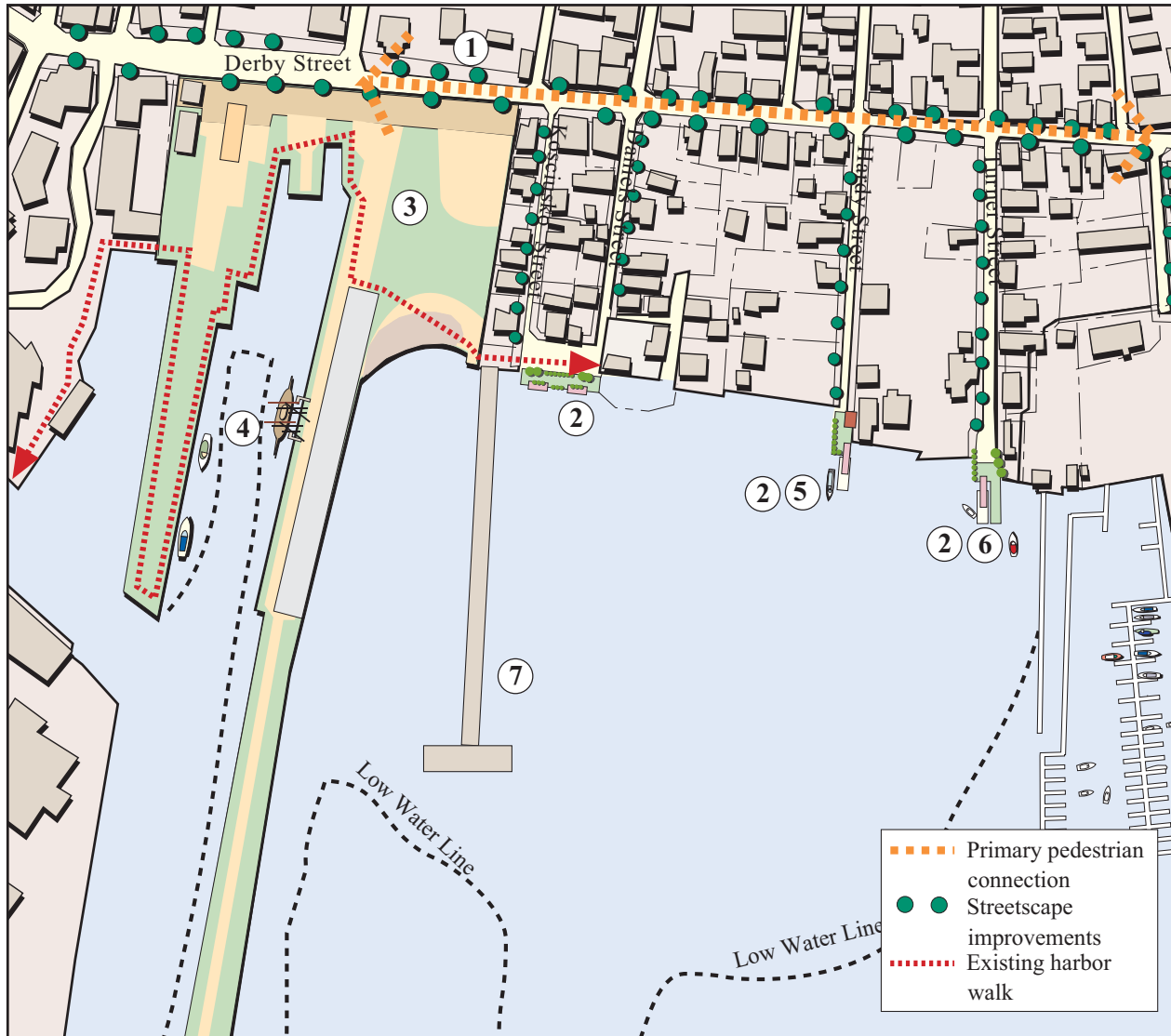
- *Add floats to the ends of Hardy and Turner Streets to promote increased boating activity and recall the history of the site.*
- *Construct a landing for a water shuttle stop and other small vessels at the House of the Seven Gables.*
- *Promote a water taxi/shuttle service, harbor tours and other boating activities in this area.*
- *Explore the feasibility of constructing a wharf or dock off NPS property near the water end of Kosciusko Street extending out to the north end of the Derby Wharf anchorage.*

A dinghy dock of approximately 600 square feet is proposed at the end of Hardy Street which would enable boaters use dinghies to access their boats in the offshore mooring field. Other floats at the end of Turner Street would support a water taxi service, including a float that meets ADA accessibility requirements.

The Harbor Plan calls for increased use of water transportation options whenever feasible, and recommends the requisite landside supports to accommodate such use. A water taxi landing is proposed at the end of Turner Street as part of a water taxi service which could operate from various points along the harbor. The Harbor Plan also supports harbor tours operating from Pickering Wharf or Central Wharf as another waterside activity which heightens public enjoyment of the waterfront. An initiative to offer NPS ranger-led tour of the lighthouse station on Baker's Island is being tested and expected to be offered to visitors very soon. This could be expanded to visit to other islands in Salem Sound.

Activation of the waterfront between the SMNHS and the proposed site of the Salem Wharf was strongly supported by the 2000 Harbor Plan. Several proposals to create additional dock and mooring facilities in this area were broadly supported by Harbor Plan committee members and many of the major stakeholders interviewed during the 2008 Update. Although the majority response was positive, some of the concerns expressed include the possible negative environmental impact on the mud flats in this part of the harbor, the cost of any dredging that would likely be required and ownership issues concerning the mud flats off the private waterfront homes in the Derby Street Neighborhood. Constructing a pile-supported dock out from the NPS land off Kosciusko Street would allay most of these concerns. The amount of dredging required would be significantly reduced and since it would land on a publicly owned parcel, ownership issues should be less of a problem. The dock would loosely replicate wharves (Tuckers and Ingersoll) that existed at this site in the early to mid 1800s. With floats running along the dock and extending out toward the channel, transient boaters would have a convenient landing spot, allowing them to pick up or let off passengers, visit the nearby attractions and the downtown retail center, or enjoy activities along the waterfront.

Figure 8: TOURIST HISTORIC HARBOR

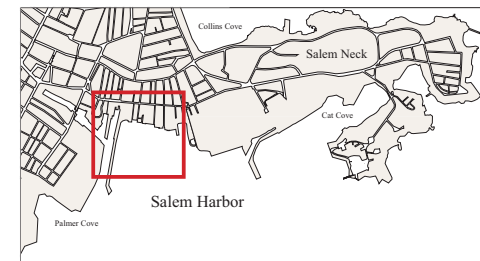


Recommendations

- Future extension of a Harbor Walk as a combination of walkways along the water's edge and connections to Derby Street where practical
- (1) Streetscape improvements/Harbor Walk today
- (2) Park-like outlooks
- (3) Support for current and ongoing NPS plans
- (4) Support for berthing facility for Central Wharf and rehabilitation and restoration of historic buildings
- Neighborhood events and programs
- (5) Dinghy dock
- (6) Water taxi and harbor tour services
- (7) Construction of Tucker/Ingersoll Wharf

Key Benefits

- Enhanced historic character
- Increased waterside activities
- Landscaped streets



SALEM HARBOR PLAN



Recommendations for Landside Use

- *Implement streetscape improvements on Derby Street as well as on side streets including Kosciusko Street, Daniels Street, Daniels Street Court, Hardy Street and Turner Street.*
- *Create small, park-like outlooks at the ends of streets extending south from Derby Street.*
- *Implement walkway improvements consistent with the idea of the Salem Harborwalk, wherever feasible, at the water's edge along public rights-of-way from the House of the Seven Gables to existing Harborwalk on Pickering Wharf. In the short term, the Plan illustrates a walkway system that provides pedestrians with a distinct course along city streets connecting the waterfront outlooks, and also provides a clear route from this area to the Salem Wharf.*
- *In the long-term, provide for additional public access to the waterfront in this and other areas through Chapter 91 licensing, easements, acquisition of properties, or use of existing public areas.*

The overall approach to streetscape improvements and providing pedestrian access to the waterfront applies in the Tourist Historic Harbor as well. Streetscape improvements as described previously will be continued along Derby Street, as well as along Kosciusko Street, Daniels Street, Daniels Street Court, Hardy Street and Turner Street. It would also be consistent with the intent of the Harbor Plan to extend streetscape improvements into the adjacent neighborhoods, including the north side of Derby Street, over time, perhaps initiating partnerships with the private sector as necessary. Wherever public rights-of-way currently exist along the water's edge, as illustrated in the following diagram, walkway improvements will be made. The long-term vision for Salem Harbor provides for additional public access to the waterfront through a number of potential means, such as the Chapter 91 licensing process, easements, and the acquisition of property.

As referenced earlier, the MCZM has produced a handbook that provides communities with the tools to identify and reclaim historic rights-of-way to the sea. The publication walks the reader through all of the steps in such a process, and presents a local case study as well as useful grant program information. In response to citizen queries regarding the location of the historic right-of-way to the sea within the Tourist Historic Harbor, the Harbor Plan recommends that the reclamation process might be undertaken either under the auspices of the City or an interested community group.

In the short-term, the Harbor Plan recommends that the Salem Harborwalk be clearly delineated along existing city streets leading pedestrians to several waterfront lookouts, as well as to Salem Wharf. The Harbor Plan recognizes the potential to provide pleasant and useful public access at the street ends and along the public right-of-way that extends to the water's edge. A small, park-like lookout, with seating and planting, is proposed for Daniels Street Court at the water's edge side of the existing parking area. Additional lookouts with plantings and seating are located at the end of Hardy Street with a water taxi landing at the end of Turner Street.

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- ***Support the implementation of current and ongoing National Park Service (NPS) programs and improvements. NPS plans include the addition of interpretive exhibits for visitors, accommodations for visiting historic and recreational vessels, the rehabilitation and restoration of a number of historic buildings and gardens, restoration of Derby Beach, various streetscape improvements, and more active use of their tall ship “Friendship”.***
 - ***Support NPS plans to expand their multipurpose mooring and berthing facility on Central Wharf to accommodate the visiting historic and marine education/research vessels, harbor tours, and possible some larger transient private vessels.***

The National Park Service (NPS) is nearing the end of implementing a comprehensive restoration and improvement program in support of the overall mission of the National Historic Site as identified in their 1991 Site Plan. Projects already completed include the rehabilitation of the exterior of the Custom House, Derby House and Narbonne House; several historic landscape restoration projects; the renovation of St. Joseph’s Hall; the rehabilitation and restoration of the West India Goods Store; and new exhibits in the back of the Derby House and in the Public Stores. An historic 18th century warehouse previously located on the Marblehead waterfront has been acquired by NPS, disassembled and will be reconstructed on Derby Wharf in 2008.

Derby Wharf has been the focus of a number of improvements, including the installation of a variety of pedestrian amenities and details, such as stone seating, historic foundation markers and a compass rose.

For some time, the NPS has sought funding to make a number of additional improvements on Derby Street, including the removal of overhead utility wiring; the installation of “period” lighting; and repaving and other streetscape detailing which links the site’s attractions on the north side of Derby Street with the wharves. All streetscape improvements will be consistent with design elements of the Harbor Plan.

The National Park Service, as part of its interpretive program, has recently added a multi-purpose berthing facility at Central Wharf for visiting historic vessels and other boats consistent with the mission of the National Historic Site. Current plans are to expand these floats and to consider allowing larger private boats to tie up along this wharf as a new source of revenue to support local NPS programs.

The NPS and the City of Salem have long been partners in preservation of the maritime history of the area and providing means for visitors and residents alike to provide physical and visual access to the historic waterfront. Toward this, the NPS is interested in further partnership with the City to study the possibility of utilizing Central Wharf or other parts of the site to activate the waterfront and the water sheet. This could include docks for dinghies and land-side support facilities for inner harbor water taxi/shuttle services or excursion boats offering historic harbor tours and ranger-led trips to offshore site such as the Bakers Island lighthouse station.

- ***Promote increased coordination among relevant organizations citywide to provide maximum support to tourism activities that will enhance the quality of the visitor experience.***

Within the City of Salem there exists an abundance of potential attractions for visitors, ranging from waterside activities to the world-class Peabody Essex Museum, the House of the Seven Gables and numerous other historic attractions such as the National Historic Site. Heightened coordination among these tourism-related organizations could reinforce the promotion and marketing of the City. The Harbor Plan's recommended approach is discussed in greater detail in the Implementation section of this report.

- *Promote events, programs and design elements that celebrate the maritime cultural heritage of residents, encourage community participation and strengthen neighborhood identity and pride.*
- *Promote the City's small business loan program, storefront improvement program, and the housing rehabilitation programs aimed at upgrading homes and businesses.*

The Harbor Plan seeks to balance the various visitor-related priorities outlined above with the goal of enhancing the quality of life for residents of this unique and historic waterfront neighborhood. Clearly, many of the proposed recommendations benefit both residents and visitors.

To complement efforts to improve the public realm, the Harbor Plan also recommends promoting a number of existing building improvement and housing programs to enhance the overall character of the neighborhoods and improve the building condition of these historic properties. The City has Commercial Design Guidelines that were developed in 2005 that would apply. A brief description of these programs follows:

- *Small Business Loan Program* – This program works to expand the financing opportunities for local entrepreneurs, while creating jobs and revitalizing the city's downtown and eligible neighborhoods. The program provides low-interest loans to qualified entrepreneurs to cover the gap between the amount of financing available for an economic development project and the amount that conventional lenders can finance. Funds are available for acquisition, working capital, qualified technical assistance, job training, and construction or rehabilitation of real property.
- *Storefront Improvement Program* – This program offers grants for up to \$5,000 per storefront for exterior improvements. The program requires a match of funds by the applicant.
- *HRP – Housing Rehabilitation Program* - This program offers zero (0%) percent, deferred-payment loans to Salem's low- and moderate-income households through the Department of Planning and Community Development (DPCD), as part of the Mayor's goal to improve the quality and safety of Salem's housing. The program provides assistance for small and medium size rehabilitation projects in order to eliminate existing or potential health and safety hazards, to carry out handicapped accessibility improvements and to undertake historic preservation. Typical rehabilitation projects

include, but are not limited to, the following repairs: painting, roofing, insulation, window replacement, plumbing, and electrical work. Owners of properties with lead-based paint hazards may combine this program with MassHousing's *Get the Lead Out* and/or the City of Salem *Gap Filler* programs.

- *GTLO (Get the Lead Out) Program* – Salem's Department of Planning and Community Development (DPCD) is the local rehabilitation agency that administers this program funded by *MassHousing*. Salem's program provides no- and low-interest loans to owner-occupants, landlords, and non-profit organizations throughout the North Shore to remove lead paint from homes and reduce the risk of lead poisoning in children.
- *Gap Filler Program* – This program supplements the Get the Lead Out Program funding to help low- and moderate-income owner-occupants and investor-owners with low-income tenants pay for inspections, lead abatement, relocation during abatement, and related costs to attain compliance with Federal and State lead laws.

Eligibility guidelines for these programs are defined by federal regulations.

As in the South Commercial Waterfront, the Harbor Plan calls for expressing the history and identity of the community with programs and urban design features. There are numerous opportunities to involve the community in commemorating events of local historic or cultural significance. This includes festivals as well as public art and design projects. For example, components of the streetscape system, (e.g. lighting or benches) might be adapted to express the identity and heritage of the neighborhood.

It is particularly important in this area to ensure that the identity of this district as a *residential community* is not lost among efforts to promote tourism. Moreover, it is widely acknowledged that these goals are not mutually exclusive; tourists like to visit destinations that are real, pleasant places to live. Consequently, priority will be given to events and programs that celebrate the cultural heritage of residents encourage community participation and strengthen neighborhood identity and pride. A negative factor associated with some neighborhood improvement initiatives is that many longtime residents are displaced by newcomers as property values rise and the character of the neighborhood changes. It is the intent of the Harbor Plan to use means, such as the programs described above, to work proactively against such trends.

Recommendations for Infrastructure Requirements

- *Consider the transportation conditions in the Tourist Historic Harbor in the context of the citywide transportation management plan.*
- *Support the City's efforts in implementing programs to address stormwater drainage problems in this area.*

In the Tourist Historic Harbor District, the Harbor Plan proposes small-scale landside development activities, and a location for water shuttle service. These proposed uses are ancillary or secondary uses that do not generate new vehicular traffic. Rather, they draw people

from tourist population already in the area for other activities. Traffic associated with the water taxi service will be drop-off or walk-up activity. The landside development is primarily specialty retail that again draws from pass-by foot traffic.

As is the case in other parts of the waterfront, areas within the Tourist Historic Harbor, especially low lying areas, are subject to stormwater and sanitary sewage overflows during severe storms. As at the South Commercial Waterfront, both the Inflow and Infiltration and overflow treatment facility programs need to continue to be implemented. Improvements to the water system include main line cleaning, relining of existing pipes, and valve and hydrant replacements.

Additional waterfront activity, the waterfront walkway, and the extension of streetscape improvements will also require additional lighting and the extension of power services to locations currently unserved.

North Commercial Waterfront

The North Commercial Waterfront is the site of the most significant changes proposed within the project area. In the 2000 Salem MHP, a waterfront parcel on Blaney Street currently owned by Dominion Energy was identified as the preferred site for a city-owned commercial wharf capable of supporting a variety of commercial water-dependent uses. This single move would have the greatest impact on reclaiming Salem's identity as a "vibrant seaport." This new public or public/private wharf would accommodate, in a pleasant park setting, a range of waterfront uses, specifically dockage and services for cruise ships, ferries, excursion vessels, and a variety of commercial boats. Residents of nearby neighborhoods would form the ranks of visitors, drawn on a regular basis to enjoy the waterside open space and views.

Follow-on studies since 2000 included subsurface investigations, preliminary planning, economic analysis, programming, engineering feasibility and schematic design. Some site improvements were completed in the late 1990s to support a commuter ferry demonstration initiative. The success of this demonstration led to further interim site improvements with fund support from the State Seaport Bond. A high-speed 120-passenger catamaran was purchased by the City with the help of a State EOT grant and seasonal ferry service between Boston and Salem beginning in 2006. In 2007, annual ridership had grown to nearly 73,000 passengers.

A 2005 study consolidated the previous planning, engineering and marketing efforts into a comprehensive site plan, identified dredging areas and volumes, and estimated site development cost of \$11,235,000 (in 2005 dollars), not including land acquisition. The study supported the need for the interim improvements completed in 2006, but suggested that, in the longer term, several specific steps would be required:

- City needs to gain control (through acquisition or long-term lease) of the 10 Blaney Street property.
- Some additional study is needed including a traffic analysis.

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- Final building and site design need to be advanced to provide adequate detail for construction bid solicitation and to obtain necessary local, State and Federal permits.
 - Funding needs to be secured to complete needed infrastructure improvements and to implement proposed programs.
 - Governance and management structures will need to be established to oversee Salem Wharf operations.

Implementation of all landside and waterside improvements in this planning area will be in compliance with the Americans with Disabilities Act (ADA) and the regulations of the Massachusetts Architectural Access Board (521 CMR). These should not interfere with marine activities in the Industrial Port that supporting critical power production or compromise the security requirement of these operations.

Recommendations for Navigation and Waterside Use

- *Construct a new wharf to flexibly accommodate the specific set of waterside uses described in the Harbor Plan.*
- *Provide berthing for excursion boats, headboats, ferries, water shuttles and taxis, and other commercial boating activities, with the exception of casino boats.*
- *Provide berthing and other support services to accommodate cruise ships and other commercial passenger vessels.*
- *Conduct dredging at Hawthorne Cove necessary to accommodate the construction and operation of the proposed Salem Wharf.*

This Harbor Plan continues to strongly support a program to develop the proposed multi-use, deep water access wharf off of Blaney Street on the west side of the Harbor's Designated Port Area (DPA). A preliminary conceptual design for this new municipal complex was developed in the 1990s and details were included in the City's 2000 Municipal Harbor Plan. Since that time, there have been many changes that now need to be considered in creating a commercial wharf facility that will meet the current needs of marine operations and of a changing local economy. Among these new considerations are the increased security requirements since 9/11, a growing and dynamic cruise ship industry, lessons learned from the reestablished ferry service to Boston, and changes in local marine industries including offshore LNG operations and other infrastructure needed for future energy production.

Recognizing the need to update the wharf design, the City has contracted with a team of waterfront specialists to develop a revised conceptual plan for the Blaney Street site. Since the initiative is not expected to be completed until after approval of this Harbor Plan update, the Harbor Plan will defer to the study's City-approved findings and recommendations. The following direction is provided to guide this development.

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- The site will remain a part of the DPA and thus its use will be dedicated principally to the support of a mix of water-dependent marine industries.
 - The site was used in the late 1990s for a seasonal ferry service connecting Salem and Boston. This service was reestablished in 2006. If this service continues to be economically viable, its operation should be accommodated as one of the principal activities within the new wharf complex.
 - In addition to ferries, the new wharf should be designed to support the needs of small to mid-size cruise ships, water-dependent excursion/tourist businesses, and dockage for other commercial boats, and landside facilities directly supporting these activities.
 - The City should continue to aggressively negotiate with the current owner(s) of the 10 Blaney Street property to either purchase the site or obtain a long-term lease for its use for supporting water-dependent commercial operations.
 - To realize the site's full potential to serve the marine industries proposed for the wharf, some offsite improvements will most likely be needed. Most critical are improved access and additional parking.
 - Options for improved access include increasing the width of Derby Street from Webb Street to India Street or possibly as far west as Blaney Street. This would allow for two-way traffic between the end of Webb Street and an improved or newly created access road onto the site. Creating a new access road off Derby Street east of Blaney Street (i.e., closer to Webb Street) would allow vehicles to avoid having to negotiate the sharp turn at the corner of Blaney and Derby Streets or to move onto and off the site without conflicting with pedestrian traffic moving between the wharf and downtown Salem.
 - As the site is more fully developed, more parking will likely be needed during the peak summer and early fall tourist season than can be accommodated on the 2.2 acre Blaney Street parcel. Ideally additional parking lot(s) or garage(s) should be created within easy walking distance of the site (3 to 4 minute walk or less than ¼ mile). If possible, this "accessory" parking should be located within the DPA with use shared with others located in the industrial port. If this proves not to be feasible, then a study should be completed to identify opportunities for creating satellite parking utilizing shuttle service that would serve the DPA's needs.

Recommendations for Landside Use

- *Support water-dependent uses that are appropriate to the site in scale and character, and which do not exceed the capacity of limited parking resources.*
- *Locate a re-fueling station and a pump-out station on the pier for the use of commercial vessels*
- *Extend streetscape improvements along Derby Street.*
- *Enhance pedestrian connections from Blaney Street to the Salem Wharf to provide a clear and pleasant route for both residents and visitors.*
- *Create a series of pleasant pedestrian walkways and open spaces at the Salem Wharf site.*
- *Celebrate and incorporate into physical improvements and proposed events aspects that reinforce neighborhood identity, local history and cultural identity.*
- *Support new construction that is consistent with the character of the neighborhood and respectful of existing views to the water.*

The Harbor Plan calls for a development program for the Salem Wharf that focuses on waterside transportation, excursion businesses and other types of commercial dockage, including a cruise ship facility and additional supporting landside development. The recommended program represents a mix of water-dependent industrial and accessory uses, and supporting and compatible non-water dependent uses.

Pavilions, ticket booths and waiting areas would be provided to serve the needs of passengers on the various types of commercial boating enterprises.

As described in discussions about other planning districts, the public realm in the North Commercial Waterfront will be improved with streetscape and other neighborhood amenities consistent with the overall design approach throughout the study area. As in other areas on the harbor, opportunities will be taken to express the heritage and history of the neighborhood in design elements and programming of community events, and new design will be encouraged that is responsive to the character of this unique waterfront context.

Recommendations for Infrastructure Requirements

- *Develop a plan to effectively manage increased traffic and meet current and increased demand for parking in the area. This would include defining Webb Street as the primary access route to the Salem Wharf.*
- *Make necessary improvements to ensure adequate and safe vehicular and pedestrian access, as well as adequate parking to meet new demand.*

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- *Support the City's efforts in implementing programs to address stormwater drainage problems in this area.*

One important component of the recommended citywide Transportation Management Plan would address the increased traffic and parking demand resulting from the proposed new uses associated with the development of the Salem Wharf. The magnitude of the projected traffic volumes associated with the Wharf development is likely to necessitate improvements to the local roadway system. The types of improvements necessary could include traffic signal timing and intersection striping adjustments, minor roadway widening, new traffic control devices, and the development of satellite parking facilities. Intersection and roadway improvements are likely to be necessary at several locations along Derby Street, Essex Street and Webb Street since these will be the primary access routes to the new development.

Signs would be provided to direct motorists to use Bridge Street and Webb Street to access the site. All exiting traffic would have to use Webb Street as Derby Street is currently one way eastbound between Orange Street and Webb Street and would continue to be one way to Blaney Street after the Wharf development. In general, any increase in traffic volumes is expected to be concentrated during morning and evening commuter hours.

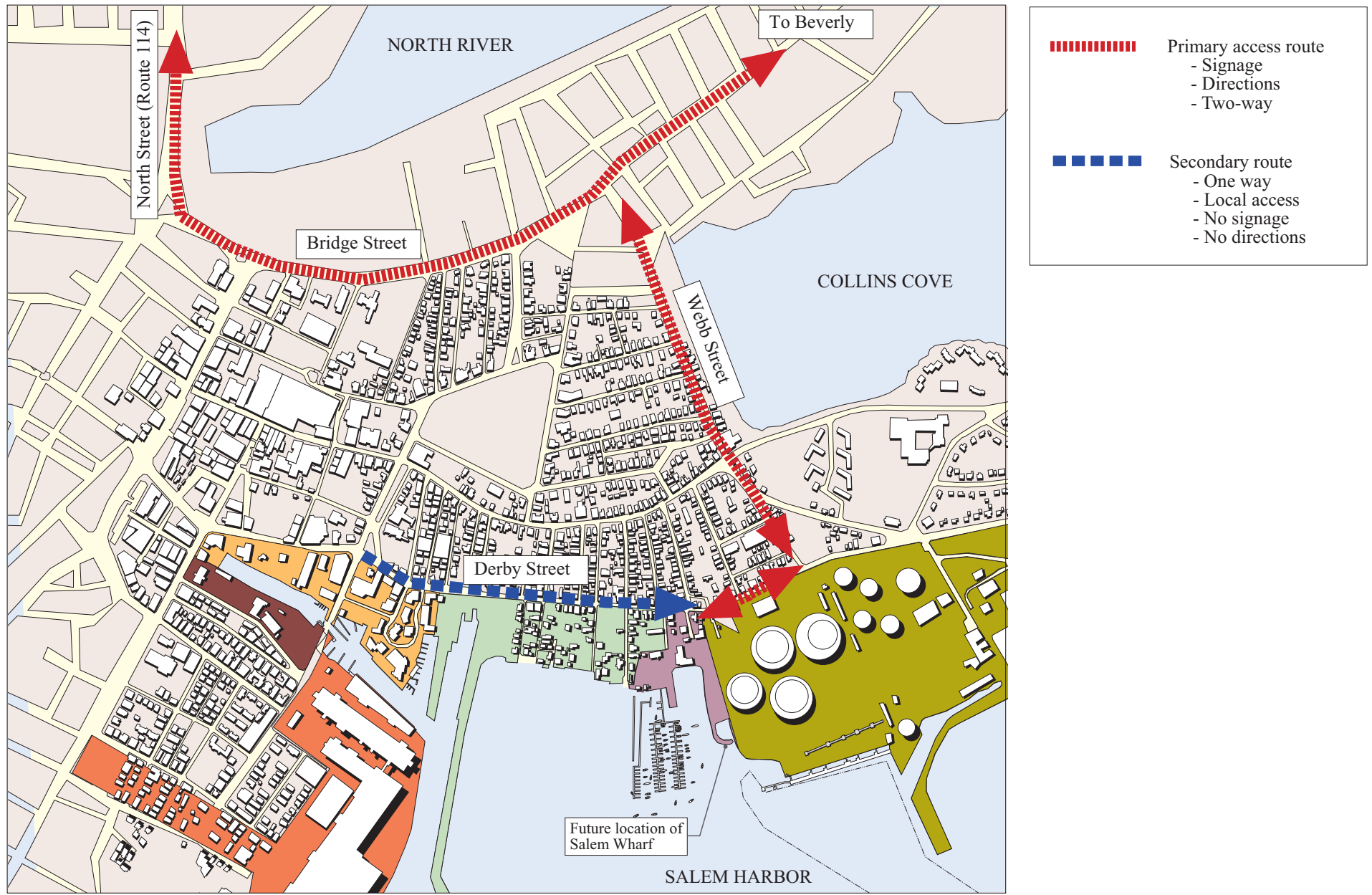
As in other districts, portions of the North Commercial Waterfront are subject to stormwater and sanitary sewage overflows during severe storms. To address this condition, both the Inflow and Infiltration and the overflow treatment facility programs need to continue to be implemented. Improvements to the water system include main line cleaning, relining of existing pipes, and valve and hydrant replacements.

The gas utility infrastructure can be upgraded to supply the demands generated by new developments since there is a high pressure main in Fort Avenue.

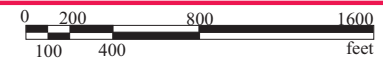
Industrial Port

The Industrial Port District covers an area of approximately 78 acres. All but about five acres of the landside portion of the Designated Port Area (DPA) are located on one parcel within this area. The facilities that comprise the landside portion of the DPA include the Dominion Energy power plant, the Dominion-owned (former Northeast Petroleum) oil terminal and tank farm, and a berthing facility for the DPA. The South Essex Sewage District Treatment Plant is located within the Industrial Port District but is not part of the DPA. The entire land area within this District is intensely used for water-dependent industrial activities, and the Plan recommends that it continue to be used in this manner.

Figure 9: PRIMARY ACCESS TO NEW SALEM WHARF



SALEM HARBOR PLAN



Recommendations

- *Support continued and future marine industrial uses.*
- *Implement Derby Street and Fort Avenue streetscape improvements as a link in the Salem Harborwalk.*
- *Make landscape improvements along the Dominion Energy site at Hawthorne Cove to provide a visual buffer when the site is viewed from the North Commercial Waterfront area.*
- *Promote and support graphic design program to improve the appearance of the oil tanks and other energy plant elements, where practicable, that detract from the visual appeal of the district.*
- *Support environmental impact improvements at the site.*

The predominant uses at the Industrial Port are the energy facility and the sewage treatment plant. The plan anticipates the continued agreement between the Designated Port Area status and the activities within this planning district. The Harbor Plan supports continued water-dependent industrial uses at the Industrial Port.

The Dominion Energy property occupies a prime site on the Salem waterfront, and is a key feature, both on the harbor and in the City's overall economy. This Harbor Plan proposes no change in existing use of the facility. As the Salem Wharf project takes form and the long-term future needs of the power plant site are better known, if any property becomes excess to the plant's needs, consideration should be given to uses that would support the water-dependent activities of other part of the DPA, specifically the North Commercial Waterfront.

The Plan strongly supports the on-going environmental improvements in this sub-area.

The Industrial Port and berthing facilities are used primarily to off-load bulk fuel (oil and coal) for fueling the electric power generating facilities at the site. The Plan supports the continued use of this marine facility for its current purpose. It is not the intent of this Harbor Plan to expand the existing industrial site, but to see its use limited to the current maritime operation. Specifically, the Plan does not support the expansion of terminal operations at the site that would support oil or coal distribution beyond the needs of the power plant.

The long-term future of the Dominion Energy facility, while one of the most important issues in the City's future, is believed to be outside the time-frame (10-years), and beyond the structure and scope, of this Harbor Plan. Any changes, expansion or increase of use shall be evaluated on a case by case basis, by the City administration and the City Council to determine its desirability. In addition, because of the role of this site as a Designated Port Area, the Harbor Plan proposes the establishment of a mechanism to ensure on-going discussion between the City and the facility's owners regarding activities at the plant.

The Harbor Plan supports the long-term commitment to marine industrial uses consistent with the site's status as a Designated Port Area (DPA). At the same time, the Plan recognizes the proximity of the site to adjacent residential neighborhoods and its location between two non-industrial waterfront areas within the overall study area, namely the North Commercial Waterfront and the Community Waterfront. Consequently, streetscape improvements are called for along Derby Street and Fort Avenue to serve as an important link in the Harborwalk for pedestrians and cyclists between the proposed Salem Wharf and Winter Island Park. Additionally, landscaping is recommended for the area adjacent to Hawthorne Cove to serve as a visual buffer from the industrial uses on the Dominion Energy site. The Harbor Plan also recommends that steps be taken to improve the aesthetic appearance of the site such as some sort of graphic treatment to the oil tanks and other industrial elements.

The Harbor Plan supports improvements to the Dominion Energy site to maintain its economic vitality and to continue to reduce its environmental impact. Improvements may include mitigation of solid waste disposal impacts, reduction of treated wastewater discharge to the harbor, improvements in combustion technology and consideration of alternative fuels such as partial or total use of natural gas, biomass, or other special fuels which may offer an improvement in air emissions. Also in keeping with the Environmental Resource Management theme of this Update, the Plan supports employment of alternative systems for energy production on the site if compatible with other uses in the area including residential. These systems might, for example, include solar and wind power.

Any land which would be freed up as a result of such a shift in fuel source should be developed for other maritime uses which utilize the deep water port. Any proposed industrial use would have to meet the highest environmental standards.

Community Waterfront

The Community Waterfront District is comprised of three parcels with frontage on Salem Harbor, Cat Cove and Smith Pool, covering about 66 acres. The landside boundary is formed by Fort Avenue and by Winter Island Road, where it runs along the upper end of Smith Pool and continues eastward along a straight line to Salem Harbor.

The uses within the district are water-dependent and water-enhanced. The major uses are the Northeastern Massachusetts Aquaculture Center at Cat Cove operated by Salem State College, the City-owned Winter Island Park and Fort Pickering, and the Plummer Home for Boys situated along the Salem Sound side of Winter Island.

Smith Pool is located within the property of the Aquaculture Center. It was created by damming the upper end of Cat Cove and now provides a research environment for the study of marine life in a simulated ocean environment. With completion of renovations at the facility several years ago, the College has been able to offer not only a college-level curriculum, but also a program for elementary and high school teachers.

Winter Island Park occupies the southern end of Winter Island. While the southern and eastern sides of Winter Island provide little or no shelter from the Atlantic Ocean, the western side of the Island along Cat Cove is protected from heavier seas. The Salem Harbormaster's Office is located at the Island's southeastern point. Much of the shoreline is rocky with the main exception being the crescent of beach known locally as Waikiki Beach.

The City is particularly concerned that Winter Island be protected and enhanced as a resource for public recreation and enjoyment. Historic resources on the exposed side of the Island that very vulnerable to damage from winds and seas are the earthworks at Fort Pickering and the Fort Pickering Lighthouse. Several years ago a new boat ramp was built with funding from the Massachusetts Public Access Board in the vicinity of the existing pier and the old Coast Guard seaplane hangar. A large parking area exists near the hangar and boat ramp. The location offers exceptional views out to sea and down the length of Salem Harbor. Winter Island's fifty-seven camp sites draw 2300 visitors annually from across the nation for stays that range from two days to two weeks. Increasingly, Winter Island has been and continues to be used as a location for private and corporate events ranging in size from fifty to five hundred participants.

Winter Island is a unique resource along the New England seacoast, with thirty acres of public waterfront parkland, magnificent views across Salem Harbor and a rich historic heritage. All improvements proposed for Winter Island in the Harbor Plan are intended to preserve and enhance this special place. The Winter Island Park envisioned in the Harbor Plan would be designed for primarily passive enjoyment --- strolling, picnicking, taking in the views -- by residents and visitors alike. The Plan seeks to reinforce the park's passive character in the nature and design of the landscape improvements and programming proposed. Priority would be given to uses that accommodate the community's year-round enjoyment of the park. Implementation of all landside and waterside improvements in this planning area will be in compliance with the Americans with Disabilities Act (ADA) and the regulations of the Massachusetts Architectural Access Board (521 CMR).

A variety of measures would be taken to tap into the rich historic heritage of Winter Island. This heritage includes the important role that Winter Island played in the Civil War as evidenced in the presence of Fort Pickering. A program of restoration improvements would be made to Fort Pickering to stabilize its condition, ensure safety and enhance appreciation of the Fort's historic value. The U.S. Coast Guard Air Station at Winter Island was commissioned in 1935 and operated first as a coastal defense installation and then as a full Air and Sea Rescue Station during World War II. Although the U.S Coast Guard moved the Air Station from Winter Island to Cape Cod in 1969, five buildings from this era still remain. Because of its historic significance Winter Island is proposed as one of the sites that would comprise Salem's Distributed Maritime History Museum.

Figure 10: COMMUNITY WATERFRONT



Recommendations

- Streetscape improvements on Fort Avenue
- Salem Harbor Walk
- Landscaping and streetscape improvements parkwide
- (1) Water taxi and harbor tours
- (2) Public boating activities
- (3) Additional floats off existing pier
- (4) Dredging
- (5) Mooring field
- (6) RV parking lot
- (7) Electrical service to the trellis area
- (8) Beach improvements and reconstruction of the path between the Fort and the beach
- (9) Re-use or demolition of the former Coast Guard hangar
- (10) Restoration of the former barracks building
- (11) New covered stage and backdrop
- (12) Recreation of the original moat around Fort Pickering
- (13) Rehabilitation of the entrance to the ammunitions bunker
- (14) Stabilized erosion and other life safety improvements at Fort Pickering
- (15) Exclusion fences to direct public access and protect the land
- Restoration of the light house
- (16) Potential Site for Marina
- (17) Potential Site for Boat Pumpout and Fueling Station

Key Benefits

- Increased opportunities for passive and active recreation
- Protected historic resources
- Improved and enhanced parklands
- Increased waterside activities



Harbor Walk on Public Land

SALEM HARBOR PLAN



While the primary focus of the Harbor Plan in this planning district is Winter Island, the Harbor Plan recommendations also call for supporting the activities at the Northeast Massachusetts Aquaculture Center as developed by Salem State College. Figure 10 shows all recommendations for this area.

Many of the recommendations for Winter Island as outlined below would increase the public's use and enjoyment of this site by upgrading or adding new infrastructure and introducing new activities. Although these changes support the Harbor Plan's vision, as with other improvements proposed in this Plan, recommendations for new and/or expanded uses and facilities would need to be evaluated to determine their cost compared to public benefit, the potential for any negative environmental impact, and any legal issues that may prevent implementation. For example, adjustments to the existing MOU with The Plummer Home for Boys may be needed before new uses can be introduced to the Island. Prior to moving forward with implementation on any specific project, the City will need to solicit a legal opinion from the City Solicitor regarding proposed uses on Winter Island given existing restrictions.

Recommendations for Navigation and Waterside Use

- *Promote a water shuttle service and harbor tours as alternative means to access the park. (we need to get a legal opinion on this)*
- *Add floats to the existing pier to increase opportunities for public boating.*
- *Add services that will support efforts to make Salem a welcoming full service port for recreational boats.*
- *Promote public boating activities, such as kayak rentals, sailing programs, etc. to increase opportunities for public waterside enjoyment.*

Among the waterside improvements proposed in the Harbor Plan is the provision for water shuttle service to various points throughout the waterfront, including Forest River Park, Pickering Wharf, Tourist Historic Harbor, and the South Commercial Waterfront. This would afford a visitor to Salem the opportunity to visit Winter Island Park without driving. The Harbor Plan encourages an overall increase in public boating activities, such as kayak rentals, windsurfing lessons and sailing programs.

Winter Island should become the harbor's center for supporting transient recreational boating offering a variety of services ranging from pump out and refueling to the sale of basic consumable supplies normally needed by boat operators. Other services would include showers, restrooms and access to a variety of transportation options including trolleys, bicycle rentals and water shuttle.

Recommendations for Landside Use

- *Continue streetscape improvements along Fort Avenue.*
- *Construct a safe and pleasant walkway, as part of the Salem Harborwalk, and bikeway, which would wind adjacent to, but buffered from, the existing access road.*
- *Implement a program of landscaping improvements throughout the park, including site furniture at appropriate locations, (such as the picnic area) and improved lighting, park-wide.*
- *Extend electrical service to the trellis area to broaden the types of activities able to be accommodated there.*
- *Confine recreational vehicle (RV) camping and tenting to well-defined locations. RV parking would not be allowed along the waterside edge of the parking lot so as not to obstruct the views for park visitors.*
- *Use landscaping to buffer the RV and tenting area from other portions of the park, as well as to provide a visual buffer from the power plant.*
- *Construct landside support facilities for a water shuttle service and harbor tours to increase opportunities for waterside transport to and from the park.*
- *Make improvements, such as the outdoor showers, to promote the continued enjoyment of swimming at Winter Island.*

Streetscape improvements along Fort Avenue would be consistent with those throughout the waterfront area. An entrance to Winter Island for pedestrians and bicyclists would follow alongside the existing Winter Island Park entrance roadway.

The Harbor Plan calls for a comprehensive program of landscape improvements to enhance the experience of visiting the park at Winter Island. The first step in such a process would be to retain a consultant to develop a landscape design, circulation and parking layout and planting plan for the park. Such an effort would address the issue of restricting the recreational vehicle (RV) camping and tenting to well-defined locations, screened by new landscape buffers from general view. Confining these activities to designated areas and using landscaping as visual buffers would not only afford campers more privacy, but would enhance the appearance of the park for other visitors. The parking layout will be developed to be consistent with the August 11, 1992/February 28, 1996 Land Management Agreement between the City of Salem and the Public Access Board. This agreement designates a specific number and location for car-trailer parking to accommodate users of the boat ramp.

Specific landscape improvements would likely include replacing topsoil and re-seeding lawns; planting other types of ground cover where appropriate; planting shrubs and trees; establishing a system of gravel-covered pathways; improved aesthetically-pleasing lighting, perhaps such as

bollard lights, throughout the park; and installing site furniture at appropriate locations park-wide. The system of pathways would link attractions around Winter Island, and would include directional and interpretive signage. Site furniture would include tables and benches in the picnic area, seating, trash and recycling receptacles park-wide. Grills, as well as additional shade trees should also be provided in the picnic area.

Lighting should be introduced to allow the safe exit from the amphitheater area and other points in the park. Electrical service and lighting should also be extended to the trellised area to allow for flexibility in the use of this area. This amenity would facilitate the staging of small-scale musical events (e.g. by accommodating amplifiers) and catered events for parties interested in renting the area for small functions.

Water taxi service and harbor tours would use the existing pier for docking. Support facilities for these uses should be constructed in this area. A small kiosk is proposed to provide tickets and scheduling information. The Harbor Plan also recommends that restroom facilities and a small bathhouse, including outdoor showers be considered in the vicinity of Waikiki Beach.

- ***Determine the feasibility of reusing the former U.S Coast Guard Hangar Building.***
- ***Restore the former U.S Coast Guard Barracks Building for a public, non-commercial use following up on the recently completed study that evaluated the feasibility of its restoration and reuse.***
- ***Construct a new covered stage and backdrop taking advantage of the natural amphitheater near the site of the Hangar Building.***

Several architectural improvements are recommended for the area. There is significant interest in restoring and re-using the former U.S Coast Guard Hanger. The Harbor Plan recommends that the City of Salem evaluate the feasibility of restoring this building for high-rack storage of recreational boats and to create repair service bay for the Harbormaster's boats. Apparently the skeletal structure of the building is in good condition and a new roof has recently added. The large hangar doors and brick skin of the building would need to be replaced and several safety features added including a sprinkler system to allow its use for boat storage. This could serve as source of new revenue for the City. A cost/benefit analysis would need to be completed. This use is consistent with the Harbor Plan's vision for the Winter Island Park but would likely require a modification to the Memorandum of Agreement (MOA) between the City of Salem and the Board of Trustees of the Plummer Home for Boys, regarding permitted uses at the site.

If this process does not yield an acceptable approach for the long-term preservation of the hangar, the building might be demolished. Its historical significance should be expressed, however, in some way at the site. One possibility would be to retain an architectural element, such as one of the towers, or a portion of the facade as a reminder of the building's significant past.

In either the case of complete renovation of the building or its demolition, replacement space would need to be provided for use currently located in the hangar building, in new structures or within the hangar building. These uses include the park management offices, park equipment and materials storage, and a gift shop. A new covered stage and backdrop would be built for outdoor performances. The natural amphitheater in the vicinity of the hangar building should be incorporated into the design of this amenity. If the hangar is razed, its current site should be landscaped to provide open space and additional parking spaces to support new waterside activities.

A Winter Island Barracks Building Re-Use Feasibility Study was completed in July 2007. It found that it would cost just under \$1 million to complete repair that would begin the building back to useable condition and went on to recommend possible grant opportunities that could help with some of the capital costs. Several organizations have expressed interest in using the building including but not limited to Salem Coastwatch, Sail Salem, Inc and the Veterans' Council.

A parking management plan would be enforced to ensure that long-term parking would be restricted and that non-boating users would continue to have access to the convenient parking and view that can be enjoyed from the southern end of the island.

- *Stabilize the transition between the ramparts of Fort Pickering and the shore.*
- *Erect a safety fence at the top of the earthworks and at the perimeter of the Fort to protect the public from the thirty-foot drop to the shore.*
- *Erect an exclusion fence to prevent uncontrolled access from damaging the fragile fort structures and landscape.*
- *Reconstruct the path between the Fort and the beach.*
- *Recreate the original moat around Fort Pickering, which was filled during the 1930's, including a replica of the original timber bridge that crossed the moat.*
- *Create a sharper definition of the earthworks at the Fort.*
- *Rehabilitate the entrance to the ammunitions bunker and add lighting to the underground portions of the bunker to make this historic site accessible to visitors.*
- *Restore and repair the lighthouse.*

The Harbor Plan calls for a number of improvements that serve to further enhance the significance of the valuable historic resources at Winter Island, particularly Fort Pickering. One set of such improvements focuses on ensuring public safety at the Fort and protecting fort structures and landscape. Such improvements would involve stabilizing the eroding area between the ramparts and the shore, as well as erecting fencing to protect the public as well as the landscape. A designated path between the Fort and the shore would be delineated. The entire

earthworks at the Fort would be more sharply delineated and stabilized through the planting of grass or other appropriate ground cover.

The ammunitions bunker would be restored and lighting would be introduced to make the site accessible to visitors. At appropriate points in the area of the Fort, interpretive plaques or markers would be placed to enhance the visitor experience.

Fort Pickering's original moat should be re-excavated and relined with stone, if the original stone was removed when the moat was filled in the 1930's. This improvement will restore the Fort to its Civil War era appearance. A replica of the original timber bridge should be reconstructed across the moat. The bridge should be capable of supporting small maintenance vehicles.

Recommendations for Infrastructure Requirements

- *Provide adequate sewer improvements to accommodate new uses at Winter Island.*
- *Add a new pier or pier extension in the vicinity of the boat ramp for use in providing pump-out services for recreational boats. The option of also using this facility for marine fuel sales should be explored.*

The activities proposed are intended to increase park use, and would need to be evaluated for on-site infrastructure improvements. The estimated costs of replacing or adding a second sanitary sewer to the site is between \$10,000 and \$80,000 depending on the distances to be covered and the level of repair or replacement. This type of cost is typically borne by the property owner rather than the public utility company.

The existing pump out facility at the Congress Street Bridge in the South Commercial Waterfront district is inadequate and tired and, at many times, inaccessible. With the expected designation of Salem Sound as a no discharge zone in the very near future, there will be an increased need for pump out facilities and the likely availability of State fund to pay for these improvements. There are no facilities in Salem that sell fuel to boaters. The nearest fueling station is in Beverly. Offering the sale of marine fuel at Winter Island would support the initiative to create a welcoming port for recreational boats and could prove to be a new source of revenue for the City. The cost/benefit of adding this service should be determined.

V. IMPLEMENTATION



Army Corps of Engineers Dredging Project (2007)

V. IMPLEMENTATION

Accomplishing the vision outlined in this Harbor Plan will require concerted effort by the public and private sectors and will require time. However, by keeping the underlying goals clearly in focus, every project and new initiative can contribute to a vital, coherent and delightful waterfront and harbor for Salem.

The Salem Harbor Plan has been created as an action plan. Its pages list hundreds of tasks that lie ahead if the vision for the waterfront is to be realized. It also recognizes that no single entity will be responsible for implementation. The cooperative and persistent efforts of hundreds of individuals will be required to fully bring these concepts to fruition.

Most of the early responsibilities for implementing the Plan rest with existing public agencies and organizations. These include the non-profit organizations that are essential to the civic, economic and cultural life of the harbor. Ultimately, the private sector will make important contributions to the revitalization of the waterfront, as its quality improves and its prosperity expands.

This implementation section of the Harbor Plan acknowledges that substantial public expenditures will be required to unlock key projects that are listed in this Plan. In particular, harbor dredging, the Salem Wharf initiative and expanded use of Winter Island will require special public investment in the port in order to create a critical mass of waterside uses.

Potential resources to fund improvements are summarized in the Harbor Plan. Special opportunities are associated with the state's Seaport Bonds that should be available for substantial funding of major improvements. Other state and federal grants may be directed over time to many of the other recommendations. Nevertheless, City funding and participation must be an integral part of the overall program for positive change.

Within this chapter, the Harbor Plan outlines the coordination needed among Salem departments and offices of government and private nonprofit organizations. This coordination is necessary to accomplish an enhanced cultural and tourism experience and to develop the waterfront, specifically the Salem Wharf, the South River Basin and a reinvigorated Winter Island.

Oversight and Responsibilities

- *Provide required management structures that will ensure resources and staff support for implementing the Harbor Plan and its amendment and updates.*
- *Ensure increased coordination among relevant local management entities.*

In order to ensure compliance with the Plan in years to come, it is important to have a management structure in place that will direct the allocation of responsibilities for the harbor, its edges and links to the downtown and the neighborhoods. The organizations that will guide each facet of the Harbor Plan must be able to focus on their own particular function and project. They must have the ability to coordinate, negotiate and work with both public and private organizations on the City, state and federal levels. They must have a staff that has the capability to create a plan, the credibility to obtain funding, and the skills to develop projects, manage the process and maintain results. The organizations will need all the necessary powers and tools to carry out projects, and they must have the support of a broad-based constituency.

Several organizations should continue to play an active part in the successful implementation of the Harbor Plan. They are:

City of Salem Department of Planning and Community Development (DPCD)

The Harbor Plan recommends that the Salem Planning and Community Development Department (DPCD) provide leadership and general oversight for all Harbor Plan implementation efforts. City funds, recycling of loans from urban renewal projects for present urban renewal designations, and CDBG funds support the DPCD. The Department may receive other public funds from the federal and state governments for projects. The Department has the appropriate powers and funding sources to undertake area-wide activities and coordinate the physical design aspects of the Harbor Plan. In particular, the Department would be responsible for the following efforts:

- * Establish and construct a Salem Harborwalk;
- * Support dredging of the channels;
- * Promote measures to improve the environmental quality of the Harbor;
- * Work with property owners to address Chapter 91 compliance issues;
- * Undertake streetscape improvements and small park-like lookouts throughout the Harbor, establish gateways, implement a signage program, and reinforce connections between the downtown and the waterfront;
- * Create an appropriate parking and traffic plan for the Downtown Waterfront;
- * Negotiate with National Grid to continue streetscape, landscape and access improvements along the south side of the South River;
- * Ensure continued communication with Dominion Energy to ensure optimal use of the Harbor's Designated Port Area and development of the Salem Wharf.
- * Ensure continued focus on waterfront opportunities and projects by continuing the involvement and supporting work of the Harbor Plan Implementation Committee.
- * Clarify the jurisdiction of Winter Island in implementation planning and establishing management consistent with this Plan.

City of Salem Harbor Plan Implementation Committee (HPIC)

The Harbor Plan Implementation Committee (HPIC) was created as a standing citizen's committee in 2000 as recommended by the Harbor Plan. This committee works directly with the Department of Planning and Community Development (DPCD) to assist in the implementation of the Harbor Plan and to update the Plan as necessary. The Committee meets periodically to review the status of the Plan, prepare advisory recommendations concerning proposed projects or programs, and advise the City in regards to evolving issues relating to the waterfront and harbor. In addition, the HPIC serves as the Planning Committee for revision of the Harbor Plan and served as the main body advising/guiding the 2008 Update of the Plan. The membership of the Committee represents broad interests of citizens, neighborhood representatives, elected officials, institutions and businesses along the waterfront.

The HPIC should continue as a standing committee providing guidance and assistance to the DPCD in overseeing implementation of the Harbor Plan recommendations.

Destination Salem

Destination Salem is the Office of Tourism & Cultural Affairs for Salem, Massachusetts. It is a non-profit, public-private organization with a mission to cooperatively market and promote tourism in Salem. Destination Salem members include numerous Salem business owners, City of Salem representatives, the National Park Service, and the Salem Chamber of Commerce. Projects are funded by its members and/or through grants and government subsidies.

This Plan recommends that Destination Salem take an active role in helping implement those sections of the Plan that promote and positively impact the attractiveness of the Salem waterfront as a unique and appealing destination for both visitors and local residents. This should include developing the concept of a distributed maritime history museum, supporting programs that activate the waterfront, and offering guidance for and assisting with waterfront improvements such as streetscape upgrades, landscaping, and directional and informational signs.

In general, Destination Salem should assist in efforts to:

- * Enhance strategic maritime, historic, arts, cultural, tourist and business cooperation to improve the visitor experience and maximize the potential public benefits associated with tourism in an efficient and productive manner.
- * Create a strategic marketing approach to promote Salem as a high quality visitor destination.
- * Identify funding sources to support tourist business alliances to ensure their long-term effectiveness

Other City Departments or Entities and Recommended Roles

The following entities also have significant roles to play in the fulfillment of this Plan's vision for the future of Salem Harbor:

City of Salem Department of Park, Recreation and Community Services

This Department oversees a number of programs, facilities and revenue-generating activities within the planning area. Its involvement is critically important to the implementation of several of the Plan's recommendations including those relating to Winter Island, Forest River Park, the creation and maintenance of waterfront pocket parks and waterfront recreational programs. The management responsibilities for waterfront parks and water-dependent programs links this department to several of the Plan's recommendations, particularly the proposed expanded use on Winter Island facilities.

City of Salem Harbormaster

The Harbormaster has office and dock space on Winter Island and uses the old hangar for servicing and winter storage of his boats. This position is assigned waterfront regulatory duties including responsibility for inspections and for setting fees for boats and ships using the piers, docks, moorings and ramps in the Port of Salem. The role of the Harbormaster is not expected to change significantly in the foreseeable future except in providing some new services for recreational boaters in support of the recommendation to make Salem a more welcoming, full-service port for recreational boats. The Harbormaster is not expected to be assigned management responsibilities for the Salem Wharf but should serve as a member of the committee/commission overseeing operations of this new facility intended to support commercial vessels.

City of Salem Conservation Commission

Waterfront developments on the Harbor would continue to be regulated by the Conservation Commission for impacts to wetland resource areas. The updated Harbor Plan of 2008 placed more emphasis on the environment on or around Salem Harbor and thus this committee will be leading implementation of several Environmental Stewardship recommendations included in the Plan.

City of Salem Planning Board

Any projects recommended in the Harbor Plan would be subject to Planning Board review for site plan approval, subdivision approval and special permits, as applicable.

City of Salem Renewable Energy Task Force

This Task Force is focused on creating ideas, researching technologies and recommending programs with the goal of bettering Salem's environmental stewardship. Their mission is consistent with the Plan's stated goal to demonstrate environmental leadership through waterfront initiatives that promote energy conservation and support protection and restoration of marine ecosystems within the planning area.

Salem Redevelopment Authority (SRA)

The SRA and its Design Review Board (DRB) plays an active role in redeveloping downtown Salem and revitalizing the Central Business District while preserving the social fabric and architectural heritage of the City. The South River Basin in the Harbor Plan's South Commercial Waterfront is part of the City's Heritage Plaza East Urban Renewal Area and thus a focus area of the SRA.

Other Salem committees/boards that should be considering revitalization of the harbor and its waterfront in their deliberations include:

- Beautification Committee
- Bike Path Committee
- Historical Commission
- Parking Department Board

U.S National Parks Service (Salem Maritime Historic Site)

PRIVATE NONPROFIT ORGANIZATIONS

The Salem Partnership

A private, nonprofit project-focused organization, the Partnership is committed to projects that will revitalize economic development in Salem with a close focus on the Port and the Salem Court. The organization celebrated its 20th anniversary in 2007. In addition to harbor development and support for the Court project, the Partnership has recently focused on a Creative Economy Initiative and the downtown Main Streets Program. The Partnership has been actively involved in both the development of the future Salem Wharf and the update of this municipal harbor plan and is expected to work with the public sector and its representatives on waterfront development projects involving the private sector.

Salem Harbor Community Development Corporation (CDC)

The CDC represents the interests of low and moderate income Salem residents, targeting their activities in the Point neighborhood. It offers social services and programs to residents in the neighborhood and has been responsible for developing, owning and managing housing for the area. It is funded through CDBG, the State, United Way, and management and development fees. The CDC is expected to continue to be involved in those projects affecting the neighborhoods it represents.

Salem State College

Although its primary mission is as an educational institution, Salem State College is involved in the Salem waterfront. The College has an active aquaculture center in Cat Cove; its athletics department has run sailing program for Salem's youth on Winter Island; it is a member of Destination Salem; and the College President serves on the Executive Committee for the Salem Partnership.

Salem Sound Coastwatch (SSCW) (formerly Salem Sound 2000)

A non-profit coastal watershed organization with the mission to protect and improve the environmental quality of Salem Sound and its watershed, which includes Salem and the other five watershed communities: Beverly, Manchester, Danvers, Peabody, and Marblehead. Through municipal partnering, scientific investigation, and education, and stewardship, SSCW works to promote environmental awareness and foster responsible and sustainable resources management practices. Their top priorities are protecting coastal habitats, commercial and recreational marine resources, and water quality.

Essex National Heritage Commission (ENHC)

The ENHC is the non-profit management organization for the Essex National Heritage Area (ENHA). The Commission's mission is to promote and preserve the historic, cultural and natural resources of the ENHA and develop public/private partnerships that support. Their goals are consistent with Harbor Plan objectives to promote the rich maritime heritage of Salem Harbor and support waterfront attractions that celebrate that history.

Economic Development

The economic development envisioned in the Harbor Plan holds promise for the City of Salem. Thoughtful and sound city planning will be required for the well coordinated efforts of public and private sector activities. The continued process of achieving the Harbor Plan's promises should remain open and responsive to the people of Salem through their access to the citizen oversight committees and boards such as the Planning Board, the administrative offices of their government and through their elected representatives to the City Council. While the use of the contracted services or authorities may be appropriate, the coordination of city planning remains the focus of the Salem Department of Planning and Community Development (DPCD)

- * The Port of Salem Expansion study, expected to be completed in Spring 2008, will address the appropriate management options for the future Salem Wharf facility.
- * Create a development and management entity for the redevelopment and operation of Winter Island.

The use of a specially created development mechanism is a very important ingredient to crafting a successful approach to redevelopment of the Salem Wharf Project, the redevelopment of Winter Island and other initiatives along the waterfront. In particular, the Salem Wharf will require substantial public improvements in order to make its operation feasible and to provide the envisioned public benefits. A development mechanism must provide the ability to combine public investment and private investment on the same site in a way that will be both accountable to the public sector and business-like for the private sector. The development mechanism must be able to acquire land and leases within a framework of public purpose. The mechanism must be flexible and streamlined to operate like a private corporation in terms of management and contracting, but have the benefit of public oversight to ensure that public goals and commitments are met.

The Port of Salem Expansion study, expected to be completed in Spring 2008, will be addressing the appropriate Harbor Management Entities for the Salem Wharf facility. A six-member Port Management Committee has been formed to guide the initial phases of this ongoing initiative. The final management entity created would likely focus exclusively on the marine industrial, water-dependent activities supported by the new wharf facility. Other waterfront infrastructure and operations within the Port of Salem supporting recreational uses and small commercial activities (such as Winter Island) should be under a separate oversight committee and/or management staff.

As Winter Island is developed with expanded services for recreational boaters, with the possible reuse of the existing barracks and hangar buildings, and with improvements to the island's recreational services and historic structures including Fort Pickering, a restructuring of island management will likely be necessary to efficiently and effectively oversee all the activities and operations on this site. Creation of a separate management organization should be considered for Winter Island and possibly to oversee development and to coordinate programs/activities for all waterfront public open space including the Harborwalk. This is similar to a recommendation within the 2007 Update of Salem's Open Space and Recreation Plan for all the City's conservation land, parks, playgrounds and outdoor sports facilities (see Appendix B).

Below is a summary of proposed actions that the DPCD would coordinate:

- * Providing for public access to the waterfront through Chapter 91 licensing, easements, acquisition of properties, or through construction along public areas;
- * Promoting private development along the South Commercial Waterfront, and undertaking waterfront improvements, including repairs to sea wall and bulkhead, provision of additional floats, slips and a dinghy dock;
- * Providing for public access to the waterfront for the Tourist Historic Harbor, installing bike racks, constructing a dinghy dock and landside facilities for a water taxi service;
- * Adding floats, and constructing a dinghy dock and landing for a water taxi for the Tourist Historic Harbor;
- * Celebrating neighborhood identity in physical improvements and proposed events for the North Commercial Waterfront;
- * Supporting new construction consistent with character of the neighborhood for the North Commercial Waterfront, including non-water dependent uses to contribute financial support to Salem Wharf, a refueling station, new parking facilities, and a landscape buffer;
- * Promoting businesses aimed at providing services to boaters;
- * Constructing Salem Wharf, building berthing facilities, providing fuel dock;
- * Supporting environmental improvements at the Industrial Port;

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- * Undertaking landside and waterfront improvements for the Community Waterfront, particularly at Winter Island;
 - * Issuing an RFP for the re-use of the former Coast Guard hangar building and undertaking a feasibility study for renovating the former barracks building;
 - * Involving the community and neighborhood groups in the long-term maintenance and management plans for Winter Island Park;
 - * Implementing necessary land agreements between the Board of Trustees of the Plummer Home for Boys and the City of Salem to ensure minimal disruption to the implementation of improvements proposed in the plan, (specifically the pedestrian and bike paths on Plummer Home property adjacent to the access road);
 - * Seeking both construction and operational subsidies as required to fully meet the public goals for Winter Island.

Implications for Harbor Management

Although the options described above will need to be created with public funding, development fees and revenues should ultimately support their staffing and overhead, making them self-sustaining. Because the overall fiduciary and development decisions will take place in public meetings, public participation will continue through all the developments in each of the options described above.

Phasing Strategy

Phasing and implementation will depend on a number of variables, including agreement on priorities, availability of public funding and private financing, receptivity of the marketplace, coordination of existing organizations and groups, and establishment of new entities that will guide and manage the projects described in the Harbor Plan.

Implementation phasing has been developed in consideration of both the value of the project and the feasibility of completing with available funding, time required for permitting, and the impact on/by other development initiatives. Many of these projects such as dredging will continue to be needed into the foreseeable future. Listed below are the priorities for the near, mid and long term. Most of the initiatives not listed here be such as environmental resource enhancements and marketing the harbor should be begin as some as staff and funding can be identified and continue into the foreseeable future.

Near-term Priorities (2008 – 2010)

- * Develop the Salem Wharf;
- * Confirm long term role of Harbor Plan Implementation Committee;
- * Clarify, coordinate and communicate roles and responsibilities for implementing the Harbor Plan;
- * Complete initial improvements to the South River Basin including the new 15 Peabody Street, seawall repairs, Harborwalk around the west and south sides of the South River, and floating docks on at the east end of the basin (near Congress Street Bridge).
- * Develop a local Dredge Material Maintenance Plan and begin “quick start” dredging projects such as the South River and, if needed, in the vicinity of the Salem Wharf.
- * Complete feasibility studies for a Kosciusko Street Wharf, Winter Island Hangar, Inner Harbor Water Shuttle and Distributed History Museum.
- * Complete a comprehensive survey of seawalls and storm drains within the planning area.
- * Develop a design and plan for completing streetscape improvements, directional and informational signs and buffer landscaping along the waterfront
- * Develop a comprehensive plan for expanded services on Winter Island including identifying funds and completing renovation of the old barracks building.
- * Prepare City capital plans to induce Harbor Plan projects;
- * Develop business and financial plans for projects and programs;

Mid-term Priorities (2011 – 2015)

- * Continue dredging initiatives including areas such as Palmer Cover Channel and, as needed in Tourist Historic Harbor area. ;
- * Work with NPS in local preparation for 100th anniversary of Park Service.
- * Explore opportunities for adding new regional ferry connections from Salem
- * Construct facilities for water shuttle/ taxi in the Tourist Historic Harbor and bike racks along the waterfront;
- * Add additional floating docks and performance barge to South River Basin
- * If determined to be feasible (both economically and with minimal environmental impact), construct a new public wharf off Kosciusko Street.
- * Create a Distributed Maritime History Museum along the Salem waterfront

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- * Add floating docks within the Tourist Historic Harbor and at Forest River Park to support water shuttle operations and accommodate dinghies.
 - * After facility upgrades and expansion of services, promote Salem as a full service and welcoming port for recreational boats.

Priorities for Long-term or Dependent on Private Development

- * Complete remaining maintenance dredging as needed within the planning area
- * Issue RFP for new projects and construct landside support facilities for the Winter Island including restoration of Fort Pickering and other historic structures;
- * Add remaining sections of Harborwalk, public accessways, view corridors as private development occurs
- * Increase public access along the water's edge in Shetland Park and explore feasibility of adding a Shetland Park commercial wharf at the entrance to the Palmer Cove Channel.
- * Prepare Harbor for Salem's 400th anniversary celebration

Resources

Estimate of Proposed Costs

The following estimate of costs refers to public costs associated with several of the major recommendations contained in this Plan. The costs of developing the Salem Wharf and completing harbor dredging are expected to be significant but will likely be substantial funded through the Massachusetts Seaport Bond Bill. Dredging costs should be estimated as part of the separate local DMMP planning process. **The cost for the construction of the Salem Wharf is being developed as a part of the Salem Port Expansion contract and is expected to be available sometime in 2008.** The figures below represent total estimated project costs in 2007 dollars. Most costs were estimated based on given unit cost assumptions, to a concept level of detail. The costs may vary considerably, however, depending on final design directions and technical issues encountered during design and construction.

Plan Element	Total Cost *
<u>Area-Wide Recommendations</u>	
Signage Program	\$500,00
<u>South Commercial Waterfront</u>	
<i>Landside Uses</i>	
Streetscape Improvements	\$2,700,000
Public Parks and Open Space	\$1,800,000
Harborwalk around South River.	\$800,000
<i>Waterside Uses</i>	
Boat floats and access	\$160,000
<u>Tourist Waterfront</u>	
<i>Landside Uses</i>	
Streetscape Improvements	\$1,500,000
Extend Streetscape Improvements to Adjacent Residential Area	\$600,000
Dinghy Dock	\$60,000
Landside Support Facilities for Water Taxi Activities	\$300,000
Waterfront Outlooks	\$270,000
<u>North Commercial Waterfront</u>	
Improve Derby Street streetscape.	\$250,000
<u>Industrial Waterfront</u>	
Improve Derby Street and Fort Avenue streetscape.	\$1,260,000
<u>Community Waterfront</u>	
<i>Landside Uses</i>	
Improve Fort Avenue streetscape.	\$500,000
Winter Island improvements	
Demolition, renovation, stabilization, landscape and park improvements	\$1,100,000
Office and tourist information center	\$200,000
Add surface parking facilities on the old hanger site.	\$175,000
Build new stage and backdrop.	\$150,000
<i>Waterside Uses</i>	
Expand floats and construct support facilities for water taxi and harbor tour activities.	\$75,000

(* 2007 dollars)

In addition to the costs associated with the recommendations within the harbor planning area, the Harbor Plan supports funding of necessary improvements and repairs to the waterside facilities at the Willows and construction of dock at Forest River Park, consistent with the funding of the other needs specified here.

Dredging

Dredging has been identified within this Harbor Plan as a critical path element. Recently dredging has been conducted in the main navigational channel leading into the Port by the U.S. Army Corps of Engineers. Dredging has also been completed within the last 5 years at the piers adjacent to the Power Plant and immediately next to Derby Wharf at the National Parks Service property. It is now critical to dredge the fairways, driveways, and slips that connect the piers docks and wharves throughout the Harbor to the main channels. Without this needed dredging, vessels will be able to enter the Port but not utilize the piers, wharfs, and landings to their fullest.

A critical component in the dredging sequence is identifying a location where (unsuitable) dredge material can be disposed. Options include in water disposal (in engineered structures such as Confined Aquatic Disposal [CAD] Cells), shoreline disposal (in engineered structures such as Confined Disposal Facilities [CDFs]), and in upland facilities such as landfills or beneficial re-use sites. These solutions have been utilized by marine interests successfully throughout the east coast. A study to determine the most viable options for the specific materials that will need to be dredged from Salem Harbor should be conducted. Such a study is usually referred to as a Dredge Material Management Plan (DMMP). A DMMP is intended to identify and seek pre-approval for unsuitable dredge material disposal scenarios from the various regulatory agencies. As such, a DMMP is clearly an early identified activity that will need to be conducted within the phasing of the overall dredging of the Harbor. The DMMP should form the framework for the management of the overall dredging of the Harbor into the future. That said, the DMMP is not a required precursor to harbor dredging, as “quick-start” projects can move ahead with individual specialized scenarios.

Quick-Start Projects

The DMMP should provide disposal options for the majority of the materials removed during dredging, however project can be “quick-started” prior to its completion. The DMMP should provide an economic material placement solution for dredge products. Any project could proceed prior to the implementation of a DMMP if it identifies a suitable disposal option within its scope.

DMMP Projects

In order to be economically feasible, a disposal plan for the materials dredged from the channels and port facilities will be required. To fully implement the Harbor Plan, up to one million cubic yards of material will need to be relocated. A portion of this material will be unsuitable for deep water disposal and will require an alternative disposal method developed in the DMMP.

Sequencing

The utility of the proposed piers depends heavily on the ability of deep draft ships to access them at all tides. The most important aspect of this is to assure adequate draft at the slip space. In some cases it may be advantageous to dredge dock space under a “quick-start” project in order to meet short term goals of attracting deeper draft vessels to the Port. However, dredging a dockage point and not its associated channel, limits the accessibility of that point to higher tide ranges which ultimately will limit the desirability of the destination. For this reason dredging of dock spaces should not be seen as a long term solution, but as a means of returning certain harbor areas to usability prior to completion of the DMMP.

Potential Funding Sources

A variety of both debt and equity (grant) sources may be appropriate to the implementation of the Salem Harbor Plan. The full range of state and federal sources will be explored as part of an implementation strategy for the Harbor Plan. The following summary represents a first step in this process, but is not intended to foreclose other options which may arise as the project moves forward. It is also likely that there might be significant private interest in projects proposed by the Harbor Plan as indicated by the positive rates of return on investment.

One significant potential resource worthy of particular note is the Seaport Bond Bill, “An Act Relative to the Revitalization and Development of the Commonwealth’s Seaports.” This bill provides for funds to be available to develop and revitalize the Commonwealth’s seaports, for a variety of purposes related to infrastructure, facilities, dredging and related improvements. Among the specific authorizations in this bond bill is not less than eighteen million dollars for the dredging, improvements, expansion and development of the Salem Port, the dredging of an additional deep water basin, and the construction of a public port facility. Beyond that specific authorization, Salem would be eligible for general funds authorized for improvements to coastal facilities in designated and non-designated port areas. This may include construction, reconstruction, rehabilitation, expansion, replacement and improvement of public facilities, piers, wharves, boardwalks, berths, bulkheads, and other harbor and waterfront facilities. Funds may also become available for the removal of unsafe and hazardous wharves and piers, and for research, planning, and public infrastructure investments in fish hatcheries and aquaculture.

A brief description of a number of public funding programs of potential relevance to the implementation of the Salem Harbor Plan follows.

Source: Seaport Bond Funds

Amounts:	There is no preset limit on the size of projects funded although there are annual spending limits within the bond cap. Requests are to be made directly to the Governor’s Seaport Advisory Council by the City of Salem.
Uses:	Seaport bond funding can be sought by the City of Salem for dredging projects, harbor-related studies, and waterfront infrastructure upgrades, repairs and additions that can demonstrate economic benefit to the Commonwealth of Massachusetts by serving its commercial interest, and/or the public good. In general seaport bond funding can be used to cover costs associated with testing, characterization, design, and also construction. .
Timing:	NA
Note:	Construction funding may require a 20% match in either funds or in kind services from the City

Source: EPA Brownfields Program

Amounts:	Current funding for fiscal year 2008 allows up to \$200,000 in Assessment Grants (funded over three years), \$1,000,000 in Revolving Loan Funds (funded over five years), and \$200,000 in Cleanup Grants (funded over 3 years).
Uses:	The EPA Brownfield program can be accessed as a funding source for returning underutilized contaminated properties to beneficial use. The focus of the program is on upland and land side properties; however, it is not limited to projects linked to the restoration of these sites.
Timing:	Yearly

Source: NOAA Portfields grant

Amounts: N/A**Uses:** Building on the Success of the EPA Brownfields Program, the National Oceanographic and Atmospheric Administration has begun pilot programs on coastal brownfield redevelopment under the heading of “Portfields”. Although currently in pilot stages only, the focus of this program is on returning underutilized, contaminated properties to beneficial use and improving marine transportation. This could develop into an important funding source for many of the projects within this plan.**Timing:** In pilot phase only

Source: Transit-Oriented Development (TOD) Bond Program

Amounts: NA**Uses:** This Program was authorized in Chapter 291, Section 2I of the Acts of 2004 for the purpose of providing technical and financial assistance to public entities or the public entity of a public/private partnership undertaking: 1) housing construction; 2) parking construction; 3) preliminary design of pedestrian and bicycle improvements, and/or 4) construction of pedestrian and bicycle improvements. Projects must be located within ¼ mile of a transit station as defined in the Program regulations (e.g. Salem Commuter Train Station, Blaney Street Ferry Terminal). The State Executive Office of Transportation and Public Works directly manages the bicycle, pedestrian and parking awards.**Timing:** The Program funding rounds have been conducted on an annual basis subject to available CAP, the Governor’s direction through the former OCD, and the needs of the Administration’s housing program. The Program target release date would be the fourth quarter of a particular state fiscal year (SFY), with applications accepted at the close of that SFY (June 30th). The review and subsequent award announcement target date would be the close of the first quarter in the following SFY (September 30th). The actual dates of each Program release have varied and are set at the Secretary and Deputy Secretary’s discretion.

Source: Water Transportation Capital Improvement Program

Amounts: Since 1998 this Program has provided over \$23 million in grants to enhance passenger water transportation throughout the Commonwealth. The Program was capitalized in several Legislative Transportation Bond Bills and assigned to EOTPW budget line items.**Uses:** The State Executive Office of Transportation and Public Works provides technical assistance, funding and oversight of eligible feasibility studies, design/engineering and construction of passenger water transportation infrastructure that prioritizes commuter-based trips. EOTPW’s program is supportive of projects that also increase accessibility. Projects may directly support passenger handling facilities, but can also support ferry operation and maintenance/repair.**Timing:** Program releases have averaged one per year since the mid 1990’s. Actual release dates vary at the discretion of the Secretary and Deputy Secretary. Release dates are also subject to available authorization, CAP and EOTPW staffing capacity. The Program release target date would be the fourth quarter of the current state fiscal year (SFY), with applications accepted at the close of the current SFY (June 30th). The target date for reviews and subsequent award announcements would be at the close of the first quarter in the following SFY (September 30th).

Source:	Transportation Equity Act (SAFETEA-LU)
Amounts:	\$241.1 billion with \$285 million earmarked for ferry systems.
Uses:	In addition to nationwide funding for ferries, the Act provides funds for a variety of other transportation programs most oriented to highway improvements, air quality, pedestrian safety, etc.
Timing:	FY 2006 - 2010
Note:	SAEFTEA-LU builds on earlier ISTEA and TEA 21 bills. For more information, see www.fhwa.dot.gov/safetealu/

Source:	MA Community Development Action Grant
Amounts:	\$1 million cap per project.
Uses:	Community and Development funds for economic development; no restriction on spending but must be spent on publicly-owned or managed projects in order to stimulate economic development activities that will leverage private investment, create/retain jobs for low and moderate-income persons, and address the needs of deteriorated or disinvested neighborhoods.
Timing:	State-appropriated and bonded every four years. The competitive grant program and funding rounds are announced annually.
Note:	See www.mass.gov/dhcd/components/cs/1PrgApps/CDAG/default.HTM for more information.

Source:	Public Works Economic Development Funds
Amounts:	Up to \$1 million spent every two years; \$15,000,000 unspent this year.
Uses:	To assist municipalities in funding transportation infrastructure that will stimulate economic development.
Timing:	Every two years.

Source:	MA Ready Resource Fund
Amounts:	Up to \$400,000 per year.
Uses:	Public facilities, parking lots and infrastructure.
Timing:	NA

Source:	Chapter 90 Funding
Amounts:	NA
Uses:	Roadway paving and raising curbing, streetscape improvements for state roads.
Timing:	Possibly some funds available this year, but more in future years.

Source:	Community Development Block Grants
Amounts:	NA
Uses:	Streetscape and Main Street improvements if area is shown to meet criteria of 'slum and blight.' CDBG funds may be matched to dollars obtained from other sources.
Timing:	Yearly.
Note:	Salem is an Entitlement Community, which means that they receive a fixed amount of CDBG funding and are thus precluded from competing for additional funds.

Source:	MA Preservation Project Fund - MHC/MACD
Amounts:	Up to \$1 million expected in round 14 grants (applications due nlt 2/22/08)
Uses:	Grants are given to municipalities and nonprofit organizations for preservation of historic properties.
Timing:	Yearly.
Note:	See www.sec.state.ma.us/MHC/mhcmppf/mppfidx.htm . IRS offers 20% tax credit for rehabilitation of historic properties; for commercial and rental property only - no public incentives for individual homeowners; grantee must provide 50% match.

Source:	MA DCR Historic Landscape Preservation Initiative
Amounts:	Ranged from \$2,431 to \$273,252
Uses:	From 1998 to 2003, this program funded 113 landscape preservation projects in 71 municipalities for historic parks, commons, public buildings. Program is not currently funded but DCR staff will provide technical assistance.
Note:	See www.mass.gov/dcr/stewardship/histland/histland.htm .

Source:	Homeland Security Funds for Ports
Amounts:	Funding range not available although several \$m have already been received by Massachusetts Ports including Salem.
Uses:	To increase port security primarily against terrorist attack In Massachusetts, funds provided for smaller ports (e.g. Salem, Gloucester) have been used to purchase security cameras, fencing, law enforcement boats, and ID equipment.
Notes:	Although these are federal funds, they have come through the Governor's Seaport Advisory Council.

Existing City of Salem Loan and Grant Programs that have applicability within the planning area include:

- Small Business Loan program
- Storefront Improvement Program
- HRP – Housing Rehabilitation Program
- GTLO (Get the Lead Out) Program
- Gap Filler Program

Other funding options to assist in the implementation of streetscape, facade improvements and other related public improvements might include Investment Tax Credits, which are administered at the federal level through the National Park Service, and community partnerships with local banks. Salem's solid track record with past redevelopment efforts was cited by the Massachusetts Department of Housing and Community Development as a potential asset in pursuing such an option with private banks in the future.

The likelihood of acquiring funding under any of these or other sources depends on a variety of factors, including timing, eligibility and competing applications. At the same time, a project's inclusion in a Master Plan would undoubtedly strengthen its position in any competitive review process.

Waterfront Enterprise Fund

** Create a Waterfront Enterprise fund to support marine uses and public access.*

An additional funding-related recommendation of the Harbor Plan is the establishment of a Waterfront Enterprise fund as authorized in M.G.L. Chapter 44, Section 53 F1/2. Enterprise funds allow communities to separately account for the revenues and expenses of providing a particular service. Examples might include mooring fees, a certain percentage of boat excise tax revenues, and other revenue generated by waterside activities. An enterprise fund may be established for services such as utilities, health care, recreation and transportation. The Harbor Plan recommends establishing such a fund for the waterfront area, which might include all user fees and charges associated with waterside activities, as well as Chapter 91 mitigation funds. The purpose of such a fund would be to direct the proceeds of mitigation funds, revenue generated by user fees and other donations to the enhancement of the public's access and use and enjoyment of the shoreline and waters of Salem Harbor. This would include, but not be limited to, maintenance and improvements of public landings and other public properties for water-dependent use.

All exclusion fees collected as a condition of Chapter 91 licensing would be deposited in this Waterfront Enterprise Fund along with any other funds from grants, gifts, and other sources. These funds are to be used for purposes consistent with the Harbor Plan. The City Department of Planning and Community Development should manage this fund, with expenditures approved on an annual basis through the normal City budgeting process.

In 2004, the City DPCD established a Watersheet Activation Fund for the purpose of planning, programming, designing, constructing and/or maintaining watersheet activation elements in the South River. Monetary contributions to this fund are required for any development or redevelopment on a parcel of land that abuts the South River and which triggers a Chapter 91 Waterways License.

Table 1: Summary and Status of Actions Proposed in the 2000 Salem Harbor Plan

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
OVERALL RECOMMENDATIONS			
1. Evaluate and determine method or entities to develop and manage Salem Wharf and Winter Island.	<ul style="list-style-type: none"> ▪ Analyze Harbor Management Entity and choose appropriate option for each project. 	Dept of Planning & Community Development (DPCD) Mayor City Council	Not yet completed. To be addressed in current Port Expansion Project.
2. Establish Harbor Plan Implementation Committee (HPIC)	<ul style="list-style-type: none"> ▪ Determine Committee structure and membership ▪ Appoint Committee members 	Mayor City Council	Established in 2000. Initially met quarterly but frequency dropped off. Reactivated by new Mayor in 2006 and since then meets on the fourth Tuesday of every month.
3. Develop Waterfront Overlay District	<ul style="list-style-type: none"> ▪ Determine waterfront uses, consistent with the Harbor Plan and for each sub-area, which should be allowed and encouraged through the Overlay District. ▪ Develop structure for District. ▪ Hold Public Hearings 	Salem DPCD City Council	A portion of this work has been completed. Further development is needed to fully evaluate to determine value/benefit of implementation. Has not yet been presented to the Planning Board.
4. Establish a Harborwalk along Salem's waterfront		Salem DPCD Salem Public Works & Public Service Departments (DPW/DPS)	Design work completed. Permitting and funding in place for section around west and south sides of South River. Construction to begin in 2008. Existing harborwalk around Pickering Wharf expected to be upgraded as part of the Waterfront Complex Development. Other sections pending private development of waterfront sites (as part of Chap 91 licensing).
5. Implement a streetscape program and establish an informational signage system.	<ul style="list-style-type: none"> ▪ Hold meetings with business and neighborhood groups to roll out, gain support, and publicize program. 	Salem DPCD Salem DPW/DPS Destination Salem Salem Chamber of Commerce	Comprehensive citywide sign plan completed. Consultant on board to prioritize and finalize implementation.

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
<p>6. Develop overall parking and circulation strategy including public transit links by land and by sea.</p>	<ul style="list-style-type: none"> ▪ Retain civil engineering firm specializing in transportation impact assessment. ▪ Hold meetings with public agencies, local businesses, and neighborhoods to develop and gain support for the strategy. 	<p>Salem DPCD Salem DPW/DPS Mass Highway Department MBTA City Council</p>	<p>Parking and traffic circulation need to be assessed. Anticipate that Port Expansion study will be tasked with evaluating impact of increased traffic to and parking needs of Salem Wharf.</p>
<p>7. Support dredging of the Federal Channel, the Federal South Channel, the South River, all public and private facilities, and the Dredge Material Management Plan (DMMP).</p>	<ul style="list-style-type: none"> ▪ Concurrent with DMMP disposal site approval, provide permitting for dredging of projects. ▪ Design and permit other project infrastructure. 	<p>Salem DPCD (for DMMP disposal site) Applicants for other projects</p>	<p>In 2006/2007. Dredging completed in main Federal Shipping Channel and Power Plant Turning Basin. Also completed at South River entrance, around Friendship berth, and anchorage east of Derby Wharf. High priority continues for dredging around Salem Wharf, South River, and several other active portions of the Harbor. Local DMMP needs to be developed.</p>
<p>8. Promote measures to improve and enhance the environmental quality of the Harbor.</p>	<ul style="list-style-type: none"> ▪ Support groups such as Salem Sound Coastwatch that are currently studying environmental quality issues 	<p>Salem DPCD Harbor Management Entity</p>	<p>Comprehensive Plan is needed.</p>
<p>9. Clarify, coordinate, and communicate roles of the public, nonprofit and private sectors.</p>	<ul style="list-style-type: none"> ▪ Begin conversations between City and various groups currently involved in planning and marketing the waterfront. ▪ Adopts recommendations of the Master Harbor Plan (Harbor Master Plan Committee). ▪ Hold well-publicized public hearings regarding recommendations, including responsibilities and resources and long term management entities. 	<p>Salem Harbor Plan Implementation Committee (HPIC) Salem DPCD Destination Salem Harbor Management Entity Salem Planning Board The Salem Partnership and its affiliate, Salem Chamber of Commerce Salem Harbor CDC Salem State College Salem City Council</p>	<p>Action continues. Will become even more important with Salem Wharf, Distributed History Museum and further activation of downtown waterfront.</p>

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
SOUTH COMMERCIAL WATERFRONT			
1. Long Term Improvements:			
a. Increased public access around Shetland Mills, connecting planning area to Palmer Cove.	<ul style="list-style-type: none"> ▪ Incorporate Plan recommendations into special permit and Chapter 91 licensing process. 	Salem DPCD Mass Coastal Zone Management (MCZM)	
b. Improvements to beach and park at Palmer Cove.	<ul style="list-style-type: none"> ▪ Include funding in Capital Plan. 	Salem Park and Recreation MCZM	
c. Landside support for water taxi at Pioneer Village, with necessary dredging.	<ul style="list-style-type: none"> ▪ Investigate subsurface conditions and sediment quality for dredging most appropriate channel. ▪ Design and permit dredging and pier infrastructure. ▪ Funding for taxi float and kiosk. 	Salem DPCD MCZM	
d. Promote private development.	<ul style="list-style-type: none"> ▪ Establish Waterfront Overlay District 	Harbor Management Entity Salem DPCD The Salem Partnership Salem Chamber of Commerce Private property owners	Work along Derby Street including Pickering Wharf is noteworthy. Further development/improvement of properties within South River Basin still critical to waterfront activation in this area and to realize it role as a gateway from downtown to the Harbor.
2. Landside Improvements:			
a. Streetscape improvements: establish gateways; implement signage program; reinforce connections between downtown and the waterfront		Salem DPCD Salem DPW/DPS Destination Salem Salem Chamber of Commerce	Work at Beverly Coop Bank site and proposed development along Derby Street and at Pickering Wharf are steps toward this goal. Gateways, view corridors and more signs (directional and interpretive) are still needed.

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
b. Promote access to water's edge as integral to any new development.	<ul style="list-style-type: none"> ▪ Incorporate Plan recommendations into special permit, variance, and Chapter 91. 	Salem Planning Board MCZM	Has been incorporate into new development as opportunities occur. Needs constant attention to take advantage of opportunities.
c. Construct Harborwalk along south side and west end of South River Basin	<ul style="list-style-type: none"> ▪ Obtain necessary license/permits and funding, complete design and construct along So. River Basin. 	Salem DPCD	Conservation Commission permit and DEP Chapter 91 Waterways License obtained. Construction expected to begin in 2008.
d. Make waterfront accessible, street furniture, building improvements.	<ul style="list-style-type: none"> ▪ Incorporate funding into City Capital Plan; seek alternative sources of funding. 	Salem DPCD Salem DPW/DPS	Isolated improvements to date. Significant progress expected in 2008+
e. Create pocket parks.	<ul style="list-style-type: none"> ▪ Incorporate funding into City Capital Improvement Plan; seek alternative sources of funding. 	Salem DPCD Salem DPW/DPS	Funds to remediate 15 Peabody Street received in Spring 2007 and funds to construct waterfront park received fall 2007. Construction expected to begin in 2008
f. Involve residents, artists and designers in community design efforts of murals, paving and other public art projects.	<ul style="list-style-type: none"> ▪ Form Alliance; develop agenda, priorities, and program. 	Salem DPCD Salem DPW/DPS Salem Harbor CDC Chamber of Commerce	
g. Encourage uses that promote enjoyment of the water, such as restaurants, boat rental shops.	<ul style="list-style-type: none"> ▪ Develop retail marketing plan and begin outreach. 	Harbor Management Entity Salem DPCD Destination Salem	Downtown Salem Retail Market Study completed in 2007. Implementation efforts expected soon. No significant progress yet on waterfront retail supporting water-dependent uses although importance of supporting recreational boats emphasized in 2008 Update.
h. Address neighborhood need for parking.	<ul style="list-style-type: none"> ▪ Create parking plan. ▪ Acquire property or right to use privately-owned parcels currently proposed for parking. ▪ Negotiate with Mass Electric and owners of Wendy's site. 	Salem DPCD Salem DPW/DPS Salem Harbor CDC	Parcel across from site of proposed 15 Peabody Street Park acquired by Salem Harbor CDC and converted to parking lot with spaces leased mostly to Point Neighborhood residents.

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
i. Encourage removal of existing fencing at National Grid site and replace with a pleasant landscape buffer.	<ul style="list-style-type: none"> ▪ Negotiate with National Grid. 	Salem DPCD	
j. Promote programs to celebrate community identity, e.g. floats linked to annual Hispanic Festival.	<ul style="list-style-type: none"> ▪ Form Alliance; develop agenda, priorities, and program. 	Salem Harbor CDC Destination Salem	
3. Waterside Improvements:			
a. Undertake waterfront improvements, including repairs to seawalls and bulkheads, provision of additional floats, slips, and dinghy docks, and encouraging uses to animate the area such as transient boat dockage.	<ul style="list-style-type: none"> ▪ Seek funding sources and undertake engineering and design studies. ▪ Create promotional program and marketing plan for families visiting recreational boaters, excursion boats. 	Harbor Management Entity Salem DPCD	Remains a priority recommendation. Repair of collapsed section of seawall and bulkhead expected to begin in 2008. No new floats, dinghy docks, or boat slips have yet been added.
4. Infrastructure Requirements:			
a. Improve vehicular and pedestrian access.	<ul style="list-style-type: none"> ▪ Include in overall circulation and parking strategy. 	Salem DPCD Salem DPW/DPS Harbor Management Entity MCZM	Little progress made to date, other than improvements of Derby/Congress Streets intersection. Improvements of intersection of Ward, Peabody and Congress Streets expected to begin in 2008. Some parking and pedestrian access initiatives have recently been completed or scheduled to begin in near future (as discussed above).
b. Conduct dredging of the South River and South River Basin.	<ul style="list-style-type: none"> ▪ Acquire funding. ▪ Locate disposal sites. ▪ Conduct necessary engineering studies and engineering works. 	Salem DPCD Harbor Management Entity MCZM	Approach dredged in 2007 by US Army Corps. Remainder of river and basin remains a high dredge priority
c. Support studies and implementation of stormwater drainage solutions.	<ul style="list-style-type: none"> ▪ Implement I/I, overflow treatment facility improvement programs. 	Salem DPCD Salem DPW/DPS	Some study completed but an updated comprehensive survey is needed

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
TOURIST HISTORIC HARBOR			
1. Laneside Improvements:			
<p>a. Promote increased coordination among relevant organizations citywide to provide tourism activities and enhance the quality of the visitor experience.</p>	<ul style="list-style-type: none"> Develop a strategic historic, arts, cultural, and tourist business alliance and create a strategic marketing partnership. 	<p>Destination Salem The Salem Partnership National Parks Service (NPS) Chamber of Commerce Salem Harbor CDC North Shore Convention Council</p>	On-going
<p>b. Implement streetscape improvements, walkway improvements, and small park areas.</p>	<ul style="list-style-type: none"> Hire a firm that includes a designer with expertise in identity and informational graphic design and a landscape architect with expertise in streetscape design; Hold meetings with business groups to roll out, gain support, and publicize program. 	<p>Salem DPCD Salem DPW/DPS Destination Salem</p>	Small pocket park added at end of South River Basin (in front of Beverly Coop). New waterfront park being added at 15 Peabody Street. Construction for the Harborwalk expected to start in 2008. No significant progress on streetscapes.
<p>c. Promote events, programs and designed elements that celebrate the maritime cultural heritage of residents, encourage community participation and strengthen neighborhood identity and pride</p>	<ul style="list-style-type: none"> Develop a strategic historic, arts, cultural, tourist business alliance 	<p>National Parks Service (NPS) Salem Harbor CDC</p>	Remains a priority
<p>d. Provide for public access to the waterfront through Chapter 91 licensing, easements, acquisition of properties, or through construction along public areas.</p>	<ul style="list-style-type: none"> Gain acceptance of waterfront land use plan; Incorporate Plan recommendations into special permit, variance, and similar reviews; Establish memorandum of understanding for specific implementation of Chapter 91 recommendations if required. 	<p>Salem DPCD Harbor Management Entity City Council Salem Planning Board DEP</p>	Done as Chapter 91 licenses for waterfront development are approved.

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
e. Promote property improvement programs.	<ul style="list-style-type: none"> ▪ Determine availability of funding from the HUD, banks and other sources. ▪ Promote programs to encourage participation of eligible residential and commercial properties within the planning area. 	Salem DPCD	
f. Support implementation of NPS programs.	<ul style="list-style-type: none"> ▪ Incorporate NPS agenda into strategic marketing partnership plan of Destination Salem. 	Destination Salem	City remains very supportive of NPS initiatives. Marketing partnership still appropriate. Need to work together on prep for NPS 100 th birthday (2016) and City's 400 th birthday (2026).
g. Install bike racks along the waterfront.	<ul style="list-style-type: none"> ▪ Incorporate funding into City Capital Improvement Plan. ▪ Seek alternative sources of funding. 	Salem DPCD	54 new bike racks added downtown. Addition of more racks planned for 2008 including sites along the waterfront.
h. Construct a dinghy dock and landside facilities for a water taxi service.	<ul style="list-style-type: none"> ▪ Incorporate funding into City Capital Improvement Plan. ▪ Seek alternative sources of funding. 	Salem DPCD Harbor Management Entity	
2. Waterside Improvements:			
a. Support NPS plans to construct a mooring and berthing facility.	<ul style="list-style-type: none"> ▪ Incorporate into recommendations and public hearings for Harbor Master Plan. 	Harbor Plan Implementation Committee (HPIC)	Berth for Friendship completed and floating docks added to Central Wharf.
b. Promote water taxi service, harbor tours and other boating activities.	<ul style="list-style-type: none"> ▪ Incorporate waterfront activities agenda into strategic marketing partnership plan of the Office of Tourism & Cultural Affairs 	Salem DPCD Harbor Management Entity HPIC	Private on-call water taxi service is seasonally available. No progress made on an inner harbor shuttle. A NPS ranger-led harbor tour is currently under consideration.

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
NORTH COMMERCIAL WATERFRONT			
1. Landside Improvements: a. Extend streetscape improvements, enhance pedestrian connections, and create pedestrian walkways.	<ul style="list-style-type: none"> ▪ Hire a firm that includes a designer with expertise in identity and informational graphic design and a landscape architect with expertise in streetscape design; Hold meetings with business groups to roll out, gain support, and publicize program. 	Salem DPCD Salem DPW/DPS Salem DPCD	
b. Manage traffic and increased parking.	<ul style="list-style-type: none"> ▪ Implement circulation and parking program. 	Harbor Management Entity Salem DPW/DPS Salem DPCD	
c. Celebrate neighborhood identity in physical improvements and proposed events.	<ul style="list-style-type: none"> ▪ Coordinate projects with appropriate representatives and groups. 	Harbor Management Entity Salem Harbor CDC	
d. Support new construction consistent with character of the neighborhood and respectful of existing views, including non-water dependent uses to contribute financial support to Salem Wharf; a refueling station, new parking facilities; a landscape buffer.	<ul style="list-style-type: none"> ▪ Resolve future ownership and management issues. ▪ Create ownership and management entities; develop lease mechanism for publicly-owned land for potential private development; develop financing mechanism to support new entities ▪ Insure private financing. 	Salem DPCD Harbor Management Entity Private Developers The Salem Partnership	Refueling facility for commercial vessels added to ferry dock in 2007. Salem Wharf initiative is currently at Preliminary Design Stage. Permitting Phase expected to be completed 2008. Construction to start shortly thereafter.

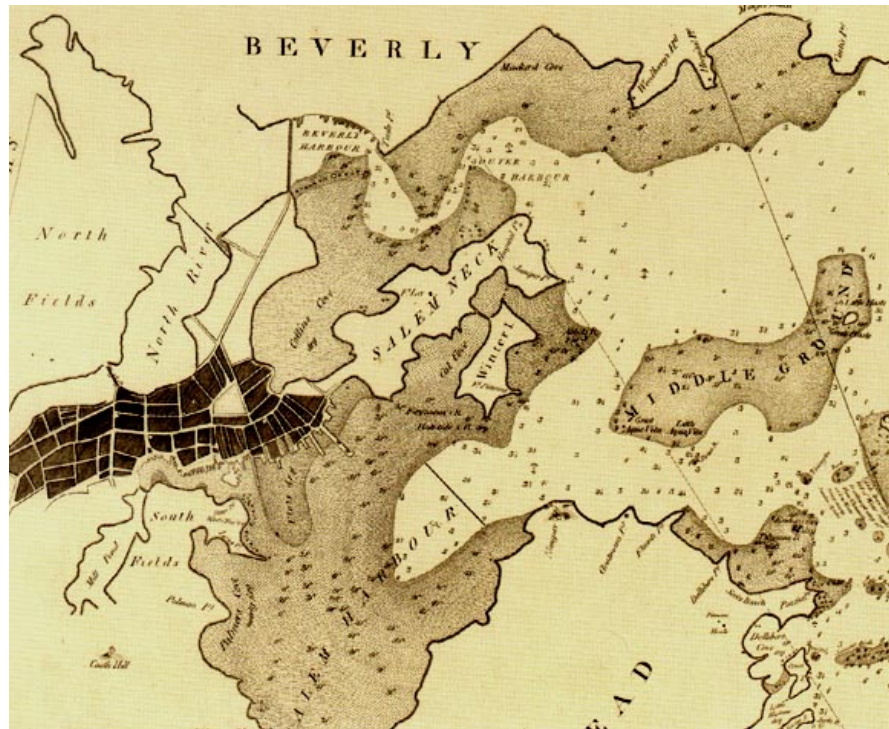
Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
<p>2. Waterside Improvements:</p> <p>a. Construct the Salem Wharf off Blaney Street Property, build berthing facilities, provide fuel dock, commercial pump out facility, and other waterside amenities.</p>	<ul style="list-style-type: none"> ▪ Create ownership and management entities; develop lease mechanism for publicly-owned land for potential private development; develop financing mechanism to support new entities. ▪ Secure funding from Governor's Advisory Seaport Council. 	<p>Salem DPCD Harbor Management Entity</p>	<p>Interim ferry docks in place, upgraded with fixed fueling line, water line, and dry fire line in summer 2007. Preliminary Design of Salem Wharf facility on-going. Permitting Phase of Wharf and associated dredging is expected to be completed in 2008.</p>
<p>b. Conduct dredging at Hawthorne Cove to facilitate the planned Salem Wharf facility.</p>	<ul style="list-style-type: none"> ▪ Provide design and permitting for dredging and associated infrastructure for project. 	<p>Salem DPCD Harbor Management Entity MCZM</p>	<p>Sediment testing in preparation for dredging associated with the wharf has been completed. Permitting phase for wharf and dredging is expected in 2008.</p>

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
Industrial Port			
1. Landside Improvements: a. Implement streetscape and landscape improvements; undertake graphics program for energy plant elements.	<ul style="list-style-type: none"> ▪ Hire a firm that includes a designer with expertise in identity and informational graphic design and a landscape architect with expertise in streetscape design; Hold meetings with Dominion Energy to agree on those improvements to be undertaken by City and those by Dominion Energy 	Salem DPCD Salem DPW/DPS Harbor Management Entity Dominion Energy	
b. Construct additional parking facilities to support new uses.		Salem DPCD	Some minor improvements made to Blaney Street parking lot. Additional on site or off site parking needed.
c. Support environmental impact improvements at the site.	<ul style="list-style-type: none"> ▪ Monitor and discuss potential for environmental impact improvements. 	Salem DPCD Harbor Management Entity Dominion Energy	On-going
2. Waterside Improvements: a. Support federal channel maintenance dredging.		Salem DPCD Dominion Energy MCZM	Main Ship Channel (federal channel) dredged to a depth of 32'. Work completed in January 2007 by the US Army Corps.

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
Community Waterfront			
1. Landside Improvements:			
<p>a. Streetscape improvements, Landscaping, extension of electrical service, landscape buffers, walkway as part of the Harborwalk, bikeway, pedestrian walks, confine RVs.</p>	<ul style="list-style-type: none"> ▪ Participate in the City’s streetscape and signage project, but insure that a landscape designer familiar with park design is also included in the process. 	<p>Winter Island Management Entity Salem Parks and Recreation Salem DPW/DPS</p>	
<p>b. Construct landside support facilities for a water taxi service, improvements such as outdoor showers, new covered stage, stabilize eroded transition between ramparts of Fort Picketing and the shore, erect and exclusion fences, reconstruct paths, recreate original moat, create a sharper definition of the earth works, rehabilitate the entrance to the ammunitions bunker and add lighting, restore and repair the lighthouse.</p>	<ul style="list-style-type: none"> ▪ Develop financial management program to enhance fee income from Winter Island activities and direct revenues back into maintenance, management and new construction at the Park. ▪ Create public funding plan for activities and new projects not covered through fees ▪ Create a new structure to manage public and private development. ▪ Set priorities among projects. ▪ Sign MOA between The Plummer Home and City to ensure public access to pathway adjacent to access road. 	<p>Winter Island Management Entity Salem Parks and Recreation Salem DPW/DPS</p> <p>Salem DPCD Trustees of Plummer Home</p>	<p>Little progress made other than routine maintenance.</p> <p>MOA between the City and the Plummer Home is still needed.</p>
<p>c. Re-use US Coast Guard Hangar Building</p>	<ul style="list-style-type: none"> ▪ Undertake financial feasibility study of various uses for building renovation ▪ Complete Park amenities 	<p>Salem DPCD</p>	<p>Study completed to convert to a sports complex but price was too high. Now considering use for winter storage of recreational boats as source of income.</p>
<p>d. Restore former US Coast Guard Barracks Building</p>	<ul style="list-style-type: none"> ▪ Undertake financial feasibility study of various uses for building renovation. 	<p>Winter Island Management Entity Salem DPCD</p>	<p>Reuse study completed in 2007. Options being actively considered and funding sources identified.</p>
<p>e. Make public more aware of resources at Winter Island</p>	<ul style="list-style-type: none"> ▪ Undertake public outreach program, support generation and marketing program. 	<p>Salem Parks and Recreation Salem DPCD</p>	<p>On going. More effort needed.</p>

Categories and Recommendations	Required Actions	Responsibilities Primary responsibility in bold	Status
2. Waterside Improvements: a. Promote water taxi service and harbor tours.	<ul style="list-style-type: none"> ▪ Construct adequate landing facilities. ▪ Market services. 	Salem Parks and Recreation Salem DPCD Chamber of Commerce	Remains a priority
b. Add floats to existing pier.	<ul style="list-style-type: none"> ▪ Purchase and install floats. 	Salem Parks and Recreation Salem DPCD	Additional floats needed. Recommend new docks for pump out and refueling facility
c. Promote public boating activities	<ul style="list-style-type: none"> ▪ Include promotional plan with activities of the Office of Tourism & Cultural Affairs ▪ Insure that all necessary waterside improvements have been completed 	Salem Parks and Recreation Salem DPCD	Needs more attention. Making Salem a full service port for recreational boats is a priority recommendation for this Update of the Harbor Plan.

VI. REGULATORY ENVIRONMENT



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VI. REGULATORY ENVIRONMENT

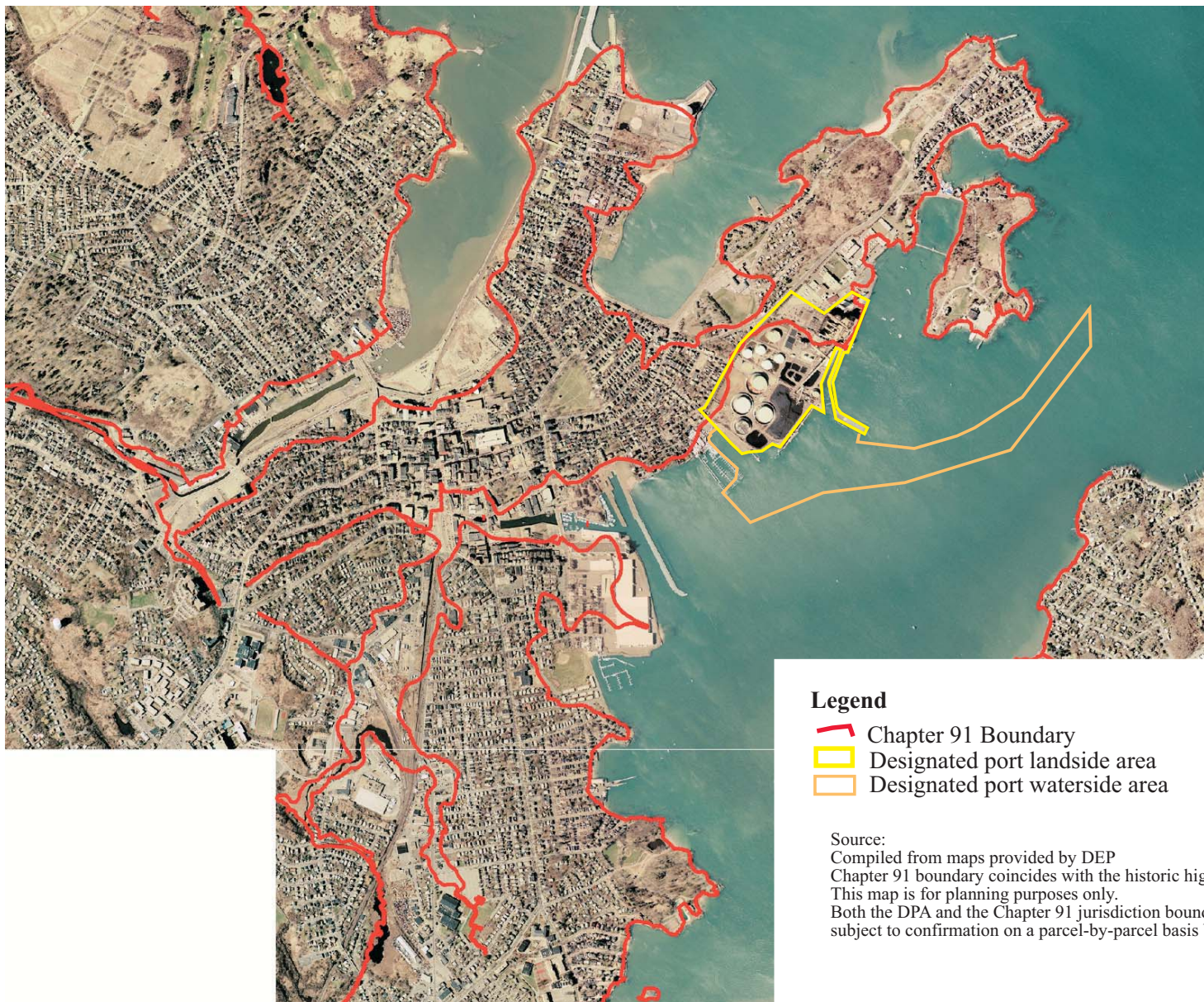
- *Use existing regulatory mechanisms over time, such as zoning, site plan review and Chapter 91 as a means to realize the vision of continuous public access to and along the waterfront, view corridors down to the water's edge from nearby streets and public space, and increased activity on and around the South River.*
- *Employ Chapter 91 provisions for supporting Designated Port Area (DPA) uses associated with the new Salem Wharf.*
- *Ensure that all proposed Salem waterfront improvements are in compliance with the approved standards established in this Municipal Harbor Plan/DPA Master Plan.*
- *Develop new local Waterfront Overlay Districts to facilitate and support desired redevelopment of each waterfront planning area.*

Overview: Chapter 91

Salem's waterfront and harbor are subject to the regulatory authorities of the local, state, and federal governments. Among the state's authorities, Massachusetts General Law Chapter 91 (Public Waterfront Act) and the Waterways Regulations (310 CMR 9.00), which was adopted to implement the law, seek to ensure that the Commonwealth's tidelands are utilized only for water-dependent uses or otherwise "serve a proper public purpose which provides greater benefit than detriment to the rights of the public in said lands." The Chapter 91 licensing program is administered by the Waterways Regulation Program of the Massachusetts Department of Environmental Protection (DEP)

Chapter 91 applies in tidelands, great ponds, and along certain rivers and streams. Tidelands refer to all land presently or formerly beneath the waters of the ocean at mean high tide. On the landside, tidelands extend to the *historic* high tide line, i.e., the farthest landward tide line which existed "prior to human alteration" by filling, dredging, impoundment or other means. Generally, DEP jurisdiction applies to all filled as well as flowed tidelands, with the possible exception of "landlocked" tidelands. These are filled tidelands which are outside of Designated Port Areas, are located more than 250' from nearest existing mean high water (MHW) mark, and are separated from the shoreline by a public way. See Figure 11 for an approximate location of the historic high tide line in Salem Harbor. This is a "presumptive" line used by the Department of Environmental Protection (DEP) for preliminary jurisdictional determinations in the Waterways licensing process and by the City for planning purposes. It can be challenged by a project proponent if reliable historical records or charts/maps are presented to show the location of this line to be inaccurate. For 285, 283, 281 Derby Street and 24 Congress Street, for example, DEP recently issued a "Determination of Applicability" (310 CMR 9.00) for a positive finding that reasonable evidence had been submitted by the property owner to define the line as being closer to the current water's edge for those properties.

Figure 11: DESIGNATED PORT AREA AND CHAPTER 91 DESIGNATION



Activities Subject to Chapter 91

Chapter 91 authorization in the form of a State-issued license is generally required for the placement of fill, building of structures and dredging in tidelands. Types of structures include: piers, wharves, floats, retaining walls, revetments, pilings, bridges, dams and waterfront buildings (if on filled lands or over the water). A new license also may be required if there has been a structural change or change in use of a previously licensed structure. The placement of temporary rafts, floats or moorings in the waterway do not require a Chapter 91 license, if they receive an annual permit from the Harbormaster, per Chapter 91 Section 10A.

Water-Dependent Uses

In general, uses licensed under the waterways program must either be water-dependent or “serve a proper public purpose, which provides greater benefit than detriment to the rights of the public in said lands.”

A water-dependent use is one that requires direct access to or location in tidal or inland waters, and therefore cannot be located away from said waters. A full definition of water-dependent uses can be found in the regulations (see 310 CMR 9.12(2)). Among the uses defined as water-dependent that are likely to apply to Salem are:

- Marinas, boat basins, channels, storage areas, and other commercial or recreational boating facilities;
- Facilities for fishing, swimming, diving, and other water-based recreational activities;
- Parks, esplanades, boardwalks, and other pedestrian facilities that promote use and enjoyment of the water by the general public and are located at or near the water’s edge, including but not limited to any park adjacent to a waterway and created by a public agency;
- Aquariums and other education, research, or training facilities dedicated primarily to marine purposes;
- Aquaculture facilities;
- Waterborne passenger transportation facilities such as those serving ferries, cruise ships, commuter and excursion boats, and water shuttles and taxis;
- Dredging for navigation channels, boat basins, and other water-dependent purposes and subaqueous disposal of the dredged materials below the low water mark;
- Navigation aids, marine police and fire stations, and other facilities which promote public safety and law enforcement on the waterways;
- Shore protection structures, such as seawalls, bulkheads, revetments, dikes, breakwaters, and any associated fill which are necessary either to protect an existing structure from natural erosion or accretion, or to protect, construct, or expand a water-dependent use;
- Flood, water level, or tidal control facilities;
- Discharge pipes, outfalls, tunnels, and diffuser systems for conveyance of stormwater, wastewater, or other effluents to a receiving waterway;
- Marine industrial activities and facilities.

Designated Port Area (DPA)

Within the DPA, it is the intent of state policy and programs to encourage water-dependent (aka marine) industrial uses. In general, water-dependent industrial uses are those industrial and infrastructure facilities that are dependent on marine transportation or require large volumes of water to be withdrawn from or discharged into a waterway for cooling, process, or treatment purposes.

Water-dependent industrial uses include:

- Marine terminals and related facilities for transfer and storage of goods transported by marine vessels;
- Facilities associated with commercial passenger vessel operations;
- Manufacturing facilities relying on goods shipped by waterborne transportation;
- Commercial fishing and fish processing facilities;
- Boatyards, dry docks, and other facilities related to the construction, servicing, maintenance, repair, or storage of vessels;
- Facilities for vessels engaged in port operations or marine construction;
- Other industrial uses or infrastructure facilities which cannot reasonably be located at an inland site as determined in accordance with 310 CMR 9.12(2)(c) or (d).
- Uses determined to be associated with the operation of a Designated Port Area.

A portion of the Salem waterfront has been identified by the Commonwealth as a DPA (see Figure 12). The DPA consists of the land, piers, and water area southeast of Derby Street and Fort Avenue, extending from the Salem Station Power Plant to (and including) the northernmost wharf of the Hawthorne Cove Marina. Major water-dependent industrial uses within the DPA include the former Northeast Petroleum tank farm and oil terminal and Dominion Energy's coal and oil-fired electrical generation plant. The DPA includes the federal channel and turning basin leading to the Salem Terminal Wharf and the near-shore waters between the terminal facilities and the turning basin. The regulations describe the water area of a DPA to include the side slopes of channels and all water area lying between the port's main shipping channel and any land or water areas of the DPA.

Other uses, including certain general industrial, commercial, and transportation activities, and compatible public access can be accommodated under prescribed circumstances and conditions. To enhance flexibility and the economic viability of DPAs, most nonwater-dependent industrial uses and commercial uses are eligible for licensing as "Supporting DPA Uses" if they are compatible with nearby marine industry, do not involuntarily displace existing marine industry, and provide direct economic or operational support to water-dependent industrial use in the DPA. Nonwater-dependent industrial uses and commercial (water-dependent and nonwater-dependent) uses qualifying as Supporting DPA Uses may occupy an area of a DPA property up to 25 percent of all filled tidelands and piers on the project site. Larger amounts of the site may be developed for non water-dependent industrial uses if authorized by an approved DPA Master Plan. Uses specifically excluded from the DPA include residential (including hotels and private residences) and recreational boat marinas.

Authority of the Salem Harbor Plan and DPA Master Plan

The City of Salem's Harbor Plan and DPA Master Plan set forth the City's objectives, standards and policies for guiding public and private use of the land and water areas of its harbor, and offer an implementation program to achieve the desired plan. The area covered by a harbor plan typically includes the central portion of the municipality's working waterfront where there are filled tidelands and the existence of and/or potential for significant water-dependent activities.

The Salem Harbor Plan (upon approval by the Executive Office of Energy and Environmental Affairs (EOEEA)) will serve to guide EOEEA agency actions including the regulatory decisions of the DEP under Chapter 91. When a state-approved harbor plan/DPA master plan exists, any project seeking Chapter 91 license from DEP must be in conformance with that plan. In essence, once the Salem Municipal Harbor Plan is approved by the State, DEP will use its regulatory authority to help implement the goals and objectives articulated in the Plan.

Through a locally-prepared Municipal Harbor Plan (MHP), a municipality has the ability to "substitute" local standards for certain Chapter 91 dimensional requirements such as building height limits and setbacks. These substitutions, if and when approved by the state, apply only to nonwater-dependent uses and are subject to conditions as specified in the required Harbor Plan approval standards (see 301 CMR 23.05). Some of the minimum standards for **nonwater-dependent development** under Chapter 91 (310 CMR 9.51 and 9.52) that may be adjusted through substitutions by an approved MHP are:

- Pile-supported structures may not be placed beyond the footprint of existing, previously authorized pile-supported structures except where no further seaward extension is proposed and the open water lost is replaced on a 1:1 basis;
- Facilities of Private Tenancy may not be placed on any pile-supported structures over flowed tidelands, nor on the ground level of any filled tidelands within 100 feet of the project shoreline;
- Neither new/expanded buildings nor parking facilities may be placed at or above grade within the defined water-dependent use zone;
- At least one square foot of tideland area shall be reserved for open space for every square foot of tideland covered by the footprint of new building(s) within the project site. Renovation or reuse of existing buildings shall provide open space to the maximum reasonable extent;
- New or expanded buildings shall not exceed 55 feet in height if located over the water or within 100 feet of the high water mark; for every foot beyond 100 feet from the high water mark, the height of the building can increase by 0.5 feet,
- Minimum widths for walkways in a pedestrian access network, appropriately sized for the site, given, among other things, the size of the WDUZ, extent of water-dependent activity and the associate public use hat may be accommodated, and
- Minimum ground-level space devoted to water-related public benefit uses including outdoor public recreation facilities and interior facilities of public accommodation.

Recognizing that special circumstances frequently arise, the purpose of allowing substitutions is to tailor the Waterways Regulations to permit alternative ways to achieve the same purposes, which may be more compatible with the community's zoning regulations. Substitute provisions can be less restrictive than the Waterways requirements, "provided that the plan includes other requirements which, considering the balance of effects on an area-wide basis, will mitigate, compensate or otherwise offset adverse effects on water-related public interests."

The provisions of a Municipal Harbor Plan also can provide guidance for DEP by "amplifying" or elaborating upon the numerous *discretionary* requirements of Chapter 91 for projects under review. 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 DPA uses" to guide DEP in its future licensing.

The DPA Master Plan provides the City with some potentially important flexibility in calculating the amount of Supporting DPA Uses that may be allowed and in siting these uses within the DPA. Through the Master Plan, the area that can be devoted to supporting commercial uses can equal up to 25% of the total DPA land area and supporting industrial uses may occupy an even greater area. This is in contrast to the regulatory limit of 25% of the land and pier area on each project site for all Supporting DPA Uses. The plan can specify where in the DPA these uses could or should be sited and contain provisions to ensure that the DPA is managed/regulated in conformance with the plan.

The City of Salem will consider developing a new Waterfront Overlay District which will support this Harbor Plan's goals to facilitate desired waterfront redevelopment and encourage appropriate uses with each waterfront planning area.

Guidance to DEP: Substitute Provisions

The Salem Harbor Plan proposes substitutions of certain minimum dimensional requirements of the Waterways Regulations for nonwater-dependent uses⁽¹⁾. The following discussion identifies the applicable provision of the Waterways Regulations, the alternative standards of the Plan, and the justification for proposed substitutions. The Plan further recognizes that there may be limited cases where strict compliance with other numerical standards of the regulations would create a substantial hardship for the continuation of an existing use or structure. In such situations, the variance procedure set forth in 310 CMR 9.21 is considered by this Harbor Plan to be an adequate means to address the hardship issue.

The two tables at the end of this chapter (Tables 2 and 3) summarize both the substitutions and amplifications in the Plan. Figures in this chapter are meant to be illustrative and should not be used to precisely determine the position of regulatory boundaries, substitution offsets or building footprints.

⁽¹⁾ *Water dependency is defined in 310 CMR 9.12 as a use that "requires direct access to or location in tidal or inland waters, and therefore cannot be located away from said waters." Examples of non-water dependent uses include housing, office space, retail shops, and restaurants. Water-dependent uses include parks, boardwalks and other pedestrian facilities that promote use and enjoyment of the water by the general public and are located on or near the water's edge.*

A. The specified width(s) of the water-dependent use zone within which new or expanded buildings for nonwater-dependent uses and all new parking facilities are prohibited. Sec. 9.51(3)(c).

This Harbor Plan proposes a substitution for the minimum width of the Water-Dependent Use Zone (WDUZ) for new or expanded non-water dependent buildings along the South River in Subarea A of the South Commercial Waterfront district (as defined in Chapter II). Using the criteria specified under the Waterways Regulations, the WDUZ for properties in this Subarea generally ranges in depth from between 35 and 60 feet inland from the water's edge. On parts of Pickering Wharf, the WDUZ has a depth of 100 feet under the unmodified regulations.

This Plan, in keeping with the Waterways Regulations, allows for existing structures of non water-dependent use to continue occupying portions of the WDUZ. For new or expanded nonwater-dependent buildings which are otherwise consistent with the Plan's recommendations for build-out of the South Commercial Waterfront, this Plan allows for the WDUZ on certain properties within Subarea A to have a minimum width of no less than 20 feet extending inland from the existing project shoreline, provided that the developer:

- (1) Provides substantive site specific offsets that will significantly improve the public use and enjoyment of the remaining WDUZ. This option only applies if these offsets have been defined in this Harbor Plan for specific site(s). During this update of the Plan, one waterfront site on Pickering Wharf was considered for this alternative offset option because of its unique physical characteristics, its importance to public waterfront access and because a development proposal for the site was under preliminary consideration by the City. Various waterfront enhancements were considered as potential offsets for a reduced WDUZ width on this site. Improvements considered to be appropriate offsets for the Pickering Wharf site are defined on page 109 and have been preliminarily approved by the City.

or

- (2) Maintains the total size of the WDUZ as stipulated under the Waterway Regulations (Chapter 91) but with the option of reconfiguring portions that are outside the 20-foot minimum setback to create specific view and/or pedestrian corridors as shown in Figure 13 (eliminating the requirement within this subarea for the **entire** WDUZ to run parallel and adjacent to the project shoreline),

This Plan specifies only three opportunities where a reconfiguration of the WDUZ is allowed. Two of these opportunities (i.e. along the property lines that define the east and west sides of 289 Derby Street) would require that the reconfigured WDUZ be used to create view/pedestrian access corridor(s) (minimum of 20 feet wide) connecting Derby Street to the water's edge. Neither parking nor motorized vehicle traffic, other than for emergency response, would be permitted within these pedestrian corridors or within any remaining shoreside WDUZ. If a walkway/accessway already exists along the shared

property line on the adjacent property, the developer/property owner(s) would only be required to make up the difference to create a corridor with a total minimum width of 20 feet, including what already exists on the adjacent property. The total size of the WDUZ on the property must continue to equal or exceed the WDUZ size calculated using Chapter 91 (i.e. no net loss of WDUZ).

The third opportunity for reconfiguring a portion of the WDUZ would be at 311 Derby Street (currently used as a Goodyear Tire Services Center). Because of the relatively shallow depth of this parcel and the corresponding narrow width of the required Chapter 91 WDUZ, there is a relatively small portion of WDUZ that would be available for reconfiguration while still retaining the required 20-foot setback from the shoreline. The proximity of the existing publicly owned Harborwalk gateway along the west side of the property reduces the value of creating another pedestrian access corridor across this property. On the other hand, a view corridor here would have significant public benefit potentially allowing visual contact with the South River Basin while on Central Street from as far inland as Charter Street. This Plan would allow a future developer of 311 Derby Street to build slightly closer to the project shoreline (i.e. within 20 feet) if a 20-foot view corridor were created/preserved across from Central Street and down to the water's edge. Parking would be permitted within this view corridor except for that portion which is relocated WDUZ. Neither parking nor vehicular driveways would be allowed within the 20-foot wide WDUZ that remains along the water's edge.

This alternative standard for the WDUZ in the north portion of the South Commercial Waterfront District will not compromise the Waterways Regulations' objective for the WDUZ, which is to ensure that "...sufficient space along the water's edge will be devoted exclusively to water-dependent activity and public access associated herewith." It is the conclusion of this Plan that the recommended water-dependent uses and public access can be accommodated within the 20-foot passage along the shoreline of the properties. This conclusion is based on:

- (1) the limited capacity of the river to support vessel activity. The navigability and utility of the South River is limited by its shallow depth, narrow width, and, for some of the area, low clearance (3 feet at MHW) of the Congress Street Bridge. Even the dredging planned for the South River will provide a depth of only -4.0 to -6.0 feet at MLW to accommodate relatively shallow-draft vessels.

- (3) the level and type of water-dependent use established by this Plan for the South River. Dredging of the South River will provide the basis for new opportunities supporting small-scale recreational boating only (generally limited to vessels under 30 feet). In addition, the Salem Harbor Plan encourages new development and uses along the waterfront to take advantage of potential new water-dependent opportunities presented by the river as well as to attract and accommodate public use and enjoyment of the waterfront. New development in this area will include water-dependent uses, such as facilities in support of small-boat recreational or commercial activities.

Activation of the waterfront with small-boat tie-up or berthing facilities, dinghy docks, or other needed support facilities (e.g., lockers, storage) for recreational boaters or fishermen should be included as part of new development of properties in suitable locations. These facilities will occupy the water's edge in a manner compatible with the Salem Harborwalk. This arrangement is consistent with the Chapter 91 regulations as well as the City's objectives of creating an active transition area between the South Commercial Waterfront neighborhood and downtown. See Chapter V (pg 88) for discussion of the South River Watersheet Activation Fund which requires all developers of properties along the South River to make monetary contributions to a fund that will be used to activate this section of the Harbor's watersheet. The success of efforts to attract boats and the public to and increasing water-dependent activities along this section of waterfront can not be realized until proposed dredging of the South River is completed. Without dredging, much of the watersheet west of the Congress Street Bridge will remain largely unsuitable for most water-dependent activities.

In addition to satisfying the Waterways standards, this has the added advantage of creating an active and interesting urban space and walkway system that achieves an urban design goal of a well-defined area activated by facilities of public accommodation consistent with the historic urban setting. This same intention will be incorporated into the design for the edges of new Salem Wharf and other waterfront districts that will serve to encourage public access along lively, intensely-used sections of waterfront that accommodate a variety of water-dependent uses. This activation of the water's edge is in keeping with the historical image of the community as a New England port with mixed uses stretched along an active, maritime-dominated water's edge.

As an offset to having a narrow WDUZ in this area of the South River, the Harbor Plan calls for the creation of several unobstructed access and view corridors connecting the walkway around the South River to the adjacent streets. Specific locations have been chosen for these corridors to align, where feasible, with streets that will extend the views of the waterfront up closer to the downtown retail center and popular visitor attractions and to surrounding residential neighborhoods (see Figure 13 and discussion of three of these corridors on pages 106 and 107).

Although the width of the WDUZ has been reduced along the water's edge, redistribution of portions of the remaining WDUZ will create important openings connecting the waterfront with the flow of urban activity from the surrounding area. An adequately-sized (i.e. 20 foot) accessway along the waterfront together with small parks are considered more appropriate for the area because it complements a revitalized commercial district in both size and design, featuring waterfront access, water-dependent uses and much-needed physical and visual connections between the residential area and the waterway on the south. These corridors are all substantially wider than the 10 foot minimum width normally required for connecting walkways between the waterfront and nearby public ways.

A proposal to build a Waterfront Complex on Pickering Wharf at 23 Congress Street was considered during the 2008 Update of the Harbor Plan. Plans for this project had not been

fully developed at that time but a conceptual plot plan with building lot coverage, building height, tentative planned uses for the new facility, and public access amenities were discussed with the Salem Harbor Plan Committee. Based on information provided by the project proponent, the Committee agreed that, in lieu of a redistribution of a portion of the WDUZ, the WDUZ would be reduced to a width of twenty feet from the project shoreline provided that, as an offset for any adverse impacts of a smaller WDUZ, improvements would be made that would significantly enhance the public's use and enjoyment of this section of waterfront. All of the following improvements are to be implemented by the project proponent in the same time period as the rest of the proposed Waterfront Complex is being build. These improvements shall include:

- (1) Upgrade and maintenance of off-site portion of the existing public walkway around Pickering Wharf from the southwest corner of Finz Restaurant (76 Wharf Street) extending easterly to the southern corner of Victoria Station Restaurant (86 Wharf Street) as shown on Figure 12. (This will include widening the walkway to a full, clear ten feet, and adding other enhancements to make it consistent with Salem Harborwalk design standards, including appropriate lighting to allow for the walk's safe use at night. In some locations this widening will require a pile supported or cantilever seaward projection.); and
- (2) Creation/construction and maintenance of an appealing "gateway" entrance to the Harborwalk which directly connects to Congress Street that will serve to more effectively attract the public onto the public accessway beside the waterfront and draw their attention to Salem Harbor and beyond.

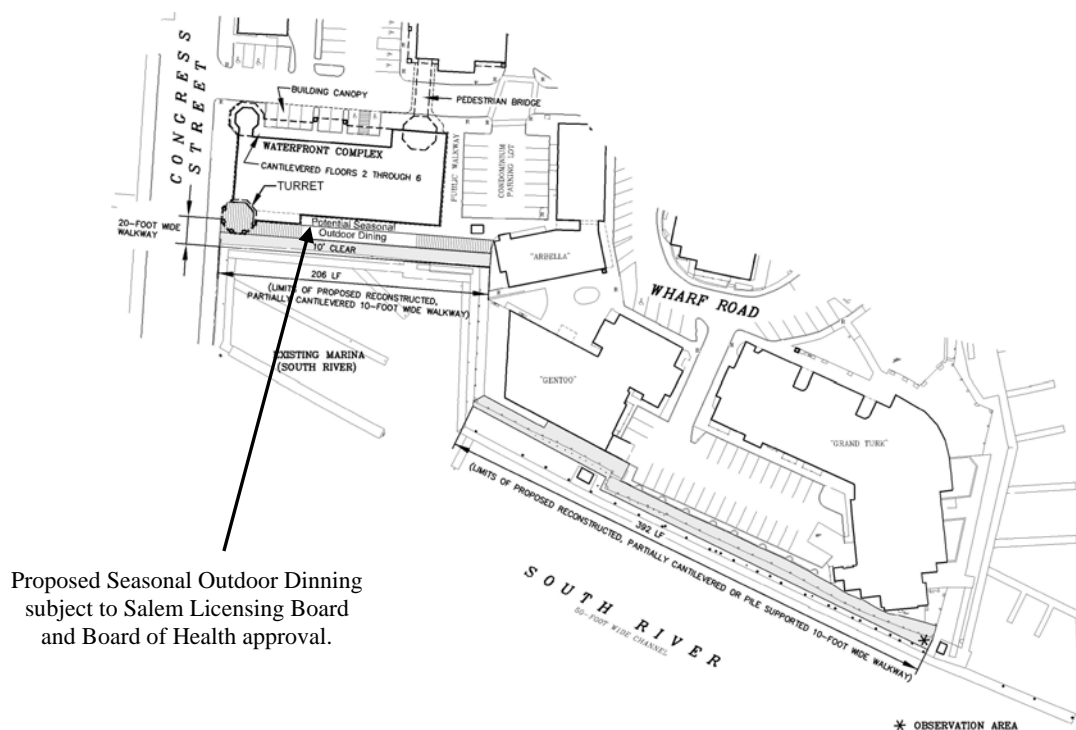


Figure 12. Proposed Waterfront Complex at Pickering Wharf

A portion of the proposed Waterfront Complex would be dedicated to supporting the operations of the existing marina surrounding Pickering Wharf. Facilities of public accommodation including public restrooms would occupy ground floor space within the building that is not otherwise dedicated to directly support water-dependent uses.

Pickering Wharf offers an outstanding and unique opportunity to attract both residents and visitors to the Salem waterfront. Improved public access along the water's edge here will provide a critical bridge between the South River Basin and both Salem's outer harbor and the waterfront attractions of Salem National Maritime Historic Site. As an offset for the WDUZ's reduced width at the proposed Waterfront Complex development on Congress Street, there would be more public benefit realized by completing infrastructure upgrades along portions of Pickering Wharf (as shown on Figure 12) than with a redistribution of part of the WDUZ on the project site. This is particularly true for this site since the Harborwalk when fully built out as part of the Waterfront Complex would already intersect the adjacent public street (Congress Street) thus negating the need for a separate connecting access corridor.

B. The provision for reserving one square foot of tideland as open space for every square foot of building footprint containing nonwater-dependent use on the project site. Sec. 9.51(3)(d)

In the 2000 Salem Harbor Plan, there was a substitution which allowed the maximum 50 percent coverage requirement be applied on an aggregate basis within the South River Basin, i.e., the total area of all the lots along this section of the South River, rather than limiting nonwater-dependent building site coverage to approximately 50 percent on a parcel-by parcel basis. Because this substitution had not been employed since the approval of the 2000 Plan and because of the complexity in fairly distributing open space to the eligible properties, this provision has been removed from the Plan with this 2008 Update.

This updated Harbor Plan does allow the required 50% open space to be applied to a project site as a whole, even if the project site consists of two or more adjoining parcels provided that the parcels are under common ownership or control at the time of application.

C. The provision for limiting new or expanded nonwater-dependent buildings heights to 55 feet within 100 feet of the high water mark and then allows the height to increase by one-half foot for every additional foot of separation from the high water mark. (Sec. 9.51(3)(e).)

This Plan establishes the a maximum height of 70 feet for non-water dependent buildings within 130 feet of the high water mark in Sub-area A of the South Commercial Waterfront district. This would be consistent with existing height limits stipulated under Salem municipal zoning and match the heights of several other buildings within the district.

The offset for this substitution will be a requirement for additional open space above the 50% already required under Chapter 91. The amount of additional open space will be proportional to new shadow created by the portion of the building above the limits defined in Chapter 91. This new shadow will be calculated for full sun conditions that would occur at the site on October 23rd between the hours of 9 AM and 3 PM. (i.e. This is the total new

shadow cast on the ground level open space by the additional building mass over the entire 6-hour period.) The required additional open space will be equal to half the calculated new building shadow. This open space will be dedicated to supporting public use of the project site's waterfront with a preference for infrastructure that offers protection from the weather or improves the site's public appeal (e.g. public art, landscaping). No more than half of this additional open space may be assigned to public parking.

For the proposed Waterfront Complex on Pickering Wharf, the Harbor Plan Implementation Committee agreed that appropriate offsets for a taller building must include the following:

- (1) Addition of a ground-level covered public space in a "turret" proposed as a design element on the southwest corner of the new building in the 'gateway' area:
- (2) Addition of landscaping and new design elements along the Congress Street end of the proposed building that will further improve the appearance of the planned Harborwalk gateway off Congress Street and also shall be used to separate and screen the gateway from any of the building's loading docks and/or service areas on Congress Street; and
- (3) Construction of an observation platform incorporated as part of the Harborwalk on the southeast corner of Pickering Wharf (shown on Figure 12).

The construction of these three offsets will replace the additional public open space requirements determined through the shadow calculation defined above.

Guidance To DEP: Non-substitute Provisions

This section provides specific guidelines for Waterways licensing on matters involving the application of discretionary requirements or amplifications to Chapter 91 requirements. The guidance of the Plan is intended to apply to all existing and new development that will be licensed under the DEP Chapter 91 Waterways Regulations.

South Commercial Waterfront

The Harbor Plan's vision for the future of the South Commercial Waterfront features increased public open space, continuous pedestrian access in the form of the Salem Harborwalk along the entire shoreline including both sides of the South River, and increased levels of water-dependent activity along the waterfront. Some of these objectives along the South Commercial Waterfront will be realized through Chapter 91 licensing. Based on historic map information presented by DEP, the plan presumes that all parcels bounded by Peabody, Lafayette, Derby, and Congress streets are subject to Chapter 91 and there are both private and Commonwealth filled tidelands within this area.

It is anticipated that there is existing development along the South Commercial Waterfront where a structure or use occupies filled tidelands without complete and proper authorization. While the long-term goals of this plan are achievable through individual or joint redevelopment of properties, activating the waterfront, increasing public access to the water, and improving the conditions of accessible property is possible in the short-term through the licensing process. In cases where existing development will require licensing under the waterways regulations, the Harbor Plan specifies the ways in which such development can comply with the public benefits requirements of the regulations.

Salem Harborwalk

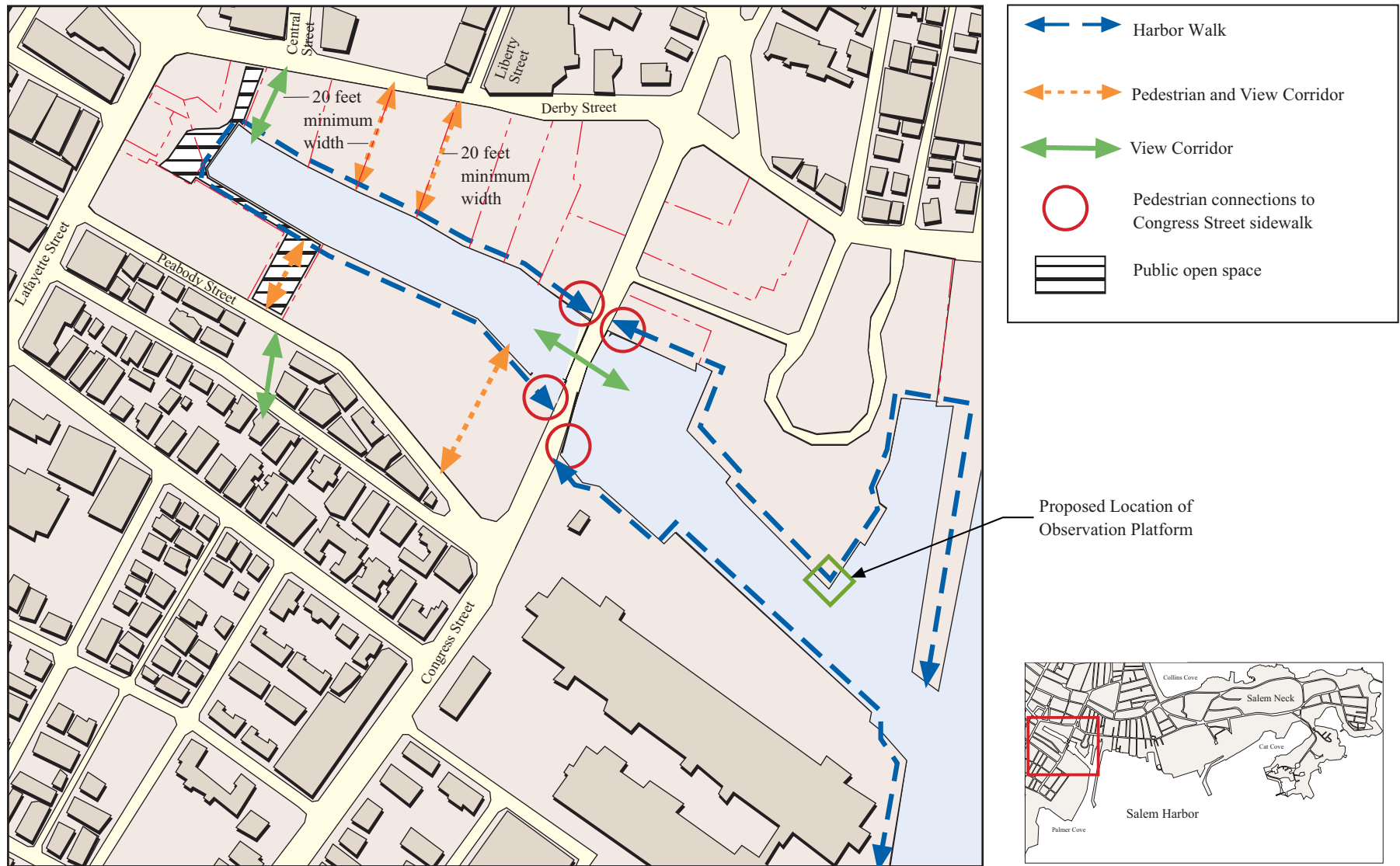
Improving public access to and along the shoreline and activating the water's edge are two of the fundamental objectives of the Chapter 91 program and the Harbor Plan's recommendations are fully consistent with and promote the state policies for tidelands. The Harbor Plan's public access goals will be primarily achieved through the Chapter 91 licensing process as property owners redevelop or improve their properties.

The Waterways Regulations contain several core provisions that are essential to the open space and waterfront access goals of the Plan. These are:

- The project shall preserve any rights held by the Commonwealth in trust for the public to use tidelands...for lawful purposes...[Specifically], the project shall not interfere with public rights of navigation...public rights of free passage over and through the water...public rights associated with a common landing, public easement, or other historical legal form of public access from the land to the water that may exist on or adjacent to the project site...public rights of fishing, fowling, and the natural derivatives thereof... (§9.35)
- A nonwater-dependent use project that includes fill or structures on any tidelands shall not unreasonably diminish the capacity of such lands to accommodate water-dependent use...[taking] into account any relevant information concerning the utility or adaptability of the site for present or future water-dependent purposes... (§9.51)
- A nonwater-dependent use project that includes fill or structures on any tidelands shall devote a reasonable portion of such lands to water-dependent use, including public access in the exercise of public rights in such lands...[taking] into account the capacity of the project site to serve such water-dependent purposes... (§9.52)

Figure 13: SOUTH COMMERCIAL WATERFRONT GUIDELINES:

For the Harbor Walk, Open Space, and Pedestrian Connections (Substitutions and Amplifications to Chapter 91)



SALEM HARBOR PLAN



Associated with each of these core provisions are a number of discretionary requirements, several of which are of primary relevance to Salem and are thus amplified upon by the recommendations of this Harbor Plan. The specific discretionary requirements on which the Plan provides guidance for DEP application are listed below.

§9.35(5)(c) Management of Areas Accessible to the Public. *“No gates, fences, or other structures may be placed on any areas open to public access in a manner that would impede or discourage the free flow of pedestrian movement...”*

§9.52(1)(a) Utilization of Shoreline for Water-Dependent Purposes. *“In the event that the project site includes a water-dependent use zone, the project shall include...facilities that generate water-dependent activity...”*

§9.52(1)(b) Utilization of Shoreline for Water-Dependent Purposes.

(1) *“In the event that the project site includes a water-dependent use zone, the project shall include...walkways and related facilities along the entire length of the water-dependent use zone...no less than ten feet in width...”*

(2) *“In the event that the project site includes a water-dependent use zone, the project shall include...appropriate connecting walkways that allow pedestrians to approach the shoreline walkways from public ways or other public access facilities to which any tidelands on the project site are adjacent.*

The Harbor Plan establishes a dedicated 20-foot wide public accessway along the entire shoreline of the South River. A minimum of 10 feet of this walkway must be an unobstructed pathway. The inland ten feet of this accessway could be used for landscaping and accessory amenities that would enhance the general public’s waterfront experience. Accessory amenities supporting water-dependent uses could include benches, lighting, tables, signs, trash receptacles, canoe and bicycle racks, safety ladders, shade/weather shelters and children’s play areas. In an effort to help further activate the near water’s edge, seasonal, temporary outdoor seating for food service could also be allowed within the inland 10-foot section of the public accessway but only with an approved outdoor café permit (Common Victualler License) from the City of Salem Licensing Board and an approved food permit from the City of Salem Board of Health consistent with the permitting of seasonal outdoor dining facilities on public sidewalks/ways throughout the City of Salem. No nonwater-dependent buildings, vehicles or utility infrastructure (e.g. dumpsters, HVAC units, loading platforms) will be allowed in the public accessway unless they directly support water-dependent use(s). These access requirements would be in addition to the standards for public access to the waterfront required under Chapter 91.

This harbor walkway is essential to improving access along the water’s edge, and is a critical aspect of this Plan. New development or redevelopment of existing structures must comply with this 20-foot standard. In cases of properties requiring licensing of existing development, where the existing building is within twenty feet of the shoreline, the passageway shall consist of the entire area between the building and shoreline, but not less than ten feet (minimum standard). If necessary, this minimum 10-foot

passageway is to be created either by a) removing structures along the water's edge, b) creating a passageway through the building or, if these alternatives are infeasible, c) building new pedestrian structures over the water, as illustrated in Figure 6, d) in cases where existing walkways along the waterfront are being improved or widened to provide a ten-foot width, such improvements may be cantilevered and/or pile supported if necessary. An inland route connecting with the waterfront walkway on either side is considered a final alternative, but only when the above are not possible (due to insurmountable obstacles) and where it would be a benefit to encourage movement between Peabody and Derby Streets and activities on the waterfront.

§9.55 Standards for Nonwater-Dependent Infrastructure Facilities.

(1) “[Infrastructure facilities] shall include mitigation and/or compensation measures as deemed appropriate by the Department to ensure that all feasible measures are taken to avoid or minimize detriments to the water-related interests of the public.”

(2) “[Infrastructure facilities] shall take reasonable measures to provide open spaces for passive recreation at or near the water's edge, wherever appropriate.”

Discussions should be initiated with National Grid regarding the reconfiguration and/or relocation of the substation. As currently configured, the substation is having a significant negative impact on the appearance of the waterfront and the South River Basin's potential as a locus of water dependent use and public enjoyment. Relocation of the facility would enable the redevelopment of this sizable parcel for more appropriate waterfront uses and provide more opportunities to connect the surrounding residential neighborhood to the waterfront. For example, a public accessway across the southeast corner of this parcel would connect the shoreline with a proposed pedestrian pavilion near the intersection of Ward, Peabody and Congress Streets. Small boat and dinghy docks/floats could also be added to their waterfront nearest to Congress Street and, in the near term, be actively used by the public without a need for significant dredging as would be required for most of the remainder of the South River Basin.

Prohibition on Gambling Cruises

The Salem waterfront is a very limited and highly valued resource of the City. The Plan has established priorities for water-dependent uses based on their ability to provide direct and indirect economic and quality-of-life benefits to Salem. Typically, gambling boat operations do not tend to bring benefits of this type to their host community, but do contribute to traffic congestion and exacerbate the shortage of parking needed for the uses encouraged by the Plan. Therefore, the Plan supports the licensing of the principal water-dependent uses listed in Section 9.12(2) of the Waterways Regulations, with the one exception that dockage for and facilities in support of gambling cruises¹ are specifically prohibited.

¹ This plan defines a gambling cruise as any excursion vessel outfitted essentially for gambling, excluding cruise ships, ferries, and other vessels dedicated primarily for marine transportation.

This Harbor Plan finds that the detriments of such gambling boat operations far exceed the benefits to the community to an extent that justifies their exclusion in accordance with Section 9.31(3)(b) of the Waterways Regulations. In the licensing of any structure associated with passenger vessels, the Plan requires a condition specifically prohibiting its use in support of gambling cruises.

Designated Port Area (DPA)

The following paragraphs amplify upon the provisions in Section 9.32(1)(b) and the definitions in 9.02 of the Waterways Regulations governing uses eligible for licensing in a DPA.

The entire land area of the industrial port has long been and is currently used for water-dependent industry. The recommendations for this industrial port support maintaining the current levels of water-dependent industrial uses. The vast majority of the land area of the DPA is within Chapter 91 jurisdiction. In the unlikely event that the current uses of Dominion Energy's Salem Station Power Plant site are discontinued within the next ten years (i.e., prior to the next required renewal of this Plan), only the following uses will be eligible for licensing: water-dependent industry, marine industrial parks, and temporary uses as defined in the Waterways Regulations. In the long-term, the Plan supports the site's use for viable alternative sources of energy including possibly wind and solar.

There are no uses and/or structures categorically restricted by the Waterways Regulations that are not similarly prohibited by the Salem Harbor Plan. Likewise there are no uses and/or structures that are supported by this Plan that are prohibited by Waterways Regulations. No substitutions to the Waterways Regulations are proposed for the properties within the DPA.

This Harbor Plan continues to strongly support a program to develop the proposed new Salem Wharf off Blaney Street on the west side of the DPA and within the North Commercial Waterfront district. A preliminary conceptual design for this new municipal complex was developed in the 1990s and details were included in the City's 2000 Municipal Harbor Plan. Since that time, there have been many changes that now need to be considered in creating a commercial wharf facility that will meet the current needs of marine operations and of a changing local economy. Among these new considerations are the increased security requirements since 9/11, a growing and dynamic cruise ship industry, lessons learned from the reestablished Salem Ferry service to Boston, and changes in local marine industries including offshore LNG operations and other infrastructure needed for future energy production.

Recognizing the need to update the wharf design prior to beginning any significant on-site improvements, the City contracted with a team of waterfront specialists to develop a revised conceptual plan for the development of the site. The initiative is not expected to be completed until after approval of this Harbor Plan Update. For that reason, prior versions of the new Salem Wharf design, one of which was included in the 2000 Harbor Plan, have been removed from this Update. The final report from the ongoing Salem Wharf Expansion project, when available, is expected to become a companion document to this Harbor Plan.

The site will remain a part of the DPA and thus its use will be dedicated principally to the needs of a mix of water-dependent marine industries. The facility is being designed to support commercial vessel operations, and includes berthing and facilities for cruise ships, off-shore operations support vessels, excursion boats, water taxis, ferries, marine construction and mooring service operations, and a variety of other commercial working boats. These activities and uses are consistent with Chapter 91 regulations for DPAs.

To realize the site's full potential to serve the marine businesses proposed for the wharf, some offsite improvements will most likely be needed. Most critical are improved landside pedestrian and vehicle access and additional parking. As the site is more fully developed, more parking will likely be needed during the peak summer and early fall tourist season than can be accommodated on the 2.2 acre Blaney Street parcel. Ideally additional parking lot(s) or garage(s) should be created within easy walking distance of the site (3 to 4 minute walk or less than ¼ mile). If possible, this "accessory" parking should be located within the DPA with use shared with other industries located in the industrial port. Creation of parking facilities within the industrial port (outside the WDUZ and located so as not to displace or interfere with existing water-dependent industrial activities) should be considered to be predominantly accessory to the proposed water-dependent industrial uses and would be consistent with the regulations for DPAs.

In accordance with the authorization in the regulations for Review and Approval of Municipal Harbor Plans (301 CMR 23.00), and as consistent with the definition in 310 CMR 9.02, the Harbor Plan endorses the following nonwater-dependent industrial and commercial uses in the North Commercial Waterfront district which are all allowable under the Salem zoning code and as Supporting DPA Uses: business offices (adaptive reuse of existing buildings), general storage and warehousing, retail and service, restaurants, and off-street parking. Because of severe space constraint on the Blaney Street site, these uses may not be called for in the final wharf design and, if they were, would be located outside the WDUZ and would occupy far less than the allowable 25% coverage.

Other Local and Federal Regulations and Permits

Wetlands Regulations

The Wetlands Protection Act (Chapter 131, Section 40) through the Wetlands Protection Program requires local conservation commissions to examine and regulate development activities which may alter wetlands, and to issue or deny permits based on whether the proposed activity is consistent with the requirements of the Wetlands Protection Act and DEP regulations (state Wetlands Regulations at 310 CMR 10.00 provide clarification of the provisions of the Act). DEP issues superseding orders and variances, and offers compliance, enforcement and technical assistance.

Under the Wetlands Act, the Conservation Commission has authority over projects in or affecting five 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 flows, 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 water bodies, banks, beaches, and dunes.

The Salem Conservation Commission has responsibilities to plan for, acquire, and manage open space as well as to promote conservation restrictions.

The Clean Water Act

Section 404 of the Federal Clean Water Act establishes a permit program to regulate discharges of dredged or fill material into wetlands and other waters of the US. In tidal areas, “waters of the US” extend to the (spring) high tide line. The Section 404 permit program is implemented by the US Army Corps of Engineers (ACoE). The National Marine Fisheries Service and Fish and Wildlife Service have advisory review role. In addition, Section 404(c) gives the US Environmental Protection Agency veto authority over the Corps’ decision to issue a permit.

The ACoE cannot issue a Section 404 permit unless it determines that:

- 1) The proposed project is not contrary to the public interest. The general criteria for the public interest review are in 33 CFR section 320. The factors involving the public interest include economics, environmental concerns, historical values, fish and wildlife, aesthetics, flood damage prevention, land use classifications, navigation, recreation, water supply, water quality, energy needs, food production and the general welfare of the public.
- 2) The proposed project complies with the Section 404(b)(1) Guidelines. Section 404(b)(1) Guidelines are federal regulations (40 CFR section 230) that provide the environmental criteria to be satisfied before a Section 404 permit involving discharge of dredged or fill material can be issued.

The 404(b)(1) Guidelines prohibit discharging of dredged or fill material if there is a practicable alternative. An alternative is practicable if it is available and capable of being accomplished considering cost, existing technology and logistics, and overall project purpose. The Guidelines also require that the discharger undertake all appropriate and practicable mitigation measures to minimize any potential harm to the aquatic ecosystem. The Corps’ evaluation of a project under this standard progresses through the following stages: avoidance of impacts where practicable through the evaluation of alternative sites; minimization of impacts; and appropriate and practicable compensation of unavoidable impacts through wetlands creation or restoration.

Section 401 of the Clean Water Act requires a water quality certification from the state in which a discharge under a 404 permit will originate. The certification states that the discharge complies with the state water quality criteria.

The Rivers and Harbors Act of 1899

Section 10 of the Federal Rivers and Harbors Act of 1899 authorizes the United States Army Corps of Engineers (USACE) to regulate structures and work in navigable waters of U.S. 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 or disposal of dredged material, excavation and filling. The new Salem Wharf and associated proposed fill will need to be reviewed for environmental suitability and approved under Section 404 and Section 10.

General Permitting Requirements for Dredged Material

Regulatory permitting for dredging projects requires approvals from many agencies. The following is a list of required regulatory agency approvals:

1. The **United States Army Corps of Engineers (USACE)** is required to review the project for possible impacts on navigation, flooding, coastal resources, and the transportation and disposal of sediment in navigable waters. A Corps' review involves several other agencies including the Environmental Protection Agency (EPA), National Marine Fisheries, U.S. Fish and Wildlife Service, and the State Historic Commission. Filing of a Corps of Engineers application initiates a review process which includes a suitability determination for the disposal of dredged material, addresses historic resource, environmental, navigation and abutter issues, and begins a public notification process that, if the project meets all permitting requirements, concludes with a permit describing necessary dredging operational procedures.
2. **Massachusetts Environmental Protection Act (MEPA)** requires submission of an Environmental Notification Form (ENF) for dredging projects anticipating the removal of over 10,000 cubic yards of material. . This form is reviewed by and comments are sought from many agencies. The MEPA process also involves a 30-day public review process. The public notification is accomplished by publication of the first page of the ENF in the Environmental Monitor. The review identifies project elements that need to be considered in the design and permitting of the project, and determines whether the project requires the filing of an Environmental Impact Report (EIR). At the conclusion of the ENF review a certification is issued by the Secretary of Energy and Environmental Affairs indicated whether the ENF satisfied the MEPA requirements or if an EIR is required. Other State agencies cannot issue their approvals, or funds, until the MEPA process is completed.
3. **Massachusetts Department of Environmental Protection (DEP) Wetlands and Waterways** has three departmental agency approvals. They are: a) a Water Quality

Certification for the dredging and for the handling and disposal of dredged material; b) a Chapter 91 permit granted under Waterways Regulatory Program for the proposed dredging and development activities and c) a local Conservation Commission's review of the project's impact on area's wetland resources.

4. **Massachusetts Coastal Zone Management (MCZM)** office will complete a consistency review as part of the Army Corps' federal permit process. MCZM will also determine whether the proposed project satisfied State-level polices. These include defined requirements regarding Water Quality, Habitat, Protected Areas, Coastal Hazards, Port and Harbor Infrastructure, Public Access, Energy, Ocean Resources, and Growth Management.
5. The local **Conservation Commission** must receive a Notice of Intent (NOI) for the project. After review by the Commission, an Order of Conditions may be issued outlining the procedures and mitigation measures required to minimize impact on wetland resources. Bathymetric survey, identification of resources, sediment sampling and testing are required to describe the project for NOI submittal. The Conservation Commission review process includes a public hearing where the applicant presents the project and how it conforms to the requirements of the Massachusetts Wetlands Protection Act. Comments from proponent, opponents, and abutters are heard during the hearing.

The Federal Emergency Management Agency

The **Federal Emergency Management Agency (FEMA)** performed a Flood Insurance Study of the City of Salem in 1977. The study utilized hydrologic and hydraulic analyses to establish Flood Insurance Zones and flood plain management measures for the area. The investigation considered historic flood elevations, estimates of shoreline levels considering still water and wave run-up for various storm frequencies.

The study provides a plan of the various Flood Insurance Zones along the harbor as established by this study. The following summary describes the Harbor area zone designations in detail.

- Zone A: Special Flood Hazard Areas inundated by types of 100-year shallow flooding, determined by the approximate methods; no flood elevations shown or flood hazard factors determined.
- Zone AO: Areas of 100-year, shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
- Zone A2 & A4: Special Flood Hazard Areas inundated by the 100-year flood, base flood elevations shown, and zones subdivided accordingly.
- Zone V2 - V4: Areas of 100-year coastal flooding with velocity (wave action); base flood elevations and flood hazard factors determined.

Zone B: Areas between the limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or area protected by levees from the base flood.

Zone C: Areas of minimal flooding.

A majority of the project area dredge sites are located in velocity zone designation V3, with the exception of the Winter Island area which has been designated as a Zone V2 velocity zone. South River and Cat Cove are not located in velocity zones, but are still subject to flood hazards associated with the 100-year storm event. South River is designated as a special Flood Hazard Zone A2 at its intersection with Lafayette Street to just beyond Pickering Wharf Marina and then becomes a Zone A4 area at the area surrounding Central Wharf. Cat Cove is designated as a Zone A4 flood hazard zone. Smith Pool (north of Cat Cove) has an A2 flood hazard designation.

FEMA flooding studies should be considered in the design of all coastal structures.

Homeland Security Act (HSA) of 2002

The HSA (Public Law No. 107-296, 116 Stat. 2135 (Nov. 25, 2002)) enacted following the terrorist attack on September 11, 2001 created the Department of Homeland Security in the largest government reorganization in 50 years. The HSA is a sweeping anti-terrorism bill giving federal law enforcement agencies broad powers. The impact on Salem Harbor is still being defined. It has led to increased security requirements by Dominion Energy at their Salem Station Power Plant. It will also need to be considered in the operation of the new Salem Wharf facility in handling larger passenger vessels such as ferries and cruise ships. Facility Security Plans are required for major port facilities that receive vessels carrying more than 150 passengers, commercial vessels greater than 100 gross register tons or vessels subject to the international convention for Safety of Life at Sea on international voyages – such as cruise ships.

Facility Security Plans should indicate the operational and physical security measures the port facility will take to ensure that it always operates at security level 1 (i.e. have at least the minimum appropriate protective security measures in place at all times). The plans should also indicate the additional, or intensified, security measures the port facility can take to move to and operate at security level 2 when instructed to do so. It should indicate the possible preparatory actions the port facility could take to allow prompt response to the instructions that may be issued at security level 3 (the highest level set when a significant security incident is probable, imminent, or has occurred in the local area).

Coast Guard Sector Boston has recently developed an area Maritime Security Plan that covers the North Shore including the Port of Salem.

Table 2 2008 Salem Harbor Plan Substitution Summary

Regulatory Provision	Standard Requiring Substitution	Proposed Substitution	Area of Applicability	Offsetting Public Benefits
310 CMR 9.51(3)(c) Water-Dependent Use Zone (WDUZ)	Width of the WDUZ is the lesser of 100 feet or 25% of property depth from the present high water mark, but no less than 25 feet.	Minimum width of WDUZ along the water's edge will be no less than 20 feet. With the exception of one parcel specified in the Plan, the total area of the WDUZ on a project site shall not be less than required by the Chapter 91 regulations.	Sub-area A within the South Commercial Waterfront District	The public benefit is the creation of specific 20 ft wide view/accessway corridors as defined in the plan. For these properties, although reconfigured, there will be no net loss in the size of the WDUZ. For one specified property where a reconfiguration of the WDUZ is not considered feasible or desirable, the Plan supports creating other specific substantive improvements to offset the allowed reduced size of the WDUZ. <i>(pg 106 – 110)</i>
		Removed the substitution included in the 2000 Plan that had reduced the width of the WDUZ on the west side of the DPA.	Designated Port Area (DPA) within the North Commercial Waterfront District.	A substitution in the 2000 Harbor Plan had allowed for a reduced width of the WDUZ on the proposed site of the new Salem Wharf to accommodate non-water dependent uses. This substitution is no longer necessary and has been removed from the 2008 update. <i>(page 116)</i>
310 CMR 9.51(3)(d) Open Space Coverage	At least one square foot of project site at ground level shall be reserved for open space for every one square foot of footprint of buildings on the site containing nonwater-dependent uses	Removed the substitution included in the 2000 Harbor Plan that had allowing the distribution of open space on an aggregate basis throughout the entire District.	South Commercial Waterfront District.	A substitution in the 2000 Plan had allowed required open space to be distributed throughout the district. Consistent with Chapter 91, required open space now needs to be distributed within a project site, which may be comprised of multiple adjacent parcels but only if all are under common ownership/control. <i>(pg 110)</i>
310 CMR 9.51(3)(e) Building Height	For new or expanded nonwater-dependent use buildings, the height shall not exceed 55 feet within 100 feet of the high water mark nor increase by more than one-half foot for every additional foot beyond 100 feet.	Allow nonwater-dependent-use buildings up to a height of 70 feet within 130 feet of the high water mark. This is consistent with the City of Salem's Zoning.	Sub-area A within the South Commercial Waterfront District.	The offset for this substitution will be a requirement for additional open space proportional to the amount of new shadow created. Method of calculating new shadow is defined in the Plan. Additional parking may account for no more than 50% of this new open space. For one specific parcel, other substantive site-specific offsets have been defined in the Plan other than creation of additional open space. <i>(pg 110-111)</i>

Table 3 2008 Salem Harbor Plan Amplification Summary

Regulatory Provision	Standard Requiring Amplification	Area of Applicability	Proposed Amplification
310 CMR 9.35(3)(b), 9.35(5)(c), 9.52(1)(a), 9.52(1)(b) and 9.55(2). Public Access and Rights to On-foot Passage	Preserve capacity for water-dependent use including taking reasonable measures to provide open space for active or passive recreation by the Public at or near the water's edge.	South Commercial Waterfront District	Salem Harbor Walk. In addition to the public access requirements established under Chapter 91 which are applicable to filled tidelands within the entire planning area, this Plan establishes a requirement for a dedicated 20-foot wide public accessway along the shoreline of the entire South River of which a minimum of ten feet shall be unobstructed pathway. This Plan provides specific guidance on this amplification and what alternatives are allowed. <i>(pg 112-115)</i>
310 CMR 9.02 Supporting Commercial Uses	Amount of supporting DPA Uses on filled tidelands within a DPA shall not exceed 25% of the area of the project site.	DPA within the Industrial Port District.	The portion of the DPA located within the Industrial Port district, will be available exclusively for water-dependent industrial or temporary use (as temporary use is defined in 310 CMR 9.02). It is envisioned that facilities on this site will continue to be primarily employed in the production of electrical energy for public consumption. The Plan supports future use of the site for infrastructure to convert alternative energy sources (e.g. solar, wind, tidal) to electric power. <i>(pg 116)</i>

**Guidance for DEP
(enforceable through local ordinances)**

None Gambling Cruises	None	Entire Planning Area	The Plan specifically prohibits use of waterfront lands within the planning area to support gambling cruises. <i>(pg 115 – 116)</i>
None Oil Tank Fields	None	DPA within the Industrial Port District.	The Plan does not support the expansion of terminal operations within the Industrial Port district for bulk distribution of oil or coal beyond the on-site needs of the power plant that is currently, or other marine industrial businesses that may be, located in the Salem DPA. Local access to and from the site, other than by water, will not safely support the movement of these bulk products away from the harbor over land routes. <i>(pg 62)</i>

VII. FUTURE PLANNING



Cruise Ship Visiting North Shore Port

VII. FUTURE PLANNING

The Harbor Plan recommends that the City of Salem and the Harbor Plan Implementation Committee commit to extending current planning efforts to take into consideration all of the City's waterfront and offshore islands over the course of the next three years. It is recommended that the City seek to secure funds through state or federal grant programs to facilitate this effort.

The Harbor Plan recommends that the Harbor Plan Implementation Committee remain in place to oversee this planning initiative with committee membership adjusted to include representatives of parties, residential neighborhoods, commercial districts and organizations that have interest in or would be significantly impacted by activities and development in the newly expanded waterfront planning areas. Their efforts should be supported by standing organizational entities (e.g. committees, authorities) that will oversee the development and operational management of waterfront activities such as the Salem Wharf and Winter Island.

APPENDIX A

Stakeholder Interviews



Plummer Home for Boys on Winter Island

Stakeholder Interview Summary

During the data collection phase of this Harbor Plan Update, over two dozen interviews were conducted with a variety of waterfront stakeholders. Information gathered provided the consultants and the Harbor Plan Committee with a broad mix of views concerning the harbor and some of the significant opportunities it offers for the City and its residents. Comments and suggestions collected during the interviews were considered in updating the Harbor Plan, but all were not incorporated into the Plan. This appendix is included to offer the reader a sense of the diversity of issues on the minds of those actively involved with the harbor. Recommendations made during these interviews and summarized on the following pages should not be considered as the official views of the Committee or the City unless they have been incorporated into the main body of the Harbor Plan.

Shared Visions for Future of Harbor

"Need to achieve critical mass of activity, services, attractions, and amenities. Harbor will then takeoff." Palmer Cove Yacht Club

"Need dramatic gateway to waterfront (similar to Columbus Park in Boston)) and waterfront pocket parks." Shetland Park

"Would like to see an active working port with variety of healthy marine industries and better transportation links to the offshore islands." Dominion

"Waterfront should be a destination for visitors and residents. Clearly has potential." Chamber of Commerce

"Need more interpretative and directional signs." Cat Cove Lab

"The location of the Blaney Street commercial docks and proposed Salem Wharf is good for operations that support water transportation for Salem visitors." Harbor Express

"Need to market City as offering an extraordinary mix of things to do and see. Maritime history and waterfront should be promoted as exciting parts of the mix." House of Seven Gables

"Salem needs to attract more people (both residents and visitors) to the waterfront. Need more retail, better parking." Plummer House for Boys

"City has incredible assets in the number and potential quality of its waterfront parks, but they are underutilized. They need to be connected by water transportation and walking/biking paths." Pioneer Village

"Dredging of South River Basin and addition of floats around its perimeter for use by small boats and dinghies should be completed. Proximity to downtown would make this area very popular for recreational boats." Harbormaster

"Salem Harbor is becoming more popular within the yachting community (e.g 2003 NYYC event) . This opportunity for growth should be supported/encouraged." Salem Partnership

"Need to create/support activities that would get people out on the water. Improving boat access to the Forest River area would be a plus." Weedons (waterfront residents)

"Dredging needs to be a top priority to allow use of more of the Salem waterfront and to activate the Harbor" Hawthorne Cove Marina

"It's important to maintain waterfront infrastructure. For example, without proper maintenance, drainage and sewage systems fail and the cleanliness of the harbor is invariably negatively impacted." Salem Sound Coast Watch

" Want an active and engaging port that will inspire the public, increasing their awareness of the significances of maritime history on New England and the United States" National Park Service

"Need to have better access to the downtown from the water. Need more dinghy docks, boat and tie-up facilities. More launch service/water taxi service should be considered. Need to get people right downtown. The South River Basin provides an outstanding opportunity. " Dions Yacht Yard

Following is a summary of the key points made during each of the Stakeholder Interviews completed by the consultants for this 2007 update of the Salem Harbor Plan.

City Engineer

- Need a system-wide inspection of stormwater outfalls and seawalls around entire harbor.
 - City DPW has mapped storm sewer system and Salem Sound Coast Watch has been doing testing. Some point source pollution exists. Storm drain off Dominion needs attention. There are no known CSOs remaining in the harbor although there has been some sewer leakage into storm drains. At Pikes Beach, sewer line runs offshore well off beach.
 - There has also been a seawall failure next Dion Boat Yard). May be best to consider some major infrastructure changes in this area. Consider creating seawall under sewer line with walkway?? Or should consider option of adding a pump station near Dion's. Kosciusko Street seawall failed and was repaired in 2004/2005. Wall at east end of Cat Cove (Smith Pond) that supports road out to Winter Island is in bad shape. Could loose both sidewalk and causeway.



Cat Cove Lab (Dr. Mark Fregeau)

- Anticipate they will continue to actively use of Smith Pool to support their marine lab and aquaculture activities.
- Would like to offer more activities for the public if they can be part of a larger program to attract people down to water's edge. Solo events in past have not been well attended.
- Need more interpretative signs (Cat Cove, CG AirSta, Fort Pickering) and directional signs.

Dominion (Mike Fitzgerald and Malia Griffin)

- Although they don't object to cruise ships, concerned that they might conflict with delivery of fuel to their plant. They felt that someone in the City should coordinate use of the new wharf to ensure that conflicts do not occur. If they

have enough warning, they likely would be able to schedule deliveries of fuel to avoid conflict.

- Following 9/11, required security measures for the plant have reduced their flexibility to accommodate public access in the vicinity of the plant. They expect security measures to become even more restrictive in the future.
- Supportive of the new ferry operations and look forward to continue working with the City in improving waterfront uses on the Blaney Street property.
- They do not anticipate any significant changes in their power generation and



distribution operations in the next decade or more. Power generation is carried out by Dominion while distribution is the function of National Grid (their substation is on Dominion property). They feel that their activities have historically been and will continue to be the best use of the property.

- Not in favor of any commercial activities on Winter Island
- Would prefer to see an active working port with a variety of healthy marine industry rather than a port dominated by recreational boats and waterfront residences.
- Would like to see better transportation links to the offshore islands.

Harbor Express (Bill Walker)

- Blaney Street site is the best location in the harbor for ferry operations. Any site further in would be too dangerous (because of boat traffic, narrow channel and water depth) and too time consuming to reach. New ferry dock is geographically well suited (i.e. proximity to downtown plus deep water access) for most commercial waterfront operations (not just ferries).
- There is a priority need for a “real” terminal with a capacity for at least 150 people and with restrooms.
- Ferry only draws about 5 to 6 feet, thus there is currently enough water without dredging.
- There is a need for a fueling system on the dock (installed in May 2007). Need to keep ferry topped up to maintain trim and fuel efficiency. In 2006, had to go into Central Wharf to refuel.
- The turn off of Derby Street onto Blaney Street is too tight for large trucks or busses. Need a “no parking” ordinance for Blaney Street to increase useable width of street. It may be a safety issue for fire trucks.



2007 (5 ½ month season).

- An inner harbor shuttle (boat and/or trolley) run would be very helpful.

- New lighting (since 1998) at Blaney Street site was not turned on last year but now is back on.
- Ferry takes 45 minutes one way - Boston to Salem. With offloading/ loading time, round trip takes 2 hrs. Total ridership in 1998 had been 65k. When the service was restarted in 2006, there were 42k passengers (July thru Oct). This grew to 73k in

House of Seven Gables (Stan Birchfield)

- Interested in maritime history interpretation not exhibits. Their focus is on:



American architecture
Maritime history
Hawthorne

- Would be interested in supporting any initiative that would activate the waterfront and attract more visitors, although they have no current plans to activate their section of the waterfront. Enthusiastic about potential of cruise ships. Supports maintaining

and/or creating new view corridors down to water.

- Feels that the Friendship has great potential but needs to become more active.
- Winter Island also has unrealized potential with opportunities that should be pursued.
- Against condos or other new residences on the waterfront.
- Believes that City is generally poor at selling itself. Needs to promote that it offers an extraordinary mix of things to do and see. Existing inventory of outstanding 17th and 18th century homes is exceptional and needs to be marketed. Witch Museum is #1 attraction in Salem and thus important but is primarily for 1st time visitors to City. Exhibit never changes. Leaves potential return visitors with

attitude “Been there, done that”. Need diversity. Maritime history should be part of the mix.

- Shoulder seasons have been great.
- Existing benches at the end of Blaney Street are rarely used.
- Need better signs and parking.

National Park Service (Patricia Trap and Colleen Bruce)

- For Derby Wharf, their plan calls for adding some reproduction warehouse buildings but this is not in the near future. They have purchased an old 2-story building (30' x 60') building that had been on the Marblehead waterfront. This has been disassembled and is in storage. It will be installed on the south side of Derby Wharf in 2008. The rigging shed currently on Central Wharf has to go. It does not meet code.
- They would like to finish widening their walkway (promenade) seaward of the street sidewalk, extending it down Derby Street to the property line near Kosciusko Street. Would more closely replicate 19th Century conditions with a brick and granite surface and also offer more space for people to watch fireworks and other waterfront activities without being in the mud during rainy periods.
- There will be more historical interpretive signs.
- Friendship will be underway more – including “Ambassadorial Sails”. Also plan to have more dockside events and rent out the ship for private functions such as weddings.
- In future, hope to remove contaminants from beach area (environmental cleanup) that were deposited decades/centuries ago during ship repair and tannery operations. This could be a Brownfields initiative.
- They plan to move utility lines underground along Derby Street where it runs through their property – hope this can be done in near future. *Should this be considered for the remainder of Derby Street (Blaney to Washington)?*
- NPS will be offering Ranger-led tours to the Lighthouse Station on Baker’s Island with a boat departing from Central Wharf. This has the potential of being expanded to a broader tour of Salem Sound.
- Some ideas:



- Boat building programs for students – trade school, apprenticeship.
 - Expand ferry service
 - Create water shuttle service around the inner harbor
 - Need more view corridors to see down to the water
 - Should be striving for active and engaging port – certainly has potential
- Intend to use Central Wharf for more commercial/modern vessels. Would like, and are attempting to get, more visiting boats focused on maritime history and education. A 50' float was recently added to the northeast side of Central Wharf. Plan to extend add more float(s) toward Derby Street to increase vessel berthing space. They are exploring opportunity to use the southwest side of Central Wharf for recreational boats although this may interfere with Pickering Wharf boat access. May rent docking space as a source of revenue, but are concerned about competing with private marinas. As NPS budget keeps getting cut, they are looking for new opportunities generate revenues . If Fame needs to move from dock rented at Pickering Wharf (at insistence of USACofE), it can possibly be accommodated at Central Wharf.
- Would strongly prefer to have only historic or educational boats/ships on Derby Wharf but need better definition of historic and educational, commercial and recreational , and where best to locate these different types of boats

Pioneer Village (John Goff)

- From their perspective, there has been a reawakening of harbor relative to maritime heritage in past 5 years (since 2002). Efforts by NPS have been significant (e.g. "Friendship" added in 1998).
- City has incredible assets in the number and potential quality of its waterfront parks, but they are underutilized. They need to be connected by water transportation and walking/biking paths.
- Ferry is a major new asset. City needs to look at new sources of funding for waterfront projects and water transportation initiatives. Federal ISTEAs grants may be a source of funds for water transportation in Salem Harbor.
- Suggested that Nelson Benton (Salem News Editor) would be a good source of information/ideas since he was the person that was strongly promoting (and for past 10 years has continued advocacy for) the inner harbor water shuttle to connect waterfront attractions such as the Pioneer Village.
- Very interested in creating water transportation links to other parts of the harbor, particularly Derby Wharf. Because of the shallow tidal mud flats at their site, ideally some dredging could be done but use of very shallow draft vessel may allow access during all but very low tide periods. Some have suggested low-draft double-pontoon boats similar to what had been used to carry people from the Willows to Misery Island until this service was discontinued a couple years ago. Another options it to replicate the 16th century shallop boats and use them to transport people from Derby Wharf to Pioneer Village. Needed shore-side infrastructure may include a small wharf (expensive to permit and build and a continuous maintenance challenge) or just a ramp and float that could be pulled out of the water during the off-season. Would need Coast Guard approvals of design and outfit to have it legally serve as a passenger ferry.
- Pioneer Village could provide the first chapter in the story of Salem's rich maritime history through reenactments, living exhibits and artifacts. This could be tied, for example, to the 18th Century boat building history (Frigate *Essex*) on Winter Island, the exceptional deep 19th Century maritime history of Derby Wharf and the surrounding area, and the 20th Century story of the Coast Guard on Winter Island.



Plummer Home for Boys (James Lister and Nicole McLaughlin)

- 1980 agreement exchanged land for island public access and sewer line easement. Only commercial activity allowed on Winter Island under this agreement was a marina. This 30-year agreement was not officially recorded until 1990, thus not due to expire until 2020.
- There was no MOA signed after 2000 as recommended in the Harbor Plan. This needs attention.
- Safety/security is not a big problem, although periodically but infrequently there has been some inappropriate (illegal?) activity. The site is very secluded.
- They have a thoughtful and receptive board – mostly Salem residents. They are open to ideas that would benefit both Plummer House and the community. As a nonprofit, they are always looking for ways to raise money. Very interested in new revenue streams and programs that would benefit their boys such as boat building, sailing. Also interested in infrastructure improvements/additions and programs that would enhance Plummer House.
- Likely would be neutral on initiatives that would not benefit their organization but would have no detrimental impacts on their programs/facilities.
- Salem needs to attract more people (both residents and visitors) to the waterfront. Need more retail, better parking. Beach maintenance is lacking.
- Improvements around Derby and Congress Street intersection are very nice.
- Need public access to Shetland site and its water's edge.
- Friendship is good for harbor but Derby Wharf should be used more



Chamber of Commerce (Rinus Oosthoek)

- Waterfront should be a destination.
- Recommends that consideration be given to putting a lock on the South River at the Congress Street Bridge. May be less expensive than dredging although understands that clearance under the bridge would still be a problem. Strongly agrees that there is a need for more activity, art and improved appearance around and on South River to attract visitors to the water's edge.
- Disappointed in lack of progress on the harbor walkway but very pleased with the start up of the Salem Ferry (many Chamber members have expressed delight!).

- Signs (both directional and interpretative) are very important. The sign plan developed by PEM would be very expensive to fully implement and the signs that have been installed, although attractive, are not easily read. Need to cover attractions for entire area.
- Recommend naming districts (e.g. Town House Square).
- There's a need for long-term planning in preparation for Salem's 400th anniversary. What will/should the harbor look like in 2026?
- Recommends considering attracting an International Boat Building School for Winter Island.
- Believes that the cruise ship opportunity needs immediate attention.
- The Downtown Retail Report for Salem that has just been completed should be considered in updating the Harbor Plan.

Department of Parks and Recreation (Doug Bollen)

- Winter Island – community requested removal of RVs. Harbor Plan recommended landscape shielding.
- #1 priority - Winter Island needs its own commission or maybe a harbor and Public Lands Commission.
- Vine Associates is currently completing a study for reuse of the CG barracks bldg. Sail Salem/ community boating is interested in these facilities. Would be a public sailing program.
- 2003 Study (for \$5,000) to evaluate feasibility of converting the old CG hangar to a city sports complex determined that it would cost \$4 to 5 million to complete. Funding at this level is not available for this.
- May be possible to store boats outside or even inside hangar over the winter to generate a new source of revenue for the City.
- There are Island access restrictions (Plummer House) that expire in 2010.
- There is a possibility for a Sea School in the barracks but would require 99-yr lease.
- Don't want to turn Winter Island into a trailer park. "Boat storage could generated more \$\$ than RVs".
- Access fee to WI is \$20 (2 cars for 2 years) for Salem residents. For nonresidents, fee is \$100.
- With island caretaker, vandalism/crime is no longer a problem on the Island.



- Ferry and cruise ships are good things.
- RVs are parked right next to function hall. Fee is \$40/night for waterfront space.
- Winter Island manager is appointed by the mayor but managed by Parks & Rec. This is not ideal.
- The city-owned public float by the Congress Street bridge is managed by Hawthorne Cove Marina who also rents shack (has ice machine on wharf). City's boat pump out facility is also here.

Harbormaster (Peter Gifford)

- Winter Island boat ramp (renovated/expanded in 1990) is most heavily used on North Shore.
- The many parks along the Salem waterfront (e.g. Forest River Park, Willows, Winter Island, NPS) are invaluable resources and should be protected to prevent over use or loss of this invaluable network of public land. Concerned about the threat of new attractions or even increased activity.
- Winter Island is already overused during the summer (particularly on weekends). Activating the old CG barracks and hangar will just cause further overcrowding. These buildings keep getting studied and nothing happens. The City uses the hangar to store its lawn care equipment and both Salem's and Beverly's Harbormaster boats during the winter.



- The Harbormaster office on Winter Island is in an excellent location to oversee Harbor boating activities.
- RVs use much of the Island during the summer season. They provide a significant income for the City thus it would be difficult to eliminate them. Early on, this revenue allowed Winter Island to be preserved.
- Sail Salem would like to use Winter Island facilities for their programs.
- Likes the proposal for the New Salem Wharf for ferry and cruise ship. Says that American Canadian Caribbean Line (Warren, RI) was coming into Salem until 2005.
- Although City owns ferry dock, currently Harbor Express is paying liability insurance on this dock thus it very reluctant to allow others to use this facility.
- There is no short-term transient boat access on Pickering Wharf. Overnight transient slips are often available but at a relatively high cost. The town float on the south side of South River next to the Congress Street bridge is used by the Rockmore shuttle boats and water taxi. This does not leave enough space for recreational boat use or easy access to the pump out station. May need to move pump out station to a better location.
- Would like to see dredging in the South River Basin. Floats around the perimeter for use by dinghies and small boats would be good. These could be managed by harbormaster and/or Parks Dept. Harbor visitors want to go downtown.
- The Blaney Street site offers solutions for many problems.

- Could use 2nd pump-out boat as a backup. Have looked into installing a pump out station for Winter Island but a reinforced concrete slab that is up to 10' thick prevents burying a line to connect to the waste water line for the island. It has been determined to be too costly (~\$900k) to do this. If not for cost, pump out station would be good idea for Winter Island.
- No commercial fishing vessels are allowed on Winter Island because of prohibition of commercial business. This was also a factor in loss of Duck boats along with a insurance liability issue.
- Pioneer Village has no water at MLW and thus would be difficult to run a water shuttle here.
- Need construction material and equipment (e.g. tractor, front-end loader/back hoe) loading capability somewhere in the harbor.

Harbor Pilots (Captain Bob Blair)

- Pilots are in charge of the movement of the large commercial vessels in Salem Harbor. This includes vessels delivering coal and oil to Dominion Energy and cruise ship port calls. They would give priority to power plant deliveries although this should not conflict with cruise ship visits.
- Need a Port Security Plan for Salem
- There is a need for an organization to market the port, coordinate and promote economic development and resolve schedule conflicts.
- Coal delivery to power plant totals about one million tons per year (40k tons/ship, 25 ships)
- New Salem Wharf needs to be a port facility open to ocean going vessels. Smaller recreational boats should not be allowed access to this facility for safety reason. Recreational boat marina facilities not permitted by DPA regulations.
- South River improvements should be a low priority compared to other port needs, particularly in the industrial portion of port
- A wharf at the SE corner of Shetland property would be exposed to wind-driven waves and thus would be difficult to use during the fall and winter.
- Suggested consideration be given to constructing a horseshoe shaped pier between Turner Street and Kosciusko Street to accommodate recreational boat



and to activate this section of the waterfront. Also would provide an opportunity for visitors and residents to get out onto the water.

- The Willows is an asset that deserves more public investment in its infrastructure

Essex National Heritage Commission (Annie Harris)

- No one in the city including those of us who served on the first Harbor Plan have ever supported using the oil tanks for anything more than the plant's immediate needs and in fact we hope that one or more of these tanks may be dismantled in the future.
- Disappointed with lack of progress to date in activating the South River.
- Dredging - CAD cells appear to be the answer for disposal but Salem residents are not willing to take material from other harbors in a Salem CAD cell.
- Need a designated anchorage area, more transient moorings and dinghy dock(s).
- Lack of a bus staging area and parking facilities is a problem.
- Will hear frustration at not getting more done in the harbor since 2000.
- Future -
 - Need 1st class marina for transient boats
 - Dredging of the South River should be a high priority
- Winter Island is underutilized
- Boundary for the Harbor Plan study area should extend down to Forest River Park.

Salem Sound Coastwatch (Barbara Warren)

More pump out facilities are needed. Suggest adding one for recreational boats at Winter Island and at Salem Wharf for commercial vessels. Should also consider getting a backup pump-out boat that could be a shared resource with surrounding coastal communities. Too many challenges in creating pump out station at Beverly Bridge (currents too strong) or as SESD (Cat Cove water too shallow).

- In 2005, there was a survey of all outfalls in Salem Sound at low tide. Need to keep testing water/outflows emptying into the harbor. Systems inevitably fail thus they need to be monitored and repairs when they fail. This is an ongoing issue in all urban environments. There appear to be some pollutants currently leaking into the South River Basin apparently from the National Grid site



although there are no outfalls to point to. Enterococcus bacteria numbers have been increasing over past 2 years at Derby Wharf outfall.

- Salem Pool is no longer useable by the public (no swimming and no beach). Salem Sound CoastWatch could help promote marine educational events at this site.
- Pickering Wharf – need restrooms on east side of wharf for those using docks there as seasonal homes. Hannah Glover partially blocks access to South River Basin and City dock. The Fame is the type of business/activity we need for harbor and should be supported.
- Should explore feasibility of adding docks/floats along Shetland Park waterfront for use by recreational boats. Not a fan of constructing a new wharf over the mud flats in Tourist Historic Harbor planning area. Impact on this environmentally sensitive area would be too great.
- Need to cooperate more closely with Marblehead on Harbor cleanup.
- Some efforts underway to rejuvenate eel grass beds in Palmer Cove/Point.
- Duck boats were not safe to operate at the existing public boat ramps.
- Goodyear property is ideally located to serve as a gateway to South River Basin.

Palmer Cove Yacht Club (Marc Winder, Tom Cassano, Shirley Cassara and Bob Connors)

- Salem Sound has become a no discharge area. There is only one pump out station in the harbor. Need more. Harbormaster may need second pump out boat.
- Noted that water quality has improved significantly over past several years.
- Their priorities for change are (1) dredging, (2) more mooring area and (3) security for the club facilities and their boats.
- Agree that City should be promoting maritime history.
- Extensive work completed on their seawall this past year. Included repairs/replacement with of seawall (vinyl sheet pile).
- Have standing agreement with other clubs to allow boat visits. Offer ten transient slips for use by members and visitors. Have accommodated FBI boats and schooners during major harbor events.
- Believes that Forest River is “ripe for development”.



- There has been no dredging of the channel into Palmer Cove since 1974. Maintenance dredging is critically needed. Existing ramp system is unusable at times due to sediment fill. Channel which is supposed to be 8' at MLW is down to 6' for most of its length. Mooring in Palmer Cove can not be used for sail boats with fixed keel. One of those present for this interview stated that 10 years ago his mooring had 10' of water at MLW but is now down to 6'.
- Walter Power expressed his view that there is a need for more mooring space in the harbor and that the addition of dinghy docks at end of Turner Street (next to House of 7 Gables) had been recommended in 2000 Harbor Plan but had not yet been built.
- Salem is not a working port except for a few fishing vessels and ships that resupply the power plant. Salem ferry and efforts to attract cruise ships are good initiatives.
- Vision for future:
 - Need to achieve critical mass of activity, services, attractions, and amenities. Harbor will then takeoff
 - Ferry and cruise ships
 - Need to do more to activate Historic Waterfront district

Weedons – (residents within Waterfront Tourist District)

- Have lived in house for more than 30 years. Front-row witnesses to changes in the harbor during that period.
- They like the new Salem Ferry and they liked the Duck boats.
- They expressed great concern over the proposed (in the 2000 Plan) addition of a harborwalk in front of their home if it was to be attached to the existing seawall. Felt that it would compromise the integrity of the seawall. Suggested that a new seawall could be built several tens of feet outboard of the current wall with the space behind the wall used for containment of harbor dredge spoils. When filled, this volume could be capped and then used as a public walkway (part of the Harborwalk system). They admitted some concern about the noise, trash and security issues that may come with increased public access in front of their property and that others home owners in the area would likely aggressively resist any improvement in public access along the water's edge in front of their properties.
- Need to create/support activities that would get people out on the water. This could include more excursion boats, water shuttles, etc.
- Improving boat access to the Forest River area would be a plus.
- They also suggested there is a need for more/better signs for visitors – both directional with walking distance to attractions (e.g. Seven Gables, Winter Island, PEM, The Willows) and historic interpretation for past events and existing landmarks.



Shetland Park (Tom Kent)

- Unclear on status of Chapter 91 license for entire site. New marina on South River was properly licensed.
- Initial proposals for Salem Ferry explored possibility of having ferry docks located at Shetland Park. Two locations proposed. Parking would not have been a problem with currently available spaces and opportunity to use underutilized National Grid site across Congress Street.
- Excelerate has moved into office space at Shetland. Initially (during offshore construction) the on-site staff will probably be between 15 and 20, decreasing to

4 or 5 after construction (early 2008) to support ongoing operations. There are no current or foreseeable plans to build docks/pier(s) to support Excelerate vessels.

- Generally supports increased public access but creating safe access routes to and along water's edge will likely be challenging. If it requires a "public taking", it could prove to be very expensive. Most difficult will be creating a route from Congress Street (next to bridge) along the south-side of South River to the start of the



berm across from Central Wharf (walkway around main admin bldg). Pedestrian routes on road immediate south of this building would be unsafe. It is not practicable to allow the general public to pass through the entire length of the building (security challenges). The only viable option appears to be a cantilevered walkway on the north side of the building over the South River but this would likely create privacy and noise problems for tenant on the 1st floor of that building. If walkway is built low enough to prevent people from looking directly into offices, it may not be high enough to prevent it from being flooded at times of spring high tides. Floating docks may be difficult due to requirement for ADA access. Shetland owns a small piece of waterfront land on the southwest corner of their property that they currently allow Palmer Cover Yacht Club to use. This may offer space to allow pedestrian access up onto to berm from Leavitt Street.

- Suggestions to develop waterfront on southeast corner of SP property are "pie in the sky". There are access difficulties with the berm and lack of water depth would require extensive dredging. The water sheet areas are not owned by Shetland Park. They have no current plans to further develop their waterfront.
- Security on the site is an issue that continues to draw additional attention. Tenants include DOD and DOE contractors/personnel and State agencies. The Registry of Deeds will be moving into Park in August 2007.
- Cleanup along South River since 2000 has been a positive.
- Future challenges for the site include impact of the new Court building and associated traffic
- Enthusiastic about new ferry and future potential for cruise ships. Would like to see more businesses in City. This is good for Shetland Park and also would hopefully increase tax base/ reduce taxes.

- Would like to see dramatic entrance to City's waterfront Harborwalk, similar to arch-covered walkway in Boston's Columbus Park that would serve to draw more visitors to the water's edge.
- Likes the concept of pocket parks along water's edge, although he points out that this has been suggested for a decade or more with little progress to date.

Hawthorn Cove Marina (Russ Vickers)

- When Seaport Bond was first filed, Salem was not in the Plan. He lobbied with Salem Partnership to have it be included. They were the first recipients of bond funding (\$100k) from the Seaport Advisory Council. It was used to study the feasibility of Salem Wharf. Also formed Port Development Corporation. He started water taxi service in the harbor as step to help activate the waterfront.
- The Salem Wharf project has been scaled back some. Had originally been sized to accommodate 800-foot ships. Now likely will be able to accommodate vessel up to 400 feet in length. Agrees that new Salem Wharf should be multi-function serving a variety of water transportation needs ranging from cruise ships and ferries to excursion boats and water taxis. He has submitted a 4-page report to the Mayor outlining his desires/suggestions.
- He runs a water taxi service (Salem Water Taxi Company) providing transportation between boats (on moorings or at anchor) to the shore. The Salem Water Taxi is a busy budget service that works well while the Hawthorne Cove Marina offers a more upscale water taxi service for club members.
- He also offers moorings, both seasonal and transient.
- Believes that Plan should indicate that there is a need for boat fueling service in the harbor.



sediment that is unsuitable for off-shore dumping thus dredging material disposal options need to be identified and permitted (i.e. CAD cells). Need to dredge Hawthorne Cove, remove about 25k cuyd to increase mean depth from 5 to 7 feet.

- Last winter (2006/2007), Corps dredged the federal channel. Power Plant dredged their turning basin 5 years ago. Looking for Corps to continue dredging up into the South River Basin and off North Commercial Waterfront. This area has contaminated

- Regarding Public Access: Feels this is a romantic idea/noble goal. For any development around the South River creating a public Harborwalk would be a good thing. In other areas does not think it benefits waterfront users much although is not a bad thing. Does believe that more floats and dinghy docks in the main waterfront area (between Hawthorne Cove and Palmer Cove) for use by recreational boats would be great, helping to activate this area.
- Regarding Transient Recreational Boats: Currently does not see a great demand. Believes that Salem has adequate dockage for transient boats to meet existing demand. Hawthorne Cove Marina, for example, can accommodate up to 30 transient boats on a typical summer weekend and they are not all used through the summer. Contends that the local market is different from Boston, for example, that attracts and serves the larger boats (or mega yacht). Boating used to be big in Salem in the past but does not believe that there is trend for more people to use boats locally. Does believe that, if there were more attractions and more public waterfront infrastructure supporting the recreational boating community, more people from outside Salem could be drawn to the area. Would require both a more active and inviting waterfront and some focused marketing of the harbor as an attractive destination for boaters.
- Connection to City's maritime heritage is important.
- Noted that when Seven Gables had looked at taking over management of Pioneer Village in the late 1990s/early 2000, they were exploring the feasibility of running a water shuttle between the two sites. When the management link between the two attractions did not materialize, this water shuttle route lost support. A system of connections including Winter Island, downtown (Central Wharf and/or a site in South River Basin) and possibly some off-shore islands should still be considered with secondary stops at Seven Gables and Pioneer Village.
- Pointed out that an old Railroad right of way offered a possible opportunity to connect Dominion oil terminal and tank field to North River area and then possibly up closer to Rt 128. Thus by laying underground piping, product (oil or other liquids) could be moved from the harbor up to tanker trucks near a major roadway (128). This proposal for expanding port operations by increasing oil import would have offered a new revenue generator for the harbor and City. Unfortunately the idea was killed by public resistance to more industrial activities and the addition of big oil tanks. There was similar resistance to creating CAD cells in out-lying Salem Harbor.

Dion's Yacht Yard (Fred Atkins)

- Dion Yacht Yard offers the Harbor's only commercial access to the waterfront for industrial supplies/equipment. Uses crane to load barges, boats, ships. Recent examples are support for Army Corps of Engineering (dredging) and Excelerate (LNG deep water port) operations.
- Blaney Street needs RoRo capability for marine construction equipment and/or a crane.
- Salem Harbor is being used more by the yachting community which offers an opportunity for future harbor growth which should be supported . The 2003 NYYC event was a smashing success.
- Boundary for the Harbor Plan study area should extend down to Forest River Park.
- Sewer line near Dion almost broached in 1978 storm. Maybe able to protect this public utility infrastructure by creating a walkway (part of the Harborwalk?) here that encloses the sewer line.
- At foot of Ocean Avenue, when storm drain fills with seawater during spring high tide, it picks up oil and the slick that is created often covers much of the southern part of the harbor. Oil is most likely coming from streets, cars.

For South Cove Area (between Shetland Park and Forest River):

- Little change in the area since 2000. There have been several new marine-related businesses including several Yacht Brokers that have moved over from Marblehead and up from Boston, and two large sail makers (North Sails and Doyle Sails). A positive indication that Salem has a lot to offer this type of business.
- Yacht Yards (like his) and marine related commercial business are disappearing from the North Shore. There are fewer boat repair businesses, yet there are more boats.
- Access to the waterfront and watersheet needs to be improved from a commercial marine-related business standpoint. Dions allows many water-dependent businesses to access the waterfront through his property. Feels that if he did not provide this access, then these could not exist here. The planned New Salem Wharf must have commercial and industrial access to the watersheet. The lack of access is keeping new businesses from settling in Salem and is driving existing ones out of Salem.
- Channels need to be dredged. The Army Corps dredged into the Palmer Cove/Forest River areas several decades ago. Needs to be dredged again, including the channel into Dions. Without dredging many water-dependent commercial uses can't continue in Salem.

- A large sewer main (30" pipe) crosses the beach next to the Boat Yard and presents a significant environmental risk. If boats were to break free during a storm, they could hit the pipe causing raw sewerage to discharge into the Harbor. It should be better protected.



Constructing a seawall on the water side of the pipe and then filling behind it may be the best option. A portion of the filled area next to the shore could then be used for parking and the remainder could be a useable park or open space.

- Access to the waterfront and watershed needs to be improved from a tourist/visitor standpoint. The waterfront is underutilized and is a great asset that could attract new visitors. The lack of facilities for transient boaters is limiting a growth in tourism. Specifically:
 1. The lack of a public dinghy dock is a real problem. Most people visiting the area by boat have no safe/convenient way to land ashore. With better facilities, more people would visit.
 2. Private moorings are taking over the areas that are supposed to be used as anchorages. More designated or useable anchorage areas are needed and/or additional public docks or moorings that will allow people to tie up for short shoreside excursions (eat in restaurants, shop downtown, visit attractions) .
- Need to attract more people to Forest River Park. This is a tremendous City asset that is underutilized. Boats can not currently get into the Park at most stages of the tide. Dredging is needed. Pioneer Village would greatly benefit from regular water shuttle to this area and the Park would be used more. (Note: Mr. Atkins indicated that in his youth, many people from surrounding towns and from Boston used to come to Forest River Park to picnic and enjoy the waterfront. That does not happen today. Business used to be there to serve these tourists. Kids used to make money by carrying people's things to and from the park. It had a nice family atmosphere and attracted lots of people. Thinks that City should attempt to reinvigorate again.)
- Dions owns the beach on either side of his facility and allows the public to use it but has concerns about liability.
- The outfall in Lindale Cove is also a problem. During periods of extreme high tide (storms, lunar tides, etc.) an oil slick forms on the water of the Cove. It is a real detractor to tourism, not to mention the environment.
- Constructing a Town Pier with docks off of south side of Shetland Mills is a good idea. Would allow more people access to the water and more water users

access to the City. Dredging needs to be part of this initiative so that large enough vessels could use to make it worth while.

- Need public boat ramp in this part of the Harbor. Might be a former ramp at Forest River Park that could be repaired and reactivated. Would also need dredging to make it useable.

For entire Salem Waterfront:

- Harbor Walk from Winter Island through downtown and extending all the way to Forest River Park is a good thing.
- City needs more boat pump-out facilities. A pump-out facility could possible be incorporate into the bulkhead/seawall that should be built to protect the sewer line next to Dions. People could tie up to the bulkhead and pump directly into City sewer line. Would require dredging.
- Need to have better access to the downtown from the water. Need more dinghy docks, boat and tie-up facilities. More launch service/water taxi service should be considered. Need to get people right downtown. The South River Basin provides an outstanding opportunity.
- The Congress Street Bridge needs to be fixed! Should have never been built the way it was – restricts water traffic to the South River Basin area. Suggests physical change to the bridge. Thinks that with a fairly simple and relatively inexpensive modification to the bridge, then more head-room could be achieved that would allow passage of boats at all tides. Would open water area west of the Bridge for use by more commercial vessels as well and possibly a marina.
- Private moorings in the Harbor need to be better controlled. Moorings are taking up public areas of the Harbor. Need for anchorage areas and for public moorings to attract more transient users.
- Blaney Street needs RoRo capability for marine construction equipment and/or a crane.
- Need to think about expanded public use of Winter Island. Is great asset but underutilized. Too many RVs taking up valuable public open space. Need to get Salem State College to expand from Smith Pool and run programs on Winter Island. Boat Schools, Boat Clubs, Sailing Clubs, etc.
- Frostbite sailing club should be considered for Winter Island. Would encourage year round use.
- Supports the formation of a Port Authority or Harbor Development Commission. More control and more energy need to be asserted on the waterfront issues and opportunities.

Meetings were also held with Michael Rockett and Timothy Clarke to discuss their plans/intentions for developing the properties that they own on the South River.

APPENDIX B

Recent Studies



Former U.S. Coast Guard Barracks on Winter Island

City of Salem Open Space and Recreation Plan Update

(Completed in 2007 by Vanasse Hangen Brustlin, Inc)

Plan Summary

The City of Salem is a highly developed and densely populated community with an interesting array of open spaces and parks remaining within its borders and limited direct access to open space resources in adjacent municipalities. The need to improve and upgrade park facilities, and preserve and protect existing open spaces is widely recognized and deeply felt by Salem residents.

Changing demographics in Salem over the past decade have altered the needs for and demands on limited public resources for outdoor recreation, physical fitness and sports, such as playing fields, playgrounds, and other active and passive recreational facilities.

The City faces serious management, staffing and financial challenges to address these diverse needs for conservation land, parks, playgrounds and outdoor sports facilities. Although some progress has been made over the past five years to enhance several key sites, and a couple of volunteer Friends groups have been formed to advocate and raise funds for specific parks, it is recognized that more efforts to supplement City resources are needed. However, the City also needs to develop a stronger open space management program and incorporate region-wide solutions, where feasible, to meet the competing demands of many different constituencies.

This document is Salem's first Open Space and Recreation Plan since 1996. It presents an updated inventory of Salem's open spaces, documents open space and recreation needs, and establishes an ambitious program to expand and modernize its park and recreation system. Overall, this Plan reaffirms Salem's desire to meet the following goals:

1. Maintain public spaces and recreational facilities
2. Protect open spaces
3. Develop and implement a capital improvement program
4. Improve public access and awareness

Salem's open space and park system is a precious and limited resource that has been difficult to acquire and maintain and needs to be protected ardently. This Plan presents open space goals, objectives and actions that will guide Salem's open space and recreation philosophy, planning, improvement, maintenance, and management through 2012.

Three areas in particular rise to the top as being absolutely essential for any future progress towards meeting the goals of this Plan:

- Obtaining support from City staff, commissions, and boards that open space and recreation is a central and lasting priority for Salem.
- Creating some form of an oversight committee.
- Securing additional sources of funding, staffing, and other support for park facility maintenance and enhancement.

Winter Island Barracks Building Re-Use Feasibility Study

(Completed July 2007 by Vine Associates, Inc)

Executive Summary

The City-owned U.S. Coast Guard Barracks Building (hereinafter referred to as the “Barracks Building”) was part of a former Coast Guard station that operated on a portion of Winter Island from 1935 to 1970. The Winter Island Station played an important role in the country’s defense during World War II and therefore, the Barracks Building and its associated site is considered worthy of historic preservation and restoration. The Winter Island Historic and Archaeological District was listed in the National Register of Historic Places on April 14, 1994 consisting of 36 properties.

The City of Salem would like to rehabilitate the Barracks Building for adaptive re-use. However, the building has suffered from years of neglect and is in need of major repairs to become usable. Additionally, potential uses are restricted to those of a public nature due to use restrictions imposed through various property transfers over the past hundred years. Public uses would also complement the existing uses that occur in the City-owned Winter Island Park where the structure is located. An assessment of necessary repairs and associated cost estimates were developed along with an evaluation of potential uses for the building as part of this study.

Based on visual inspections of the building, historical details on the building architecture and discussions with persons knowledgeable about the structure, preliminary cost estimates were developed for two different levels of repair/restoration as follows:

- Stabilization/Emergency repairs required to stabilize the structure and address safety code issues, prevent winter weather related deterioration, and vandalism.
- Long Term improvements to improve the building to a level suitable for leasing and tenant fit out with restoration of the buildings; more important exterior architectural details.

Phase 1 Stabilization \$ 165,000

Phase 2 Long Term \$ 695,000

A separate cost estimate, (included in the report) was developed for the installation of a catering kitchen, tables, and chairs should the City decide to create a function hall in the building.

Potential uses were identified based on public input and interviews with various interested parties. Uses considered in the Study include a function hall, a community boating program, common office and meeting room space for public organizations, and other uses.

The Study recommends that the City move forward with securing grant monies to restore the building to a level that would allow leasing to one or more suitable users under a long term agreement with the City retaining title to the property and in a manner that rehabilitates the more important architectural exterior features of the building.

Downtown Salem Retail Market Study: Strategy and Action Plan

(Prepared in May 2007 by Karl F. Seidman Consulting Services)

Introduction

Under the leadership of Mayor Kimberley Driscoll, private and public sector stakeholders have been working to implement a vision to revitalize downtown Salem as a vibrant year-round retail destination. To advance this vision, the team of Karl Seidman Consulting Services, ConsultEcon, Inc. and the Institute of Regional Development were hired by the Salem Redevelopment Authority to complete a Downtown Retail Plan for Salem. This study builds on significant other downtown initiatives including redevelopment and reuse of several downtown buildings for housing and retail space, introduction of seasonal exhibit and work space for artists, a new summer ferry service to downtown Boston, a storefront improvement program, renewal of the Main Street Program and holding a public forum to develop a shared vision for downtown Salem.

This report presents the recommended strategies and action plan to strengthen downtown Salem's retail base, expand its customers and improve the customer experience while visiting and shopping downtown. It is the second phase of the study and builds upon the earlier market analysis phase that is documented in a separate report. The following strategies are presented in the Plan:

Retail Development Strategy

1. Establish a proactive business recruitment campaign
2. Expand entertainment options and branding
3. Improve the city permitting process
4. Maintain a strong downtown business retention effort
5. Complete a publicity campaign..... (for) downtown Salem's revitalization.

Market Development Strategy

1. Conduct a unified and comprehensive marketing campaign.
2. Expand the downtown resident retail market
3. Target marketing to Salem State College students and workers at large Salem employers
4. Expand promotions to increase shopping, dining and entertainment spending
5. Support a year-round events program to increase (shopping/visitors) in spring and fall
6. Better coordinate between downtown and tourism marketing initiatives

Experience Enhancement Strategy

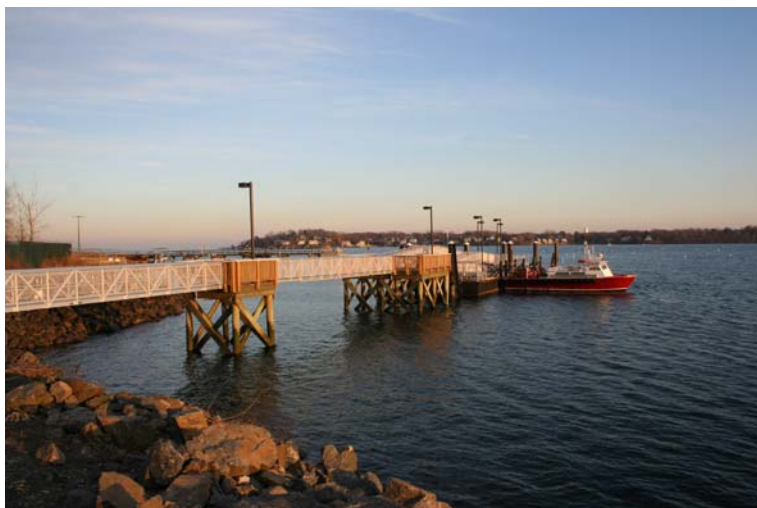
1. Create better signage and information to navigate downtown
2. Make the Essex Street pedestrian mall more vibrant, interesting, clean and safe
3. Institutionalize staffing for downtown cleanliness and beautification efforts
4. Establish informed ambassadors and employees to better advise

Port of Salem Expansion Plan

(in the process of completion in 2007/2008 by Bourne Consulting Engineering)

This project is being conducted concurrently with the Salem Municipal Harbor Plan Update and is expected to be completed several months after the Harbor Plan is submitted to the Commonwealth for approval. The effort focuses on development of the Salem Wharf proposed to be located off Blaney Street in the Harbor's North Commercial waterfront. The Harbor Plan includes general statements concerning the Salem Wharf development and its relation to overall port development but defers to the Port Expansion initiative to define the City's vision and plans for this addition to the Harbor's commercial port infrastructure. The scope of work for this project includes the following five tasks:

1. Analyze existing plans for the Port of Salem
2. Facilitate a Port Planning Process seeking and consolidating public input to identify the community's preferred development scenarios. This will include public meetings and close consultation with the City planning staff and a citizen Port Management Committee.
3. Establish a final program for construction and management of a Salem Wharf facility including a site plan with utilities, infrastructure, dredging and other needed site improvements, port security requirements, and site access challenges/solutions. The consultants will then prepare schematics drawings with cost estimates for build out of the proposed facility.
4. Develop an Implementation Plan that will guide the City through subsequent design, permitting and construction phases of this project. This will include a strategy for obtaining necessary project permits, identifying funding sources, and suggesting construction and follow-on port operations management options.



Blaney Street waterfront as it appeared in 2007 with the wharf and floats being used by the Salem Ferry. The new Salem Wharf is proposed for this site.

APPENDIX C

Environmental Enhancements



Outfall at End of Derby Wharf

ENVIRONMENTAL RESOURCE ENHANCEMENT

During the process of updating Salem's Municipal Harbor Plan, improving the quality of the Harbor's water and the health of its marine ecosystems/habitats was identified as a priority. This led to an initiative to complete a preliminary assessment of several water quality enhancement opportunities. These were discussed with the City's Conservation Agent/Conservation Commission. Although the findings did not fit comfortably in the main body of the Harbor Plan, including them as an appendix to the Plan seems appropriate and potential valuable in planning for future harbor development.

In addition to continued efforts to improve the quality of effluent from the South Essex Sewer District (SESD) plant, and storm water drains and seepage from non-point sources, harbor environmental enhancement projects should consider the condition of streams and rivers flowing into the Harbor. To better organize this effort, the natural resources of the Harbor have been divided into three groups

1. Upland – areas adjacent to the rivers and streams which flow either directly or through stormwater systems into harbor waters.
2. Intertidal – areas that are subject to flooding during regular tide cycles.
3. Subtidal / Open Water – areas that are always underwater throughout the harbor.

By focusing efforts to improve the habitat within the greater harbor area, commercial and recreational productivity can be increased. The Plan encourages the methods of improvement discussed below as a means of increasing the overall water quality and biodiversity of the harbor ecosystem. The areas described herein are included on Figure C-1.

UPLAND:

Although not traditionally considered part of the harbor, the upland areas surrounding the surface waters which empty into the harbor can have considerable effect on the harbor water quality. For this reason it is imperative that the existing local regulations for the protection of wetlands, promulgated by the Conservation Commission as well as state regulations, need to be strictly enforced. Several enhancements to upland areas could have considerable impact on the harbor waters. These areas include; Mill Pond, Rosie's Pond, South River, Brook Street Brook, Upper Forest River and Upper North River.

- Removal of Phragmites: Many of the wetlands surrounding the ponds and rivers have become choked with the invasive species Phragmites. Removal of this invasive plant and the establishment of native species will encourage native wildlife to return (including spawning of anadromous fish) as well as improve the ability of the waterways; to function as natural filters for runoff, and to store flood waters.
- Water Clarification: Efforts should be made to control pollutants and sediment carried in storm runoff prior to their discharge to these areas. Use of Best

Management Practices (BMPs) in the surrounding areas will serve to maintain and improve the quality of the water entering the resource areas.

- Removal of Fill: Filling of the wetlands in these areas occurs both due to active and passive human activities. Fill which is encroaching on the natural limits of these ponds and waterways should be removed so that the waterway resources can be returned to their former extent. Whether the fill has been dumped, or it is the accumulation of sand and silt from roads and driveways, the reduction in the area of the wetland reduces the amount of filtering it may perform and likewise degrades the quality of the water that travels downstream. Filling of wetlands also decreases the volume available for flood water storage, exacerbating flood events by increasing flood heights.
- Removal of Contaminants: Also critical to the improvement of the harbor waters is the removal of contaminated materials from the upland soils and waters. By removing contaminants from these areas, one source of harbor pollutants is eliminated.
- Removal of Restrictive Structures: Restrictive inlet and outlet structures on upland ponds, wetlands and watercourses upset the natural water levels and flow of these systems rendering them less effective as flood storage and habitat. Poorly designed or poorly maintained structures can become barriers to anadromous and catadromous fish runs. The removal of these structures and replacement with carefully designed and appropriately sized structures reestablishes the natural water levels, and allows the natural communities of flora and fauna to return or revitalize.

INTERTIDAL:

Intertidal areas of the Harbor are of critical concern to the commercial, recreational and environmental interests. Enhancement of these areas should be encouraged to create additional habitat where possible. The intertidal zone extends from the low tide line to the top of the saltwater marshes, and enhancement to this critical resource area will have a dramatic effect on the harbor. All of the recommendations for the *Upland* area (noted above) improvements are also recommended for the intertidal zone including: phragmite removal, water clarification, fill removal, and contaminant removal. Further planned enhancements are:

- Planting of Salt Marsh Grass: Planting of Salt Marsh Grass (*Spartina Patens*, *Spartina Alterniflora*) in appropriate areas provides both habitat for marine and non-marine wildlife. The increased marsh area also improves water quality through filtration of sedimentation.
- Removal of Restrictive Structures: In order to re-establish the natural salinity levels of the local salt marshes and intertidal zones, restrictive structures such as culverts, sluiceways, and abutments, should be studied and resized if appropriate. The redesigned structure should consider the requirements of the resource area which it drains and the historic width of the channel prior to construction of the restricting structure. Improved structures should include design elements which encourage the re-establishment of historic fish runs and the natural flushing of tidal areas.

- Re-establishment of Channels: Efforts to enhance the existing tidal marshes should consider clearing of and re-establishing the river way channels within them. Restrictive flow has, in some cases, caused the buildup of sediments in formerly open channels. These channels allow flushing and encourages the reach of saline waters into the marsh helping to create a more natural setting and encouraging the reestablishment of native species

SUBTIDAL / OPEN WATER:

Increases in the quality of the waters entering the harbor through continued efforts by the SESD, and the projects listed above will increase the viability of enhancement projects in the subtidal and openwater areas of the harbor. Enhancements of this portion of the Harbor resource include: water clarification and stormwater and runoff filtration and decontamination. Additional projects should include:

- Removal of Contamination: Removal of contaminated sediments and contamination is of paramount importance. Where possible, the plan encourages the removal of contaminated sediment, and the responsible disposal of that contaminated sediment. Water pollution control is also vigorously supported, as any effort to decrease the amount of contaminant load to the Harbor will improve the resource.
- Eelgrass Plantings: Lighter boat traffic and shallow water make the entrance to Collins Cove, and the area Northeast of Forest River Park potential locations for efforts to re-establish Eelgrass stands. These areas will provide habitat for marine wildlife that will increase the diversity as well as the productivity of the harbor. Existing Eel Grass beds should be provided additional protection and be supplemented to prevent their degradation. Eelgrass beds provide essential habitat for juvenile fish species important to recreational and commercial fisheries and biodiversity. The severe degradation of Eelgrass beds in Salem Harbor between 1995 and 2001 is shown on figure C-2. According to the Massachusetts Department of Environmental Protection there has been a 78.2% decrease in Eelgrass area in Salem Harbor. The plan recognizes the technical difficulties associated with the reestablishment of Eelgrass; however the dramatic loss of this part of the ecosystem in Salem Harbor makes it apparent that efforts should be undertaken to reverse the trend before that entire resource is lost.
- Shellfish Seeding: Shellfish habitat has been adversely impacted by the contaminants found in some harbor sediments, and shellfish communities have been degraded as a result. The Plan recognizes that it is important that the habitat be restored and the communities reestablished, as these organisms play a vital role in the harbor ecosystem. Higher water quality (from improvements made upstream) will support higher densities of shellfish in the intertidal, subtidal, and open water portions of the harbor. Areas which have been disturbed during contaminant removal operations, as well as maintenance or improvement activities are encouraged to be seeded with native shellfish species after the completion of construction to begin the reestablishment of shellfish colonies and improve the biodiversity of the harbor. Included in figure C-2 are areas identified

by the Division of Marine Fisheries (DMF) as suitable shellfish habitat. Additionally, the plan recommends that a shellfish survey be undertaken to supplement and update the information collected by the DMF in their 1997 Technical Report "The Marine Resources of Salem Sound, 1997" (Chase, Plouff and Castonquay, Massachusetts Division of Marine Fisheries, Technical Report TR-6, October 2002)

Figure C-1 Resource Enhancement Areas

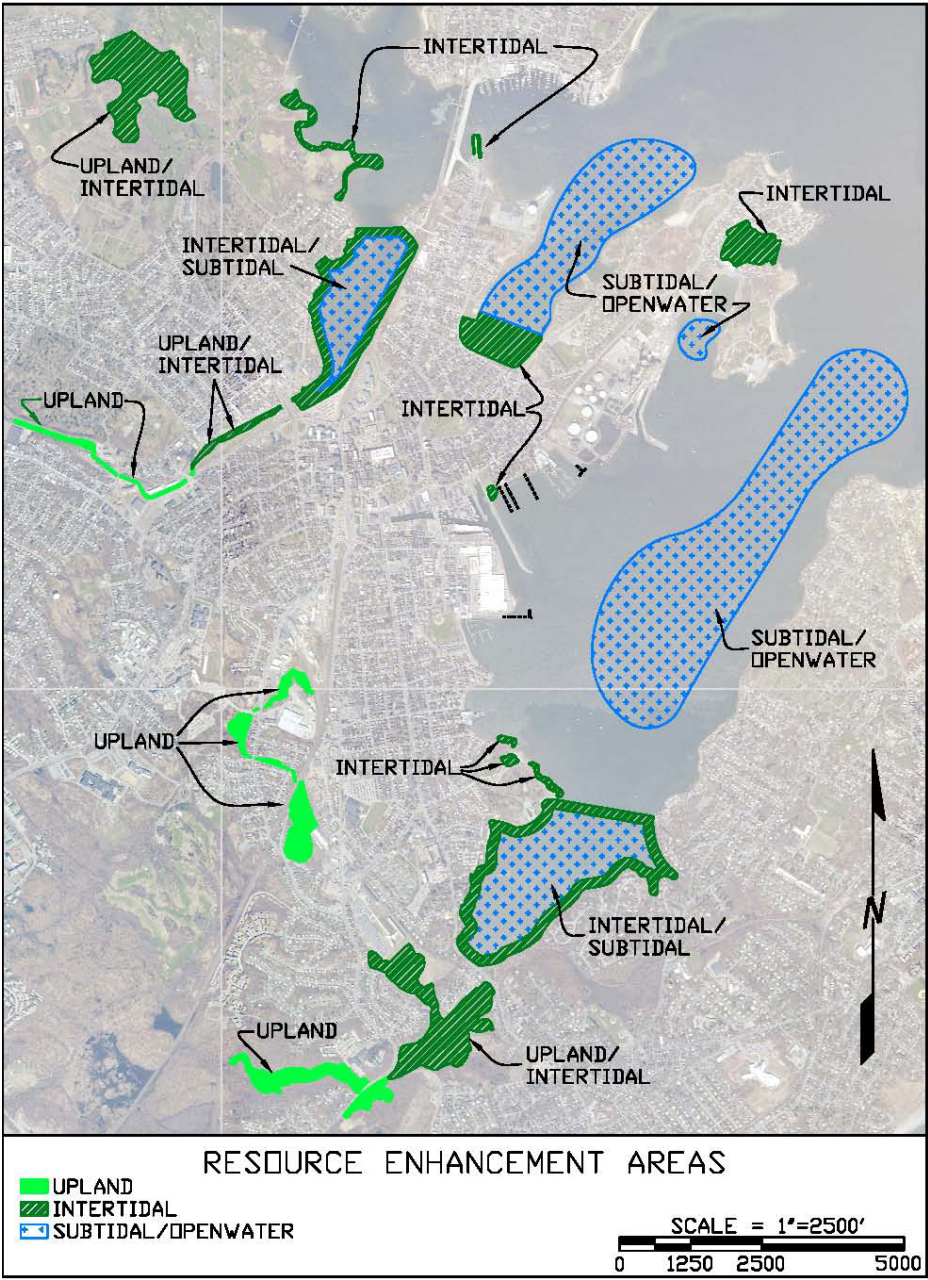
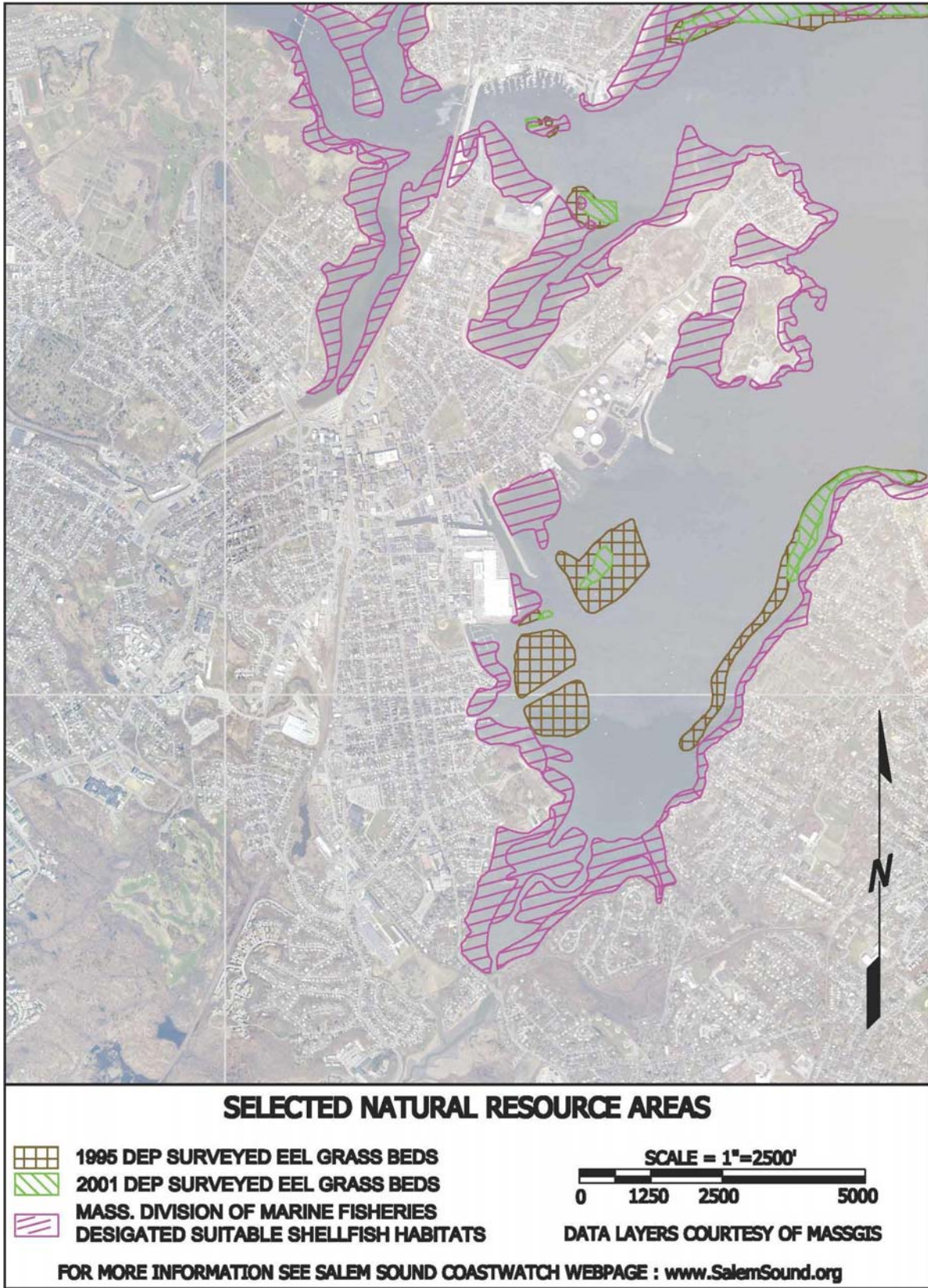
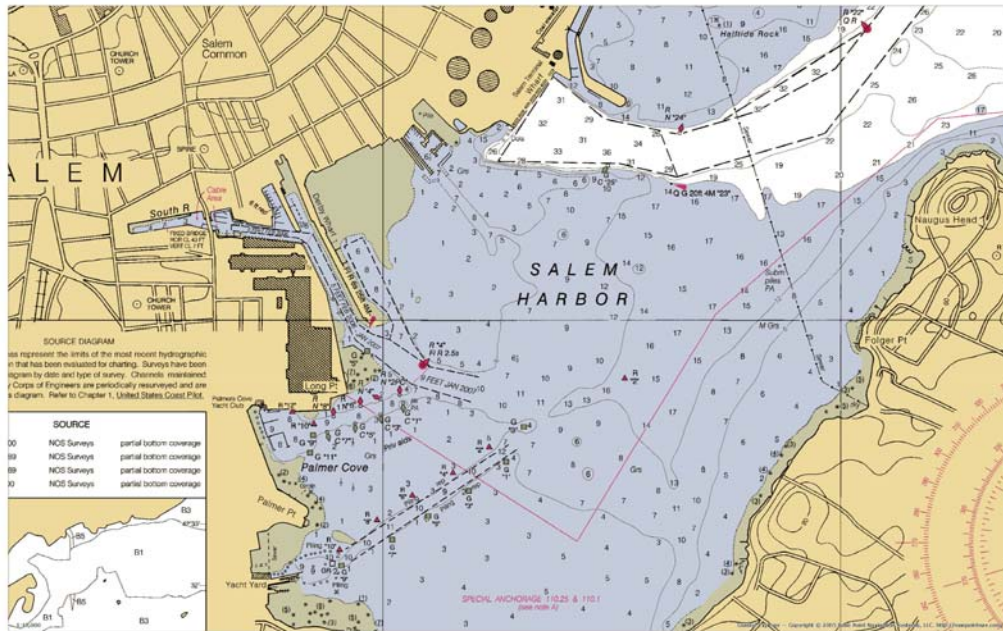


Figure C-2 Selected Natural Resource Areas



APPENDIX D

Bathymetric Survey



NOAA Chart # 13276

BATHYMETRIC SURVEY

During the initial phases of the harbor plan development, it became apparent that current bathymetric survey information would be a valuable tool in assessing the needs of the harbor. In response, planning level tide corrected bathymetric data was collected using a precision single beam digital fathometer, in selected areas of interest throughout the harbor. The bathymetry showed that the usable harbor depths range from three to thirty-five feet below MLLW, with channel depths between five and thirty-five feet, and mooring fields ranging between three and twenty-two feet in depth. The following figures show the bathymetry in four of the locations discussed in the body of the Plan, starting with the South River Channel and Basin (figure D-1). The bathymetry of the proposed location of dinghy docks and a portion of the Harborwalk is shown on figure D-2 (South River Basin). The location of the proposed Palmer Cove Pier and the historic Derby Wharf area are shown in figure D-3. The Winter Island mooring field and portions of the 35-foot deep Federal Navigation Channel are shown on figure D-4.

The information collected, and shown on the figures below, was used extensively in assessing the needs of the current and planned future users of the Salem water sheet.

Figure D-1 Bathymetric Survey of the South River

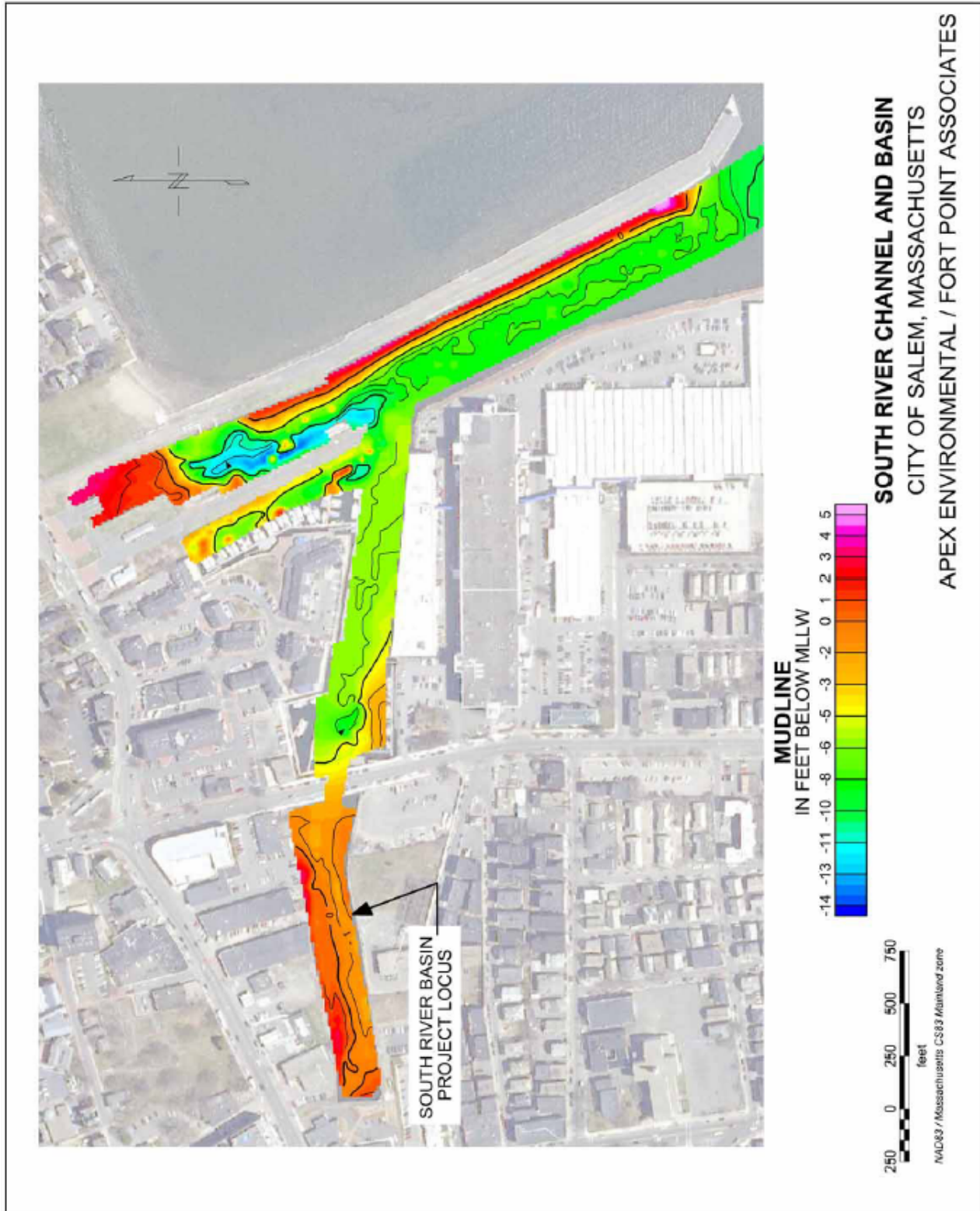


Figure D-2. Bathymetric Survey of the South River Basin

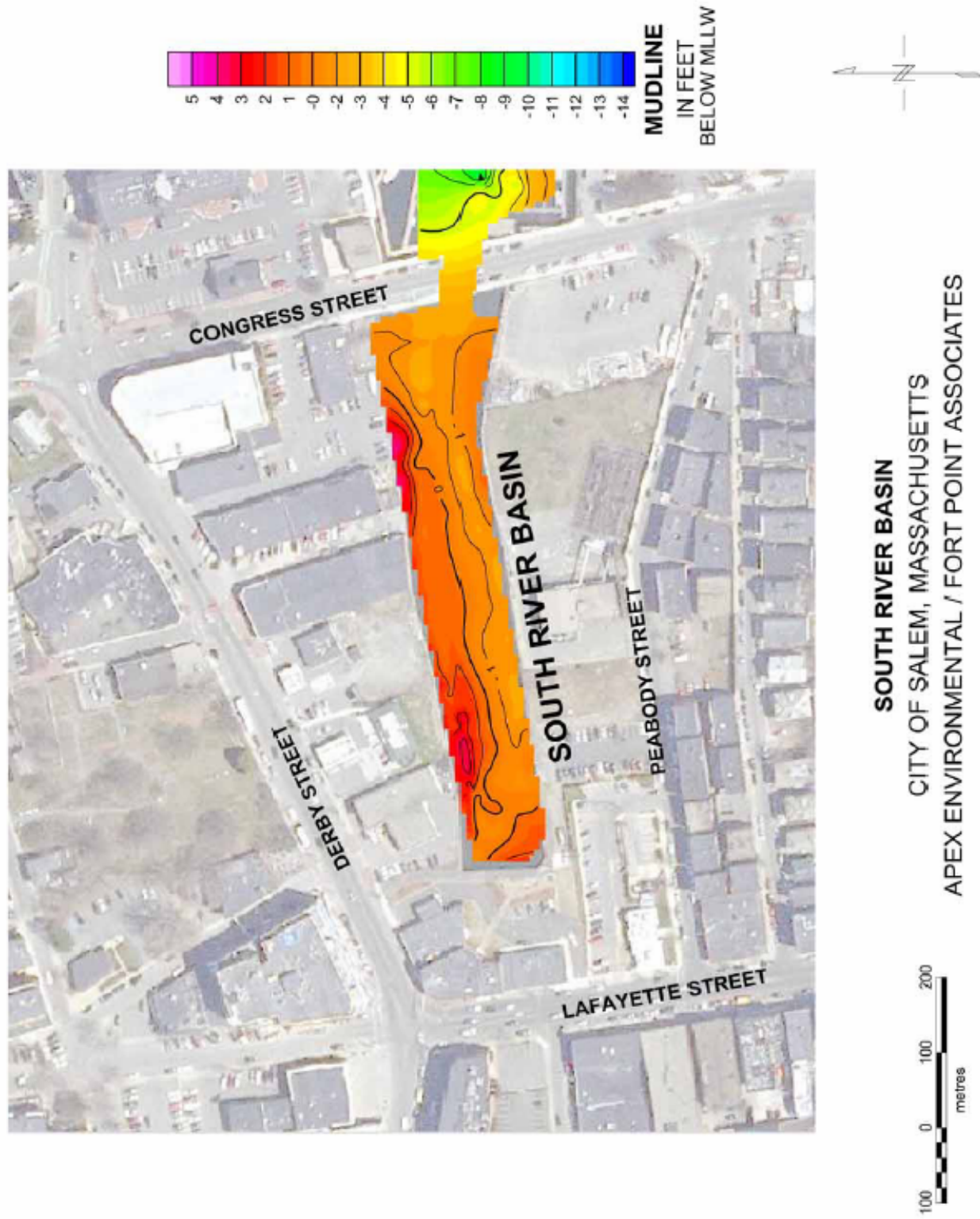
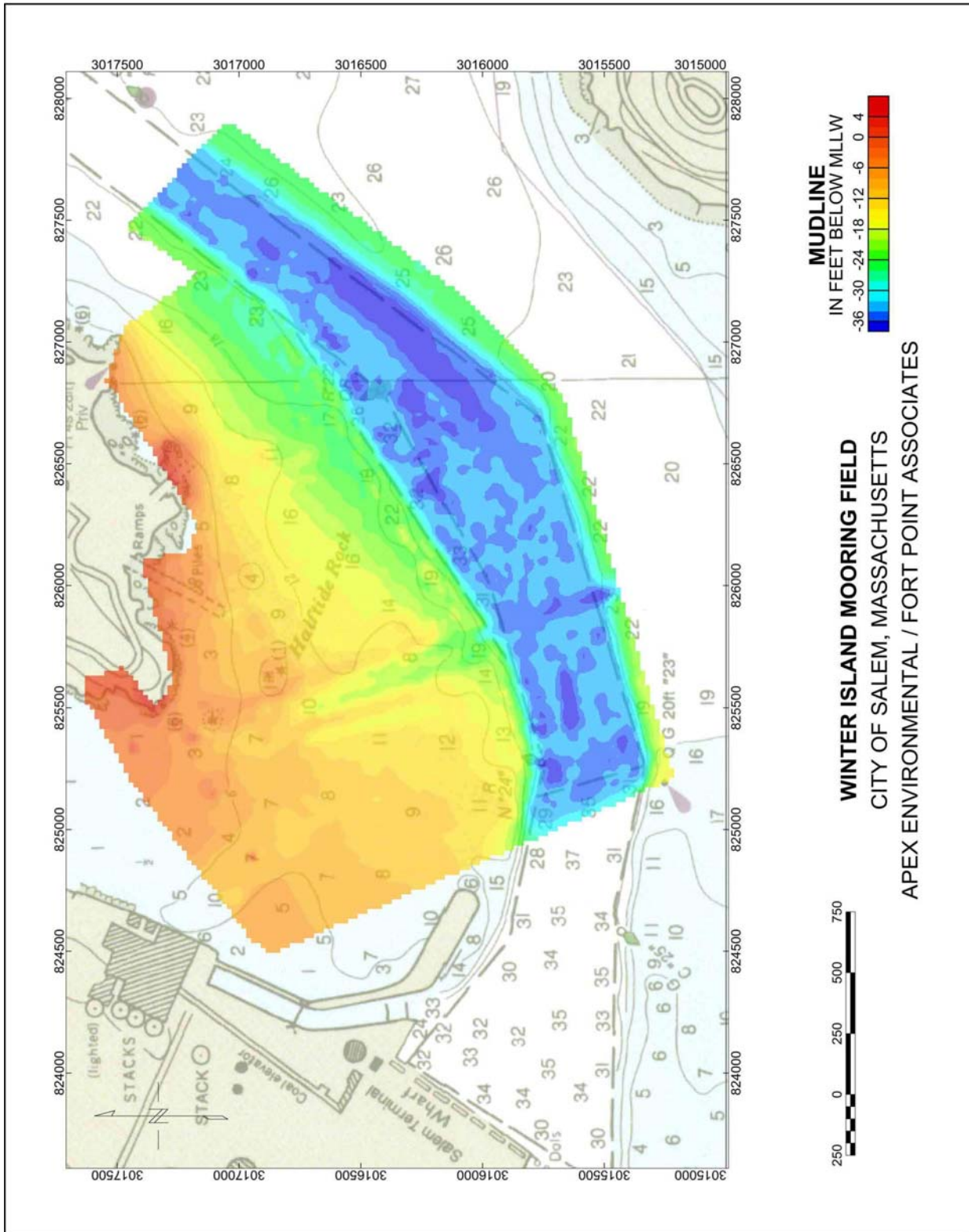


Figure D-4. Bathymetric Survey off Winter Island

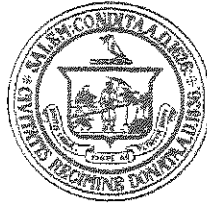


APPENDIX E

Compliance, Forwarding and Approval Documents



Derby Light and Salem Power Plant



CITY OF SALEM, MASSACHUSETTS

Kimberley Driscoll
Mayor

January 30, 2008

Mr. Ian A. Bowles, Secretary
Executive Office of Energy & Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

Dear Secretary Bowles:

I am pleased to submit the updated Salem Harbor Plan for your review and approval. The Plan will be valid for ten years or until 2018. Enclosed please find two (2) original copies of the 2008 Salem Harbor Plan and Statement of Compliance with the Standards for Approval of Municipal Harbor Plans (310 CMR 23:00).

The City Planning Department and the Harbor Plan Implementation Committee (HPIC) have worked closely with your staff at CZM throughout the development of this document. On January 22, 2008 the HPIC endorsed the approval of the Plan.

This document is not new, but an update of the original Plan approved in 2000. The contributions by those who participated in creating the original Plan have proven to be an invaluable foundation for this Update. Their vision for the future of Salem Harbor remains largely on target, reaffirmed by those involved in reviewing their work more than seven years after the original document was approved. However, during the update process, there was agreement that the Plan needed some adjustments, substitutions, and amplification based on port security, economics and community/regional changes that have occurred over the past seven years, and in consideration of new waterfront developments recently completed or currently proposed.

The 2008 Salem Harbor Plan represents a tremendous opportunity for the City of Salem to continue to revitalize and reclaim the value of its waterfront. I look forward to continuing to work with you and your staff and appreciate your support in implementing the goals and recommendations set forth in our Plan for the Port of Salem.

Respectfully,

A handwritten signature in black ink that reads "Kim Driscoll". The signature is written in a cursive, flowing style.

Kimberley Driscoll
Mayor



Salem Harbor Plan

Statement of Compliance with
Municipal Harbor Plan Approval Standards
January, 30 2008

S a l e m H a r b o r P l a n

Compliance with Municipal Harbor Plan Approval Standards

The original Scope of Work for the Salem Municipal Harbor Plan was developed by the City of Salem and the Salem Harbor Planning Committee working in concert with the Massachusetts Coastal Zone Management (MCZM) Office. It was approved by the Secretary of the Executive Office of Environmental Affairs (EOEA) in June 1997. Work on developing the Plan was a multifaceted 3-year public process that culminated in its submission to EOEA along with a comprehensive Statement of Compliance on June 9, 2000. After determining that the document fully met Approval Standards for Municipal Harbor Plans as set forth in 301 CMR 23.05, the Secretary approved the Municipal Harbor Plan along with its Designated Port Area Master Plan on November 9, 2000. A copy of the approval letter is attached.

Since its approval, this Plan has served as an invaluable planning tool for the City of Salem and has provided useful guidance to the Department of Environmental Protection in their review and approval of Chapter 91 Waterways licenses for properties along Salem's waterfront. At the 5-year anniversary of the Plan, there was general consensus from the City and within the community that the vision and direction provided by the Plan remained valid but some adjustments and amplifications were needed due to recent waterfront development proposals, port security concerns, new opportunities offered by marine industry, and changes in the community and regional economy since the Plan's approval in 2000.

An update of the Salem Municipal Harbor Plan has now been completed and is submitted to the Executive Office of Energy and Environmental Affairs (EOEEA) seeking approval. The Plan continues to fully comply with the approval standards as documented below:

301 CMR 23.05 (1) The Plan must be consistent with the Harbor Planning Guidelines of CZM, as applicable. This standard shall be deemed to be met if the plan adequately and properly complies with the Scope and any written statement of the Secretary relative to how such guidelines are to be applied to the municipality.

The initiative to update the 2000 Salem Municipal Harbor Plan began in 2005. A request for renewal was submitted by the City of Salem to EOEEA along with a preliminary Scope of Work (letter of October 3, 2005 is attached). Funding to complete the renewal was provided by the Commonwealth in FY2007 through the Seaport Advisory Council. This renewal was led by the City of Salem Department of Planning and Community Development (DPCD) with the assistance of the Salem Harbor Plan Implementation Committee (HPIC). Incorporating adjustments suggested by MCZM and the HPIC, the Renewal's Scope of Work was published as part of a Request for Proposals (RFP) seeking professional planning support for this initiative. Several qualified bidders submitted proposals and a contract for services was awarded in March 2007.

After a very public process including more than a dozen public meetings and nearly two dozen one-on-one stakeholder interviews and with extensive input from MCZM staff, the renewal process has produced an updated Salem Municipal Harbor Plan which has been accepted by the HPIC and approved by the Mayor. Although adjustments have been made to the Plan originally submitted in 2000, none of these changes should affect the Plan consistency with required Approval Standards. Following are the noteworthy adjustments made to the Plan during this renewal initiative:

- 1. Harbor Planning Area.** The South Commercial Waterfront Planning Area has been expanded to include additional filled tidelands currently used by Shetland Park (a mixed use commercial complex) and by the Palmer Cove Playground and Yacht Club. Because of the complex mix of uses within this planning area, it has been divided into three sub-areas.

- 2. Water-dependent Use Zone (WDUZ).**
 - a. South Commercial Waterfront.** The 2000 Salem MHP allowed new or expanded nonwater-dependent buildings to be built up to 20 feet of the existing shoreline within the South Commercial Waterfront planning area. For most of the properties in this area, the Waterways Regulations define a WDUZ with a shore-side width greater than 20 feet. The offset for the narrower shore-side WDUZ was a requirement to create five unobstructed corridors (no-build zones) in the district that would connect the South River Harborwalk with the adjacent streets. The updated Plan limits this substitution to specified properties located in a newly defined Sub-Area A (north side and west end of the South River) within the South Commercial Waterfront. It also requires that developers taking advantage of this substitution use the redistributed WDUZ to create specific view corridors and pedestrian accessways connecting adjacent streets to the South River Harborwalk (see Figure 13.) An alternative offset has been allowed for a proposed development located immediately east of the Congress Street Bridge. For this site, in lieu of creating a connecting accessway, the offsets for a reduced width of the WDUZ would be substantive on-site and off-site improvements specified in the Plan that would significantly enhance the public's use and enjoyment of the water's edge.

 - b. Industrial Port.** The 2000 Salem MHP allowed nonwater-dependent structures to be built up to 35 feet of the east edge of Hawthorne Cove in an area where the WDUZ was to be as much as 100 feet deep. This flexibility was anticipated to be needed to support activities associated with the proposed development of the Salem Wharf within this planning area's Designated Port Area (DPA). Because property boundaries for this site will not be as large as originally anticipated, the depth of the WDUZ as calculated by Waterways Regulations will now be less than 35 feet along the east edge of the Cove. In addition, the nonwater-dependent uses proposed in the original development plans are not expected to be part of the new Salem Wharf facilities. For these reason, the substitution for reducing the size of the WDUZ in this

planning area and the corresponding offsets are not needed and have been removed from this Harbor Plan.

- c. ***Open Space.*** The 2000 Salem MHP proposed a substitute provision for the South River Basin (defined by Congress, Derby, Lafayette and Peabody Streets) that would limit site coverage by nonwater-dependent buildings to no more than 50 percent of the total area within the Basin. This aggregate treatment of Open Space has been removed as a substitution in this update of the Salem MHP. Open Space requirements will revert back to the parcel-by-parcel approach specified in the Waterways Regulations, however, a development site containing more than one parcel can be treated as one parcel for purpose of the 50% open space requirement.
- d. ***Building Heights.*** In this updated Salem MHP, nonwater-dependent buildings up to a maximum of 70 feet are allowed in Sub-Area A of the South Commercial Waterfront District. This is consistent with existing Salem municipal zoning for this area. The offset for this substitution will be a requirement for additional open space proportional to any new shadow created by the taller building. An alternative offset has been allowed for a proposed development next to the Congress Street Bridge. On this site, in lieu of additional open space as an offset for a building over 55 feet but less than 70 feet in height, the developer of this site would be required to complete three specific waterfront improvements defined in the Harbor Plan.
- e. ***Salem Wharf.*** This Harbor Plan continues to strongly support a program to develop the proposed multi-use, deep water access wharf off of Blaney Street on the west side of the Harbor's Designated Port Area (DPA). The 2000 Salem MHP provided a conceptual design for this facility, referred to as the Salem Wharf. In the Summer of 2007, recognizing a need to update the wharf's design, the City contracted a team of waterfront specialists to create revised plans for development of this property. The final conceptual design was not completed in time to be incorporated into the 2008 Update of the Salem Harbor Plan but will become a companion document to this Plan when approved. The wharf's design will be required to comply with applicable Waterways Regulations including those specific to a site located within a DPA.

301 CMR 23.05 (2) The Plan must be consistent with all CZM Policies, as applicable. In evaluating the plan for such consistency, the Secretary shall take into account all relevant guidance as to the interpretation and application of such Policies as may be available in documents comprising the CZM Plan and other policy-related materials issued by CZM, such as federal consistency determinations.

In addition to the discussion and direction included in the main body of the Harbor Plan (see pages 27 to 29), Appendix C provides guidance concerning environmental resource enhancement and addresses several of the CZM policies listed below, particularly Water Quality and Habitat.

- **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.***

In cataloging infrastructure improvements throughout the harbor planning area, the Salem Harbor Plan addresses the need to mitigate water quality impairment caused by improper sewerage connections and inadequate stormwater management. Significant progress has been made since 2000. The City has a systematic program in place to address these issues throughout the City. Stormwater has been regulated as a point source under a city-wide NPDES permit; the Harbor Plan supports the continued proactive effort to achieve full compliance with this regulatory standard.

In addition, the Plan supports ongoing environmental performance improvements at the Dominion Energy Salem Harbor facility, specifically citing efforts to reduce the discharge of treated wastewater into the Harbor.

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

The Salem Harbor Plan proposes a gradual but significant redevelopment program for the South River area west of the Congress Street Bridge. The increased emphasis on public access and use of this area for water-dependent activities on these currently degraded properties will provide the opportunity to bring new development into compliance with current stormwater management requirements. Construction of the “Salem Harborwalk” will incorporate measures to mitigate pollution impacts from uncontrolled runoff, as required by current stormwater management regulations.

The program for the Salem Wharf calls for application of Best Management Practices (BMPs), both in the construction and in the operation of this major new marine facility. The environmental improvements here will be both on-site and harbor-wide, through the provision of services such as pumpout facilities and vessel waste oil collection.

- **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.”***

The Dredged Material Management Planning (DMMP) program developed by CZM shortly after the 2000 Salem MHP provides valuable guidance for reducing the environmental impact of harbor dredging and the disposal of dredged materials from both public and private dredging projects supported by the Harbor Plan. The Harbor Plan addresses the value of a locally sponsored DMMP program and the need to explore the feasibility of creating Confined Aquatic Disposal (CAD) cells in an environmental friendly manner as an economically viable option for disposal of dredged materials.

See the Plan’s Appendix C for additional discussion.

- **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.”**

“Preserving the historic character of Salem” is a predominant theme of the Salem Harbor Plan. The Plan calls not only for protecting, but restoring historic features throughout the waterfront. Most notably, the ongoing efforts of the Salem National Maritime Historic Site to effectively tell the story of Salem’s historic prominence in maritime trade are highlighted in the Plan. Funding for programs to assist property owners in restoring historic buildings is recommended, as are general streetscape improvements which harken back to the City’s historic past. On Winter Island, particular emphasis is given to the restoration of Fort Pickering to honor its Civil War significance, as well as the rehabilitation of the World War II Coast Guard Hangar Building and associated Barracks Building.

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

As noted under *Habitat Policy #1*, above, a locally sponsored DMMP process will provide the foundation for the appropriate environmental design of future dredging projects by identifying and designating the most environmentally beneficial dredged material disposal site for recommended dredging projects in the City of Salem. In addition, the rigorous permit review process for dredging projects, involving agencies at the local state and federal level, will ensure consideration and protection of these parameters.

- **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 environmental policies.”**

Construction of the Salem Wharf will expand deep-water port uses in the City of Salem’s DPA by adding facilities to accommodate cruise ships, ferries and other passenger vessel operations. This will significantly increase the public benefits realized from recent dredging of the Salem Harbor Federal Channel and proposed dredging of Hawthorne Cove along the west edge of the City’s DPA. In addition, the expansion of Salem’s deep-water port will allow for safer maneuvering of vessels at the Dominion Energy facility. Improved boating access to the South River through dredging will significantly enhance the public’s use and enjoyment of this important section of the Salem waterfront and provide an economic boost for nearby businesses. Other areas in Salem requiring dredging have been identified in the Plan along with a discussion of the public benefits to be realized from these projects.

- **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.”*

As noted above, the Salem Harbor Plan proposes expanding the City’s deep-water port operations and supports the continuation of existing marine industrial activity within the DPA.

- **Ports Management Principal #1** - *“Encourage, through technical and financial assistance, expansion of water-dependent uses in designated ports and developed harbors, redevelopment of urban waterfronts and expansion of visual access.”*

The Salem Harbor Plan supports an enlargement of the Designated Port Area (DPA), through expansion dredging and construction of the Salem Wharf to accommodate specific new water-dependent industrial uses. This facility will be comprised of a diversified marine transportation and servicing facility that is expected to provide significant economic benefit to City and the North Shore. Furthermore, the Salem Harbor Plan proposes a gradual and realistic redevelopment of the South River area, which would bring water-dependent uses back to a long-neglected low-income waterfront neighborhood and reconnect that neighborhood to Salem’s downtown core.

Completion of the proposed Salem Harborwalk and requirements in the Harbor Plan for connecting pedestrian accessways, view corridors and gateways will help to activate the waterfront and offer new opportunities for the public use and enjoyment of Salem Harbor.

301 CMR 23.05 (3) *The Plan must be consistent with state tidelands policy objectives and associated regulatory principles, as set forth in the waterways regulations of the DEP. In evaluating the plan for such consistency the Secretary shall take into account all relevant guidance as to the interpretation and application of such regulations as may be available in written determinations, licensing decisions, and other administrative documents issued by the Waterways Regulatory Program, or as may otherwise be provided by DEP in accordance with the consultation procedures of 301 CMR 23.08(2). In addition, the Secretary shall act in accordance with the following provisions.*

1. *As articulated in the waterways regulations, the primary state tidelands policy objectives with which the Plan must be consistent are as follows:*
 - a. *to ensure that development of all tidelands complies with other applicable environmental regulatory programs of the Commonwealth, and is especially protective of aquatic resources within coastal Areas of Critical Environmental Concern, as provided in 310 CMR 9.32(1)(e) and 9.33;*

Any development proposed based on the Salem Harbor Plan will be reviewed in light of,

and required to meet, all state and local environmental standards, ensuring compliance with applicable regulatory programs of the Commonwealth. There are no coastal Areas of Critical Environmental Concerns (ACECs) in the Salem Harbor Plan Study Area.

- b. *to preserve any rights held by the Commonwealth in trust for the public to use tidelands for lawful purposes, and to preserve any public rights of access that are associated with such use, as provided in 310 CMR 9.35;***

The preservation of these rights is ensured through the requirements of Chapter 91. The substitutions for particular Chapter 91 Standards in the Salem Harbor Plan further tailor the application of these regulatory requirements to the specific circumstances along Salem's waterfront, enhancing their effectiveness in protecting the public interest, while certain amplifications of Chapter 91 standards proposed in the Plan expand the public benefits of access to the waterfront. These substitutions and amplifications are detailed below.

- c. *to preserve the availability and suitability of tidelands that are in use for water-dependent purposes, or which are reserved primarily as locations for maritime industry or other specific types of water-dependent uses, as provided in 310 CMR 9.32 (1)(b) and 9.36;***

A primary thrust of the Salem Harbor Plan is to “*reclaim Salem's identity as a vibrant seaport...*”. The Plan proposes significant activation of the Harbor's waterside in several areas which are not currently committed to water-dependent uses. The proposed Salem Wharf will create a new harbor-edge in the DPA, exclusively committed to water-dependent industrial uses, potentially including water transportation, dockage for commercial fishermen and commercial passenger vessel operations. Dredging the South River will accommodate new dockage and public access amenities. Establishing new land-side access facilities such as landings and dinghy docks will further define the waterfront as an active maritime center.

- d. *to ensure that all licensed fill and structures are structurally sound and otherwise designed and built in a manner consistent with public health and safety and with responsible environmental engineering practice, especially in coastal high hazard zones and other areas subject to flooding or sea-level rise, as provided in 310 CMR 9.37;***

All public and private marine construction projects supported by the Harbor Plan will be subject to city and state review procedures, ensuring sound design and appropriate mitigation of potential environmental impacts. The proposed Salem Wharf in particular, will constitute a substantial development proposal which will be required to undergo assessment under the Massachusetts Environmental Policy Act (MEPA), further ensuring a thorough and coordinated review process. The Salem Wharf will be a state-of-the-art facility in both construction and operation, incorporating all reasonable Best Management Practices (BMPs) to minimize environmental impacts.

- e. ***ensure patronage of public recreational boating facilities by the general public and to prevent undue privatization in the patronage of private recreational boating facilities, as provided in 310 CMR 9.38; and to ensure that fair and equitable methods are employed in the assignment of moorings to the general public by harbormasters as provided in 310 CMR 9.07;***

The Plan proposes a significant expansion of public waterfront facilities including public landings and dinghy dockage. Use of these facilities will be managed under existing City policies and procedures, as implemented by the Harbormaster under the authority of 310 CMR 9.07.

- f. ***to ensure that marinas, boatyards and boat launching ramps are developed in a manner that is consistent with sound engineering and design principles, and include such pumpout facilities and other mitigation measures as are appropriate to avoid or minimize adverse impacts on water quality, physical processes, marine productivity and public health, as provided in 310 CMR 9.39;***

See discussion under policy objective # 3 above.

The City of Salem currently has one pumpout facility in the South River and a pumpout boat operated by the City's Harbormaster. This Plan recommended the City add a pumpout facilities for commercial vessel at the proposed Salem Wharf and explore the feasibility of add a facility for recreational boating on Winter Island.

- g. ***to ensure that dredging and disposal of dredged material is conducted in a manner that avoids unnecessary disturbance of submerged lands and otherwise avoids or minimizes adverse effects on water quality, physical processes, marine productivity and public health, as provided in 310 CMR 9.40;***

All dredging project recommended in the Plan will be subject to local, state and federal permitting and review requirements, ensuring that environmental impacts will be analyzed and minimized. Maintenance dredging of the Federal Channel involves previously disturbed areas. Improvement dredging that may be required to support the Salem Wharf would be subject to all permitting requirements, including environmental review. The South River dredging project is currently fully permitted and awaiting the designation of an appropriate disposal site through the DMMP program.

- h. ***to ensure that nonwater-dependent use projects do not unreasonably diminish the capacity of any tidelands to accommodate water-dependent use, as provided in 310 CMR 9.51;***

See discussion of "substitutions" later in of this document.

- i. to ensure that nonwater-dependent use projects on any tidelands devote a reasonable portion of such lands to water-dependent use, including public access in the exercise of public rights in said lands, as provided in 310 CMR 9.52;***

The Harbor Plan supports continued water-dependent industrial activity in the DPA, as well as the development of new water transportation and commercial dockage opportunities, through a series of waterside improvements. In all areas where new development is proposed, the Plan recommends a series of landside and waterside improvements that promote activity on and along the water, encourage water-dependent activity, provide waterfront access, make access improvements, establish clear pedestrian connections, and provide beach and park improvements. In certain locations, a more intense level of commercial development on and adjacent to tidelands is proposed. In all cases, the development includes public access and/or water-dependent uses commensurate with a more active and intensely used waterfront. Chapter 91 requirements would apply to any proposed developments on tidelands, ensuring that this provision would be met.

- j. to ensure that non water-dependent use projects on Commonwealth tidelands, except in Designated Port Areas, 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 are merely incidental to the achievement of public purposes, as provided in 310 CMR 9.53;***

Chapter 91 requirements would apply to any proposed nonwater-dependent developments on Commonwealth tidelands.

- 2. If the plan includes provisions which amplify upon any discretionary requirement of 310 CMR 9.00, such provisions must be complementary in effect with the regulatory principle(s) underlying such discretionary requirement...***

The Waterways regulations contain several core provisions that are essential to the open space and waterfront access goals of the Plan. These are:

The project shall preserve any rights held by the Commonwealth in trust for the public to use tidelands... for lawful purposes... [Specifically], the project shall not interfere with public rights of navigation...public rights of free passage over and through the water...public rights associated with a common landing, public easement, or other historical legal form of public access from the land to the water that may exist on or adjacent to the project site...public rights of fishing, fowling, and the natural derivatives thereof...(§9.35)

A nonwater-dependent use project that includes fill or structures on any tidelands shall not unreasonably diminish the capacity of such lands to accommodate water-dependent use... [taking into account any relevant information concerning the utility or adaptability of the site for present or future water-dependent purposes...(~9.51)

A nonwater-dependent use project that includes fill or structures on any tidelands shall devote a reasonable portion of such lands to water-dependent use, including public access in the exercise of public rights in such lands...[taking] into account the capacity of the project site to serve such water-dependent purposes... (§9.52)

Associated with each of these core provisions are a number of discretionary requirements, several of which are of primary relevance to Salem and are thus amplified upon by the recommendations of this Plan. The specific discretionary requirements on which the Plan provides guidance for DEP application are listed below.

§9.35(5)(c) Management of Areas Accessible to the Public. *“No gates, fences, or other structures may be placed on any areas open to public access in a manner that would impede or discourage the free flow of pedestrian movement...”*

§9.52(1)(a) Utilization of Shoreline for Water-Dependent Purposes. *“In the event that the project site includes a water-dependent use zone, the project shall include...facilities that generate water-dependent activity...”*

§9.52(1)(b) Utilization of Shoreline for Water-Dependent Purposes.

(1) *“In the event that the project site includes a water-dependent use zone, the project shall include... walkways and related facilities along the entire length of the water-dependent use zone... no less than ten feet in width...”*

(2) *“In the event that the project site includes a water-dependent use zone, the project shall include...appropriate connecting walkways that allow pedestrians to approach the shoreline walkways from public ways or other public access facilities to which any tidelands on the project site are adjacent*

3. *If the plan includes provisions which are intended to substitute for the minimum use limitations or numerical standards of the waterways regulations....*

The Plan proposes substitutions of certain minimum dimensional requirements of the Waterways Regulations for nonwater-dependent uses. The following discussion identifies the applicable provision of the Waterways Regulations, the alternative standards of the Plan, and the justification for proposed substitutions. The Plan further recognizes that there may be limited cases where strict compliance with other numerical standards of the regulations would create a substantial hardship for the continuation of an existing use or structure. In such situations, the variance procedure set forth at 310 CMR 9.21 is considered by this Plan to be an adequate means to address the hardship issue.

- a. *The specified width(s) of the water-dependent use zone within which new or expanded buildings for non water-dependent uses and all new parking facilities are prohibited. Sec. 9.51 (3)(c).***

This Harbor Plan proposes a substitution for the minimum width of the Water-Dependent Use Zone (WDUZ) for new or expanded non-water dependent buildings along the South River in Subarea A of the South Commercial Waterfront district (as defined in Chapter II). The size of the WDUZ would not change for most properties but would be redistributed to create view corridors and pedestrian accessways connecting the waterfront to adjacent streets.

The substitution for WDUZ width requirements proposed in the 2000 Salem MHP for the North Commercial Waterfront has been removed from the Plan.

This substitution, the proposed offsets, and its justification for a portion of the South Commercial Waterfront are described in detail on page 107 to 111 of the Salem Harbor Plan.

- b. *The provision for open space on a one-to-one basis for every square foot of tideland area within the combined footprint of buildings containing nonwaterdependent use on the project site. Sec. 9.51 (3)(d).***

In the 2000 Salem Harbor Plan, there was a substitution which allowed the maximum 50 percent coverage requirement be applied on an aggregate basis within the South River Basin. Because this substitution had not been employed since the approval of the 2000 Plan and because of the complexity in fairly distributing open space to the eligible properties, this provision has been removed from the Plan with this 2008 Update.

Further discussion of this change is provided on Page 111 of the Harbor Plan.

- c. *The provision for limiting new or expanded nonwater-dependent buildings heights to 55 feet within 100 feet of the high water mark and then allows the height to increase by one-half foot for every additional foot of separation from the high water mark. Sec. 9.51(3)(e).***

This Plan establishes the a maximum height of 70 feet for non-water dependent buildings in Sub-area A of the South Commercial Waterfront district. This would be consistent with existing height limits stipulated under Salem municipal zoning. Offsets for this substitution include a requirement for additional open space or, for one site, substantive improvements for would enhance the public use and enjoyment of the waterfront.

Further discussion of this substitution is provided on Pages 111 and 112 of the Harbor Plan.

- 4. *In accordance with 310 CMR 9.51(3), any determination made pursuant to 301 CMR 23.05(3 (c), shall be based upon a demonstration by the municipality that the substitute provisions set forth in the plan will promote, with comparable or greater effectiveness, the state tidelands policy objectives stated in the corresponding provisions of 310 CMR 9.00...***

See 3 above.

5. ***If the plan includes a DPA master plan, such master plan must preserve and enhance the capacity of the DPA to accommodate water-dependent industrial use and must prevent substantial exclusion of such use by any other use eligible for licensing in a DPA pursuant to 310 CMR 9.32. At a minimum, this determination shall be based upon a demonstration by the municipality that...***

The DPA master plan approval standards are addressed in detail in the next section.

301-23.05(4) The plan must include all feasible measures to achieve compatibility with the plans or planned activities of all state agencies owning real property or otherwise responsible for the implementation or development of plans or projects within the harbor planning area. This determination shall be made only if full consultation has occurred between the municipality and the relevant state agencies, wherein both parties have made every reasonable effort to maximize the compatibility of their respective plans.

The Massachusetts Public Access Board completed construction of a major boat ramp on Winter Island in 1996. Operation of the ramp is managed by the City of Salem under a Land Management Agreement signed between the Board and the city in 1992. The agreement was amended in 1996 to include specific provisions related to parking for boat trailers. The boat ramp is a central feature of Winter Island and all proposals included in the Plan are consistent with its use.

The Northeastern Massachusetts Aquaculture Center, which is owned by Salem State College is also located within the Harbor Planning area. The Harbor Plan promotes the ongoing development of this new facility.

30 1-23.05(5) 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;.

Building heights and the width of the WDUZ are the only requirements under 310 CMR 9.00 that are less restrictive in the Salem Harbor Plan and these substitutions would apply to a very limited number of properties located within Sub-Area A of the South Commercial Waterfront. All site improvements under the Harbor Plan will be required to be undertaken in a timely and coordinated manner with the construction of facilities allowed by the substitutions. The City of Salem is committed to ensuring this coordination and will monitor development and redevelopment of these properties through review of Salem Conservation Commission Order of Conditions, Planning Board Decisions, and Salem Redevelopment Authority approvals, as applicable. The Harbor Plan Implementation Committee will continue to exist as a body focused on encouraging/facilitating waterfront development and in that role will monitor projects falling within the Harbor Planning Area.

Salem Harbor Plan

DPA Master Plan Approval Criteria

A segment of the Salem waterfront has been identified by the Commonwealth as a Designated Port Area (DPA). The DPA consists of the land, piers, and water area southeast of Derby Street and Fort Avenue, extending from the Dominion Energy's site to (and including) the northernmost wharf of the Hawthorne Cove Marina. Major water-dependent industrial uses within the DPA include the former Cargill/Northeast Petroleum tank farm and oil terminal and the Dominion Energy's coal-and-oil-fired electrical generation plant. The DPA includes the federal channel and anchorage leading to the Salem Terminal Wharf and the nearshore waters between the terminal facilities and the anchorage (see Figure 11 in the Harbor Plan).

Since the Salem Harbor Plan is, in part, a master plan for the DPA, the DPA Master Plan Approval criteria in 301 CMR 23.05(e) must be met. In general, the DPA Master Plan must preserve and enhance the capacity of the DPA to accommodate water-dependent industrial use, and must prevent substantial exclusion of such use by any other use eligible for licensing in a DPA pursuant to 310 CMR 9.32. The DPA Master Plan approval criteria and the ways they are met by the Plan are described below:

1. ***“The master plan shall ensure that an extensive amount of the total DPA land area in close proximity to the water will be reserved for water-dependent industrial uses;...the master plan shall further ensure that commercial uses and any accessory uses thereto will not, as a general rule, occupy more than 25% of the total DPA land area covered by the master plan.”***

The entire land area of the industrial port has long been and is currently used for water-dependent industrial use. The Plan's recommendations for the industrial port support maintaining existing uses and encouraging new types of water-dependent industrial uses of the port, potentially including water transportation, commercial fishing boat dockage and other passenger vessel operations.

The proposed construction of Salem Wharf is programmed to support cruise ship berthing, and berthing and support for ferries, water taxis, and other commercial vessels. The new wharf represents a physical expansion of the upland portion of the Salem DPA. New dredging will extend the turning basin for safer operation of vessels going to the power plant and provide additional navigable water and berthing space for cruise ships and other commercial vessels around the end and inside of the Salem Wharf. The Salem Harbor Plan includes this latter area as part of the water area of the DPA.

The power plant owned and operated by Dominion Energy, a significant component of the regional utility infrastructure, occupies almost the entire DPA and is a maritime industrial use. In the event that the current uses of the Dominion Energy are discontinued, the DPA will continue to be used for water-dependent industrial use, Marine Industrial Parks, and

temporary uses as defined in the Waterways Regulations.

2. ***“The master plan shall set forth reasonable arrangements, as required in 310 CMR 9.36, to prevent commitments of any space or facilities that would significantly discourage present or future water-dependent industrial activity, especially on waterfront sites; ... [such as]... appropriate limits on the type, location, density, scale, duration, operation, or other relevant aspects of commercial uses, in order to ensure that such uses will mix compatibly with and not significantly alter the predominantly maritime industrial character of the DPA; the plan may also specify reasonable limitations on any uses in the DPA, if necessary to mitigate undue conflict with existing residential uses on properties abutting the DPA.”***

The water-dependent industrial use currently occupying the bulk of the DPA (both within and outside of Chapter 91 jurisdiction) is expected to remain and the Plan establishes a contingency in the event the use is discontinued within the period of time this Plan is in effect.

The Plan supports the licensing of all the principal water-dependent uses listed in Section 9.12(2) of the Waterways Regulations, with the exception that oil terminal facilities are not expandable, and that dockage for and facilities in support of gambling cruises is specifically prohibited. The Plan’s priorities for water-dependent uses are those that provide direct and indirect economic and quality-of-life benefits to Salem. The Plan finds that the significant increase in truck traffic which would be associated with an expansion of existing oil distribution activities will be detrimental to the adjacent residential neighborhood. Likewise, gambling boat operations do not tend to bring economic and quality of life benefits to the host community, but do contribute to traffic congestion and exacerbate the shortage of parking needed for the preferred water-dependent industrial uses encouraged by the plan, potentially including marine transportation, other passenger vessel operations, and dockage for commercial fishermen.

The Salem Plan finds that the detriments of such gambling boat operations far exceed the benefits to the community to an extent that justifies their exclusion in accordance with Section 9.31 (3)(b) of the Waterways Regulations. In the licensing of any structure associated with passenger vessels, the Plan requires a condition specifically prohibiting its use in support of gambling cruises. The Plan defines a gambling cruise as any excursion vessel outfitted essentially for gambling, excluding cruise ships, ferries and other vessels dedicated primarily to marine transportation.

3. ***“The master plan shall identify any industrial or commercial uses allowable under the municipal zoning code that shall qualify as a Supporting DPA Use, provided such uses comply with the provisions of the definition set forth in 310 CMR 9.02 and any associated written guidelines of DEP”***

The Plan endorses the following industrial and commercial uses allowable under the Salem zoning code as Supporting DPA Uses: boat yard, business offices (adaptive reuse of existing buildings), general storage and warehousing, retail and service, restaurants, and off-street

parking. The Plan also favors the future use of at least a portion of the DPA for alternative, environmentally sensitive energy production such as solar panels, wind driven turbines and even tidal as these technologies are developed and can be shown to have no detrimental impact on the environment or affect the quality of life of residents living in surrounding residential neighborhoods.

4. ***“The master plan shall set forth a strategy to guide the on-going promotion of water-dependent industrial use by appropriate municipal, state, and federal agencies; the strategy shall include, but is not limited to: (a.) recommendations for capital improvements or other economic or operational benefits to be provided by projects involving Supporting DPA Uses,... (b.) recommendations to preserve or enhance the infrastructure of navigation channels, truck routes and rail lines, and other transportation facilities providing user access to the working waterfront and its backlands from both the water and the land sides, and (c.) commitments to maintain a surrounding land development pattern, that provides an appropriate buffer between industrial uses in the DPA and community uses that require separation therefrom in order to avoid significant operational conflict.*”**

- a. The Plan recommends that the City continued to maintain communication with the power plant owner(s) to foster productive coordination in planning for future uses of this area. This would include negotiating for acquisition of property necessary for the development of Salem Wharf. A representative of Dominion Energy currently serves as a member of the Harbor Plan Implementation Committee. This participation should continue.

The Plan makes recommendations for identifying a management entity responsible for the development and long-term operation of the Salem Wharf.

- b. The Plan recommends improvement and maintenance dredging in support of DPA uses and other water-dependent uses.

Other infrastructure improvements include bulkheads to stabilize shorelines, pier structures, and fendering to accommodate berthing of larger vessels and floats, with utilities to service mixed-use vessels using the site. Fuel docking facilities will provide Salem with a needed service for vessels using the Harbor.

The Plan recommends implementation of streetscape and landscape improvements, and landscape buffer between the DPA’s industrial elements and the existing residential neighborhood.

- c. No changes in the land use pattern surrounding the DPA is envisioned or proposed. These uses have co-existed with the principal DPA use for decades.

**DECISION ON THE CITY OF SALEM'S
REQUEST FOR APPROVAL
OF THE
SALEM MUNICIPAL HARBOR PLAN RENEWAL
PURSUANT TO 301 CMR 23.00**

June 24, 2008

**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, subject to the conditions noted below, the City of Salem request dated January 30, 2008 to renew their Municipal Harbor Plan ("Plan"). The original Plan was approved by the Secretary on November 9, 2000. This Decision on the renewal to the original 2000 Plan presents a synopsis of Plan content, together with my determinations on how the renewal Plan complies with the standards for approval set forth in the Municipal Harbor Planning (MHP) regulations at 301 CMR 23.00.

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 on January 30, 2008. Following a review for completeness, CZM published a notice of public hearing and 30-day opportunity to comment in the *Environmental Monitor* dated February 6, 2008. Oral testimony was accepted during a public hearing held in the City of Salem on February 12, 2008, and four written comment letters were received prior to the close of the public comment period on March 7, 2008. The review process led by Massachusetts Coastal Zone Management (CZM), included consultation between staff of CZM, the Waterways Regulation Program of the Department of Environmental Protection (MassDEP), and the City of Salem. The Plan renewal was reviewed under procedures set forth at 301 CMR 23.04. In reaching my approval decision I have taken into account the oral and written testimony submitted by the public during these respective comment periods.

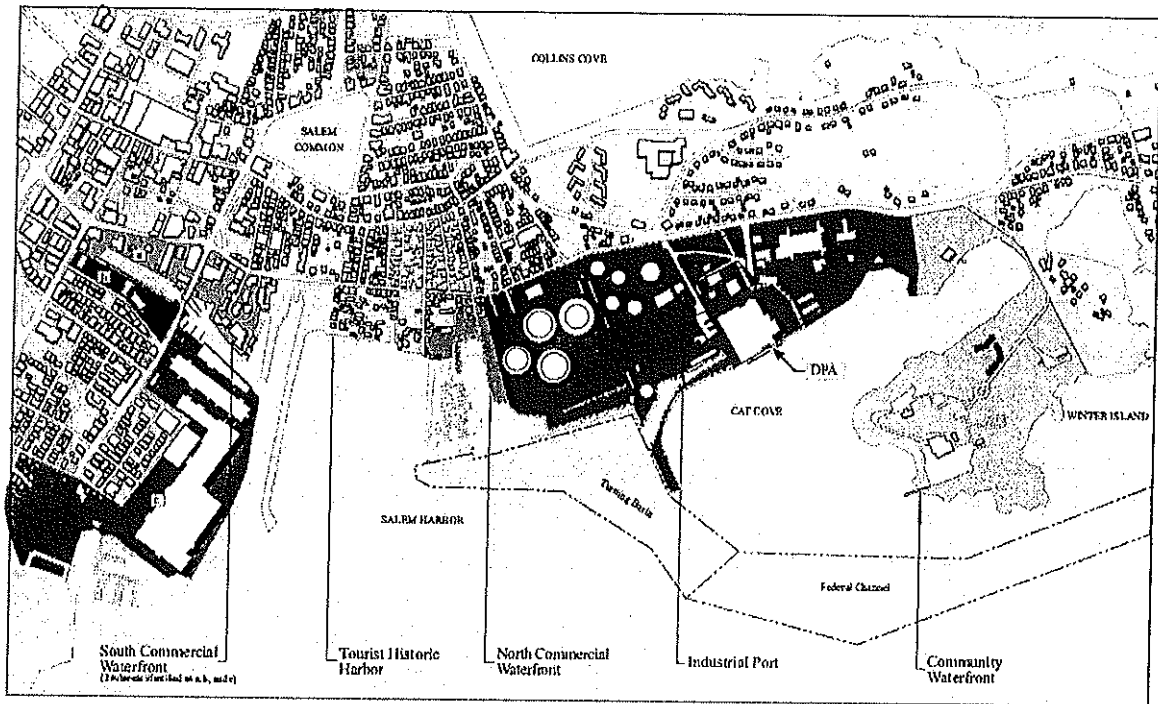
As shown below in Figure 1, the harbor planning area includes the shoreline and adjacent landside areas between Winter Island and Palmer Cove. For most of the planning area, the upland boundary is generally defined by the public roadway closest to the water's edge. For this renewal, the southwest part of the planning area has been expanded slightly from the area used in the 2000 Plan to encompass the filled tidelands in this area. As was the case with the 2000 Plan, the overall planning area is divided into five districts, including:

- South Commercial Waterfront — includes Pickering Wharf, the South River Basin, Shetland Park, Palmer Cove Yacht Club and the Palmer Cove Playground. This district has been further divided into three sub-areas:
 - South Commercial Waterfront "A" — Pickering Wharf and the areas to the north and west of the South River Basin;
 - South Commercial Waterfront "B" — the south side of the South River Basin; and
 - South Commercial Waterfront "C" — Shetland Park and Palmer Cove.
- Tourist Historic Harbor — includes Derby Wharf, the Salem Maritime national Historic Site and other nearby waterfront historic sites, extending to Derby Street and the adjacent neighborhood.
- North Commercial Waterfront — extends from Hawthorne Cove Marina to the edge of the power plant, including the parcels within the Designated Port Area (DPA) which will be the site of the proposed construction of the new Salem Wharf project.
- Industrial Port — includes Dominion Energy Salem Station Power Plant, the former Northeast Petroleum fuel oil distribution facility, the South Essex Sewage District Treatment

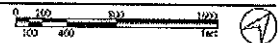
Plant (SESD), and the Federal Channel. Except for the SESD, this entire district is within the DPA.

- Community Waterfront — includes Cat Cove, Smith’s Pool and Winter Island, which is the largest recreational space on the inner harbor.

Figure 1: PLANNING AREAS



SALEM HARBOR PLAN



In addition to its focus on these five planning districts, the Plan considers the relationship between the overall harbor planning area and the surrounding harbor and its community context, to ensure proper coordination between Plan recommendations and other issues and initiatives that are linked to the harbor.

The Salem Harbor Plan renewal reinforces and builds upon the City’s original vision statement for the future of Salem Harbor as a “vibrant seaport”, affording a high quality of life for residents while maximizing the public benefits inherent in this unique resource:

“[The vision of this Plan is to]...reclaim Salem’s identity as a vibrant seaport, which makes use of its waterfront for a variety of commercial and recreational waterside activities, and has high quality landside facilities necessary to support these activities at an environmentally beneficial and economically sustainable level. Such waterside activities and landside facilities should preserve the City’s distinguishing historic character and ultimately enhance the quality of life in the City for residents, visitors and businesses.”

This vision is consistent with the primary objectives of urban waterfront planning and regulation in the Commonwealth, which are to ensure that the shoreline is used primarily for water-dependent purposes and to provide public access for the use and enjoyment of water-dependent facilities. I consider this Plan to be a solid example of how municipal objectives and priorities can be pursued in harmony with state policy governing stewardship of tidelands, including those located within a Designated Port Area (DPA).

II. PLAN CONTENT

The Salem Harbor Plan renewal outlines a comprehensive strategy for protecting and enhancing the economic, environmental, historic and cultural resources of Salem Harbor in an effort to balance the residential and business needs of the adjacent neighborhoods, opportunities for the entire City, and the potential of the waterfront as a regional public resource. Though the City continues to find value in the guidance and vision for future development of many of the recommendations of the 2000 Plan, some adjustments were considered necessary to address economic, port security, community changes, and development needs that have occurred since the implementation of that Plan. The renewal groups the Plan's 64 core recommendations into seven general themes, including Infrastructure; Public Access; Activation of the Harbor's Edge and Watersheet; Governance; Transportation and Marine Commerce; New Revenues; and Environmental Resources. This approach allows easy comparison of similar recommendations and in many cases demonstrates how individual initiatives may support common themes. These recommendations are also discussed in detail in the Planning Recommendations chapter. The Plan also highlights eight broad goals, with associated objectives, which underlie the rationale for the Plan's recommendations and guided the development of the Plan. Finally, the Plan's individual chapters address the framework for the planning effort, the implementation strategy, the regulatory environment, and future planning.

Dredging to maintain safe navigation continues to be a main theme in the renewal Plan. As in the previous version, this Plan finds that dredging is a central need to achieve a reinvigorated harbor that can accommodate a broad variety of recreational, commercial, and industrial vessels. As such, the Plan calls for dredging of the Salem Wharf/Hawthorne Cove area to create a fully functional wharf facility to support expanded commercial vessel operations, recommends that the City continue to pursue the possibility of dredging in the South River area to allow access by small boats to activate the South River Basin, and calls for near-shore dredging at several key public and private locations. It should be noted that, although the Plan calls for significant dredging in a number of locations within the planning area, approval of this Plan does not supersede the separate regulatory review requirements for these activities.

On the landside, public access to and along the waterfront continues to be a main goal of the Plan. The renewal continues to support the creation of the "Salem Harbor Walk", a continuous walkway along the harbor's edge from Winter Island to Palmer Cove. The City is currently in the process of completing a City and Seaport Bond funded portion of the harbor walk along the west end and south side of the South River Basin, and the Plan recommends that the City ensure that additional harbor walk sections are completed as part of private development through Chapter 91 licensing. In conjunction with the creation of the harbor walk, the Plan includes numerous recommendations to improve public access to and awareness of the waterfront as a district. These include the creation of access ways and view corridors linking the downtown area to the water's edge, creation of symbolic waterfront "gateways" in strategic locations, improved access to the shore

from the water, the development of a comprehensive “path finding” informational signage system, and improved vehicular access and parking. Finally, the Plan includes significant recommendations to improve public use of the extensive facilities at Winter Island.

Transportation and marine commerce continue to be a major focus in the renewal Plan. In addition to the existing Salem Ferry connecting Salem and Boston, the Plan recommends that the City explore other regional ferry connection opportunities, cruise ships, excursion boats, harbor tour boats and a water shuttle/water taxi service. The planned addition of the Salem Wharf project will support a variety of commercial water-dependent uses such as these and others. The Plan further supports the continuation of marine-industrial uses within the DPA, and recommends that any plans for this area include flexibility for future dock space for commercial fishing vessels. Finally, the Plan recommends the development of an overall transportation strategy to address parking needs, optimal traffic circulation, and alternative transportation options, including links to both land and water-based public transit.

Another key theme of the Plan is the activation of the harbor’s edge and watersheet, which the Plan proposes to do through the support and promotion of a number of initiatives designed to improve the public’s connection to the Salem waterfront. These initiatives include support of the National Park Service (NPS) efforts to construct new exhibits and improve its accommodations for visiting historic and recreational vessels; development of a “Distributed Salem Maritime History Museum”; celebrations to promote Salem’s maritime heritage and neighborhood cultural identity; and increased and improved public amenities and water dependent activities on the waterfront.

The Plan recognizes that optimal implementation of its recommendations will require significant coordination, and lays out a governance strategy to assure that the Plan’s goals can be achieved. The strategy includes a recommendation for continued staffing of a Harbor Coordinator to implement and, as necessary update, the Harbor Plan, with the intent of renewing the Plan a minimum of once every ten years. The Plan also recommends the continuation of the Harbor Plan Implementation Committee, to be charged with tracking and encouraging implementation of the recommendations, reviewing waterfront development proposals for consistency with the Plan, and participation in the Plan renewal process. In addition, the Plan recommends that Development and Management Entities be created for Salem Wharf and Winter Island. In light of current security issues, the Plan also recommends a Port Security Task Force to develop/update a Port Security Plan. Finally, the Plan recommends that the tourist and business entities work together to maximize the public benefits associated with tourism along the waterfront.

The Plan also recognizes that new revenues will be necessary to achieve many of the goals and recommendations, and lays out a strategy that includes both estimated costs and potential funding sources to meet the costs. In addition to proposed new revenue streams that may be gained through improvements to tourism and expanded recreational services, the Plan explores a number of public funding programs with potential relevance to the implementation of the Salem Harbor Plan. In addition to these sources, the Plan recommends the creation of a Waterfront Enterprise fund, as authorized in MGL Chapter 44 Section 53 F1/2, to support marine uses and public access on the waterfront consistent with the Plan. In 2004, the City established a Watersheet Activation Fund for the purpose of planning, programming, designing, constructing and/or maintaining watersheet activation elements specific to the South River. The proposed fund would provide funding for these purposes throughout the planning area.

Finally, the Plan supports the recognition of Salem Harbor as an environmental resource, and recommends throughout measures that will improve and enhance the environmental quality of this important resource. Specific recommendations for the improvement and protection of the environment of Salem Harbor include recommendations to encourage and support eco-friendly forms of transportation, and the support of decreased environmental impact through the long-term goal of alternative forms of energy within the DPA.

III. COMPLIANCE WITH APPROVAL STANDARDS

The Salem Harbor Plan renewal contains numerous local visionary planning aspects to guide planning and development within the harbor planning area. It should be noted, however, that although these elements are laudable and important to the Plan as a whole, my approval today of the Plan renewal is bounded by the authority and standards as contained in 301 CMR 23.00 et seq. (Review and Approval of Municipal Harbor Plans) and is applicable only to those discretionary elements of the Chapter 91 regulations that are specifically noted in this Decision. This Decision does not supersede any of the separate regulatory review and authorization requirements for any activity.

A. Consistency with MCZM Program Policies and Management Principles

The Federally-approved CZM Program Plan establishes 20 enforceable program policies and 9 management principles which embody coastal policy for the Commonwealth of Massachusetts. The following is a brief summary of the Policies and Management Principles applicable to the renewal Plan area:

- 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; public access; historic preservation; and environmental excellence. I find that the Plan renewal documentation (see pp. 27-29, Appendix C, and Statement of Compliance) demonstrates consistency with the spirit and intent of these Program Policies and Management Principles, as required by 301 CMR 23.05(2). Of particular note in this renewal is that the Plan again not only supports the continuation of existing marine industrial uses in the DPA, but also proposes significant new uses and an expansion of marine industrial uses with the proposed Salem Port Expansion project.

B. Consistency with Tidelands Policy Objectives

As required by 301 CMR 23.05(3), I also find that the Plan renewal is consistent with state tidelands policy objectives and associated regulatory principles set forth in the state Waterways Regulations of MassDEP (310 CMR 9.00). As promulgated, the Waterways Regulations provide a uniform statewide framework for regulating tidelands projects. Municipal Harbor Plans and associated Amendments present communities with an opportunity to adopt a vision that modifies these uniform standards through the amplification of the discretionary requirements of the Waterways Regulations or through the adoption of provisions that, if approved, are intended to substitute for the minimum use limitations or numerical standards of 310 CMR 9.00. The substitution provisions of MHPs, in effect, can serve as the basis for a MassDEP waiver of specific use limitations and numerical standards affecting nonwater-dependent use projects, and thereby reflect local planning goals in decisions involving the complex balancing of public rights in and private uses of tidelands.

The Plan sections relating to 301 CMR 23.05(3) have been effectively summarized in the Regulatory Environment section of the Plan and the Statement of Compliance submitted with the Plan. The Plan contains clear guidance that will have a direct bearing on MassDEP licensing decisions within the harbor planning area. Included in this guidance are:

- provisions that amplify upon certain discretionary requirements of the waterways regulations;
- provisions that are intended to substitute for certain minimum numerical standards in the regulations; and
- provisions that together comprise a master plan for the lands and waters within the Salem DPA.

These provisions are each subject to particular approval criteria under 301.CMR 23.05(3)(b)-(e), and as further explained below, I find that all such criteria have been met.

1. Standards for the Evaluation of Substitute Provisions

The general framework for evaluating all proposed substitution provisions to the Waterways requirements is established in the MHP Regulations at 301 CMR 23.05(2)(c) and 301 CMR 23.05(2)(d). The regulations, in effect, set forth a two part standard 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.

For the first part, 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. The second standard, 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 substitution provisions relative to the minimum use and numerical standards of 310 CMR 9.51(3)(a)–(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.

Table 1 contains a summary of the substitute provisions approved through this decision; Table 2 contains a summary of the amplifications approved through this decision contained below.

Table 1 — Summary of Substitute Provisions

Regulatory Provision	Applicable Location	Chapter 91 Standard	Substitution	Offsetting Measures
310 CMR 9.51(3)(c): Water Dependent Use Zone (WDUZ)	Sub-Area A South Commercial Waterfront District	Width of the WDUZ is the lesser of 100 feet or 25% of property depth from the present high water mark, but no less than 25 feet.	Minimum width of WDUZ along the waterfront will be no less than 20 feet; remaining WDUZ area required by Chapter 91 calculation can be redistributed to create pedestrian/view corridors.	No net loss of WDUZ. Creation of two permanent pedestrian access corridors and one permanent view corridor linking the downtown area of Salem to the waterfront.
310 CMR 9.51(3)(c): Water Dependent Use Zone	Waterfront Complex site at Pickering Wharf	Width of the WDUZ is the lesser of 100 feet or 25% of property depth from the present high water mark, but no less than 25 feet.	Minimum width of WDUZ will be no less than 20 feet.	Upgrade and maintain an off-site portion of Pickering Wharf, including widening to a clear 10 feet, enhancing it to make it consistent with existing design standards, and providing appropriate lighting. Create and maintain a “gateway” entrance to the Harborwalk at Congress Street Bridge.

Table 1 — Summary of Substitute Provisions (continued)

Regulatory Provision	Applicable Location	Chapter 91 Standard	Substitution	Offsetting Measures
310 CMR 9.51(3)(e): Building Height Commercial	Sub-Area A South Waterfront District	For new or expanded non water-dependent use buildings, the height shall not exceed 55 feet within 100 feet of the high water mark nor increase by more than one-half foot for every additional foot beyond 100 feet.	Allow non water-dependent buildings up to a height of 70 feet to be consistent with the City of Salem Zoning requirements.	Additional public open space on the site calculated by determining the new shadow cast at the ground level by the additional building mass during full sun conditions on October 23 rd between 9 a.m. and 3 p.m.. No more than half the additional open space may be used for parking.
310 CMR 9.51(3)(e): Building Height	Waterfront Complex site at Pickering Wharf	For new or expanded non water-dependent use buildings, the height shall not exceed 55 feet within 100 feet of the high water mark nor increase by more than one-half foot for every additional foot beyond 100 feet.	Allow non water-dependent buildings up to a height of 70 feet to be consistent with the City of Salem Zoning requirements.	Addition of ground-level public space in a “turret” portion of the new Harborwalk gateway adjacent to Congress Street. Additional landscaping and design elements to improve appearance and to screen gateway from the buildings loading/service areas. Construction of an observation platform on the southeast corner of Pickering Wharf.
310 CMR 9.52(1)(b)(1): Utilization of Shoreline for Water Dependent Purposes	South River waterfront	Walkways and related facilities along the entire length of the water-dependent use zone; wherever feasible, such walkways shall be adjacent to the project shoreline and, except as provided in a municipal harbor plan, shall be no less than 10 feet in width.	Require a dedicated 20-foot wide public walkway around the South River, of which a minimum of 10 feet shall be unobstructed pathway. The inland 10 feet will be used for landscaping and accessory amenities to enhance the general public’s waterfront experience.	Minimum standard will be 20 feet. The substitution directly benefits the public through enhanced access. No additional offsetting benefit required.

Table 2 — Summary of Amplifications

Regulatory Provision	Applicable Location	Standard Requiring Amplification	Amplification
310 CMR 9.02 Supporting Commercial Uses	Industrial Port District of DPA	Amount of supporting Designated Port Area (DPA) uses on filled tidelands within a DPA shall not exceed 25% of the area of the project site.	Only water-dependent industrial uses and temporary uses will be allowed in this portion of the DPA.

2. Analysis of Requested Substitute Provisions

Water Dependent Use Zone [310 CMR 9.51(3)(c)]

To approve any substitute 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 Salem 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 these provisions promote this tideland policy with comparable or greater effectiveness is conducted in accordance with the MHP regulatory guidance discussed in detail below.

In Sub-area A within the South Commercial Waterfront District, the Plan proposes a substitution to the Water Dependent Use Zone (WDUZ) requirement at 310 CMR 9.51(3)(c). Within this Sub-area, the City proposes a minimum width of 20 feet for the WDUZ along the waterfront. As an offset for the narrower WDUZ, the Plan calls for the creation of several unobstructed access and view corridors connecting the Harborwalk around the South River to the adjacent streets. Specific locations were chosen for these corridors to align, where feasible, with streets that will extend the views of the waterfront to the downtown retail center, popular visitor attractions and the surrounding residential neighborhoods. Although the width of the WDUZ along the waterfront has been reduced, redistribution of the WDUZ area will create connections with the flow of urban activity from the surrounding area, effectively complimenting the water-dependent uses in the WDUZ with improved waterfront access and much-needed physical and visual connections.

Only three opportunities for this substitution are recognized in the Plan. Two of these, located to the east and west of 289 Derby Street, will require that the reconfigured WDUZ area be used to create permanent view/pedestrian access corridors 20 feet wide connecting Derby Street to the South River. Within this area, there shall be no parking or motorized vehicle traffic allowed, with the exception of emergency response vehicles.

The third opportunity for reconfiguration of the WDUZ exists at 311 Derby Street. Because the depth of the WDUZ as calculated under Chapter 91 regulations is relatively shallow at this location, reconfiguration of the WDUZ would not yield enough area to create a pedestrian corridor. In addition, the publicly-owned Harborwalk gateway already exists adjacent to this site. However,

there is an opportunity to create a significant public benefit with a view corridor in this location, which would allow visual contact with the South River Basin from as far inland as Charter Street. The Plan will allow a reduction of WDUZ width along the waterfront to 20 feet, as long as the developer provides a 20-foot wide view corridor across from Central Street down to the water's edge. Although allowed within this view corridor, parking will not be allowed in the portion of the view corridor that is created as a result of WDUZ reconfiguration.

Where these corridors will be created on shared boundaries, the City will need to work closely with the developers and MassDEP to assure that the area of WDUZ and reconfigured WDUZ space equals or exceeds the WDUZ area as calculated under Chapter 91 regulations. Under no circumstances will there be a net loss of WDUZ area as a result of reconfiguration.

On one parcel on Pickering Wharf (within Sub-area A), reconfiguring the WDUZ area would not be sufficient to offset the reduced area on the waterfront. To offset the effects associated with the decreased WDUZ and to ensure that nonwater-dependent uses do not unreasonably diminish the capacity of site-related tidelands to accommodate water dependent use, the Plan proposes qualitative improvements in lieu of a quantitative offset, designed to significantly enhance the public's use and enjoyment of this section of waterfront. These qualitative improvements will be completed during the construction of the proposed waterfront complex, and include the following:

1. Upgrading and maintenance of an off-site portion of the existing public walkway around Pickering Wharf from the southwest corner of the existing Finz Restaurant at 76 Wharf Street extending easterly to the southern corner of the existing Victoria Station Restaurant at 89 Wharf Street. The improvements will include widening the walkway to a full, clear ten feet and adding other enhancements to make it consistent with Salem Harborwalk design standards, including appropriate lighting to allow for the walk's safe use at night; and
2. Creation/construction and maintenance of an appealing "gateway" entrance to the Harborwalk which will directly connect to Congress Street to more effectively attract the public onto the public accessway beside the waterfront.

Allowing these offsets for the reduction in WDUZ on this site will improve the overall public access to the entire section of waterfront on Pickering Wharf as described above. By improving an existing sub-standard and underutilized area of the Harborwalk off-site and highlighting the public access through the construction of the "gateway" at Congress Street, the offset will effectively enhance the public's use and enjoyment of the waterfront in this location.

As a result of my review, I am comfortable that the City has demonstrated that the proposed substitute provision will, in the context of the goals and site constraints associated with Sub-area A and the Pickering Wharf site, sufficiently offset the reduced WDUZ in this area, and ensure with comparable or greater effectiveness, that sufficient public benefit will be provided to enhance water-dependent use and public access associated therewith as appropriate for this waterfront Sub-area of Salem Harbor.

Building Height [310 CMR 9.51(3)(e)]

To approve any substitute provision to 310 CMR 9.51(3)(e), I must first determine that the Plan specifies alternative height limits and other requirements that ensure that, in general, new or

expanded buildings for nonwater-dependent use will be relatively modest in size, in order that wind, shadow, and other conditions of the ground-level environment will be conducive to water-dependent activity and public access associated therewith, as appropriate for the applicable location on Salem Harbor. The harbor plan approval regulations focus on how a building's mass will be experienced at the public open spaces on the project site, especially along the waterfront and key pathways leading thereto. Within this context, I must apply the "comparable or greater effectiveness" test to determine whether the proposed substitution and offsetting measures will assure that the above objective is met. My determination relative to whether or not these provisions promote this tideland policy with comparable or greater effectiveness will be conducted in accordance with the MHP regulatory guidance discussed in detail below.

The Plan before me also requests a substitution of the Waterways requirements at 310 CMR 9.51(3)(e) for building height in Sub-area A within the South Commercial Waterfront District. Specifically, the Plan would allow nonwater-dependent buildings up to a maximum of 70 feet in this area, consistent with Salem's Municipal zoning for this area. For most parcels within this Sub-area, the additional height will be offset with a requirement for additional dedicated public open space on the parcel proportional to the amount of new shadow created as a result of the added height. The offset area requirement will be calculated by determining the new shadow cast at the ground level by the additional building mass during full sun conditions that would occur on the site on October 23rd between the hours of 9 a.m. and 3 p.m. The additional open space required will equal half the calculated new building shadow. While parking is allowed in open space areas under Chapter 91 regulations, in this case no more than half of the open space set aside for this offset may be used for parking.

For the proposed Waterfront Complex on Pickering Wharf, the Plan recommends that alternative offsets be required. These include:

1. The addition of a ground-level covered public space in a "turret" proposed as a design element on the southwest corner of the new building in the new Harborwalk 'gateway' area adjacent to Congress Street;
2. The addition of landscaping and new design elements along the Congress Street end of the proposed hotel building to further improve the appearance of the planned Harborwalk gateway and separate and screen the gateway from the building's loading docks and/or service areas; and
3. The construction of an observation platform incorporated as part of the Harborwalk on the southeast corner of Pickering Wharf.

Based on my review of the Plan, it appears that increases in net new shadow to the ground-level pedestrian environment along the waterfront, resulting from the proposed height increase within Sub-area A of the South Commercial Waterfront District from a maximum of 55 feet to a maximum of 70 feet, will be minimal due to the area's orientation relative to the waterfront. It appears that there will be little net new shadow attributable to the increased heights associated with the proposed substitute provision that would impact ground-level conditions or impair public use and enjoyment of the waterfront and its adjacent watershed. I therefore conclude that the proposed substitute height provision will not impair water-dependent activity and public access to the

waterfront, and that the offsets proposed in the Plan will appropriately serve to meet the objectives of 310 CMR 9.51(3)(e).

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

To approve any substitute provision to 310 CMR 9.52(1)(b)(1), I must first determine that the alternative minimum width for the pedestrian access network, specified in the Plan is appropriate given the size and configuration of the WDUZ and the nature and extent of water-dependent activity and public uses that may be accommodated therein. Within this context, I must apply the “comparable or greater effectiveness” test to determine whether the proposed substitution and offsetting measures will assure that the above objective is met. My determination relative to whether or not these provisions promote this tideland policy with comparable or greater effectiveness will be conducted in accordance with the MHP regulatory guidance discussed in detail below.

As was the case with the 2000 Harbor Plan, the renewal Plan proposes a substitution of the standards for Utilization of the Shoreline for Water-Dependent Purpose which requires a pedestrian access network with walkways to be no less than 10 feet in width along the entire shoreline of the South River. The proposed substitution would require a dedicated 20 foot wide public pedestrian accessway along the entire shoreline of the South River. A minimum of 10 feet of this walkway along the waterway must be an unobstructed pedestrian pathway. The Plan proposes that the landward 10 feet of this accessway could be used for landscaping and accessory amenities that would enhance the general public’s waterfront experience. No nonwater-dependent buildings, vehicles or utility infrastructure (e.g. dumpsters, HVAC units, loading platforms) will be allowed in the public accessway unless they directly support water-dependent use(s). These access requirements would be in addition to the standards for public access to the waterfront required under Chapter 91.

The Plan states that this harbor walkway is essential to improving access along the water’s edge, and the City considers it a critical aspect of this Plan. Because the provision provides a minimum width standard of 20 feet and directly benefits the public through enhanced access and water-dependent uses that may be accommodated along the Harborwalk, I approve this substitution with no further requirement for offset. All new development, redevelopment, or existing development requiring Chapter 91 licensing within the area proposed by the Plan shall comply with this requirement.

3. Analysis of Requested Amplification Provisions

The MHP regulations (301 CMR 23.05(2)(b)) require me to find 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, MassDEP 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 one provision that will have significance to the Chapter 91 licensing process as an amplification, pursuant to 301 CMR 23.05(2)(b).

Supporting Commercial Uses [310 CMR 9.32(1)(b) and 9.02]

The Plan states that the entire land area of the Industrial Port District has long been and is currently used for water-dependent industry. The Plan’s recommendations for the Industrial Port maintain the current levels of water-dependent industrial uses, as the vast majority of the land area

of the DPA is within Chapter 91 jurisdiction. Although the Plan suggests that it is unlikely that the current uses of Dominion Energy's Salem Station Power Plant site will be discontinued within the 10 year duration of this Plan, the City chose to include provisions that would guide MassDEP licensing decisions in that event. The Plan recommends that only the following uses be eligible for licensing in the Industrial Port District: water-dependent industry, marine industrial parks, and temporary uses as defined in the Waterways Regulations. Any proposed new use(s) for this site beyond energy production, marine industry, and temporary uses as defined in 310 CMR 9.02 will require a renewal or amendment to this Harbor Plan. I find that the proposed amplification does compliment the underlying principle of this provision, and I approve the amplification as described in the Plan.

The Plan also states that in the long-term, the City supports the Industrial Port District for use for viable alternative sources of energy including possibly wind and solar. The City is aware that these uses are currently not allowed under Chapter 91 regulation, but prefers to keep this provision, though not binding, in the Plan for future reference.

4. DPA Master Plan

Because the Salem Harbor Plan is intended to be, in part, a master plan for the DPA, I must find that the Plan is consistent with DPA approval criteria at 301 CMR 23.05(2)(e). Specifically, I must find that the DPA Master 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. The master 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.

Currently, the entire land area of the DPA is used for water-dependent industrial use, and the City continues to be steadfast in its intent to preserve and enhance this irreplaceable working waterfront. The Plan, like the 2000 version, voices a long-term commitment to maritime use at the power plant site, and to maintaining the industrial character of the entire site. In the event of any unforeseen discontinuation of the current uses, the Plan supports only projects that are entirely or predominantly maritime industrial. Accordingly, in the vocabulary of the waterways regulations at 310 CMR 9.02, the only uses that will now be eligible for a Chapter 91 license on this site are Water-dependent Industrial Uses (with accessory uses), Marine Industrial Parks, and Temporary Uses.

In the Salem Wharf area of the DPA, the Plan encourages new types of water-dependent industrial uses of the port, particularly through the proposed construction of the Salem Port Expansion project. This project is planned to support cruise ship berthing, as well as berthing for ferries, water taxis, and commercial vessels. This new wharf will physically expand the upland portion of the DPA, and the proposed dredging will extend the existing turning basin for vessels bound for the power plant, and provide additional navigable water and berthing space for commercial vessels within the DPA. In keeping with the Plan's philosophy of preserving a strong working character throughout the DPA, the proposed Salem Port Expansion program will support entirely water-dependent DPA uses.

Further, the Plan limits the scope of uses that may qualify for a project as a supporting DPA use to include only boat yards, business offices (as adaptive reuse of existing buildings), general storage and warehousing, retail and service, restaurants, and off-street parking, and sets forth a

strategy to assure the ongoing promotion of water dependent industrial use within the DPA, consistent with 301 CMR 23.05(2)(e).

Based on the information provided in the Plan as discussed above, I find that the DPA master plan as set forth in the Plan is consistent with the requirements of 301 CMR 23.05(2)(e).

C. Relationship to State Agency Plans

Real property in the harbor planning area owned by state agencies consist of two existing facilities, including a boat ramp on Winter Island held by the Massachusetts Public Access Board and the Northeastern Massachusetts Aquaculture Center of Salem State College. The renewal Plan continues to support ongoing use of these facilities, and in the absence of any contrary indication, I presume that no incompatibility exists with agency plans for continued operation.

D. Implementation Strategy

As was the case with the 2000 Plan, the 2008 Plan renewal devotes an entire chapter to identifying actions that will be required for effective implementation. A summary matrix organizes these actions, together with organizational responsibilities, according to the recommendations for each geographic area covered by the Plan. Also included is a discussion of the roles of specific departments and committees within City government, along with more specific discussions of economic development strategy. Finally, the Plan lays out a phasing strategy, estimates proposed costs, and explores a number of public funding programs that may provide resources needed for implementation of the actions proposed in the plan

IV. EFFECTIVE DATE AND TERM OF APPROVAL

This Decision shall take effect immediately upon issuance on June 24, 2008. As requested by the City of Salem, the Decision shall expire 10 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 10 years). No later than 6 months prior to such expiration date, in addition to the notice from the Secretary 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 renewal of the Salem Harbor Plan as the municipal harbor plan for the City of Salem, subject to the following conditions:

1. In Sub-area A within the South Commercial Waterfront District, the WDUZ may be reduced to a minimum of 20 feet, only if the area of reduction is redistributed to create pedestrian and/or view access corridors as described in III.B.2. above. Under no circumstances will a redistribution of the WDUZ result in a net loss of area on the site. Parking will not be allowed

in a reconfigured of the WDUZ. In all cases, the required pedestrian or view corridor shall be completed before a Certificate of Occupancy is issued for the project.

2. For the waterfront complex site at Pickering Wharf, the following offsets for reduced WDUZ shall be completed before a Certificate of Occupancy is issued for the project:
 - a. Upgrading and maintenance of an off-site portion of the existing public walkway around Pickering Wharf from the southwest corner of the existing Finz Restaurant at 76 Wharf Street extending easterly to the southern corner of the existing Victoria Station Restaurant at 89 Wharf Street. The improvements will include widening the walkway to a full, clear 10 feet and adding other enhancements to make it consistent with Salem Harborwalk design standards, including appropriate lighting to allow for the walk's safe use at night; and
 - b. Creation/construction and maintenance of an appealing "gateway" entrance to the Harborwalk which will directly connect to Congress Street to more effectively attract the public onto the public accessway beside the waterfront;
3. In Sub-area A within the South Commercial Waterfront District, nonwater-dependent buildings may be constructed up to a maximum of 70 feet, provided the additional height is offset with a requirement for additional dedicated public open space on the parcel calculated by determining the new shadow cast at the ground level by the additional building mass during full sun conditions that would occur on the site on October 23rd between the hours of 9am and 3pm. The additional open space required will equal half the calculated new building shadow. No more than half of the open space set aside for this offset may be used for parking.
4. For the proposed Waterfront Complex on Pickering Wharf, the non-water dependent building may be constructed up to a maximum of 70 feet, provided the following offsets are completed before a Certificate of Occupancy is issued:
 - a. The addition of a ground-level covered public space ("turret") proposed as a design element on the southwest corner of the new building in the new Harborwalk 'gateway' area adjacent to Congress Street; and
 - b. The addition of landscaping and new design elements along the Congress Street end of the proposed hotel building to further improve the appearance of the planned Harborwalk gateway and to separate and screen the gateway from the building's loading docks and/or service areas; and
 - c. The construction of an observation platform incorporated as part of the Harborwalk on the southeast corner of Pickering Wharf.
5. For properties adjacent to the South River, a dedicated 20 foot wide public accessway is required. The walkway shall include a minimum of 10 feet of unobstructed pedestrian pathway. The landward 10 feet of this accessway may be used for landscaping and accessory amenities that will enhance the general public's waterfront experience. No nonwater-dependent buildings, vehicles or utility infrastructure (e.g. dumpsters, HVAC units, loading platforms) shall be allowed in the public pedestrian accessway unless it directly supports a water-dependent use(s).
6. The City shall prepare a final, approved Salem Harbor Plan ("Approved Plan") to include:
 - a. The plan dated January 2008;
 - b. The Statement of Compliance (dated January 30, 2008);

- c. Materials submitted during the consultation session; and
- d. This Approval Decision.

Copies of the final, approved plan shall be provided to CZM and MassDEP's Waterways Program, kept on file at the City Clerks and the Department of Planning and Development, and made available to the public through city's website and/or copies at the public library.

For waterways licensing purposes, the Approved Plan shall not be construed to include any of the following:

1. Any subsequent addition, deletion, or other revision to the final Approved Plan, 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 MassDEP 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 dated June 12, 2008, the DEP Waterways Program Chief has expressed support for approval of the renewal Plan and stated that in accordance with the provisions of 310 CMR 9.34(2), the Department will require conformance with any applicable provisions of the approved MHP in the case of all waterways license applications submitted subsequent to the MHP renewal's effective date. It will apply as well to all pending applications for which no public hearing has occurred or where the required public comment period has not expired by the effective date of the approved MHP renewal.



Ian A. Bowles
Secretary of Energy and Environmental Affairs

06/24/08
Date



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IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

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DEPT. OF PLANNING &
COMMUNITY DEVELOPMENT

June 12, 2008

Ian Bowles, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street
Boston, MA 02114

RE: DEP Recommendation for the Approval of the the City of Salem Municipal Harbor Plan Renewal ("Plan"), dated January, 2008.

Dear Secretary Bowles:

The Department of Environmental Protection, Waterways Regulation Program (WRP) has reviewed the City of Salem's Municipal Harbor Plan Renewal (MHP), dated January, 2008. The original MHP was approved by the Secretary on November 9, 2000. WRP staff have worked closely with the Massachusetts Office of Coastal Zone Management (CZM) throughout the planning process, and our comments have been adequately addressed and incorporated into the final MHP renewal. The WRP, therefore, recommends that you approve the MHP and make a finding that it is consistent with state tidelands policy objectives, as required by 301 CMR 23.05(3).

In accordance with the provisions of 310 CMR 9.34(2), the Department will require conformance with any applicable provisions of the approved MHP in the case of all waterways license applications submitted subsequent to the MHP renewal's effective date. It will apply as well to all pending applications for which no public hearing has occurred or where the required public comment period has not expired by the effective date of the approved MHP renewal.

The WRP looks forward to continuing its work with CZM and the City of Salem in the implementation of this important planning effort.

Should you have any questions in regard to the foregoing, please contact me at (617)292-5615. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Ben Lynch", with a stylized, cursive script.

Ben Lynch
Program Chief
Waterways Regulation Program
Mass DEP

cc: Mayor Kimberly Driscoll
Leslie-Ann McGee, CZM Director
Kathryn Glenn, CZM
L. Langley, Wetlands & Waterways Program Director, DEP
Alex Strycky, Wetlands & Waterways Program, DEP
WRP Harbor Planning File