

JUNE 2017

NEPONSET WHARF

24 Ericsson Street, Boston, MA 02122

Environmental Notification Form/ Project Notification Form



PROPONENT



CPC Ericsson Street LLC

SUBMITTED TO

Executive Office of Energy
and Environmental Affairs
Massachusetts Environmental
Policy Act Office

The Boston Planning and
Development Agency

PREPARED BY



99 High Street
10th Floor
Boston, MA 02110

IN ASSOCIATION WITH

RODE Architects
OJB
MLF Consulting LLC
MJR Consulting LLC
Dalton & Finegold LLP
McPhail Associates LLC
Childs Engineering Corp
Cosentini Associates
Soden Sustainability Consulting



300 A STREET, SUITE 101
BOSTON, MASSACHUSETTS 02210
857.496.0425

June 30, 2017

Ref:13866.00

Matthew A. Beaton, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street
Boston, MA 022114

RE: Neponset Wharf
Boston, MA

Dear Secretary Beaton:

CPC Ericsson Street, LLC, (Proponent), is pleased to submit the enclosed Environmental Notification Form (ENF) [as a joint filing which also includes a Project Notification Form (PNF) initiating review under Article 80B of the City of Boston Zoning Code] for the construction of a new, mixed-use development Project known as Neponset Wharf (Project), in the Port Norfolk neighborhood of Boston (Dorchester), Massachusetts. The Project site encompasses approximately 7.6 acres, 3.6 acres of developed land and four (4) acres of watersheet, along the Neponset River and Pine Neck Creek at the northernmost point of the Port Norfolk peninsula. The Project consists of 307,000 square feet of floor area¹ within four new buildings including a boathouse and three new, mixed-use buildings. The Project will reserve over 50 percent of the Site for public outdoor space, and significantly expand public accessibility to this unique waterfront property. The Project will include the following key components:

- › The **existing marina** will be renovated with new reconfigured docks and piers, and maintenance dredging will be performed, as necessary.
- › **Existing landside storage and service facilities** will be modernized and consolidated from 71,300 square feet to 23,000 square feet, while maintaining an approximately 75-vessel capacity.
- › Three new **mixed-use residential buildings** will be constructed including 150 condominium units, as well as approximately 185 structured parking spaces, a 25-room hotel, and a 4,000 square-foot restaurant/café.
- › Existing inaccessible paved land area will be replaced with approximately two acres of new **landscaped outdoor space**, including approximately 28,000 square feet of continuous publicly accessible Harborwalk, a public fishing pier, facilities for kayak launching and storage, public

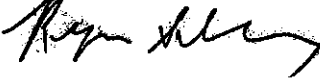
restrooms, a small refreshment stand (Shore Shack), and a marina support building which provides bait, tackle, ice, fuel, etc.

- › A new **pedestrian bridge** is being considered across Pine Neck Creek, to connect the Project Site and Tenean Beach to improve pedestrian access to the Site and connectivity to the open space areas along the Dorchester Shores trail system.

This ENF/PNF presents details about the Project and provides an analysis of transportation, potential environmental impacts, historic resources, infrastructure needs, and other proposed components of the Project in order to inform state and city agencies about the Project and its potential impacts. A detailed analysis of these impacts and proposed mitigation, as well as responses to comments received on this filing, will be documented through a subsequent Draft Environmental Impact Report (DEIR).

With the submission of this ENF/PNF, we respectfully request the EOEEA publish notice of availability of this joint ENF/PNF for public review in the July 12th edition of the *Environmental Monitor*. We will also publish public notice of this submission in the Boston Herald on or before July 12th, as required by 301 CMR 11.15(1). Based on this tentative schedule, public comments will be due by August 1st and a decision will be due by August 11th. We look forward to working with you and your staff in your reviewing of the Project. Requests for copies of the ENF/PNF should be directed to Seth Lattrell at (617) 607-2973 or via email at slattrell@vhb.com.

Sincerely,



6/30/17

RYAN P. SILLERY, Manager

Enclosure

cc: MEPA Distribution List



300 A STREET, SUITE 101
BOSTON, MASSACHUSETTS 02210
857.496.0425

June 30, 2017

Ref:13866.00

Brian Golden, Director
Boston Planning and Development Agency
One City Hall Square, 9th Floor
Boston, MA 02201

RE: Neponset Wharf
Boston, MA

Dear Director Golden:

CPC Ericsson Street, LLC, (Proponent), is pleased to submit the enclosed Project Notification Form (PNF) [as a joint filing which also includes an Environmental Notification Form (ENF) initiating review under the Massachusetts Environmental Policy Act (MEPA)] for the construction of a new, mixed-use development Project known as Neponset Wharf (Project), in the Port Norfolk neighborhood of Boston (Dorchester), Massachusetts. The Project site encompasses approximately 7.6 acres, 3.6 acres of developed land and four (4) acres of watershed, along the Neponset River and Pine Neck Creek at the northernmost point of the Port Norfolk peninsula. The Project consists of 307,000 square feet of floor area¹ within four new buildings including a boathouse and three new, mixed-use buildings. The Project will reserve over 50 percent of the Site for public outdoor space, and significantly expand public accessibility to this unique waterfront property. The Project will include the following key components:

- › **The existing marina will be renovated** with new reconfigured docks and piers, and maintenance dredging will be performed, as necessary.
- › **Existing landside storage and service facilities will be modernized and consolidated** from 71,300 square feet to 23,000 square feet, while maintaining an approximately 75-vessel capacity.
- › **Three new mixed-use residential buildings will be constructed** including 150 condominium units, as well as approximately 185 structured parking spaces, a 25-room hotel, and a 4,000 square-foot restaurant/café.
- › Existing inaccessible paved land area will be replaced with approximately **two acres of new landscaped outdoor space**, including approximately 28,000 square feet of continuous publicly accessible Harborwalk, a public fishing pier, facilities for kayak launching and storage, public restrooms, a small refreshment stand (Shore Shack), and a marina support building which provides bait, tackle, ice, fuel, etc.

- › A new **pedestrian bridge** is being considered across Pine Neck Creek, to connect the Project Site and Tenean Beach to improve pedestrian access to the Site and connectivity to the open space areas along the Dorchester Shores trail system.

This ENF/PNF presents details about the Project and provides an analysis of transportation, potential environmental impacts, historic resources, infrastructure needs, and other proposed components of the Project in order to inform state and city agencies about the Project and its potential impacts. A detailed analysis of these impacts and proposed mitigation, as well as responses to comments received on this filing, will be documented through a subsequent Draft Project Impact Report (DPIR).

We look forward to working with you and your staff in your reviewing of the Project. The Proponent will publish notice of submission of the ENF/PNF, as required by Section 80A-2(3) coincident with this filing. Based upon this tentative schedule, public comments will be due by **September 8th**. Requests for copies of the ENF/PNF should be directed to Seth Lattrell at (617) 607-2973 or via email at slattrell@vhb.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Ryan Sillery", is written over a horizontal line. To the right of the signature, the date "6/30/17" is handwritten in black ink.

RYAN P. SILLERY, Manager

Enclosure

cc: Tim Czerwienski, BPDA

Neponset Wharf

Boston, Massachusetts

SUBMITTED TO **Executive Office of Energy and Environmental Affairs**

100 Cambridge Street, Suite 900 (9th Floor)

Attn: MEPA Office

Boston, MA 02114

Boston Planning and Development Agency

One City Hall Square

Boston, MA 02201

PROPONENT **CPC Ericsson Street LLC**

300 A Street

Boston, MA 02110

PREPARED BY **VHB**

99 High Street, 10th Floor

Boston, MA 02110

In association with:

RODE Architects

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Soden Sustainability Consulting

June 2017

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Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: _____

MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Neponset Wharf

Street Address: 24 Ericsson Street

Municipality: Boston

Watershed: Boston Harbor

Universal Transverse Mercator Coordinates:
4684286 N / 331743 E

Latitude: 42°17'33.49" N

Longitude: 71° 2'27.55" W

Estimated commencement date: Fall 2018

Estimated completion date: Spring 2020

Project Type: Mixed Use

Status of project design: 10% complete

Proponent: CPC Ericsson Street LLC

Street Address: 300 A Street, Suite 101

Municipality: Boston

State: MA

Zip Code: 02210

Name of Contact Person: Seth Lattrell

Firm/Agency: VHB

Street Address: 99 High Street, 10th Floor

Municipality: Boston

State: MA

Zip Code: 02110

Phone: (617) 728-7777

Fax: (617) 728-7782

E-mail: slattrell@vhb.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?

☒ Yes ☐ No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))

☐ Yes ☒ No

a Special Review Procedure? (see 301CMR 11.09)

☐ Yes ☒ No

a Waiver of mandatory EIR? (see 301 CMR 11.11)

☐ Yes ☒ No

a Phase I Waiver? (see 301 CMR 11.11)

☐ Yes ☒ No

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

11.03(3)(a)5. Provided that a Chapter 91 License is required, New non-water dependent use or Expansion of an existing non-water dependent structure, provided the use or structure occupies one or more acres of waterways or tidelands.

11.03(6)(b)14. Generation of 1,000 or more New adt on roadways providing access to a single location and construction of 150 or more New parking spaces at a single location.

11.03(11)(b) Any Project within a designated ACEC, unless the Project consists solely of one single family dwelling.

Which State Agency Permits will the project require?

Massachusetts Department of Environmental Protection - Chapter 91 License, Public Benefits Determination, and Water Quality Certificate.

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

The Project does not require any financial assistance or a land transfer.

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	7.6		
New acres of land altered		- 0 -	
Acres of impervious area	3.3	(0.5)	2.8
Square feet of new bordering vegetated wetlands alteration		N/A	
Square feet of new other wetland alteration		130,000	
Acres of new non-water dependent use of tidelands or waterways		2	
STRUCTURES			
Gross square footage	71,300	235,700	307,000
Number of housing units	- 0 -	150	150
Maximum height (feet)	32	54	86
TRANSPORTATION			
Unadjusted vehicle trips per day ¹	222 ³	1,515	1,737
Adjusted vehicle trips per day ²	192	1,440	1,632
Parking spaces	N/A ⁴	185	185
WASTEWATER			
Water Use (Gallons per day)	1,370	29,382	30,752
Water withdrawal (GPD)	N/A	N/A	N/A
Wastewater generation/treatment (GPD)	1,245	26,711	27,956
Length of water mains (miles)	N/A	N/A	N/A
Length of sewer mains (miles)	N/A	N/A	N/A
Has this project been filed with MEPA before? ☐ Yes (EEA # _____) ☒ No			
Has any project on this site been filed with MEPA before? ☒ Yes (EEA # <u>11439</u>) ☐ No			

¹ Unadjusted ITE Trips.

² Trips adjusted to reflect local mode share and vehicle occupancy characteristics. For a conservative analysis reflecting limited transit service, it is assumed that 0% of trips will be transit trips, and 5% of trip will be bicycle or walk trips. Average vehicle occupancies (AVOs) are based on the National Personal Transportation Survey (NPTS) data.

³ Estimated trips based on ITE Land Use Code 420 (Marina) for 75 berths.

⁴ Although currently there is surface parking in the Project Site, it is effectively un-striped. As a result, existing parking activity is informal and its capacity in terms of spaces is un-defined. The existing parking will be eliminated by the Project.

GENERAL PROJECT INFORMATION – all proponents must fill out this section

Existing Conditions

The Project Site encompasses approximately 7.6 acres – 3.6 acres of developed land and four (4) acres of watershed – located at 24 Ericsson Street, along the Neponset River and Pine Neck Creek, in the Port Norfolk section of Boston’s Dorchester neighborhood (Project Site). Refer to Figure 1.1 for the site location map. The Project Site is bounded to the north by the Neponset River, to the east by an existing restaurant/function facility (Venezia), to the south and southeast by existing buildings, including the historic Putnam Nail Company buildings (now Boston Harbor Distillery), and to the west by Pine Neck Creek. The site is accessible from Ericsson Street by easements on either side to the Putnam Nail Company buildings. Refer to Figures 1.2 for Project Context.

The Project Site is currently occupied by a recreational boat dealership that operates water-dependent uses, including an approximately 75-slip marina, and supporting buildings for marine services, retail, and storage. The majority of the site is impervious, except for a small, isolated and overgrown area immediately west of the existing buildings. The entire site was first filled and developed for industrial and commercial uses over 100 years ago, and has continued to serve water-dependent uses since. Refer to Figure 1.3 for existing site conditions.

Portions of the Project Site are within the Neponset River Estuary Area of Critical Environmental Concern (ACEC). Certain environmental regulations and performance standards for work within ACEC’s are elevated to protect, restore, and enhance resources. Refer to Chapter 8, *Wetlands and Waterways*, for additional information on the ACEC program and a detailed analysis of the applicable environmental regulations and performance standards governing the Project Site.

Project Description

CPC Ericsson Street LLC (Proponent) proposes to construct a new, mixed-use development known as Neponset Wharf, comprising approximately 307,000 square feet of floor area¹ within four new buildings, spread out across 3.6 acres of land along the Neponset River and Pine Neck Creek (Project). The Project will provide over 50 percent of the site for public outdoor space, and significantly expand public accessibility to this unique waterfront property. The Project will include the following key components:

- **The existing marina will be renovated** with new reconfigured docks and piers, and maintenance dredging will be performed, as necessary.
- **Existing landside storage and service facilities will be modernized and consolidated** from 71,300 square feet to 23,000 square feet, while maintaining the existing approximately 75-vessel capacity.
- **Three new, mixed-use residential buildings will be constructed** including 150 condominium units, as well as 185 structured parking spaces, a 25-room hotel, and a 4,000 square-foot restaurant/café.
- Existing inaccessible paved land area will be replaced with **approximately two acres of new landscaped outdoor space**, including approximately 28,000 square feet of continuous publicly accessible Harborwalk, a public fishing pier, facilities for kayak launching and storage, public restrooms, a small refreshment stand (Shore Shack), and a marina support building which provides bait, tackle, ice, fuel, etc.

¹ Gross floor area (GFA) as defined by the Code

- **A new pedestrian bridge** is being considered across Pine Neck Creek, to connect the Project Site and Tenean Beach to improve pedestrian access to the site and connectivity between the open space areas along the Dorchester Shores trail system.

Refer to Chapter 1, *Project Description*, for additional information.

Summary of Environmental Impacts

The Project is being designed to avoid environmental impacts to the natural and built environment, to the maximum extent practicable. Project-related environmental impacts will be mitigated, and will be counterbalanced by significant benefits to the adjacent neighborhoods, and the City overall. The analysis of potential environmental impacts resulting from the Project yield the following conclusions:

- Daylight – Due to the setback from the nearest public way, the Project will not significantly impact visible skydome.
- Wetlands/Waterways – The Project will comply with all applicable wetlands and waterways regulations, and will create new, public recreational opportunities for water-dependent uses, at an historically private site.
- Water Quality – The Project will improve water quality by collecting and treating stormwater runoff through a series of structural Best Management Practices, as well as reducing impervious area on the site by over 20,000 square feet.
- Noise – A preliminary assessment finds that the Project’s operations will have no adverse noise impacts at nearby sensitive receptor locations and will not contribute to a violation of the City of Boston’s noise standards.
- Solid and Hazardous Materials – The environmental conditions on the site will be addressed in accordance with the Massachusetts Contingency Plan, as applicable. Existing solid and hazardous materials within the site buildings will be removed and disposed of in accordance with applicable state and federal regulations.
- Groundwater – Although the Project Site is not located within Boston’s Groundwater Conservation Overlay District, the Project will be designed to maintain current area groundwater levels.
- Geotechnical – The surface treatments and building footprints that cover the site are underlain by a granular fill that is approximately 13.5- to 18.5-feet thick. The fill material is underlain by an intermittent organic soil deposit and a deposit of natural marine sand. Additional geotechnical assessment will be performed to design properly foundations for the proposed structures.
- Construction – Construction-related impacts are temporary in nature, and are typically related to truck traffic, dust, noise, solid waste and vibration. Informed by discussions with the local community and interested government agencies, all temporary construction-related impacts associated with the Project will be minimized through a written Construction Management Plan.

Potential environmental impacts associated with air quality and greenhouse gas emissions will be more fully described in the subsequent Draft Environmental Impact Report / Project Impact Report (DEIR/DPIR).

Alternatives

In development of the Project, the following project alternatives are evaluated

- **No-Build Alternative** –The No-Build Alternative retains the existing conditions at the Project Site. It leaves the existing buildings, docks, and piers in place at the Project Site, such that the waterfront remains inaccessible to the public, as described in Section 1.1, *Port Norfolk Site Context and Existing Conditions*. The No-Build Alternative does not include any of the significant public open space and waterfront accessibility benefits associated with the Project, nor does it include

the environmental benefits of improved stormwater management and reduction in impervious coverage. Refer to Figure 1.3 for Existing Conditions.

- **As-of-Right Build Alternatives** – The Proponent has explored several potential redevelopment options for the site that would comply “As-of-Right” with existing zoning and Chapter 91 constraints on the site. As discussed in Chapter 1, *Project Description*, the site is within a Waterfront Services subdistrict, and, therefore, allowable uses under the current zoning are those related to commercial marine services, including fish storage/wholesale, marine retail, etc., as well as boating-related services, including service, storage, rental and repair. Under existing zoning, the Proponent has considered three possible development scenarios for the Project Site:

- o Marina Renovation – The “Renovation Alternative” includes the renovation of the existing marina and the continuation of the existing uses. This alternative would reconstruct the existing buildings within a similar, approximately 71,300 square foot floor area, and retain the 75-vessel capacity of the marina. The Renovation Alternative includes dredging of the marina and maintenance of the existing docks and piers within their existing licensed footprint. The Renovation Alternative retains the existing wave-fence surrounding the marina.

As a water-dependent use under Chapter 91, this alternative would not be required to provide the same level of public access, site activation, or public open space. This alternative would include some upgrades to stormwater management, however, impervious area would remain the same.

- o Cold Storage/Seafood Processing – The “Commercial Alternative” considers the construction of a new commercial fish storage and wholesale processing facility on the site. This alternative would demolish the existing buildings and construct a one- to two-story, 50,000 – 75,000 square foot facility along the waterfront. The “Commercial Alternative” would include the maintenance of the existing main piers for vessel berthing while offloading, but would remove smaller floating docks and piles. No dredging is anticipated under this alternative.

The Commercial Alternative is a water-dependent industrial use, and therefore, under Chapter 91, would not be required to provide the public access, site activation, or public open space provided by the Project. This alternative may also have negative community impacts related to noise, odor, and regular truck traffic.

- o Marine Retail – The “Retail Alternative” contemplates an approximately 20,000 square foot boating supply and fishing retail store. This alternative would retain the existing floats and docks for boat sales, but would eliminate the existing buildings and services facilities in order to use that land for parking and boat storage. The Retail Alternative would be constructed outside of Chapter 91 jurisdiction, so the uses within jurisdiction would remain water-dependent. Similar to the alternatives discussed above, the Retail Alternative would not be required to provide public access, open space, and site activation as is proposed by the Project.

- **Preferred Alternative** – The Preferred Alternative would consist of the Project, as described in Chapter 1, *Project Description*, which includes 307,000 square feet of new development within four new buildings and approximately two acres of public outdoor space. In addition, the Project will include approximately 28,000 square feet of new Harborwalk, a public fishing pier, facilities for kayak launching and storage, public restrooms, a small refreshment stand, and a marina support building which provides bait, tackle, ice, fuel, etc. The Project will maintain and renovate the existing marina while maintaining its 75-vessel capacity. Refer to Figure 1.4.

Refer to Table 1 for a comparison of alternatives considered by the Proponent.

Table 1 Comparison of Alternatives

<u>No-Build Alternative</u>		<u>As-of-Right Build Alternatives</u> 1. Renovation Alt. 2. Commercial Alt. 3. Retail Alt.	<u>Preferred Alternative</u>
Primary Use	Marina and associated services	1. Marina and supporting services 2. Commercial Fish Wholesaler 3. Marine Retail	Mix of uses including residential, marina, restaurant and hotel.
Impervious Cover	No change	1-3 No change	Over 20,000 sf reduction
Public Access	No change	1-3 No change	Significant improvements to site access, including a 28,000 sf Harborwalk and new public fishing pier
Public Open Space	No change	1-3 No change	Approximately two (2) acres of new open space
Transportation Impacts	No change	1. No change 2. Fewer net trips than Project, but significantly higher volume of truck traffic on local streets 3. Fewer net trips than Project	Trips are predominately car traffic and will be minimized to the extent feasible through the implementation of Transportation Demand Management (TDM) measures.
Stormwater Quality	No change	1-3 Limited Improvement	Significant Improvements
Dredging	Not required	1. Required 2-3 Not Required	Required

* 1 = Marina Renovation; 2= Cold Storage/Seafood Processing; 3 = Marine Retail.

The Preferred Alternative avoids or minimizes environmental impacts to a greater extent than the No-Build and As-of-Right Alternatives by improving water quality through the reduction of impervious surface and improvements to stormwater treatment. The Preferred Alternative will also provide a modern and sustainable development that will significantly improve access to the waterfront and enhancement of existing water-dependent uses, consistent with the goals previously expressed by the community, as discussed in Section 1.4.4, *Consistency with Applicable Plans and Policies*. Analysis of the Preferred Alternative, including existing site characteristics, cost of site improvements, and mitigation requirements did not identify a practical and cost effective alternative that would significantly reduce environmental and community impacts over the Preferred Alternative, while still maintaining a substantial public benefit. The Preferred Alternative offers substantial benefits to the public that are not provided by the No-Build or As-of-Right Build Alternatives. Consequently, the Preferred Alternative is carried forward for further analysis in this document.

Mitigation Measures

Appropriate mitigation for Project-related impacts to the natural and built environment will be further determined at the completion of the impact analyses, as required as part of the subsequent DEIR/DPIR.

Construction Phasing

It is anticipated that the Project will be constructed in a single phase over an 18-month construction period.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

☒ Yes (**Neponset River Estuary**)

☐ No

If yes, does the ACEC have an approved Resource Management Plan? X Yes No;

If yes, describe how the project complies with this plan.

Refer to Chapter 1, Section 1.1.1, *Area of Critical Environmental Concern*. A copy of Resource Management Plan (RMP) is included in Appendix C.

Will there be stormwater runoff or discharge to the designated ACEC? X Yes No;

If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

One of the goals of the ACEC articulated in the RMP is to protect and improve the water quality conditions of the Neponset River Estuary in order to meet, or where possible exceed, state water quality standards. Refer to Chapter 7, *Infrastructure*, for additional information on stormwater management.

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/priority_habitat_home.htm)

☐ Yes (Specify _____) ☒ No

HISTORICAL /ARCHAEOLOGICAL RESOURCES:

Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☒ Yes (Specify: Port Norfolk Area (MHC No. BOS.A. Refer to Chapter 6, *Historic Resources*, for additional information) ☐ No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? ☐ Yes ☒ No

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? Yes X No; if yes, identify the ORW and its location. _____

Are there any impaired water bodies on or within a half-mile radius of the project site? X Yes No; if yes, identify the water body and pollutant(s) causing the impairment:

Neponset River: Debris/Floatables/Trash; Dissolved Oxygen; Enterococcus Bacteria (TMDL); Fecal Coliform (TMDL); PCB(s) in Fish Tissue; Turbidity.

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? Yes X No

STORMWATER MANAGEMENT:

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:

The Project will comply with the standards set forth in the DEP Stormwater Management Regulations through the incorporation of on-site stormwater management and treatment systems that are expected to improve water quality, reduce runoff volume, and control peak rates of runoff in comparison to existing conditions. Refer to Chapter 7, Section 7.3.4, *Compliance with DEP Stormwater Standards*, attached.

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes X No ; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification):

RTN 3-0012654 Remedy Operation Status (REMOPS), Phase V; RTN 3-0014368 Closed (Linked with RTN 3-0012654); RTN 3-0021859 Closed (Linked with RTN3-0012654).

The above referenced RTNs are related to releases of petroleum products that are collectively being managed under RTN 3-12654 which was assigned by the DEP in 1995. The area affected by RTN 3-12654 occupies the northeastern portion of the subject site. Remedial actions associated with RTN 3-12654 are being conducted under a Phase V Remedy Operation Status (ROS) prepared in accordance with 310 CMR 40.0893 of the MCP. The Phase V ROS was submitted to the DEP by a previous owner on December 3, 2013.

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes No X ; if yes, describe which portion of the site and how the project will be consistent with the AUL:

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN? Yes No X ;

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:

The Project Construction Manager will implement a waste management plan to divert Project-related construction waste material from landfills through recycling and salvaging where practicable. The majority of structures to be demolished consist of metal and concrete. Existing metal and concrete will be processed and reused on-site, or recycled by the contractor. Any construction waste will be handled in a manner consistent with all applicable local, state, and federal regulations.

Will your project disturb asbestos containing materials? Yes X No ; if yes, please consult state asbestos requirements at <http://mass.gov/MassDEP/air/asbhom01.html>

The Proponent will work closely with their environmental team to assess and quantify above-grade environmental conditions and risks. All materials will be managed in accordance with applicable solid waste and air regulations, and disposed of at a licensed facility as asbestos-containing waste.

Describe anti-idling and other measures to limit emissions from construction equipment:

The **Commonwealth of Massachusetts'** anti-idling law will be enforced during the construction phase of the Project with the installation of on-site anti-idling signage.

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes No X ;

ATTACHMENTS:

1. List of all attachments to this document.
Appendix A: BPDA Letter of Intent
Appendix B: MEPA Distribution List
Appendix C: ACEC Resource Management Plan
Appendix D: Preliminary BPDA Checklists
2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries.
Refer to Figure 1.1 for project locus
- 3.. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.
Refer to Figure 1.2 for site context and 1.3 for existing conditions
- 4 Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts.
Refer to Chapter 4, *Environmental Protection*, for environmental constraints, and Chapter 6, *Historic Resources*, for historic resources.
5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).
Refer to Figure 1.4 for proposed conditions site plan
6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).
Refer to Appendix B – MEPA Distribution List
7. List of municipal and federal permits and reviews required by the project, as applicable.
Refer to Table 1.3, Anticipated Project Permits and Approvals

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

- A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1))
___ Yes X No; if yes, specify each threshold:

II. Impacts and Permits

- A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	<u>1.6</u>	<u>0.1</u>	<u>1.7</u>
Internal roadways	<u>0.1</u>	<u>0.1</u>	<u>0.2</u>
Parking and other paved areas	<u>1.6</u>	<u>(0.7)</u>	<u>0.9</u>
Other altered areas	<u>4.3</u>	<u>0.5</u>	<u>4.8</u>
Undeveloped areas	<u>0</u>	<u>0</u>	<u>0</u>
Total: Project Site Acreage	<u>7.6</u>	<u>0</u>	<u>7.6</u>

- B. Has any part of the project site been in active agricultural use in the last five years?
___ Yes X No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?
- C. Is any part of the project site currently or proposed to be in active forestry use?
___ Yes X No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:
- D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ___ Yes X No; if yes, describe:
If the potential pedestrian bridge is carried forward into permitting, the Proponent intends to grant ownership of the bridge to DCR, therefore Article 97 would not apply
- E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? ___
Yes X No; if yes, does the project involve the release or modification of such restriction?
___ Yes ___ No; if yes, describe:
- F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ___ Yes X No; if yes, describe:
- G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes ___ No X; if yes, describe:

III. Consistency

- A. Identify the current municipal comprehensive land use plan
Imagine Boston: 2030 (2017)
- B. Describe the project's consistency with that plan with regard to:
See Chapter 1, Section 1.4.4, *Consistency with Applicable Plans & Policies*, attached.
- C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)
Metropolitan Area Planning Council (MAPC), MetroFuture: Making a Greater Boston Region (2008)
- D. Describe the project's consistency with that plan with regard to:
See Chapter 1, Section 1.4.4, *Consistency with Applicable Plans & Policies*, attached.

RARE SPECIES SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? ____ Yes X No; if yes, specify, in quantitative terms:

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

- B. Does the project require any state permits related to **rare species or habitat**? ____ Yes X No
- C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? ____ Yes X No.
- D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? X Yes No; if yes, specify, in quantitative terms:
301 CMR 11.03(3)(a)(5) – Project requires a new Chapter 91 license for a non-water dependent use which occupies more than one acre of tidelands.
- B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? X Yes No; if yes, specify which permit:
Massachusetts Department of Environmental Protection – Chapter 91 License and Water Quality Certificate
Boston Conservation Commission – Order of Conditions
- C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

- A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? X Yes No; if yes, has a Notice of Intent been filed? Yes X No;
- B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:
See Chapter 8, Section 8.5, *Wetlands Protection Act*, attached.
- C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

<u>Coastal Wetlands</u>	<u>Area (square feet) or Length (linear feet)</u>	<u>Temporary or Permanent Impact?</u>
Land Under the Ocean	<u>94,000 sf</u>	<u>Permanent</u>
Designated Port Areas	<u>N/A</u>	<u>N/A</u>
Coastal Beaches	<u>36,000 sf</u>	<u>Permanent</u>
Coastal Dunes	<u>N/A</u>	<u>N/A</u>
Barrier Beaches	<u>N/A</u>	<u>N/A</u>
Coastal Banks	<u>TBD¹</u>	<u>TBD</u>
Rocky Intertidal Shores	<u>N/A</u>	<u>N/A</u>
Salt Marshes	<u>N/A</u>	<u>N/A</u>
Land Under Salt Ponds	<u>N/A</u>	<u>N/A</u>
Land Containing Shellfish	<u>N/A</u>	<u>N/A</u>
Fish Runs	<u>N/A</u>	<u>N/A</u>
Land Subject to Coastal Storm Flowage	<u>276,800 sf</u>	<u>Permanent</u>

¹ Impacts to coastal bank are subject to further design consideration. The shoreline of the site consists entirely of manmade structure.

Inland Wetlands

Bank (If)	<u>N/A</u>	<u>N/A</u>
Bordering Vegetated Wetlands	<u>N/A</u>	<u>N/A</u>
Isolated Vegetated Wetlands	<u>N/A</u>	<u>N/A</u>
Land under Water	<u>N/A</u>	<u>N/A</u>
Isolated Land Subject to Flooding	<u>N/A</u>	<u>N/A</u>
Bordering Land Subject to Flooding	<u>N/A</u>	<u>N/A</u>
Riverfront Area	<u>N/A</u>	<u>N/A</u>

D. Is any part of the project:

1. proposed as a **limited project**? ____ Yes X No; if yes, what is the area (in sf)? ____
2. the construction or alteration of a **dam**? ____ Yes X No; if yes, describe:
3. fill or structure in a **velocity zone** or **regulatory floodway**? X Yes ____ No
4. dredging or disposal of dredged material? X Yes ____ No ; if yes, describe the volume of dredged material and the proposed disposal site:
5. a discharge to an **Outstanding Resource Water (ORW)** or an **Area of Critical Environmental Concern (ACEC)**? X Yes ____ No (Stormwater from the site will be treated and discharged within the ACEC. Refer to Chapter 7, Section 7.3.4, Compliance with DEP Stormwater Standards, attached.)
6. subject to a wetlands restriction order? ____ Yes X No; if yes, identify the area (in sf):
7. located in buffer zones? X Yes ____ No; if yes, how much (in sf) Approx. 121,400 SF of the Project Site is located within buffer to Coastal Bank.

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? ____ Yes X No
2. alter any federally-protected wetlands not regulated under state law? ____ Yes X No; if yes, what is the area (sf)?

III. Waterways and Tidelands Impacts and Permits

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? X Yes ____ No; if yes, is there a current Chapter 91 License or Permit affecting the project site? X Yes ____ No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:

Refer to Chapter 8, *Wetlands and Waterways*, for a description of the Project license history.

B. Does the project require a new or modified license or permit under M.G.L.c.91? X Yes ____ No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current 0 Change 2 Total 2

If yes, how many square feet of solid fill or pile-supported structures (in sf)?

Approximately 7,200 of solid fill will be occupied by nonwater-dependent uses. Surrounding tidelands are occupied by public open space and water-dependent uses.

C. For non-water-dependent use projects, indicate the following:

Area of filled tidelands on the site: 2 acres

Area of filled tidelands covered by buildings: Approx. 7,200 SF

For portions of site on filled tidelands, list ground floor uses and area of each use:

Ground-floor building uses within tidelands are anticipated to include a combination of lobby space and boat storage, and water-dependent uses including marina-related retail and kayak storage. Refer to Chapter 2, *Urban Design*, for a more detailed discussion of ground floor uses.

Does the project include new non-water-dependent uses located over flowed tidelands?

Yes ____ No X

Height of building on filled tidelands

The maximum building height on filled tidelands will be less than 55 feet.

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

Refer to Chapter 8, *Wetlands and Waterways* report figures.

D. Is the project located on landlocked tidelands? ☐ Yes ☒ No; if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations? ☐ Yes ☒ No; if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

F. Is the project non-water-dependent **and** located on landlocked tidelands **or** waterways or tidelands subject to the Waterways Act **and** subject to a mandatory EIR? ☒ Yes ☐ No;
(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

G. Does the project include dredging? ☒ Yes ☐ No; if yes, answer the following questions:

What type of dredging? Improvement ☐ Maintenance ☒ Both ☐

What is the proposed dredge volume, in cubic yards (cys)

24,200 cys (including 1ft overdredge)

What is the proposed dredge footprint **129,000 sf** with **12** depth (ft);

Will dredging impact the following resource areas?

Intertidal Yes ☒ No ☐; if yes, **22,000** sq ft

Outstanding Resource Waters Yes ☐ No ☒

Other resource area (i.e. shellfish beds, eel grass beds) Yes ☐ No ☒

If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation?

Additional information on avoidance, minimization, and mitigation to be provided in the DEIR/DPIR

If no to any of the above, what information or documentation was used to support this determination?

MassGIS Data Layers

Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the sediment shall be included in the comprehensive analysis.

Improvement dredging is not anticipated

Sediment Characterization

Existing gradation analysis results? ☐ Yes ☒ No

Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? ☐ Yes ☒ No

Do you have sufficient information to evaluate feasibility of the following management options for dredged sediment? **No** (NOTE: This information is required for a 401 Water Quality Certification.)

IV. Consistency:

A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? ☒ Yes ☐ No; if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

Refer to Chapter 8, *Wetlands and Waterways*, for a CZM Consistency review.

B. Is the project located within an area subject to a Municipal Harbor Plan? ☐ Yes ☒ No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? ____ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? ____ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ____ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? ____ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

- A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? **X** Yes ___ No; if yes, specify, in quantitative terms:

11.03(6)(b)14. Generation of 1,000 or more New adt on roadways providing access to a single location and construction of 150 or more New parking spaces at a single location.

- B. Does the project require any state permits related to **state-controlled roadways**? ___ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

- A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces	N/A ¹	185	185
Number of vehicle trips per day	Unknown ²	1,515 ³	1,515
ITE Land Use Code(s):	230- Residential Condominium/Townhouse 310 – Hotel 931 – Quality Restaurant		

- 1 Although currently there is surface parking on the Project Site, it is effectively un-striped. As a result, existing parking activity is informal and its capacity in terms of number of spaces is un-defined. The existing parking will be eliminated by the Project.
- 2 As access to the Project Site is shared with other abutting land uses, it is not possible to quantify the number of existing vehicle trips associated with land uses on the site itself.
- 3 Unadjusted ITE Trips. The number of daily project trips is estimated to be 1,440 vehicle trips when adjusted to reflect local mode share and vehicle occupancy characteristics. For a conservative analysis reflecting limited transit service, it is assumed that zero percent of trips will be transit trips, and five percent of trip will be bicycle or walk trips. Average vehicle occupancies (AVOs) are based on the National Personal Transportation Survey (NPTS) data.

- B. What is the estimated average daily traffic on roadways serving the site?
Roadway volumes subject to detailed analysis to be documented in the DEIR/DPIR.

- C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

The Project does not require mitigation on state-controlled roadways at this time.

- D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

Consistent with the State and City's goals to reduce auto dependency, the Project will include a series of Transportation Demand Management (TDM) measures to encourage alternative modes of transportation and discourage single-occupancy vehicle trips. The TDM Plan for the Project will be fully explored in the DEIR/DPIR.

- E. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? ___ Yes **X** No; if yes, describe if and how will the project will participate in the TMA:

- F. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? ____ Yes X No; if yes, generally describe:

The Proponent will explore the potential for new water-transportation services, but no facilities are currently present in the immediate vicinity of the site.

- G. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

The Project is not anticipated to penetrate approach airspace of any nearby airport; however, the Proponent will determine the applicability of such filings and initiate them in due course in accordance with the Project schedule.

III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

The Project will provide pedestrian and bicycle transportation infrastructure that is consistent with BTDC Complete Streets guidelines and bicycle parking guidelines. The Project is consistent with Massachusetts and the City of Boston plans and policies to reduce vehicle trip generation and promote alternative modes of transportation.

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? ____ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **roadways or other transportation facilities**? ____ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

ENERGY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))?
___ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? ___ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

AIR QUALITY SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ____ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**? ____ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ____ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? ____ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? ____ Yes **X** No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? ____ Yes **X** No; if yes, attach correspondence

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? **X** Yes ____ No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? **X** Yes ____ No; if yes, please describe:
The Project Site is located within the boundaries of the Port Norfolk Area, included in the Inventory of Historic and Archaeological Assets of the Commonwealth. For additional details refer to Chapter 6, *Historic Resources*.

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ____ Yes **X** No; if yes, does the project involve the destruction of all or any part of such archaeological site? ____ Yes ____ No; if yes, please describe:

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

II. Impacts

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

The Project Site is located within the Port Norfolk Area, which is included in the Inventory; however, there are no historic, contributing resources within the Project Site. The Project will have no direct impacts on listed or inventoried resources. For additional details refer to Chapter 6, *Historic Resources*.

III. Consistency

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

The Project Site is located within **Dorchester Neighborhood Zoning District's** Port Norfolk Design Overlay District. The project will be designed to be consistent with the Dorchester Neighborhood District design guidelines for new construction and is subject to review by the Boston Landmarks Commission (BLC).

Demolition of the ca. 1955-1962 storage buildings on the site will require BLC review under Article 85 of the Boston Zoning Code (Demolition Delay Ordinance).

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

Boston Herald – July 12, 2017

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

Signature of Proponent

Date

Signature of person preparing ENF

Date

Ryan Sillery

Name (print or type)

Seth Lattrell

Name (print or type)

CPC Ericsson Street LLC

Firm/Agency

VHB

Firm/Agency

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Street

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Project Description

Introduction

In accordance with Massachusetts Environmental Policy Act (MEPA) Massachusetts General Law (MGL) Chapter 30, Section 61-62I and the regulations promulgated thereunder set forth at 301 CMR 11.00, and Article 80B of the City of Boston Zoning Code and Enabling Act (Code), CPC Ericsson Street LLC (Proponent) respectfully submits this joint Environmental Notification Form and Project Notification Form (ENF/PNF) for the construction of a new, mixed-use development project, known as Neponset Wharf (Project), in the Port Norfolk neighborhood of Boston (Dorchester), Massachusetts.

This ENF/PNF is being submitted as an initial filing in accordance with the Boston Redevelopment Authority's (BRA's), d/b/a the Boston Planning and Development Agency (BPDA's), Large Project Review process, and the Executive Office of Energy and Environmental Affairs (EEA) MEPA process. Following issuance of the BPDA Scoping Determination and the Secretary of the EEA's MEPA Certificate, a Draft Environmental Impact Report/Project Impact Report (DEIR/DPIR) for the Project will be prepared and filed.

This Chapter provides an overview of the existing site conditions and describes the Project. This Chapter also presents Project-related benefits, regulatory and planning context, and a description of community outreach efforts.

1.1 Port Norfolk Site Context and Existing Conditions

The Port Norfolk peninsula and neighborhood has been described as "an island in the city" in prior planning studies completed by the City, as it is a 114-acre peninsula approximately five miles from downtown Boston and across the Neponset River from Quincy. Physically separated from the rest of the City by water, roadways, and railways, this distinctive neighborhood exhibits a character and scale that is unique to the City. It is for these reasons that the City has focused in prior studies on ways to improve the underutilized parts of the peninsula while protecting the existing residential areas. As described within this ENF/PNF, the Project team has approached the design and planning of this Project respectful of this unique context, and endeavors to construct a Project that integrates into the existing urban fabric of the Port Norfolk neighborhood, and becomes an asset to the existing and established community.

The Project site encompasses approximately 7.6 acres, 3.6 acres of developed land and four (4) acres of watersheet, along the Neponset River and Pine Neck Creek at the northernmost point of the Port Norfolk peninsula (Project Site or Site). Refer to Figure 1.1 for the site location map. The Project Site is bounded to the north by the Neponset River, to the east by an existing restaurant/function facility (Venezia), to the south and southeast by existing buildings, including the historic Putnam Nail Company buildings (now Boston Harbor Distillery), and to the west by Pine Neck Creek. The Site is accessible from Ericsson Street by easements on either side to the Putnam Nail Company buildings. Refer to Figures 1.2 for Project Context.

The Site is currently occupied by a recreational boat dealership that operates water-dependent uses, including a 75-slip marina and five supporting buildings for marine services, retail, and storage. The existing marina contains a mix of floating docks and pile-supported piers that are contained within a wave fence. The Site shoreline is comprised of granite seawall and dumped-stone revetment along the west and north shoreline, transitioning to a sheetpile bulkhead on the northeast.

The majority of the Site is impervious, except for a small, isolated and overgrown area immediately west of the existing buildings. The paved surface covering the majority of the Site is used seasonally for storing boats and parking for marina patrons. The entire Site was first filled and developed for industrial and commercial uses over 100 years ago, and has continued to serve water-dependent uses since that time. Refer to Figure 1.3 for existing site conditions.

1.1.1 Area of Critical Environmental Concern

Portions of the Project Site are within the Neponset River Estuary Area of Critical Environmental Concern (ACEC) under 301 CMR 12.00, as promulgated by the Secretary of the Executive Office of Energy and Environmental Affairs pursuant to M.G.L. c. 21A, s. 2(7). The purpose of the ACEC Program is to preserve, restore, and enhance critical environmental resources and resource areas of the Commonwealth of Massachusetts. As discussed in Chapter 8, *Wetlands and Waterways*, the Project has been designed with careful consideration for this significant environmental context to provide a net environmental benefit to the surrounding estuarine ecosystem. The boundaries of the ACEC in relation to the Project Site are shown on Figure 8.1, Neponset River Estuary ACEC.

Certain environmental regulations and performance standards for work within ACEC's are elevated to protect, restore, and enhance resources. The Project will embrace this environmental context and will comply with these heightened regulations.

1.2 Project Description

The Project consists of approximately 307,000 square feet of floor area¹ within four new buildings, including a boathouse and three new, mixed-use buildings, spread out across 3.6 acres of land along the Neponset River and Pine Neck Creek. The Project will reserve over 50 percent of the Site for public outdoor space, and significantly expand public accessibility to this unique waterfront property. The Project will include the following key components:

1. **The existing marina will be renovated** with new reconfigured docks and piers, and maintenance dredging will be performed, as necessary.
2. **Existing landside storage and service facilities will be modernized and consolidated** from 71,300 square feet to 23,000 square feet, while maintaining an approximately 75-vessel capacity.
3. **Three new mixed-use residential buildings will be constructed** including 150 condominium units, as well as approximately 185 structured parking spaces, a 25-room hotel, and a 4,000 square-foot restaurant/café.
4. Existing inaccessible paved land area will be replaced with **approximately two acres of new landscaped outdoor space**, including approximately 28,000 square feet of continuous publicly accessible Harborwalk, a public fishing pier, facilities for kayak launching and storage, public restrooms, a small refreshment stand (Shore Shack), and a marina support building which provides bait, tackle, ice, fuel, etc.
5. **A new pedestrian bridge** is being considered across Pine Neck Creek, to connect the Project Site and Tenean Beach to improve pedestrian access to the Site and connectivity to the open space areas along the Dorchester Shores trail system.

The following sections describe the design approach, Project components, development program, and anticipated Project schedule.

1.2.1 Open Space Design Approach

The Port Norfolk peninsula is an important waterfront resource within the City of Boston and the Dorchester neighborhood. The Project will preserve and enhance the existing marine uses and provide new public open spaces and improved public access along the Neponset River shoreline connecting a sequence of proposed and existing public spaces along the Dorchester waterfront. The new residential units, retail, and hotel uses complement the water-dependent facilities by adding vitality

¹ Gross floor area (GFA) as defined by the Code

and activity to this prominent location where the Neponset River meets Boston Harbor.

The Project coincides with a decades-long planning and open space development effort to revitalize and enhance Dorchester's southern and eastern shorelines. Recognizing the long-term neighborhood goals to protect existing residential areas and promote needed waterfront and open space uses, both the City of Boston and the Commonwealth of Massachusetts have led efforts to rehabilitate these waterfront edges, bringing back the natural environment that existed before industrial development blocked public access. The Neponset River Trail, Pope John Paul II Park, Finnegan Park, Victory Road Park, Malibu Beach, and Tenean Beach are examples of public open spaces created nearby over the past two decades. Additionally, current plans are underway to improve the Morrissey Boulevard greenbelt with new pedestrian and bike lanes. The Project furthers this vision by providing high-quality open space along the waterfront, and by recognizing design strategies that help preserve the distinctive character of the surrounding Port Norfolk neighborhood.

1.2.2 Project Components/Uses

As shown in Figure 1.4, the Project consists of a mix of uses within a few new buildings and other structures. Key Project components are as follows:

Building A – Located in the in the southeastern corner of the Site, Building A proposes two levels of structured parking beneath six levels of residential and hotel space. The program for Building A is as follows:

- › Approximately 43 residential units and associated amenity/lobby space, including outdoor residential amenity space above the parking podium;
- › A small, approximately 25-room hotel, which functions as a supporting amenity for marina patrons and guests, but will be available to the public;
- › Structured parking for approximately 70 vehicles; and
- › Indoor storage for approximately 45 bicycles.

Building B – Located north of Building A, Building B proposes a small, two-level lobby/amenity space beneath three levels of residential space, most of which will be raised up above grade, on piles, to provide greater continuity between the surrounding open spaces, and improved resiliency from coastal flooding. The space beneath the cantilevered portion of the building is designed as a stepped terrace that will be accessible to the public. The program for Building B includes:

- › Approximately 21 residential units and associated amenity/lobby space; and
- › Indoor storage for approximately 21 bicycles.

Building C – Also referred to as the “Boathouse”, Building C is located along the waterfront, east of Building B. The Boathouse contains storage space for

approximately 75 vessels, with smaller vessels (less than 25 feet-long) on stacked shelves, three high, and larger vessels stored on grade. Within the Boathouse either a marine travel lift or specialty forklift will move boats to and from the existing berth which will be contained within the building envelope to maximize public safety. In the summer months, larger vessels will be seasonally moved out of the Boathouse and moored in water, while smaller vessels may be moved in and out of storage as needed.

Building D – Located immediately to the south and abutting Building C, Building D comprises three levels of parking beneath up to five levels of residential. The program for Building D includes:

- › 86 residential units and associated amenity/lobby space;
- › A small (approximately 4,000 square feet) restaurant/café to support the adjacent marina uses, with the potential for some outdoor seating on the fourth floor above Building D;
- › Structured parking for approximately 115 vehicles; and
- › Indoor storage for approximately 86 bicycles.

Public Amenities/Supporting Uses – In addition to the four primary buildings described above, the Project will activate the surrounding open space and marina with new public amenity structures, as described below:

- › Kayak Storage Shed - A kayak storage shed and launching ramp will be provided along Pine Neck Creek along the western edge of the Harborwalk. Storage space would be available for rent to residents and the public.
- › Shore Shack – Envisioned as an accessory to the surrounding water-dependent uses, the Shore Shack is located on the Harborwalk, central to the Site. This structure will contain restrooms and facilities for marina patrons that will be available to the public, as well as a small facility serving refreshments.
- › Marina Support Building – Located at the end of the main pier, the Marina Support Building will provide bait, tackle, and other marine supplies as well as a fueling station. Potential ticket sales and pick up/drop off for a water taxi could also be served by this structure.
- › Fishing Pier – Located in the northwestern corner of the Site, and within the footprint of the existing marina, the Fishing Pier will provide the public with direct access to the Neponset River. Functioning as both an observation platform and fishing pier, the structure will be fitted with supporting amenities including lighting and trash receptacles.
- › Pedestrian Bridge – A potential pedestrian bridge to Tenean Beach that would be funded and constructed by the Proponent, but potentially granted to DCR after construction. This structure would greatly improve walking/biking accessibility to and from Tenean Beach.

- › Open Space Amenities – In addition to the structures discussed above, the Project will activate the two-acre outdoor space with a variety of active and passive recreational amenities. Amenities currently proposed, as described in Section 2.4, and shown in Figure 2.7, include:
 - o *Harborwalk* – The Project will construct 28,000 square feet of new, continuous, publicly accessible Harborwalk along the perimeter of the Site, connecting the proposed open spaces with the marina, fishing pier, and associated supporting facilities.
 - o *Dog Park* – Open to the community and located west of Building A.
 - o *Tidal Garden* – A resiliency and wellness feature, which highlights the important environmental context of the Site.
 - o *Game Court* – Located along the Harborwalk, game courts could provide recreational opportunity along the waterfront.

1.2.3 Proposed Development Program

The proposed development program is provided in Table 1-1 below:

Table 1-1 Proposed Development Program

Use/Element	Approx. Area ¹	Approx. Height ²	Approx. Quantity
Project Site	3.6 acres ³		–
Building A	93,500 sf	86 feet	8 Stories
<i>Residential/Amenity</i>	<i>59,000 sf</i>		<i>43 Units</i>
<i>Hotel</i>	<i>10,500 sf</i>		<i>25 Rooms</i>
<i>Parking⁴</i>	<i>24,000 sf</i>		<i>70 Spaces</i>
Building B	28,500 sf	55 feet	5 Stories
<i>Residential/Amenity</i>	<i>28,500 sf</i>		<i>21 Units</i>
Building C (Boathouse)	23,000 sf	31 feet	1 Story
<i>Boat Storage</i>	<i>23,000 sf</i>		<i>75 Vessels</i>
Building D	159,500 sf	86 feet	8 Stories
<i>Residential/Amenity</i>	<i>115,500 sf</i>		<i>86 Units</i>
<i>Restaurant/Café</i>	<i>4,000 sf</i>		
<i>Parking</i>	<i>40,000 sf</i>		<i>115 Spaces</i>
Public Amenities/Supporting Uses			
<i>Kayak Storage Shed</i>	<i>650 sf</i>		
<i>Shore Shack</i>	<i>400 sf</i>		
<i>Marina Support Building</i>	<i>1,450 sf</i>		
Overall Total SF	307,000 sf		
		150 Units (Condominium)	
		185 Parking Spaces (Vehicle)	
		152 Bike Storage Spaces	

1 All building areas are provided as gross floor area (GFA), as defined by Article 2A of the Code.

2 Measured to the top of the last occupiable floor.

- 3 The overall parcel contains four acres of watershed which is not included in this calculation of developable area. Total parcel area is 7.0 acres.
- 4 The Project includes approximately 91,500 square feet of structured parking, of which, approximately 31,000 square feet is located at grade, and therefore excluded from calculation of GFA in accordance by the City of Boston Zoning Code

1.2.4 Anticipated Project Schedule

The Project is anticipated to be constructed in a single phase, beginning in the fall of 2018 with substantial completion expected in the spring of 2020. This single phase is planned to minimize the time for construction, and so any potential impacts from construction to the adjacent neighborhoods. Management and minimization of construction impacts is discussed in Chapter 4, *Environmental Protection*, and will be studied in greater detail in the DEIR/DPIR.

1.3 Summary of Public Benefits

This section outlines key benefits to the public that are associated with the Project, as well as benefits associated with Sustainability/Green Building and Climate Change, Transportation, and Social and Economic Benefits.

Sustainability/Green Building and Climate Change Resiliency

› *Area Revitalization –*

- › Revitalizes and newly opens to the public a longstanding industrial/commercial site.
- › Features an attractive and efficient site plan with significant new public open space and public amenities.

› *LEEDv4 Certifiable –*

- › Complies with the City of Boston's Article 37 of the Code.
- › Incorporates a variety of sustainable design strategies to improve water quality and reduce urban heat island effect, among other LEEDv4 features.

› *Stormwater Management –*

- › Will improve upon the existing environmental conditions on-site by increasing pervious area by 0.5 acres, substantially improving stormwater treatment and improving water quality.
- › Will improve water quality by incorporating on-site stormwater management and treatment systems which will also reduce runoff volume, and control peak rates of runoff in comparison to existing conditions.

› ***Resource Conservation –***

- › Maximizes the conservation of energy and water, and minimizes impacts to regional infrastructure and water resources, through sustainable design strategies.
- › Reduces overall annual energy consumption by an estimated 24.3 percent over baseline, which equates to an estimated reduction of 716 tons of CO2 emissions.
- › Intends to participate in local utility incentive programs to adopt various energy conservation measures.

› ***Climate Resilience –***

- › The design is adapted to climate change, to reduce vulnerability to rising sea levels and changes in intensity and frequency of storms, including raising the Project Site grade so that the finished floor elevation for occupiable spaces of the Project is at 21 feet Boston City Base (BCB) for buildings in FEMA AE Zones, and 25 feet BCB for buildings in VE Zones.
- › The design elevation considers sea level rise scenarios over the lifetime of the Project, making the Project resilient to current and future extreme storm events.

Transportation

› ***Trip Reduction –***

- › Captures internal trips between different uses, thereby reducing vehicle trips and creating opportunities for parking facilities to be shared by multiple uses.

› ***Traffic and Safety Improvements –***

- › Will explore potential opportunities for improvements in traffic operations, circulation, signage and safety.

› ***Transportation Demand Management –***

- › Includes secure bicycle parking in compliance with BTD's guidelines, to encourage cycling as a strong transportation mode.
- › Will implement further TDM strategies to reduce single-occupant vehicle trips and encourage alternatives transportation modes.
- › Will explore potential shuttle services to the Red Line as well as opportunities for water transportation to the Site.

Social and Economic Benefits

- › *Additional Residential Opportunities* –
 - › Promotes a mixed-use neighborhood that will improve the vitality of the Site.
- › *Affordable Housing* –
 - › Provides affordable housing opportunities consistent with the BPDA's Inclusionary Development Policy.
- › *Enhanced Recreational Opportunities* –
 - › Provides enhanced recreational boating opportunities with a strong focus on catering to the area's fishing community.
 - › Creates approximately 2 acres of public waterfront access and outdoor space, a major boon to shoreline improvements along the Dorchester shoreline.

1.4 Regulatory Context

This section lists the anticipated permits and approvals as well as the local planning and regulatory controls applicable to the Project.

1.4.1 Local Planning and Regulatory Controls

Article 80

The Project is subject to land use controls imposed through the City of Boston Zoning Code. Under Section 80B of the Code, Large Project Review by the BPDA is required for any new construction equal to or greater than 50,000 square feet of gross floor area. The Project exceeds this threshold. The Proponent commenced Large Project Review under Article 80 by the filing of a Letter of Intent (the "LOI") with the BPDA on May 26, 2017, to indicate the Proponent's plan to file a PNF later this summer. A copy of the LOI is provided in Appendix A, *Letter of Intent*.

Zoning

The Proposed Project is located within the Waterfront Service (WS) Subdistrict of Article 65's Dorchester Neighborhood District, which generally permits the proposed multi-family residential and mixed-use buildings contemplated by the project as allowed or conditional permitted uses. As currently proposed, the Project would require zoning relief for hotel use, Floor Area Ratio (FAR), building height, lot coverage, side yard, and multifamily dwellings as a percentage of FAR.

Article 37

Article 37 of the Code requires that proposed projects subject to Large Project Review meet standards for certification under the US Green Building Council

Leadership in Energy and Environmental Design (LEED) program. A LEED Checklist and a Climate Change Preparedness and Resiliency Checklist will be submitted to the Interagency Green Building Committee as part of Large Project Review. A draft of this checklist is included in Appendix D. Additional details are provided in Chapter 3, *Sustainability and Green Building*.

Article 85

Article 85 of the Code requires that existing structures that were constructed 50 or more years ago must undergo review by the Boston Landmarks Commission prior to demolition and may be subject to a demolition delay. The Proponent will submit an application to the Boston Landmarks Commission for review and approval prior to commencement of demolition of the existing metal clad buildings on-site.

1.4.2 Massachusetts Environmental Policy Act

The Project is subject to MEPA review because it requires the state actions described in Section 1.4.3 below, and exceeds review thresholds pursuant to:

1. **301 CMR 11.03(3)(a)(5)** – Project requires a new Chapter 91 license for a non-water dependent use which occupies more than one acre of tidelands; and
2. **301 CMR 11.03(6)(b)(14)** – Generation of 1,000 or more New adt on roadways providing access to a single location and construction of 150 or more New parking spaces at a single location.
3. **301 CMR 11.03(11)(b)** – Any Project within a designated ACEC, unless the Project consists solely of one single family dwelling.

1.4.3 Anticipated Permits/Approvals

Table 1-2 below presents a preliminary list of anticipated reviews and approvals of the Project by governmental agencies based on currently available information. It is possible that some of the listed reviews and approvals will not be required, or that additional reviews or approvals that will be required are not listed below.

TABLE 1-2 ANTICIPATED PROJECT PERMITS AND APPROVALS

Agency/Department	Permit/Approval/Action
Federal	
United States Army Corps of Engineers	Federal Rivers and Harbors Act of 1899, Section 10 Permit and Clean Water Act Section 404 Permit
United States Environmental Protection Agency	NPDES Notice of Intent for Dewatering General Permit NPDES Notice of Intent for Construction General Permit
State	
Massachusetts Architectural Access Board	Variances (<i>if required</i>)

Agency/Department	Permit/Approval/Action
Massachusetts Coastal Zone Management Agency	Federal consistency review
Massachusetts Department of Environmental Protection, Division of Air Quality	Notice of Construction
Massachusetts Department of Environmental Protection, Division of Watershed Management	Surface Water Discharge Permit; and Groundwater Discharge Permit
Massachusetts Department of Environmental Protection, Division of Waterways	Waterways (Chapter 91) License Public Benefit Determination
Massachusetts Department of Environmental Protection, MEPA Office	MEPA review, concluding with MEPA Certificate
Massachusetts Historical Commission	State Register Review
Massachusetts Department of Conservation and Recreation	Construction Access Permit (<i>if required for pedestrian bridge construction</i>)
City	
Boston Board of Appeal	Conditional Use Permit for multifamily dwellings Zoning relief for hotel use, and dimensional relief for FAR, side yard, building height, lot coverage, side yard, and multifamily dwellings as percentage of FAR
Boston Civic Design Commission	Schematic Design Review
Boston Conservation Commission	Order of Conditions
Boston Fire Department	Approval of Fire Safety Equipment
Boston Inspectional Services Department	Demolition Permits Building Permits Parking Garage Permit / Flammable Storage License
Boston Landmarks Commission	Demolition Delay Determinations and review of a Project within the Port Norfolk Neighborhood Design Overlay District
Boston Parks and Recreation Commission	Construction within 100 Feet of Park
Boston Planning and Development Agency	Article 80 Review and Execution of Related Agreements; Design Review in coordination with recommendation received from Boston Landmarks Commission re: Port Norfolk Neighborhood Design Overlay District requirements; Section 80B-6 Certificate of Compliance
Boston Public Improvement Commission	Petition for Specific Repair License, Maintenance, and Indemnification Agreement Grant of Location (utilities)
Boston Public Safety Commission Committee on Licenses	Permit for Storage of Fuel in (Emergency Storage Tanks); Garage License

Boston Public Works Department	Street Opening Permit
	Curb Cut Permit <i>(if required)</i>
Boston Transportation Department	Construction Management Plan (CMP)
	Transportation Access Plan Agreement (TAPA)
Boston Water and Sewer Commission (BWSC)	Site Plan
	General Service Application
	Sewer Connection Permit

1.4.4 Consistency with Applicable Plans & Policies

The following sections provide a summary of local and regional plans and policies applicable to the Site.

Port Norfolk Planning and Zoning Policies

In 1984, the City of Boston created a new zoning mechanism called an Interim Planning Overlay District (IPOD) to facilitate interim zoning while longer term planning and rezoning of the City was completed. In 1985, the IPOD (Article 27A) was approved. Article 27A, which created the first IPOD in Boston, imposed interim zoning and development controls for Port Norfolk. Following implementation of the IPOD, and prior to the final zoning, the City engaged in a planning process to identify recommendations for implementation of the IPOD and for future zoning efforts. The results of this effort were published by the City in 1989 through the "Port Norfolk Neighborhood Plan." The Port Norfolk Neighborhood Plan identified specific goals for the community and of future land use options. The two primary goals that emerged from this planning process include:

1. "to protect and enhance the existing residential community", and
2. "to better utilize the waterfront, particularly for water-dependent uses."

The Project embraces these goals by providing new housing opportunities in a mixed-use, waterfront oriented project, developed around a renovated marina. Improvements to recreational opportunity and accessible of the waterfront will enhance the existing residential community and support the continuation of the existing water-dependent marina uses.

In 2002, the City adopted Article 65 (Dorchester Neighborhood Zoning District), which superseded the Port Norfolk IPOD creating the Dorchester Neighborhood Zoning District. Article 65 was developed with the extensive participation of the Dorchester Planning and Zoning Advisory Committee, civic associations, business groups, and residents.

The Project Site is located within the Port Norfolk WS Subdistrict and the Port Norfolk Neighborhood Design Overlay District (NDOD). NDODs protect the historic character, existing scale, and quality of the pedestrian environment of certain neighborhoods, in which development of housing is encouraged, so long as new

construction preserves and complements the character of the existing housing stock will enhance the historic quality of these neighborhoods.

Imagine Boston: 2030

Imagine Boston 2030 is the first citywide plan in 50 years. It aims to create a framework to preserve and enhance Boston while embracing growth to address challenges and make the City stronger and more inclusive. The plan sets goals to preserve wisely, enhance equitability, and grow inclusively through:

- › Providing quality of life in accessible neighborhoods;
- › Driving inclusive economic growth;
- › Promoting a healthy environment and adapting to climate change; and
- › Investing in infrastructure, open space and culture.

The principles of the Project are closely aligned with the City's Imagine Boston 2030 goals. The Project will promote economic growth with new housing opportunities through a sustainable and resilient development. Consistent with the Plan, the Project will provide new open space and improved recreational opportunity for the community, as well as improved waterfront access.

Metropolitan Area Planning Council (MAPC), MetroFuture: Making a Greater Boston

MetroFuture: Making a Greater Boston Region (MetroFuture) is a comprehensive regional plan for the Boston metropolitan area, prepared by the Metropolitan Area Planning Council (MAPC). The plan provides a complete set of implementation strategies, recommendations, and action steps for regional growth and development. MetroFuture focuses on six key elements for growth and development in the region. Each of these is supported by more specific sub-goals and objectives. The Project is consistent with many of these, and directly meets the following goals:

- › *Sustainable Growth: Most new growth will occur through reuse of previously developed land and buildings.* The Project will redevelop a previously developed Site to create new housing and publicly accessible open space.
- › *Housing Choices: Low-income households will be able to find affordable, adequate, conveniently located housing...and they will be able to avoid displacement.* The Project will establish affordable housing opportunities consistent with the BPDA's Inclusionary Development Policy.
- › *Energy, Air, Water and Wildlife: The region will use progressively less energy for electricity, heating, cooling and transportation.* The Project Site will be designed to high standards of energy efficiency. Passive stormwater management strategies and other green infrastructure will be integrated into the Project design.

1.5 Agency Coordination and Community Outreach

The Proponent has engaged abutters, neighborhood groups, community leaders, business owners, elected officials, City and State regulatory agencies, and other stakeholders. Through this public engagement process, the Project Team has gathered input and feedback as it prepares plans for the Project.

1.5.1 City/State Coordination and Meetings

Members of the Project team have met with City Councilor Frank Hunt, State Representative Dan Hunt, and State Senator Linda Dorcea Forry. The team has also met with members of the DEP, DCR, MEPA and BPDA staff to consult on the planning, development and design of the Project. Following is a list of City and State coordination meetings that have taken place to date.

April 6, 2017	DEP Site Jurisdictional Review
May 5, 2017	BPDA Pre-Filing Meeting
May 10, 2017	MEPA Pre-Filing Meeting
May 16, 2017	City Councilor Frank Baker
May 16, 2017	State Representative Dan Hunt
May 17, 2017	DCR Meeting
May 22, 2017	2 nd BPDA Pre-filing Meeting
May 31, 2017	Senator Linda Dorcea Forry
June 26, 2017	Boston Landmarks Commission

1.5.2 Community Outreach

Prior to acquisition of the Property, the Proponent met with the Port Norfolk Civic Association to seek neighborhood input on potential redevelopment opportunities for the Site. After moving forward with acquiring the Site and incorporating community input, the Proponent has reengaged the community to ensure that the Project design is sensitive to their concerns. The Proponent has hosted a series of meetings including an open house, to solicit input and introduce the Project. Community engagement to date has included:

Fall, 2016	Port Norfolk Civic Association (introduction of Proponent)
May 16, 2017	Port Norfolk Civic Association (informal discussion)
June 3, 2017	Port Norfolk Community Open House
June 20, 2017	Port Norfolk Civic Association (informal discussion)

The Proponent has also initiated, through the submission of the LOI, the formation of an Impact Advisory Group (IAG). The IAG is group of individuals selected by the district City Councilor, State Representative, and State Senator to formally review the impacts of the Project and make recommendations for mitigation. Comprised of up to 15 members, the IAG typically includes residents, business owners, or designees of community organizations within the impacted area.

The Proponent will continue to meet with stakeholders through the permitting, design, and construction of the Project. The Project team is committed to a Project that enhances the surrounding community and provides significant benefit to the City and Commonwealth.

1.6 Project Proponent/Development Team

The following lists the key members of the development team for the Project (the "Project Team"):

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Sustainability Consultant	Soden Sustainability Consulting 19 Richardson Street Winchester, MA 01890 Colleen Ryan Soden colleen@sodensustainability.com
Air/Noise Consultant	VHB 101 Walnut Street Watertown, MA 02472 Heidi Richards hrichards@vhb.com Quan Tat qtat@vhb.com

1.7 Legal Information

1.7.1 Legal Judgments or Actions Pending Concerning the Project

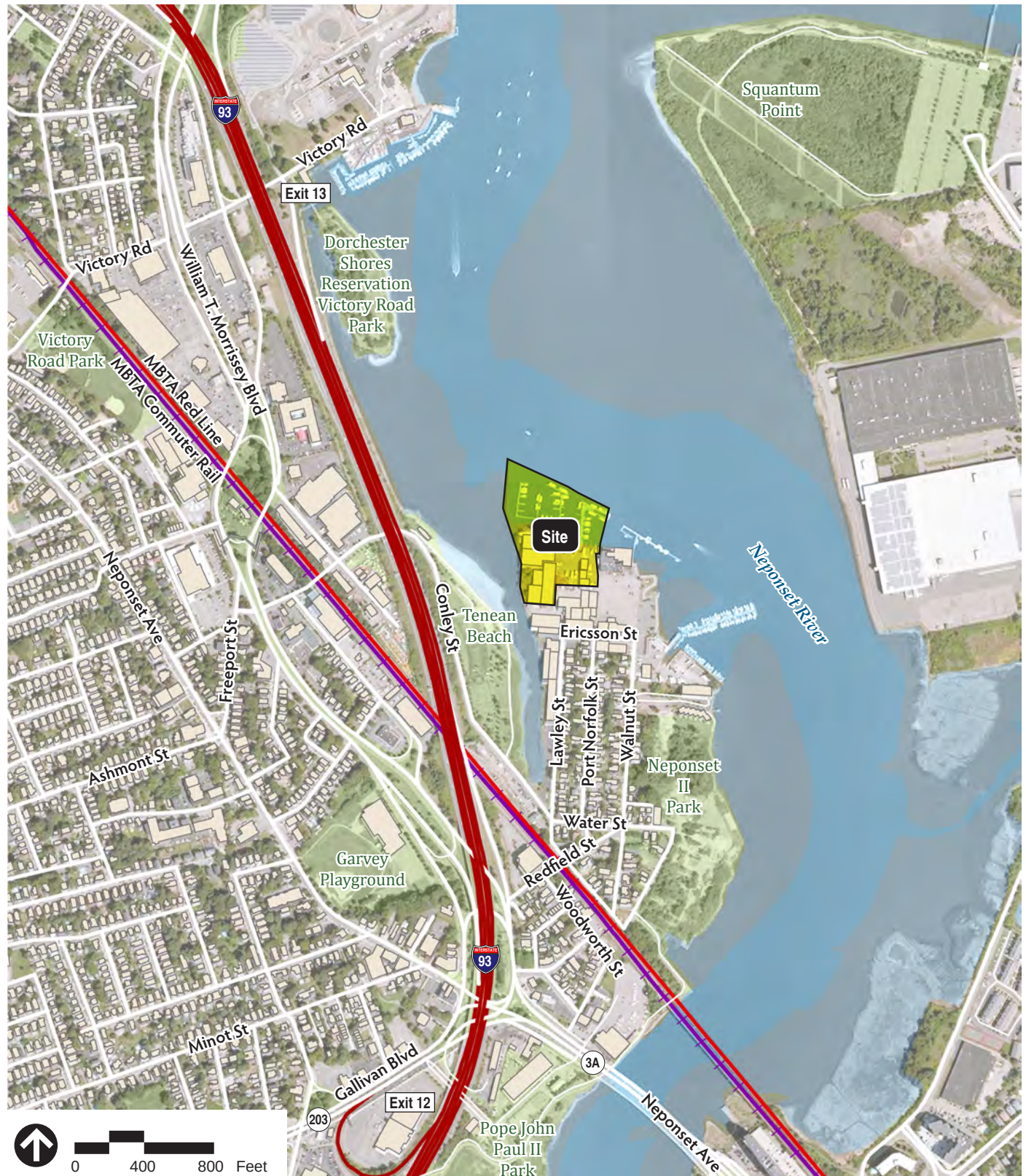
To the Proponent's knowledge, there are no legal judgments or actions pending concerning the Project.

1.7.2 History of Tax Arrears on Property Owned in Boston by the Applicant

There are no known tax arrears on property in Boston owned by the Proponent.

1.7.3 Evidence of Site Control

The Proponent CPC Ericsson LLC, a Massachusetts limited liability company, owns fee title to the Project Site, pursuant to four quitclaim deeds granted to the Proponent by Bruno Holdings, LLC, all dated January 14, 2017, and recorded on January 27, 2017, at the Suffolk County Registry of Deeds in Book 57483, at Pages 82, 84, 87, and 90, respectively.

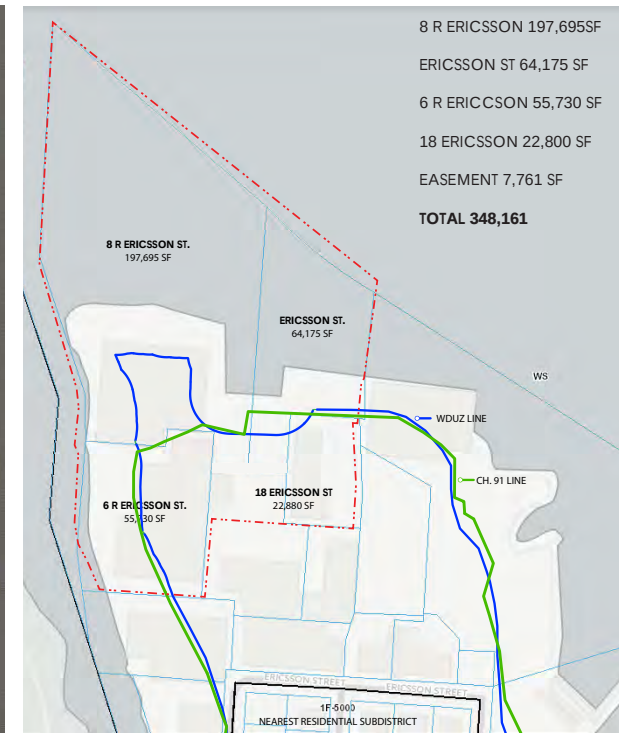


Source: ArcGIS Bing Aerial, MassGIS

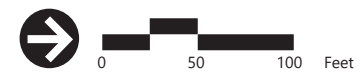
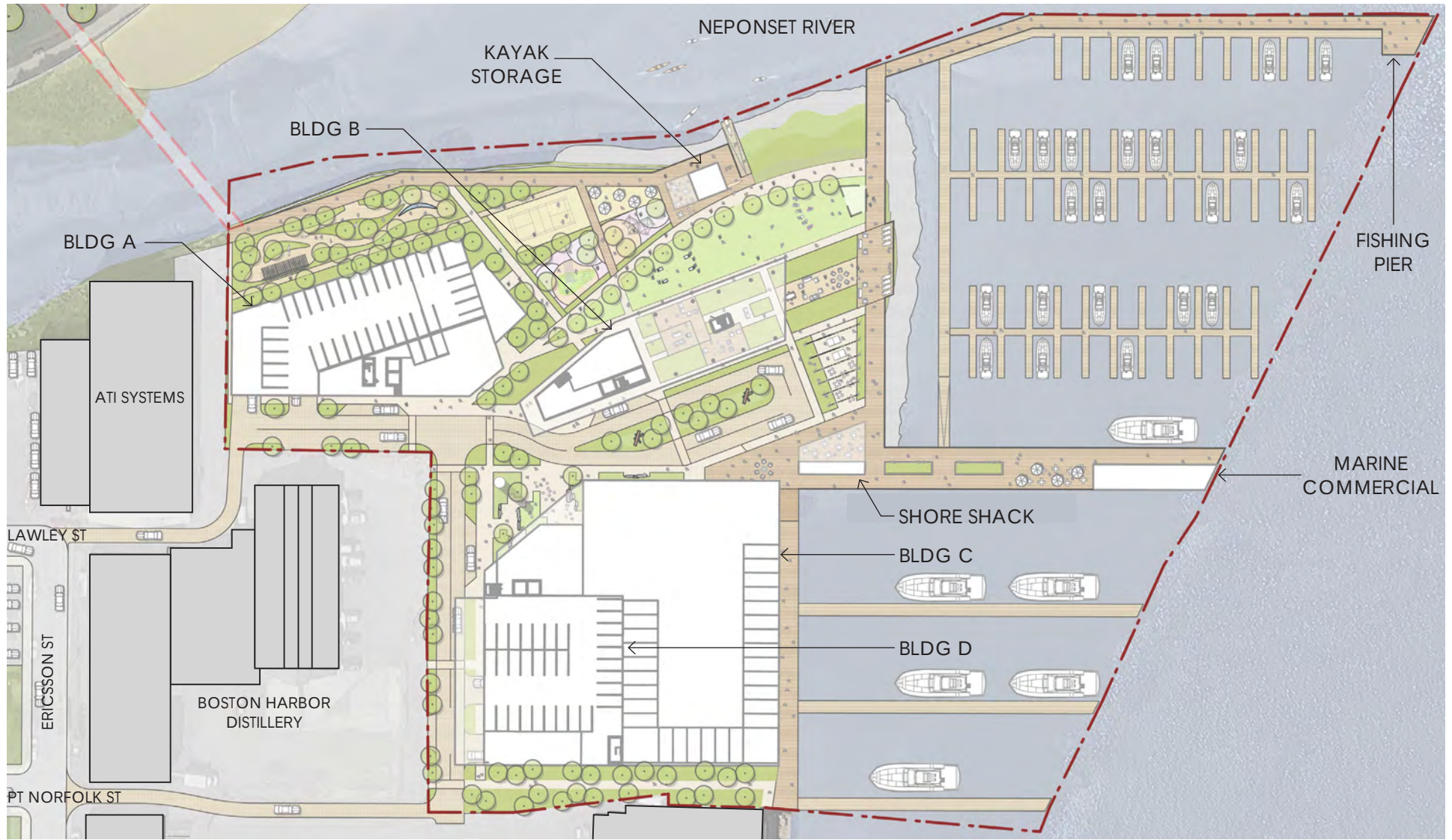


Figure 1.2
Project Context

**Neponset Wharf
Boston, Massachusetts**



EXISTING CONDITIONS



- Green Open Space
- Hardscape
- Boardwalk

SITE PLAN



EXISTING SITE PHOTOS

06/27/2017



EXISTING SITE PHOTOS

2

Urban Design

Introduction

This Chapter addresses the design of the Project, including significant public realm improvements.

2.1 Summary of Key Findings and Benefits

The Project will provide a range of public and community benefits to enrich the Port Norfolk neighborhood. Public benefits of the Project include the following:

- › The Project is designed and scaled to enhance the surrounding Port Norfolk neighborhood by complementing the existing, surrounding uses.
- › The Project will create a new publicly accessible Harborwalk and fishing pier to encourage local public use of and access to the shoreline.
- › The Project will provide over 50 percent of the Project land area, or approximately two acres of the Site, for publicly accessible outdoor space.
- › The Project will support a decade-long effort to revitalize and enhance the waterfront along Dorchester's southern and eastern waterways, and rehabilitate the shoreline conditions.
- › The Project will promote and enhance the existing water-dependent uses by reconfiguring the existing marina with new piers and floats, removing the existing wave fence, and constructing new and modern marina support facilities.
- › The Project will introduce a comprehensive pedestrian experience through an engaging landscape design that supports passive and active recreation.
- › The Project will improve accessibility and activation of the Port Norfolk waterfront through the provision of 28,000 square feet of continuous new Harborwalk along the Neponset River and Pine Neck Creek, a new public fishing pier, and the Shore Shack.

2.1.1 Neighborhood Context

The Port Norfolk neighborhood generally comprises single- and two-family residences along the interior street grid with a mix of multi-family and commercial structures dominating the waterfront parcels. Commercial buildings immediately south of the Project Site include remnants of the area's industrial past, most notably

the Putnam Nail Company building, built circa 1859. Many of these historic industrial buildings have been kept in working condition, and currently house offices, a spirits distillery, and winery. Along the water's edge, adjacent to the Site on the east is Venezia, a contemporary restaurant and banquet facility. To the southwest are additional industrial buildings built in the late twentieth century.

Currently, the Site itself contains primarily single-story, metal-clad (many deteriorated) buildings housing a boat dealership, boat storage, and boat maintenance facility.

2.2 Planning Principles and Design Goals

2.2.1 Site Planning

The Project is being planned with an emphasis on creating an active and engaging public realm. To achieve this goal, the Site's public realm has been divided into three distinct planning areas: the Wharf, the District, and the Open Green Space. Refer to Figure 2.1 for Site Planning Context.

"The Wharf" sustains and improves boating and associated supporting uses. A significant portion of the Project Site is waterfront area, so the movement of boats and access to slips and docks is critical to the Project. Proposed accessory landside uses within the Wharf will support and activate the Marina for customers and the public alike.

"The District" is the internal Site area that engages with the existing surrounding buildings and neighborhood. The District relates the Project back to the architecturally significant Boston Harbor Distillery building to the south, and manages the primary entrance for pedestrians and vehicles. Drop-off zones and building entries are intended to support a pattern of facades and sidewalks.

"The Open Green Space" departs from the hardscape and working areas of the District and Wharf and provides green spaces and pathways that open to the long views of the water and city skyline. The edges are defined by a new Harborwalk facing Tenen Beach, the marina, and expansive views out to Boston Harbor. Amenity spaces within the Open Green Space, including a tidal garden, would serve the entire neighborhood, allowing dog walking, kayaking, and passive recreation. The open space design will incorporate a range of strategies to address potential flooding and expected sea level rise. At the tip of the open space, a tidal garden will mitigate tidal surges during high tides and storm events. Raised topography will help protect all the Site edge conditions. At Site level, stormwater management and landscape treatment systems will incorporate appropriate plant selections to reduce runoff and improve water quality.

2.3 Building Design Concept and Development

2.3.1 Height and Massing

The four main buildings (Buildings A, B, C, and D) of the Project derive their massing and form from the varied, existing conditions proximate to the Site, including buildings of historical significance, as well as ACEC and Chapter 91 regulations. Other considerations include maximizing public access to the water's edge and open spaces, highlighting harbor and skyline views, optimizing solar exposure for both residential units and public spaces, easing the arrival and circulation of vehicles, and serving the marina and boathouse facility.

The ground floor uses within the Project Site consider the impacts of sea level rise and climate changes. All residential spaces and many other uses have been raised above the first two levels, well above the possible future flood elevations due to climate change. The ground floor of the buildings comprises two parking garages, lobbies, and a boathouse. Refer to Figure 2.2a-e for Project floor plans.

The site plan carefully relates to the existing neighborhood, with a strong desire to maximize public access to the water's edge and provide new public open space. The orientation of the buildings presents a grouping of smaller facades from the neighborhood viewpoint, to avoid blocking view corridors and sightlines to the water. Additionally, by orienting the buildings on their north/south axis, circulation is directed from arrival at The District through the Site toward the Open Green Space and the Wharf. Refer to Figure 2.3 for Project Massing.

The design approach for Buildings A, B, C, and D is summarized below:

Building A

Situated closest to the neighborhood, at the end of Lawley Street, Building A is envisioned as an eight-story building, with a two-level parking garage, one level of hotel use, and the remaining five floors made of residential condominiums. The parking podium supports bike storage. An amenity space on the roof consisting of a sun deck, fitness space, and potentially a pool. This amenity space overlooks the Open Green Space, Pine Neck Creek, and has the best views of Tenean Beach across the inlet. The Lawley Street façade is sensitive to the neighborhood, presenting a relatively small building face, broken up into a series of smaller planes to minimize massing. Building A also sits closest to the Boston Harbor Distillery (former Putnam Nail Company building), and it is one of three buildings that frame the urban nature of the District as the arrival space into the Site.

Refer to Figure 2.4a for an elevation view of Building A.

Building B

Building B is a five-story residential building adjacent to the District. Being closest to the water's edge, the majority of the building is elevated on piles, with the first residential level two stories above grade. This serves both to maintain continuity between the surrounding open spaces and as a resiliency measure for future sea level rise, as discussed in Chapter 3, *Sustainability/Green Building and Climate Change Resiliency*. A lobby, bike storage, and other amenity space activate the ground floor of the building. This building frames the transition between the District, the Open Green Space, and the Wharf. The space beneath the pile-supported portion of the building will be activated by a series of stepped decks or terraces. These decks will be available to the public as waterfront viewing areas, and will also help to manage the elevation change up to the building entry.

Refer to Figure 2.4b for an elevation view of Building B.

Buildings C and D

Buildings C and D are two structurally independent but adjacent buildings. Building C features a three-story podium with up to five levels of residential use above. Building D's podium is taken up entirely by the Boathouse. Building C's podium comprises a lobby, bike storage, and parking garage. The Boathouse will store larger boats (30-55 feet) on grade and smaller boats (25 feet) on stacked racks three-high with the capability to maneuver and store boats within the building envelope. Thus, Building C will present a working façade along The District and The Wharf, where people visiting the Site will be able to experience the active maritime uses essential to the Project from a safe distance. Above the Building C podium, a portion of the roof top overlooking the Wharf may be reserved for exterior deck space to support the restaurant/café in Building D. The remaining space in Building C is residential units with expansive views out to Dorchester Bay and the Boston skyline.

Refer to Figure 2.4c for an elevation view of Building C/D.

2.3.2 Character and Exterior Materials

The Port Norfolk neighborhood comprises a special mix of architectural style. Both the residential district made up of 19th century stick-framed structures and the 19th century industrial masonry buildings are notable for their continued use and occupation. It is important to note that Ericsson street separated the traditional residential area from the maritime-focused industrial structures. This co-existence has been present for centuries, where north of Ericsson has always contained the industrial port character to which the neighborhood owes its name. The port was—and to some extent, still is, a densely packed arrangement of large buildings supporting water-dependent uses.

The mixed-use buildings will pay homage to this past with a simple combination of masonry, glass, and metal panels, with textures and colors that complement the surrounding industrial structures. Portions of the facades and smaller structures on-site utilize a mix of warmer wood materials, both to respect the nature of living spaces and to reflect on a typical New England waterfront environment. The Boathouse is a more utilitarian structure made up of mostly metal panels with some form of translucent glazing. It will have large operable garage bays for moving boats into and out of the water and access back onto the landside. These bays will activate the facade and provide the public a view into the commercial operation of the space.

Refer to Figure 2.5 for Exterior Materials and 2.6a-c for Project Renderings.

2.3.3 Signage

All signage throughout the Project Site will be in keeping with the character of the neighborhood, and will complement the architectural identity of existing and proposed buildings. Signage will be thoughtfully located, designed to generate an inviting streetscape, and appropriately scaled for the location. Wayfinding signage will be incorporated as appropriate, to facilitate pedestrian access throughout the Site.

2.4 Public Realm Improvements

In contrast to the existing Site condition, which is dominated by asphalt and metal structures, the Project aims to create a sustainable, active, and connected environment to tie into the surrounding Port Norfolk neighborhood. Key aspects of the landscape design aim to provide areas for seamless integration by lifting Building B above grade to help create an active and connected ground plane for the Project Site.

Enhancements to the publicly accessible open spaces (or public realm) will encourage people to visit the Site and engage the local community, by creating an active and appealing public waterfront. A new Harborwalk will create a vibrant and attractive shoreline that provides strong connections through the Project Site. Additional amenities to encourage direct access to the waterfront may include city overlooks, a fishing pier, restrooms, and kayak storage facility and/or launch as described in Section 1.2.2, *Project Components/Uses*.

Beyond the waterfront improvements, the Project will seek to provide spaces for public engagement with well placed seating areas, dedicated spaces for families and pets, fitness stations, potential art installations, as well as flexible open spaces for temporary uses and general passive recreation.

The public realm will showcase sustainable technology and stormwater management. Native plantings and a tidal garden will serve aesthetic and ecological functions, working to create an environment welcoming of both people and wildlife.

Refer to Figure 2.7 for the Project's Open Space Plan.

2.4.1 Streetscape

Sidewalks are proposed along the access roadways, which will provide an inviting entry to the Site. Internal design of roadways, sidewalks, etc. (streetscape) design will provide for a pedestrian-friendly streetscape, integrating drop-off areas as a safe point of vehicular access without interrupting traffic flow. Each major point of entry to the buildings will be universally accessible. Street furnishings, such as benches or seating elements will serve as a resting place for pedestrians, street lighting to improve pedestrian safety, and bike racks to encourage alternate transportation options. Stormwater management measures will mitigate runoff and/or flooding. Plantings and street trees are proposed to maximize the Project landscape areas.

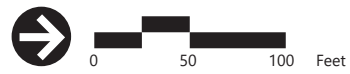
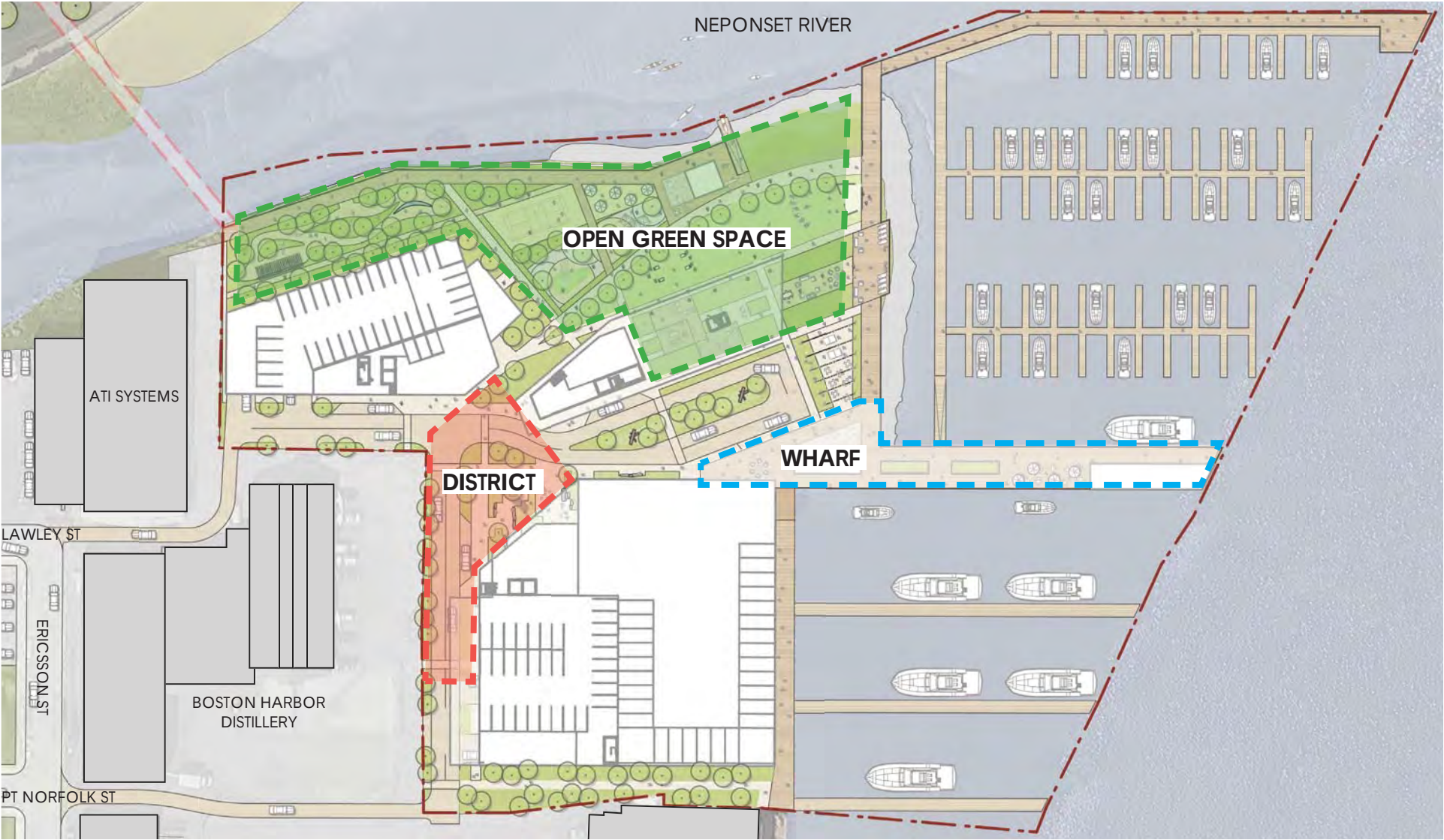
Refer to Figure 2.8 for the Streetscape Improvement Plan.

2.4.2 Pedestrian Access/Circulation and Accessibility

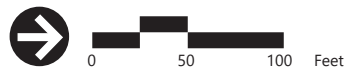
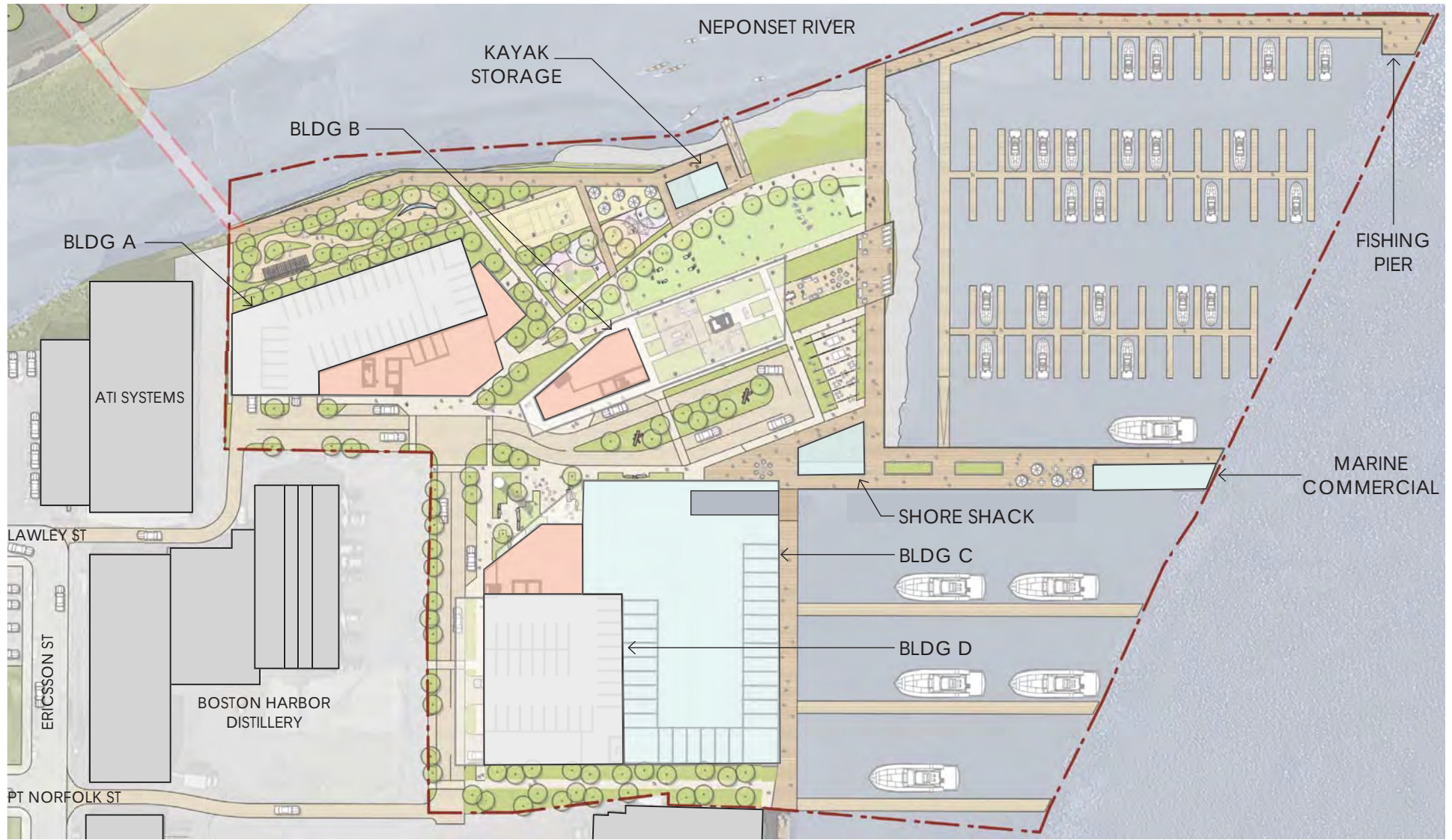
It is anticipated that the Project will be primarily accessed via foot from the nearby residences in the Port Norfolk neighborhood and surrounding community. The primary pedestrian connection envisioned is multiple accessible sidewalks along the entry points into the Site. Once within the Site, sidewalks and pathways will connect pedestrians to the outdoor public space and Harborwalk. Additionally, pedestrian bridge is under consideration which would connect Tenean Beach to the Harborwalk. The proposed landscaped open spaces will be a pedestrian-only area, open to the public, and located on the waterside of all buildings.

The Project will significantly improve accessibility around the Project Site. Vehicular access to the Project will be located on Ericsson Street. A one-way entry will align with Port Norfolk Street while the one-way exit will align with Lawley Street. Two parking garages and loading docks in Buildings A and D will be accessed along the new interior roadways. Curbside drop-off/pick-up will be provided at each building lobby and at the marina.

Refer to Figure 2.9 for the Pedestrian Access and Circulation Plan.



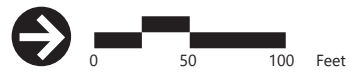
- Green Open Space
- Hardscape
- Boardwalk



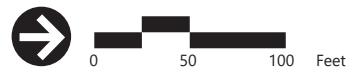
- Garage
- Lobby/Amenity
- Boathouse/Marina Support

FLOOR PLANS - GROUND LEVEL

NEPONSET WHARF, BOSTON, MA

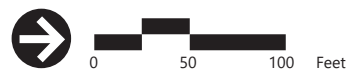


- Garage
- Boathouse
- Amenity

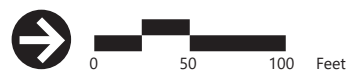


- Garage
- Residential
- Hotel

FLOOR PLANS - THIRD LEVEL

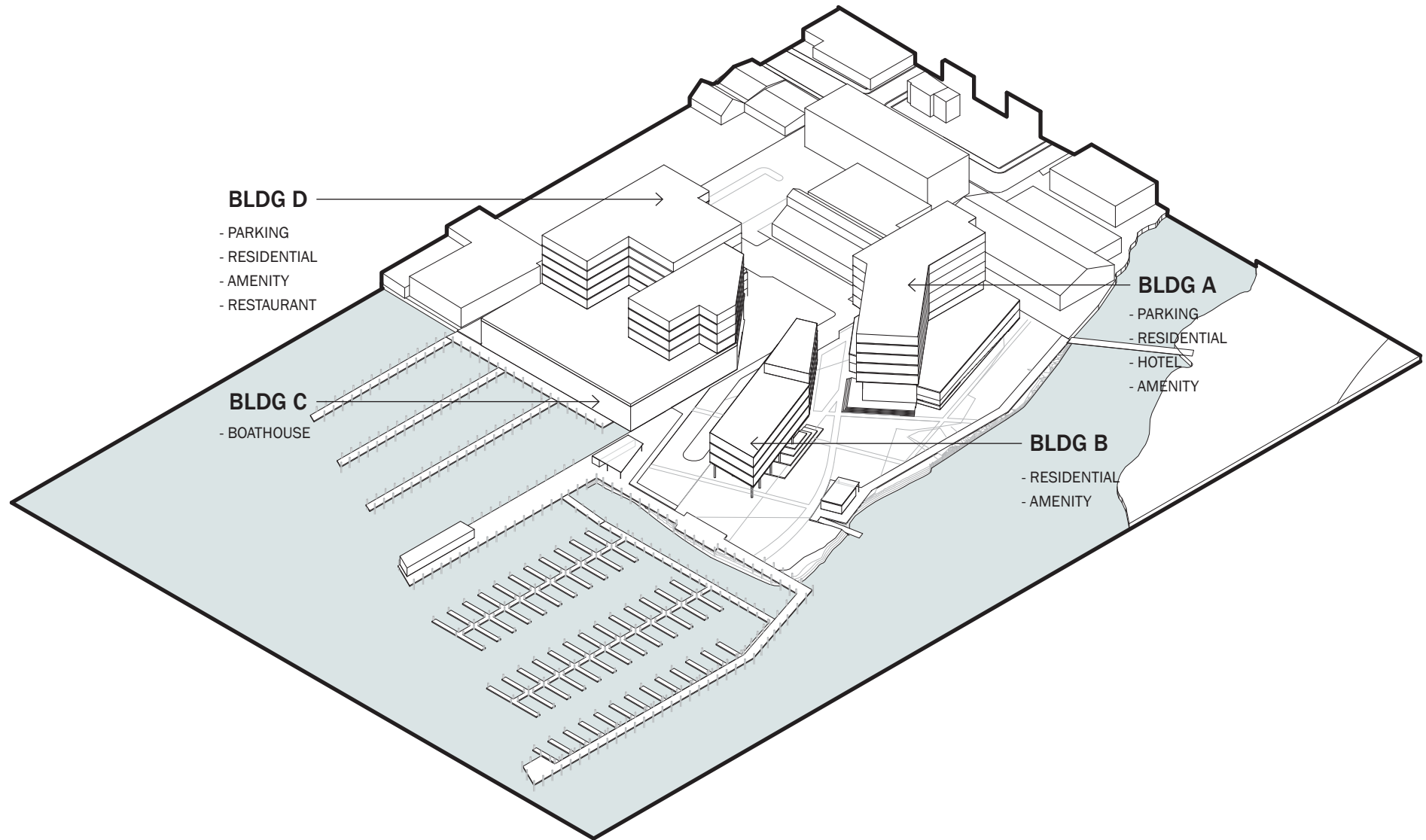


- Commercial
- Residential
- Hotel



- Commercial
- Residential
- Hotel

FLOOR PLANS - TYPICAL UPPER LEVEL
NEPONSET WHARF, BOSTON, MA



PRELIMINARY PROJECT MASSING

NEPONSET WHARF, BOSTON, MA



NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION





NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION





NORTH ELEVATION



EAST ELEVATION

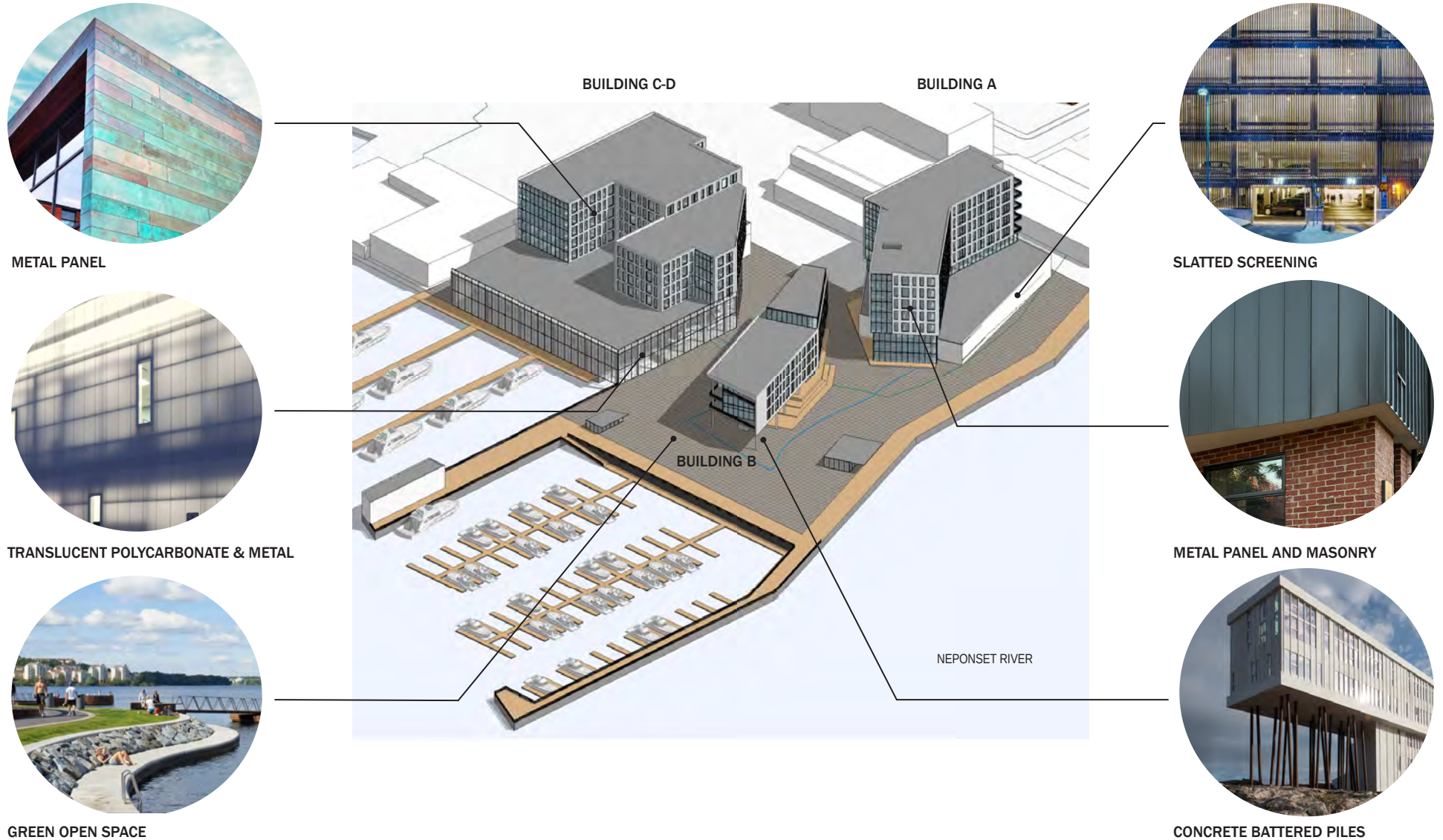


SOUTH ELEVATION



WEST ELEVATION





PRELIMINARY EXTERIOR MATERIALS

NEPONSET WHARF, BOSTON, MA



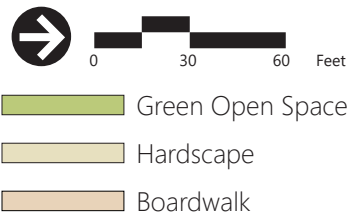
PROJECT RENDERING



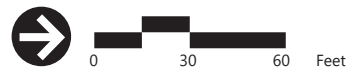
PROJECT RENDERING



PROJECT RENDERING

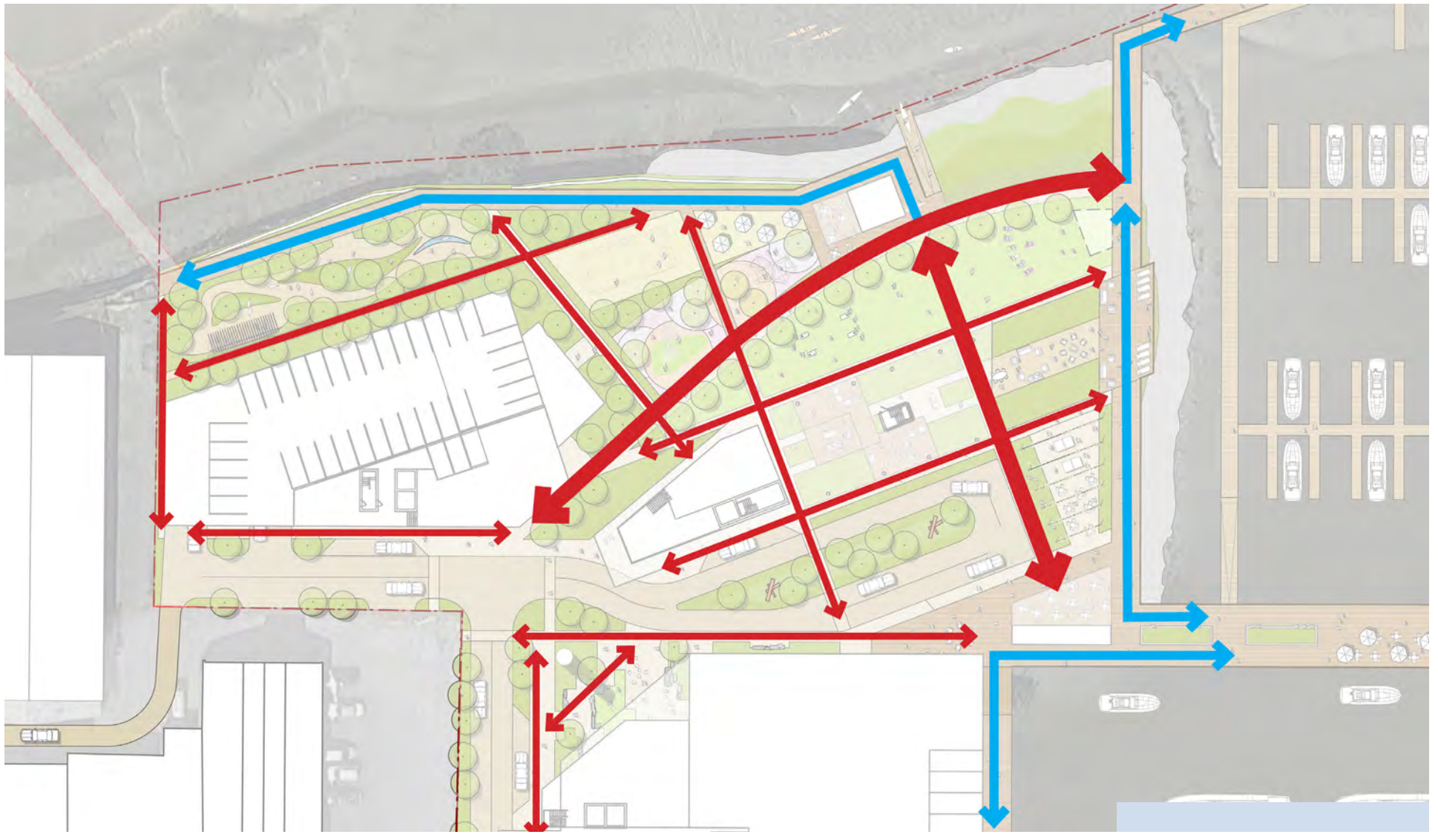


OPEN SPACE PLAN



- Green Open Space
- Hardscape
- Boardwalk

STREETScape IMPROVEMENT PLAN



Site Circulation

Harborwalk

PEDESTRIAN ACCESS AND CIRCULATION PLAN

NEPONSET WHARF, BOSTON, MA

3

Sustainability/Green Building and Climate Change Resiliency

Introduction

This Chapter provides preliminary information regarding the Project's sustainability/green building, and climate change preparedness and resiliency strategies, as applicable. It identifies the proposed U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED™) version 4 (v4) rating system level based on early design. This Chapter also discusses the approach to preparing for predicted climate change, in accordance with the BPDA Climate Change Resiliency and Preparedness Policy (Resiliency Policy). The required Climate Change Resiliency and Preparedness Checklist (Resiliency Checklist) has been completed for the Project and is provided in Appendix D.

3.1 Summary of Key Findings and Benefits

The key findings and benefits related to sustainability/green building design and climate change preparedness include the following Project attributes:

- › Reuses a previously developed site in an urban setting as opposed to an undeveloped space.
- › Complies with Article 37, Green Buildings of the Code by demonstrating compliance with the LEEDv4 program at the "Certifiable" level.
- › Utilizes sustainable design strategies and exceeds the minimum building energy code requirements, thereby maximizing the conservation of energy and water, and minimizing impacts to regional infrastructure and water resources.
- › Meets the Massachusetts Stretch Energy Code requirement to be 10 percent better than ASHRAE 90.1-2013.
- › Project intends to participate in local utility incentive for various energy conservation measures.
- › The site design will reduce vulnerability to rising sea levels and changes in intensity and frequency of storms, over the lifetime of the project, including by raising the finished floor elevation for occupiable spaces to 21 feet BCB for buildings in FEMA AE Zones, and 25 feet BCB for buildings in VE Zones.

3.2 Regulatory Context

The following section provides an overview of the state and local regulatory context related to energy efficiency and greenhouse gas (GHG) emissions.

3.2.1 Article 37 Green Buildings

Any project that is subject to Article 80, Large Project Review, is also subject to the requirements of Article 37. Through Article 37 – Green Buildings, the City of Boston encourages major building projects to be “planned, designed, constructed, and managed to minimize adverse environmental impacts; to conserve natural resources; to promote sustainable development; and to enhance the quality of life in Boston.”

Article 37 requires all projects over 50,000 gross square feet to meet LEED certification standards by either certifying the Project or demonstrating that the Project would meet the minimum requirements to achieve a LEED Certified level without registering the Project with the USGBC (LEED Certifiable). With the LEEDv4 rating system effective as of October 31, 2016, the BPDA requires initial Article 80 Large Project Review submissions to demonstrate that they will be LEED certifiable using LEEDv4.

Boston Green Building Credits

Appendix A of Article 37 lists “Boston Green Building Credits,” which are credits that may be included in the calculation toward achieving a LEEDv4 certifiable project. These credits, along with prerequisites, were developed by the City and are intended to address local issues unique to development within Boston. The credits include the following categories: Modern Grid; Historic Preservation; Groundwater Recharge; and Modern Mobility.

3.2.2 Stretch Energy Code

As part of the Green Communities Act of 2008, Massachusetts developed an optional building code, known as the “Stretch Energy Code,” that gives cities and towns the ability to choose stronger energy performance in buildings than otherwise required under the state building code. Codified by the Board of Building Regulations and Standards as 780 CMR Appendix 115.AA of the 8th edition Massachusetts Building Code, the Stretch Energy Code is an appendix to the Massachusetts building code, based on further amendments to the International Energy Conservation Code (IECC).

The Stretch Energy Code increases the energy efficiency code requirements for new construction and major residential renovations or additions in municipalities that adopt it. The Stretch Energy Code applies to both residential and commercial buildings and, specifically, to new commercial buildings over 5,000 square feet in

size, including multi-family residential buildings over three stories. The City of Boston adopted the Stretch Energy Code, which became mandatory on July 1, 2011.

Effective January 1, 2017, the Stretch Energy Code now requires 10 percent greater energy efficiency compared to the state's energy code (Base Code). This ENF/PNF assesses the energy performance of the Project using the Stretch Energy Code requirements in effect as of January 1, 2017 in order to demonstrate the Project can meet such requirements.

3.2.3 BPDA Climate Change Preparedness and Resiliency Policy

In conformance with the Mayor's 2011 Climate Action Leadership Committee's recommendations, the BPDA requires projects subject to Boston Zoning Article 80 Large Project Review to complete a Resiliency Checklist to assess potential adverse impacts that might arise under future climate conditions, and any project resiliency, preparedness, and/or mitigation measures identified early in the design stage. The Resiliency Checklist is reviewed by the Interagency Green Building Committee.

3.3 Sustainability/Green Building Design Approach

The Project is located on a previously developed site in the Port Norfolk neighborhood of the City of Boston.

To meet the requirements of Article 37, the following section describes how the Project complies with the LEED Building Design & Construction v4 criteria. The Project is currently tracking 45 points in the "yes" column, with 41 in the "?" or "maybe" column (i.e., to be further evaluated). The Project will demonstrate compliance with the LEED Certifiability Requirements. Further study over the coming weeks and months will guide final credit achievement.

Overview

Sustainability informs every design decision of the Project Team. Enduring and efficient buildings conserve embodied energy and preserve natural resources. The Project embraces the opportunity to positively influence the urban environment. Its urban location takes advantage of existing infrastructure while some access to public transit will reduce dependence on single-occupancy vehicle trips and minimize transportation impacts.

The LEED v4 for Building Design and Construction (BD&C) rating system tracks the sustainable features of a Project by achieving points in the following categories: Location & Transportation; Sustainable Sites; Water Efficiency; Energy and Atmosphere; Materials and Resources; Indoor Environmental Quality; and Innovation and Design Process. The Project Team is committed to an integrated design approach using the LEED BD&C v4 rating system as a guide and intends to meet

certifiability requirements as stated. above. This rating will meet or exceed Boston's Green Building standard.

Location and Transportation

The Location and Transportation credit category encourages development on previously developed land, thereby minimizing a building's impact on ecosystems and waterways, and on regionally appropriate landscaping, and smart transportation choices.

The Site has been previously developed, earning sensitive land protection. The Site is also located on a brownfield where soil or groundwater contamination has been identified, and where the local, state, or national authority (whichever has jurisdiction) requires its remediation. We will perform remediation to the satisfaction of that authority.

The Site is in a neighborhood with several amenities within 0.5 miles of the Project Site. The Project is providing bicycle facilities and showers for the occupants of the building, along with charging stations and low emitting dedicated parking spaces.

While the Site's location supports access to public transit (i.e., the Site is located within 0.5 miles of three bus lines), the available transit options are not within the distances required under LEED to achieve the related points.

Sustainable Sites

The development of sustainable sites is at the core of sustainable design. Sustainable Site design provides quality open space with active landscape elements that can both mitigate stormwater and provide shade and thermal comfort for the building occupants.

The Project will evaluate Low Impact Development (LID) Strategies to promote infiltration for quality stormwater management.

As required by LEED, the Project will create and implement an erosion and sedimentation control plan for all construction activities associated with the Project. The plan will conform to the erosion and sedimentation requirements of the 2012 U.S. Environmental Protection Agency (EPA) Construction General Permit (CGP) or local equivalent, whichever is more stringent.

The Project will complete and document a site survey or assessment that will demonstrate the relationships between the Site features and the topics of Topography, Hydrology, Climate, Vegetation, Soils, and Human use. The Project will evaluate compliance with light-pollution reduction from the buildings and the Site lighting.

Water Efficiency

Buildings are major users of our potable water supply. Conservation of water preserves a natural resource while reducing the amount of energy and chemicals

used for sewage treatment. The goal of the Water Efficiency credit category is to encourage smarter use of water, inside and out.

Water reduction is typically achieved through more efficient appliances, fixtures and fittings inside, and water-wise landscaping outside. To satisfy the requirements of the Indoor Water Use Reduction Prerequisite and credit, the Project will incorporate water conservation strategies that include low-flow plumbing fixtures for water closets and faucets. To satisfy the requirements of the Outdoor Water Use Reduction Prerequisite and credit, the landscape will be designed so it will not require a permanent irrigation system. Plant species will be native and adaptive.

The Project is targeting a 50-percent reduction from the baseline in indoor water use. All newly installed toilets, urinals, private lavatory faucets, kitchen sinks and showerheads that are eligible for labeling will be low-flow and have the Water Sense label.

The Project will also install permanent water meters that measure the total potable water use for the buildings and associated grounds, in addition to water meters for two or more of the following water sub-systems, as applicable to the project:

- › Irrigation;
- › Indoor plumbing fixtures and fittings;
- › Domestic hot water; and
- › Boiler.

Metering data will be compiled into monthly and annual summaries, and the resulting whole-project water usage data will be shared with USGBC.

Energy & Atmosphere

According to the U.S. Department of Energy, buildings use 39 percent of the energy and 74 percent of the electricity produced each year in the United States. The Energy and Atmosphere credit category encourages a wide variety of energy strategies: commissioning; energy use monitoring; efficient design and construction; efficient appliances, systems and lighting; the use of renewable and clean sources of energy, generated on-site or off-site; and other innovative practices.

Fundamental Commissioning and Enhanced Commissioning will be pursued for the project. Envelope Commissioning will also be evaluated as an alternative.

A whole-building energy simulation will be performed for the project demonstrating a minimum improvement of 10 percent for new construction per ANSI/ASHRAE/IESNA Standard 90.1–2010, Appendix G, with errata. The Project Team will analyze efficiency measures during the design process and account for the results in design decision making. The team will use energy simulation of efficiency opportunities, past energy simulation analyses for similar buildings. The Project will

also prove compliance with the Stretch Code which requires a minimum of 10 percent improvement over ASHRAE Standard 90.1–2013.

The Project will evaluate installing new or using existing building-level energy meters, or submeters that can be aggregated to provide building-level data representing total building energy consumption (electricity, natural gas, chilled water, steam, fuel oil, propane, biomass, etc.).

The Project will also evaluate incorporating on-site clean/renewable energy production. At minimum, the buildings will be constructed to allow for a future rooftop solar installation ("solar ready").

As required by LEED, the Project will not use chlorofluorocarbon (CFC)-based refrigerants in new heating, ventilating, air-conditioning, and refrigeration (HVAC&R) systems. The Project will target the use of refrigerants used in heating, ventilating, air-conditioning, and refrigeration (HVAC&R) equipment that minimize or eliminate the emission of compounds that contribute to ozone depletion and climate change.

The Proponent will contract to obtain 50 to 100 percent of the Project's energy from green power, carbon offsets, or renewable energy certificates (RECs).

Materials & Resources

During both construction and operations, buildings generate tremendous waste and use many materials and resources. The Materials & Resources credit category encourages the selection of sustainable materials, including those that are harvested and manufactured locally, contain high-recycled content, and are rapidly renewable. It also promotes the reduction of waste through building and material reuse, construction waste management, and ongoing recycling programs.

As required by LEED, the Project will provide dedicated areas accessible to waste haulers and building occupants for the collection and storage of recyclable materials for the entire building. Collection and storage areas may be separate locations. Recyclable materials will include mixed paper, corrugated cardboard, glass, plastics, and metals. The Project will also take appropriate measures for the safe collection, storage, and disposal of two of the following: batteries, mercury-containing lamps, and electronic waste.

To comply with both the prerequisite and credit requirements related to construction waste management, the Project will develop and implement a construction and demolition waste management plan that will identify at least five materials (both structural and nonstructural) targeted for diversion, and approximate a percentage of the overall Project waste that these materials represent. The Project will divert at least 75 percent of the total construction and demolition material; diverted materials must include at least four material streams. The Project will also consider completing a life-cycle assessment.

Careful material selection will be performed for the Project. Where possible the Project hopes to integrate products that have Environmental Product Declarations (EPD), Sourcing of raw materials and corporate sustainability reporting, and Material Ingredients disclosures.

Indoor Environmental Quality

The U.S. Environmental Protection Agency estimates that Americans spend about 90 percent of their day in-doors, where the air quality can be significantly worse than outside. The Indoor Environmental Quality credit category promotes strategies that can improve indoor air through low emitting materials selection and increased ventilation. It also promotes access to natural daylight and views.

As required by LEED, the Project will meet the minimum requirements of ASHRAE Standard 62.1–2010, Sections 4–7, Ventilation for Acceptable Indoor Air Quality (with errata), or a local equivalent, whichever is more stringent. Also, during building operations the Proponent will institute a No Smoking Policy to prohibit the use of all tobacco products inside the buildings and within 25 feet of building entrances, air intakes, and operable windows.

The Project will provide enhanced indoor air quality strategies. The Project will provide entryway systems, interior cross-contamination prevention, and filtration. The Project will target low emitting materials for all materials within the building interiors (defined as everything within the waterproofing membrane). This includes requirements for product manufacturing volatile organic compound (VOC) emissions in the indoor air and the VOC content of materials.

The Project will develop and implement an indoor air quality (IAQ) management plan for the construction and preoccupancy phases of the buildings, meeting or exceeding all applicable recommended control measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings under Construction, 2nd edition, 2007, ANSI/SMACNA 008–2008, Chapter 3. The Project will follow strict IAQ guidelines and protect absorptive materials stored on-site from moisture damage. The Project also will pursue either a building flush out or air quality testing.

The Project will meet the criteria for the thermal comfort criteria both for controllability and the ASHRAE 55 standards.

Daylight will be evaluated for energy efficiency opportunities and benefits for the occupants. The Project will achieve a direct line of sight to the outdoors for at least 75 percent of all regularly occupied floor area. View glazing in the contributing area will provide a clear image of the exterior, not obstructed by frits, fibers, patterned glazing, or added tints that distort color balance.

The Project will be evaluated for compliance with acoustical performance.

Innovation and Design Process

The Innovation in Design and Innovation in Operations credit categories provide additional points for projects that use new and innovative technologies, achieve performance well beyond what is required by LEED credits, or utilize green building strategies that are not specifically addressed elsewhere in LEED. This credit category also rewards projects for including a LEED Accredited Professional on the team to ensure a holistic, integrated approach to design, construction, operations and maintenance. The following five credits are being pursued and/or evaluated for the project:

- › Innovation in Design: Education & Outreach
- › Innovation in Design: Green Housekeeping
- › Innovation in Design: Integrated Pest Management
- › Innovation in Design: EP To be Determined
- › Innovation in Design: Modern Grid

Regional Priority

Up to 4 points are available to projects based on location.

- › Regional Priority: Indoor Water Use Reduction (yes)
- › Regional Priority: High Priority Site (yes)
- › Regional Priority: Optimize Energy (maybe)
- › Regional Priority: Renewable Energy (maybe)
- › Regional Priority: Rainwater Management (maybe/alternate)

3.4 Preliminary Energy Conservation/GHG Emissions Reduction Approach

Although the 9th edition of the building code has not yet been adopted, the design team chose to set energy reduction targets while keeping in mind the anticipated revisions to the Stretch Code.

The Project will target a 15 percent improvement in the proposed building performance rating for new buildings compared with the baseline building performance rating, which surpasses the 10 percent that will be required by the revised Stretch Code under Appendix AA 103.2. The baseline performance rating was calculated according to the building performance rating method in Appendix G of ANSI/ASHRAE/IESNA Standard 90.1-2013 (with errata but without addenda 1) through a computer simulation model which included every building on the Project Site.

3.4.1 Preliminary Energy Model

Appendix G of Standard 90.1-2013 requires that the energy analysis completed for the Project's performance rating method include all energy costs associated with the building project. The Project Team has also made provisions to comply with all the mandatory requirements of ASHRAE 90.1 – 2013, namely Sections 5.4, 6.4, 7.4, 8.4, 9.4, and 10.4), which is a prerequisite to complying via the modeling protocol for both energy code compliance and LEED certification.

The 15 percent energy reduction target will be met by evaluating materials to create a high performing building envelope, efficient mechanical and ventilation equipment, and a lighting design with high efficiency.

The whole building design as evaluated through the parameters listed below is projected to reduce energy usage from the baseline by 24.3 percent, or 716 tons of CO₂.

3.4.2 Energy Efficiency Measures

A list of inputs to the energy model has been provided in Table 3.1.

Thermal Envelope

The thermal envelope will be designed to exceed the prescriptive requirements for Climate Zone 5A (Boston) of ASHRAE 90.1-2013 in order to reduce solar gains and reduce heat loss. Proper envelope detailing will ensure the mechanical equipment is properly sized for the expected loads.

Roof insulation was evaluated to perform at R-35, or seven inches of rigid insulation for all space types. Soffit and exposed floors will also input with R-35 insulation. Both the roof and floor targets exceed the baseline of R-30.

Wall insulation will be applied continuously to reduce thermal bridging from material penetrations or high conductivity materials. Additional interior stud back up will enable batt insulation to supplement the exterior cladding. In this iteration of the energy model, R-20 continuous insulation was applied throughout the Project.

Glazing can be a source of both high solar gains and heat loss. The proposed glazing percentage of 50 percent exceeds the code baseline of 40 percent, but is mitigated through the use of high efficiency glazing and framing. A U-value of 0.36 exceeds the baseline of 0.42, and an SHGC of 0.32 reduces solar gain from the baseline value of 0.40.

Heating, Ventilating, and Air Conditioning

All mechanical systems will be selected to exceed the minimum efficiency requirements of ASHRAE 90.1-2013 Section 6. Heat recovery will be employed wherever possible to reduce the energy required to condition the ventilation air.

In the condominiums, high efficiency air cooled split DX systems with condensing combination gas fired boilers can be utilized to heat, cool, and provide domestic hot water. These units will reduce thermal energy losses by limiting circulation piping for a typical central hot water system. In addition, all domestic hot water fixtures can be specified to be at least 20 percent below the LEED baseline flowrates. Ventilation will be provided through central make up air units equipped with 75 percent efficient heat recovery wheels that preheat the entering outdoor air with toilet exhaust.

The hotel will be specified as high efficiency air cooled VRF systems. These systems have the capability to recover heat between the common refrigerant lines shared by evaporators attached to the same condenser. In addition, the all-electric condensers, which provide both heating and cooling, can have their demand offset by photovoltaics or cogeneration if desired. In addition, all domestic hot water fixtures will be specified to be at least 20 percent below the LEED baseline flowrates. Ventilation will be provided through central make up air units equipped with 75 percent efficient heat recovery wheels that preheat the entering outdoor air with toilet exhaust.

Both the Boathouse and any commercial spaces will be served by rooftop variable air volume units. These units will be equipped with gas heating coils, but the tenants will be responsible for distribution systems.

Interior and Exterior Lighting

All common and amenity spaces will be designed to include daylight photocell sensors wherever possible. Vacancy sensors will automatically shut off lighting to spaces within 20 minutes of occupants leaving a common space with enclosed partitions. In addition, high efficacy fixtures will be selected to reduce the connected load by at least 20 percent in common spaces.

Table 3.1: Energy Modeling Inputs

Input Summary	Baseline Case (ASHRAE 90.1-2013, App. G)	Proposed Design
Roof Insulation	R-30 c.i.	R-35 c.i. (all construction types)
Floor/Soffit Insulation	R-30 c.i.	R-35 c.i. (all construction types)
Wall Insulation Wall Construction Type	R-13 + R-10 c.i (Steel Framed) U-0.055	R-20 ci (Condo/Hotel) R-20 ci (Boathouse) R-20 ci (Retail)
Windows / Glazing for each building	U-0.42 (curtainwall/fixed) U-0.50 (operable windows) SHGC-0.40 (both)	U-0.36 SHGC-0.32

Window-to-Wall Ratio For Each Building: Vertical Vision Glazed Area : Total Vertical Opaque Wall Area + Total Vertical Vision Glazed Area	40%	50%
Temperature Setpoints	Cooling: 75°F Heating: 70°F	Cooling: 75°F Heating: 70°F
Corridor HVAC System	DX RTU with Gas-Fired Furnace	DX RTU with Gas-Fired Furnace and heat recovery (75% Eff.)
Corridor Cooling Efficiency	10.8 EER	12 EER
Corridor Heating Efficiency	80% Et Gas Fired Furnace	80% Et Gas Fired Furnace
Residential/Hotel HVAC System	PTAC - DX with hot water coil	PTAC with Condensing Combi Boilers (Condo) Air Cooled VRF with Heat Recovery (Hotel)
Residential/Hotel Cooling Efficiency	9.3 EER	12 EER (PTAC and VRF)
Residential/Hotel Heating Efficiency	82% Ec Boiler	95% Ec Boiler
Retail HVAC System	Air Cooled Packaged VAV w/ Hot Water Coils	Air Cooled Packaged VAV w/ Gas Fired Furnace
Retail Cooling Efficiency	12.2 EER	13 EER
Retail Heating Efficiency	82% Ec Boiler	95% Ec Boiler
Domestic Hot Water	80% Et Boiler	95% Et Boiler
Lighting LPD (Space by Space)	0.91 W/SF (Residential) 0.66 W/SF (Corridor) 0.69 W/SF (Stairwell) 1.44 W/SF (Retail) 0.19 W/SF (Parking) 0.42 (Mechanical)	0.73 W/SF (Residential) 0.45 W/SF (Corridor) 0.60 W/SF (Stairwell) 1.44 W/SF (Retail) 0.095 W/SF (Parking) 0.32 (Mechanical) *Vacancy sensors in common spaces
Appliances	Standard Efficiency	Energy Star Rated
Bathroom Fans	N/A - exhaust fans included in total system fan energy	N/A - exhaust fans included in total system fan energy
Elevators	same as proposed	TBD
Whole Building Energy Model Results - TBD		
Electricity Cost [kWh]	\$0.140	\$0.140
Natural Gas Cost	\$1.100	\$1.100
Total Energy Cost	TBD	TBD
	% Savings Over Baseline	TBD

3.4.3 Clean and Renewable Energy Analysis

The Proponent evaluated the following clean and renewable energy sources as described below: photovoltaic panels; combined heat and power; wind; transpired solar collectors; and solar thermal systems.

Photovoltaic Panels

There are many long-term benefits to photovoltaic panels beyond just reduced electric demand during times of production, or demand shaving when combined with battery storage. Solar energy provides an inexhaustible and import independent energy source. The roof and Site area, as well as open space by the Neponset River, enables the possibility of significant solar production. As the design progresses, the Project Team will evaluate the possibility of a solar photovoltaic array once there is more detail regarding the available roof area and a better understanding of possible incentive programs to offset initial investment.

Combined Heat and Power

Cogeneration, or combined heat and power, provides a unique opportunity to reduce electric demand and provide useful heating at the same time. Based on the projects network connection and constant base load, a unit between 75 and 100 kW would be anticipated. The base load includes, but is not limited to, lighting in corridors and stairwells, supply and exhaust fans for ventilation, and compressors to temper make up air. Thermal energy produced by the system, ie. lower temperature heat, would be utilized to offset the hotel's and/or residential domestic hot water load.

Wind

Port Norfolk is situated near the waterfront, which could enable small scale vertical axis wind turbines to be implemented. These units would not need to be oriented towards the prevailing winds. Further study on historical wind data and low speed energy production is still on going. Tradeoffs in terms of area allocation with photovoltaic panels and/or solar thermal collectors would need to be studied further.

Transpired Solar Collectors

The current design of the Project includes several areas with south facing walls. A potential design feature could include passive solar heating on the southern exposure that could be interlocked with the ventilation system. This would enable a low energy alternative to fossil fuel heating of the space during the winter months when solar energy could offset the space tempering requirements.

Solar Thermal

Available roof area could be utilized to offset domestic hot water loads for the hotel through the implementation of solar thermal collectors. Given the height of the buildings, it could be feasible to offset the domestic hot water load with a solar thermal array. Tradeoffs in terms of area allocation with photovoltaic panels and/or vertical axis wind turbines would need to be studied.

3.4.4 Energy Efficiency Assistance

The Proponent is aware that the Project's electrical and natural gas service providers may offer technical assistance and incentives for implementing energy efficiency measures. By working with these utilities throughout the design process, the Proponent will evaluate additional energy conservation strategies and, therefore, additional energy savings and associated GHG emissions reductions may be achieved.

Furthermore, the Proponent is committed to meeting the applicable requirements of the City of Boston Building Energy Reporting and Disclosure Ordinance, Section 7-2.2 of the Boston Ordinances, once the Project is in operation.

3.5 Climate Change Preparedness and Resiliency

Climate change is expected to result in rising sea levels, more frequent extreme storms, and more extreme weather events. The following sections describe how the predicted effects of climate change and potential resiliency measures have been considered in the design of the Project.

As required by the BPDA for all Large Project Review projects, the Proponent has considered anticipated changes in climate, which is reflected in the Resiliency Checklist provided in Appendix D.

3.5.1 Predicted Future Conditions

The Proponent has surveyed climate change publications and data to evaluate potential future conditions over the life of the Project including changes in sea level, temperature, precipitation, and flooding events.

Extreme Precipitation

The City of Boston is expected to experience less frequent, but more extreme precipitation events due to climate change. Increases in the intensity of precipitation events cause stormwater infrastructure to reach capacity faster with greater volumes of precipitation runoff. This results in inland flooding, where surface runoff cannot be conveyed to stormwater infrastructure properly. While inland flooding can damage buildings with floodwaters, stormwater overflows can cause combined sewer systems to reach capacity preventing the appropriate conveyance of wastewater from nearby

buildings, while sending diluted wastewater into local waterways. To prevent these deleterious consequences, stormwater infrastructure needs to be designed to accommodate the expected increases in precipitation intensity and stormwater management needs to be applied across the local watershed.

Extreme Weather Conditions

In addition to sea level rise and flooding, additional climate change issues predicted for Massachusetts, per the EEA's 2011 Massachusetts Climate Change Adaptation Report, include an increase in extreme weather events. These could consist of drought, tropical rainfall patterns (i.e., increased precipitation) and extreme heat and cold stretches, increases in the number of days with extreme heat (i.e., temperatures greater than 90°F and 100°F) and/or fewer days of snow yet increased winter precipitation. Proposed Project-related resiliency measures aimed at addressing these potential events are discussed below.

Sea Level Rise

The Site's location on the tidally-influenced Neponset River and Pine Neck Creek makes it vulnerable to changes in sea level, which is projected to rise substantially by the end of the century. This report uses sea level rise (SLR) projections from the City of Boston's June 2016 *Climate Change and Sea Level Rise Projections for Boston: The Boston Research Advisory Group Report (COB BRAG report)*.

In order to identify local vulnerabilities to climate change impacts, and reconcile the differences in projections from various sources, in 2015 the Boston Research Advisory Group (BRAG) was established. The BRAG was comprised of scientists and experts specializing in coastal storms, temperatures, precipitation and sea level rise who were overseen by a team from UMASS Boston. The group was charged with developing a consensus on the possible climate changes and SLR that the City of Boston will face in the future by 2030, 2050, 2070, and 2100. The COB BRAG report presents the *probabilities* of different amounts of sea level rise based on the following three greenhouse gas (GHG) emissions scenarios:

- › Low: Major Emissions Reductions – Carbon dioxide (CO₂) emissions stay the same as they are today and then decline after 2020.
- › Moderate: Moderate Emissions Reductions – CO₂ emissions increase slightly, and then begin declining after 2040.
- › High: Business As Usual– CO₂ emissions continue to increase, tripling by 2100.

Table 3-2 provides information on projected mean higher high water (MHHW) elevations¹ under SLR scenarios projected in the COB BRAG report in Boston City Base (BCB) datum.

¹ Current MHHW is measured at the Boston Tide Gage in Fort Point Channel and uses the 1992 baseline elevation of 4.77' NAVD88.

Table 3-2 Projected Mean Higher High Water at the Boston Tide Gage (BCB)

	1992	2030	2050	2070	2100
COB RCP Low^a	11.23	12.06	12.71	13.72	15.17
COB RCP Med^a	11.23	12.05	12.74	13.92	16.45
COB RCP High^a	11.23	11.59	12.02	12.81	14.51
COB RCP High^b	11.23	12.02	12.81	14.45	18.74

^a Projections are within the “likely range” with an approximately 17% likelihood.

^b Projection is within the “likely range” with an approximately 83% likelihood.

Source: City of Boston, 2016

As sea level rises, the Site will become increasingly vulnerable to flooding from both low probability events, such as the 1% annual chance (100 year) flood, and higher probability events, such as the 5% annual chance (20 year) flood. Large storm surges and associated flooding are expected to become more frequent over the next century. For example, with just 1.0 foot of SLR, the recurrence interval of the storm surge elevation currently associated with the 1% annual chance flood would likely be less than 15 years, and possibly less than two years.² With 0.66 to 0.98 feet of SLR, today’s 100-year flood event will have a return period of 30 years.³ Finally, climate models project more intense and longer-lasting tropical storms, with related increases in wind, rain, and storm surges, although not necessarily an increase in the number of these storms that make landfall. Increasing hurricane intensity coupled with sea-level rise leads to rising storm surge levels and increasing damage from hurricanes.⁴

Table 3-3 shows the projected BFEs of the 1% annual chance flood for the area surrounding the Site, which were estimated by adding various projections to the existing BFE.⁵ As shown in Table 3-3, the additive impacts of sea level rise and storm surges could result in base flood elevations between elevation 17.8 (Near-term) and elevation 28 (End of Century under a Business As Usual emissions scenario). Consistent with BPDA recommendations that projects are prepared for, at the least, the SLR levels in the Moderate Emissions Scenario, the Project has been designed to account for the likely range of the High Emissions Scenario in the design year of 2070 (***Bold/Italicized*** text).

² Kirshen, *et al.*, 2008.

³ Tebaldi *et al.*,

⁴ Karl *et al.*, 2009.

⁵ This method is less accurate than application of a hydrodynamic model such as the Boston Harbor Flood Risk Model (BH-FRM). The outputs of the BH-FRM are not currently available to the public for use at the Project site.

Table 3-3 Projected Base Flood Elevation (BCB)^a

	2030	2050	2070	2100
BFE 11 NAVD88^b (Zone AE)				
Low Emissions	17.8-18.3	18.2-18.9	18.7-19.9	19.4-21.4
Moderate Emissions	17.8-18.3	18.2-19.0	18.8-20.2	19.0-22.7
High Emissions	17.8-18.3	18.3-19.0	19.0-20.7	20.7-25.0
BFE 13 NAVD88^b (Zone AE)				
Low Emissions	19.8-20.3	20.2-20.9	20.7-21.9	21.4-23.4
Moderate Emissions	19.8-20.3	20.2-21.0	20.8-22.2	21.0-24.7
High Emissions	19.8-20.3	20.3-21.0	21.0-22.7	22.7-27.0
BFE 14 NAVD88^b (Zone VE)				
Low Emissions	20.8-21.3	21.2-21.9	21.7-22.9	22.4-24.4
Moderate Emissions	20.8-21.3	21.2-22.0	21.8-23.2	22.0-25.7
High Emissions	20.8-21.3	21.3-22.0	22.0-23.7	23.7-28.0

^a Projections are within the "likely range" with an approximately 83% to 17% likelihood.

^b Base Flood Elevations are in Feet above 1992 mean sea level. COB BRAG report elevations are in Feet above 2000 mean sea level. An adjustment of 0.098 feet was made to account for the difference in mean sea level between these two years.

3.5.2 Potential Resiliency Measures

Using an evidence-based design approach, the Proponent has identified building and site design resiliency measures to address the potential impacts described above.

Flooding

Several building and site design measures have been evaluated to make the Project more resilient to flooding events. Based on the comprehensive analysis of the Project vulnerabilities to flooding presented above, the finished floor elevation for occupied floors has been set at 21 feet BCB for buildings in FEMA AE Zones, and 25 feet BCB for buildings in VE Zones. The Project design will also elevate all critical infrastructure and equipment above the design flood elevation. This strategic design approach will maintain resiliency up to the 100-year flood event evaluated by FEMA with the projected Moderate to High Emission Sea Level Rise in 2070. Figure 3.2 depicts the FEMA 100-year floodplain elevation in the existing condition.

Extreme Heat Events

To address extreme weather conditions that the City of Boston is expected to experience in the future, the Project has been designed to withstand and mitigate the expected increase in extreme heat events. The evapotranspiration from the extensive Project open space will provide an enhanced pedestrian environment in extreme heat events. The Site design will maximize green space and focus on the creation of micro climates to enhance usability during all seasons.

The use of native plant materials will minimize the need for irrigation and maintenance, while providing habitat for local fauna. To accommodate any irrigation needs, the Project is evaluating the use of treated greywater and/or stormwater capture and storage as sources for water usage. Tree species will be evaluated to ensure high performance and functionality while requiring minimal irrigation and maintenance. The landscape design will explore the use of plant materials known for hydraulic redistribution to ensure survival in the multitude of conditions that will be encountered over the life of the Project Site. With the addition of ground level plantings, the Project will ultimately help to reduce heat island effect in the area exponentially from the current site condition (i.e., asphalt and steel rooftops).

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LEED v4 for BD+C: New Construction and Major Renovation Project Checklist

Project Name: Neponset Wharf
Date: 23-May-17

Y ? N

1	Credit	Integrative Process	1
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7	3	6	Location and Transportation	16
		Credit	LEED for Neighborhood Development Location	16
1		Credit	Sensitive Land Protection	1
2		Credit	High Priority Site	2
2	2	1	Surrounding Density and Diverse Uses	5
	5	Credit	Access to Quality Transit	5
1		Credit	Bicycle Facilities	1
	1	Credit	Reduced Parking Footprint	1
1		Credit	Green Vehicles	1

1	5	4	Sustainable Sites	10
Y		Prereq	Construction Activity Pollution Prevention	Required
1		Credit	Site Assessment	1
	2	Credit	Site Development - Protect or Restore Habitat	2
	1	Credit	Open Space	1
	1	2	Rainwater Management	3
	2	Credit	Heat Island Reduction	2
	1	Credit	Light Pollution Reduction	1

9	2	0	Water Efficiency	11
Y		Prereq	Outdoor Water Use Reduction	Required
Y		Prereq	Indoor Water Use Reduction	Required
Y		Prereq	Building-Level Water Metering	Required
2		Credit	Outdoor Water Use Reduction	2
6		Credit	Indoor Water Use Reduction	6
	2	Credit	Cooling Tower Water Use	2
1		Credit	Water Metering	1

12	14	7	Energy and Atmosphere	33
Y		Prereq	Fundamental Commissioning and Verification	Required
Y		Prereq	Minimum Energy Performance	Required
Y		Prereq	Building-Level Energy Metering	Required
Y		Prereq	Fundamental Refrigerant Management	Required
4	2	Credit	Enhanced Commissioning	6
7	4	7	Optimize Energy Performance	18
	1	Credit	Advanced Energy Metering	1
	2	Credit	Demand Response	2
	3	Credit	Renewable Energy Production	3
	1	Credit	Enhanced Refrigerant Management	1
1	1	Credit	Green Power and Carbon Offsets	2

2	5	6	Materials and Resources	13
Y		Prereq	Storage and Collection of Recyclables	Required
Y		Prereq	Construction and Demolition Waste Management Planning	Required
	3	2	Building Life-Cycle Impact Reduction	5
	1	1	Building Product Disclosure and Optimization - Environmental Product Declarations	2
		2	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
	1	1	Building Product Disclosure and Optimization - Material Ingredients	2
2		Credit	Construction and Demolition Waste Management	2

7	8	1	Indoor Environmental Quality	16
Y		Prereq	Minimum Indoor Air Quality Performance	Required
Y		Prereq	Environmental Tobacco Smoke Control	Required
2		Credit	Enhanced Indoor Air Quality Strategies	2
	2	1	Low-Emitting Materials	3
1		Credit	Construction Indoor Air Quality Management Plan	1
1	1	Credit	Indoor Air Quality Assessment	2
1		Credit	Thermal Comfort	1
1	1	Credit	Interior Lighting	2
	3	Credit	Daylight	3
1		Credit	Quality Views	1
	1	Credit	Acoustic Performance	1

5	1	0	Innovation	6
4	1	Credit	Education, Green Housekeeping, Modern Mobility, Integrated Pest, Modern and	5
1		Credit	LEED Accredited Professional	1

2	2	0	Regional Priority	4
1		Credit	Regional Priority: Indoor Water Use	1
1		Credit	Regional Priority: High Priority Site	1
	1	Credit	Regional Priority: Optimize Energy	1
	1	Credit	Regional Priority: Renewable	1

45	41	24	TOTALS	Possible Points: 110
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110				

Source: Soden Sustainability Consulting



Figure 3.1
LEED Checklist

Neponset Wharf
Boston, Massachusetts



Source: FIRM Panel 91 of 176, Map Revised March 16, 2016



Figure 3.2
FEMA 100-Year Floodplain

**Neponset Wharf
Boston, Massachusetts**

4

Environmental Protection

Introduction

This Chapter provides information on existing environmental conditions at the Project Site and the potential environmental impacts of the Project. The following sections assess potential Project-related impacts and identify the steps that have been or will be taken to avoid, minimize, and/or mitigate adverse impacts.

In compliance with City of Boston Article 80 and State MEPA requirements, this Project will address potential environmental impacts in the following categories:

- › *Shadow*
- › *Daylight*
- › *Solar Glare*
- › *Air Quality*
- › *Water Quality*
- › *Noise*
- › *Solid and Hazardous Materials*
- › *Groundwater*
- › *Geotechnical*
- › *Construction*
- › *Greenhouse Gases*

Where the current state of the design allows, this ENF/PNF provides a full assessment of Project impacts; however, where additional information is needed, initial assessments are provided with an outline of the more detailed analyses to be addressed in the DEIR/DPIR as public and agency input is received and design is further developed.

4.1 Summary of Key Findings and Benefits

The key findings and benefits related to environmental protection include:

- › Daylight – Due to the setback from the nearest public way, the Project will not significantly impact visible skydome.
- › Water Quality – The Project will improve water quality by collecting and treating stormwater runoff through a series of structural Best Management Practices, as well as reducing impervious area on the site by over 20,000 square feet. Impacts associated with water and sewage are discussed in Chapter 7, *Infrastructure*.
- › Noise – A preliminary assessment finds that the Project's operations will have no adverse noise impacts at nearby sensitive receptor locations and will not contribute to a violation of the City of Boston's noise standards.
- › Solid and Hazardous Materials – The environmental conditions on the Site will be addressed in accordance with the Massachusetts Contingency Plan,

as applicable. Existing solid and hazardous materials within the Site buildings will be removed and disposed of in accordance with applicable state and federal regulations.

- › Groundwater – Although the Project Site is not located within Boston’s Groundwater Conservation Overlay District, the Project will be designed to maintain current area groundwater levels.
- › Geotechnical – The surface treatments and building footprints that cover the Site are underlain by a granular fill which is approximately 13.5 to 18.5 feet in thickness. The fill material is underlain an intermittent organic soil deposit and a deposit of natural marine sand. Additional geotechnical assessment activities will be performed to evaluate foundation design considerations for the proposed structures.
- › Construction – Construction-related impacts are temporary in nature, and are typically related to truck traffic, dust, noise, solid waste and vibration. All temporary construction-related impacts associated with the Project will be minimized in coordination with the applicable agencies and through the completion of a Construction Management Plan.

Potential environmental impacts associated with shadow, solar glare, air quality, and Greenhouse Gasses (GHG) will be more fully described in the subsequent DEIR/DPIR filing.

4.2 Shadow

Due to the anticipated design of the proposed buildings, the seasonal nature of the waterside uses, and the orientation of the Site, new shadows are anticipated to be minimal and will not impact public spaces.

An analysis of the shading impact under the No-Build and Build Conditions may be required under Article 80, Large Project Review (Section 80B-2(c) of the Code) to identify potential shading impacts on public sidewalks, plazas, and open spaces. If required, a shading analysis will be prepared for the DEIR/DPIR in accordance with the requirements of Section B.2. of the BPDA Development Review Guidelines.

4.3 Daylight

There will be a minor increase in obstruction of the skydome of less than five percent due to the construction of the new buildings in the background of the existing structures, and due to the proximity of the existing buildings to the street. An increase in daylight obstruction is to be expected when replacing low-rise buildings with taller new development.

The following section describes the anticipated effect on daylight coverage at the Project Site as a result of the Project. An analysis of the percentage of skydome

obstructed under the No-Build and Build Conditions is a requirement of Article 80 (Section 80B-2(c)). The results of the analysis are presented in Figure 4.1.

4.3.1 Methodology

The daylight analysis was conducted using the BRADA program developed in 1985 by the Massachusetts Institute of Technology to estimate the pedestrian's view of the skydome, taking into account building massing and building materials used. The software approximates a pedestrian's view of a given site based on input parameters such as: location of viewpoint; length and height of buildings and the relative reflectivity of the building façades. The model typically uses the midpoint of an adjacent right-of-way or sidewalk as the analysis viewpoint. Based on these data, the model calculates the perceived skydome obstruction, and provides a graphic depicting the analysis conditions.

The model inputs used for the study presented herein were taken from a combination of the BPDA's City of Boston model data, an existing conditions survey, and schematic design plans prepared by the Project's architects. As described above, the BRADA software considers the relative reflectivity of building façades when calculating perceived daylight obstruction. Highly reflective materials are thought to reduce the perceived skydome obstruction when compared to non-reflective materials. For the purposes of this daylight analysis, the building façades are considered to be non-reflective, resulting in a conservative estimate of daylight obstruction.

4.3.2 Viewpoints

The following viewpoint was used for this daylight analysis:

- › **Ericsson Street** – This viewpoint is located on the centerline of the Project Site along Ericsson Street.

This point represents existing and proposed building façades when viewed from the adjacent public way.

4.3.3 Results

Daylight Existing/No-Build Conditions

Under the Existing/No-Build Condition, the existing buildings located between the Project Site and Ericsson Street obstruct 30.6 percent of the skydome. The skydome obstruction is generated in large part by the limited setback from the street.

Daylight Build Conditions

Under the Build Condition, there would be a minor increase in obstruction of the skydome to 34.0 percent due to the construction of the new buildings in the

background of the existing structures. This effect is to be expected when replacing low-rise buildings with taller new development. The increased height allows the Project to retain substantial public open spaces while meeting the necessary density required to make the Project feasible.

4.4 Solar Glare

Impacts of solar glare on neighbors and adjacent roadways are not anticipated to the proposed building design. The design does not include large areas of reflective glass or other materials that would result in solar impacts. Large glazed surfaces are oriented towards the water and away from major roads.

The City of Boston BPDA Development Review Guidelines require projects undergoing Large Project Review to analyze the potential impacts from solar glare if there is a potential for visual impairment or discomfort due to reflective spot glare on:

- › Potentially affected streets;
- › Public open spaces; and
- › Pedestrian areas.

Furthermore, projects must consider the potential for solar heat buildup in any nearby buildings receiving reflective sunlight from the Project, if applicable.

4.5 Air Quality

This section presents an overview of and the results for the preliminary mobile source assessment conducted for the ENF/PNF filing of the Project. The purpose of the air quality assessment is to demonstrate that the Project satisfies applicable regulatory requirements, and whether it complies with the 1990 Clean Air Act Amendments (CAAA) following the local and the U.S. Environmental Protection Agency (EPA) policies and procedures.

The air quality assessment conducted for this Project includes a qualitative localized (microscale), or “hot spot”, analysis of carbon monoxide (CO) concentrations in accordance with BPDA screening guidance. The microscale analysis evaluated potential CO impacts from vehicles traveling through congested intersections in the project area under the existing conditions, as well as considering site-specific impacts under the future conditions. The results from this evaluation are subject to the National Ambient Air Quality Standards (NAAQS). Finally, the sections below discuss the future requirements to be analyzed in the DEIR/DPIR filing.

4.5.1 Background

The CAAA resulted in states being divided into attainment and non-attainment areas, with classifications based upon the severity of their air quality problems. Air quality control regions are classified and divided into one of three categories: attainment, non-attainment, and maintenance areas, depending upon air quality data and ambient concentrations of pollutants. Attainment areas are regions where ambient concentrations of a pollutant are below the respective NAAQS; non-attainment areas are those where concentrations exceed the NAAQS. A maintenance area is an area that used to be non-attainment, but has demonstrated that the air quality has improved to attainment. After 20 years of clean air quality, maintenance areas can be re-designated to attainment.

The Project is located in the Port Norfolk neighborhood within the City of Boston, Suffolk County, Massachusetts, which under the EPA designation is a CO Maintenance area. Projects located in a CO maintenance area are required to evaluate their CO concentrations with the NAAQS, as has been done for this Project. The City of Boston is in attainment for the remainder of the criteria pollutants.

4.5.2 Air Quality Standards

The EPA has established the NAAQS to protect the public health. Massachusetts has adopted similar standards as those set by the EPA for CO. Table 4-1 presents the NAAQS for carbon monoxide.

Table 4-1 National Ambient Air Quality Standards

Pollutant	Primary Standards		
	Level	Averaging Time	Form
Carbon Monoxide	9 ppm (10 mg/m ³)	8-hour	Not to be exceeded more than once per year
	35 ppm (40 mg/m ³)	1-hour	

DEP maintains a network of air quality monitors to measure background CO concentrations. Background concentrations are ambient pollution levels from all stationary, mobile, and area sources. Background CO concentrations are determined by choosing the maximum of the second-highest annual values from the previous three years. Looking at the air quality monitor closest to the project site (Von Hillern) for the years 2013-2015, the CO background values are 1.8 ppm for the 1-hour averaging time and 1.2 ppm for the 8-hour averaging time. These values are much less than the 1-hour and 8-hour NAAQS. The background values are presented in Table 4-2.

Table 4-2 Air Quality Background Concentrations

Pollutant	Background Concentrations		NAAQS	
	Level	Averaging Time	Level	Averaging Time
Carbon	1.2 ppm	8-hour	9 ppm	8-hour
Monoxide	1.8 ppm	1-hour	35 ppm	1-hour

Monitoring Location: Von Hillern, Boston, MA. Years 2013-2015.

The potential CO concentrations from motor vehicle traffic related to the Project will be considered in conjunction with these background concentrations to demonstrate that the Project will comply with the NAAQS Standards.

4.5.3 BPDA Development Review Guidelines

The BPDA Development Review Guidelines require “a microscale analysis predicting localized carbon monoxide concentrations should be performed, including identification of any locations projected to exceed the National or Massachusetts Ambient Air Quality Standards, for projects in which:

- › Project traffic would impact intersections or roadway links currently operating at Level of Service (LOS) D, E, or F or would cause LOS to decline to D, E, or F; or
- › Project traffic would increase traffic volumes on nearby roadways by 10 percent or more (unless the increase in traffic volume is less than 100 vehicles per hour); or
- › The Project will generate 3,000 or more new average daily trips on roadways providing access to a single location.”

4.5.4 Microscale Screening Analysis

The objective of the microscale analysis will be to determine if the Project will interfere with the attainment or maintenance of the Massachusetts and/or National Ambient Air Quality Standards established by the Federal Clean Air Act Amendments. Massachusetts has developed a State Implementation Plan (SIP) to demonstrate compliance with the CAAA. The SIP contains project-level criteria that require that an adequate air quality study be prepared in consultation with the air quality regulatory agencies and that the results of the study demonstrate that:

- › Proposed projects will not result in new CO violations, and
- › Proposed projects will not result in any existing CO violations being increased.

It is anticipated that a qualitative or quantitative assessment of the air quality impacts of the Project will be conducted once the traffic impacts are determined. If

any CO violations are predicted, mitigation measures will be developed and tested to meet the SIP and CAAA criteria.

4.5.5 Mesoscale Air Quality Analysis

A mesoscale air quality analysis may be required if the Project is expected to be of regional significance. The BPDA requires a mesoscale air quality analysis if a project produces 10,000 or more vehicle trips per day. As described in Chapter 5, Transportation, the Project is anticipated to generate fewer than 2,000 vehicle trips per day, therefore this analysis is not required for the BPDA. MEPA requires that all projects filing an EIR assess GHG and Ozone Precursors (for projects in an Ozone non-attainment area) in a mesoscale analysis. Accordingly, a quantitative mesoscale air quality analysis consistent with EPA and DEP guidelines will be conducted for the DEIR/DPIR filing.

4.6 Noise

This section presents the results of a preliminary noise assessment conducted for the ENF/PNF filing of the Project. Noise associated with the Project's activities, including mechanical equipment and loading activities, has been evaluated to assess the potential for impact to nearby receptors. The purpose of the noise assessment is to demonstrate that the Project would comply with the City of Boston's noise regulations. Since the Project would introduce new residences to the Project Site, ambient noise levels have been evaluated to determine conformance with the Interior Design Noise Level established by the U.S. Department of Housing and Urban Development (HUD). This section presents background on how noise is described, applicable noise criteria, analysis methodology, and the preliminary findings of the assessment. Existing noise measurements will be conducted for the DEIR/DPIR filing and the noise impact assessment results will be updated accordingly.

4.6.1 Fundamentals of Noise

Noise is defined as unwanted or excessive sound. Sound becomes unwanted when it interferes with normal activities such as sleep, communication, work, or recreation. How people perceive sound depends on several measurable physical characteristics, which include the following:

- › Level - Sound level is based on the change in pressure and is related to the intensity or intensity.
- › Frequency - Sounds are comprised of acoustic energy distributed over a range of frequencies. Acoustic frequencies, commonly referred to as tone or pitch, are typically measured in Hertz. Pure tones have a concentration of sound in a narrow frequency range.

Sound levels are most often measured on a logarithmic scale of decibels (dB). The decibel scale compresses the audible acoustic pressure levels which can vary from the threshold of hearing (zero dB) to the threshold of pain (120 dB). Because sound levels are measured in dB, the addition of two sound levels is not linear. Adding two equal sound levels creates a 3 dB increase in the overall level. Research indicates the following general relationships between sound level and human perception:

- › A 3 dB increase is a doubling of acoustic energy and is the threshold of perceptibility to the average person.
- › A 10 dB increase is a tenfold increase in acoustic energy but is perceived as a doubling in loudness to the average person.

The human ear does not perceive sound levels from each frequency as equally loud. To compensate for this phenomenon in perception, a frequency filter known as A-weighted [dB(A)] is used to evaluate environmental noise levels. Table 4-3 presents a list of common outdoor and indoor sound levels.

Table 4-3 Common Outdoor and Indoor Sound Levels

Outdoor Sound Levels	Sound Pressure (μ Pa)*		Sound Level dB(A)**	Indoor Sound Levels
	6,324,555	-	110	Rock Band at 5 m
Jet Over Flight at 300 m		-	105	
	2,000,000	-	100	Inside New York Subway Train
Gas Lawn Mower at 1 m		-	95	
	632,456	-	90	Food Blender at 1 m
Diesel Truck at 15 m		-	85	
Noisy Urban Area—Daytime	200,000	-	80	Garbage Disposal at 1 m
		-	75	Shouting at 1 m
Gas Lawn Mower at 30 m	63,246	-	70	Vacuum Cleaner at 3 m
Suburban Commercial Area		-	65	Normal Speech at 1 m
	20,000	-	60	
Quiet Urban Area—Daytime		-	55	Quiet Conversation at 1 m
	6,325	-	50	Dishwasher Next Room
Quiet Urban Area—Nighttime		-	45	
	2,000	-	40	Empty Theater or Library
Quiet Suburb—Nighttime		-	35	
	632	-	30	Quiet Bedroom at Night
Quiet Rural Area—Nighttime		-	25	Empty Concert Hall
Rustling Leaves	200	-	20	
		-	15	Broadcast and Recording Studios
	63	-	10	
		-	5	
Reference Pressure Level	20	-	0	Threshold of Hearing

Source: *Highway Noise Fundamentals*. Federal Highway Administration, September 1980.

- * μPA – MicroPascals, which describe pressure. The pressure level is what sound level monitors measure.
- ** dB(A) – A-weighted decibels, which describe pressure logarithmically with respect to 20 μPa (the reference pressure level).

A variety of sound level descriptors can be used for environmental noise analyses. These descriptors relate to the way sound varies in level over time. The following is a list of common sound level descriptors:

- › L90 is the sound level which is exceeded for 90 percent of the time over the course of a particular period. The L90 is generally considered to be representative of the ambient or background sound level.
- › Leq is a single value that represents the same acoustic energy that exists over a period of time with fluctuating levels. The Leq takes into account how loud noise events are during the period, how long they last, and how many times they occur.
- › Ldn is a single value that represents the same acoustic energy that exists over a 24-hour period with a 10 decibel penalty for noise generated at night (10:00 PM to 7:00 AM), due to the increased sensitivity to noise at night.

4.6.2 Noise Impact Criteria

Under Chapter 40, Section 21 of the General Laws of the Commonwealth of Massachusetts and the City of Boston Code, Ordinances, Title 7, Section 50, the Air Pollution Control Commission of the City of Boston has adopted Regulations for the Control of Noise in the City of Boston. These regulations prohibit persons from creating or causing to be emitted noise that exceeds maximum limits based on the type of zoning district where the sound is received. In the context of this ENF/PNF filing, exceeding these noise limits would be considered an adverse impact and mitigation would be needed. Table 4-4 summarizes the noise standards for the various types of zoning districts covered by the ordinance.

The maximum noise level received in a residential zoning district shall not exceed 60 dB(A) for daytime periods (7:00 AM to 6:00 PM) and 50 dB(A) for nighttime conditions (6:00 PM to 7:00 AM). Maximum noise level limits for business and industrial zoning districts are higher.

Table 4-4 City of Boston Zoning District Noise Standards, dB(A)

Land Use Zone District	Daytime (7:00 AM – 6:00 PM)	All Other Times (6:00 PM – 7:00 AM)
Residential	60	50
Residential/Industrial	65	55
Business	65	65
Industrial	70	70

Source: Regulations for the Control of Noise in the *City of Boston, Air Pollution Control Commission*.

The BPDA Design Review Guidelines (April 2006) indicate that residential projects may need to demonstrate conformance with the HUD's interior noise goal of 45 dB(A) Ldn. HUD has determined that this interior noise goal is necessary to provide suitable living environments.

4.6.3 Noise Assessment Methodology

The methodology used to assess noise impact includes identifying noise-sensitive receptor locations in the study area, characterizing the existing noise conditions, assessing the proposed Project's mechanical equipment and loading/service activities according to applicable criteria, and evaluating the need to reduce noise levels to comply with the noise limits.

Noise Receptors

The City of Boston's noise regulations limit noise generated by the Project's mechanical equipment and loading/service activities within nearby residential, business, and industrial zoning districts. Because the City of Boston noise limits are generally evaluated at exterior locations with frequent human use, receptors are typically located at the closest residential property line.

The nearest residences to the Project site are approximately 200 feet or farther away, on Ericsson Street, Lawley Street, and Port Norfolk Street. Other properties in the study area are primarily industrial and businesses, such as the Boston Harbor Distillery, Boston Winery, Venezia restaurant, Port Norfolk Yacht Club, and Sullivan and McLaughlin.

4.6.4 Existing Noise Conditions

The predominant existing noise sources near the proposed Project include I-93 approximately 550 feet away, the MBTA Red Line and commuter rail line approximately 850 feet away, traffic on local roadways, and boat loading and unloading activities at the current MarineMax Russo Boston facility. Based on the Federal Transit Administration guidance manual¹, ambient noise levels at the Project Site are estimated to be 55 dB(A) Leq during the day, 45 dB(A) Leq during the night, and 55 dB(A) Ldn at receptors 400 to 800 feet away from interstate highways.

There are buildings intervening between the closest residences on Ericsson Street and the Project Site, I-93, and the MBTA rail corridor. These reduce existing noise from the predominant existing noise sources.

¹ Federal Transit Administration "Transit Noise and Vibration Impact Assessment", Report FTA-VA-90-1003-06, May, 2006.

4.6.5 Future Noise Conditions

This section evaluates the future noise conditions at nearby residential receptors, and assesses potential noise impact associated with the Project's proposed mechanical equipment and loading activities. For residences that would be introduced by the Project, exterior noise levels have been estimated and conformance with HUD's Interior Design Noise Level has been evaluated.

Mechanical Equipment

The Project is in the early stages of design, so the specific mechanical equipment has not been selected at the time of this noise assessment. Based on preliminary design plans, the anticipated mechanical equipment for the Project is expected to include rooftop heating, ventilation, and air-conditioning equipment.

All mechanical equipment would be 250 feet or farther away from the closest residences, and there would be intervening buildings between these noise sources and the receptors. At this distance and with intervening buildings, typical noise generated by rooftop mechanical equipment would be substantially below the City of Boston noise limits, and there would be no noise impact expected.

Service and Loading Activities

The Project's activities would include loading and unloading boats, operations similar to those at MarineMax Russo Boston currently, except that the relocated boat house facility would keep most loading activities indoors, instead of outdoors today. Therefore, noise generated by the Project's loading activities would be expected to comply with the City of Boston noise limits, and there would be no noise impact expected.

Other loading activities associated with the commercial marine operation, would be located at truck docks at the ground level of the proposed buildings. These loading dock activities will be managed so that service and loading operations do not impact traffic circulation on the adjacent local roadways. Because loading and service activities will be enclosed or shielded by the proposed buildings and operations will be managed, noise impacts to nearby sensitive receptor locations are expected to be negligible.

Interior Design Noise Level

Existing noise levels at the Project Site are estimated to be 55 dB(A) Ldn due primarily to noise from I-93 and the MBTA rail corridor. Again the Project is in the early stages of design, so the specific building materials and types of windows are not known at this time. The Project would not affect the existing noise exposure from I-93 and the MBTA rail corridor. Standard building practices typically provide a minimum of 20 dB(A) of outdoor-to-indoor sound attenuation. Therefore, interior

noise levels would be below the 45 dB(A) HUD standard, and new residences would be in a suitable noise environment.

4.6.6 Conclusion of Preliminary Noise Impact Assessment

The noise assessment identifies noise-sensitive receptors in the study area, estimates existing noise conditions, evaluates future noise conditions with the proposed Project, assesses the potential for noise impact at existing residential receptors according to the City of Boston's noise regulations, and evaluates conformance with HUD's Interior Design Noise Level standard for new residences. The results show that noise-generated by the Project, including mechanical equipment and boat loading and unloading activities would not exceed Boston noise regulations, so there would be no adverse noise impact and no need for mitigation. The assessment also determined that exterior noise levels are estimated to be 55 dB(A) Ldn and that HUD's Interior Design Noise Level standard would be met with standard building practices.

4.7 Solid and Hazardous Materials

Since the 1950's, the Site has been primarily used as a marina for recreational boats and yachts. However, as discussed in Chapter 6, *Historic Resources*, prior to that time, the Site was occupied by the Putnam Nail Company and earlier by a shipyard, both industrial uses.

The storage and use of petroleum products have been documented at the Site since the late nineteenth century. Currently, approximately 8,000-gallons of gasoline and diesel are stored within double-walled underground storage tanks (USTs) that are located at the northeastern portion of the Site. The USTs were installed in 1989 with interstitial monitoring, and are operated and maintained by the operator of the marina.

As a result of the historical Site usage, which includes the storage of petroleum in former USTs that were previously removed from the subject Site, releases of petroleum hydrocarbons, petroleum related constituents and non-aqueous phase liquid (NAPL) were identified at the northeastern portion of the Project Site and reported to the DEP. These releases are collectively being managed under Release Tracking Number (RTN) 3-12654, which was assigned by the DEP in 1995. Response actions associated with RTN 3-12654 are being conducted under a Phase V Remedy Operation Status (ROS) in accordance with Section 40.0893 of the Massachusetts Contingency Plan (MCP). Periodic groundwater testing is being performed at the RTN 3-12654 site, the most recent of which indicate that concentrations of the contaminants of concern are below the applicable MCP risk characterization standards established by the DEP. Additional assessment and remediation (if necessary) will be performed to facilitate regulatory MCP closure of the release.

Prior to construction of the Project, additional assessment will be performed to pre-characterize in-situ soils for off-site removal, and groundwater for potential off-site discharge. In addition, the existing buildings will be assessed for the potential presence of asbestos, lead paint, or other hazardous materials. Appropriately licensed professionals will prepare work plans to identify the means and methods for the safe removal and legal disposal or recycling of these materials, if found.

Abatement and disposal of hazardous materials (or hazardous waste) will be performed under the provisions of MGL c21 /2C, OSHA, and the MCP, by specialty contractors experienced and licensed in handling materials of this nature. The soils transported off-site will be legally disposed in accordance with the MCP and other DEP and federal regulatory requirements. Disposal of materials will be tracked via Material Shipping Records, Bills of Lading and/or other methods, as required to ensure their proper and legal disposal. If required, the off-site discharge of groundwater will be performed in accordance the EPA National Pollution Discharge Elimination System (NPDES) permits issued to the Commonwealth as well as DEP and municipal regulations.

4.8 Groundwater

From 1995 through April 2017, a series of groundwater monitoring events were performed by environmental consultants associated with the MCP release at the Project Site. Groundwater levels that were observed in the monitoring wells installed at the Project Site during these events ranged from 6.2 to 11.2 feet below ground surface.

Localized trapped groundwater and/or surface water runoff may accumulate or be encountered during preparation of the foundation bearing surface after periods of heavy precipitation. If required, the off-site discharge of groundwater or accumulated surface water will be performed in accordance with the EPA NPDES permits issued to the Commonwealth of Massachusetts as well as DEP and municipal regulations pertaining to the off-site discharge of groundwater into surface water bodies.

4.9 Geotechnical

Based upon a limited environmental subsurface exploration program performed at the Project Site, the following are inferred subsurface conditions underlying the site:

- › The surface treatments and building footprints that cover the subject site are underlain by a granular fill, which is approximately 13.5 to 18.5 feet in thickness. The granular fill material generally consists of a very loose to very dense, light brown to brown, silty sand and gravel to sand and gravel containing varying amounts of ash, cinder, asphalt and concrete.

- › Underlying the fill material, an intermittent organic soil deposit exists consisting of a very soft to firm grey organic silt. Beneath the fill material and organic soil, a natural marine sand deposit was encountered which consisted of a loose yellow-grey silty sand.

Additional geotechnical assessment activities will be performed to evaluate foundation design considerations for the proposed structures.

4.10 Construction

The following section generally describes the potential temporary impacts resulting from construction activities and proposed mitigation measures anticipated to reduce these impacts. As design progresses, construction mitigation will be reviewed and refined by appropriate regulatory agencies, including through the development and submission of a parcel-specific Construction Management Plan (CMP) approved by the Boston Transportation Department (BTD). Approval of the CMP by BTD is required before the City's Inspectional Services Department can issue a building occupancy permit.

4.10.1 NPDES Construction General Permit

The Project will alter greater than one acre of land. Accordingly, those in control of construction activities on the Project Site (e.g. owner, contractor/s) are required to file a Notice of Intent (NOI) with the EPA, at least seven days prior to the start of construction, pursuant to the NPDES General Permit for Stormwater Discharges from Construction Sites. The NPDES General Permit requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) for the site-specific construction activities and implementation. The SWPPP must be in place at the time of the filing of the EPA NOI. The SWPPP will include information such as:

- › Project Drawings relative to stormwater management
- › Project/Site description
- › Drainage report as an attachment, including a Long-Term Operations and Maintenance (O&M) Plan
- › Soils information
- › General project phasing
- › Description and details of recommended erosion control BMPs as defined by state guidelines
- › Temporary and final stabilization recommendations
- › Inspection schedule and maintenance checklists for BMPs
- › Description of spill prevention and response actions
- › Copy of Order of Conditions
- › Copy of NPDES Construction General Permit regulations

During construction, the contractor will be responsible for maintaining the stormwater management system. Upon completion of construction, inspections and maintenance will be the responsibility of the property management.

4.10.2 Construction Period Impacts

The Port Norfolk community is a small neighborhood with a rich and unique history. This context places increased emphasis on developing a CMP that avoids impacts to the neighborhood to the extent possible. To limit those impacts, construction activities will be accommodated, where possible, within the boundaries of the Project Site. Details of the overall construction schedule, work hours, number of construction workers, worker transportation and parking, number of construction vehicles and routes will be further detailed in the DEIR/DPIR. They will also be addressed in the CMP to be filed with and approved by BTM in accordance with the City's transportation maintenance plan requirements. The CMP would also include yet more detail on the following topics:

Air Quality

No adverse air quality impacts from the construction of the Project are anticipated. Fugitive dust mitigation measures may include, as necessary:

- › Wet suppression to minimize the generation of dust from excavation operations and on-site vehicle traffic, with provisions for any runoff control;
- › Spraying any piles of excavation materials with soil cement or calcium chloride overnight and on weekends, and securely covering long-term material stockpiles;
- › Compacting of the soil or the use of gravel to stabilize the site access points;
- › Washing vehicle wheels before leaving the Project Site, as necessary, with provisions for runoff control;
- › Periodic cleaning of paved streets near the entrances to the Project Site to minimize vehicle mud/dirt carryout;
- › Installing fencing around the perimeter of the Project Site to assist in containing wind-blown dust;
- › Requiring that trucks hauling excavated material from the Project Site install secure covers over their loads; and,
- › Encouraging the construction contractors for the Project to implement the Massachusetts Diesel Retrofit Program control measures for heavy-duty diesel equipment.

Construction Period

The Project is currently intended to be constructed in a single phase, to minimize any disruption to the neighborhood. Duration of construction is anticipated to be approximately 18 months.

Noise

The construction of the Project will be performed in a manner that complies with the DEP and City of Boston noise regulations. To ensure compliance with these regulations during construction, the Proponent, to the extent practicable, will seek to incorporate into the general construction contract the following mitigation measures:

- › Limited vehicle idling to five minutes;
- › Limited construction vehicle warm-up to ten minutes;
- › Limiting construction to the hours allowable by City of Boston regulations; and
- › Insuring construction vehicles have ambient leveling sensors on the back up alarms.

Traffic

To minimize impacts to abutters and the local community, and reduce the number of potential truck trips on neighborhood roadways, the Proponent will consider all available measures, including information on construction activities, specific construction mitigation measures, and construction-materials access and staging area plans. These plans will also be discussed with the local community.

Odor

Odor issues are not anticipated due to the lack of organic soils on the Project Site. However, if such soils are encountered, the Project Team will undertake appropriate mitigation measures to control the odor associated with their removal, such as:

- › Cut and cover utility trenches whenever possible;
- › Protect excavated materials with plastic sheathing to encapsulate odors; and
- › Remove excavated materials from the Site in a covered vehicle on a frequent basis.

Rodents

The City of Boston has identified the infestation of rodents in the City as a serious problem. To control this infestation, the City enforces the requirements of the Massachusetts State Sanitary Code, Chapter 211, 105 CMR 410.550 and the State Building Code, Section 108.6. Policy Number 87-4 (City of Boston) requires the preparation of a program for the extermination of rodents for issuance of permits for demolition, excavation, foundation, or basement rehabilitation. The Proponent will prepare and adhere to a rodent control program prior to demolition and throughout construction.

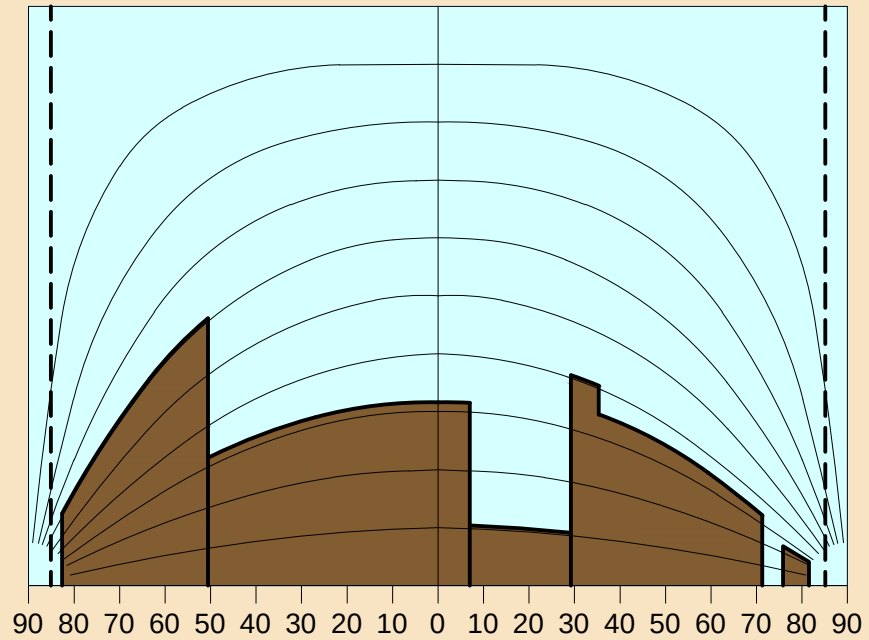
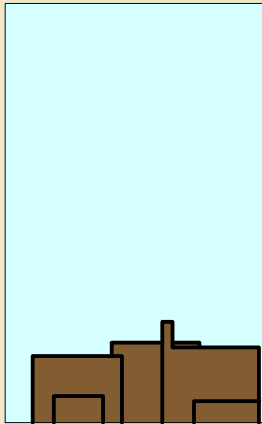
Construction Staging – Public Safety

Prior to construction, the Construction Manager will produce a Site Specific Safety Plan to be reviewed and approved by the City in conjunction with the CMP.

To separate construction activities and general public, the entire perimeter of the Site will be protected during construction by a fence that includes a debris net on top of concrete barriers. Vehicular gates will be provided for construction traffic in alignment with the flow of traffic on perimeter roads, to allow safe entrance and exiting for construction vehicles. Sidewalks around the Project Site perimeter will be maintained during construction, and overhead protection will be utilized in areas where the new construction is in close proximity to the general public.

Existing

Obstruction of
Skyplane = 30.6%



Proposed

Obstruction of
Skyplane = 34.0%

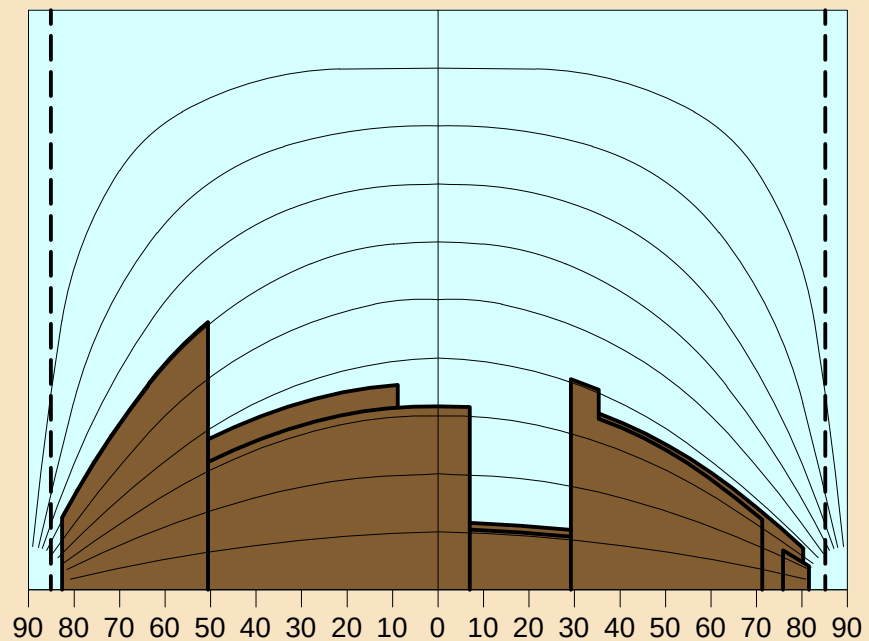
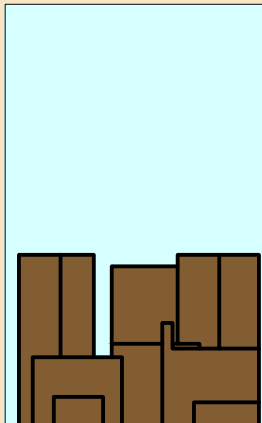


Figure 4.1

Daylighting Analysis
Center of Ericsson Street

**Neponset Wharf
Boston, Massachusetts**

5

Transportation

Introduction

This chapter provides an overview of the Project's transportation characteristics and potential impacts, based upon a preliminary evaluation of the development program and the transportation infrastructure serving the Site. Transportation will be the subject of detailed analysis to be presented in the DEIR/DPIR, informed by input from the community, and based on further discussion with MassDOT, DCR and BTM. The following sections describe Site access, Project travel characteristics, trip generation by mode, and parking. Refer to Figure 5.1 for Transportation Context.

5.1 Summary of Key Findings and Benefits

Potential traffic impacts of the Project will be identified in a detailed traffic analysis to be presented in a DEIR/DPIR. Based on discussions with the community, the BPDA, and BTM, existing traffic issues will be identified and will be studied in the analysis. The analysis will evaluate future traffic conditions both with and without the Project (build and no-build conditions). Improvements to address existing problems as well as potential impacts due to the Project itself will be explored. The comprehensive traffic analysis will be supported by collecting current traffic data in the Project area to understand existing conditions and how they might be impacted.

5.2 Project Description and Site Access

The Project Site is located on the northern edge of the Port Norfolk peninsula, and is bounded by the Neponset River on its northern side and Pine Neck Creek to the west. The Project Site has two exiting vehicle access connections to Ericsson Street, which will be improved and integrated with the on-site circulation. Ericsson Street connects to Water Street and Redfield Street via three residential streets – Lawley Street, Port Norfolk Street, and Walnut Street. Port Norfolk Street is one-way northbound. Redfield Street connects with Morrissey Boulevard across the MBTA tracks just north of Neponset Circle, but is one-way into the neighborhood between Morrissey Boulevard and Woodworth Street. As a result, vehicle traffic leaving the neighborhood travels via Woodward Street to access Neponset Circle/Morrissey Boulevard. Both the Redfield Street and Walnut Street intersections with Morrissey Boulevard are un-signalized. In addition, vehicle traffic can access the neighborhood by a circuitous route via Quincy Shore Drive and Taylor Street, but in turn must use Redfield Street to cross the MBTA tracks.

An alternate vehicle access route for the neighborhood is provided by Conley Street/Tenean Street. This route runs from the intersection of Lawley Street and Water Street, crossing under the elevated I-93 Southeast Expressway to connect with Morrissey Boulevard further to the north via Conley Street or Tenean Street. Refer to Figure 5.1 for Transportation Context.

5.3 Trip Generation

The existing marina includes approximately 71,300 square feet of boat storage and sales and administration space. As part of the improvements to the marina, all the existing buildings will be demolished and replaced with approximately 23,000 square feet of indoor boathouse/service space. While the floor area of the marina building will be significantly reduced, the capacity of the marina will be maintained at approximately 75 vessels, and therefore no net new trips are anticipated specifically for the marina. The proposed 1,450 square-foot Marina Support Building, which will include bait and tackle sales and boat fueling, will support the existing marina users and is not expected to independently generate trips. Similarly, the 650 square-foot kayak storage area will support residents and nearby community members and is not expected to generate significant external trips.

As a result, new Project trips will be largely generated by the new hotel, residential and retail components on the Site, as follows:

Hotel,	10,500 SF (25 rooms)
Residential Condominiums,	23,000 SF (150 units)
Retail/Restaurant,	4,400 SF ¹

Project trip generation is based on the Institute of Transportation Engineers (ITE) *Trip Generation* manual using the appropriate land use codes (LUC) for each component of the Project, as follows:

LUC 230,	Residential Condominium/Townhouse
LUC 310,	Hotel
LUC 931,	Quality Restaurant

The first step in estimating trip generation is the derivation of "Unadjusted" ITE trips for each land use component, without adjustments for local travel characteristics such as travel mode, and, in the case of vehicle trips, the number of persons per car or average vehicle occupancy (AVO). "Adjusted" trips are then calculated by applying mode share characteristics and vehicle occupancies to determine the number of trips by vehicle, transit, bicycle or walking.

¹ Retail/Restaurant square footage is the combined total of 4,000 square-foot restaurant and the 400 square-foot Shore Shack.

Typically, the most critical periods for evaluating traffic impacts are on a weekday during the morning (AM) and evening (PM) peak hours. However, although background traffic volumes are usually higher on a weekday, recreational and retail activity is often greater on the weekend. As a result, the most intense combination of Project traffic and background traffic can occur at the weekend. Therefore, the analysis in the DEIR/DPIR will examine both weekday and weekend (Saturday) conditions. Further, as the marina activity is seasonal, the traffic analysis will be based on traffic counts performed during the boating season to reflect a conservative analysis, albeit that any potential traffic impacts would be limited to seasonal use and would not prevail year-round.

To inform the seasonal variation in activity, “pre-season” traffic counts have already been performed for the roadways providing access to Port Norfolk. These will be supplemented by repeating the same count locations during the boating season, in addition to weekday and Saturday intersection turning movement counts throughout the study area.

5.3.1 Unadjusted ITE Trips

Unadjusted ITE new Project trips are presented in Table 5-1 for average daily, weekday morning (AM) peak hour, weekday evening (PM) peak hour, and Saturday.

Table 5-1: Unadjusted ITE New Project Trip Summary

Land Use		Unadjusted Trips ¹			
		Daily	Weekday AM Peak	Weekday PM Peak	Saturday
Condominium	150 units	915	71	84	971
Hotel	25 rooms	204	13	15	205
Retail/Restaurant	4,400 SF	396	4	33	415
Total		1,515	88	132	1,591

¹ Total trips, in + out

As shown in Table 5-1, the Project is projected to generate approximately 1,515 and 1,591 new unadjusted ITE trips (total trips, in + out) on a weekday and a Saturday, respectively, over and above the existing marina trips. On a weekday, the Project is projected to generate approximately 88 and 132 new unadjusted ITE trips during the weekday AM and PM peak hours, respectively, over and above the existing marina trips.

5.3.2 Mode Share Assumptions

As discussed in Section 5.4, Port Norfolk is not well-served by transit. Therefore, while some small number of trips are expected to be transit related, a 0-percent transit share will be incorporated in the traffic analysis to be conservative. The only mode adjustment will be a conservative five percent allocation for Project-generated bicycle and walking trips.

The other adjustment of new Project trips is the application of AVOs, which are different for each land-use, based on the *Nationwide Personal Transportation Survey* (NPTS) data, as follows:

Condominium,	1.13 persons per vehicle
Hotel,	2.20 persons per vehicle
Retail/Restaurant,	1.78 persons per vehicle

5.3.3 Adjusted Project Vehicle Trips

The resulting adjusted new Project vehicle trips are presented in Table 5-2 for average daily, weekday morning (AM) peak hour, weekday evening (PM) peak hour, and Saturday.

Table 5-2: Adjusted Project New Project Vehicle Trip Summary

Land Use		Adjusted Vehicle Trips ¹			
		Daily	Weekday AM Peak	Weekday PM Peak	Saturday
Condominium	150 units	870	68	79	922
Hotel	25 rooms	194	12	14	194
Retail/Restaurant	8,010 SF	376	3	31	394
Total		1,440	83	124	1,230

¹ Total trips, in + out

As shown in Table 5-2, the Project is projected to generate approximately 1,440 and 1,230 new adjusted vehicle trips (total trips, in + out) on a weekday and a Saturday, respectively, over and above the existing marina trips. On a weekday, the Project is projected to generate approximately 83 and 124 new vehicle trips during the weekday AM and PM peak hours, respectively, in addition to the existing marina trips.

As noted previously, the DEIR/DPIR transportation analysis will include a detailed evaluation of existing and future (year 2024) traffic conditions both with (Build) and without (No Build) the Project.

5.4 Transit Service

Transit service for the Port Norfolk neighborhood is limited to MBTA Routes 201/202 and 210. While the MBTA Red Line physically passes through the western edge of the neighborhood, the nearest stations (Fields Corner to the north and North Quincy to the south) are not within a reasonable walking distance, particularly from the waterfront of the marina. As described below, however, MBTA bus Route 210 provides service to both of these stations.

The nearest MBTA bus stops are located at Neponset Circle, approximately 0.4 miles (inbound service) and 0.5 miles (outbound service) from the Project Site, with the following service:

- **Route 201/202**, Fields Corner or North Quincy Station - Fields Corner via Adams Street to Neponset Avenue, provides service with 15-35 minute headways between 5:22 AM – 12:48 AM Monday - Friday, 6:31 AM – 9:20 PM on Saturday, and 6:50 AM – 9:44 PM Sunday. Weekday ridership for the entire route is 6,333 boardings on a weekday.
- **Route 210**, Fields Corner or North Quincy Station – Fields Corner via Adams Street to Neponset Avenue, provides service with 30 minute headways between 5:06 AM – 1:32 AM Monday – Friday, and 5:30 AM – 1:17 AM on Saturday. There is no service on Sunday.

5.5 Parking

The existing surface parking on the Project Site is used informally as it is effectively unstriped. The current surface parking will be eliminated by the development. A minimum of approximately 185 parking spaces will be provided to support the project, located in two garages that are integral to the new buildings. The parking supply reflects the following parking ratios for the new development:

Residential,	1.0 space per unit,	150 spaces
Hotel,	0.5 space per unit,	24 spaces
Retail,	1.4 space per unit,	11 spaces

An analysis of parking demand and supply will be presented in the DEIR/DPIR along with a parking management program.

5.6 Proposed Study Area/TIA Approach

The DEIR/DPIR will include a detailed traffic analysis of existing and future (year 2024) traffic conditions both with (Build) and without (No Build) the Project. The scope of the transportation impact assessment and the geographic study area will be informed by input from the community as well as BPDA and BTM. Improvements to address existing problems as well as potential impacts due to the Project itself will be explored. The traffic analysis will be grounded on a program of current traffic data collection in the area of influence of the Project, to understand existing conditions and how they might be impacted by the Project.

5.7 Transportation Improvements and Mitigation

Improvements to be explored could include traffic circulation/operation within the neighborhood, safety and traffic calming improvements, improvements for vehicle access into and out of Port Norfolk, signage and parking management. Potential shuttle service to the Red Line and opportunities for water transportation to the Site will also be explored.

In addition, a Transportation Demand Management (TDM) plan will be developed to include strategies and improvements to reduce single-occupant vehicle (SOV) trips and encourage travel by alternative modes such as access to car-sharing and bike-sharing, and hotel shuttle service. An important component of the TDM plan will support enhancement of walkability and bicycle access of the Project Site.



Source: ArcGIS Bing Aerial, MassGIS



Figure 5.1
Transportation Context

**Neponset Wharf
Boston, Massachusetts**

6

Historic Resources

Introduction

This Chapter identifies properties located within and in the vicinity of the Project Site that are listed in the National and State Registers of Historic Places, and/or are included in the Inventory of Historic and Archaeological Assets of the Commonwealth (Inventory).

6.1 Summary of Key Findings

- › The Project Site is located within the Port Norfolk Area, which is included in the Inventory.
- › The Project Site is located within the boundaries of the Port Norfolk Neighborhood Design Overlay District, as defined in Article 65 (Dorchester Neighborhood District) of the Boston Zoning Code.
- › The Project Site includes marine storage, service, and retail buildings constructed ca. 1955-1962; however, there are no historic resources within the Project Site.
- › There are 11 historic resources located within a ¼-mile radius of the Project Site.

6.2 Regulatory Context

6.2.1 Massachusetts Historical Commission

The MHC has review authority over projects requiring state or federal funding, licensing, permitting, and/or approvals. The purpose is to evaluate potential direct or indirect impacts to properties listed or eligible for listing in the National and State Registers of Historic Places, in compliance with State Register Review requirements (M.G. L. Chapter 9, Sections 27-27c, as amended by Chapter 254 of the Acts of 1988) and Section 106 of the National Historic Preservation Act of 1966 (if necessary). Submittal of this ENF/PNF initiates MHC review of the Project.

6.2.2 Boston Landmarks Commission

The Boston Landmarks Commission (BLC) will coordinate its review of the Project with the BPDA in accordance with the BPDA Article 80B, Large Project Review process, in association with the Boston Environment Department.

The Project Site is located within the boundaries of the Port Norfolk Neighborhood Design Overlay District and subject to review by the BLC in accordance with Article 65 of the Boston Zoning Code (Dorchester Neighborhood District). The BLC will review the application to determine the Project's consistency with the design guidelines for new construction set forth in the article, specific to the site plan, design and architecture, and landscape, and provide its recommendations to the BPDA.

The buildings on the site are over 50-years old and subject to Article 85 of the Boston Zoning Code (Demolition Delay). An Article 85 application will be submitted to the BLC. The Inspectional Services Department may not issue any demolition permit relating to a building that is more than 50 years of age, unless, among other things, it has received a notice issued by the BLC that no demolition delay is required or that the 90-day demolition delay has expired.

6.3 Historic Resources

A review of the MHC's Massachusetts Cultural Resource Information System (MACRIS) database was undertaken to identify previously recorded, above-ground and archaeological resources, located on or within a one-quarter mile radius of the Project Site.

6.3.1 Historic Resources within One-Quarter-Mile Radius of the Project Site

The Project Site is located within the Port Norfolk area, which is included in the Inventory; however, there are no historic, contributing resources within the Project Site. The area surrounding the Project Site has been thoroughly documented by historic resource surveys, resulting in several inventoried historic resources which are all located within the Port Norfolk area boundaries. Figure 6.1 depicts the location of the properties and proximity to the Project Site, which are summarized in Table 6-1.

Table 6-1 Historic Resources in the Vicinity of the Project Site

No.	Resource Name	Location	MHC Inventory No.	Designation
A	Port Norfolk Area	Bounded by Neponset Avenue, Lawley Street, and the Neponset River	BOS.DX	INV RNRE
B	Lawley Street Area	13–84 Lawley Street	BOS.GE	INV

No.	Resource Name	Location	MHC Inventory No.	Designation
C	Port Norfolk Street Area	1–58 Port Norfolk Street	BOS.HD	INV
D	Walnut Street Area	118–188 Walnut Street	BOS.HX	INV
1	Putnam Nail Company – Lawley, George Shipyard/Seymour’s Ice Cream Plant	12 Ericsson Street	BOS.5978	INV
2	Putnam Nail Company – Lawley, George Shipyard	No # Ericsson Street	BOS.6648	INV
3	Whitmarsh, William W. House	52 Port Norfolk Street	BOS.6178	INV
4	Mason, Lewis House	166 Walnut Street	BOS.6357	INV
5	Bartlett, William F. House	146 Walnut Street	BOS.6356	INV
6	Hannum, James House	134 Walnut Street	BOS.6355	INV
7	House	33 Lawley Street	BOS.6036	INV

RNRE Recommended Eligible for National Register listing by a Consultant

INV Listed in Inventory of Historic and Archaeological Assets of the Commonwealth, no current designation

Port Norfolk Area (MHC No. BOS.DX)

The Port Norfolk area, originally called Pine Neck, attracted mariners and fisherman in the 17th and 18th centuries, and the area remained pasture land into the 19th century. In 1844, the Old Colony Railroad expanded into Dorchester, which opened Port Norfolk to residential and commercial development, but also bisected the area. This led to expansion of industrial and commercial interests along the Neponset River, north of the present Neponset Avenue and at the northernmost point of the peninsula. In 1860, the General Isaac Putnam Nail Company was established in Neponset to manufacture horseshoe nails. It was located on Ericsson Street at Port Norfolk by 1869, where it operated through the early 20th century. The George Lawley and Son Shipyard built pleasure yachts on the Site between 1910 and 1945. The property was later occupied by a commercial marina and Seymour’s Ice Cream; the marina still operates at the Site. The marine storage buildings on the site date to ca. 1955-1962.

Three residential streets, Walnut, Lawley, and Port Norfolk Streets, were laid out within Port Norfolk in the mid-nineteenth century by architect Luther Briggs and remain relatively intact.

The Port Norfolk area was surveyed 1995 and recommended eligible for listing in the National Register of Historic Places under Criteria A and C for its industrial history and its architecture.

6.3.2 Archaeological Resources

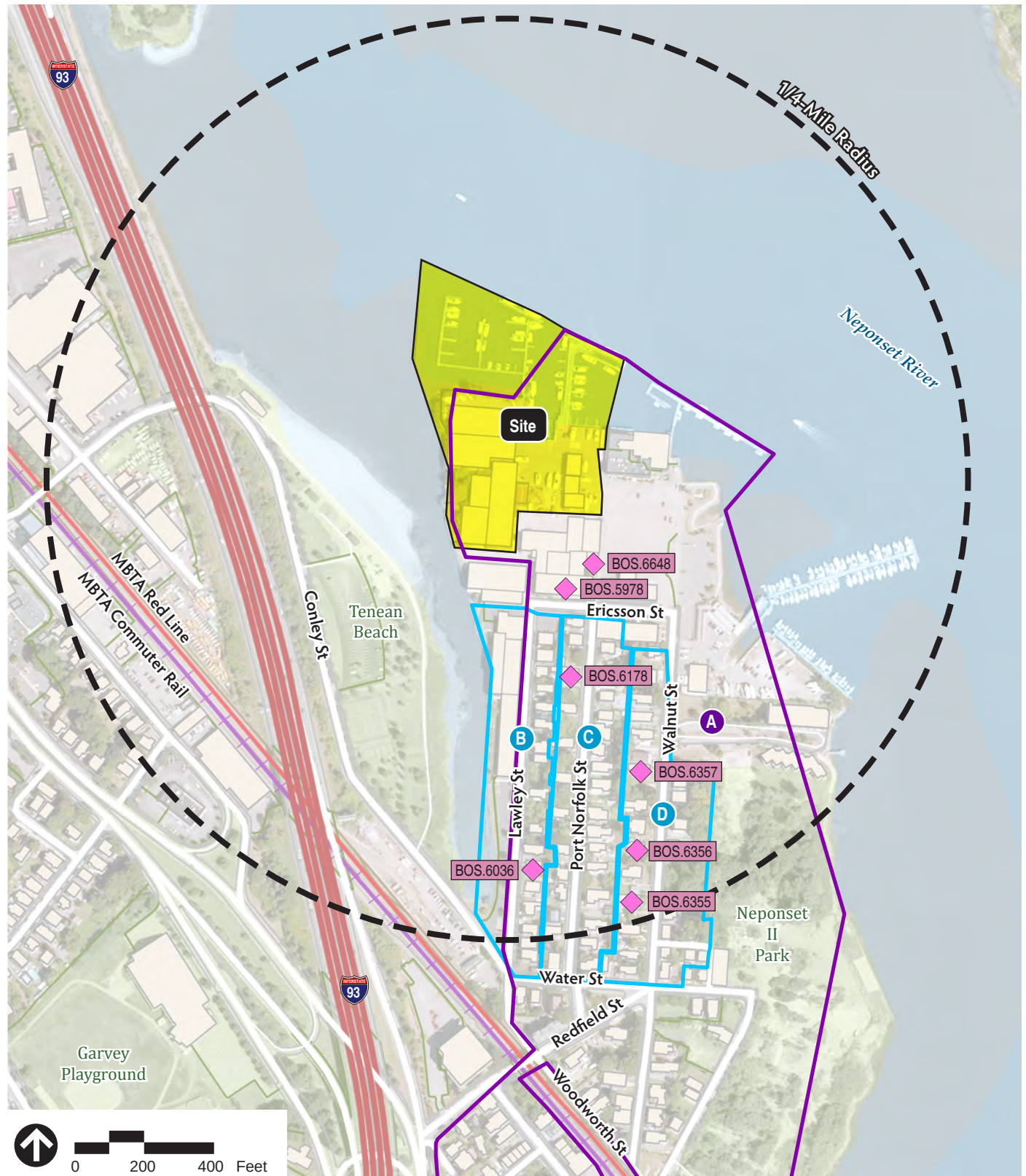
No previously identified archaeological resources are located within the Project Site, and no impacts to significant archaeological resources are anticipated as a result of the Project.

6.3.3 Next Steps

The Project Site does not include any properties included in the State and National Register or Inventory, and will have no direct impacts on historic resources,

The Project is being designed to be sensitive to adjacent and nearby historic resources. The Proponent will consult with the BLC and BPDA to assure the Project is consistent with the Article 65-Dorchester Neighborhood District design guidelines set forth in Section 65-37.2

The DEIR/DPIR will include an evaluation of potential impacts the Project may have on historic and archaeological resources, including, as applicable, visual, urban design, and shadow impacts.



Source: ArcGIS Bing Aerial, MassGIS

Historic Resources in the Vicinity of the Project Site

- A** Port Norfolk
- B** Lawley Street 13-84
- C** Port Norfolk Street 1-58
- D** Walnut Street 118-188



Figure 6.1
Historic Resources

**Neponset Wharf
Boston, Massachusetts**

7

Infrastructure

Introduction

This chapter describes the existing infrastructure systems surrounding the Project Site, and discusses utility aspects of the Project and potential utility impacts. The following utilities are discussed: wastewater, water, stormwater management, natural gas, electricity, and telecommunications. Chapter 3, *Sustainability/Green Building and Climate Change Resiliency*, discusses energy conservation measures being considered as part of the Project.

The Project is expected to connect to existing city and utility company systems in the adjacent public streets. Based on available existing conditions plans and record utility drawings, it is expected that the increase in demand associated with the development and operation of the Project can be accommodated with existing infrastructure. Detailed design of the Project's utility systems will proceed in conjunction with the design of the building and interior mechanical systems.

During initial community outreach, it was suggested that the existing sewage system may have capacity issues and may not be able to support the Project. The existing sewage system, as discussed herein, is owned and managed by the Boston Water and Sewer Commission (BWSC). Further coordination with BWSC, as well as the private utility companies, will be necessary to evaluate existing capacity and understand the impact of the proposed infrastructure requirements of the Project. Additional detail related to this coordination and analysis will be presented in the DEIR/DPIR. Refer to Figure 7.1 for a site plan that shows the existing infrastructure at the Project Site.

7.1 Summary of Key Findings and Benefits

The key impact assessment findings related to infrastructure systems include:

- › Utility infrastructure systems are available at the site frontage and it is anticipated that they will support the demand associated with the development and operation of the Project. This will be confirmed as the design develops, service locations are established and the design team meets with the appropriate agencies and utility companies.
- › On-site drainage generally flows towards the Neponset River via overland flow and BWSC-owned and maintained drainage infrastructure in Ericsson Street abutting the Project Site.

- › The Project Site is currently serviced by BWSC for domestic and fire protection water and sanitary sewage conveyance.

Key Project-related mitigation and/or benefits associated with the infrastructure systems include:

- › The Project will not introduce additional peak flows, pollutants, or sediments that would potentially impact the receiving waters of the local BWSC stormwater drainage system.
- › The Project will improve the quality and quantity of site stormwater runoff compared to existing conditions by collecting and infiltrating 1 inch of rainfall over all impervious areas (that meet BWSC standards).
- › The proposed stormwater management systems will comply with the 2008 DEP Stormwater Management Policy and Standards.
- › In order to reduce overall water usage for the Project, the Proponents will install low flow and low-consumption plumbing fixtures, in compliance with Article 37 of the Boston Zoning Code.

7.2 Regulatory Context

The following discusses the regulatory framework of utility connection reviews and standards. A complete list of the anticipated state and local permits associated with Project-related infrastructure is included in Chapter 1, *Project Description*. For the Project:

- › BWSC approval will be required for all water, sewer and stormwater systems.
- › The Boston Fire Department will review the Project with respect to fire protection measures such as siamese connections, hydrants, and standpipes.
- › Design of the Project Site access, hydrant locations, and energy systems (gas and electric) will also be coordinated with the respective system owners.
- › Where new utility connections are needed and existing connections are to be capped, the excavation will be authorized by the Boston Public Works Department (BPWD) through the street opening permit process, as required.

All improvements and connections to BWSC infrastructure will be reviewed by BWSC as part of the BWSC site plan review process. This process includes a comprehensive design review of the proposed service connections, assessment of system demands and capacity, and establishment of service accounts.

7.2.1 EPA National Pollutant Discharge Elimination System

The EPA requires that all projects that disturb greater than one acre of land obtain a permit for stormwater discharges through the NPDES Construction General Permit (CGP)

for Stormwater Discharges from Construction Activity (2012, EPA). Compliance with the CGP is achieved by the following:

- › Developing and Implementing a SWPPP;
- › Completing, certifying, and submitting a Notice of Intent (NOI) to the EPA; and
- › Complying with the requirements contained in the CGP and the Order of Conditions.

Compliance with the CGP and its Standard Permit Conditions is the responsibility of the site Operator.

7.2.2 DEP Stormwater Standards

In March 1997, DEP adopted a new Stormwater Management Policy to address non-point source pollution. In 1997, DEP published the Massachusetts Stormwater Handbook as guidance on the Stormwater Policy, which was revised in February 2008. The Stormwater Management Standards are regulated under the Wetlands Protection Act Regulations 310 CMR 10.05(6)(k) through (q). The Policy prescribes specific stormwater management standards for redevelopment projects, including urban pollutant removal criteria for projects that may impact environmental resource areas.

7.2.3 BWSC Site Plan Review

All improvements and connections to BWSC infrastructure will be reviewed by BWSC as part of the Site Plan Review process. This process includes a comprehensive design review of the proposed service connections, assessment of system demands and capacity, and establishment of service accounts for water, sewer, and stormwater systems.

7.3 Stormwater Management

Since a majority of the Project Site is already impervious, the Project will not result in significant changes in the pattern of stormwater runoff. Stormwater management controls will be established in compliance with the BWSC standards. The Project is expected to improve stormwater runoff quality and reduce peak flows by increasing landscaping and pervious areas, and through the use of treatment and infiltration facilities.

7.3.1 Existing Drainage Conditions

Record information shows on-site drainage generally flows towards the Neponset River. Ericsson Street contains BWSC owned drainage infrastructure adjacent to the Project Site. Portions of the site run-off travel overland and discharge directly into the Neponset River. The remaining portions of the site travel both overland and through site catch basins into Ericsson Street to a BWSC owned 18-inch and 15-inch

drain. Run-off ultimately flows to the Neponset River through outfall SDO091. Figure 7.1 shows the existing drainage facilities serving the Project Site

7.3.2 Proposed Drainage Conditions

The Project will incorporate stormwater management and treatment systems that will improve water quality, reduce runoff volume and control peak rates of runoff in comparison to existing conditions. The Project will provide infiltration that retains site runoff while providing treatment and peak flow mitigation, in accordance with stormwater standards and Boston Water and Sewer Commission (BWSC).

Additionally, to better ensure improved water quality from the Project, a “Don’t Dump, Drains to Neponset River” casting will be installed at all new catch basins, area drains, and trench drains.

Stormwater runoff calculations will be done for existing and proposed conditions during the BWSC permitting process for the 2-, 10-, 25- and 100-year storm events. During construction, measures will be implemented to minimize water quality impacts and avoid impacts to abutters

7.3.3 Compliance with EPA National Pollutant Discharge Elimination System

The Project will be required to obtain coverage under the EPA NPDES permit (CGP), as the disturbance area of the Project is greater than one acre. Therefore, the Proponent will:

- › Develop and implement a SWPPP;
- › Certify and submit a Notice of Intent to the EPA; and
- › Read and comply with the requirements contained in the CGP and the Order of Conditions.

The Proponent will ensure that the Operator perform the NPDES requirements during construction.

7.3.4 Compliance with DEP Stormwater Standards

Standard #1: No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

- › Compliance: The Project will comply with this Standard. Untreated stormwater will not be directly discharged to, nor will erosion be caused to, wetlands or waters of the Commonwealth as a result of the Project.

Standard #2: Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

- › Compliance: The Project will comply with this Standard. The existing discharge rate will decrease as a result of the improvements associated with the Project. The project is significantly increasing the pervious area and collecting run-off through infiltration systems which will reduce the pre-development peak discharge rates.

Standard #3: Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the post development Project Site should approximate the annual recharge from the pre-development or existing Project Site conditions, based on soil types.

- › Compliance: The Project will prevent the loss of annual recharge to groundwater by incorporating groundwater recharge techniques. The Proponents will install surface and subsurface infiltration systems to meet BWSC infiltration requirements. Infiltration is the largest component of stormwater discharge rate reduction, and will greatly promote annual recharge relative to the existing Site condition, which is a mostly impervious.

Standard #4: For new development, stormwater management systems must be designed to remove 80 percent of the average annual load (post-development conditions) of TSS. It is presumed that this standard is met when: Suitable nonstructural practices for source control and pollution prevention are implemented; Stormwater BMPs are sized to capture the prescribed runoff volume; and Stormwater management BMPs are maintained as designed.

- › Compliance: The Project will remove 80 percent of the annual load of TSS by the implementation of BMPs. The Proponent is designed an environmentally sensitive site, which inherently implements source controls and pollution prevention techniques. These include minimizing site impervious areas, incorporating nonstructural stormwater treatment including vegetated stormwater storage, and minimizing the need for fertilizers by using native, durable species. Stormwater overflow will be collected and treated by structural means, including subsurface drainage systems sized to capture the required volume.

Standard #5: For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If, through source control and/or pollution prevention, all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with

higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53 and the regulations promulgated there under at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.

- › Compliance: The Project Site will be occupied by buildings and open spaces not associated with land uses with higher potential pollutant loads. The proposed parking garage will drain via a gas/oil separator to the sanitary sewer system.

Standard #6: Stormwater discharge to critical areas must utilize certain stormwater management BMPs approved for critical areas. Critical areas are Outstanding Resource Waters ("ORWs"), shellfish beds, swimming beaches, cold-water fisheries and recharge areas for public water supplies.

- › Compliance: The Project Site does not discharge within the Zone II or Interim Wellhead Protection Area of a public water supply or near any other critical area.

Standard #7: A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural stormwater best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.

- › Compliance: The Project is considered a redevelopment project. The Project will comply with Stormwater Management Standards 1 through 6 to the maximum extent practicable and all other requirements of the Stormwater Management Standards and will thereby materially improve upon existing conditions.

Standard #8: Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.

- › Compliance: Sedimentation and erosion controls will be employed to prevent construction or land disturbance impacts to groundwater. Erosion and sediment control plans will be submitted to BWSC and the contractor will be required to implement the measures as part of the BWSC general services application process. The implementation of these measures is also a requirement of the NPDES permit that will be obtained for the Project.

Standard #9: A Long-Term Operation and Maintenance (O&M) Plan shall be developed and implemented to ensure that stormwater management systems function as designed.

- › Compliance: An Operation and Maintenance ("O&M") Plan will be developed and implemented. The O&M Plan will be reviewed by the BWSC.

Standard #10: All illicit discharges to the stormwater management system are prohibited.

- › Compliance: There are no currently known illicit discharges. All proposed discharges will be reviewed by the BWSC to ensure consistency with this standard.

7.3.5 Compliance with ACEC Resource Management Plan

One of the goals of the ACEC articulated in the RMP is to protect and improve the water quality conditions of the Neponset River Estuary in order to meet, or where possible exceed, state water quality standards.

7.4 Sanitary Sewage

7.4.1 Existing Sewer System

BWSC owns and maintains the sanitary sewer lines in the vicinity of the Project Site. These include the 12-inch sewer line which runs down Ericsson, Port Norfolk and Walnut Street. The existing site currently generates approximately 1,245 gallons per day of wastewater.

7.4.2 Proposed Sewage Flow and Connections

Generation rates from the Massachusetts State Environmental Code (Title 5) were used to estimate the Project's sewage generation rates. Table 7-1 below presents the estimated sanitary sewage flow for the Project.

Table 7-1 Estimated Sanitary Sewage Flow

Proposed Occupancy	Quantity	Sewage Generation (GPD)
Residential: 110 GPD/Bedroom	230 Beds	25,300
	<i>(Assumed mix)</i>	
Retail: 50 GPD/1000 SF	2500 SF	125
Restaurant: 35 GPD/Seat	40 Seats	1,400
Hotel: 110 GPD/Bedroom	25 Beds	2,750
Marina: 10 GPD/Slip	75 Slips	750
	Total Proposed	30,325
	Total Existing	1,245
	Net New Total	29,080

- 1 Based on DEP 310 CMR 15.203 flow calculation factors
- 2 GPD=Gallons per day
- 3 SF=Square Feet
- 4 Assume 40 seat restaurant

The Project will generate an estimated 30,325 gallons per day of new sewage generation (29,080 gallons per day of net new sewage generation). The Project plans to maintain the existing 12-inch sewer line in Ericsson Street with a new connection

servicing the site. All connections will be coordinated with BWSC to ensure the city's sewer system has sufficient capacity to support the Project.

7.4.3 Infiltration and Inflow

Infiltration and inflow (I/I) is extraneous quantities of water that enter the sanitary sewers and reduce the capacity of the system to transport sanitary sewage. Reduction of I/I also decreases the quantity of water transported to the Massachusetts Water Resource Authority (MWRA) wastewater treatment facilities, thereby reducing overall transportation costs, treatment costs and BWSC sewer assessments. Massachusetts DEP recommends that new developments be required to remove I/I from the sanitary sewer system at a ratio of 4:1, as part of the requirements by the Secretary of the EEA. The Proponent will make an appropriate contribution to BWSC's I/I Infiltration Inflow Reduction Mitigation Account to fund I/I identification and reduction projects.

7.5 Domestic Water and Fire Protection

7.5.1 Existing Water Supply System

There is currently a 12-inch Ductile Iron Cement Lined water main in Ericsson Street. The existing Buildings have a domestic water and fire protection service connection to the 12-inch main in Ericsson Street. There is an existing fire hydrant at the end of Lawley Street and the middle of Ericsson Street. Refer to Figure 7.1 for the existing water distribution system

7.5.2 Proposed Water Demand and Connections

New water connections will be designed in accordance with BWSC design standards and requirements. Water services to new buildings will be metered in accordance with BWSC's Site Plan Requirements and Site Review Process. The review includes, but is not limited to, sizing of domestic water and fire protection services, calculation of meter sizing, sizing and location of booster pumps (if required, by MEP Engineer), backflow prevention design, and location of hydrants and Siamese connections conform to BWSC and BFD requirements. The Proponent will provide for the meter connection to the BWSC's automatic meter reading system. Fire protection connections on the Project Site will also need approval of the BFD.

Consistent with the sustainable design and operations goals for the Project, the Proponents will install low-flow and low-consumption plumbing fixtures to reduce water usage and, consequently, sanitary flow reductions. A water reduction of a minimum of 20 percent over the baseline is a requirement of Article 37 of the Boston Zoning Code, which requires new buildings to be LEED™ "certifiable."

7.6 Other Utilities

7.6.1 Natural Gas Service

National Grid owns and operates the gas mains and services in the vicinity of the project site. The survey, provided by Otte and Dwyer, indicates underground power facilities in Ericsson Street along the frontage of the Project Site. The Project plans to connect to this main to service the site.

The estimated natural gas demand load for the Project is 11,650 CFH. The Proponents will work with National Grid to confirm that local infrastructure has adequate system capacity as design progresses. Refer to Figure 7.1 for all existing gas services.

7.6.2 Electrical Service

Eversource owns and operates the electric facilities in the vicinity of the Project Site. The survey, provided by Otte and Dwyer, indicates underground power facilities in Ericsson Street along the frontage of the Project Site. The estimated electrical demand load for the project is 150,100 BTU/HR. As the design of the Project progresses, the Proponent's electrical engineer and civil engineer will coordinate with Eversource on future configurations of the power system and connections.

Energy conservation measures will be an integral part of the Project-related infrastructure design. The buildings will employ energy-efficient and water-conservation features for mechanical, electrical, architectural, and structural systems, assemblies, and materials, where feasible and reasonable.

7.6.3 Telephone and Telecommunications

Verizon owns and operates the telephone facilities and services in the vicinity of the Project Site. The survey, provided by Otte and Dwyer, indicates that there is an active conduit and manhole located in Ericsson Street where the existing buildings are currently being serviced. Given the existing infrastructure, telephone for the Project Site could be provided from Ericsson Street as the Project plans to extend telephone systems to service the proposed buildings. The configuration of the proposed service will be developed with Verizon as the design progresses.

Comcast owns and operates the telecommunications facilities and services in the vicinity of the Project Site. The survey, provided by Otte and Dwyer, indicates that there is active conduit and manhole in Ericsson Street. Telecommunications for the Project Site could be provided from Ericsson Street as the Project plans to extend the telecommunications line to service the proposed buildings. The configuration of the proposed service will be developed with Comcast as the design progresses.

7.6.4 Protection of Utilities During Construction

Existing public and private infrastructure located within the public right-of-way will be protected during construction. The installation of proposed utilities within the public way will be constructed in accordance with BWSC, Boston Public Works Department, the Dig-Safe Program, and governing utility company requirements. All necessary permits will be obtained before the commencement of work. Specific methods for constructing proposed utilities where they are near, or connect with, existing water, sewer, and drain facilities are subject to review by the BWSC as part of its Site Plan Review process.



Figure 7.1
Existing Utilities

8

Wetlands and Waterways

Introduction

This Chapter describes the Project's compliance with the Massachusetts Public Waterfront Act, Water Quality Certification regulations, Massachusetts Office of Coastal Zone Management Policies, and the Massachusetts Wetlands Protection Act, as heightened by the Project Site's location within the Neponset River Estuary ACEC.

8.1 Summary of Key Findings and Benefits

- › The Project will activate the waterfront by enhancing water-dependent uses and create opportunities for recreational boaters and fishermen.
- › The Project will provide substantial public benefits and is protective of the Public Trust rights inherent in filled tidelands by significantly enhancing public access to and use of the Site.
- › The Project will provide a new Harborwalk and a pedestrian bridge connection to Tenen Beach is under consideration.
- › The Project will exceed open space requirements under Chapter 91.
- › The Project will improve public connections to the natural environment within the context of an existing developed area, consistent with the Neponset River Estuary ACEC Resource Management Plan.
- › The Project will meet all applicable wetland and water quality regulations.

8.2 Regulatory Context

This section discusses the wetlands and waterways approvals applicable to the Project as well as the planning and regulatory controls applicable to the Project.

8.2.1 Neponset Estuary ACEC & Resource Management Plan

The ACEC regulations direct state environmental agencies to preserve, protect, and enhance natural and cultural resources within ACEC's through their own regulations programs and regulations. ACEC's are identified and nominated at a local level, and are reviewed and designated by the EOEEA. One of the tools that help communities to identify and prioritize local concerns in the ACEC is a Resource Management Plan (RMP). RMP's serve to outline the management and implementation of ACEC programs and specific state environmental regulations. Similar to the Municipal

Harbor Planning process, RMP's allow communities to tailor the implementation of certain regulations to achieve specific community goals. The EOEEA Secretary oversees and approves the implementation of the RMP to ensure that the plan is consistent with goals of the ACEC program.

The Neponset River Estuary was designated as an ACEC in 1995, and is recognized for its critical importance of preserving and managing a significant estuarine ecosystem within a heavily urbanized area. The Project Site is in the lower Neponset River Estuary, which is identified as the portion of the ACEC most suitable for the continuation of water-dependent recreational uses. The RMP acknowledges and specifically endorses expansion/improvement of existing facilities, and maintenance dredging activities which allow for the continued use of those spaces. Refer to Figure 8.1 for ACEC Context.

As presented in Sections 8.3-8.5, the Project will be constructed in compliance with the goals and objectives of the ACEC program, as implemented by the RMP, and enforced by state and local regulations.

8.2.2 Massachusetts Public Waterfront Act (Chapter 91)

The Massachusetts Public Waterfront Act, MGL Chapter 91, as implemented by the DEP through the Waterways Regulations (310 CMR 9.00), regulates activities in filled and flowed tidelands within the Commonwealth, and is intended to protect and promote public use of the waterfront. The limit of Chapter 91 jurisdiction is defined by the oldest most credible map depicting the mean high water mark prior to placement of fill. This presumed historic shoreline is used to define the historic high water mark and the limits of Chapter 91 jurisdiction at the Project Site. According to GIS data compiled through the DEP/CZM Chapter 91 Historic Shoreline Mapping project, historic mean high water for the Project Site was determined based on the U.S. Coast Survey of the Inner Harbor, surveyed in 1847, 1894, and 1895 (see Figure 8.2). The Site was filled and developed under the following authorizations:

Table 8-1 Consistency with Applicable Massachusetts Coastal Zone Management Policies

Year	License Number	Agency	Proponent	Description
1879	466	Board of Harbor and Land Commissioners	Putnam Nail Company	Construct a pile-supported wharf
1885	900	Board of Harbor and Land Commissioners	Putnam Nail Company	Construct wharves and embankments
1911	3550	Board of Harbor and Land Commissioners	George Lawley and Son Corporation	Build and manage pile piers and marine railways, and to dredge, on Neponset River (<i>missing license plan</i>)
1943	2572	Department of Public Works	George Lawley and Son Corporation	Construct a temporary locker building on its Pier No. 1 in Pine Neck Creek

1969	5604	Department of Public Works	Yacht Leasing Corporation	Maintain structures and dredge in the Neponset River
1976	98	Department of Environmental Quality Engineering	Yacht Leasing Corporation	Application to place riprap, solid fill, maintain piles, pier, floats and fill in the Neponset River
1999	7938	DEP	T.R.E., Inc.	Remove a granite block seawall and fill, reconstruct an existing seawall and to construct and maintain a riprap slope and public viewing platform
2002	9374	DEP	Thomas Real Estate, Inc.	Construct and maintain a steel bulkhead in/over the Neponset River

A portion of the Project Site is located seaward of the historic mean high water, and is therefore entirely within Chapter 91 jurisdiction. The Project Site is not separated from the watershed by a public way and is therefore not considered to be landlocked. The Proponent will obtain a new license under Chapter 91 for construction of the portions of the Project within Chapter 91 jurisdiction, the rehabilitation of the Marina, and the Project's open space improvements. Portions of the Project within jurisdiction include nonwater-dependent uses. As such, the new license for the Project will be nonwater-dependent.

8.2.3 Water Quality Certificate

The Massachusetts 401 Water Quality Certificate Program was established to meet the Commonwealth's obligations to enforce Section 401 of the Federal Clean Water Act and is implemented by MassDEP under the regulations at 314 CMR 9.00. These regulations require the state to certify that proposed discharges of dredged or fill material, dredging and dredged material disposal in waters of the United States comply with the applicable Surface Water Quality Standards and other applicable state law.

Section 8.4 provides a consistency review for the Project with respect to the MassDEP Water Quality Program.

8.2.4 Coastal Zone Management

The Project is subject to the Massachusetts Coastal Zone Management Plan's Federal Consistency Review established under the regulations at 301 CMR 21.07 because it is geographically located in the Massachusetts Coastal Zone and requires a federal permit issued by the USACE. The regulations require the proponent to demonstrate and the Massachusetts Office of Coastal Zone Management Program to certify that projects subject to such review are consistent with the regulatory policies and management principles listed in 301 CMR 21.98. Section 8.5.1 provides a consistency review for the Project with respect to the Massachusetts Office of Coastal Zone Management (CZM) policies and management principles.

8.2.5 Wetlands Protection Act

As depicted on Figure 8.3, DEP mapping identifies state-regulated wetland resource areas within the Project Site, including Land Subject to Coastal Storm Flowage, Coastal Bank, Land Under Ocean, Riverfront Area, and Tidal Flat associated with the Neponset River. These resources are subject to the jurisdiction of the Wetlands Protection Act (WPA). Work within these areas requires the filing of a Notice of Intent with the Boston Conservation Commission and the issuance of an Order of Conditions which protects the identified public interest of the WPA:

- › Protection of public and private water supply;
- › Protection of groundwater supply;
- › Flood control;
- › Storm damage prevention;
- › Protection of land containing shellfish;
- › Protection of fisheries; and
- › Protection of wildlife habitat.

Existing Wetlands Resources

Based on review of the existing conditions survey, the following resource areas have been identified on or adjacent to the Project Site:

- › **Land Subject to Coastal Storm Flowage (LSCSF)** – As defined in §10.04, LSCSF means “land subject to any inundation caused by coastal storms up to and include that caused by the 100-year storm, surge of record, whichever is greater.”
- › **Coastal Bank** – As defined in §10.30(2), a coastal bank means “...seaward face or side of any elevated platform, other than coastal dune, whichever lies at the landward edge of the coastal beach, land subject to tidal action or other wetland.”
- › **Land Under the Ocean** – As defined in §10.25 (2), is (in part), “land extending from the mean low water line seaward to the boundary of the municipality's jurisdiction and includes land under estuaries.”
- › **Riverfront Area** – As defined at §10.58(2)(a), a Riverfront Area is the area of land between a river's mean annual high water line and a parallel line measured (25 feet in Boston) horizontally. The Riverfront Area may include or overlap other resource areas or their buffer zones. The riverfront area does not have a buffer zone.
- › **Tidal Flat** – As defined at §10.58(2), includes “any nearly level part of a coastal beach which usually extends from the mean low water line landward to the more steeply sloping face of the coastal beach or which may be separated from the beach by land under the ocean.”

Refer to Figure 8.3, Wetland Resources, for DEP mapping of on-site wetland resource areas.

8.3 Chapter 91 Licensing Review and Compliance

Chapter 91 provides for the protection of the public's rights to navigation along and access to the Massachusetts shoreline. The Chapter 91 regulations establish standards for jurisdictional projects based on a number of criteria. Key among these are a project's status as water-dependent or nonwater-dependent, its location on flowed or filled tidelands, and its location on tidelands identified as either Private or Commonwealth Tidelands. The regulations also apply additional criteria to that portion of a Project Site within the "water-dependent use zone." In the case of water dependency, a project that is principally nonwater-dependent will be reviewed as nonwater-dependent in whole, whether or not it includes water-dependent aspects.

The following sections review licensing provisions of Chapter 91.

Categorical Restrictions on Fill and Structures in an ACEC

The Project Site is subject to certain categorical restrictions based on its location within an ACEC. Pursuant to 9.32(1)(e) and 9.32(2)(d), the regulations prohibit the placement of new fill in ACEC waters and place increased limits on new structures within ACECs. In an ACEC, new, privately owned structures for water-dependent use below the high-water mark, such as private docks or piers, are only eligible for a license provided that such structures are consistent with an ACEC RMP adopted by the municipality and approved by the Secretary of Energy and Environmental Affairs. Likewise, improvement (new) dredging is prohibited within an ACEC except for the sole purpose of fisheries and wildlife enhancement.

As described in Section 8.2.1, the RMP specifically endorses the expansion and improvement of existing waterfront facilities, and acknowledges the historic dredging that has occurred on the Site. Based on review of the Site's license history and historic aerials, it is understood that the dredging of the existing marina was originally authorized in 1911 through Harbor and Land Commissioners License No. 3550, however the plan for this license is missing from DEP records and from the registry of deeds. The Project Team has consulted with DEP (Water Quality and Chapter 91 Waterways Program), as well as USACE, CZM, and DCR, and will continue to coordinate with state agencies to confirm that the anticipated dredging is consistent with DEP's definition for maintenance dredging. The proposed waterside improvements will be implemented compliant with these provisions, and is consistent with the RMP.

Facilities of Private Tenancy

The Project Site is subject to 310 CMR 9.51(3)(b), which, among other things, prohibits ground floor facilities of private tenancy in new or expanded buildings for nonwater-dependent use on any filled tidelands within 100 feet of the shoreline. The

Project is consistent with this requirement, and has located all Facilities of Private Tenancy either above the ground floor or outside of Chapter 91 jurisdiction.

Water-Dependent Use Zone

The Project Site is subject to 310 CMR 9.51(3)(c), which prohibits new or expanded buildings for nonwater-dependent use to be located within a water-dependent use zone. A water-dependent use zone (WDUZ) extends for the lesser of 100 feet or 25 percent of the average distance from the ordinary high water line to the landward lot line of the property. The WDUZ on the Project Site is depicted in Figure 8.4, Chapter 91 Jurisdiction, and has been determined in coordination with DEP and certified by a Professional Land Surveyor. No new buildings for nonwater-dependent purposes are located within the WDUZ, therefore the Project is consistent with this standard. Structures proposed within the WDUZ include supporting facilities which serve as accessory structures to the marina, including the boathouse which is structurally independent of the adjacent mixed-use portion of the building. The nonwater-dependent uses on Site are designed to enhance the use of the marina and will not conflict with or discourage water-dependent activity or public use of the WDUZ.

Open Space

The Project Site is subject to 310 CMR 9.51(3)(d), which requires that at least one square foot of the Project Site at ground level be preserved as open space for every one square foot of tideland area within the combined footprint of buildings containing nonwater-dependent use. Open space, for Chapter 91 purposes, as interpreted by DEP, includes all areas not covered by buildings that are at grade and open to the sky.

Although the provisions of 310 CMR 9.53 (which require more expansive and active open space) do not apply to the Project because, as shown in Figure 8.5 it is located landward of the Historic Mean Low Water mark (HMLW) and privately owned, the Project will maintain the waterfront area as both an asset to the Project Site and a benefit to the community. As such, the Project will exceed the open space requirements and provide quality programming and year-round activity that will be enhanced by activity from the surrounding buildings and Port Norfolk neighborhood in general.

Height

The Project Site is subject to 310 CMR 9.5.1(3)(e), which restricts the height of new or expanded buildings within jurisdictional filled tidelands. Building heights¹ shall not exceed 55 feet within 100 feet of the existing MHW line. At further landward distances, buildings may be increase in height by one-half foot for every additional

¹ As measured according to local zoning.

one foot of separation from the MHW line. New buildings within jurisdiction will comply with Chapter 91 height limitations.

Facilities of Public Accommodation ("FPA") within 100 Feet of the Project Shoreline

The Project Site is subject to 310 CMR 9.51(3)(b), which prohibits facilities of private tenancy within 100 feet of the shoreline on the ground floor of buildings on filled private tidelands. Facilities of private tenancy are defined in 310 CMR 9.02 as any facility at which the advantages of use accrue, on either a transient or a permanent basis, to a relatively limited group of specified individuals (e.g., private club, condominium building) rather than to the public (e.g., restaurant, coffee shop, aquarium or a museum). The Project fully complies with this regulation and does not include any facilities of private tenancy within 100 feet of the shoreline within jurisdiction.

Utilization of the Shoreline for Water-Dependent Purposes

The Project Site includes a 74-foot wide WDUZ as defined by 310 CMR 9.51(3)(c). This calculation has been reviewed by DEP and certified by a Professional Land Surveyor. This regulation, combined with the requirements of 310 CMR 9.52 requires nonwater-dependent use projects to devote a reasonable portion of tidelands in jurisdiction to water-dependent use that promote public access of and public use of the waterfront. The regulation at 310 CMR 9.52(1) requires one or more facilities that generate water-dependent activity and a pedestrian access network that is appropriate for the Project Site and the Project. As described in Chapter 2, *Urban Design*, the Project embraces this standard and has been designed to enhance existing water-dependent uses and expand public recreational opportunity along the waterfront with a new Harborwalk, kayak rentals, new open space, and supporting public facilities.

8.4 Water Quality Certification

Water Quality Certification will be required for the Project because it will require dredging of more than 100 cubic yards of material. Key criteria for the evaluation of Water Quality Certification include; no practicable alternative that would have less adverse impact on the aquatic ecosystem, and confirmation that appropriate steps will be taken to avoid and minimize adverse impacts to land under the ocean and the intertidal zone. Consistency with this criteria will rely on ongoing design and analysis and will be presented in greater detail in the DEIR/DPIR.

8.5 Wetlands Protection Act

The proposed work will occur within the Riverfront Area, Land Subject to Coastal Storm Flowage, 100-foot buffer zone to Coastal Bank, Land Subject to Coastal Storm Flowage (LSCSF), and Land Under Ocean. The Site also contains Tidal Flats, however

no work is proposed within that resource. As noted below, the WPA does not prescribe performance standards for LSCSF.

Since the Project Site is within an ACEC, all performance standards for coastal resources are raised to “no adverse effect” on the interests of the WPA except for maintenance dredging for navigational purposes of Land Under Ocean.

Riverfront Area

The WPA regulations at 310 CMR 10.58 establish a 25-foot Riverfront Area (RA) associated with the Neponset River. As the Neponset River is a tidal river, the RA is measured horizontally from MHW, rather than the top of the riverbank (310 CMR 10.58(2)(a)(2)(c)). The present MHW shoreline is located at elevation 4.33’ NAVD88. The Project Site contains approximately 29,600 square feet of RA, which consists of previously developed paved surfaces. The portion of the Project that will be located within the RA include water-dependent facilities to support the use of the marina and public open space. All work within RA will be performed in compliance with the applicable performance standards. There is no buffer zone associated with the RA.

Land Subject to Coastal Storm Flowage

The most recent FIRM for the City of Boston indicates that the Site contains areas identified as both Flood Hazard Areas (“A” zones) and Coastal High Hazard Areas (“V” zones). These areas are subject to flooding at elevations 11 - 13, and 14 feet NAVD88 during the 1% annual chance flood, respectively. Since the flood waters would extend from the tidal waters of the Neponset River, this area is regulated as LSCSF. The WPA does not prescribe any performance standards for LSCSF.

100-foot Buffer Zone to Coastal Bank

The WPA regulations under §10.02(2)(b) establish a 100-foot buffer zone from the limits of coastal bank. Work within the 100-foot Buffer Zone to Coastal Bank will require compliance with the performance standards enumerated within §10.30. The proposed work within the buffer zone will not result in any short-term construction related or long-term operational impacts to the protected resource area, Coastal Bank, or any additional down gradient resource area.

Land Under the Ocean

Land Under the Ocean exists within the Neponset River seaward of the mean low water line. Land Under the Ocean consists of unconsolidated sediments, rocky material, and debris found within the regularly submerged portion of the River. According to data maintained by MassGIS Online Data Viewer (OLIVER), the Project Site does not contain any mapped eelgrass beds. There are areas mapped as suitable for soft-shell clams to the west of the Site, but shellfish growing is prohibited. Land Under Ocean does not have a 100-foot buffer zone. Work proposed within Land Under Ocean will be completed in compliance with the applicable performance standards.

Tidal Flat

Tidal flat exists immediately west of the site, and are consisted of shallow flats along Pine Neck Creek. No work is anticipated within Tidal Flats, however if work is required it will be completed in compliance with the applicable performance standards.

8.5.1 Coastal Zone Management (CZM) Policies

The Project Site is located within the Massachusetts Coastal Zone and, as the Project will be a non-water dependent project, must be consistent with the regulatory policies established by CZM under the federally approved Massachusetts Coastal Zone Program.²

Table 8-2 lists the CZM policies which are applicable to the Project, and assesses the consistency with those applicable policies.

Table 8-2 Consistency with Applicable Massachusetts Coastal Zone Management Policies

CZM Policy	Summary of Policy	Summary of Consistency Statement
Coastal Hazard Policy # 1	Preserve, protect, restore, and enhance the beneficial functions of storm damage prevention and flood control provided by natural coastal landforms	The policy does not apply. The Project Site is currently developed and does not contain natural coastal landforms.
Coastal Hazards Policy # 2	Ensure that construction in water bodies and contiguous land areas will minimize interference with water circulation and sediment transport	The Project is not anticipated to have an adverse impact on water circulation. The adjacent bank consists of a man-made bulkhead and does not serve as a sediment source.
Coastal Hazards Policy # 3	Ensure that state and federally funded public works projects would be safe from flood and erosion-related damage	The policy does not apply. The Project is not a state or federally funded public works project.
Coastal Hazards Policy #4	Prioritize acquisition of hazardous coastal areas that have high conservation and/or recreation values	The Project includes development within a V Zone, and as such will comply with applicable building code standards. The Project will substantially improve recreational opportunity on the Site.
Energy Policy # 1	For coastally dependent energy facilities, assess siting in alternative coastal locations	This policy does not apply. The Project is not an energy facility.
Energy Policy # 2	Encourage energy conservation and use of renewable sources	Project will incorporate energy conservation measures and include assessment of renewable energy potential to the extent practicable as presented in Chapter 3, <i>Sustainability/Green Building and Climate Change Resiliency</i> .
Growth Management Policy #1	Encourage sustainable development that is consistent with state, regional, and local plans	Project will incorporate sustainable design elements, and is consistent with regional, state, and local plans. Project sustainability is discussed further in Chapter 3, <i>Sustainability/Green Building and Climate Change Resiliency</i> .

² Massachusetts Office of Coastal Zone Management Policy Guide, Executive Office of Energy and Environmental Affairs, October 2011.

CZM Policy	Summary of Policy	Summary of Consistency Statement
Growth Management Policy #2	Ensure that state and federally funded infrastructure projects serve developed urban areas	The policy does not apply. The Project is not a state or federally funded infrastructure project.
Growth Management Policy #3	Encourage revitalization and enhancement of existing development in the coastal zone	The Project will revitalize and activate the Project Site on a year-round basis.
Habitat Policy # 1	Protect coastal, estuarine, and marine habitats to preserve wildlife habitats	The Project will obtain an Order of Conditions from the Boston Conservation Commission.
Habitat Policy # 2	Advance the restoration of degraded or former habitats in coastal areas	This policy does not apply.
Ocean Resources Policy # 1	Support the development of sustainable aquaculture, both for commercial and enhancement (public shellfish stocking) purposes.	This policy does not apply. Shellfish growing is prohibited in the surrounding resource areas.
Ocean Resources Policy # 2	The extraction of oil, natural gas, or marine minerals (other than sand and gravel) in or affecting the coastal zone must protect marine resources, marine water quality, fisheries, and navigational, recreational and other uses.	This policy does not apply, no extraction of oil natural gas, or marine minerals is proposed
Ocean Resources Policy # 3	Accommodate offshore sand and gravel extraction needs in areas and in ways that will not adversely affect marine resources, navigation, or shoreline areas.	This policy does not apply, no extraction of sand and gravel is proposed outside of maintenance dredging.
Ports and Harbors Policy # 1	Ensure that dredging and disposal of dredged material minimize adverse effects on water quality, physical processes, marine productivity, and public health and take full advantage of opportunities for beneficial re-use.	Anticipated maintenance dredging will require a Water Quality Certification from DEP and will be coordinated closely with state and federal agencies to ensure impacts to marine resources are minimized to the extent feasible.
Ports and Harbors Policy # 2	Obtain the widest possible public benefit from channel dredging and ensure that Designated Port Areas and developed harbors are given highest priority in the allocation of resources.	Dredging is proposed within an existing developed marina and will serve to improve navigation for the public use of facilities enhanced by the Project.
Ports and Harbors Policy # 3	Preserve and enhance the capacity of Designated Port Areas to accommodate water-dependent industrial uses	This policy does not apply; the Project is not within a Designated Port Area
Ports and Harbors Policy # 4	For development on tidelands and other coastal waterways, preserve and enhance the immediate waterfront for vessel-related activities that require sufficient space and suitable facilities along the water's edge for operational purposes.	The Project will enhance an existing recreational boating marina.
Ports and Harbors Policy # 5	Encourage, through technical and financial assistance, expansion of water-dependent uses in Designated Port Areas and developed harbors, re-development of urban waterfronts, and expansion of physical and visual access	The project is not within a Designated Port Area, but will enhance an existing recreational boating marina and improve public access to the Site.
Protected Areas Policy # 1	Preserve, restore, and enhance coastal Areas of Critical Environmental Concern, which are complexes of natural and cultural resources of regional or statewide significance.	The Project endeavors to preserve the unique resources of the Neponset River Estuary ACEC as described in this Chapter.
Protected Areas Policy # 2	Protect state designated scenic rivers in the coastal zone.	The Project Site is not within a designated scenic rivers.

CZM Policy	Summary of Policy	Summary of Consistency Statement
Protected Areas Policy # 3	Ensure that proposed developments in or near designated or registered historic places respect the preservation intent of the designation and that potential adverse effects are minimized.	Refer to Chapter 7, <i>Historic Resources</i> , for a detailed evaluation of the Project's approach to enhancing the existing historic resources.
Public Access Policy # 1	Ensure that development would promote general public use and enjoyment of water front	The Project will create new recreational opportunities through the enhancement of filled tidelands by providing new pedestrian oriented open space and public accommodations.
Public Access Policy # 2	Improve public access to coastal recreational facilities; facilitate multiple uses; minimize adverse impacts of developments	The Project proposes significant improvements to public open space and pedestrian accessibility. The proposed development will support a mix of uses and will minimize impacts.
Public Access Policy # 3	Expand coastal recreational facilities and develop new public areas for recreational activities	The Project will enhance an existing recreational marina and will include public access in the form of open space and public pedestrian access ways along the waterfront open space.
Water Quality Policy # 1	Ensure that point-source discharges do not comprise water quality standards	No point source discharges are associated with the proposed improvements. An improved stormwater management system will be designed and constructed for the Site which meets federal stormwater management standards and is compliant with both the DEP Stormwater Management Policy and Boston Water and Sewer Commission requirements.
Water Quality Policy # 2	Implement nonpoint source pollution controls to promote the attainment of water quality standards and protect designated uses and other interests	Potential nonpoint discharge is limited to stormwater runoff. Stormwater at the Project Site will be collected and treated in appropriate stormwater management structures designed in accordance with federal stormwater management standards, DEP Stormwater Management Policy and Boston Water and Sewer Commission requirements.
Water Quality Policy # 3	Ensure that subsurface waste discharges conform to applicable standards	The policy does not apply as the Project does not propose subsurface waste discharges.

8.5.2 Public Benefit Determination

The Project is subject to the jurisdiction of the 2007 statute "*An Act Relative to Licensing Requirements for Certain Tidelands*" (2007 Mass. Acts Ch. 168, sec 8) because it is entirely within filled tidelands. The act requires the Secretary to consider the following when making a Public Benefit Determination:

- › Purpose and effect of the development;
- › The impact on abutters and the surrounding community;
- › Enhancement of the property;
- › Benefits to the public trust rights in tidelands or other associated rights;
- › Community activities on the development site;
- › Environmental protection and preservation;
- › Public health and safety; and
- › General welfare.

The following sections describe how the Project provides appropriate public benefits and is adequately protective of the Public Trust rights inherent in tidelands.

Purpose and Effect of the Development

The overall purpose of the Project is the redevelopment of an existing marina and associated upland service buildings into a new mixed-use development.

The Project will provide substantial direct and indirect public benefits, including the provision of access and recreational opportunity on previously inaccessible tidelands, the remediation of Project Site contamination, new housing opportunities, and considerable improvements to the public realm.

Impact on Abutters and Community

The Project will result in a substantial net benefit to the community by advancing the goals of the Imagine Boston 2030 plan and converting an underutilized waterfront development area into a new neighborhood asset.

The Proponent is working closely with their abutters and members of the community to ensure impacts are minimized to the extent feasible. Potential traffic impacts of the Project will be mitigated through the TDM measures discussed in Chapter 5, *Transportation*. Construction impacts will be addressed through the development of a CMP, as discussed in Chapter 4, *Environmental Protection*.

Enhancement of the Property

The Project will enhance the Project Site by converting an underutilized waterfront property and deteriorating buildings into a vibrant mixed-use marina development with new interior and exterior public spaces.

Benefits to the Public Trust Rights in Tidelands or Other Associated Rights

As described above, the Project will include numerous direct public benefits related to tidelands including improving public access to the shoreline, providing new public open space, and substantial public amenities.

Community Activities on the Site

The Project will result in a substantial net improvement to community activity at the Project Site by providing new open space, improved accessibility throughout the Site, and new public amenities such as kayak rental facilities.

Environmental Protection/Preservation

The Proponents are committed to redeveloping the Project Site in accordance with all applicable local, state, and federal environmental protection regulations. Table 1-2 in Chapter 1, *Project Description*, provides a list of the regulatory approvals anticipated to be required.

Public Health and Safety

The Project will promote public health and safety through implementing a Site design that provides a safe and universally accessible facility from all directions. Improvements include landscape and appropriate lighting and signage to provide a safe well-lit environment for visitors and employees on a 24/7 basis.

General Welfare

The Project will protect the general welfare by replacing underutilized buildings with a modern pedestrian scale mixed use Project. The Project will comply with all applicable local, state, and federal environmental protection standards.

Protection of Groundwater

As described in Section 4.8, *Groundwater*, the Project protects groundwater levels at the Project Site. If required, the off-site discharge of groundwater or accumulated surface water will be performed in accordance with the EPA NPDES permits issued to the Commonwealth of Massachusetts as well as DEP and municipal regulations pertaining to the off-site discharge of groundwater into surface water bodies.



Source: MassGIS, VHB

- Site Area
- Parcel Boundary
- Neponset River Estuary ACEC
- Previously Authorized Dredging

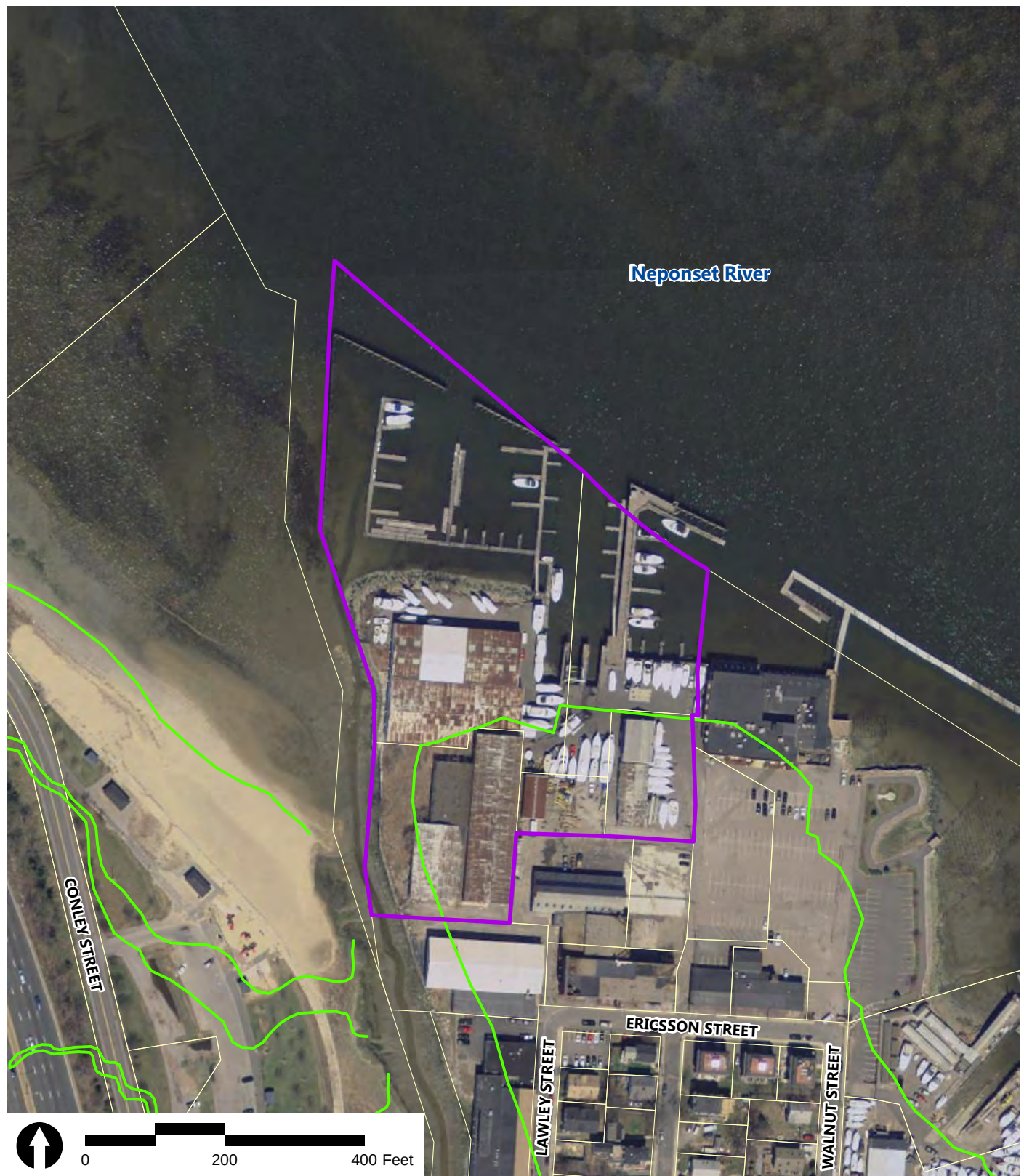
Note: As identified in Figure 11(c) of the ACEC Resource Management Plan



Figure 8.1

Neponset Wharf
Neponset River Estuary ACEC

Dorchester, Massachusetts



Source: MassGIS, VHB

- Site Area
- Parcel Boundary
- Historic Mean High Water

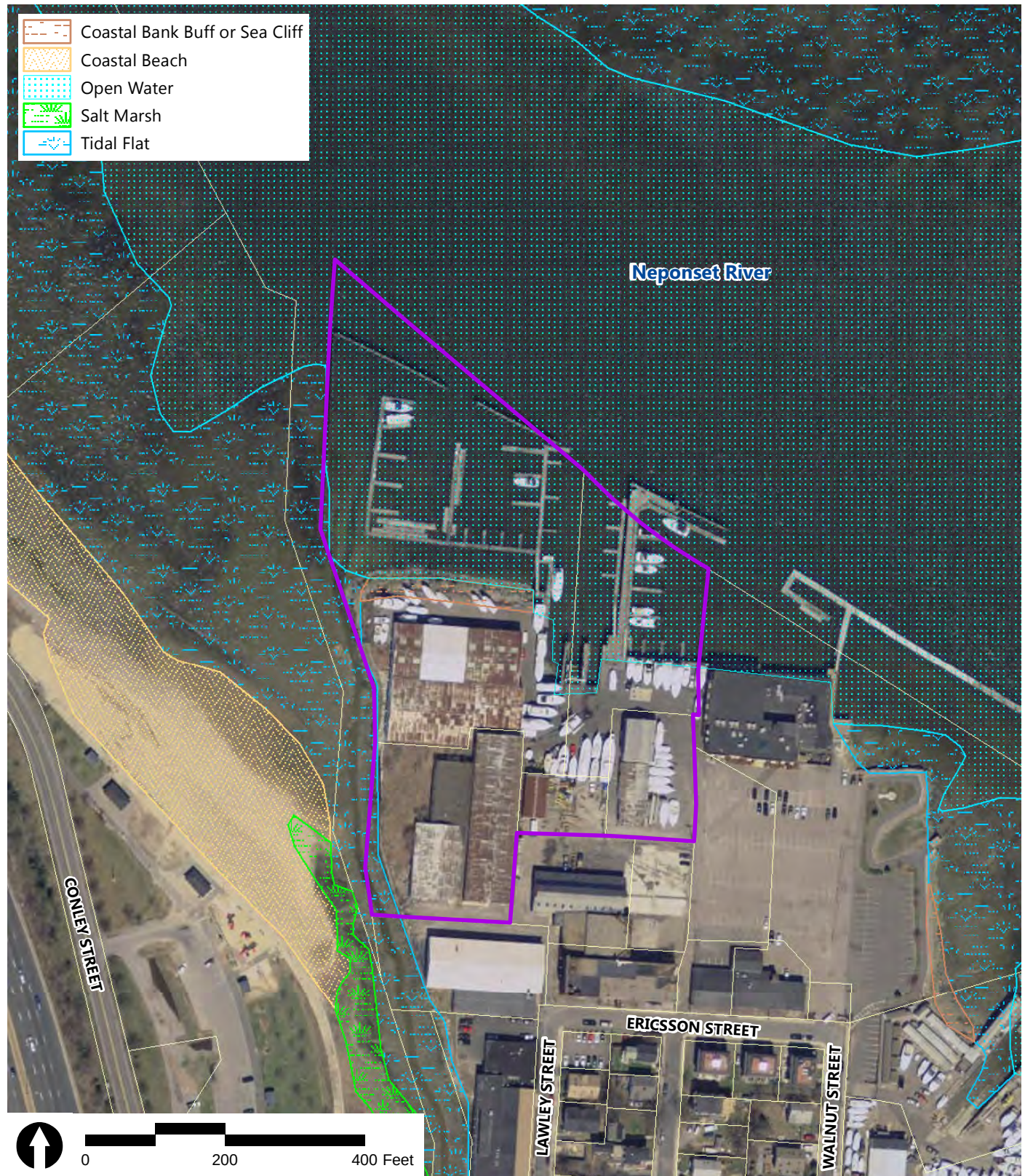


Figure 8.2

Neponset Wharf

Historic Coastal Survey 1847, 1894 and
1895 HMHW

Dorchester, Massachusetts



Source: MassGIS, VHB

- Site Area
- Parcel Boundary



Figure 8.3
Neponset Wharf
Wetland Resource Areas

Dorchester, Massachusetts



Source: MassGIS, VHB

- Site Area
- Parcel Boundary
- Water-Dependent Use Zone
- Historic High Water
- Contemporary High Water
- Historic Mean Low Water



Figure 8.4
Neponset Wharf
Chapter 91 Jurisdiction

Dorchester, Massachusetts



Source: MassGIS, VHB

- Site Area
- Parcel Boundary
- Historic Mean Low Water



Figure 8.5
Neponset Wharf
Historical Coastal Survey 1893
HMLW

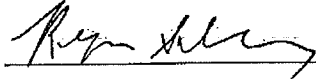
Dorchester, Massachusetts

9

Project Certification

This ENF/EPNF has been submitted to the Boston Planning and Development Agency, as required by Article 80 of the Zoning Code, on the June 30, 2017.

Proponent
CPC Ericsson Street LLC

 6/30/17

Ryan Sillery
Manager

Preparer
VHB

 6/30/17

Seth Lattrell
Environmental Planner

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Appendix A: Letter of Intent



300 A STREET, SUITE 101
BOSTON, MASSACHUSETTS 02210
857.496.0425

May 26, 2017

Via Hand Delivery

Mr. Brian Golden, Director
Boston Planning and Development Agency
One City Hall Square, 9th Floor
Boston, MA 02201
Attn: Tim Czerwinski, Project Manager

**RE: Letter of Intent to File Project Notification Form
Article 80 Large Project Review
Neponset Wharf - Port Norfolk, Dorchester**

Dear Director Golden:

The purpose of this letter is to notify the Boston Planning and Development Agency (BPDA) that CPC Ericsson Street LLC (Proponent), owner - developer of approximately 7.6 acres, of which 3.6 acres represents land, off of Ericsson Street in the Port Norfolk neighborhood of Dorchester (Project Site), intends to file a Project Notification Form (PNF) with the BPDA for construction of a new mixed-use development project, to be known as "Neponset Wharf", and anticipated to contain approximately 330,000 gross square feet in four main and three accessory mixed-height structures; with existing marina uses and boat slips proposed to be maintained and renovated, and augmented by new overwater structures and on-land boat storage; approximately 150 multi-family residential units; an approximately 25 room hotel; supporting retail component; and new parking facilities for approximately 195 spaces to serve project residents as well as to support public access to new open space and waterfront programs, including a boathouse (Proposed Project).

We are submitting this Letter of Intent (LOI) pursuant to the Executive Order Relative to the Provision of Mitigation by Development Projects in Boston issued on October 10, 2000, as amended, in anticipation of the submission of a Project Notification Form to commence the Article 80B-2 Large Project Review process for the Proposed Project.

The Project Site's current buildings, occupied by MarineMax/Russo Boston and together containing approximately 71,300 gross square feet of boat storage, sales, and service facilities areas, would be demolished to allow the Proposed Project to proceed.

The Proposed Project will significantly improve an underutilized waterfront property on Boston's Neponset River shore by:

- Improving existing marine uses;
- Introducing new waterfront uses, including possible water transportation links;
- Enhancing public access to the Neponset River;
- Providing public amenities including various programmed open spaces;
- Providing a Harborwalk, and possible pedestrian link to nearby Tenean Beach to connect to the improved waterfront open spaces; and
- Advancing housing creation goals of Mayor Walsh's 2030 Housing Plan.

The Project Site is bounded to the north by the Neponset River, to the south by Ericsson Street and the historic Putnam Nail Company buildings, to the west by Pine Neck Creek (Neponset River), and to the east by the Boston Winery and the Venezia Restaurant and parking lot.

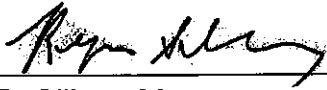
The Proposed Project is located within the Waterfront Service ("WS") Subdistrict of Article 65's Dorchester Neighborhood District, which generally permits the proposed multi-family residential and mixed-use buildings contemplated by the project as allowed or conditional permitted uses, with certain dimensional and use relief required.

Prior to submitting this LOI, the Proponent and its team attended a regularly scheduled meeting of the Port Norfolk Civic Association on May 16, 2017 to informally discuss the project and to arrange for a community project open house at the site on June 3, 2017. The Proposed Project has also been presented and discussed the project at meetings with local elected officials, and with the BPDA.

We wish to thank you and BPDA staff for your time and attention to this matter. Our team looks forward to working with the BPDA, members of the Impact Advisory Group to be formed, local elected officials, other city agencies, and the local Port Norfolk neighborhood and Dorchester community in advancing towards a successful project outcome.

Very truly yours,

CPC Ericsson Street LLC



Ryan P. Sillery, Manager

cc: Jonathan Greeley, BPDA
Michael Christopher, BPDA
Tim Czerwienski, BPDA
David Cotter, Mayor's Office of Neighborhood Services
City Councilor Frank Baker
State Senator Linda Dorcena Forry
State Representative Daniel Hunt
Joseph Rull, MJR Consultants, LLC
Kevin Deabler, RODE Architects Inc
Jared Eigerman, Dalton & Finegold, LLP
Mitchell Fischman, MLF Consulting LLC
Elizabeth Grob, VHB
Seth Lattrell, VHB

Appendix B: MEPA DISTRIBUTION LIST

Appendix B: MEPA Distribution List

Federal

US Army Corps of Engineers
New England District
Regulatory Division
696 Virginia Road
Concord, MA 01742

Commonwealth of Massachusetts

Secretary Matthew A. Beaton
Executive Office of Energy and
Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Deputy Commissioner Gary Moran
Department of Environmental Protection
One Winter Street
Boston, MA 02108

Ben Lynch, Program Chief
Department of Environmental
Protection, Waterways Program
One Winter Street
Boston, MA 02108

DEP/Northeast Regional Office
Attn: MEPA Coordinator
205B Lowell Street
Wilmington, MA 01887

Senator Linda Dorcea Forry
24 Beacon Street, Room 410
Boston, MA 02133

Massachusetts Department of
Transportation
Public/Private Development Unit
ATTN: Lionel Lucien
10 Park Plaza
Boston, MA 02116

Massachusetts Department of
Transportation – District #6
Attn: MEPA Coordinator
185 Kneeland Street
Boston, MA 02111

Massachusetts Historical Commission
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125

Metropolitan Area Planning Council
60 Temple Place, 6th Floor
Boston, MA 02111

Massachusetts Water Resource Authority
Attn: MEPA Coordinator
Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Coastal Zone Management
Attn: Project Review Coordinator
251 Causeway Street, Suite 800
Boston, MA 02114

Department of Energy Resources
Attn: MEPA Coordinator
100 Cambridge Street, 10th Floor
Boston, MA 02114

Department of Conservation and
Recreation
Attn: MEPA Coordinator
251 Causeway St. Suite 600
Boston MA 02114

Massachusetts Bay Transportation
Authority
Attn: MEPA Coordinator
10 Park Plaza, 6th Fl.
Boston, MA 02116-3966

Division of Marine Fisheries
(North Shore)
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

Representative Daniel Hunt
24 Beacon Street, Room 155
Boston, MA 02133

City of Boston

Boston Planning & Development Agency
Attn: Brian P. Golden, Director
One City Hall Square, 9th Floor
Boston, MA 02201

Office of Environment, Energy &
Open Space
Attn: Austin Blackmon, Chief
One City Hall Square, Room 709
Boston, MA 02201

Chief of Economic Development
John Barros
One City Hall Square, 9th Floor
Boston, MA 02201

Boston City Council
One City Hall Square, 5th Floor
Boston, MA 02201

Boston Transportation Department
One City Hall Square, 7th Floor
Boston, MA 02201

Boston Department of Public Works
1 City Hall Square, Room 714
Boston, MA 02201

Boston Conservation Commission
One City Hall Square, Room 805
Boston, MA 02201

Boston Landmarks Commission
One City Hall Square, Room 805
Boston, MA 02201

Boston Public Health Commission
Attn: Monica Valdes Lupi
1010 Massachusetts Avenue
Boston, MA 02118

Boston Water and Sewer Commission
Attn: MEPA Reviewer
980 Harrison Avenue
Boston, MA 02119

Councilor Frank Baker
1 City hall Square, Suite 550
Boston, MA 02201

Boston Public Library
Fields Corner
1520 Dorchester Ave
Dorchester, MA 02122

Boston Public Library
Adams Street Branch
690 Adams St.
Dorchester, MA 02122

Other Interested Parties

Boston Harbor Now
15 State St
Boston, Massachusetts, MA 02109

Conservation Law Foundation
62 Summer Street
Boston, MA 02110

Save the Harbor / Save the Bay
212 Northern Ave, Room 304
Boston, MA 02210

Port Norfolk Civic Association
176 Walnut Street
Boston, MA 02122

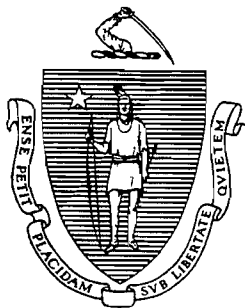
Neponset River Watershed Association
2173 Washington Street
Canton, MA 02021

Appendix C: ACEC RESOURCE MANAGEMENT PLAN

Note: Materials are provided on the enclosed CD-ROM.
Hard copies are available upon request.

Neponset River Estuary
Area of Critical Environmental Concern
Resource Management Plan

March 1996



Massachusetts Executive Office of Environmental Affairs
Department of Environmental Management
Areas of Critical Environmental Concern (ACEC) Program



William F. Weld, Governor
Argeo Paul Cellucci, Lt. Governor

Trudy Coxe, Secretary, EOE
Peter C. Webber, Commissioner, DEM

Neponset River Estuary
Area of Critical Environmental Concern
Resource Management Plan

March 1996

Massachusetts Executive Office of Environmental Affairs
Trudy Coxe, Secretary, EOE
Department of Environmental Management
Peter C. Webber, Commissioner, DEM

Prepared for: ACEC Program
100 Cambridge Street, 14th Floor
Boston, MA 02202

Prepared by: Richard F. Delaney and Jack Wiggin

Printed on Recycled Paper

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Acknowledgments

Phil Brady, DMF/DFW
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Ellie Spring, Cedar Grove Civic Association
Richard Thibedeau, DEM

Neponset River Acronym List

BNAF	Boston Natural Areas Fund
Boston BOH	Board of Health
Boston CC	Conservation Commission
Boston DPW	Department of Public Works
Boston ED	Environment Department
Boston PD	Parks Department
BRA	Redevelopment Authority
BW&SC	Water and Sewer Commission
DEM	Department of Environmental Management
DEM/ACEC	Areas of Critical Environmental Concern
DEM/CA/SP	Coastal Access/ Sea Path Program
DEP	Department of Environmental Protection
DEP/BRP	Bureau of Resource Protection
DEP/BWSC	Bureau of Waste Site Clean Up
DEP/DWW	Division of Wetlands and Waterways
DEP/OWM	Office of Watershed Management
DFWELE	Department of Fisheries and Wildlife Environmental Law Enforcement
DFWELE/DMF	Division of Marine Fisheries
DFWELE/Riverways	Riverways Program
DFWELE/DFW	Division of Fisheries and Wildlife
DFWELE/DFW/NHP	Natural Heritage Program
DFWELE/PAB	Public Access Board
EOEA	Executive Office of Environmental Affairs
EOEA/OTA	Office of Technical Assistance
EOEA/WRBP	Wetlands Restoration and Banking Program
JBC	Joint Beaches Commission
MAPC	Metropolitan Area Planning Council
MBTA	Massachusetts Bay Transit Authority
MCZM	Massachusetts Coastal Zone Management
MDC	Metropolitan District Commission
MHC	Massachusetts Historical Commission
MHD	Massachusetts Highway Department
Milton BOS	Board of Selectmen
Milton CC	Conservation Commission
Milton DPW	Department of Public Works
Milton PD	Parks Department
Milton Planning	Planning Department
MWRA	Massachusetts Water Resource Authority
NepRWA	Neponset River Watershed Association
NepRWA-FONE	Friends of Neponset Estuary
NepRWA-UM	Urban Monitors
NR Coordinator	Neponset River Coordinator
NRESC	Neponset River Estuary Stewardship Council
NRWCC	Neponset River Watershed Community Council
Quincy BOH	Board of Health
Quincy CC	Conservation Commission
Quincy DPW	Department of Public Works
Quincy PD	Parks Department
Quincy Planning	Planning Department
STH/STB	Save the Harbor/ Save the Bay
TBHA	The Boston Harbor Association
TPL	Trust for Public Lands
TTOR	The Trustees of Reservations
UMass Boston	UMass Boston
USACOE	US Army Corps of Engineers
USFWS	US Fish and Wildlife Service

Preface

In September 1994, the Neponset River Watershed Association and the Boston, Milton and Quincy Conservation Commissions nominated the Neponset River Estuary as an Area of Critical Environmental Concern (ACEC). The intent of the nomination was to engage the Commonwealth in efforts to protect existing natural and cultural resources and to identify methods of restoring degraded resources. An extensive public review and Executive Office of Environmental Affairs (EOEA) interagency review followed. On March 27, 1995, under the authority of Massachusetts General Law Chapter 21A, Section 2(7), Secretary of Environmental Affairs Trudy Coxe designated the Neponset River Estuary an ACEC with an effective date of December 1, 1995 (see Appendix A for the designation document).

The Neponset River Estuary ACEC designation is notable for two reasons. First, it recognizes the critical importance of the natural resources situated in a heavily urbanized area and, second, in making the designation, the Secretary, for the first time, directed the agencies of the Executive Office of Environmental Affairs (EOEA) to collaborate with municipalities, environmental and community groups and organizations, local businesses and residents, and other interested parties to prepare a Resource Management Plan (RMP) for the ACEC.

The purpose of the Neponset River Estuary ACEC Resource Management Plan is to guide implementation of the Neponset River Estuary ACEC designation, i.e., those activities for preserving, restoring, enhancing, using, and managing the resources of the estuary, and to coordinate the activities and interests of federal, state and local agencies and the public and private sectors within the ACEC. The Secretary also required the RMP to address certain regulatory and boundary issues identified in the designation document and to propose, as appropriate, recommendations for amending the designation prior to its December 1, 1995 effective date.

A draft Resource Management Plan (RMP) and proposed amendments to the ACEC designation were distributed for public review and were the subject of a public hearing on November 15, 1995. On December 1, 1995 the Secretary issued her decision to amend the Neponset River Estuary ACEC designation incorporating a technical clarification of the ACEC boundary and providing for limited exemptions for specified environmentally beneficial activities. She also issued the MEPA Certificate asking that the RMP be further developed and refined, particularly in regard to coordination with other on-going planning initiatives, and to include a detailed implementation plan.

Executive Summary

Introduction

On March 27, 1995 the Secretary of Environmental Affairs designated the Neponset River Estuary an Area of Critical Environmental Concern (ACEC) under the authority of Massachusetts General Laws Chapter 21A, Section 2(7). In making the designation, the Secretary also directed the agencies of the Executive Office of Environmental Affairs (EOEA) to collaborate with municipalities, environmental and community groups and organizations, local businesses and residents, and other interested parties to prepare a Resource Management Plan (RMP) for the Neponset River Estuary ACEC.

The purpose of the Resource Management Plan is to guide the implementation of the Neponset River Estuary ACEC and coordinate the activities and interests of federal, state and local agencies and the public and private sectors within the ACEC. As required by the designation, the plan also addresses regulatory and boundary issues identified in the designation document and raised during the public review process leading to the designation.

The Resource Management Plan for the Neponset River Estuary ACEC describes the existing conditions of the natural resources, human uses, and interests of state, local and federal government and citizen advocacy groups. It establishes goals to guide future decisions and actions in the Neponset River Estuary ACEC; identifies issues of resource preservation, restoration, enhancement, and use; and makes recommendations for managing the resources. Section I of the RMP introduces the ACEC program, details the purpose of the RMP, and discusses the associated state, municipal, regional, nonprofit, and federal agencies and programs affecting the Estuary. Section II details the recommended actions and tasks for meeting each goal for each resource feature identified in the ACEC designation. Section III discusses the implementation strategy for the RMP and plan evaluation and schedule for revision of the plan.

Following an extensive review and evaluation of the regulatory analysis and recommendations for amendments to the designation contained in the draft RMP, and based on public hearing testimony and written comments received, the Secretary of Environmental Affairs adopted amendments to the original designation on December 1, 1995. These amendments provide limited exemptions from the ACEC for certain environmentally beneficial activities that are instrumental in the restoration of natural resources within the ACEC. In order to avoid any unnecessary delays in the implementation of these rehabilitation projects and because they provide a net environmental benefit and are consistent with the goals of the ACEC, the Secretary exempted certain activities associated with the closure and capping of the Hallet Street landfill, the remediation of hazardous waste sites, and specified improvement dredging projects. The Neponset River Estuary ACEC is notable for recognizing the critical importance of preserving and managing a highly significant estuarine ecosystem situated in a heavily urbanized area.

The Planning Process

The current Final Resource Management Plan is being submitted to MEPA for a final public review on March 15, 1996, to be noticed in the Environmental Monitor on March 25th. A 30-day public comment period will follow, after which the Secretary will issue her final findings on the plan. At that point the plan becomes a working document to be implemented and revised over time.

This planning process began in September 1994, when the Neponset River Watershed Association and the Boston, Milton and Quincy Conservation Commissions nominated the Neponset River Estuary as an Area of Critical Environmental Concern (ACEC). The intent of the nomination was to engage the Commonwealth in efforts to protect existing natural and cultural resources and to identify methods of restoring degraded resources. An extensive public review of the nomination was conducted by the Executive Office of Environmental Affairs (EOEA). On March 27, 1995, Secretary of Environmental Affairs Trudy Coxe designated the Neponset River Estuary an ACEC with an effective date of December 1, 1995 and requested that an RMP be prepared (see Appendix A for a copy of the ACEC designation document). The Department of Environmental Management (DEM), which administers the Massachusetts ACEC Program, drafted a scope for the RMP and retained consultants to draft the plan under the guidance of a steering committee.

The identification of issues and development of the goals upon which this Resource Management Plan is based was guided by a steering committee representing the four co-nominators of the ACEC designation: the conservation commissions of Boston, Milton and Quincy, and the Neponset River Watershed Association; four representatives of the Executive Office of Environmental Affairs (EOEA): the Coastal Zone Management Program (MCZM), Department of Environmental Management (DEM), the Department of Environmental Protection (DEP), and the Metropolitan District Commission (MDC); and representatives of environmental and community groups.

A draft Resource Management Plan and proposed amendments to the ACEC designation were distributed for public review and were the subject of a public hearing on November 15, 1995. The draft Resource Management Plan also underwent a concurrent review in accordance with the requirements of the Massachusetts Environmental Policy Act (MEPA) regulations. On December 1, 1995, the Secretary issued her decision to amend the Neponset River Estuary ACEC designation incorporating a technical clarification of the ACEC boundary and providing for limited exemptions for environmentally beneficial activities (see Appendix B for a copy of the ACEC Amendments document).

The findings and conclusion of the MEPA review of the draft RMP are presented in the Certificate of the Secretary of Environmental Affairs, EOEA #10516, issued December 1, 1995 (see Appendix B for the designation of amendments and Appendix C for the MEPA Certificate). In the Certificate, the Secretary acknowledged the accomplishments of the draft RMP including the need and justification to adopt the amendments to the ACEC. She also asked that the plan be further developed and refined, particularly in regard to coordination with other on-going planning initiatives and to include a detailed implementation plan. Between December 1, 1995 and March 15, 1996, the steering committee, other state and municipal agencies, nonprofit environmental groups, citizen reviewers, and the consultants continued to revise the plan and identify specific implementation tasks.

Significance of the Neponset River and Resources

The Neponset River flows 27 miles (45 km) from the Neponset Reservoir in Foxboro to Dorchester Bay. The total drainage area of the watershed is 323 square miles. The estuarine section of the river extends from Lower Mills Dam to its mouth at Commercial and Squantum points, an area of approximately 1300 acres. Among its resources are one of the two remaining salt marshes in Boston Harbor, fisheries and wildlife habitat, active and passive recreation, historic and anthropological sites, and beautiful natural and urban vistas. The value of these resources was found to be of regional significance in the ACEC designation for their outstanding natural and cultural characteristics, and for the intrinsic value of the estuarine ecosystem. Urbanization during this century, however, has slowly degraded the resources of the ecosystem making this present restoration and protection effort appropriate.

Important criteria in support of the designation of this area as an ACEC include significant threats to public health through contamination to shellfish beds and water quality; uniqueness of the area through the presence of state-listed rare species; the biological productivity of the estuarine wetlands system; and the potential economic benefits in terms of recreation, tourism and fisheries from a restored and healthy ecosystem.

Goals for the Neponset River Estuary ACEC

The goals for the Neponset River ACEC endorsed by the steering committee were shaped from a draft list of resource management goals and objectives prepared by EOEA which was based on a list originally suggested by the nominators of the Neponset River Estuary ACEC. The draft goals and objectives were distributed for public review and comment during the nomination process. Goals have been developed for each of the resource features identified in the nomination in order to address their restoration, enhancement, preservation, and management.

Overall

Preserve, enhance, restore, manage, and encourage appropriate use of the natural and cultural resources of the estuary of the Neponset River.

Surface Waters and Water Quality

Protect and improve the water quality conditions of the Neponset River Estuary in order to meet, or where possible exceed, state water quality standards.

Estuarine and Freshwater Wetlands

Preserve, protect, and restore wetlands in the Neponset Estuary.

Habitat Resources

Preserve, protect and restore fisheries and wildlife habitat in the Neponset Estuary.

Finfish

Protect, restore, and enhance anadromous fish runs and habitat/breeding grounds for salt water species.

Shellfish

Preserve, protect, and restore shellfish beds to increase the availability of the resource for wildlife and for commercial and recreational use.

Wildlife

Protect and restore the salt marsh, brackish marsh, coastal bank, barrier beach and the vegetated 100 foot buffer zones, as self-regulating systems, in order to support the full range of biological diversity in the Estuary, including rare and endangered species.

Special Use Areas

Protect, enhance, and increase publicly-owned open space in the Estuary for its recreational and educational value.

Cultural, Historical and Archeological Resources

Preserve, protect, enhance, and restore historic and anthropological sites in the Neponset Estuary.

Economic Development

Encourage appropriate land and water uses that provide public benefits and are compatible with sound resource protection and management.

Water-dependent Uses

Preserve and encourage water-dependent uses.

Summary of Major Recommendations of the RMP

The Resource Management Plan contains regulatory and nonregulatory actions for preserving, restoring, enhancing, using, and managing the resources of the Neponset River Estuary ACEC. Viewed collectively, the recommended actions provide a comprehensive plan for protecting the natural value and functions of the Estuary's resources and, where possible, accommodate and encourage appropriate economic and recreational use.

The recommended actions or suggested tasks are presented by resource type and activity. In most cases, each recommended action or task suggests an initial list of *key parties* which are encouraged to coordinate and cooperate in implementing it. A *lead party* has been identified and other parties may need to become involved eventually. Likewise, a suggested *timetable* and *potential resources* needed to accomplish the task are identified. In all cases, every effort has been made to complement and incorporate other planning efforts underway in the river especially the MDC Master Plan—through which many substantial recreation, open space and remediation opportunities will occur.

Three overlying themes emerged from the development of the RMP and its numerous individual tasks. First, the daunting challenge of restoring the water quality of an urban estuary is the determining factor for most of the natural resource related goals, such as salt marsh, fisheries resources, and wildlife habitat restoration. Second, MDC's ongoing Master Plan effort represents an exciting and rare opportunity to achieve well-planned, sustainable recreational use and public access to a rather sizable length of riverfront. Third, given the urbanized nature of this ACEC, several environmental remediation projects need to be undertaken on an expedited basis.

Water quality. Several tasks in the Surface Waters and Water Quality section of the RMP recommend further identification and elimination of point and nonpoint sources of pollution. The water quality of the Estuary has been classified as SB, fishable/swimmable by the DEP, but it is significantly polluted and does not meet those standards. Assessment has indicated

that many of the sources of pollution emanate upriver above the ACEC or are from nonpoint sources in areas adjacent to the ACEC. Therefore, an overriding recommendation of the RMP calls for the implementation of nonpoint source plans and stormwater management plans for the areas immediately adjacent to the ACEC as well as for the entire watershed.

The MDC Master Plan. Due to the significance and scope of the MDC properties and planning processes in the ACEC, and because the MDC Master Plan and Park Design Project for the Lower Neponset River anticipates activities and uses consistent with the goals of the ACEC, the RMP recommends that the Master Plan, once completed, reviewed, and approved by the Secretary of EOEA, become an addendum to the RMP and that its timely implementation be a priority recommendation of the RMP and all involved agencies. The Master Plan will not only address increased public access and recreational activities, but also incorporates several major remediation and restoration projects. A discussion of the Master Plan and most of the RMP's recommendations for implementation of this plan are found in the Special Use section of this plan.

Environmentally beneficial projects. Several recommendations address major landfill closure, hazardous waste site remediation projects and some limited improvement dredging projects. One concern raised in the nomination review process was whether the increased scrutiny and potential for more stringent standards for permitting activities within or affecting the ACEC could hinder or delay the implementation of these projects.

Because the overriding purpose of ACEC designation is to "preserve, enhance, restore, manage, and encourage appropriate use of the natural and cultural resources," the draft RMP recommended that these environmentally beneficial activities be given limited exemptions from the ACEC designation through formal amendments adopted by the Secretary of EOEA. Following public review and EOEA evaluation, the Secretary adopted these amendments on December 1, 1995. These specified activities will continue to be subject to all other requirements of wetland, waterways, and other environmental laws and regulations, and are exempted on the condition that the owner (or its agents) takes all practicable measures to avoid and minimize further degradation of adjacent resources and to mitigate any unavoidable impacts to the greatest extent possible.

The closure and capping of the Hallet Street and Neponset Drive-In landfill sites represents the largest remedial action to improve the environmental quality of the ACEC. Both the review and evaluation process and the ultimate remedial actions will be complex. The process will be conducted under the direction of the Metropolitan District Commission (MDC) as part of the landfill assessment actions (Initial and Comprehensive Site Assessments) and landfill closure construction, as determined through DEP/DSWM's Corrective Alternative Action Analysis (CAAA) process.

Implementation Strategy and Plan Revision

Based on the steering committee and interagency discussions, the recommended process for evaluation of the plan's implementation and periodic revision is as follows.

The overall and most effective mechanism for advancing the goals of an ACEC is cooperation and collaboration among public agencies, nonprofits, the private sector, and the public. These cooperative efforts are realized through increased communication and education, joint efforts toward meeting common objectives, and evaluation of the progress gained through those efforts.

This resource management plan proposes numerous tasks to implement the goals and objectives of the ACEC, all of which depend on a commitment by a collaboration among various government and nongovernmental entities. The implementation of the tasks suggested in this plan will occur over time as the agencies deemed responsible and cooperating parties are able to incorporate the tasks into their yearly work plans. The plan provides a reference document as well as a working blueprint for improvements to the Estuary.

As a state designation, an ACEC requires agencies of the Executive Office of Environmental Affairs (EOEA) to take actions to preserve, restore, and enhance the resources of the ACEC. This ACEC resource management plan recommends various tasks that state agencies can cooperatively implement. Many state agency representatives would also be involved through participation in the Neponset Estuary ACEC Stewardship Council, discussed below, and resource management plan revisions.

EOEA's Neponset Watershed Project, conducted in conjunction with the Neponset River Watershed Association provides a framework for the extensive cooperation and coordination required to effectively implement this RMP. The ACEC designation highlights the estuarine ecosystem within this larger watershed initiative. However, all tasks in this RMP are recommended with the expectation that they be closely aligned and integrated with the management strategies and plans being developed by other major planning initiatives within this watershed and estuary. These include the MDC Master Plan, the Friends of the Neponset Estuary Action Plan, the BNAF/TPL Neponset Greenway Plan, the Neponset River Watershed Action Plan, the Plan for the Future of Boston Harbor Beaches, and the EOEA Watershed Wetlands Restoration Plan.

The RMP recommends that an ACEC Stewardship Council be organized for the purpose of periodically reviewing and evaluating the progress made in implementing the RMP, building consensus, and recommending further actions or changes to the RMP. It is also recommended that this process be conducted at meetings twice each year by all interested parties, including the ACEC nominators, municipal, state agency, and nonprofit environmental group representatives, local businesses, and citizens.

In order to facilitate the Council's actions, the RMP recommends creation of a position of Neponset River Coordinator, housed in the community at the Neponset River Watershed Association, who would be primarily responsible for coordination, public outreach and technical assistance. With several initiatives currently active in the Neponset River, a single point of contact and coordination would be beneficial to all, especially the citizens who have been active in many of these programs.

It is envisioned that the Stewardship Council will hold semiannual meetings in September and March and other meetings as deemed necessary. An annual update report would be prepared by the Neponset River Coordinator based on these meetings and for the review and approval by the ACEC Stewardship Council. The report would describe the status and updated timetable for each implementation task in the RMP and would provide other updates and additions. Achieving the goals of the ACEC will be an iterative and dynamic process, and the Stewardship meetings and annual report will help focus and evaluate the numerous activities that will be involved.

If future meetings and evaluations reveal the need for plan revisions to address Chapter 91 Waterways Regulations requirements for private docks and piers, formal review and approval by the Secretary of Environmental Affairs will be required. The Neponset River Coordinator would consult DEM's ACEC Program for guidance. The process is outlined in EOEA's "Policy Guidelines for the Review and Approval of ACEC Resource Management Plans."

Future plan updates and the results of other ongoing planning efforts within the ACEC may also involve proposals for further amendments to the designation. The procedures for amending the ACEC designation itself are contained in the regulations of the Executive Office of Environment Affairs (301 CMR 12.00). Changes to the boundary or provisions for further improvement dredging projects not specified in the currently designated ACEC, are examples of changes that would require formally amending the ACEC designation. Such proposals should first be considered and endorsed by the Stewardship Council, and be brought to DEM's ACEC Program for review before being formally submitted to the Secretary for consideration.

Conclusion

The rich and varied resources of the Neponset Estuary ACEC have been shaped by the interaction of complex natural processes and intense human activities. Its present highly stressed condition is troublesome. The potential for restoration and enhancement of its environmental quality and economic viability is substantial; but the challenge can be daunting. The first steps have been taken. The citizens have clearly voiced their concern and desire for improvements. The ACEC designation has focused responsible agencies and individuals' attention on the critical issues and goals. Now, the Resource Management Plan provides the first set of strategies and tasks needed to achieve these goals. Every task will require significant coordination and collaboration. The RMP, itself a product of wide collaboration among the interested parties, needs to be viewed as a dynamic mechanism that is implemented immediately, re-evaluated periodically, and adjusted as issues arise.

I. Introduction

The ACEC Program

The Massachusetts Areas of Critical Environmental Concern (ACEC) program is designed to promote the long-term preservation, management, and use of natural and cultural resources that have been determined to be of regional, state, or national significance. Resources of importance include fisheries, coastal geologic features, salt and fresh water wetlands, surface waters and water supplies, natural hazard areas, historical and archeological resources, wildlife habitat, and special use areas such as public recreation areas.

Areas that combine four or more of these features may be nominated by citizens, municipal or state agencies or the Governor for designation as an ACEC. A decision by the Secretary of Environmental Affairs to designate an area as an ACEC carries with it a requirement that all state environmental agencies acquire information about the resources of the ACEC; preserve, restore or enhance the resources of the area; and ensure that activities within the ACEC minimize adverse effects on the natural and cultural values of the designated area.

State agencies carry out this charge through coordinated regulatory review and revision, integrating policy and planning, and by assisting in the preparation of ACEC resource management plans which establish goals for resource protection and use and an implementation strategy.

For a detailed description of the ACEC program, the reader is referred to the Massachusetts Department of Environmental Management's (DEM) *ACEC Program Guide* (1993).

The Purpose and Structure of the Resource Management Plan

An ACEC resource management plan is a collaborative effort between Executive Office of Environmental Affairs (EOEA) agencies and municipalities, environmental and community groups and organizations, local businesses and residents, and other interested parties. A resource management plan is meant to develop resource management goals and implementation plans for the preservation, restoration, enhancement, use and management of the resources of an ACEC. The resource management plan, to the greatest extent possible, will guide the implementation of the ACEC designation and coordinate the activities and interests of federal, state and local agencies and the public and private sectors. Relevant regulatory and planning programs and certain collaborative programs are discussed below. Section II, Resource Management of the Neponset River Estuary, includes an inventory and assessment of the resources, and recommended guidance and tasks for accomplishing the goals of the plan.

In addition to providing a management structure for an ACEC, a resource management plan may address certain activities which are prohibited by state regulation in an ACEC in the absence of such a plan. Specifically, 310 CMR 32(1)(e)(4), DEP Waterways Regulations, prohibits construction of new privately-owned docks and piers in an ACEC unless provided for in a resource management plan adopted by the municipality and approved by EOEA. The

role of the resource management plan in this regard is to provide an analysis of the potential impact of such structures on the resources of the ACEC, and to provide a context and recommendation for the review and permitting of these types of structures.

Because the Neponset Estuary is a highly urbanized ACEC, it is characterized by extensive waterfront development, important public recreation lands owned and managed by the MDC, accumulated negative environmental impacts on water quality, salt marshes, fisheries and wildlife habitat, and critical environmental resource restoration needs and opportunities. In response to these circumstances, several regulatory issues were raised during the public review of the nomination. These issues, which included a reevaluation of the boundary and an assessment of the impact of ACEC designation on several major environmentally-beneficial projects, were examined in the October 1995 draft Resource Management Plan. Regulatory amendments drafted in conjunction with and supported by that plan were adopted by the Secretary of Environmental Affairs in December 1, 1995 following public review and hearing. As stated in the Secretary's Certificate on the Neponset River Estuary ACEC Resource Management Plan (EOEA #10516), "The Wetlands Protection Act, the Chapter 91 Waterways regulations and the MEPA regulations require stricter standards and a more sensitive review of projects within an ACEC. However, stricter standards and more sensitive review are not necessarily needed when an activity is designed to enhance the environment, especially when there is consensus that the existing environment is not pristine. Therefore, the . . . amendments exempt such beneficial activities from the ACEC designation, so that they may go forward without being subject to the ACEC-related standards." Those amendments pertain to regulatory provisions for landfill closures cleanup of hazardous waste (21E) sites, and future improvement dredging projects (see Appendix B).

The resource management plan is also meant to:

- provide the public with an outline of regulatory requirements and agency roles within the ACEC; at the same time establish a mechanism to integrate resource conservation and restoration objectives into the planning, management, and regulatory activities of the federal, state, and local governments;
- work towards improved decision making by recommending that the assessment of resource values and of cumulative impacts of estuarine development be undertaken in advance of individual project review;
- promote increased coordination and cooperation among the several municipalities, state and federal agencies, nonprofit groups and citizens in gathering and sharing information, considering future land and water use, reviewing proposed development, and in designing and implementing specific solutions to problems;
- streamline regulatory reviews through advance planning, inventory and research, and public/private cooperative efforts.

The resource management plan is meant to be an evolving document. It sets up a structure for on-going implementation and includes mechanisms for evaluating and amending the document (see Section III).

The Neponset River Estuary and the Significance of its Resources

The Neponset River flows 27 miles from the Neponset Reservoir in Foxboro to Dorchester Bay. The total drainage area of the watershed is 323 square miles. The Neponset River estuary is that segment where the flow of the Neponset River meets the coastal waters of Dorchester Bay. It extends from the Lower Mills Dam to the mouth of the river between Commercial and Squantum points and is within the cities of Boston and Quincy and the town of Milton (see Figure 1). The Neponset River Estuary ACEC covers an area of approximately 1300 acres.

Among its resources are one of the two remaining salt marshes in Boston Harbor, fisheries and wildlife habitat, active and passive recreation, historic and anthropological sites, and beautiful natural and urban vistas. The estuary has been fortunate in that some level of protection of its natural assets has been in place for a century, thus preserving its marshlands from the negative impacts of drainage and development. Urbanization, however, has slowly degraded the ecosystem, making this present effort at protection and restoration appropriate.

The estuary is also an economic resource. A variety of industrial, commercial and residential uses and infrastructure exist within and alongside the natural resources. These human uses of the estuary are important and this plan attempts to provide a management framework for both preserving, enhancing, and restoring natural and cultural resources and encouraging and integrating appropriate human uses.

The document designating the Neponset River Estuary an ACEC identified the following interests in support of the nomination of the Neponset River Estuary for protection under the ACEC program. It is useful to review them in the context of the resource management plan, as they set up the context for management planning and implementation in the estuary:

(1) Threats to Public Health Through Inappropriate Use

Much of the ACEC is floodplain, a natural hazard area. Although much of the upland portions of the ACEC are already developed, it was found that potential future inappropriate development in sensitive areas, increased impervious surfaces, and inadequately designed and constructed storm water measures constitute a threat to the resources of the ACEC and to public health and safety.

Contaminated shellfish beds due to poor water quality resulting from inappropriate development also constitute a potential threat to public health and safety. Although shellfish harvesting is restricted, attempts to harvest shellfish threaten public health. In addition, poor water quality threatens public health through the public use of beaches and swimming areas.

Finally, there is a threat to public health resulting from the location of at least 13 potential hazardous waste sites (also known as 21E sites) listed by the Department of Environmental Protection (DEP) as located within the nominated area as of December 16, 1994. This number includes the former Neponset Drive-In site owned by MDC.

(2) Quality of the Natural Characteristics

The undeveloped Neponset marshes are an outstanding natural characteristic significant to the region, and the recreational opportunities afforded by the river for boating, swimming and fishing, and by MDC lands and other open space areas for other forms of recreation strongly support ACEC designation.

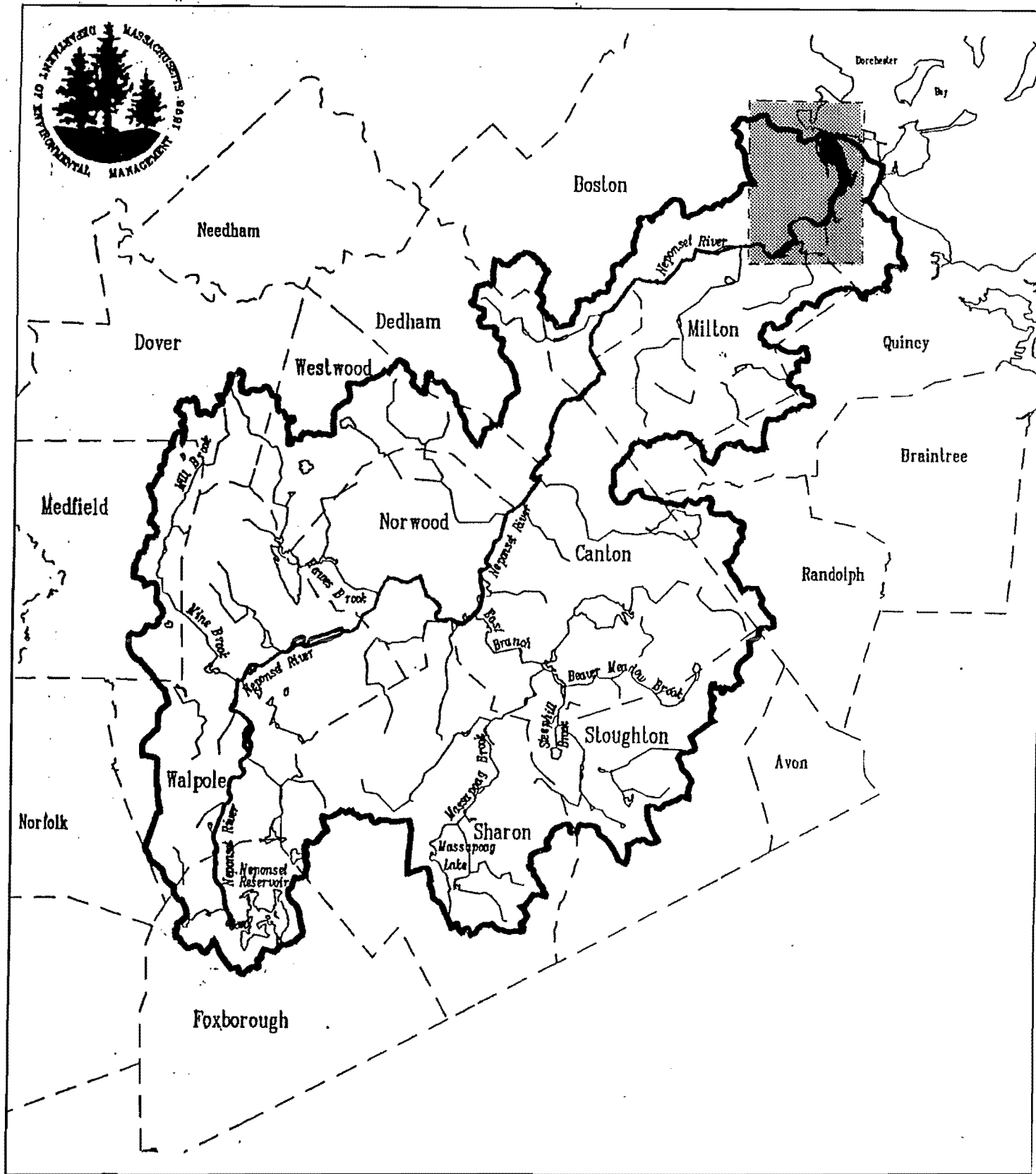


Figure 1: Map of the Neponset River Watershed (from Neponset River Basin Plan, Mass. DEM-Office of Water Resources) with the estuary indicated by shaded box.

(3) Productivity

Estuarine wetland systems are among the richest and most biologically productive ecosystems on earth, and the Neponset River estuary is no exception. Comments from the Massachusetts Division of Marine Fisheries and the Natural Heritage & Endangered Species Program underline the significance of the area regarding biological productivity and diversity of wildlife.

(4) Uniqueness of Area

The uniqueness of the area is defined from a regional, state or national perspective, considering features such as endangered plant and animal species, archaeological/historic/cultural resources, or other resources of educational value. The uniqueness of this area supports ACEC designation, through the presence of state-listed rare species and archaeological and historic resources, and the educational value this riverine, salt marsh ecosystem to the Boston metropolitan area.

(5) Irreversibility and Magnitude of Impact, and Imminence of Threat to the Resources

The resources of the Neponset River Estuary are subject to heavy historical and current development pressures that threaten their continued viability as a healthy and productive ecosystem. The condition of and threats to resources are similar if not identical to those described in the designation document for the Fowl Meadow and Ponkapoag Bog ACEC: "Historically, discharges to the Neponset River from a variety of sources resulted in extremely poor water quality. Water quality has improved since the passage and implementation of the Clean Water Act, but according to recent information from the DEP Bureau of Resource Protection (BRP), the river does not meet Class B standards. According to BRP, "Through the discharge permit and construction grant programs, point sources have largely been cleaned up, but unless nonpoint sources are addressed, the river will not meet Class B standards. The river does not meet its designated uses because of high coliform bacteria counts, nutrient enrichment, and low dissolved oxygen levels. The sources of these pollutants are CSOs (Combined Sewer Overflows), exfiltration, urban runoff and septic systems . . ."

It is essential that these kinds of conditions, combined with continued urban use and development pressures, do not result in irreversible environmental degradation of the Neponset River estuary. Therefore, the Neponset River Estuary ACEC designation is warranted to protect the resources from imminent threats, and highly significant, adverse and irreversible impacts.

(6) Economic Benefits

Economic benefits are described in the ACEC Regulations in terms of intrinsic values important to a region's economic stability, such as recreation, tourism, and fisheries development. Recreation values of the area associated with the Neponset River, and the extensive public recreation and open space areas, strongly support designation. Fisheries development supporting designation is also clearly documented.

(7) Supporting Factors

Over 70 comments were received regarding the nomination. Written or oral testimony was received from three state legislators; five municipal boards and commissions; 16 environmental and community organizations; three businesses; ten federal and state agencies; and over thirty citizens. Although not all comments supported ACEC

designation, and many expressed concerns or reservations regarding designation, the large majority of comments recognized the intrinsic value and importance of the area.

An ACEC designation requires higher standards of review by state agencies of certain proposed activities and encourages coordination of programs, plans and activities to achieve the goals of the designation.

The nomination process has pointed out the large number of conflicting visions that exist for parts of the Neponset River Estuary and, without a context for resolution of these differences, it is unlikely they will be resolved adequately or acceptably. The designation highlights the importance of the estuary's resources and focuses attention on issues of resource values, function, degradation and use. The designation of this ACEC, accompanied by the requirement to prepare a resource management plan, will prove to be an effective means for advancing the natural resource and human use values of this estuary.

A major value of ACEC designation is the educational opportunity it provides. The ecosystem orientation, the emphasis on coordination among government, nonprofit organizations, and the public, and the collaborative efforts to develop resource management goals make everyone more aware of the critical nature of the assets that are to be protected. An informed and engaged constituency is more likely to work to improve an ecosystem's environmental and human values.

The Boundary of the Neponset River Estuary ACEC

The boundary of the Neponset River Estuary ACEC, as designated, can be generally described to include the following:

- 1) the wetland resource areas of the Neponset River marshes and estuary, as defined by the Wetlands Protection Act regulations. The boundary generally follows the jurisdiction of the Wetlands Regulations, including the edge of the resource area and a 100-foot buffer. It does not include the floodplain where, in several locations, it extends beyond the 100-foot buffer of these resource areas.
- 2) adjacent public open space and historic districts.

The approximate boundary is shown on a GIS map produced by the Department of Environmental Management (Figure 2). Actual delineation of the 100-foot buffer zone of the wetlands resource areas would be made by the conservation commission during its review of a Request for Determination of Applicability or Notice of Intent using the procedures specified by the Wetlands Protection Act, M.G.L. Ch. 131, sec. 40, and DEP in the Wetlands Protection Regulations, 310 CMR 10.00.

The official document designating this ACEC contains the legal description of the boundary (Appendix A) with one technical clarification adopted as part of the amendments to the Neponset River Estuary ACEC (Appendix B).

Boundary Issues Raised in Original ACEC Nomination Review

The designation document for the Neponset River Estuary ACEC stipulated that the boundary as described therein be reevaluated during the preparation of the resource management plan and that any recommendations for amending the boundary be proposed prior to the December 1, 1995 effective date of the designation.

The boundary proposed in the *nomination* of the Neponset River Estuary utilized a number of types of features including roads, county line, zoning district lines, property lines, natural

Neponset River Estuary ACEC

Base Map: USGS 1:25,000 topographic maps; USGS-NMD 1:100,000 hydrography enhanced by MassGIS at 1:25,000.

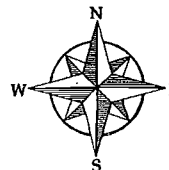
ACECs: ACEC boundary compiled and automated by Mass. Dept. of Environmental Management (DEM).



For more information, write or call: ACEC Program, Massachusetts
Dept. of Environmental Management, Div. of Resource Conservation,
100 Cambridge St., Room 1404, Boston, MA 02202 617-727-3160

Scale 1:20,000

1 mile


$$\begin{array}{c} 0 \\ | \\ 0 \end{array}$$

1 kilometer

Legend

Neponset River Estuary
ACEC boundary

This map is for planning and illustrative purposes only. It represents the best available digital statewide data for a given theme. It is not to be used by itself for legal boundary definition or regulatory interpretation. See the Neponset River Estuary ACEC designation document, as amended December 1, 1995, for the legal boundary description.

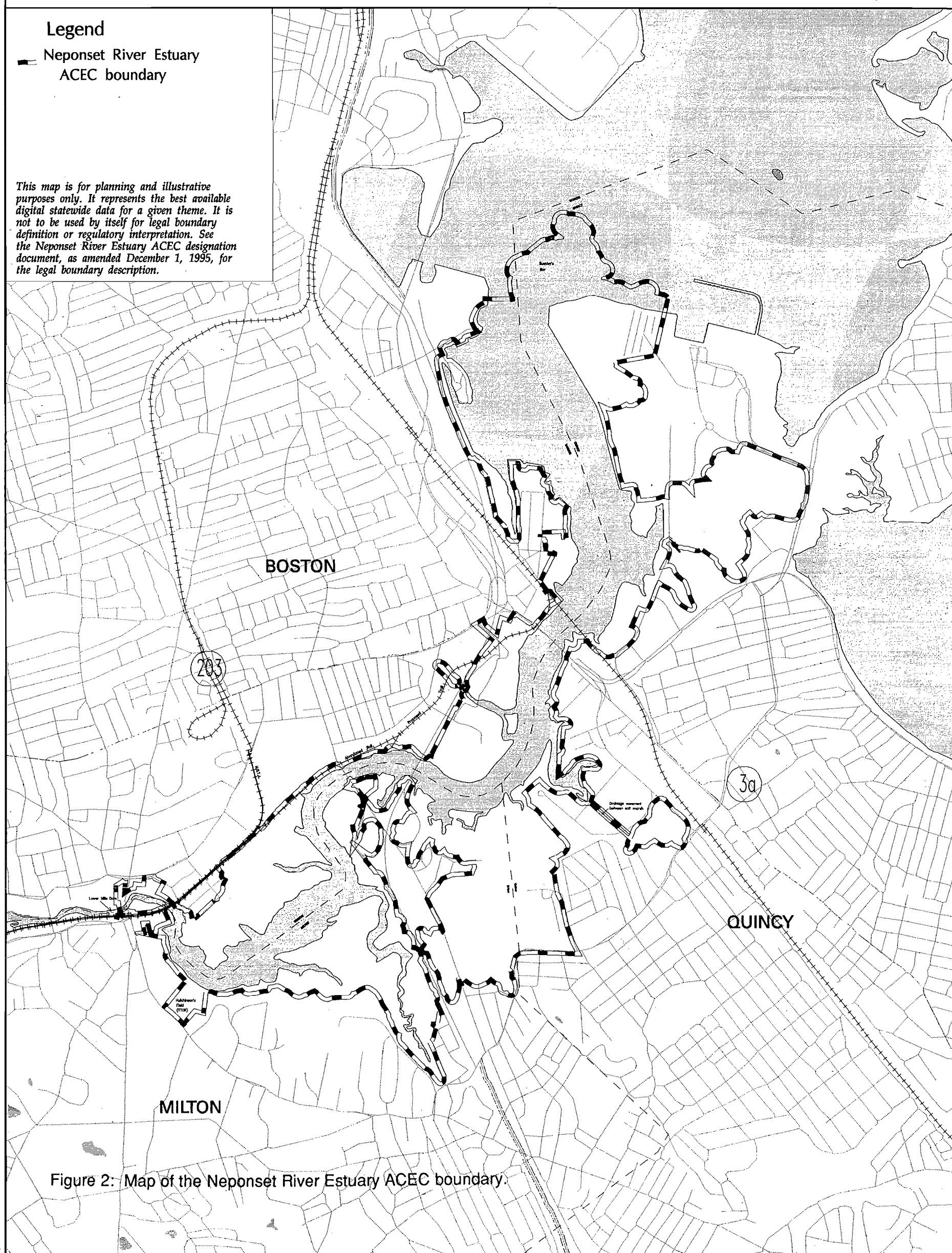


Figure 2: Map of the Neponset River Estuary ACEC boundary.

resources, setbacks and straight line distances between two points. While this kind of “architectural boundary” is for the most part readily identifiable on maps or in the field, it did raise a number of concerns about consistency and rationale for the boundary. Additional comments related to including floodplain areas, additional open water at the mouth of the river, and acreage around Commercial Point.

After consultation with the nominating parties, the Secretary selected a resource-based boundary, as described above, for the designated ACEC.

Several issues arose as a result:

A freshwater wetland on an undeveloped parcel of privately-owned land, excluded under the nominated boundary, was included. The property owner was concerned with additional restrictions on development potential.

Portions of developed single-family residential properties whose rear lot lines are coterminous with the saltmarsh border were included in the boundary by virtue of the 100-foot setback from the resource. Under the MEPA regulations, within an ACEC, an appeal to DEP of a conservation commission’s approval of a regulated activity within the 100-foot buffer zone would require the proponent to prepare and file an Environmental Notification Form (since DEP’s role would constitute a “state action”). This situation led to a concern that in some cases a single-family homeowner could be subject to an additional procedural requirement with perhaps little potential that increased environmental protection will be gained.

During the process of preparing the RMP, the ACEC boundary was reviewed on a parcel-by-parcel basis (including the Lower Mills historic district and the open space boundaries), boundary issues raised during the public review of the designation were thoroughly evaluated, and interviews were conducted with several affected property owners.

For all of the following reasons it was concluded that the resource-based boundary is the best delineation. It (1) encompasses the most critical natural resources, (2) reflects the ecosystem orientation of the ACEC program, (3) is consistent and equitable, and (4) provides a reasonable boundary for the three municipalities in which the ACEC exists and one that is already utilized by the local conservation commissions and DEP in administering the Wetlands Protection Act.

The freshwater wetlands on Squantum Point are an important component of the diverse habitat found at this location. This variety of habitat types in a relatively small area is one of the primary reasons for the unusual abundance of birds (including several state-listed rare species) and high diversity of species found on Squantum Point (see Appendix E). Including these freshwater wetlands within the boundary is consistent with the habitat protection goals of the ACEC.

The resource management plan recommends no changes to the resource-based boundary definition of the designation document. One technical revision to clarify a potential misinterpretation of the boundary was recommended and adopted by the Secretary as an amendment to the designation. Specifically, the explanatory note following the eleventh paragraph in the “Final Boundary Description of the Neponset River Estuary ACEC” contained in the designation document was revised to read:

[Explanatory note: By following the 100-foot wetlands buffer two “islands” of upland are not included within the ACEC boundary. The first lies within property known as No. 2 Granite Avenue, Milton, and the second is the general

area surrounding the intersection of Granite Avenue and the Southeast Expressway.]

Further, to relieve property owners of the potential requirement to file an ENF in the wetlands appeal situation described above, the plan recommends that the MEPA regulations be evaluated and potentially revised to eliminate this requirement in these types of cases, where MEPA review would be duplicative or unnecessary. In the interim, the Secretary of Environmental Affairs has issued a letter of assurance that such cases reaching MEPA will be expedited consistent with this objective.

Several technical revisions to the GIS map presented during the public hearing in January 1995 are required. These are needed only so the map accurately represents the boundary as described in the designation document.

Planning, Programmatic and Regulatory Framework

There is a substantial amount of attention and resources now being directed at the Neponset River. Six major efforts have direct application to areas within the estuary and the ACEC (these are described more fully at the end of this section).

- (1) In 1994 the Secretary of Environmental Affairs selected the Neponset River as the pilot watershed for the Executive Office of Environmental Affairs' Watershed Initiative, an integrated public and private approach to the protection of surface and groundwater.
- (2) With support from the Riverways Program, the Neponset River Watershed Association spawned five subwatershed groups as Stream Teams, one of which is the estuary, to identify issues and problems in the subbasin and propose an action plan for addressing the issues.
- (3) The Metropolitan District Commission is nearing completion of a Master Plan and Park Design for its properties along the lower Neponset River from Mattapan Square to the mouth of the river.
- (4) The Boston Natural Areas Fund, which has long been involved with the Neponset River, recently enhanced its community action and educational programming for the Boston shore of the Neponset River with a grant from the Lila Wallace-Reader's Digest Fund. As a partner in this project, the Trust for Public Land is developing a plan identifying potential acquisitions along the river that would help achieve the objectives of the Neponset River Greenway.
- (5) The Joint Commission's Plan for the Future of Boston Harbor Beaches (1993) made a number of recommendations, to be implemented over the next several years, for improving the condition of and access to and between Tenean Beach and adjacent beaches.
- (6) EOE's Wetlands Restoration & Banking Program is preparing a "Neponset River Watershed Wetlands Restoration Plan" as model for the state's other watersheds.

The objective of ACEC designation is the long-term preservation, management and use of the resources. Beyond special initiatives focusing on Neponset resources such as those above, the objectives of ACEC designation can be advanced through the authorities, responsibilities, and efforts of federal, state, and regional agencies; municipal boards, commissions, and departments; and civic and environmental associations and organizations. The following is a review of these agencies and organizations.

Agencies of the Executive Office of Environmental Affairs

The ACEC regulations, 301 CMR 12.00, direct all agencies within the Executive Office of Environmental Affairs to take actions, administer programs, and review regulations to preserve, restore, and enhance the resources of ACECs. EOEA agencies are also required to subject projects under their jurisdiction "to the closest scrutiny" to meet these objectives. Therefore, guidelines for implementing ACEC designation are not found in one set of laws or regulations, but are embodied within a variety of regulations and programs of state agencies.

A listing and summary of each state agency, program, and regulation that specifically addresses ACECs is presented in the *ACEC Program Guide* produced by EOEA's Department of Environmental Management in 1993. This guide is updated periodically. Another good source of this information for coastal ACECs, such as the Neponset River Estuary, is *EOEA and the Coastal Program* by the Massachusetts Coastal Zone Management Office. The following is a list identifying relevant state agencies and programs.

Regulatory Agencies and Programs

The following list identifies relevant state agencies and programs:

Massachusetts Environmental Policy Act Unit (MEPA)

DEP-Division of Wetlands and Waterways

- Wetland Protection Program
- Waterways Regulation Program
- 401 Water Quality Certification Program

DEP-Bureau of Waste Site Cleanup

- Hazardous Waste Site Cleanup (M.G.L.c.21E)

DEP-Division of Solid Waste Management

- Landfill Closure

Resource Assessment or Planning Agencies and Programs

State agencies, programs, and authorities that conduct resource assessments and/or planning in the estuary include:

Coastal Zone Management Program

Department of Environmental Management

- ACEC Program
- Office of Water Resources

Department of Environmental Protection

- Office of Watershed Management
- Wetlands Conservancy Program (mapping of wetlands and eelgrass beds)

Department of Fisheries, Wildlife, & Environmental Law Enforcement

- Division of Marine Fisheries
- Riverways Program (shoreline surveys)

Executive Office of Environmental Affairs, Wetlands Restoration and Banking Program

Massachusetts Bays Program (see below)

Massachusetts Historical Commission

Massachusetts Water Resources Authority (sampling and assessment of water and sediment quality)

Metropolitan District Commission

Municipal Boards and Agencies

Planning and Zoning

The municipalities regulate land use, density and dimensions of development through local zoning by-laws. Each city and town in the estuary in accordance with Massachusetts Home Rule Provisions has enacted local zoning and resource protection ordinances, bylaws and regulations. The Home Rule Amendment of 1966 granted broad governing powers to the municipalities. This means that each community has autonomous local land use control of the shoreline and lands within the ACEC. In the future, each community may also be able to exercise greater flexibility in zoning revisions and adoption of innovative zoning concepts for resource protection without legislative authorization.

Boston revised much of its zoning for the Neponset River/Dorchester Bay waterfront during the process of preparing and adopting the Harborpark Plan in 1990. The final permanent zoning for this area is contained in Article 42A of the Boston Zoning Code.

The zoning adopted for Neponset River/Dorchester Bay features several large shoreland open space districts covering areas of natural shoreline and beach. This district ensures minimal development for these resources. There are also several subdistricts on developed or developable land designed to promote the city's policy of balanced development, including water-dependent industrial activity, waterfront commercial and related uses, as well as residential use. Boston's regulations contain requirements for public access to be incorporated into private development on waterfront property.

South of the Neponset Avenue bridge, the shoreline is zoned open space except for a residential district at the Keystone Apartments and a waterfront manufacturing district covering the T Construction Corp. and Schlager Auto Body sites. The zoning for Port Norfolk solidifies the core residential use and establishes a waterfront service subdistrict to preserve water-dependent uses, particularly for the repair, service, storage, and sale of commercial and pleasure boats and boating supplies.

In Milton, the shoreline is zoned primarily single-family residential with lot sizes ranging from one acre to one-fifth of an acre, with business districts at Lower Mills and at No. 2 Granite Avenue. The zoning map for Milton has a notation on publicly-owned properties (including the saltmarsh of the Neponset River Reservation) that they are not available for residential development.

Quincy's zoning of the waterfront from Squantum Point to the Milton line includes Planned Unit Development (PUD), business, residential, and open space districts, the latter on public parkland. Portions of the PUD and business districts on Squantum Point have not been built out and constitute the greatest area of potential new development within and adjacent to the ACEC.

Wetlands Protection

The Wetlands Protection Act (MGL 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. DEP's responsibilities under the program are to consider appeals of local conservation commission decisions, review requests for variances, and provide enforcement and technical assistance.

The conservation commissions in Boston, Milton, and Quincy regulate activities within their jurisdictions in resource areas under the authority of the Wetlands Protection Act and, in the case of Quincy and Milton, under municipal ordinance or by-laws. Regulated areas include coastal wetlands, mudflat, bank, land subject to tidal action and coastal storm flowage, land subject to flooding, and in a zone extending 100 feet landward of any of these resource areas. Regulated activities include dredging, filling, removing, altering, or building in the areas identified above. The commissions' concern is to protect public health and safety from flooding, minimize the impact of coastal storms, maintain the natural flow pattern of water courses, and protect the wetlands areas.

The City of Quincy's Wetlands Protection Ordinance is adopted under the Home Rule provisions, independent of the Wetlands Protection Act and its regulations. This ordinance establishes procedures for applicants and commission review of proposed activities.

Applications under the Quincy ordinance are identical to a Notice of Intent filed pursuant to the Wetlands Protection Act. Public hearings are generally noticed and held concurrently and decisions reference both the local ordinance and the state authority, though conditions on approvals may specifically reference one or the other authority. Under the local ordinance, the area subject to the Quincy Conservation Commission's jurisdiction includes a 100-foot buffer zone around land subject to flooding.

Milton's Wetlands Bylaw is Chapter 15 of the Town's Bylaws. Like Quincy's ordinance, the bylaw establishes procedural requirements for applicant's and commission review and includes the 100-foot buffer zone around land subject to coastal storm flowage, flood or inundation. The Conservation Commission recently adopted a Non-Disturbance Zone regulation. The regulation states that in order to preserve the quality of certain wetland resources it is necessary to restrict or limit activity adjacent to them. Adjacent to any bank, land under water or bordering vegetated wetlands the zone of non-disturbance shall be a distance of 25 feet from the edge of the resource area wherein no alternation will be permitted. The non-disturbance zone does not apply to activities that are inherently water-dependent including, but not limited to marinas, docks and wharves. Relief from this provision is possible upon vote of the commission.

The Boston Conservation Commission has not adopted a city ordinance, but exercises its authority under M.G.L. Chapter 131, Section 40.

Water Supply, Stormwater and Sanitary Sewage Collection

The Boston Water and Sewer Commission has responsibility for the construction, operation and maintenance of the water and sewage infrastructure throughout the city. The commission operates three combined sewer overflows and nine stormwater outfalls within the ACEC (see Figure 3). As an active partner in efforts to improve the water quality of the Neponset River, the Commission has launched an ambitious CSO control program consisting of: separation of combined sewer areas by separate sanitary sewers and storm drains; an inspection, maintenance and rehabilitation program for tidegates and regulators; relocation of catch basins from combined sewers to storm drains; and manhole rehabilitations; removal of infiltration/inflow to increase capacity of sewer system.

The Commission has developed a Stormwater Management Program emphasizing best management practices, protecting the structural integrity and hydraulic capacity of the drainage system, and control of discharge of pollutants to storm drains, use of grit and oil separators, and public education campaigns.

The Commission has recently completed an investigation of the Pine Neck Creek Storm Drain to identify sources of bacterial contamination to the drain and to develop remediation measures. It is anticipated that some dredging in the creek may be a necessary part of the remediation plan.

The Quincy Department of Public Works is responsible for the city's stormwater and sanitary sewer collection system. Stormwater and sanitary sewers are separate in Quincy. There are a number of stormwater outfalls to the Neponset River estuary. The DPW has an comprehensive program for managing stormwater and controlling the effects of discharges.

The Milton Department of Public Works, Water and Sewer Division is responsible for the public water supply and collection system. All of Milton is served by public water and, within the ACEC, only the residences in the Forbes Road neighborhood have on-site septic systems. A water quality problem has been identified in this area and sewerage of the area is being considered by the town.

Regional Agencies and Organizations

Metropolitan Area Planning Council (MAPC)

The Metropolitan Area Planning Council is the regional planning agency for the 101 cities and towns surrounding Boston. MAPC conducts analyses and planning studies of the region, reviews regional impacts of major projects, and provides technical assistance to communities with a range of planning and community development issues including land use controls, water quality, and transportation.

In the Fall 1995, MAPC began a demonstration project in the Neponset River Basin designed to address stormwater runoff from urban areas (a nonpoint source of pollution) by providing technical assistance to the communities in the management and prevention of nonpoint sources. The project involves computing estimated current and future (2020) nonpoint source pollution loads in three selected subbasins of the watershed using a water quality model (P8). One of the selected subbasins is the estuary below the Lower Mills dam. Existing bylaws, regulations, and practices of the communities in the study will be reviewed and evaluated for their effectiveness in managing stormwater runoff and water quality impacts. A model stormwater bylaw/regulation will be developed and presented by MAPC during a workshop by local board members.

Nonprofit Groups

Neponset River Watershed Association (NepRWA)

One of the nominators of the Neponset River Estuary ACEC, NepRWA is a nonprofit citizens organization established in 1967 to work for improved water quality, enhanced access, and protection of open space in the Neponset River watershed. It organizes and supports public educational opportunities and other efforts to increase understanding of and focus attention on the resources of the Neponset River watershed. NepRWA is a central component of the collaborative Neponset River Watershed Pilot Project (described below).

An estuary subgroup, Friends of the Neponset Estuary, has been formed within the Association. This subgroup, with the assistance of DFWLE's Adopt-A-Stream program has conducted a shoreline survey and monitored river flow at the gauge at the Lower Mills Dam in

Neponset River Estuary ACEC

Storm Drains & Combined Sewer Overflows

For more information, write or call: ACEC Program, Massachusetts
Dept. of Environmental Management, Div. of Resource Conservation,
100 Cambridge St., Room 1404, Boston, MA 02202 617-727-3160

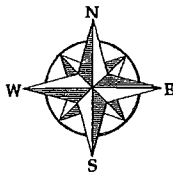
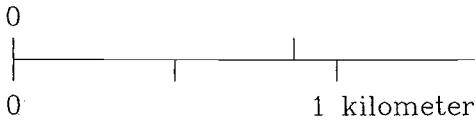
Base Map: USGS 1:25,000 topographic maps; USGS-NMD 1:100,000
hydrography enhanced by MassGIS at 1:25,000.

ACECs: ACEC boundary compiled and automated by Mass. Dept. of
Environmental Management (DEM).

Combined Sewer Overflows (CSOs): Massachusetts Water Resources
Authority; automated by Metcalf & Eddy.

Boston Storm Drains: Boston Water & Sewer Commission; automated
by Rizzo Associates.

Scale 1:20,000



DEM/MassGIS, March 1996

Legend

- ① Combined sewer overflows
- Boston storm drain outfalls
- Neponset River Estuary
ACEC boundary

This map is for planning and illustrative
purposes only. It represents the best available
digital statewide data for a given theme. It is
not to be used by itself for legal boundary
definition or regulatory interpretation. See
the Neponset River Estuary ACEC designation
document, as amended December 1, 1995, for
the legal boundary description.

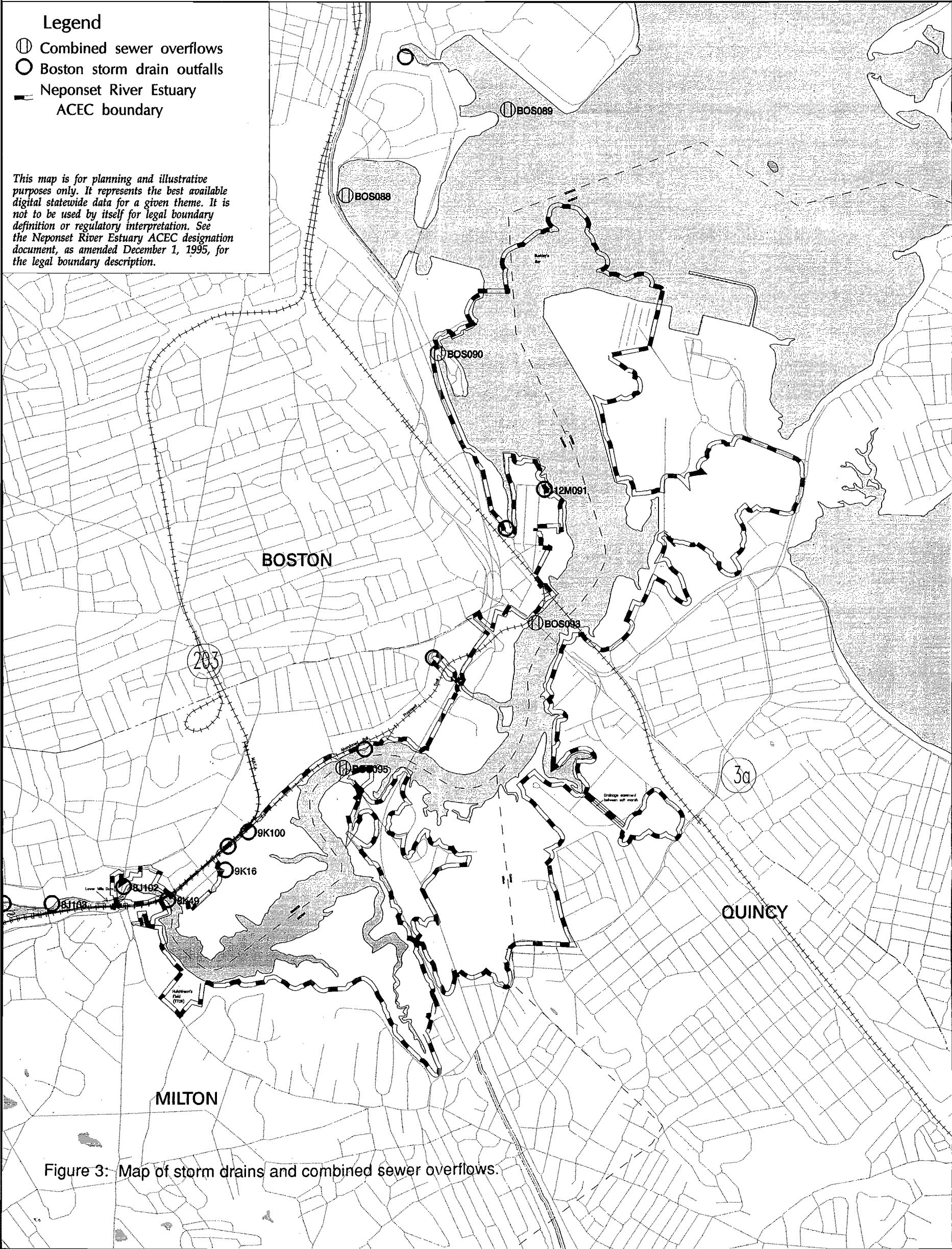


Figure 3: Map of storm drains and combined sewer overflows.

support of restoring smelt spawning in the estuary. The subgroup has been designated an official Adopt-A-Stream group by DFWELE.

Boston Natural Areas Fund (BNAF)

BNAF is a nonprofit corporation founded in 1977 to work with residents to preserve, protect, and improve urban open space in Boston. BNAF is a membership organization, focusing on Urban Wilds (places of natural beauty and environmental significance) and community gardens, of which it owns 30 throughout the city. BNAF, with the Trust for Public Land, is currently involved in a four year initiative, "Greenways to Boston harbor: the Neponset River Greenway and the East Boston Greenway," a community based project to build constituencies and stewardship for the Greenways and to demonstrate their recreational, environmental and educational potential. On the Neponset, the project is planned, implemented and evaluated by the 40 member Neponset Greenway Coordinating Council consisting of residents of Hyde Park, Mattapan and Dorchester. The Neponset Greenway Project includes support for community advocacy, educational programs for all ages, summer and weekend environmental jobs for youth and special events.

Save the Harbor/Save the Bay (STH/STB)

Save the Harbor/Save the Bay is a nonprofit organization whose mission is to foster a positive vision of Boston Harbor and Massachusetts Bay and to build a constituency to promote restoration and protection of these valuable resources. STH/STB is sponsoring an effort to have citizens become involved in monitoring water quality in the estuary.

The Boston Harbor Association (TBHA)

The Boston Harbor Association is a nonprofit, public interest organization founded in 1973 to promote a clean, alive, and accessible Boston Harbor. The Association has been working with state agencies and others on educating the public on water quality issues. TBHA was designated by the Joint Commission on the Future of Boston Harbor Beaches to monitor MDC's implementation of that plan to restore the Boston Harbor beaches.

Federal Agencies

U.S. Army Corps of Engineers

Section 404, of the Clean Water Act authorizes the U.S. Army Corps of Engineers to regulate the discharge of dredged or fill material into all waters (including wetlands) of the U.S. The limit of jurisdiction is the high tide line in tidal waters. Regulated activities include the placement of fill for construction, site-development fill, riprap, seawalls, and beach nourishment.

Section 10 of the Rivers and Harbors Act of 1899 authorizes the Corps to regulate structures and work in navigable waters of the 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.

Federal Emergency Management Agency (FEMA)

FEMA administers the National Flood Insurance Program (NFIP) which enables property owners to purchase insurance protection against losses from flooding. Participation in the NFIP is based on an agreement between local communities and the federal government which

states that if a community will implement and enforce measures to reduce future flood risks to new construction in special flood hazard areas, the federal government will make flood insurance available within the community.

Current planning projects in the estuary

In addition to this ACEC Resource Management Plan, there are a number of other planning and management projects underway currently in the Neponset River Estuary:

EOEA's Watershed Initiative

EOEA's Watershed Initiative, begun in 1994, is the Commonwealth's commitment and effort to develop a watershed management model to "institute community-based environmental decision making by using small watersheds as functional systems to integrate/coordinate regulatory and nonregulatory activities at the local, state and federal levels." The initiative is guided by a steering committee whose members are drawn from state and federal agencies, watershed associations, environmental nonprofits, industry, and citizens. This initiative will establish the direction and form for integrated management of the Commonwealth's water resources.

Neponset River Watershed Pilot Project

The Neponset Watershed Project is the Watershed Initiative's pilot project to demonstrate the watershed approach to addressing environmental concerns. In 1994 the Secretary of Environmental Affairs selected the Neponset River as the pilot watershed for the Executive Office of Environmental Affairs' Watershed Initiative, an integrated public and private approach to the protection of surface and groundwater. DEP's Office of Watershed Management, with the support and participation of civic organizations, businesses, local governments, citizens, and state and federal agencies, will work together within the watershed's boundaries to manage the activities that affect water quality and the health of the watershed. The project's implementation plan features the following milestones:

Final Resource Assessment Report	September 1995
Watershed Management Plan	April 1996
Basin-wide permitting	September 1996
Water resource grant targeting	September 1996-January 1999

Under this project, and with the active leadership of NepRWA and EOEA's Riverways Program, six subwatershed groups were formed to do shoreline surveys and develop actions plans for each subwatershed. The recommendations from the Action Plan of the Friends of the Estuary Subwatershed Group are incorporated in this ACEC Resource Management Plan as an Addendum (see Addendum A).

Friends of the Neponset Estuary Action Plan

The Friends of the Neponset Estuary is the subwatershed group focused on the Neponset River Estuary. As a participant in the Riverways Program's (Massachusetts Department of Fisheries, Wildlife, & Environmental Law Enforcement) Adopt-A-Stream Program, the Friends have been studying various issues of the estuary, conducted a shoreline survey, and prepared an Action Plan for the Neponset Estuary. The Action Plan presents goals, objectives, and specific future actions for the group and others to take to improve conditions of the estuary. Because of its important role in advancing the objectives of the ACEC, the Action Plan is an addendum to this ACEC resource management plan.

MDC's Master Plan and Park Design Project for the Lower Neponset River Reservation

The Metropolitan District Commission's Neponset River Estuary Master Plan is part of MDC's ongoing planning effort within and adjacent to the Neponset River Reservation. The planning effort is part of the MDC's long-standing goal to provide continuous public access from Castle Island in Boston Harbor to the Blue Hills in Milton. The geographic scope of the Master Plan area includes both sides of the river from its mouth at Squantum and Commercial Points to Mattapan Square, with a cursory examination of the River up to Paul's Bridge. The area includes the communities of Quincy, Boston, and Milton and both existing and potential MDC public parkland.

While this phase of planning within the Neponset region will be completed in May, 1996, the MDC has been conducting planning efforts for over four years. Given the focus of the Executive Office of Environmental Affairs, various non-profit, and local entities upon the Neponset River Basin, it is anticipated that the MDC's Master Plan will play a significant role in the process of implementing the ACEC resource management plan. The MDC Master Plan is described more fully in the Special Use Areas section and is intended to be incorporated into this ACEC plan as an addendum after review and approval of the MDC Plan by the Secretary of EOEA.

Greenways to Boston Harbor: The Neponset River Greenway

The Boston Natural Areas Fund (BNAF) and the Trust for Public Land (TPL), with funding from the Lila-Wallace Reader's Digest Fund, is conducting a four-year project "Greenways to Boston Harbor: The Neponset River Greenway (and the East Boston Greenway)." The project will enable the TPL to assist public agencies, including the MDC and the city, with plans to acquire, transfer and develop land for new parks.

The BNAF, along with several other organizations, sponsored a citizens participatory planning workshop on the Neponset (and East Boston) Greenway on May 5 and 6, 1995. Participation was drawn from the Neponset Greenway Coordinating Council, a grassroots citizen's organization formed by BNAF. The workshop generated written and graphic materials representing existing conditions and concepts for the future of the Neponset River. Recommendations from that workshop are incorporated in Section II of this plan.

Plan for the Future of Boston Harbor Beaches

The Joint Commission on the Future of Boston Harbor Beaches was established in 1991 by executive order of Governor Weld and then Boston Mayor Flynn to "coordinate, develop, and recommend a plan for the restoration of the beaches of Boston Harbor." In June 1993, following a two-year planning process that involved broad public participation, the Commission issued its plan for improving the physical condition and environmental quality of and accessibility to the Boston Harbor beaches. Follow-up studies and design of the plan's proposals for individual beaches, including Tenean Beach, are now underway. The Boston Harbor Association has been designated by the Commission to monitor and guide implementation of the plan.

The Massachusetts Wetlands Restoration & Banking Program

The Massachusetts Wetlands Restoration & Banking Program (WRBP) is currently working with the US Army Corps of Engineers to assess the condition of a number of wetland areas around the state, including the Neponset marshes. It is anticipated that a draft Watershed Wetlands Restoration Plan (WWRP) for the Neponset watershed will be made available for

public review by the fall of 1996. The WWRP will provide an inventory of wetlands restoration sites prioritized based on their capability to improve the watershed's flood storage, water quality, and fish and wildlife habitat, as well as providing information that can be used for land use planning and management purposes beyond wetlands restoration (Wetlands Restoration & Banking Program, 1995).

In the Neponset River estuary, the WRBP is working with the MDC and examining the possible restoration of the Metropolitan District Commission's Neponset Marshes and degraded wetlands at Granite Avenue in Milton. Part of the assessment of the health of the marshes and potential for restoration will include soils assessment for potential contaminants, particularly in filled areas.

In addition to the projects and programs described above, EOEa is involved in several other collaborative programs relevant to the Neponset River Estuary. Among these are:

Shellfish Bed Restoration Program

Shellfish Bed Restoration Program is a collaboration of the Massachusetts Division of Marine Fisheries (DMF), Massachusetts Association of Conservation Districts (MACD), Natural Resource Conservation Service (NRCS), Massachusetts Department of Environmental Protection, and the Massachusetts Bays Program (MBP) to identify and mitigate nonpoint source pollution from specific storm drains which are now causing shellfish bed closure or threatening open beds. Administered with the help of Regional Planning Agency technical assistance staff and a full-time program manager with funding from MBP, this program enhances the capacity of local communities to address their pollution problems.

Massachusetts Bays Program

Massachusetts Bays Program (MBP) is a partnership of federal, state, and local governments that is about to complete a five year assessment and planning effort that will conclude with a Comprehensive Conservation and Management Plan for Massachusetts and Cape Cod bays. That plan is meant to serve as a blueprint for coordinated action aimed at restoring and protecting water quality and the diverse natural resources of the Massachusetts Bays. The goals and management strategies of the CCMP and this RMP are quite similar. The smaller geographic scale of the 1,260-acre Neponset Estuary ACEC allows for the assessments and recommendations included in this plan to be more specific than those of the CCMP.

II. Resource Management of the Neponset River Estuary

The goals for the Neponset River ACEC endorsed by the steering committee were shaped from a draft list of resource management goals and objectives prepared by EOEA which was based on a list originally suggested by the nominators of the Neponset River Estuary ACEC. The draft goals and objectives were distributed for public review and comment during the nomination process. The following are the goals for the Neponset River Estuary ACEC:

Overall goal for the Neponset River Estuary

Goal: Preserve, enhance, restore, manage, and encourage appropriate use of the natural and cultural resources of the estuary of the Neponset River.

Objectives:

- Integrate state agency project review in ACEC
- Coordinate federal, state, and local planning and regulatory review
- Provide public education regarding the benefits of the ACEC and long range planning

Surface Waters

Goal: Protect and improve the water quality conditions of the Neponset River estuary in order to meet, or where possible exceed, state water quality standards.

Objectives:

- Identify and reduce point and nonpoint sources of pollution
- Identify areas of contaminated sediments and sources of this contamination
- Ensure that all sponsors and proponents of activities in the ACEC employ best management practices

Estuarine and Freshwater Wetlands

Goal: Preserve, protect, and restore saltmarsh and wetlands in the Neponset Estuary.

Objectives:

- Identify filled or degraded wetlands and consider appropriate means of restoration
- Maintain floodplain storage and prevent coastal hazards.
- Prepare a baseline assessment of the health of the saltmarsh in the ACEC
- Educate owners of residential and commercial properties containing or abutting wetlands on the value of the resources and potential impacts

Habitat Resources

Goal: Preserve, protect and restore fisheries and wildlife habitat in the Neponset Estuary.

Finfish

Goal: Protect, restore, and enhance anadromous fish runs and habitat/breeding grounds for salt water species.

Shellfish

Goal: Preserve, protect, and restore shellfish beds to increase the availability of the resource for wildlife and for commercial and recreational use.

Objectives:

- Evaluate status of fisheries habitat.
- Catalog plant and animal species and map habitats
Assess anthropogenic impacts on species composition and habitat distribution
Assess feasibility/desirability of habitat restoration including shellfish beds and fish ladders.
Identify point sources of pollution in the watershed that can be targeted for remediation

Wildlife

Goal: Protect and restore the salt marsh, brackish marsh, coastal bank, barrier beach and the vegetated 100 foot buffer zones, as self-regulating systems, in order to support the full range of biological diversity in the estuary, including rare and endangered species.

Objectives:

- Evaluate status of wildlife habitat
- Catalog plant and animal species and map habitats including upland species and rare species
- Assess anthropogenic impacts, species composition and habitat distribution, including wildlife corridors and open space buffers
- Evaluate effect of land uses on habitat
- Assess potential future impacts of land use on habitat through analysis of municipal zoning bylaws
- Assess stream flow for adequate habitat requirement
- Restore degraded habitats; protect unprotected habitats; maintain existing open space.
- Direct active recreation away from sensitive areas

Economic Development

Goal: Encourage appropriate land and water uses that provide public benefits and are compatible with sound resource protection and management.

Objectives:

- Develop and implement a plan for sustainable development of ACEC resources.
- Identify opportunities for and work towards integrated permit review
- Establish a procedure for identifying and evaluating cumulative impacts

Water-dependent Uses

Goal: Preserve existing water-dependent uses.

Objectives:

- Develop and implement a plan for sound water-dependent uses
- Develop maintenance dredging and disposal plan with municipal government agencies, DEM, DEP, CZM and the U.S. Army Corps of Engineers.
- Identify sites of previous dredging and for future dredging
- Compile and assess all sediment data from studies and permit files

Historical and Archaeological Resources

Goal: Preserve, protect, enhance, and restore historic and anthropological sites in the Neponset Estuary.

Objectives:

- Make anthropology/history of the Neponset Estuary publicly available
- Incorporate historic interpretation in planning processes
- Increase public access where appropriate and interpret these resources for the public

Special Use Areas

Goal: Protect, enhance and increase publicly-owned open space in the estuary for its value as recreational and educational resources.

Objectives:

- Coordinate the objectives of this RMP and the MDC's Park Master Plan for the Lower Neponset and with municipal recreation plans
- Encourage collaboration among public agencies, nonprofits, and private sector in prioritizing and acquiring open space
- Improve water quality for swimming, boating and fishing
- Develop plan to ensure public access to the Neponset Estuary
- Protect view sheds and make them publicly accessible
- Make use of the estuary as a laboratory and classroom for study of estuarine environments, environmental impacts, and cultural resources
- Remediate hazardous waste sites

For each category of resources and uses in the estuary, the following sections present an inventory of the existing conditions, an assessment of those conditions and existing management, and an implementation strategy. The implementation strategy begins with an identification of the issues followed by a number of specific tasks for addressing those issues and promoting the goals and objectives of ACEC.

Listed for each task are: cooperating parties, a time table, and resources for accomplishing the task. The identified agencies, organizations, or individuals under each task are those that

exercise authority or are capable and interested in contributing to the task; the entry in bolded type would have lead or coordinating responsibility. The time table entries indicate the estimated period of time in which the task would be tackled; the time frames are variously based on availability of resources, the schedule established by the lead agency, complexity of the task, and/or sequencing of tasks. Most of the tasks are projected to be completed within the five-year implementation schedule of this resource management plan. Entries under resources for accomplishing the task identify the commitment of human and financial resources needed to support the task, with specific sources identified in some cases.

Key for entries under Tasks

Cooperating parties: lead party in bold typeface, other are cooperators

Time table: based on the plan's five-year implementation schedule.

Immediate = within one year; Short-term, 1 to 3 years; Long-term = 3 to 5 years.

Resources to accomplish the task: identifies type of resources needed and possible sources.

Surface Waters and Water Quality

Goal: Protect and improve the water quality conditions of the Neponset River Estuary in order to meet, or where possible exceed, state water quality standards

Inventory

Within the Neponset River Estuary Area of Critical Environmental Concern (ACEC), the Neponset River flows from the Lower Mills Dam to its mouth at Commercial Point and Squantum Point, a distance of 4.2 tidally-influenced miles. The surface area of open water is approximately 84 acres. Portions of Gulliver Creek in Milton, Sagamore Creek in Quincy, and Pine Neck Creek and Davenport Creek in Boston flow into the Neponset River within the ACEC.

The waters of the Neponset River Estuary are classified SB-Fishable / Swimmable with restricted shellfishing in the Department of Environmental Protection's Surface Water Quality Standards (314 CMR 4.00). Class SB waters are designated as habitat for fish, other aquatic life, and wildlife; support primary and secondary recreation; and have good aesthetic quality. Factors that contribute to the attainment or non-attainment of SB water quality include point and non-point sources of pollution, sediment quality, stream flow, and diverse biota. Potential contaminants include bacteria, metals, PAHs, PCBs and other toxic products of 20th century technology. It is important to note that while this section of the river has been classified as SB it has not attained all water quality standards required for that classification. Similarly, while classified under Surface Water Quality Standards as a Restricted Shellfish Area (shellfish harvesting allowed with depuration), the entire estuary is classified as Prohibited by the Division of Marine Fisheries.

Sources of Pollution

The water quality in the estuary is significantly impacted by upstream sources. A Massachusetts Water Resources Authority (MWRA) study found the highest levels of fecal coliform, biochemical oxygen demand, total suspended solids and zinc and copper coming into the estuary from above the Lower Mills dam (MWRA, 1994). A study in 1993 indicated that upstream problems are due to a number of sources of sewage along the river (Rex, 1993). Several storm drains above the Lower Mills Dam were found to be contaminated with sewage in Boston Water & Sewer Commission (BWSC) dry-weather screening (MWRA, 1994; BWSC 1993, 1991).

The estuary itself is within a highly urbanized area with high density housing, industrial and commercial activities impacting water quality through point and non-point source pollution. One CSO treatment facility at Commercial Point (BOS090) and two other CSOs (BOS093 and BOS 095) discharge in the estuary (see Figure 4). Based on monitoring of the CSOs conducted by the MWRA in 1992, overflow of one CSO requires one-half inch of rain or greater and the others will overflow after 0.1 inches of rain. NPDES discharge permits in the estuary have been issued for the U.S. Army National Guard Armory in Dorchester (Permit #MA0030252, for intermittent discharge of vehicle washwater; and the BWSC CSOs identified above (Permit #MA0101192) (DEP, 1995). Additional known sources of fecal coliform pollution in the estuary are the failing septic systems in the Forbes Road neighborhood in Milton and Unquity Brook/Gulliver's Creek. About 60 storm drains from developed land in

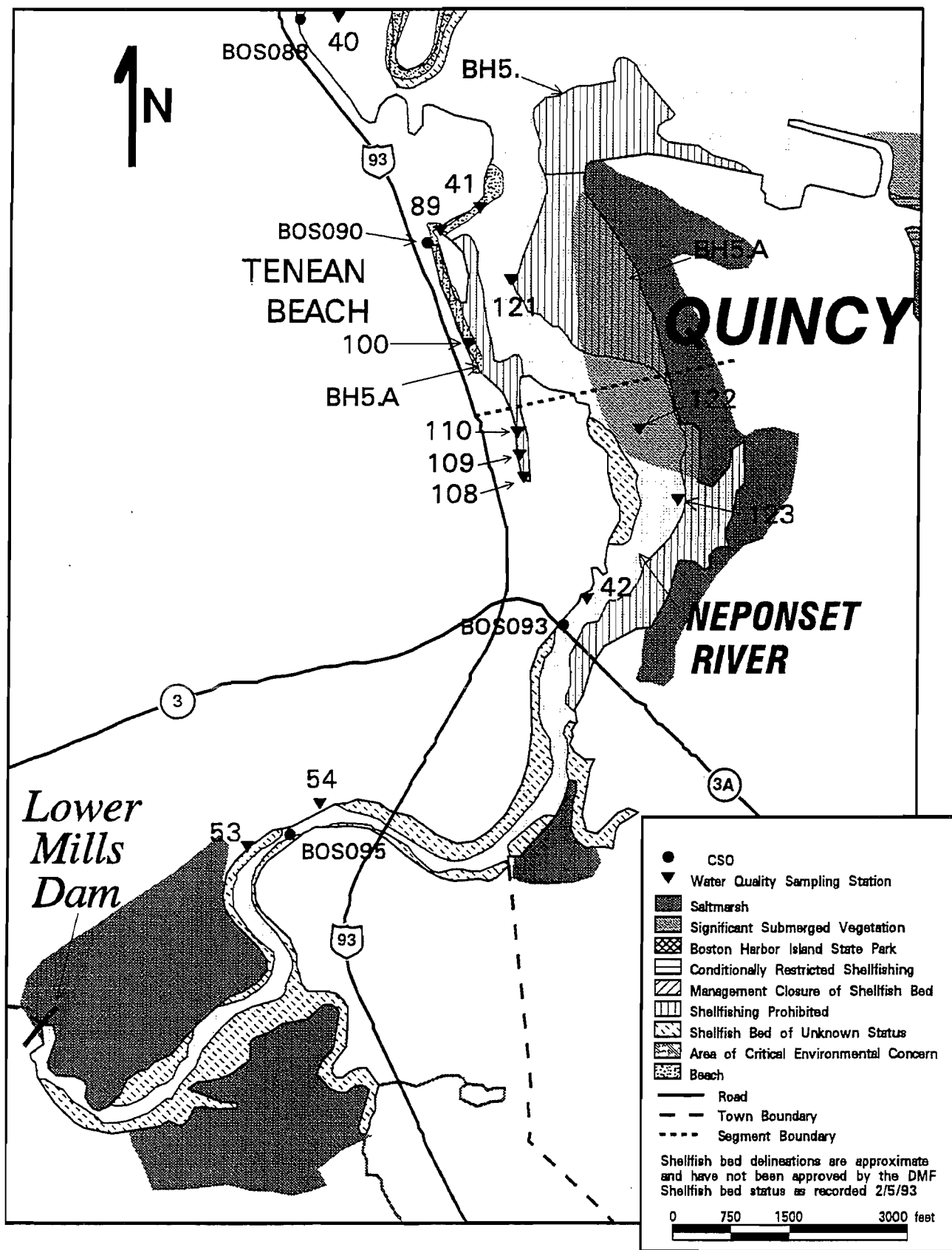


Figure 4: Map of point source discharges, sampling stations, and resources impacts by water quality (from MWRA Baseline water Quality Assessment, Figure 16-1).

Boston bordering the estuary and from area highways discharge in the estuary; and, a yet to be determined number of storm drains exist in Milton and Quincy.

Other sources of pollution are more difficult to quantify; but certainly adding to the pollutant loadings, include the non-point sources of pollution from lawn applications of fertilizers, herbicides, and pesticides, animal waste, boat discharges, and sediments from erosion and stormwater runoff.

Assessment

Some of the more recent water quality assessments include studies by the MWRA and the DEP. The Massachusetts Water Resources Authority conducted a Baseline Water Quality Assessment of Boston Harbor and its major tributaries in support of the *System Master Plan (SMP) and Combined Sewer Overflow (CSO) Control Plan for Boston Harbor*. The results and conclusions of the data collection and analysis for the assessment were published by the MWRA in August 1994. This work was the basis for the characterization of the estuary provided in *The Neponset River Watershed 1994 Resource Assessment Report* prepared by DEP's Office of Watershed Management (DEP, 1995).

These assessments show that upstream river flow and stormwater from the adjacent land are the major sources of pollution to the Estuary, resulting in non-attainment of water quality standards. Although two untreated CSO's and one treated CSO at Commercial Point discharge into the Neponset River, they contribute a small percentage of fecal coliform bacteria, nutrients and toxins to the total pollutant load, as shown in Table 1 (from MWRA, 1994).

As part of the effort to evaluate the effects of CSO improvements, the MWRA has been monitoring several water quality parameters, including fecal coliform bacteria, pyrene, and total suspended solids since 1985. The most recent data, characterized in the DEP Office of Watershed Management study (Oct. 1995), indicate that the estuary's waters fully support secondary recreation such as boating, partially support swimming at Tenean Beach and aquatic life, and do not support restricted shell fishing. In other words, the river does not meet its current classification of SB.

The Massachusetts Department of Environmental Protection (DEP) has recently completed its detailed assessment of Neponset River water quality (DEP, October, 1995) which will be used as the basis for a basin-wide planning document. Included in the evaluation were detailed water chemistry studies, sediment sampling, and biological assessments. Due to technical constraints, however, DEP did not include the saline estuarine environment in its evaluation of the Neponset but relied on MWRA data for that region. It does not expect to collect any additional information on the estuary in the final basin planning document. However, the plan will have basinwide as well as subwatershed water quality issues identified with suggested means to resolving the issues, and the Estuary is included in the plan.

As part of the Boston Harbor clean-up and because a number of critical use activities like swimming and shellfishing have been identified in this area, the Massachusetts Water Resources Authority (MWRA) and the Boston Water and Sewer Commission (BWSC) have undertaken a number of projects to remediate stormwater discharges and combined sewer overflows in the Neponset estuary. System improvements made between 1988 and 1992 have significantly decreased CSO volumes throughout the MWRA system and the Final CSO Plan proposes complete separation of the Neponset stormwater discharges from the sewerage system by 2008.

As part of the Boston Water & Sewer Commission's ongoing programs, it corrected 30 illegal connections in the Neponset Basin in 1995; and has identified 2 remaining illegal connections

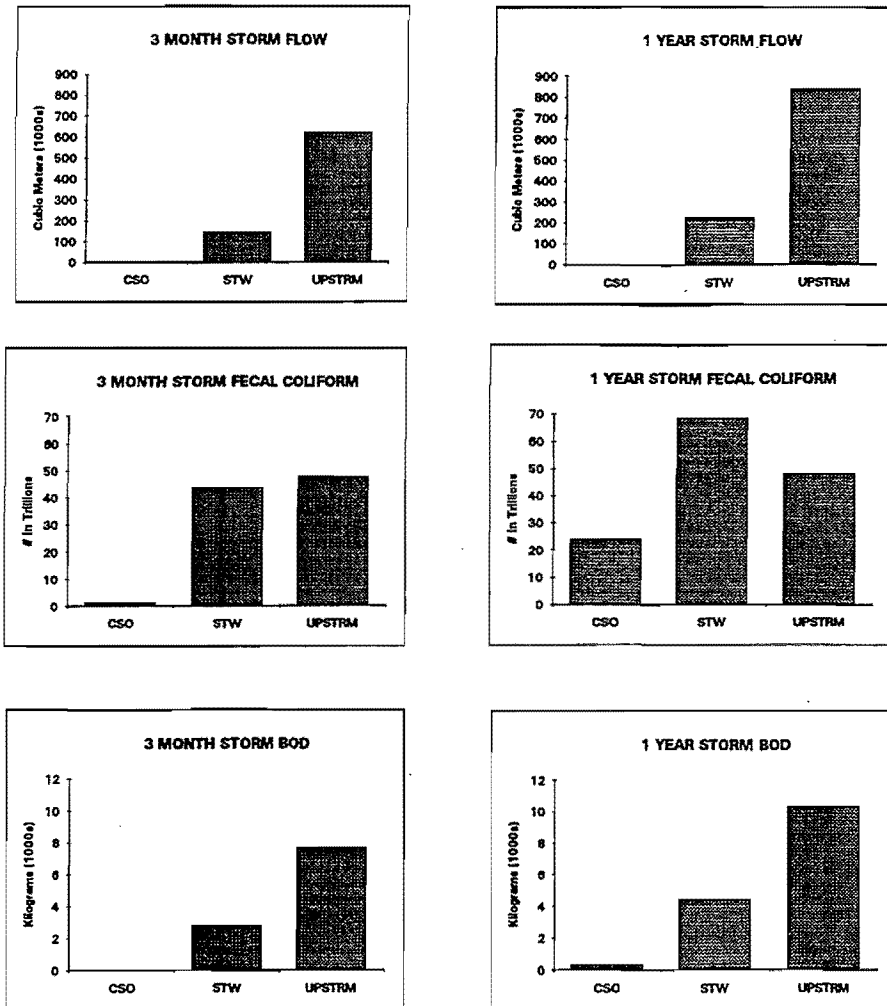


FIGURE 16-3. FUTURE PLANNED FLOWS AND LOADS FOR THREE MONTH AND ONE YEAR STORM EVENTS - NEPONSET RIVER

Table 1: Pollutant Flows and Loads in the Neponset River (from MWRA Baseline Water Quality Assessment, August 1994). Key to notation of X-axis: CSO = combined sewer overflows; STW = storm drains; UPSTRM = upstream.

Table 1 (con't): Pollutant Flows and Loads in the Neponset River (from MWRA Baseline Water Quality Assessment, August 1994). Key to notation of X-axis: CSO = combined sewer overflows; STW = storm drains; UPSTRM = upstream.

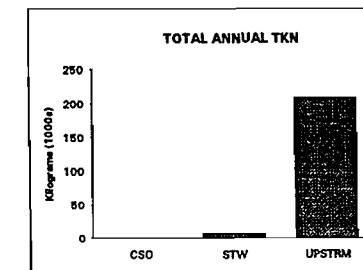
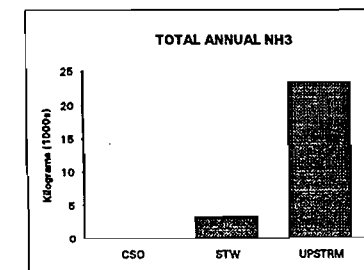
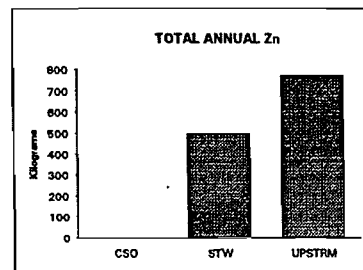
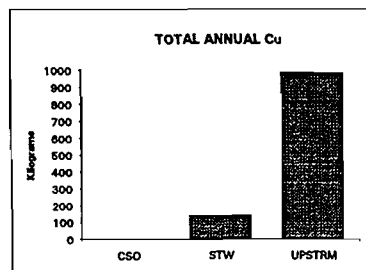
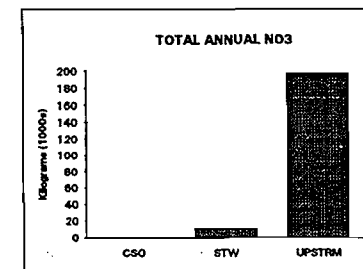
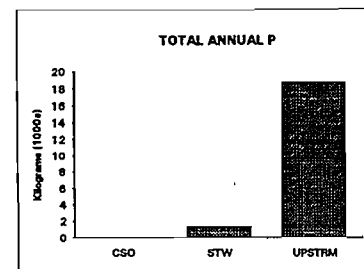
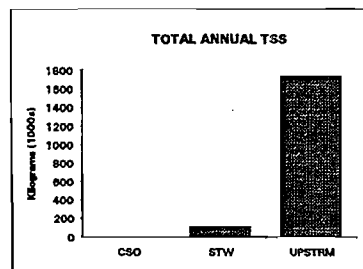
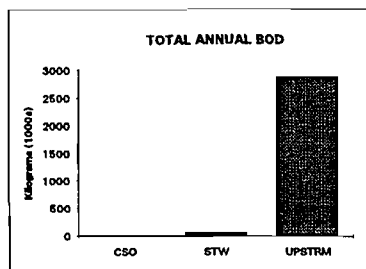
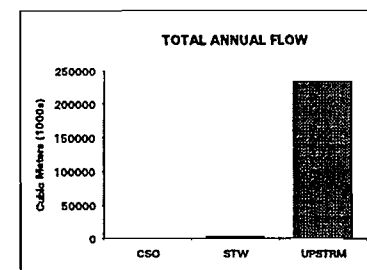
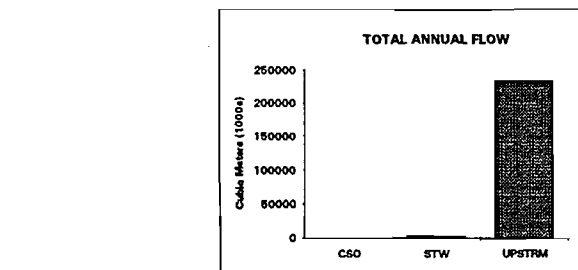


FIGURE 16-4. FUTURE PLANNED ANNUAL FLOWS AND LOADS - NEPONSET RIVER
(a) FLOWS, BIOCHEMICAL OXYGEN DEMAND, TOTAL SUSPENDED SOLIDS, COPPER, ZINC

FIGURE 16-4. FUTURE PLANNED ANNUAL FLOWS AND LOADS - NEPONSET RIVER
(b) FLOWS, TOTAL PHOSPHORUS, NITRATE, AMMONIA, TOTAL KJELDAHL NITROGEN

on the Neponset River, upstream of the ACEC, that will be corrected in the Spring of 1996. Evaluation of storm drains on the Boston side by the Boston Water and Sewer Commission identified only one discharge point in the lower river which may have contamination with debris and/or oil (MWRA, 1994; BWSC 1993, 1991). The BW&S' Harbor Quality Department has proven to be productive and effective in addressing illegal sanitary sewage connections to storm drains. An effective stormwater management program will also need to address sediment loading from roadway runoff. In particular, the area below Lower Mills Dam and the Adams Street Bridge needs monitoring for the smelt spawning habitat there (see Habitat Resources section for more information).

Tenean Beach Water Quality Monitoring

Regular monitoring of water quality at Tenean Beach has been conducted by the MDC. Bacteriological testing shows considerable improvement in conditions in recent years with the bacteriological conditions at the beach exceeding standards by 47 percent in 1989 and declining to two percent in 1992. The decline in bacteriological contamination is believed to be due to the operation of the Fox Point CSO (nearby the ACEC) and Commercial Point CSO treatment facilities (within the ACEC) which began operations in 1990 and 1991, respectively. These treatment facilities provide solids separation and chlorination prior to discharge of overflow water to the harbor (Lane, Frenchman 1993).

The Boston Water and Sewer Commission recently completed an investigation of the sources of bacterial contamination to the Pine Neck Creek storm drain, which discharges south of Tenean Beach (BWSC, 1996). The investigation included smoke and dye testing, as well as television inspection of all storm drains and sanitary sewers in the area. Wet and dry weather water quality sampling of the drain and its receiving waters was also conducted.

The investigation revealed no significant sources of sanitary contamination to the drain. Review of existing data and data collected as part of the investigation indicate that although bacterial concentrations in the drainage system are high, they are consistent with concentrations in storm drainage from similar urbanized locations. The sources of bacteria in stormwater samples appears to be stormwater runoff, likely due to contact with accumulated pet and other animal waste deposits and street litter. Elevated bacterial contaminations measured in dry weather samples, in conjunction with a correlation between higher concentrations and low tide, suggest that accumulated sediments in the drain and in receiving waters may be providing an ongoing source of bacteria to the overlying water column.

Impacts from Recreational Boating

Recreational boating has the potential to degrade water quality through improper discharge of boat waste and motor oil, and boat maintenance activities. There are two pump-outs in the vicinity of the estuary, located at Marina Bay and Thomas Marine. The ratio determined by an interagency team that developed the Massachusetts boat pumpout program is one pumpout per 300 moorings and slips. Though that ratio is exceeded in the estuary, the majority of berths are in the two facilities with pumpouts.

Implementation Strategy

Management Issues

The Neponset River is polluted from a variety of sources including upstream sources, nonpoint sources, storm drains, and CSOs. The river upstream is a major source of bacteria. Upstream problems are due to a number of sources of sewage along the river. Illegal sanitary sewage

connections to storm drains are a source of untreated sewage to the Neponset River. Stormwater discharging into the Neponset estuary is collected from a broad, heavily urbanized land area as well from several highways. Several storm drains above the Lower Mills Dam were found to be contaminated with sewage in dry-weather screening. Continued monitoring and detection of other sources of pollution is necessary to develop the most cost-effective remediation of water quality in the Neponset River estuary.

Its urban location and the presence of numerous transportation systems presents both a management challenge and opportunity for the ACEC. Certain activities such as the maintenance and repair, but not substantial enlargement, of the storm drainage systems on public roadways, maintenance activities related to the upkeep of the roadway surface (such as, repaving, line painting, bridge deck repair), the repair of structural components of bridges (such as railing, trusses, stone masonry, etc.), and, maintenance of guardrail, signs, signals and delineators could proceed without additional individual regulatory review on the condition that project proponents (and their agents) adopt best management practices (BMP's) that take all practicable measures to avoid and minimize degradation of adjacent resources and to mitigate any unavoidable impacts to the greatest extent possible. The MEPA review process could provide a reasonable environmental review process for transportation system maintenance and operation related activities that may affect the ACEC. The adoption of BMP plans could be the basis and rationale for an appeal to MEPA that could reduce the existing threshold levels which would trigger a MEPA review of these activities proposed by the project proponents.

Tasks

1. Some data about the water quality, sediment quality, and biological health of the Neponset River estuary is available, as indicated above. A more complete inventory of water quality sediment and biological data for the Neponset River estuary is needed.

Cooperating parties

Neponset River Coordinator

coordinate and assemble data

MWRA

source of information

BWSC, Milton and Quincy DPWs

source of information

DEP Office of Watershed Management

source of information

MDC

source of information

University of Massachusetts Boston

source of information and technical assistance

Massachusetts Bays Program

source of information

Time table for completion

Immediate

Resources to accomplish the task

Staff time

2. Identify additional sources of point and nonpoint pollution, bacterial and chemical contaminants in the Neponset River estuary by continued, expanded and coordinated monitoring and detection programs.

Cooperating parties

Friends of the Neponset Estuary (NepRWA subwatershed group)
field surveys and sampling
Save the Harbor/Save the Bay
training of volunteers
Urban Monitors (NepRWA, subwatershed group)
field sampling
DEP Office of Watershed Management
coordination of sampling protocols
BWSC, Milton and Quincy DPWs
source of information, technical assistance and field sampling
Municipal Boards of Health
source of information

Time table for completion

Ongoing

Resources to accomplish the task

Funding support from proposed marine monitoring program.
Volunteer time and materials

3. Recommend accurate identification and mapping of stormwater outfalls and outfall drainage areas be done by each of the three communities in the ACEC and, ideally, all communities in the watershed that discharge stormwater to the Neponset River; and identify and eliminate all illegal sanitary sewage connections to stormwater outfalls.

Cooperating parties

Municipal water and sewer authorities and DPWs
identification and mapping
BW&SC
technical assistance

Time table for completion

Short-term

Resources to accomplish the task

Commitment of municipal staff
Possible Funding from Coastal Pollutant Remediation (CPR) Program
Section 319 funds

Key for entries under Tasks

Cooperating parties: lead party in bold typeface, other are cooperators

Time table: based on the plan's five-year implementation schedule.

Immediate = within one year; Short-term, 1 to 3 years; Long-term = 3 to 5 years.

Resources to accomplish the task: identifies type of resources needed and possible sources.

4. Citizen monitoring should be encouraged to supplement MWRA/MDC/DEP assessments. A long term citizen monitoring program and strategy be established at the Neponset River Watershed Association focused on efforts to pinpoint sources of bacterial contamination and storm water monitoring. Encourage MWRA to maintain and expand its existing commitment to support volunteer citizen water quality monitoring with in-kind laboratory services.

Cooperating parties

NepRWA

coordination of various citizen groups

Friends of the Neponset Estuary

field sampling by volunteers

Save the Harbor/Save the Bay

training of volunteers

BNAF

field sampling by volunteers

MWRA

support with in-kind laboratory services

Time table for completion

Immediate

Resources to accomplish the task

MWRA in-kind services

5. Implement the recommendation of the Final CSO Conceptual Plan and System Master Plan for complete sewer line separation in the area, which will eliminate all CSO discharges.

Cooperating parties

BW&SC

engineering design and construction

MWRA

planning and funding

Time table for completion

Long-term

Resources to accomplish the task

MWRA capital funds

6. Develop and implement a municipal and regional stormwater management program which share objectives and techniques. The three communities, along with technical support staff from appropriate state agencies could form an informal Estuary Stormwater Management Committee to further pursue recommendations regarding assessment, remediation, and prevention of stormwater pollution and the development of a stormwater outreach program.

Cooperating parties

DEP & MCZM Nonpoint Source Program

coordination and tech. assistance

BW&SC

source of information and implementation

Milton Department of Public Works
source of information and implementation
Quincy Department of Public Works
source of information and implementation
NepRWA
local education and information

Time table for completion

Short-term

Resources to accomplish the task

Commitment of staff

7. Implement a solution to the septic system problem in the Forbes Road neighborhood in Milton.

Cooperating parties

Milton Board of Selectmen
overall coordination
Milton Board of Health
technical assistance and permitting
DEP
review, evaluation and permitting, funding approval

Time table for completion

Short-term

Resources to accomplish the task

Municipal and state funds for sewer construction

8. Develop Maintenance and Operations Plans for the sections of highway, road, and transit routes that traverse the ACEC. These plans could be developed cooperatively with other agencies and feature the best management practices available for controlling stormwater, reducing the use of toxic materials, contingency planning for oil and hazardous spills, and other measures to avoid and or mitigate any impacts, including those associated with ongoing maintenance.

Cooperating parties

Massachusetts Highway Department
coordination and training
EOEA
policy and regulatory review
Municipal departments of public works
source of information and practices
MBTA
source of information and practices

Time table for completion

Short-term

Resources to accomplish the task

Commitment of staff

9. Review the operational procedures and activities of all marinas and yacht clubs to identify and implement steps that can be taken to minimize any negative impacts on the river. These steps may include adopting an oil spill response plan, reducing the amount and types of toxic materials used around the facility, better management of stormwater run-off, recycling options, etc.

Cooperating parties

DMF

coordination and technical assistance

MCZM Harbor Management Program

technical assistance

Marinas and yacht clubs

source of information

DEP

technical assistance

Municipal boards of health

review of health by-laws

Time table for completion

Short-term

Resources to accomplish the task

Commitment of staff

10. Assess the need for an additional pump-out in the estuary and work with marinas and yacht clubs to site it. Alternatively, determine how to make maximum use of the facilities at Marina Bay and Thomas Marine.

Cooperating parties

DMF

coordination and technical assistance

MCZM Harbor Management Program

technical assistance

Neponset ACEC Stewardship Council

review and evaluation

Time table for completion

Short-term

Resources to accomplish the task

Commitment of staff

Funds from Coastal Pollutant Remediation (CPR) Program

11. Present the conclusions of the shoreline survey completed by the Friends of the Neponset Estuary to the Conservation Commissions and Departments of Public Works of each of the three communities, and the Massachusetts Highway Department and the MBTA. Submit the findings to the Division of Marine Fisheries for their use in evaluating water quality related to shellfish resources.

Cooperating parties

Friends of the Neponset Estuary

source of information

Interested parties and agencies
partial list above

Time table for completion

Immediate

Resources to accomplish the task

Commitment of staff

12. Regularly assess overall water quality and management concerns in the Neponset estuary. After review of the assessment by EOEa agencies, Neponset River Estuary Stewardship Council, and other appropriate parties and identify new mechanisms to bring the Neponset estuary to SB quality, including specific tasks, responsible parties, and time tables.

Cooperating parties

Neponset River Estuary Stewardship Council
coordination, review and evaluation

Time table for completion

Short-term

Resources to accomplish the task

Commitment of EOEa agency staff

Estuarine and Freshwater Wetlands

Goal: Preserve, protect, and restore wetlands in the Neponset Estuary

Inventory

The predominant ecological and visual features of the Neponset River Estuary ACEC are the extensive salt marshes. According to GIS data, salt marsh comprises approximately 320 acres, or 26 per cent of the total area of the ACEC. Salt marsh is valuable as a major source of carbon and nitrogen for the marine food chain, nursery habitat for juvenile marine species, habitat for diverse plant, bird and wildlife species, and serve as efficient filters for contaminants from upland discharges and urban runoff thereby helping to maintain water quality. In addition, salt marsh provides flood control and protection of uplands from storm damage, and is a valuable recreational resource. The marshes of the Neponset River Estuary are the second largest remaining salt marsh in Boston Harbor.

Within the ACEC, large expanses of salt marsh are located below the Lower Mills Dam in Boston and Milton, along the south shore of the Neponset at the Milton and Quincy municipal boundary, and in Quincy north of the Conrail bridge to Squantum Point (see Figure 5).

Freshwater wetlands are located at Squantum Point and within the area of the Presidents' Golf Course. According to the Massachusetts Division of Fisheries and Wildlife's Natural Heritage and Endangered Species Program, Squantum Point "provides habitat for a tremendous diversity of bird species and is one of the most important wildlife habitats in the urbanized Boston area" (communication, February 1995). The importance of this area is described further under Habitat Resources.

The combined acreage of open water at high tide, estuarine wetlands, and other wetland resource areas totals approximately 830 acres, or 66 per cent of the total area of the ACEC. In addition, floodplains overlay most of the ACEC, especially the wetlands. Floodplains cover approximately 1,005 acres or 80 per cent of the ACEC (Figure 6). This estuarine wetland system is a highly productive ecosystem, supporting important marine fisheries and diverse wildlife habitat. It is unique in its size and proximity to a highly urbanized area.

In designating the Neponset River Estuary as an Area of Critical Environmental Concern (ACEC), the Secretary found that the wetland resource areas included in the Neponset River Estuary are significant to the prevention of pollution, flood control, the prevention of storm damage, the protection of fisheries, the protection of land containing shellfish, and the protection of wildlife habitat - all of which are public interests defined in the Wetlands Protection Act and its regulations.

Over time, much of the marshland has been engineered. Fill has been placed in the wetlands of the Neponset Estuary from a variety of activities: disposal of sediment dredged from the navigation channel of the Neponset River, a solid waste landfill at Hallet Street, fill to create usable land for building or recreational purposes, disposal from construction activities, and the accumulation of tidal flotsam. Industrial activities have taken place at the edges of and in the wetlands, filling salt marsh and leaving deposits of hazardous materials behind. Flood control dikes have been constructed and parts of the marsh have been ditched to promote drainage and control mosquitoes. A number of these activities have altered the marsh in ways that promote the growth of the invasive phragmites species over native salt marsh species.

Point and nonpoint sources of pollution to the estuary affect both water quality and the health of the marshes. (See more about nonpoint source pollution abatement under Surface Waters and Water Quality.)

Assessment

The Massachusetts Wetlands Restoration & Banking Program (WRBP) is currently working with the US Army Corps of Engineers, along with local citizens and officials to assess the condition of a number of wetland areas around the state, including the Neponset marshes. It is anticipated that a draft Watershed Wetlands Restoration Plan (WWRP) for the Neponset watershed will be made available for public review by the fall of 1996. The WWRP will provide an inventory of wetlands restoration sites prioritized based on their capability to improve the watershed's flood storage, water quality, and fish and wildlife habitat, as well as providing information that can be used for land use planning and management purposes beyond wetlands restoration (Wetlands Restoration & Banking Program, 1995).

In the Neponset River estuary, the WRBP is working with the MDC and examining the possible restoration of the Metropolitan District Commission's Neponset Marshes and degraded wetlands south of Granite Avenue in Boston. Part of the assessment of the health of the marshes and potential for restoration will have to include soils assessment for potential contaminants, particularly in filled areas.

There are no regulatory prohibitions on marsh (including tidally-impaired marshes) restoration activities. Salt marsh restoration or rehabilitation projects, however, must ensure that there are no adverse effects to public or private water supplies, and that the projects avoid or, where avoidance is not practicable, minimize and mitigate any impacts to resource areas. Additionally, the restoration projects should: use best management practices to minimize erosion and siltation of adjacent resource areas; avoid, minimize or mitigate flooding impacts; and avoid placement of fill or structures in resource areas.

The Wetlands Conservancy Program, in cooperation with the Massachusetts Coastal Zone Management Program (MCZM) and the National Marine Fisheries Service (NMFS), has begun a three-year program to accurately inventory the state's submerged rooted vascular plant (SRV) resources. The project involved acquisition and interpretation of aerial photography at 1:20,000 scale followed by fieldwork and underwater survey work to accurately delineate and classify the SRV resources which are then depicted on photomaps. Aerial photographs of the Neponset estuary have been taken, and it is projected that the process to produce maps of the area will be completed during 1996.

Implementation Strategy

Management Issues

While some information is already available regarding the condition and restoration potential of Neponset ACEC wetlands, the WWRP will provide comprehensive data on location of sites and preliminary data on condition and restorability. Large sections of the salt marsh in the estuary have been invaded by phragmites. It is known that the placement of dredge material on areas of the marsh is partially responsible, although other causes may be present as well, e.g., tide gates.

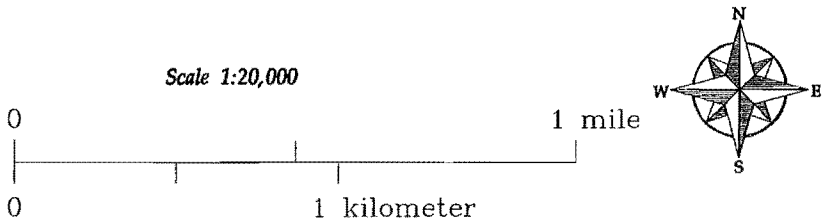
The MDC Master Plan for the Lower Neponset River will discuss on-going collaborative efforts with WRBP and the historic nature of the marshes and their flora/fauna components,

Neponset River Estuary ACEC

Wetlands

For more information, write or call: ACEC Program, Massachusetts
Dept. of Environmental Management, Div. of Resource Conservation,
100 Cambridge St., Room 1404, Boston, MA 02202 617-727-3160

Base Map: USGS 1:25,000 topographic maps; USGS-NMD 1:100,000
hydrography enhanced by MassGIS at 1:25,000.
ACECs: ACEC boundary compiled and automated by Mass. Dept. of
Environmental Management (DEM).
Wetlands: Automated by Applied Geographics from DEP 1:5000
orthophoto maps.



Legend

- Salt marsh
- Freshwater wetlands
- Tidal Flat
- Neponset River Estuary ACEC boundary

This map is for planning and illustrative purposes only. It represents the best available digital statewide data for a given theme. It is not to be used by itself for legal boundary definition or regulatory interpretation. See the Neponset River Estuary ACEC designation document, as amended December 1, 1995, for the legal boundary description.

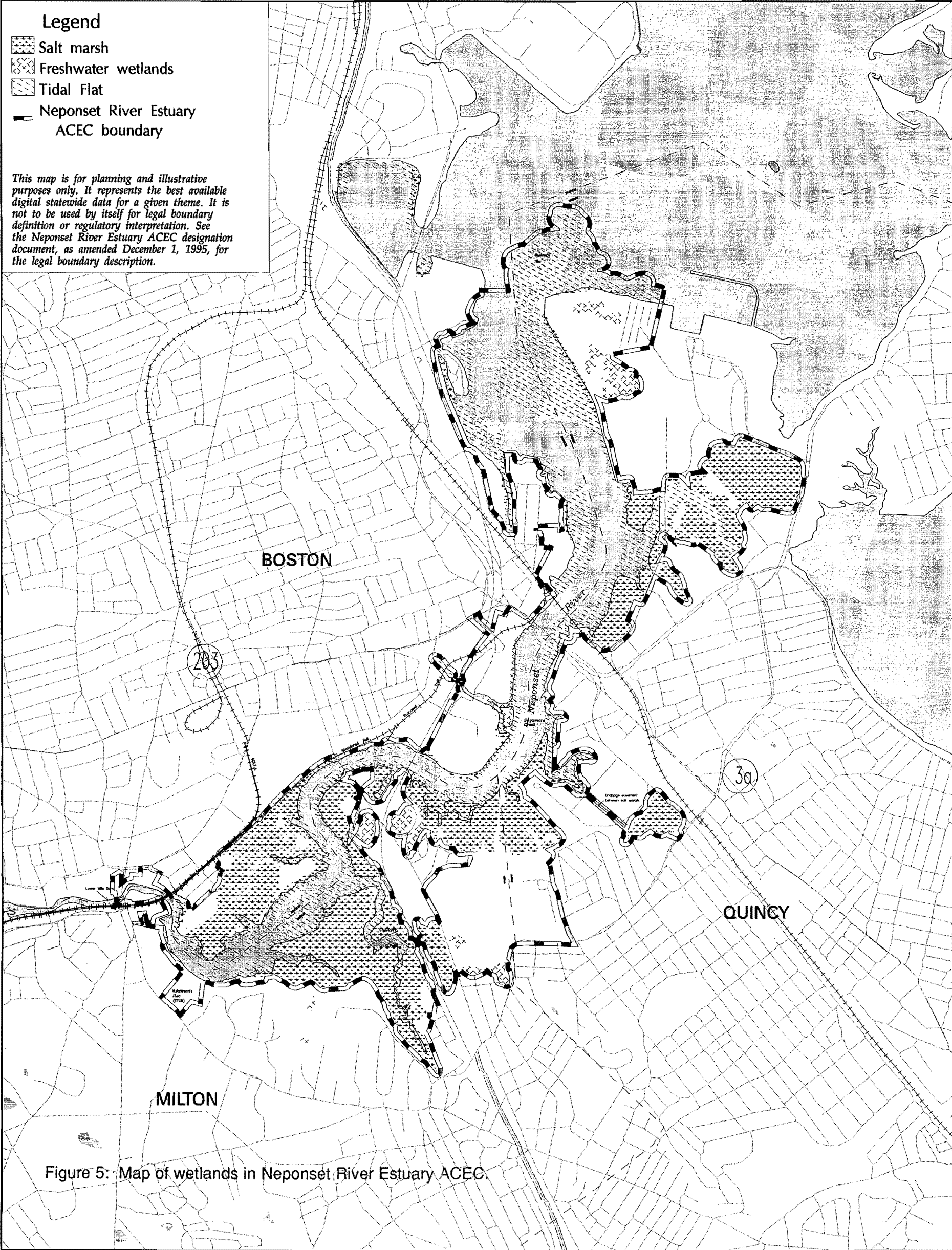


Figure 5: Map of wetlands in Neponset River Estuary ACEC.

Neponset River Estuary ACEC

Floodplains

For more information, write or call: ACEC Program, Massachusetts Dept. of Environmental Management, Div. of Resource Conservation, 100 Cambridge St., Room 1404, Boston, MA 02202 617-727-3160

Base Map: USGS 1:25,000 topographic maps; USGS-NMD 1:100,000 hydrography enhanced by MassGIS at 1:25,000.
ACECs: ACEC boundary compiled and automated by Mass. Dept. of Environmental Management (DEM).
Floodplains: Compiled onto 1:7500 basemap & automated by DEM from US Federal Emergency Management Agency data.

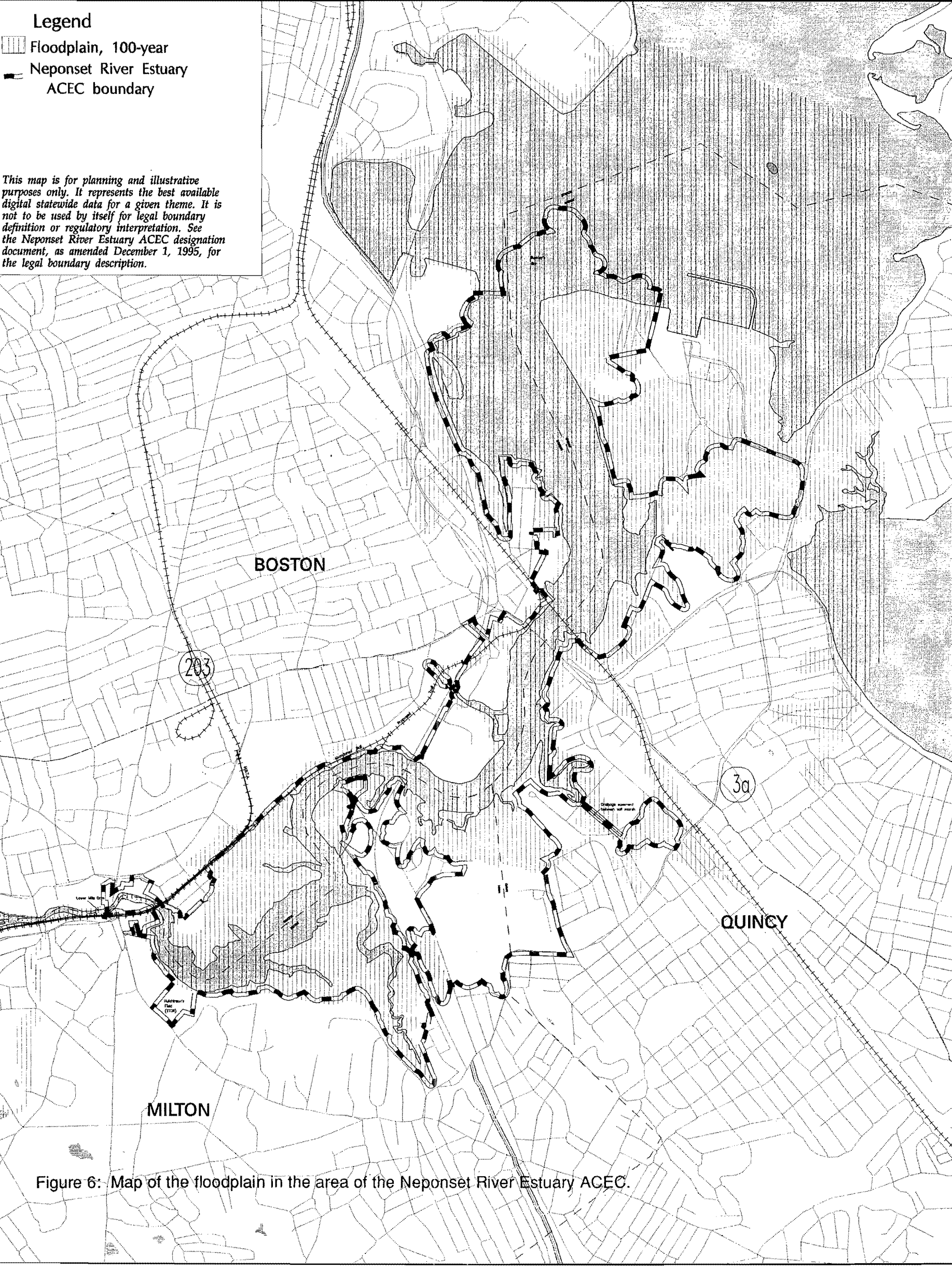
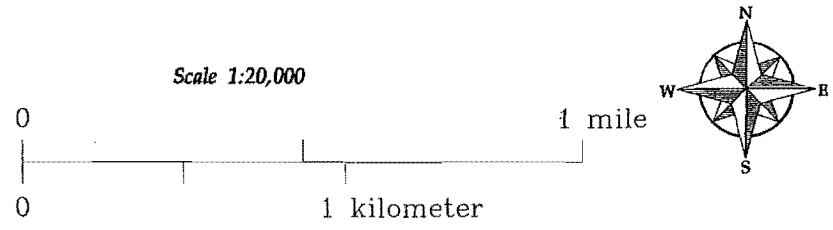


Figure 6: Map of the floodplain in the area of the Neponset River Estuary ACEC.

and make recommendations for next steps to be followed in regard to the marshes. The potential for restoring the MDC-owned marshes should be reflected in the plan and be consistent with the recommendations of the WWRP, e.g., potential for restoration of marsh area filled with dredge material. An analysis of potential soil contamination is expected to be part of the assessment of the potential for restoration at this site.

The construction of the State Street Bank Complex physically severed a substantial section of the marsh system along the river. The health of this marsh depends on the conduit running through the parking lots of the complex. The run-off inevitably carrying a cumulative load of pollutants stresses the system further.

Tasks

1. Complete watershed-level assessment (WWRP and MDC Master Plan) of Neponset wetlands.

Cooperating parties

WRBP and community sponsors

- complete assessment and WWRP
- Metropolitan District Commission
- complete Master Plan for Lower Neponset River
- NepRWA/Friends of the Estuary
- provide information and public review
- Boston, Milton, Quincy conservation commissions
- provide information and participate in restoration projects
- Neponset River Estuary Stewardship Council
- upon completion of the WWRP, incorporate appropriate Estuary sections into this ACEC resource management plan by reference or as an appendix

Time table for completion

- Immediate (Fall, 1996) Watershed Wetlands Restoration Plan
- Immediate (April, 1996) MDC Master Plan for the Lower Neponset River

Resources to accomplish the task

- Commitment of EOEA to these programs

2. Begin implementation of the WWRP by developing and carrying out recommended site-specific restoration plans to improve the quality and functions of the Neponset estuary wetlands.

Cooperating parties

WRBP

- coordination, sponsor, and technical assistance

Key for entries under Tasks

Cooperating parties: lead party in bold typeface, other are cooperators

Time table: based on the plan's five-year implementation schedule.

Immediate = within one year; Short-term, 1 to 3 years; Long-term = 3 to 5 years.

Resources to accomplish the task: identifies type of resources needed and possible sources.

DEP

permitting and technical assistance

MDC

conduct soil assessments, as necessary, to determine potential for restoration of marsh filled with dredge material; implement restoration projects proposed in Master Plan.

U.S. Army Corps of Engineers

potential participant in wetlands restoration

Public and private project sponsors (municipal conservation commissions, Quincy

DPW, Milton Board of Selectmen, private property owners)

potential sponsors of or participants in implementation of site-specific plans

DEP-DWW

permitting and technical assistance

Time table for completion

Short-term

Resources to accomplish the task

Commitment of sponsor(s)

Funds (see List of Funding Sources in WRBP's Watershed Wetlands Restoration Planning Guidance Document)

3. Upon completion, incorporate the Wetlands Conservancy Program's mapping of SRV resources (eelgrass) into this plan and into decision making in the ACEC, e.g., in permitting activities such as boating facilities.

Cooperating parties

DEP's Wetlands Conservancy Program

complete SRV mapping

Neponset River Estuary Stewardship Council

incorporate information into this ACEC resource management plan

Time table for completion

Immediate

Resources to accomplish the task

Funds from the National Marine Fisheries Service

Funds to support assessment. Possible sources include: Open Space Bond Issue, Mass. Water Resources Authority, Mass Bays Program

4. Educate landowners bordering the salt marsh and freshwater wetlands regarding the types of activities, such as disposal of brush and clippings, use of pesticides and fertilizers, that adversely impact the marsh.

Cooperating parties

NepRWA/Friends of the Estuary/Neponset River Coordinator

clearinghouse of information; educational programming

WRBP

WWRP will provide landowner outreach and education

Municipal conservation commissions and staff

disseminate information and enforce regulations

BNAF

educational programming

Massachusetts Bays Program
implementation of CCMP includes education; possible source of future funding

Time table for completion

Short-term

Resources to accomplish the task

Commitment of staff resources
Funding to support continued public educational efforts of nonprofits active in the estuary
Neponset River Coordinator

5. Educate the public of the role, function, and importance of wetlands.

Cooperating parties

NepRWA/Friends of the Estuary/Neponset River Coordinator
coordination, clearinghouse

MDC

Include interpretive environmental education as part of the program/facilities of the Lower Neponset River park; Neponset Rangers will contribute

BNAF

clearinghouse; public educational programming

Time table for completion

Ongoing

Resources to accomplish the task

Neponset River Coordinator
Funds for programming (see List of Funding Sources in WRBP's Watershed Wetlands Restoration Planning Guidance Document)

6. Identify, prioritize, and seek to acquire ownership—fee or easements—of significant wetland parcels within or contiguous to the ACEC.

Cooperating parties

MDC, municipal conservation commissions
fee acquisition or conservation easement

BNAF/Trust for Public Land

assist in identifying and prioritizing sites and in acquisitions

Time table for completion

Long-term

Resources to accomplish the task

Acquisition funds: 1996 Open Space Bond

7. Assess the condition and health of the isolated salt marsh at the State Street Bank complex in Quincy, and develop and implement measures for restoration.

Cooperating parties

WRBP

initiator and technical assistance

State Street Bank
implementation of measures to improve condition of marsh

Time table for completion

Long-term

Resources to accomplish the task

Commitment to public/private partnership
Restoration funds

8. Conduct a review and evaluation of municipal regulations, policies, and procedures (notices, etc.) and consider certain common regulatory provisions for improved protection of the wetlands resources. Boston and Quincy might consider adopting, as a policy or regulatory provision, a non-disturbance buffer zone contiguous to wetlands resources.

Cooperating parties

Boston, Milton, and Quincy conservation commissions
adopt local regulations, as appropriate

Time table for completion

Short-term

Resources to accomplish the task

Commitment of commission and staff

Habitat Resources

Goal: Preserve, protect and restore fisheries and wildlife habitat in the Neponset Estuary

FINFISH

Inventory

According to the Massachusetts Division of Marine Fisheries (DMF), the Neponset River supports valuable anadromous fish populations, including one of the largest smelt runs in Massachusetts Bay (Coates, 1995; Chase, 1996). This run supports a hook and line, recreational fishery in the fall and winter. The river provides suitable spawning habitat for blueback herring and a viable population exists in the estuary. Blueback herring are valued for bait and roe harvest and are an important forage species in the Bay. American shad have been observed by biologists below the Lower Mills Dam, and are believed to be members of a remnant population (personal communication, Phil Brady, DMF). Larval cod were present in ichthyoplankton samples taken in 1989 in the river near Granite Avenue (Chase, 1996).

DMF recognizes important fisheries habitat areas within the ACEC and notes, in particular, the magnitude of these resources relative to other locations in Massachusetts Bay. Numerous fish species enter the Neponset River estuary as seasonal migrants for feeding purposes, with striped bass, bluefish and winter flounder considered significant for commercial and recreational importance. During Autumn 1994 and Spring 1995, DMF completed a suitability assessment of the Neponset River above the Lower Mills dam and concluded that the waterway and substrate are suitable for shad and blueback herring spawning for a distance of 15.5 miles above the dam.

Assessment

The presence of the dam at Lower Mills, close to the tidal reach of the river acts as an upstream limit to smelt and blueback herring spawning habitat. There is no fish passage at the dam, thus preventing bluebacks from utilizing upstream habitat. Smelt are not jumpers by nature and do not use fish ladders. Smelt lay eggs on rocks below the dam and when the tide recedes, the eggs that are exposed dry out. This problem has existed since the dam was constructed, and although it may limit the population size, a sustainable population continues to support a popular fishery.

Restoration of anadromous fish runs in the Neponset River requires fish ladders to be constructed at the Lower Mills dam and the Tileston dam. A fishway project is underway involving DEP's Office of Watershed Management, in collaboration with Department of Fisheries, Wildlife and Environmental Law Enforcement (DFWELE), DMF, DEP, MDC, and the U.S. Fish and Wildlife Service. The project is using Section 319 funds (from the base funding of the Watershed Resources Restoration Project) to do preliminary design of the fish ladder and install a permanent gauge at the Lower Mills dam. The flow gauge at this location is needed to determine flow requirements for spawning smelt and bluebacks and future needs for passage with the new ladders.

Implementation Strategy

Management Issues

Fish ladders at the Lower Mills dam (and at the Tileston dam further upstream) are needed to provide the blueback herring and shad with access to more area of river to spawn, allowing those populations to increase.

The flow of the Neponset River is impacted by diversions and groundwater withdrawals throughout the watershed raising general concerns about the need for water conservation measures and the cumulative impact of municipal withdrawals. In particular, the adequacy of river flow in the vicinity of the Lower Mills dam needs to be assessed. Stream flow gauges are located in the upper reaches of the Neponset. As a provision of the Interbasin Transfer Act decision on the Dedham-Westwood Water District by the Water Resources Commission, there is a water depth requirement of one foot below the dam to protect anadromous fish spawning; a temporary wire gauge was installed at the Lower Mills dam for this purpose. The gauge was read by a group of volunteer "Smelt Stewards" during the Spring and Summer 1995 and will be done again this year.

Sand and sediment carried by storm drains discharging to the upper estuary can impact smelt spawning by covering the eggs laid on the river bottom below the dam (see the Surface Waters and Water Quality section for more information on stormwater management).

Current data on the finfish resources of the Neponset estuary is lacking. The last comprehensive report, *A Study of the Marine Resources of Dorchester Bay*, was done by DMF in 1971. DMF did recently complete and publish an assessment of the smelt resources of the estuary (Chase, 1996).

Water quality and forage quality need to be improved to increase commercial and recreational fish species. Water quality problems in rivers can degrade spawning habitat for certain species thereby limiting recruitment and affecting species abundance. A diminished forage base can decrease growth, both individual and population (personal communication, Brad Chase, DMF).

Tasks

1. Complete an inventory of fishery resources and an analysis of their current status. This should be done by the Division of Marine Fisheries as an updating of its 1971 document, *A Study of the Marine Resources of Dorchester Bay*.

Cooperating parties

DMF

organize, coordinate, and conduct the study

Smelt Stewards (Friends of the Estuary subwatershed group)

source of information

Key for entries under Tasks

Cooperating parties: lead party in bold typeface, other are cooperators

Time table: based on the plan's five-year implementation schedule.

Immediate = within one year; Short-term, 1 to 3 years; Long-term = 3 to 5 years.

Resources to accomplish the task: identifies type of resources needed and possible sources.

Time table for completion

Short-term

Resources to accomplish the task

Commitment of existing staff and resources
Grant funds for Dorchester Bay/Neponset River Estuary study or seek appropriation from legislature for comprehensive study of the estuarine and near shore marine resources of Massachusetts

2. Support the fishway project being planned by state and federal agencies. This could involve identifying and securing a cash or in-kind contribution to match possible federal funds to continue the project through construction. Explore sources for this match among the active nonprofits, state and municipal agencies, and the private sector.

Cooperating parties

DEP OWM

coordination

DMF

lead in construction of fish ladder

US F&WS

technical assistance

MDC

potential source of match

NepRWA/Friends of the Estuary/Neponset River Coordinator

seek funding

Time table for completion

Short-term

Resources to accomplish the task

Commitment of existing staff and resources
Funding

3. Recommend, as required by the Water Management Act permit, that the Dedham/Westwood Water District, install a permanent stream flow gauge at the Lower Mills dam to acquire the necessary flow data in support of the fish ladder.

Cooperating parties

Dedham/Westwood Water District

install gauge

DEP-OWM, DMF

technical assistance

Friends of the Neponset Estuary

monitor gauge

Time table for completion

Immediate

Resources to accomplish the task

Commitment of staff and volunteer resources

4. To ensure upstream activities do not diminish flow at critical spawning times, DEP should carefully consider the potential impact of diminished flows on efforts to restore the anadromous fish runs in its assessment of proposals for new or increased withdrawals upstream. New withdrawal permits issued by DEP, in consultation with DMF, should contain a condition that withdrawals are reduced at such times as successful spawning, rearing, or migration would be threatened by low flow conditions.

Cooperating parties

DEP

permit review

DMF

technical assistance with permit decisions

Time table for completion

Ongoing

Resources to accomplish the task

Commitment of existing staff

SHELLFISH

Inventory

With regard to shellfish resources, DMF states that there are substantial soft-shell clam beds at the mouth of the Neponset River. A limited survey of Buckley's Bar was conducted in 1989 and found very high densities of soft-shell clams, with a potential yield of 68 clams per square foot. DMF estimates that the 50 acres of Buckley's Bar could produce approximately 12,500 bushels per year, with a current market value of \$1 million per year to local harvesters. However, recent water samples from this area found continued high levels of contamination, with DMF concluding that "open shellfish harvest is not likely in the near future for this area, although restricted classification (harvest by permitted master diggers followed by depuration) is a feasible goal, especially with plans underway to improve water quality in Boston Harbor and the Neponset River." See Surface Waters/Water Quality section for discussion of existing conditions and measures being taken to improve water quality.

Figure 7 is a map produced by DMF of lower Neponset River/Upper Dorchester Bay showing shellfish growing areas, classification areas and types, and monitoring stations (for classification). Growing area refers to a geographical area, one of 303 areas into which the Commonwealth's intertidal and subtidal area has been divided for administrative purposes. The Neponset River Estuary ACEC includes growing area number GBH3.

All of the coastal waters within the Neponset River Estuary ACEC are classified as prohibited for shellfishing because water quality data has, for many years, indicated high concentrations of fecal material. Before any closed area can be opened there must be a sanitary survey conducted by DMF which documents and assesses all sources of potential pollution to an area.

Assessment

Buckley's Bar is not included in the EOE/MassBays Shellfish Restoration project. Sites for this project were selected based on an assessment of the feasibility of making significant improvements to the beds with the application of limited resources. In most cases, this has

MASSACHUSETTS DIVISION OF MARINE FISHERIES – DESIGNATED SHELLFISH GROWING AREA
 GROWING AREA CODE: GBH3 - AREA NAME: NEPONSET RIV & DORCHESTER BAY - AREA TOWN(S): BOSTON/MILTON/QUINCY

Figure 7: Map of shellfish growing areas, classification areas and types, and monitoring stations (from Mass. Division of Marine Fisheries).



0 1 M.

0 1 KM

STATION TYPE

- CLASSIFICATION
- POLLUTION SOURCE
- AD-HOC
- PRIMARY PSP
- SECONDARY PSP
- TERTIARY PSP
- CHEMICAL
- MARINA

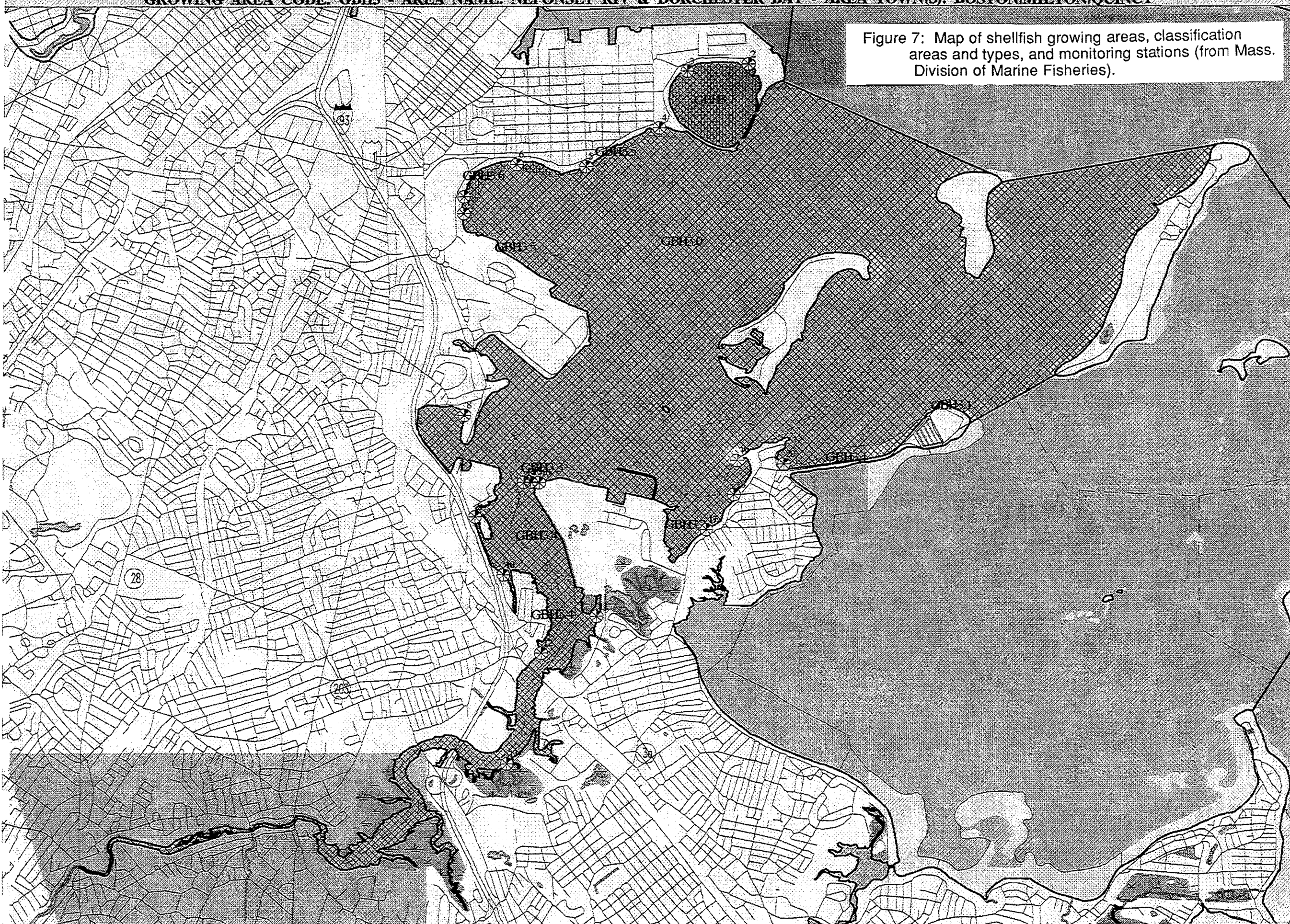
BOUNDARY LINES

- GROWING AREA
- CLASSIFICATION AREA
- TOWN BOUNDARY

CLASS AREA TYPE
AS OF 01/01/95

- APPROVED
- CONDITIONALLY APPROVED
- CONDITIONALLY RESTRICTED
- RESTRICTED
- MANAGEMENT CLOSURE
- PROHIBITED

This product is for planning and educational purposes only. It is not to be used by itself for legal boundary definition or regulatory interpretation.



meant that sites were selected where a single point source of pollution could be identified and repaired. At Buckley's Bar, there are numerous point and non-point sources of contamination, making restoration a difficult and challenging task.

As the Boston Harbor cleanup proceeds toward completion, the degree to which bacterial loading from upstream and from CSOs and sewer lines is mitigated will ultimately determine future shellfishing opportunities in Dorchester Bay and the Neponset Estuary. According to DMF, information generated over the last 5 to 7 years generally shows the Neponset River/Dorchester Bay to be seriously contaminated with little or no chance to be reopened to the harvest of shellfish for human consumption (correspondence from D. Roach, DMF, Nov. 1995).

One positive occurrence in the vicinity (outside the ACEC at the northern tip of Squantum) was the reclassification upgrade of Nickerson Beach to Conditionally Restricted for controlled purification in July 1995. Since then, Nickerson Beach has produced 2,307 bushels of soft shell clams for controlled depuration. However, the sanitary evaluation conducted at that time found rainfall triggered pollution events to be persistent for a minimum of five days even under average rainfall conditions (i.e., 0.5"). It is believed these protracted contaminating episodes reflect adverse impacts emanating from the Neponset River (correspondence from D. Roach, DMF, Sept. 1995)

Implementation Strategy

Management Issue

The restoration of shellfishing in the Neponset River estuary appears to be a long term proposition. A better understanding of the sources of pollution is needed so that efforts at restoration can begin as soon as practicable.

1. Assess feasibility of opening Neponset estuary shellfish beds for harvesting following significant water quality improvements (see Surface Waters and Water Quality section).

Cooperating parties

DMF

source of information and technical assistance
Boston, Milton and Quincy Boards of Health
source of information and technical assistance
MWRA/BWSC, Milton and Quincy DPWs
source of information and technical assistance
Mussel Watch
source of information
MassBays/Shellfish Restoration Program
technical assistance and recipient of assessment
MassBays Program
source of information and possible source of funding

Time table for completion

Long-term

Resources to accomplish the task

Commitment of existing staff and resources
Funding for Neponset River Coordinator

2. Identify potentially valuable shellfish beds in the ACEC. This could be done as part of an updating of the 1971 document, *A Study of the Marine Resources of Dorchester Bay*. This information will be useful to support long-term efforts to restore shellfishing in the estuary and in the regulatory review of proposed projects in these areas.

Cooperating parties

DMF

technical assistance

DEP

condition maintenance dredging permits to require shellfish survey, as appropriate

Friends of the Estuary/Neponset River Coordinator

compile existing knowledge and new data as produced

Boston, Milton, and Quincy Conservation Commissions

coordinate permit requirements/conditions with DEP

Time table for completion

Long-term

Resources to accomplish the task

Commitment of existing staff and resources

Funding for Neponset River Coordinator

3. Identify mechanisms to restore the Neponset estuary shellfish beds, including time tables, responsible parties, and financial resources.

Cooperating parties

Neponset River Estuary Stewardship Council

initiate, organize, and coordinate strategy

DMF

perform sanitary survey, when appropriate, such as after point sources of contamination are abated

Time table for completion

Long-term

Resources to accomplish the task

Commitment of staff and resources

WILDLIFE

Inventory

Comments regarding the nomination provided by the Massachusetts Natural Heritage & Endangered Species Program (NHP), Division of Fisheries and Wildlife, dated February 1, 1995 focus on state-listed rare species and non-game wildlife in the Squantum Point area, in Quincy. According to NHP, this area "provides habitat for a tremendous diversity of bird species and is one of the most important wildlife habitats in the urbanized Boston area."

NHP goes on to state that, "For over 30 years, Squantum Point has been known as a feeding area, roosting area, and migratory stopover for over 200 species of birds. State-listed rare species known to utilize this area are the Short-eared Owl (*Asio flammeus*), Northern Harrier

(*Circus cyaneus*), and Least Tern (*Sterna antillarum*). A list of bird species sighted in the Neponset River Estuary marshes and at Squantum Point is presented in Appendix E. Other bird species that use this area, and are uncommon but not state-listed, include the Snowy Owl, Great Blue Heron and Osprey among many others."

In regard to the wildlife habitat of this area, NHP explains that, "One of the primary reasons that Squantum Point supports both an unusual abundance of birds and a high diversity of species is the variety of habitat types occurring within a relatively small area. This area includes mudflats, sandy beaches, saltmarshes, freshwater wetlands and shrubby upland." Another reason for the heavy use by birds is because so few suitable areas exist in the greater Boston area. NHP recommended including all of these habitats within the boundary of the ACEC, and designating the area as an ACEC to help "protect an area that is unique because it is one of the few remaining natural ecosystems in our urban environment."

Assessment

The diversity of resources in the estuary—the river, its tributaries, the mudflats, salt marshes, freshwater wetlands, and vegetated open spaces—are important habitat for a variety of wildlife and fish species. The large expanse of these resources and the connection this area provides with contiguous natural areas upriver and towards the bay add to its habitat value. However, the natural resources of the Neponset estuary have been reduced and impacted by decades of urban development.

Public ownership and, more recently, regulatory and nonregulatory programs have provided protection for saltmarsh and intertidal areas. Other resources, such as freshwater wetlands and upland areas fringing on wetlands, which contribute important habitat diversity, would benefit from better protection through public acquisition (fee simple or conservation easement) and/or a higher standard of regulatory review at both the local and state levels.

Implementation Strategy

Management Issues

The tremendous efforts at reducing point and nonpoint sources of pollution and a recognition of the importance of urban green space have renewed an interest in restoring the habitat value of currently degraded natural resources.

More information needs to be acquired on the importance and quality of the various aquatic and terrestrial habitats and on the effects of development. Maintaining and restoring a diversity of habitat—wetlands and fringing upland—is necessary to support needs of a range of species. The MDC planning process currently underway will produce some data, the Notices of Intent filed with the municipal conservation commissions also contain useful information, as do site evaluations done by the nonprofits active in the watershed and bird and wildlife enthusiasts.

Tasks

1. Identify sources of information to complete wildlife inventory.

Cooperating parties

Friends of the Estuary (NepRWA subwatershed group):
organize project, coordinate, source of information,
Neponset River Coordinator:
staffing

Mass. Natural Heritage & Endangered Species Program (NHP)
source and repository of information and mapping

DFWELE

source of information and technical assistance

Metropolitan District Commission (MDC)

source of information

Boston, Milton, and Quincy conservation commissions

source of information

Boston Natural Areas Fund (BNAF)

source of information

Time table for completion

Short-term

Resources to accomplish the task

Commitment of existing staff and resources

Funding for Neponset River Coordinator

2. Prepare a comprehensive assessment of the quality of wildlife habitat in the Neponset Estuary. Include identification of degraded upland and buffer areas in the ACEC. Compile and assess information from existing sources.

Cooperating parties

Friends of the Neponset Estuary (NepRWA subwatershed group):

serve as steering committee, coordinate, draft sections

Neponset River Coordinator

prepare and produce product

technical assistance and mapping

DFWELE, NHP, DEP, and MassGIS

technical assistance

Boston, Milton, and Quincy conservation commissions and staff

provide information and technical assistance

Time table for completion

Long-term

Resources to accomplish the task

Commitment of existing staff and resources

3. Prepare proposals for funding for restoring degraded habitat in the estuary. Possible sources include: Section 604(b) Planning and Assessment funds available to the regional planning agency (MAPC) and other substate units for projects relating to water supply, wetland restoration and banking, and identifying nonpoint sources of pollution; Section 319 grants available for projects addressing problems of nonpoint source pollution.

Cooperating parties

NepRWA/Friends of the Estuary/Neponset River Coordinator

research sources of funds and prepare proposals

MAPC

prepare proposals

Boston, Milton, and Quincy conservation commissions

identify areas in need of restoration

Time table for completion

Short-term

Resources to accomplish the task

Commitment of existing staff and resources
Neponset River Coordinator

4. Based on analysis above, develop a plan with specific actions to protect and improve the wildlife habitat of the Neponset Estuary. Such plan may include recommendations: for municipalities to adopt flexible zoning techniques to protect wildlife habitat on developable property; wetlands conservation restrictions on areas bordering sensitive resources; consideration of public acquisition of privately-held freshwater wetlands that are part of a larger wetland system. The plan should include time tables, responsible parties, and necessary financial resources.

Cooperating parties

NepRWA/Friends of the Estuary/Neponset River Coordinator

Organize, coordinate, prepare

BRA, Milton Planning Board, Quincy Planning Board

consider adopting appropriate regulations, and through permitting authorities,
protecting habitat resources

Boston, Milton and Quincy conservation commissions

consider adopting appropriate regulations and, through permitting authorities,
protecting habitat resources

DFWELE, NHP, DEP

technical assistance

MDC

implementation of habitat restoration projects

Time table for completion

Long-term

Resources to accomplish the task

Commitment of existing staff and resources

Economic Use and Development

Goal: Encourage appropriate land and water uses that provide public benefits and are compatible with sound resource protection and management.

Inventory

While the preponderance of area within the Neponset River Estuary ACEC is salt marsh, intertidal flats and open water, these natural resources are interspersed with and surrounded by a mix of commercial, industrial, residential, and recreational land uses typical of an urban area.

Land use in the ACEC is presented in Table 2. The data is 1985 land use interpreted from 1:25,000 aerial photography and classified into 21 categories. This is the most recent available data for this area. Figure 8 depicts this same land use information, though aggregated into major categories. This classification system describes the nature of the land, the vegetation, and land use. Most notable from this data is that the ACEC is 33% saltmarsh, 10% open water, and another 20% is recreational land.

Land use at the northern end of the ACEC (mouth of the Neponset River) is primarily industrial, commercial, transportation-related, and publicly-owned open space. Industrial uses include the storage facility of Boston Gas at Commercial Point and the former Jordan Marsh warehouse on Squantum Point. Between this latter use and the commercial marina at Marina Bay is a large parcel of open space recently purchased by the MDC. Water transportation facilities include the pier and parking lot for the MWRA's ferry to its Deer Island facility.

Port Norfolk is a mixture of commercial and residential uses, a yacht club and a large undeveloped MDC park parcel (formerly the site of the Shaffer Paper Company). The Quincy side of the river is dominated by saltmarsh and mudflats owned by the MDC. On the Boston side, beyond the bridges for the MBTA's red line and Route 3A, are the former Neponset drive-in Theater and the Hallet Street landfill, now being planned for recreational open space by the MDC (see Special Use section). Opposite this on the Quincy side are commercial uses, including the State Street Bank office complex and, further up the river, saltmarsh backed by the President's Golf Course has been acquired by the City and will be rezoned to Open Space.

The next segment of the river is bracketed by the bridge crossings of the Southeast Expressway and Granite Avenue. On the Boston side are the Keystone Apartment building, a converted industrial building, and two industrial uses: Schlager Auto Body and T Construction Corp., whose property is used primarily for storage of materials. Remnants of piers exist at both of these properties, with fishing boats tied up along the structure at T Construction Corp. On the opposite side of the river, in Milton, is the skeleton of a partially built commercial building, a victim of the downturn in the real estate market that began in the late 1980's.

South of the Granite Avenue Bridge the river flows between large expanses of saltmarsh. Publicly-owned open space and residential uses border the marshes. The MBTA rail line crosses the river at the point where the commercial uses of the Lower Mills area begin. Lower Mills features a complex of historic buildings which housed Baker Chocolate until 1965.

Table 2: Land Use in the Neponset River Estuary ACEC, 1985 (from MassGIS)

Land Use	Acres	Percentage
Pasture	3.32	0.37
Forest	41.91	4.63
Open Areas with no vegetation	35.98	3.97
Participation Recreation	177.86	19.65
Spectator Recreation	14.64	1.62
Water-based Recreation	19.58	2.16
Multifamily Residential	4.03	0.45
High Density Residential	26.83	2.96
Medium Density Residential	0.02	0.00
Low Density Residential	2.40	0.27
Saltwater wetland	301.26	33.28
Commercial	32.26	3.56
Industrial	47.98	5.30
Urban open	68.14	7.53
Transportation	44.85	4.95
Waste disposal	0.50	0.06
Water	83.62	9.24
TOTAL	905.16	100.00

The Neponset River ACEC is criss-crossed throughout by several major north-south transportation corridors including the Southeast Expressway (with its new High Occupancy vehicle lane), the MBTA Red Line, the Old Colony railroad and several road bridges. These important regional linkages also attract and support the diverse range of land uses. These numerous transportation routes not only reflect the history of human use of this area; but also, distinctly shape the dynamics and dimensions of this urban ACEC. These major public investments provide access through the ACEC as well as direct access to specific resource areas and public recreational sites.

Assessment

The upper estuary is characterized by saltmarsh and mudflats and is in a much more natural condition than the lower estuary. Very little of the shoreline is privately owned, and where it is privately owned—as at the commercial district of Lower Mills—limited opportunity exists for utilizing the river due to the steep shoreline banks and/or the shallowness and narrowness of the river.

The heart or central node of the ACEC is located in the vicinity of the Granite Avenue Bridge. This area, approximately in the middle of the estuary, provides dramatic views of the estuary,

especially its upper reaches, has great potential for increased public access, and marks a transition from the open estuarine system to a more natural river marsh system.

The lower estuary is and has been the site of considerable commercial and industrial use. Past dredging has been done in a number of locations, (including a federal navigation channel up to the Neponset Avenue bridge), shorelines have been altered, and structures have been built in support of water-dependent uses. This section of the estuary offers far more opportunity and is better suited for water-dependent uses, including public recreation.

The Neponset River Estuary has in the past supported major industrial and commercial uses and continues to do so. The designation of the estuary as an ACEC does not preclude new development or the expansion of existing residential, commercial or industrial uses. However, the amount of privately-owned upland in the ACEC is rather limited. Further, natural resources such as saltmarsh and mudflats limit the water-dependent use potential of many properties.

The efficient and safe operation of the numerous transportation systems that criss-cross the ACEC is a regional priority and transportation agencies are concerned about the effect of the ACEC on new construction and ongoing maintenance. However, proposed improvements to mass transportation can reduce air and water pollution within the ACEC; and likewise, properly maintained storm drainage systems and the adoption of best management practices for all operations will help minimize impacts on the natural resources of the ACEC (see Surface Water and Water Quality section).

Throughout this very urban ACEC, the impacts of many decades of human uses create a priority for restoration projects and add an extra measure of complexity to the management of the natural resources. This is especially evident in the lower estuary where environmentally beneficial projects like the closure of the landfill and remediation of several hazardous waste sites are critical elements of the Resource Management Plan (RMP).

Based on this assessment in the draft Neponset Estuary ACEC RMP, the Secretary of Environmental Affairs, on December 1, 1995, amended the ACEC designation to provide for limited exemptions from the ACEC for specific actions required for landfill closures as part of the landfill assessment actions (Initial and Comprehensive Site Assessments) and landfill closure construction, as determined through DEP/DSWM's Corrective Alternative Action Analysis and/or the Massachusetts Contingency Plan. A detailed listing of such actions is contained in the December 1, 1995 amendments (see Appendix B).

Similarly, exemptions were granted from the ACEC designation for responses performed in compliance with M.G.L. Ch. 21 E and the Massachusetts Contingency Plan for the assessment and remediation of releases of oil and/or hazardous material located within the boundaries of the ACEC (see Figure 9). All exemptions for these environmentally-beneficial activities were issued on the condition that all practicable measures would be taken to avoid, minimize and mitigate impacts that would further degrade the resources of the ACEC.

Implementation Strategy

Management Issues

There is a need to develop and implement a plan for sustainable development of ACEC resources. This requires an understanding of the potential of existing land use and new development (and redevelopment) to encroach upon or otherwise impact valuable natural and

Neponset River Estuary ACEC

Land Use

For more information, write or call: ACEC Program, Massachusetts
Dept. of Environmental Management, Div. of Resource Conservation,
100 Cambridge St., Room 1404, Boston, MA 02202 617-727-3160

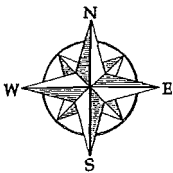
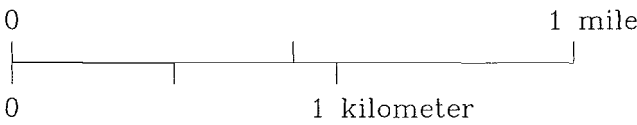
Base Map: USGS 1:25,000 topographic maps; USGS-NMD 1:100,000
hydrography enhanced by MassGIS at 1:25,000.

ACECs: ACEC boundary compiled and automated by Mass. Dept. of
Environmental Management (DEM).

Land Use: UMass Amherst 1:25,000 interpreted from 1985 aerial
photography.

Waste Disposal: Department of Environmental Protection, 1:25000.

Scale 1:20,000



DEM/MassGIS, March 1996

Legend

- Unvegetated Open
- Vegetated Areas
- Recreation
- Residential
- Commercial, Industrial, Trans.
- Waste Disposal

Neponset River Estuary
ACEC boundary

This map is for planning and illustrative
purposes only. It represents the best available
digital statewide data for a given theme. It is
not to be used by itself for legal boundary
definition or regulatory interpretation. See
the Neponset River Estuary ACEC designation
document, as amended December 1, 1995, for
the legal boundary description.

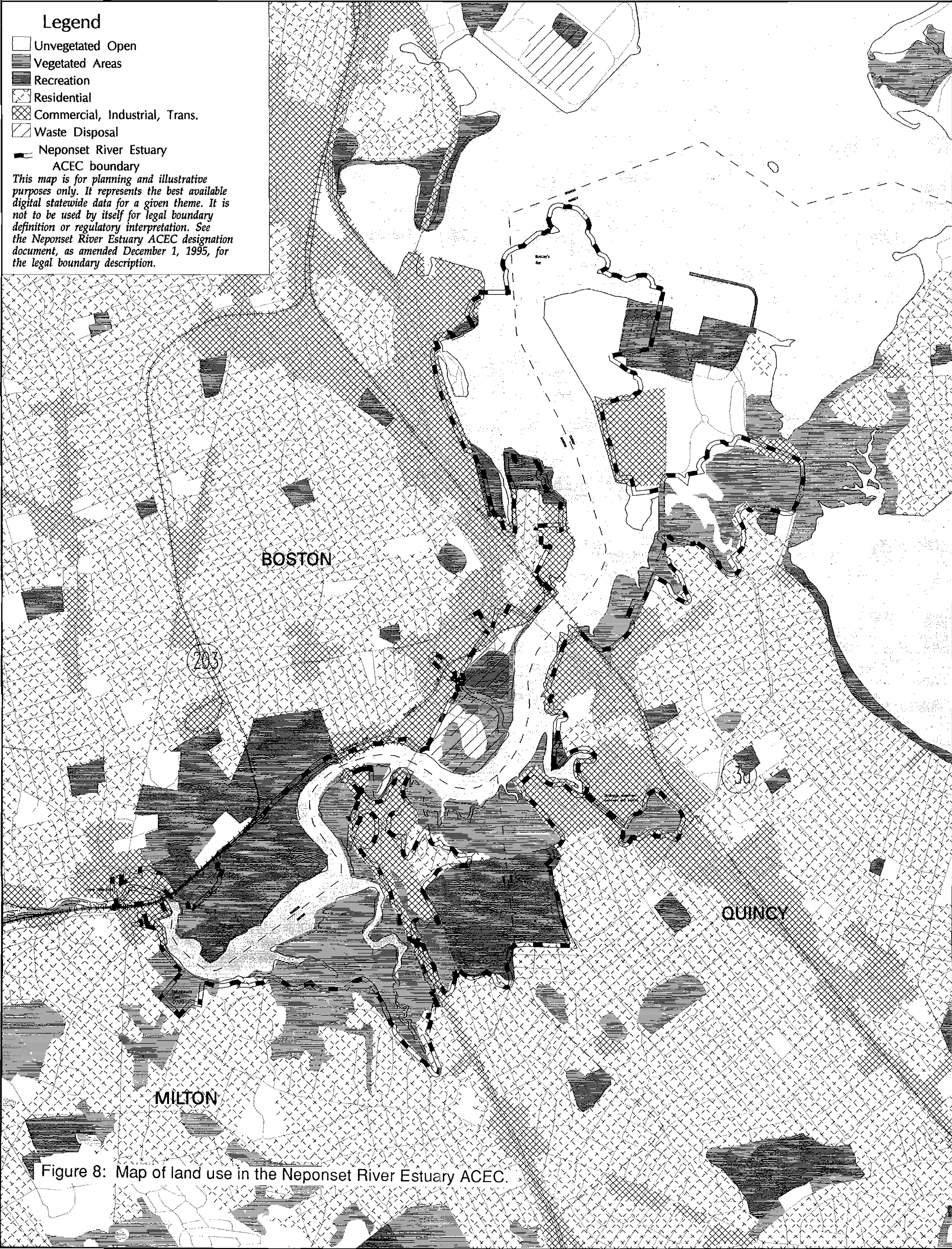


Figure 8: Map of land use in the Neponset River Estuary ACEC.

Neponset River Estuary ACEC

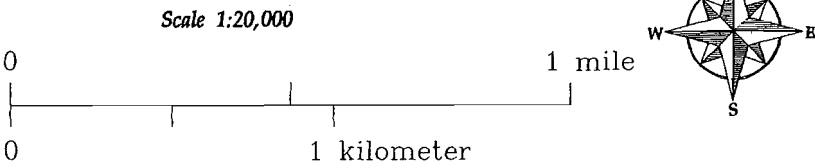
Hazardous Waste Sites

For more information, write or call: ACEC Program, Massachusetts
Dept. of Environmental Management, Div. of Resource Conservation,
100 Cambridge St., Room 1404, Boston, MA 02202 617-727-3160

Base Map: USGS 1:25,000 topographic maps; USGS-NMD 1:100,000
hydrography enhanced by MassGIS at 1:25,000.

ACECs: ACEC boundary compiled and automated by Mass. Dept. of
Environmental Management (DEM).

Hazardous Waste Sites: Mass. General Laws Chapter 21E Sites listed in
Department of Environmental Protection, Bureau of Waste Site Cleanup's SITES
Database. Points located by address matching and GPS by DEP/MassGIS,
February 1995.



- Legend**
- ⊕ Hazardous Waste (21E) Sites
(Confirmed sites and sites
to be investigated)
 - Neponset River Estuary
ACEC boundary

This map is for planning and illustrative
purposes only. It represents the best available
digital statewide data for a given theme. It is
not to be used by itself for legal boundary
definition or regulatory interpretation. See
the Neponset River Estuary ACEC designation
document, as amended December 1, 1995, for
the legal boundary description.

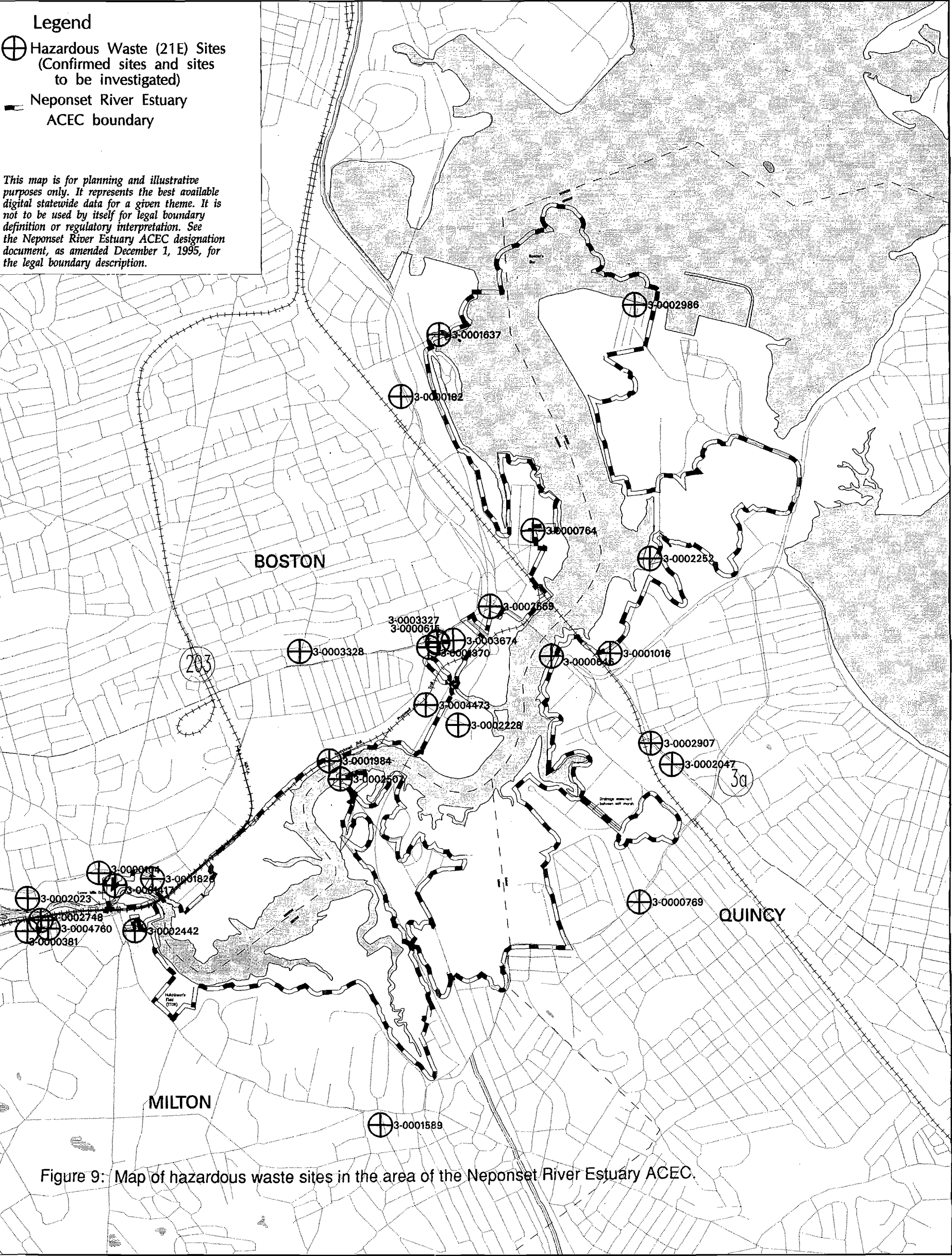


Figure 9: Map of hazardous waste sites in the area of the Neponset River Estuary ACEC.

cultural resources of the ACEC. It also requires as an understanding of the capability of the land and water resources of the ACEC to support desired economic uses.

Certain maintenance and repair activities associated with the extensive transportation networks within the ACEC should not be impaired by the designation and should proceed without additional regulatory review based on the condition that all practicable measures to avoid and minimize degradation of adjacent resources and to mitigate any unavoidable impacts are taken. Similarly, cooperative plans should be developed to incorporate best management practices for controlling stormwater, reducing levels of toxic materials, and contingency planning for oil and hazardous material spills.

Tasks

1. Complete a parcel-by-parcel inventory of land use in the ACEC. The use of each of the nearly 250 parcels identified as being at least partially within the ACEC should be aggregated into a land use classification system relevant to the management needs of the ACEC. This should be designed as a subclassification so as to remain compatible with the MassGIS classification scheme. Categories might include:

water-dependent commercial	low-density residential
water-dependent industrial	medium-density residential
nonwater-dependent commercial	high-density residential
nonwater-dependent industrial	protected open space
institutional	active recreation (water-dependent and nonwater-dependent)
vacant	

Sources of information:

- Neponset River Estuary ACEC data base
- MassGIS data base
- Municipal assessors records
- 1: 5,000-scale wetlands classification
- Municipal inventories and plans
- Wetlands Conservancy Maps

Cooperating parties

Neponset River Coordinator

- assemble and organize information

Municipal planning staffs

- source of information

Mass GIS

- assistance with data management and mapping

MAPC

- source of information

Time table for completion

- Immediate

Key for entries under Tasks

Cooperating parties: lead party in bold typeface, other are cooperators

Time table: based on the plan's five-year implementation schedule.

Immediate = within one year; Short-term, 1 to 3 years; Long-term = 3 to 5 years.

Resources to accomplish the task: identifies type of resources needed and possible sources.

Resources to accomplish the task

Commitment of existing staff time
Funds for full time Neponset River Coordinator

2. Review and assess municipal zoning ordinances (Boston, Milton, Quincy) for allowable use/natural resource conflicts, adequacy of setback, minimum non-wetland lot area, and similar requirements for protection of natural resources. Recommend additional measures as appropriate.

Sources of information may include:
Municipal zoning ordinances and maps

Cooperating parties

MAPC

coordination, analysis and recommended models
Municipal planning staffs
source of information, analysis and recommendations
Neponset River Coordinator
public information

Time table for completion

Short-term

Resources to accomplish the task

Commitment of existing staff time
Funds to support Neponset River Coordinator

3. Based on the inventory and assessment above, develop economic development/land use plan which resolves natural resource/economic use conflicts in the Neponset estuary. Revise local zoning, as needed. Include time tables, responsible parties, financial resources/constraints.

Cooperating parties

MAPC

coordination and plan development
Municipal planning staff
source of information, analysis and recommendations
Neponset River Coordinator
public information
Neponset River Estuary Stewardship Council
review and evaluation

Time table for completion

Long-term

Resources to accomplish the task

Funding for ACEC Coordinator
Planning funds (\$10,000); seek funding from the State's Municipal Incentive Grants Program.

Water-dependent Uses

Goal: Preserve and encourage water-dependent uses.

Inventory

Water-dependent uses

The number of water-dependent uses along the Neponset River Estuary has decreased from earlier decades, but the river still supports several recreational, commercial, and industrial uses dependent on waterfront locations. There are currently four yacht clubs, two marinas and several commercial properties that accommodate vessel berthing. There are only two water dependent facilities in the upper estuary, i.e., the area south of the Granite Avenue Bridge. The lower estuary, however, features many more water-dependent facilities and, by reason of past alteration of the resources and proximity to the open waters of the bay, is more suitable for these uses.

As discussed above, a number of private water-dependent uses exist in the ACEC. The estuary has a long history of commercial and industrial water-dependent uses, and the remnants of structures used for these purposes are still in existence along the riverfront. The locations of these structures are shown on Figure 10 and identified in Table 3. Permit information on these structures is contained in Appendix D.

Upper estuary: South of Granite Avenue Bridge

Milton Yacht Club

Milton Yacht Club is situated at the upper end of the estuary, near the tidal reach of the river, and at the head of the main dredged navigational channel. The property occupied by the club is leased from the town which also owns the fixed dock and other waterfront structures. The yacht club owns the floating dock and maintains the entire property. The club has about 130 members (100 regular member, 30 associate members), half of which are from Milton. The size of the club is limited in the by-laws to the number of boats that can be stored in the yard.

There are no slips; all boats are at two strings of moorings, one on each side of the dredged channel. There are approximately 30 moorings and boats are reached by dinghies kept at the dock. The fleet consists almost entirely of power boats, averaging about 32' in length, and drawing 2.5 to 3.0' of water. At low tide the navigable portion of the river is extremely narrow, some moored boats rest on mud. The area was last dredged in 1984 and, according to club members, is in serious need of dredging. The club does not anticipate expansion, but requires maintenance of its past and present facilities.

Much of the water frontage is a parking lot owned by H.P. Hood, but is used by the yacht club and the public. The northern corner of the parking lot is a popular location for launching canoes. While this arrangement has apparently worked well, changes in the private ownership of the land could disrupt and possibly diminish the amount of access and use currently enjoyed at this location.

Table 3: Previously authorized waterfront structures in the Neponset River Estuary ACEC

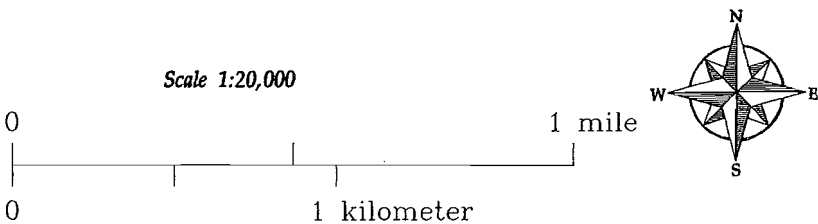
Location	Structures	Fig. 10 Map Ref.
Milton Yacht Club		1
224 Adams Street, Milton	build and maintain a pier and float; asphalt boat launching ramp extending 95' into tidewaters	2
T Construction Corp	piles and floats	3
Shlager Auto Body	fixed pier	4
2 Granite Avenue	piles for fixed pier	5
Neponset Valley Yacht Club	fixed pier, floating docks, boat launch ramp	6
Sagamore Creek at Walnut Street	maintain existing concrete platform and timber bulkhead and remove 5 piles	7
2 Hancock Street, Quincy	4 commercial floats 10'X30'; maint of existing pier construct fixed pier fill shoreline	8
Taylor Street, north of MBTA bridge	construct and maintain pile-supported piers and walkways, travel-lift slip and dock, steel sheet piling, timber pile breakwater; removal of steel barge;	9
Bay State Road	construct storm drain, tide gate and stone headwall for shoreline stabilization and flood control	10
Port Norfolk Condominiums, Boston	construct multi-unit residential buildings and site work, construct public waterfront walkway, viewing platform, place granite block seawall in and over existing filled tidelands	11
Port Norfolk Yacht Club, 179 Walnut Street	concrete boat ramp, marine railway, retaining wall, floating docks, timber pier	12
Ericsson and Walnut Street, Boston	construct 36" storm drain outfall, associated riprap	13
Old Colony Yacht Club	place timber piles, floats, and steel barge bulkhead	14
Victory Road Park	place 135 l.f. of rip-rap, construct 60' timber bridge	15
MWRA Pier, west of Marina Bay, Quincy	construct a pier, ramp, floating dock, shore protection, and parking facility	16
Marina Bay, Quincy	pile-supported pier to support floats; pile-held dock extension for commercial boating facilities; wood wharf; wooded decks	17
Surrounding Harborside Condominiums, Quincy		18

Neponset River Estuary ACEC

Base Map: USGS 1:25,000 topographic maps; USGS-NMD 1:100,000 hydrography enhanced by MassGIS at 1:25,000.
ACECs: ACEC boundary compiled and automated by Mass. Dept. of Environmental Management (DEM).



For more information, write or call: ACEC Program, Massachusetts Dept. of Environmental Management, Div. of Resource Conservation, 100 Cambridge St., Room 1404, Boston, MA 02202 617-727-3160



Legend

Neponset River Estuary
ACEC boundary

This map is for planning and illustrative purposes only. It represents the best available digital statewide data for a given theme. It is not to be used by itself for legal boundary definition or regulatory interpretation. See the Neponset River Estuary ACEC designation document, as amended December 1, 1995, for the legal boundary description.

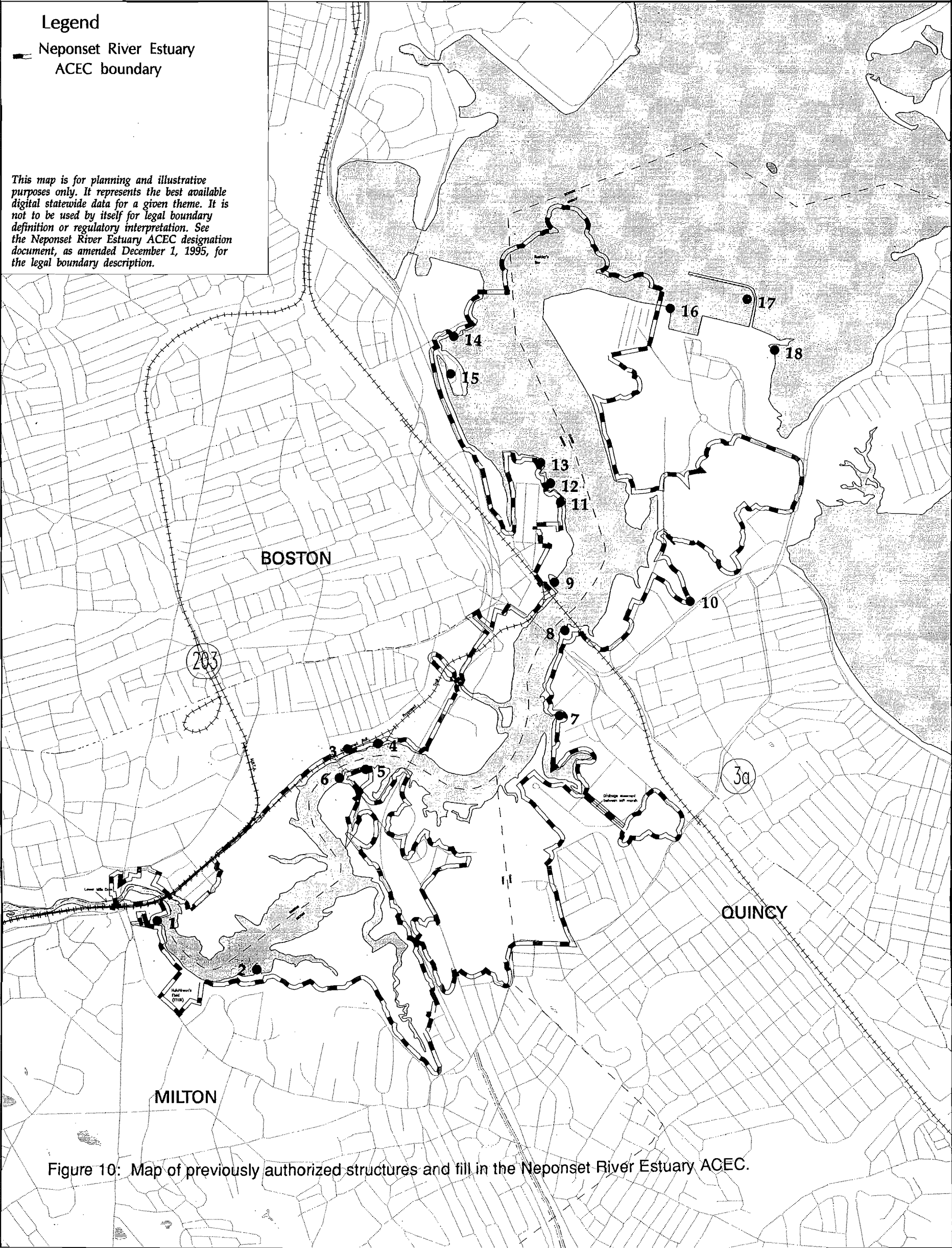


Figure 10: Map of previously authorized structures and fill in the Neponset River Estuary ACEC.

Neponset Valley Yacht Club

Neponset Valley Yacht Club is situated on MDC property just south of the Granite Avenue Bridge. It has 40 members and 20 boats on moorings accessed by dinghies from a fixed dock with floats. There is a boat launch ramp useable only at mid-tide or higher. The public occasionally uses the ramp to launch canoes, but yacht club members are wary because of the possibility of injury and liability. The entire property floods periodically at extreme high tides making any substantial improvements or permanent additions to this site ill-advised.

Mid Estuary: Neponset River Bridge to Granite Avenue

The area between the Neponset River Bridge and the Granite Avenue Bridge delineates the middle section of the Neponset Estuary ACEC. On the north side of the river is the former Hallet Street landfill and the former Neponset Drive-in Theater, both now owned by the MDC. These properties are the future site of Pope John Paul II Park. The south side of the river has extensive saltmarsh acreage with the President's Golf Course rising on the hills beyond. The State Street Bank office complex fronts a portion of the Quincy riverfront and the Southeast Expressway crosses the ACEC in this section. Currently, there is no water-dependent use in this area.

Lower Estuary: North of Neponset Avenue Bridge

While there are a number of sites of former water-dependent commercial or industrial uses in the upper and middle section of the estuary, the existing marine uses are concentrated in the lower part of the estuary, north of the Neponset Avenue Bridge (Route 3A). These sites represent the preferred areas for limited expansion for economic development rather than impacting new undeveloped areas of the ACEC. At the same time, these fairly intensive uses and operations at these sites represent continuous and cumulative impacts on the natural resources such as nonpoint pollution, boating discharges and accidental spills.

Cashman Marine

Cashman Marine is a water-dependent industrial property on the Quincy shoreline between the Neponset Avenue bridge and the MBTA Red Line bridge. The site is used for loading/unloading earth materials between trucks and barges.

Port Norfolk Yacht Club

Port Norfolk Yacht Club has approximately 85 slips and boats. The boat basin and upland have been created and modified through a series of dredging, filling, and structures authorizations (see Appendix D).

Thomas Marine

Formerly called Norwood Marine, this marina has slips for 100+ boats, travel lift, pump out, upland boat storage, boat maintenance facilities, and offers sale of marine supplies. The owner is planning work to improve some structural conditions and, possibly, reconfigure the boat basin.

Old Colony Yacht Club

Old Colony Yacht Club is located in a tight area adjacent to and surrounded by the former landfill, now Victory Road Park, the Commercial Point CSO outfall, and the Boston Gas facility. Repairs to bulkheading and some maintenance dredging have been completed recently.

MWRA Water Transportation Facility

Squantum Point supports one of the mainland ferry terminals for transporting MWRA workers to Deer Island and is an MDC park. This area offers potential for more public access and as a passenger water transportation facility after the MWRA completes its work in 1999.

Venetia Restaurant

The Venetia Restaurant is located on the waterfront between Thomas Marine and the Port Norfolk Yacht Club. There are several slips, moorings and old pilings located nearby.

Dredged Areas

Lower Estuary: Navigation channel north of Neponset Avenue Bridge

A channel provides navigable water through Dorchester Bay from the main ship channel (President Roads) in Boston Harbor up to the Neponset Avenue Bridge (see Figure 11b and c). This channel was authorized by Congress in 1907 and last dredged in 1966-67 to a depth of fifteen feet (MLW) by 100' wide. Later plans (see Appendix D) to increase the depth and breadth of the channel have since been deauthorized (personal communication, ACOE).

Mid and Upper Estuary: Navigation channel south of the Neponset Avenue Bridge

The reach of the river south of the Neponset Avenue Bridge to the Milton Yacht Club is navigable by recreational boats. While no specific record of a navigation channel being dredged *throughout* this section has been obtained, a condition of the Army Corps of Engineers' agreement to dredge the channel north of the Neponset Avenue Bridge was that the state was to dredge and maintain this reach to a depth of -6.0 feet (MLW). The Corps condition survey report of 1978 notes that this condition has been fulfilled (see Appendix D). Commonwealth records do indicate that the state has dredged two sections of this reach: one in the vicinity of the Neponset Valley Yacht Club and the other at and below Milton Yacht Club (Figure 11a and b).

In 1982 DEQE's Division of Waterways commissioned a feasibility study for the dredging of this portion of the Neponset River. The study recommended the (federal) channel width of one hundred feet be extended upstream to the Milton Town Landing with the following depths: ten feet (MLW) from the upstream terminus of the federal channel to the Granite Avenue Draw Bridge; a tapering depth of ten feet to six feet (MLW) through the mooring area of the Neponset Valley Yacht Club to a point about 1050 feet upstream of the Granite Avenue Bridge; and from this point to the Milton Town Landing, a proposed depth of six feet (MLW). This project was not implemented as described due to lack of funding and permit concerns about dredging and disposal impacts, but maintenance dredging by DEM did take place in the area of Milton Yacht Club.

Figures 11(a), (b), and (c) depict areas in the ACEC which have been dredged in the past and Table 4 identifies each site. Additional information on the extent of work authorized for each site is contained in Appendix D, a comprehensive listing of permits and licenses issued in the Neponset Estuary. It should be noted that several entries in Figure 11, Table 4, and Appendix D are for locations that, based on former and current use, have been dredged in the past, but for which dredge permits have not been located.

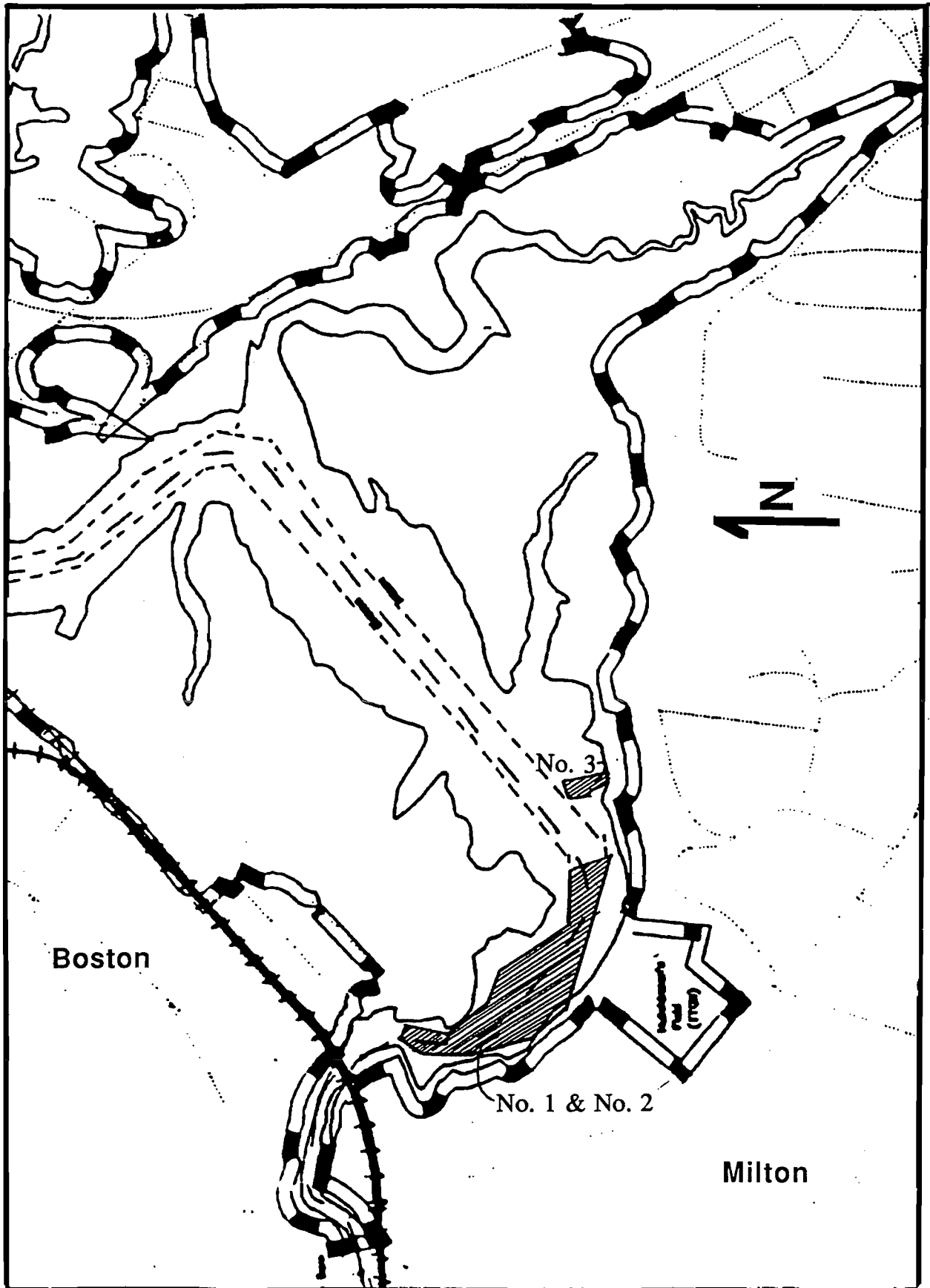


Figure 11 (a): Map of previously authorized dredging in the upper Neponset River Estuary ACEC.

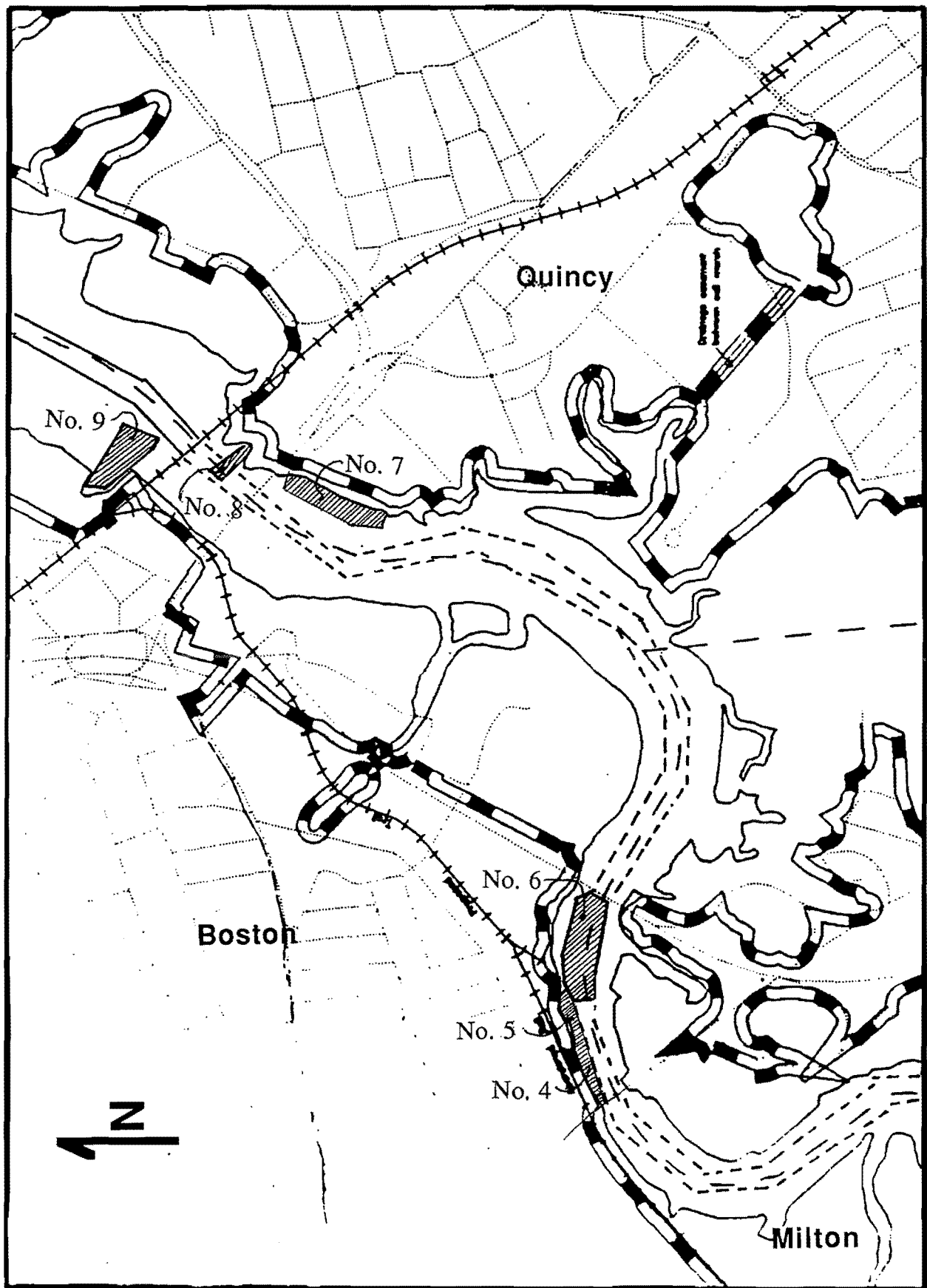


Figure 11 (b): Map of previously authorized dredging in the mid Neponset River Estuary ACEC.

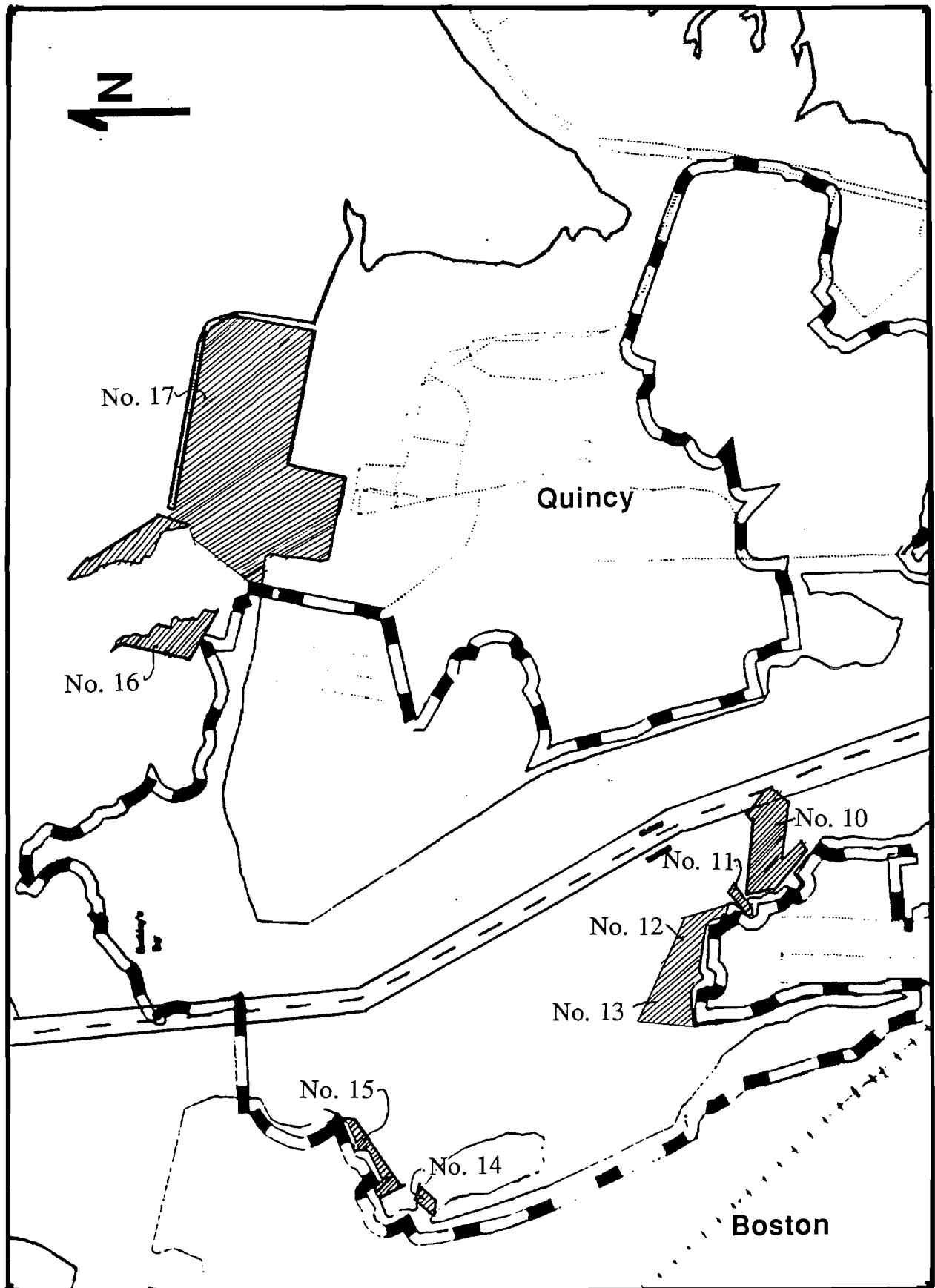


Figure 11 (c): Map of previously authorized dredging in the lower Neponset River Estuary ACEC.

Table 4: Previously authorized dredging in the ACEC

	Dredging	Fig. 11 Map Ref.
Milton Yacht Club	dredge channel and basin in Neponset River to -6.0 MLW (min width 100'; plan maintenance dredge channel in Neponset River to -6.0 MLW (min width 100')	11(a), No. 1 11(a), No. 2
224 Adams Street, Milton	dredging 37'X75' to depth of -4.0 MLW	11(a), No. 3
T Construction Corp.		11(b), No. 4
Shlager Auto Body		11(b), No. 5
Neponset Valley Yacht Club	dredge channel to -8.0 MLW (min width 200')	11(b), No. 6
Adams Inn		11(b), No. 7
2 Hancock Street, Quincy	maint. dredge 9,000 cy; max depth -7.0 MLW; disposal at MBDS	11(b), No. 8
Taylor Street, north of MBTA bridge	dredge 24,000 cy; for commercial marina facility	(b), No. 9
Port Norfolk Yacht Club, 179 Walnut Street	maintenance dredge 9,200 cy; max depth -6.0 MLW; disposal at MBDS dredge 16,000 cy of subaqueous material from irregularly shaped area maintenance dredge basin to -6.0 MLW	11(c), No. 10
Ericsson and Walnut Street, Boston	dredge 50 cy material	11(c), No. 11
Venezia Restaurant		11(c), No. 12
Thomas Marina		11(c), No. 13
Victory Road Park	dredge two areas on either side of bridge: 1,900 cy to the east, 1,200 cy to the west; on-site upland disposal	11(c), No. 14
Old Colony Yacht Club (and Port Norfolk Yacht Club)	dredge 13,000 cy at the Old Colony YC (see also Port Norfolk YC, dredge 16,000 cy) maintenance dredge basin to -6.0 MLW dredge area adjacent to seawall to depth of -5.0' MLW	11(c), No. 15
MWRA Pier, west of Marina Bay, Quincy	dredge 51,000 cy to max depth of -10.0' MLW; disposal MBDS	11(c), No. 16
Marina Bay, Quincy		11(c), No. 17
Neponset River Dorchester Bay to Neponset Avenue/Hancock Street	100' wide channel dredged to -15.0 MLW. Last dredged in 1966-1967. Condition survey in 1978 revealed no hazards to navigation.	
Neponset River south of Neponset Avenue Bridge	Neponset Avenue Bridge to Granite Ave bridge: 100' wide, -6.0 MLW Granite Ave. Bridge to Godfrey's Coal Wharf: 75' wide, -6.0 MLW In front of Godfrey's Coal Wharf: not less than 50' Mooring basin in front of Vose's Grove to -6.0 MLW. Completed 8/24 dredge and maintain a 2 mile reach of channel between the Neponset Bridge and Milton Mills to -6.0 MLW. (This dredging was required of the Commonwealth as a condition of ACOE dredging north of Neponset Bridge in 1907.	

Assessment

Water-dependent uses

The extent and value of the natural resources of the estuary limit the opportunity for new privately-owned structures in the ACEC. However, the estuary has and does support a number of active and important water-dependent uses, particularly in the area north of the Granite Avenue Bridge. Water-dependent uses should be accommodated and encouraged in these locations, where the resources have been altered by prior activities and where investment in facilities and supporting infrastructure have already been made by property owners and the public.

The planning for the MDC Master Plan and Park Design is being finalized concurrently with this RMP. Among the goals of the plan is to increase and improve public access to and along the riverfront of the entire ACEC. It is anticipated that this access will include pedestrian, boating, and fishing opportunities which may include new public structures. The final MDC Plan is intended to be incorporated into this RMP as an addendum after EOEA Secretarial review and approval, and through annual ACEC plan revisions if needed.

Because the major goals of this designation in an urban area include the restoration of resources, certain activities that otherwise would be prohibited under the provisions described above need to be undertaken. Consequently, a number of specific "environmentally beneficial" actions have been granted a limited exemption from the ACEC designation by the Secretary of Environmental Affairs via amendments to the ACEC designation issued on December 1, 1995. Specifically exempted dredging activities include improvement dredging associated with the stormwater outfalls at Tenean and Lawley Streets and Pine Neck Creek, Boston; dredging /sediment removal to allow for separation of combined sewer outfalls; sediment removal and resanding at Tenean Beach; dredging necessary to access recreational facilities as part of the MDC Master Plan; dredging for utility crossings; and certain marina dredging delineated by marina operators in conjunction with DEP Ch. 91 staff.

The ACEC designation triggers specific restrictions contained in the Commonwealth's Chapter 91 regulations regarding waterfront structures and fill. The purpose of these regulations is to protect and preserve the public's interest in coastal tidelands and waterways by ensuring that such areas are utilized only for water-dependent uses or otherwise serve a proper public purpose. The relevant provisions of the Ch.91 regulations are outlined below:

New fill: Within ACECs the Chapter 91 regulations prohibit new fill in tidelands (with a few limited exceptions described below).

Structures: Within ACECs the following projects may be conducted (are eligible for licensing in the ACEC (310 CMR 9.32(1)(e)):

- 1) fill or structures for any use on previously filled tidelands
- 2) structures for public pedestrian access over flowed tidelands, provided it is not feasible to locate the structure above the high-water mark or within the footprint of existing pile supported structure or pile field.
- 3) publicly-owned structures for water-dependent use below the high-water mark, provided it is designed to minimize encroachment into the water. Such structures would include a dock, pier, or boat launch ramp.

- 4) Privately-owned structures for a water-dependent use below the high-water mark, provided that:
 - a) the proposed use is not industrial and is located within the footprint of existing previously authorized pile-supported structures. Example: a new commercial dock in area of former industrial pier;
 - b) such structures are necessary to accommodate infrastructure facilities, and are designed to minimize encroachment in the water. Infrastructure facilities are those that produce, deliver or provide electric, gas, water, sewage, transportation, or telecommunications services to the public.
 - c) such structures consistent with a Resource Management Plan adopted by the municipality and approved by the secretary.

Beyond those described above, the few limited circumstances described in the Ch.91 regulations in which fill or structures may be allowed in the ACEC (provided that reasonable measures are taken to avoid, minimize, and mitigate any encroachment in the waterway) include:

- 1) shoreline stabilization or rehabilitation of an existing shore protection structure;
- 2) installation of drainage, ventilation, or utility structures, or placement of minor and incidental fill necessary to accommodate any modification to existing *public* roadways or railroad track and/or rail bed; or
- 3) improvement or rehabilitation of existing *public* roadways or railroad track and/or rail bed, provided that any net encroachment with respect to public roadways is limited to widening by less than a single lane, adding shoulders, and upgrading substandard intersections.

None of the above effects or restricts the continuation, maintenance, or replacement of existing and/or licensed water-dependent use structures, nor limits structures otherwise eligible for licensing. An important provision in the Chapter 91 regulations allows for the permitting of new privately-owned structures below the high-water mark if they have been provided for in a Resource Management Plan that has been approved by the Secretary of EOEA and adopted by the local municipality (see above).

Under ACEC provisions, new or improvement dredging is not allowed; and only in those areas where previous dredging can be verified will maintenance dredging be permitted.

Upper Estuary: South of Granite Avenue Bridge

The existing boating facilities are appropriate in scale and strike a reasonable balance between the requirements of operations and maintenance vs. equitable access; however, there appears to be significant interest in more recreational/educational use in this end of the Neponset River estuary. The types of use most frequently mentioned include canoeing, kayaking and hiking/birding.

The general area around the Granite Ave. bridge could provide opportunities for increasing these kinds of uses. Neponset Valley Yacht Club site is well situated and physically suited for launching of canoes, kayaks and small boats. The property has existing parking and easy access off Granite Avenue. If planned in conjunction with similar or related activities around the perimeter of the No. 2 Granite Avenue building and possible long range public improvements at the Schlager site, it could serve as a highly visible recreational center of the estuary especially if coordinated with the MDC Plan.

Mid-estuary: Granite Avenue Bridge to Neponset Avenue Bridge

There exists the opportunity to reestablish waterfront structures and boating access in this transition area between the more natural environment to the south and the developed area of the lower estuary. Redevelopment of the T Construction Corp. and/or Schlager sites could accommodate restored structures for commercial or recreational boating. The waterfront of these sites has been engineered and the existence of former waterfront structures provide the opportunity under DEP Waterways Regs. 310 CMR 9.32(1), also called Ch.91 Regs, to permit new privately-owned structures for *commercial* use.

Lower Estuary: North of Neponset Avenue Bridge

This section of the ACEC contains the largest concentration of water-dependent uses including existing marinas, yacht clubs, restaurants and water transportation facilities.

An expansion of water-dependent uses is best accommodated in this area where necessary infrastructure investments have already been made, the channel is more navigable, a more pristine areas will not be impacted.

Given strict prohibitions concerning the alteration of saltmarsh and physical limitations due to shallow water depths in the upper estuary, and the potential use or reuse locations previously authorized or historically used for water-dependent structures, the construction of new privately-owned water-dependent use structures in locations not previously authorized or historically used is not recommended within the Neponset Estuary ACEC.

Dredging

The natural sedimentation processes that occur within a riverine estuary often result in the reoccurring shifting and shoaling of areas within the ACEC. This has repeatedly caused navigational problems for the numerous types of boating, shipping and economic activities that have historically utilized the Neponset River. The ACEC designation brings several regulatory provisions into effect that address the issue of dredging. These provisions relate to maintenance dredging vs. improvement dredging.

Maintenance dredging can be conducted in the ACEC upon approval of necessary permits. Maintenance dredging refers to the dredging of areas that have in the past been authorized for dredging regardless of whether or not dredging has ever been done. The areal extent and depth of maintenance dredging eligible for permitting is as described and shown in existing authorizations. Table 4, Appendix D and Figure 11 list and depict previously dredged areas within the Neponset River Estuary ACEC. The sites listed in Table 4, Appendix D and on Figure 11 include those identified through previous permits as well as those for which permits have not yet been located but, based on former or current use, it is apparent that dredging has been done in the past.

Improvement dredging, that is, new dredging, is prohibited in the ACEC except for the sole purpose of fisheries or wildlife enhancement. Improvement dredging is defined as dredging of an area that has not been authorized previously.

Consultations with owners of existing marinas and marine businesses and with board members of existing yacht clubs in the ACEC revealed no immediate or short term expansion plans that include the need for improvement dredging. In some cases, representatives of these facilities explained that there may be places within or at the perimeter of their boat berthing areas that have not been included in previous authorizations, but that if eligible for dredging, could improve the functioning and capacity of the existing facility without encroaching on contiguous resource areas.

This kind of improvement dredging would be consistent with another stated goal of increasing public access and recreational and educational opportunities. Nevertheless, if improvement dredging is to be allowed within the ACEC, it should be done under strict conditions to avoid and minimize any negative effects of the resources (see Appendix B, page 8, regarding the specific language of the December 1, 1995 amendments describing limited exemptions for certain improvement dredging projects). Those conditions could include the use of a tight closing environmental dredge bucket, seasonal prohibitions to avoid spawning and migration periods, no disposal in Massachusetts waters and preferably in containment sites for any contaminated sediment. The disposal of dredged material is prohibited in coastal tidelands unless for the express purpose of beach nourishment, dune construction or stabilization with vegetative cover, or the enhancement of fishery or wildlife habitat.

Implementation Strategy

Water-dependent Uses

Management Issues

Generally, throughout the entire ACEC tidelands area, all structures should now have a license under the Ch.91 regulations administered by DEP. All unlicensed structures in the ACEC should file for a Chapter 91 license under the Amnesty Program by October 4, 1996. The Amnesty Program provides a simple, low cost opportunity for all existing structures to obtain required permits before the new provisions of the law go into effect.

In the upper estuary south of the Granite Street Bridge, very limited expansion of water dependent uses or any other structures is appropriate. Any reconfiguration or limited expansion of existing (including previously authorized or built) privately-owned water-dependent use structures may be permitted in conformance to the following guidelines:

- requires no new (improvement) dredging
- reconfigured structure is no closer than 25' from tidal wetlands
- reconfigured structure is no closer than 10' from navigation channel

Any new publicly-owned structures may be permitted in conformance with the following guidelines:

- structures minimize encroachment into navigable waterway
- structures built over mudflat and saltmarsh be designed and constructed to avoid and minimize impacts
- planning for new structures be coordinated with that of other municipal, state, and citizen groups

Given strict prohibitions concerning the alteration of saltmarsh and physical limitations due to shallow water depths in the upper estuary, and the potential use or reuse locations previously authorized or historically used for water-dependent structures, the construction of new privately-owned water-dependent use structures in locations not previously authorized or historically used is not recommended within the Neponset Estuary ACEC.

Appropriate water dependent uses in this section of the ACEC would be those with low impact such as canoeing, kayaking, birding, hiking and educational and interpretative programs. All boats should observe the no wake (5 mph) speed limit to prevent damage to the saltmarsh.

The middle section of the estuary offers substantial potential to increase the opportunities to maximize the opportunities to promote water-dependent uses, including boating and public access, as new land uses occur in this area. A detailed and coordinated planning study should assess the current, planned and potential uses of this transition area. For example, a public pedestrian/fishing structure or a dock for a water transportation service would be an appropriate reuse of the remnant pile field at No. 2 Granite Avenue in accordance with 310 CMR 9.32(1). If the Granite Avenue site is redeveloped for commercial use, coordinate the state and municipal reviews to achieve the most appropriate use of the waterfront. Again, use of this section of the river should complement activities and uses envisioned by the MDC Plan.

In the lower estuary section of the ACEC, limited expansion/improvement of existing facilities is anticipated and endorsed by this plan. This pertains only to proposed improvements:

- contiguous to existing facilities and/or
- in areas previously used for water-dependent activities that have not returned to a natural state.

Sites of previous dredging, fill and structures are identified on Figures 10 and 11 and in Tables 3 and 4, and detailed in Appendix D.

Tasks

1. Prepare a more detailed and comprehensive plan for public and private water-dependent uses in the estuary.

Cooperating parties

Neponset River Coordinator

coordination and plan development

MDC

source of information and plan review

DEP-DWW

source of information and plan review

Municipal planning and conservation commission staff

source of data and review

Time table for completion

After completion of the MDC's Master Plan

Resources to accomplish the task

Funding for Neponset River Coordinator

Planning funds (\$10,000); seek funding from the State's Municipal Incentive Grants Program.

Key for entries under Tasks

Cooperating parties: lead party in bold typeface, other are cooperators

Time table: based on the plan's five-year implementation schedule.

Immediate = within one year; Short-term, 1 to 3 years; Long-term = 3 to 5 years.

Resources to accomplish the task: identifies type of resources needed and possible sources.

2. Conduct a detailed and coordinated planning study focused on the current, planned and future uses of the critical transition area in the middle section of the ACEC, from the Neponset Valley Yacht Club to the Keystone Building, to determine the most appropriate use of this waterfront and to suggest activities and uses that would be complementary to those envisioned by the MDC Master Plan.

Cooperating parties

MDC

coordinate and provide information

DEP/DWW

information and plan review

Milton Planning Board

source of information and develop plan

Boston Redevelopment Authority

source of information and develop plan

MCZM

source of information and technical assistance

DEP-DWW

source of information and plan review

BNAF

source of information

Boston Conservation Commission

source of information

Time table for completion

Immediate

Resources to accomplish the task:

Commitment of staff time

Agency staff and information

Dredging

Management Issues

Consistent with this RMP's goals and objectives for economic development, special use areas, and the several intertidal and subtidal resource, future dredging for water-dependent uses should be limited essentially to those areas that have been dredged previously, i.e., maintenance dredging. See also task 2, below.

However, improvement dredging should be limited to specific areas where public projects are undertaken to promote public health, public recreation and environmental quality improvements. Regarding the exemption for dredging or trenching for potential utility crossings, this exemption should be considered only in the case where there is a clearly defined, compelling and urgent public need, and after a thorough alternatives analysis and public environmental review that has demonstrated that there are no other feasible alternatives. Specifically, exemptions have been granted from the Chapter 91 prohibitions regarding improvement dredging in the December 1, 1995 Amendments to the Neponset River Estuary ACEC (see Appendix B), as follows:

1. Improvement dredging associated with the stormwater outfalls at Tenean and Lawley Streets and Pine Neck Creek, Boston;
2. Dredging and sediment removal to allow for the installation or modification of stormwater outfalls necessary to allow the MWRA and the Boston Water & Sewer Commission to separate the existing combined sewers located in the ACEC;
3. Sediment removal and resanding at Tenean Beach,
4. Dredging necessary to access recreational boating facilities (launch ramps and docks) included in the MDC Neponset River Estuary Master Plan, as reviewed and approved by the Secretary of EOEA;
5. Dredging or trenching that may be necessary for utility crossings;
6. Dredging necessary for marina facilities provided the marina owners work with (DEP) Chapter 91 Waterways staff and EOEA agencies to delineate work areas.

A maintenance and improvement dredging and disposal plan is needed for the estuary to guide these activities in the future. It should include a complete record of the condition of the sediments throughout the estuary; accurate descriptions of previous dredging; and better delineation of new or expanded structures or dredging (see task 2, below).

Tasks

1. Assemble and synthesize all data contained in planning documents, academic research, municipal and state authorizations, licenses and permits which is related to analysis of contaminated soils.

Cooperating parties

NepRWA

assemble and analyze data

DEP/DWW

source of information, e.g., 401 Water Quality Certification

U.S. Army Corps of Engineers

source of information

University of Massachusetts Boston

source of information and analysis

Time table for completion

Immediate

Resources to accomplish task

Commitment of EOEA staff time

Funds from DEP research programs

2. Develop a dredge management and disposal plan for the estuary that will determine acceptable project areas for dredging and disposal. Results from task #1 will be part of the basis for this plan.

Cooperating parties

MCZM Harbor Management Program

coordination and planning

DEP-DWW

source of data and regulatory review

Owners/operators of water-dependent use facilities

source of data, planning

Municipal conservation commissions and staff
planning and review

Time table for completion

Short-term

Resources to accomplish the task

Commitment of state and municipal staff time

3. In several cases within the ACEC (see Appendix D), authorizations for dredging of sites that clearly have been dredged in the past, have not been located. In the short term, if necessary, it is recommended that these areas be considered as "maintenance dredging" areas. All authorizations should be located and compiled into the existing DEP data base.

Cooperating parties

DEP-DWW

regulatory review

DEM, Waterways

source of information

U.S. Army Corps of Engineers

source of information

Municipal Conservation Commission staff

source of information and review

Owners of dredge sites

source of information

Time table for completion

Immediate

Resources to accomplish the task

Commitment of staff time

4. Compile a set of standard and special conditions on dredging should be compiled from federal, state, and municipal agencies that issue permits for dredging to provide a consistent and predictable framework for dredging projects.

Cooperating parties

MCZM

coordination and model standards

U.S. Army Corps of Engineers

source of information and regulatory review

Municipal Conservation Commission staff

source of information

Time table for completion

Immediate

Resources to accomplish the task

Commitment of agency staff time

Historical and Archaeological Resources

Goal: Preserve, protect, enhance, and restore historic and archaeological sites in the Neponset Estuary.

Inventory

The geographical location and ecological richness of the Neponset River has attracted human use and settlement for 10,000 years. As summarized in the 1989 MDC publication, *A History and Guide to the Restoration of Dorchester Shores*, "the area is well endowed with abundant natural resources, and during the 10,000 years that humans have occupied the Boston Basin, the Neponset River would have been utilized during different seasons, and at different levels of intensity throughout prehistory." At the time of the first European contact with the region, Lower Falls was the seat of the Neponset tribe of the Massachusetts Indians.

The Neponset estuary was used by the Neponset Indians in the warmer seasons as a source of food. In the spring and fall, shad and herring were captured at the falls now known as Lower Mills. The earliest European settlers in Dorchester report that the Native Americans cultivated corn in an area known as the Massachusetts Fields on the Milton side of the estuary. Evidence of native encampments in the upper reaches of the estuary has been identified. The tribe was believed to have moved up-river to hunt and camp in the cooler months. Layers of archaeological and historical resources are concentrated in the area of the Neponset River estuary. At least nine archaeological sites have been recorded along the lower Neponset River.

The falls at Lower Mills were one of the earliest sources of hydropower on the North American continent. Because the power of the Neponset River could be harnessed without the major capital investment required to tame larger streams, the Industrial Revolution came early to the Neponset. During the first half of the eighteenth century, the lower falls powered gun powder mills, saw mills, grist mills, a fulling mill, a paper mill and a snuff mill. In 1765, chocolate manufacturing was begun in an existing saw mill.

Intense industrialization continued as long as water power was an efficient source of energy. The Walter Baker Chocolate Company expanded throughout the nineteenth century to become the principal industry of the village of Lower Mills. Many buildings of that complex remain and their significance has been recognized as the Dorchester/Lower Mills Industrial District, listed on the National Register of Historic Places in 1980 (Figure 12).

The MDC publication mentioned above further describes colonial settlement and evolving historical development and industrial use of the area. The Lower Mills and Neponset marshes area, Port Norfolk and Commercial Point are highlighted in the narrative. Visible reminders of the colonial and industrial periods remain, but much of this history, is not readily apparent without guides such as the MDC publication or longtime residents of the area.

Assessment

The MDC publication, *A History and Guide to the Restoration of Dorchester Shores*, May, 1989 contains specific chapters on Lower Neponset, Port Norfolk, and Lower Mills. It's bibliography provides an extensive list of other historical and archeological research focused on the Neponset River and adjacent areas. It contains some of the most convincing documentation of the scope and value of such resources within the ACEC.

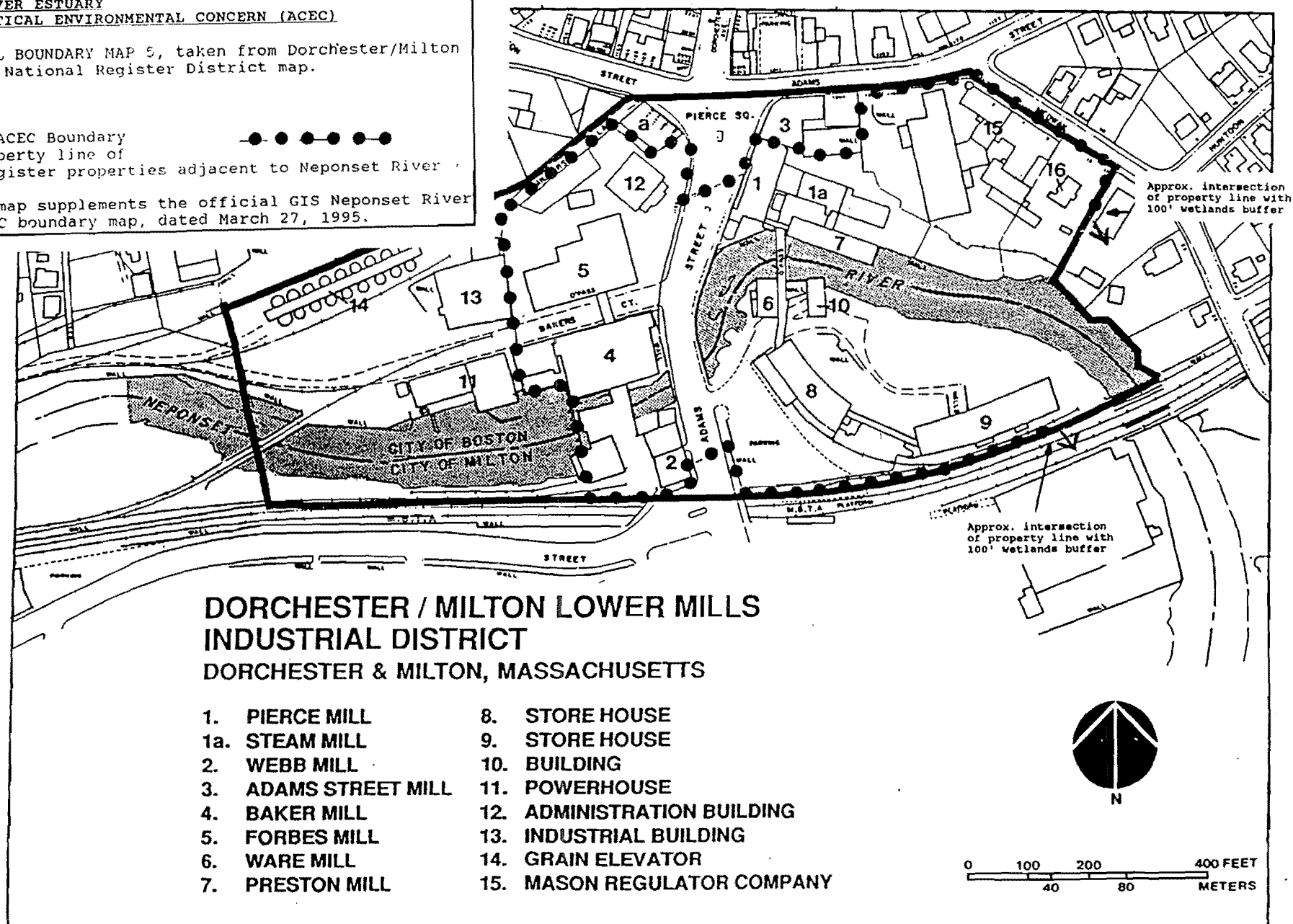
**NEPONSET RIVER ESTUARY
AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)**

SUPPLEMENTAL BOUNDARY MAP 5, taken from Dorchester/Milton Lower Mills National Register District map.

MAP KEY

Segment of ACEC Boundary showing property line of National Register properties adjacent to Neponset River

Note: This map supplements the official GIS Neponset River Estuary ACEC boundary map, dated March 27, 1995.



A Plan of the Dorchester/ Milton Lower Mills National Register District. Boston Landmarks Commission.

Figure 12: Map of the Lower Mills Historic District (source as noted).

Implementation Strategy

Management Issues

The historical and archeological significance of the Neponset River Estuary is very important and needs to be understood and incorporated into public planning and decision making processes. To achieve this goal efforts should be made to increase public understanding and awareness of these resources through educational and interpretive programs and by providing reasonable access to these resources.

Tasks

1. Complete inventory of available information on historic and archeological resources.

Cooperating parties

Neponset River Coordinator

assemble and organize inventory

Massachusetts Historical Commission

review and technical assistance

MDC

source of information

Historical societies

source of information

Time table for completion

Short-term

Resources to accomplish the task

Staff commitment

Funds to support Neponset River Coordinator

2. Assess appropriate integration of historical and archeological information in land use planning in the Neponset River Estuary.

Cooperating parties

Municipal planning agencies

access information and incorporate in existing municipal planning process

MDC

source of information

Massachusetts Historical Commission

source of information and tech. assistance

Historical societies

source of information

Time table for completion

Short-term

Resources to accomplish the task

Staff commitment

3. Make reference material available to those responsible for planning and decision making in the estuary. Catalog and distribute a Neponset River Estuary bibliography.

Cooperating parties

Neponset River Coordinator
public information and education
Massachusetts Historical Commission
public information and education

Time table for completion

Short-term

Resources to accomplish the task

Staff time and publication costs

4. Prepare designs for the reconstruction of the Adams Street bridge in Milton Lower Mills to reflect and enhance the historic character of the area, accommodate pedestrians, and provide opportunities for viewing the river, and avoid and minimize adverse impacts on water quality, wetland resources, fisheries, and wildlife habitat.

Cooperating parties

Massachusetts Highway Department
planning and design decisions
Massachusetts Historical Commission
project review and evaluation

Time table for completion

Immediate

Resources to accomplish this task

State and federal highways funds

Special Use Areas

Goal: Protect, enhance and increase publicly-owned open space in the estuary for its value as recreational and educational resources.

The ACEC regulations define “special use areas” as “undeveloped natural areas, public recreational areas, or significant scenic site(s).” The Neponset River Estuary ACEC is rich in this category of resources, notably, 1) scenic sites and views of the river and estuary from a number of locations, 2) the undeveloped and scenic nature of the salt marshes, and 3) the large proportion of public lands for recreation (Figure 13). The MDC owns a large amount of the riverfront property in the estuary which imposes on it a major responsibility for stewardship of the resources.

Inventory

According to the Metropolitan District Commission (February 16, 1995 letter to EOECA Secretary), the MDC owns approximately 490 acres in the ACEC, representing 39 percent of the total ACEC acreage. MDC’s Neponset River acquisition program began in response to Charles Eliot’s concept of a metropolitan park system for Boston at the turn of the century. Between 1896 and 1905, the MDC acquired approximately 270 acres of marsh between the Lower Mills dam and the Granite Avenue Bridge, an area now known as the Neponset River Reservation. In the one hundred years since, the MDC has acquired additional large parcels in the estuary: Squantum Point Park in North Quincy, the former Hallet Street landfill and Neponset Drive-In sites (Pope John Paul II Park), the former Conrail right-of-way, and the site of the former Shaffer Paper Company site on the shoreline of Port Norfolk. The MDC also owns other properties within the ACEC developed as parkland: Victory Road Park, Tenean Beach, and Ventura Street playground. These properties total another 220 acres. The most recent MDC purchase was wetlands acreage adjacent to the Jordan Marsh warehouse on Squantum Point.

MDC divides these properties into three categories: natural areas like the Neponset Marshes and portions of Squantum Point Park; developed sites such as Ventura Park Playground, Tenean Beach, and Victory Road Park; and undeveloped sites such as Pope John Paul II Park, portions of Squantum Point Park, the Shaffer site, and the former Conrail line, which need recreational access and enhancement and environmental reclamation and restoration (Table 5). Several of the MDC properties, i.e., the former sites of the Hallet Street landfill and Shaffer Paper, will require environmental remediation before they can be developed as recreational facilities (see discussion below and in the Economic Development section).

In addition to MDC lands, other publicly-owned recreation and open space areas highly important to local residents and the region include: The Trustees of Reservations’ Governor Hutchinson’s Field in Milton (9.6 acres), the Milton Town Landing, the President’s Golf Course (35 acres) in Milton and Quincy, and expanse of salt marsh (25 acres) owned by the Town of Milton (Figure 13).

Table 5: MDC ownership in the Neponset River Estuary ACEC.

Site	Present Use
Neponset Marshes, Milton and Quincy	natural area
Squantum Point Park, North Quincy	natural area
Ventura Park Playground, Boston	developed
Tenean Beach, Boston	developed: sandy beach, play lot, basketball
Victory Road Park, Boston (former Troy landfill)	developed: passive rec., fishing
Pope John Paul II Park (Hallet Street/Neponset Drive-In site), Boston	undeveloped
former Conrail right-of-way, Boston	undeveloped
former Shaffer Paper Company site, Boston	undeveloped

Open Space and Recreation Planning in the Estuary

MDC's Master Plan and Park Design Project for the Lower Neponset River Reservation: The MDC is currently engaged in a master planning effort for the Lower Neponset River which is scheduled for completion in Spring 1996. The planning effort is part of the MDC's long-standing goal to provide continuous public access from Castle Island to the Blue Hills. The geographic scope of the Master Plan area includes both sides of the river from its mouth at Squantum and Commercial Points to Mattapan Square, with a cursory examination of the River up to Paul's Bridge. The area includes the communities of Quincy, Boston, and Milton and both existing and potential MDC public parkland. This planning area encompasses virtually the entire ACEC.

Due to the significance of MDC properties and planning in the ACEC, the completed MDC Master Plan is intended to be incorporated as an addendum to the ACEC Resource Management Plan after the completed MDC plan is reviewed and approved by the Secretary of EOEA. Full public review of MDC's plan should ensure the opportunity for public and agency comment for both recreational and environmental concerns. As the major steward of the ACEC, MDC has the opportunity to model environmentally sustainable design and development, best management practices in remediation, long-term vision for the restoration, preservation, and enhancement of critical resources, and the public benefits of coordinated recreation and environmental education.

The one-year master planning effort will produce construction documents for a multi-use pathway for connecting various public spaces within and adjacent to the Reservation. Based on an ongoing series of public meetings, public input and comment, the Master Plan will also produce schematic-level designs for various areas within the Master Plan area. The MDC is responsible for filing for any appropriate MEPA (Massachusetts Environmental Policy Act) reviews and for securing all necessary permits, e.g., Chapter 91, Orders of Conditions, 401 Water Quality Certification, prior to constructing the park improvements.

The planning process has been guided by a Citizens Advisory Committee (CAC) which has met for over four years. The CAC meets periodically to offer suggestions and comment on alternatives for future use of the properties. A number of public meetings have been held in the neighborhoods surrounding the river to gather input and comments.

Neponset River Estuary ACEC

Protected & Recreational Open Space

For more information, write or call: ACEC Program, Massachusetts
Dept. of Environmental Management, Div. of Resource Conservation,
100 Cambridge St., Room 1404, Boston, MA 02202 617-727-3160

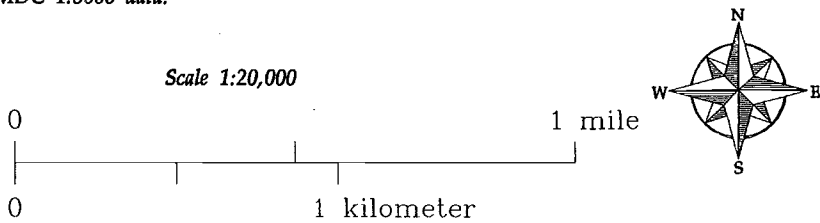
Base Map: USGS 1:25,000 topographic maps; USGS-NMD 1:100,000
hydrography enhanced by MassGIS at 1:25,000.

ACECs: ACEC boundary compiled and automated by Mass. Dept. of
Environmental Management (DEM).

Protected & Recreational Open Space: Data from MassGIS at
1:25,000 in an ongoing update program. MDC and TTOR parcels
from MDC 1:5000 data.



MASSGIS
DEM/MassGIS, March 1996



- Legend**
- Metropolitan District Commission property
 - Other protected & recreational open space
 - Boat ramp
 - Marina
 - Neponset River Estuary ACEC boundary

This map is for planning and illustrative purposes only. It represents the best available digital statewide data for a given theme. It is not to be used by itself for legal boundary definition or regulatory interpretation. See the Neponset River Estuary ACEC designation document, as amended December 1, 1995, for the legal boundary description.

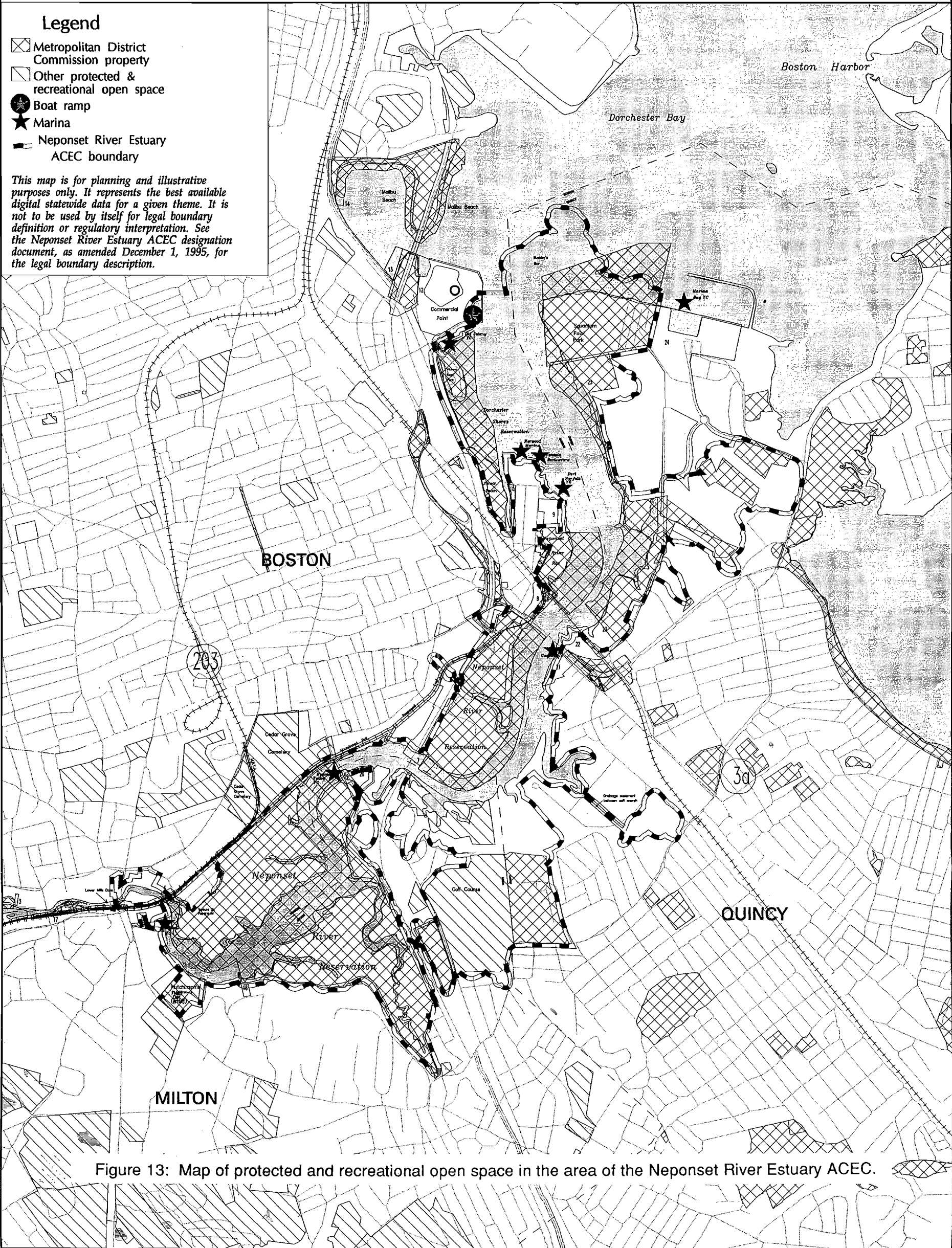


Figure 13: Map of protected and recreational open space in the area of the Neponset River Estuary ACEC.

Proposals presented to the CAC to-date for consideration include, for the area north of the Southeast Expressway:

- overlooks of the river from structures to be built on opposite shores
- boating facilities ranging from launch ramps to a community boating facility renting small boats
- riverfront promenade
- fishing piers
- fields for organized team sports, playgrounds, and passive open space

For the area between Lower Mills and the Southeast Expressway to the north:

- “put-in” areas for canoes and other small craft
- walking paths through the marsh, following previously filled areas
- bird blinds in the marsh for bird and wildlife observation
- fishing spots
- overlooks of the river

Other products of the MDC's master plan process include, but are not limited to:

- Completion and submittal to DEP of a Comprehensive Site Assessment for the former Hallet St./Drive-In sites;
- an inventory and analysis of the entire Master Plan area;
- recommendations for: interpretive programming, pedestrian, bicycle, and other non-motorized accessways to, from, and within the Master Plan area;
- interim and final signage;
- recommendations for a comprehensive safety strategy, including lighting, rangers, police, and foot, bicycle, and/or mounted patrols;
- Recommendations for potential acquisitions of property or easements for access;
- Survey of the route of the multi-use pathway, etc.

As the largest owner of properties within the ACEC, the MDC intends the master plan process to focus upon the means of developing the Neponset River Reservation for the public benefit while maintaining the unique natural qualities of the area. Funding for construction of the improvements in the final MDC master plan is included in the 1996 Open Space Bond Bill.

The estimated schedule for completion of the final master plan is May 1996. Site design drawings for the multi-use path are to be completed a month later. The creation of recreation facilities on the Pope John Paul II Park site follows the remediation and closure of the former landfill which will take several years.

Greenways to Boston Harbor: The Neponset River Greenway: The Boston Natural Areas Fund and the Trust for Public Land (TPL), with funding from the Lila-Wallace Reader's Digest Fund, is conducting a four-year project “Greenways to Boston Harbor: The Neponset River Greenway [and the East Boston Greenway].” This is a community-based project to build constituencies and stewardship for the greenways and to demonstrate their recreational, environmental and educational potential. The Neponset project is planned, implemented, and evaluated by the 40 member Neponset Greenway Coordinating Council

consisting of residents of Hyde Park, Mattapan, and Dorchester. The Neponset Greenway Project also includes support for educational programs for all ages, summer and weekend environmental jobs for youth and special events, and community advocacy.

TPL's role in this initiative is to develop a plan identifying potential acquisitions along the river, from Pauls Bridge to the mouth of the estuary, that would help achieve the objectives of the Neponset River Greenway. Goals and prioritization criteria are being drafted jointly by TPL, BNAF, greenway council members, and MDC. The project aims to create a continuous 50' to 100' wide green corridor along the banks of the Neponset River by acquiring and protecting new land which links and/or widens existing segments of MDC's Neponset River Reservation. This greenway will provide physical and visual access to the river, improve additional opportunities to engage in recreational activities, improve water quality, protect natural and cultural resources and endangered species, and promote community revitalization. TPL's land protection plan will assist public agencies, including the MDC and the City of Boston, with plans to acquire, transfer and develop land for new parks.

Plan for the Future of Boston Harbor Beaches: The Joint Commission on the Future of Boston Harbor Beaches was established in 1991 by executive order of Governor Weld and then Boston Mayor Flynn to "coordinate, develop, and recommend a plan for the restoration of the beaches of Boston Harbor." Considerable public investment in and effort to eliminate sources of pollution to Boston Harbor have resulted in significantly improved water quality and renewed interest in restoring the beaches. In June 1993, following a two-year planning process that involved broad public participation, the Commission issued its plan for improving the physical condition and environmental quality of and accessibility to the Boston Harbor beaches. The Boston Harbor Association has been designated by the Commission to monitor and guide implementation of the plan.

Tenean Beach in Dorchester, the only developed recreational beach in the ACEC, is included in the Commission's plan. The Tenean Beach property features a 150 space parking lot, tot lot, picnic shelter, viewing tower, a sanitary facility, tennis courts, furnishings and lighting. The beach is about 100,00 square feet in size and separated from the water by a relatively steep berm. Salt marsh vegetation is growing at both ends of the beach.

Monitoring of water quality at Tenean Beach is the responsibility of the MDC. MDC's Beach Testing Program takes and tests water samples for both Enterococcus and Fecal Coliform every Wednesday during the summer months for purposes of determining suitability for swimming. The Massachusetts DEP bacteriological standard for swimming beaches in Class SB waters (the classification of this area) is 200 fecal coliform bacteria per 100 milliliters of water. The US Environmental Protection Agency uses a standard for Enterococcus bacteria of 104 bacteria per 100 milliliters of water.

Bacteriological testing by the MDC shows a general improvement in conditions in recent years. Bacteriological conditions at the beach exceeded standards by 47 percent in 1989 and declined to two percent in 1992. This decline is believed to be due to the operation of the Fox Point and Commercial Point CSO treatment facilities which began operations in 1990 and 1991, respectively.

Chemical analyses of sediment samples taken near Tenean have found metal concentrations to be low, and concentration of organics low or below the detection limit. Sampling and analyses of sediments for PAH compounds, commissioned by the Joint Beaches Commission, indicated none detected (laboratory results appear in Appendix B of the Joint Beaches Commission report).

Thirty million dollars for implementation of the Joint Commission's plan was approved in 1994. This money is currently funding a long-term site design for Tenean Beach improvements as recommended by the Beaches Plan. Among the plan's recommendations for Tenean Beach being studied by the consultant are:

- regrading the beach to provide gentler slope and renourishment;
- replacing existing salt marsh vegetation (will require a variance from DEP and replacement of marsh);
- upgrading the recreational facilities and the sanitary facilities and landscaping;
- screen expressway with heavy landscaping;
- design and install an interpretive feature;
- develop the planned shoreline connection to Victory Road Park;
- complete planned pedestrian/bicycle connection to the Neponset River Reservation;
- continue an annual beach cleanup and raking to remove refuse and debris.

Assessment

The long-term commitment of the MDC to purchase open space along the shores of the Neponset River provides, today, an abundance of public property with great potential to provide active and passive recreational opportunities and to preserve and enhance natural habitat.

Several of the most prominent sites require extensive site preparation and/or suffer from environmental problems that will take time and money to remediate. A significant portion of the Pope John Paul II Park property is affected by years of use as a municipal landfill and must be capped and closed consistent with DEP regulations. The next steps are completion of a Comprehensive Site Assessment, a Closure Alternative Analysis, and a Closure Plan. The necessary measures to control leachate and rehabilitate the property are expensive and time consuming, but will greatly improve environmental quality, resource protection, and opportunities for public use. The amendments to the Neponset River Estuary ACEC adopted by the Secretary of EOEPA on December 1, 1995 provide exemptions from the ACEC designation for all activities required to be undertaken as part of the landfill closure (see Appendix B).

The MDC is presently conducting a planning process that includes considerable public participation for determine the most desired and appropriate use of the open space resources in the Lower Neponset River. The process will produce a conceptual master plan for MDC's Neponset River properties and detailed plans for a pedestrian walkway/bikeway along the shore of the Neponset providing improved access to the river. The planning effort includes a complete inventory of open space and recreational sites and an assessment of the open space and recreational management needs of the lower Neponset River.

Preliminary plans of the Beaches Commission and the MDC show a limited number of locations in the ACEC where improvement dredging below the high tide line may be necessary. These include the proposal to improve conditions at Tenean Beach and to access recreational boating facilities such as launch ramps and docks(see Task 8 below for proposed locations). These limited improvement dredging activities also received an exemption from the ACEC designation in the December 1, 1995 amendments. Among the other recommendations of the Beaches Commission plan, the proposal to replace existing salt marsh vegetation at Tenean beach will require a variance from DEP and replication of the marsh.

The Neponset Greenway Project being conducted by BNAF and TPL will contribute to increasing access to the river and restoring some of the natural character of the area. Its efforts

to build a constituency for the Neponset will contribute to long-term stewardship of the resources.

Though MDC testing indicates that water quality at Tenean Beach has improved since the early 1990s, MDC still feels the beach has water quality problems.

Implementation Strategy

Management Issues

A large percentage of publicly-owned open space has not yet been improved or maintained for recreational use. A number of the MDC properties are sites of former industrial or commercial uses that the MDC purchased to redevelop for recreational use. Other properties have been held in their natural state for habitat and open space purposes.

Much of the publicly-owned property along the river is salt marsh or rimmed by fringe marsh or mudflats. These resources should be protected in the overall plans to improve recreational use.

The MDC Master Plan includes proposals for publicly-owned structures for recreational boating, pedestrian access and fishing. In addition to any applicable regulatory guidelines, the MDC should observe the EOE's Small Dock and Pier Guidelines and Policy for the location and design of these structures. The guidelines emphasize avoiding and minimizing impacts on wetlands and shellfish resources. In the middle and upper estuary in particular, dock and launching facilities should be sited in areas that have been used historically to minimize alteration of natural areas.

Existing sites suitable for launching of small boats, canoes and kayaks are limited and not improved.

Tasks

1. Continue to facilitate remediation and closure of the landfill sites at Pope John Paul II Park and appropriate redevelopment for recreation in future review processes. The regulatory provisions under which this project will be conducted, from MEPA to CAAA, to actual permitting, should provide adequate levels of environmental protection.

Cooperating parties

MDC

owner and project proponent

MEPA

review and evaluation and certification of project

DEP

review, evaluation, and permitting

City of Boston and nonprofits

advocacy for park improvements

Key for entries under Tasks

Cooperating parties: lead party in bold typeface, other are cooperators

Time table: based on the plan's five-year implementation schedule.

Immediate = within one year; Short-term, 1 to 3 years; Long-term = 3 to 5 years.

Resources to accomplish the task: identifies type of resources needed and possible sources.

Time table for completion

Long-term

Resources to accomplish the task

Commitment of agency staff resources
Funds from the 1996 Open Space Bond

2. Support timely implementation of the MDC Master Plan for the Lower Neponset River by promoting priority of the project—for its importance to the goals of the Neponset River Estuary ACEC—among the commitments of EOEA in the 1996 Open Space Bond.

Cooperating parties

Neponset River Watershed Community Council/Neponset River Estuary Stewardship Council

incorporate recommendations into watershed management plan
DEM, MDC, MCZM
incorporate in agencies' bond funding priorities

Time table for completion

Immediate

Resources to accomplish the task

Commitment of agency and citizen efforts

3. Coordinate and integrate all governmental and citizen-based open space and recreational planning, including acquisition strategies, for the estuary. This includes the MDC's Master Plan for the Lower Neponset River, Joint Beaches Commission Plan, the Neponset Greenway Project, and municipal open space plans.

Cooperating parties

MDC, BNAF, and the Neponset River Estuary Stewardship Council

continue broad coordination and participation in recreational and land acquisition planning with other cooperating parties

Trust for Public Land

technical assistance

Joint Beaches Commission/TBHA

develop Tenean Beach proposals consistent with goals of ACEC
Boston, Quincy, Milton Parks and Recreation Departments and Conservation Commissions

continue to participate in watershed and estuary projects

DEP/BRP

encourage baseline site assessments for proposals to acquire additional parcels;
review plans

Time table for completion

Short-term

Resources to accomplish the task

Commitment of agency and citizens groups

4. Identify and develop proposals for improving access to the riverfront. Preliminary proposals in the MDC Master Plan for pedestrian viewpoints or for bird watching include:
 - a) Hutchinson Field
 - b) Ventura Park shoreline
 - c) MWRA right-of-way through marsh near Butler Street
 - d) Granite Railroad pier
 - e) at MDC right-of-way just south of the Granite Avenue bridge
 - f) Pope John Paul II Park
 - g) at the embankment through the marsh on the Milton/Quincy line
 - h) at the end of Victory Road
 - i) at Squantum Point

Cooperating parties

MDC and BNAF

Continue to develop proposals for improving public access, and work with other cooperating parties to implement completed MDC Master Plan, as reviewed and approved by the Secretary of EOEA.

Time table for completion

Immediate

Resources to accomplish the task

Neponset River Coordinator

5. The work required to close the landfill(s) at Pope John Paul II Park may provide an excellent opportunity for waterfront improvements to provide the public with direct access to the river. Support concepts in the proposed MDC plan to create riverfront walkways, small boat access, ramps and/or docks, and fishing access that avoid and minimize impacts on wetlands and shellfish resources.

Cooperating parties

MDC and Neponset River Estuary Stewardship Council

develop and/or review proposals to ensure consistency with ACEC plan
DEM, MCZM, DEP-SWM, Wetlands and Waterways
review and evaluate plans; provide technical assistance

Time table for completion

Short-term

Resources to accomplish the task

Funds to complete Comprehensive Site Assessment
Commitment of agency resources
Funds to support Neponset River Coordinator

6. If feasible and compatible with the MDC's plan, improve the waterfront at the Keystone Apartments to provide a public pedestrian connection between the Hallet Street landfill site and the railroad right-of-way. This concept was part of the municipal regulatory review at the time the property was converted to residential use.

Cooperating parties

MDC

incorporate into Master Plan

BNAF

promote through Greenways project
City of Boston Conservation Commission
work with property owner
DEP-Wetlands and Waterways
review proposal

Time table for completion

Long-term

Resources to accomplish the task

Funds (MDC, City, private) for physical improvements

7. Investigate possibilities for constructing a community boat house to shelter canoes at one or more locations on the river.

- Work with the state Public Access Board to identify a site(s)
- Evaluate MDC and municipal properties, particularly south of the Neponset Avenue Bridge.

Cooperating parties

MDC

consider as proposal in Master Plan
State Access Board
assist in identifying sites
Town of Milton, City of Quincy, City of Boston
identify potentially appropriate municipal property
DEP-DWW
technical assistance and permit review

Time table for completion

Short-term

Resources to accomplish the task

Commitment of public agency staff resources
Funds (Open Space Bond, municipal, private) for construction

8. Provide increased opportunities for the public to launch small boats by constructing new public boat launch ramps or put-in areas. These facilities will contribute to improved recreational fishing opportunities. Among areas being evaluated by the MDC are:

- a) Milton Town Landing
- b) Ventura Park
- c) Hutchinson Field
- d) Neponset Valley Yacht Club
- e) MWRA right-of-way through the marsh near Butler Street
- f) Pope John Paul II Park
- g) MDC marsh east of Commander Shea Boulevard
- h) at MDC's Squantum Point property

Cooperating parties

MDC

evaluate and include in Master Plan as appropriate

State Access Board
assist in identifying sites
Town of Milton, City of Quincy, City of Boston
identify potential sites
DEP-Wetlands and Waterways
provide technical assistance and review permits
TTOR
consider such improvement

Time table for completion

Short-term

Resources to accomplish the task

Funding from 1996 Open Space Bond, Coastal Facilities Improvement Fund,
enterprise fund

9. Assess utilizing public street ends for access to the river, primarily by neighborhood residents. One of the nonprofit river advocacy groups could conduct an initial evaluation of suitability and feasibility. Volunteers from the neighborhood could take on the project with technical assistance from state or municipal staff *Cooperating parties*

NepRWA/Friends of the Neponset Estuary

promote idea among neighborhood groups

BNAF

evaluate possibility through Greenways project

Town of Milton, City of Quincy, City of Boston

participate in implementation

Neighborhood groups

participate in planning and implementation

MDC, DEM, MCZM

technical assistance

Time table for completion

Short-term

Resources to accomplish the task

Commitment of citizen groups

Commitment of agency and municipal staff resources

Funds for improvements

10. Investigate improvements to the following areas to increase opportunities for recreational fishing:

a) between the MBTA and Hancock Street Bridge

b) south of Hancock Street Bridge

c) railway ROW to west of Neponset Valley Yacht Clubd) near Lower Mills dam

Cooperating parties

NepRWA/Friends of the Neponset Estuary

evaluate these sites and identify others

MDC

evaluate and incorporate these and other sites into Master Plan as appropriate

DMF

provide technical assistance

DEP-DWW
technical assistance and permitting

Time table for completion

Short-term

Resources to accomplish the task

Commitment of citizen groups
Commitment of agency and municipal staff resources
Funds for improvements (1996 Open Space Bond)

11. Identify and evaluate potential sites for acquisition for conservation and recreation purposes, as part of an overall strategy to implement the purposes of ACEC designation and the goals of the Resource Management Plan. All plans to acquire property should include baseline site assessments. Potential sites include, but are not limited to:
- a) The adjoining sites of T Equipment Corp. and Schlager Auto Body on the Boston side of the river just north of the Granite Avenue bridge.
 - b) All or a portion of No. 2 Granite Avenue in Milton, if an appropriate development option does not materialize.
 - c) An area of freshwater wetlands located on the parcel north of the former Jordan Marsh warehouse.

Cooperating parties

MDC

evaluate these sites and identify others for acquisition

BNAF/TPL

includes "promotes ACEC designation and goals of resource management plan" as criterion for prioritizing potential acquisition sites

DEP

technical assistance with and review of potential site contamination

Time table for completion

Short-term

Resources to accomplish the task

Commitment of agencies and advocacy groups
Acquisition funds

12. Management plans for open space should be developed following the MDC's master planning effort and BNAF's Greenway Project.

Cooperating parties

MDC

develop management plan for MDC Neponset River properties and coordinate with BNAF for overall greenway plan.

BNAF

develop management plan for greenway in cooperation with MDC

Time table for completion

Short-term

Resources to accomplish the task

Commitment of agency and organizations
Funding

13. Remove billboards adjacent to Granite Avenue.

Cooperating parties

MDC

remove billboards

Time table for completion

Short-term

Resources to accomplish the task

Commitment of agency resources, municipal and legislative support

14. Encourage annual cleanups by citizens organizations and river users.

Cooperating parties

Massachusetts Bays Program

coordination

NepRWA and BNAF

sponsor clean-ups and educational programs

Time table for completion

Immediate

Resources to accomplish the task

Commitment of program and advocacy groups

15. Make use of the estuary as a laboratory and classroom for study of estuarine environments, environmental impacts, and cultural resources.

Cooperating parties

NepRWA

clearinghouse of educational programming

MDC, BNAF, STH/STB

educational programming and facilities on environmental and cultural resources

Public School systems

integrate into curriculum

Time table for completion

Ongoing

Resources to accomplish the task

Continued commitment of advocacy groups and agencies
Educational grant funds (MassBays, EPA, foundations)

III. Management Structure and Plan Revision

A. Implementation Strategy

The overall and most effective mechanism for advancing the goals of an ACEC is cooperation and collaboration among public agencies, nonprofits, the private sector, and the public. These cooperative efforts are realized through increased communication and education, joint efforts toward meeting common objectives, and evaluation of the progress gained through those efforts.

1. Plan Implementation

This resource management plan proposes numerous tasks to implement the goals and objectives of the ACEC, all of which depend on a commitment by an collaboration among various government and nongovernmental entities. The implementation of the tasks suggested in this plan will occur over time as the agencies deemed responsible and cooperating parties are able to incorporate the tasks into their yearly workplans.

The basic tools for achieving the purposes of an ACEC involve actions of state environmental agencies, local and regional planning and management, and education and research. The first tool is the requirement in the ACEC regulations that state environmental agencies administer programs, revise regulations, and review projects subject to their jurisdiction so as to preserve, restore, and enhance the resources of the ACEC. The second is local and regional cooperation and the coordination of private organizations, the citizens are encouraged to apply high environmental standards to proposed development and to the management of critical resources. The third tool is education and research which promotes understanding and raises consciousness about the environmental significance of the area.

The implementation of this resource management plan is expected to enhance these stewardship tools with recognized products and public benefits in response to identified needs and solutions to current problems. The plan provides a reference document as well as a working blueprint for improvements to the Estuary.

2. EOEA Implementation Strategies

As a state designation, an ACEC requires agencies of the Executive Office of Environmental Affairs (EOEA) to take actions to preserve, restore, and enhance the resources of the ACEC. This ACEC resource management plan recommends various tasks that state agencies can cooperatively implement. Many state agency representatives would also be involved through participation in the Neponset Estuary ACEC Stewardship Council and resource management plan revisions.

EOEA also has several ongoing statewide strategies that may receive higher priority within an ACEC, including integrated permit review, cumulative impact evaluation, and public participation in project review and planning. These are incorporated in the individual agency permitting and planning processes, and through the MEPA environmental review process.

EOEA has also instituted a watershed approach to environmental assessment, planning, and decision making for the protection and restoration of environmental quality. This regional perspective incorporates involvement and collaboration of municipal governments, businesses, watershed and other environmental organizations, and citizens with the state and federal governments.

Specific objectives of the watershed approach to environmental management include:

- streamlined and coordinated assessment, planning, and implementation;
- a community-based collaborative process of local prioritization of environmental problems and solutions to guide government decision making;
- increased public awareness and understanding of watershed systems; and
- measurable environmental results from public and private funding of these objectives.

One of the key features of the watershed approach is using a subwatershed focus to identify problems and develop an Action Plan to highlight those problems or recommend solutions. The Neponset Estuary is one of those subwatersheds and the Friends of the Estuary is the group that works locally to assess the quality of the river and its shoreline and suggest needed actions. This ACEC resource management plan incorporates many of their suggestions for action.

An overall framework for cooperation throughout the Neponset River basin is being promoted through the Secretary of Environmental Affairs' Neponset Watershed Project, the pilot project for EOEA's Watershed Initiative (see Section I). Conducted in partnership with the Neponset River Watershed Association, this ongoing initiative involves all 14 communities along the river in an effort to forge a new model of environmental management that emphasizes local involvement and cooperative alliances. Representatives of several state agencies and citizen groups have been contributing to the effort which, as of this date, has completed the resource assessment of the watershed and is preparing a Watershed Management Plan, including implementation strategies.

The Neponset River Estuary ACEC exists within this larger framework and alongside the several other ongoing planning efforts in the watershed. It is recommended that management of the ACEC and implementation of the ACEC Resource Management Plan be closely aligned and integrated with the management process being developed for the Neponset Watershed Project. This approach promotes efficiency and coordination and minimizes the potential for duplication and delays.

3. Intergovernmental Coordination

ACEC designation highlights the fact that the estuary is part of a single ecosystem. Management of the estuary is, however, divided among many jurisdictions. Providing suggestions to increase coordinated and consistent decision making at the local and state levels in order to achieve greater resource protection is one of the objectives of this RMP.

Tasks recommended in Section II frequently include intermunicipal collaboration, and it is up to the local boards and commissions to determine how they might implement the recommendations of this plan. The following paragraphs offer some suggestions for increased intermunicipal coordination.

As described in Section I of this plan, the land and water resources within the ACEC are subject to regulation by a number of government agencies at the state and federal levels as well

as by several commissions and departments in three municipalities. Though the objectives, standards, and procedures of each regulatory program are based on specific legal authorities that must be adhered to, there are opportunities to increase coordination in the interest of ensuring consistent decisions and the highest level of protection.

It is recommended that the three municipalities review and institute changes, if necessary, in their notification systems on projects in the estuary. Planning boards, conservation commissions, and departments of public works could send the notices of their public hearings and notices of decisions to the corresponding boards in the other two municipalities. This would be an initial step in coordinating review of pending proposals, decisions, and changes in rules or regulations. Another way to raise the awareness of the Estuary's resources at the local permit level is by a simple checklist. Checklists used by municipal boards (and staff) to guide preparation and review of applications could add a field for "Neponset River Estuary ACEC" so applicants and reviewers are conscious of the designation.

4. Community and Environmental Groups, Businesses, Citizens

A critical component of the ACEC is the role and contributions of the non-governmental groups and citizens. In the Neponset ACEC, these community and environmental groups, businesses, and citizens continue to be active and invaluable contributors of time, energy, information and ideas. Several implementation tasks rely on volunteer groups to continue their water quality monitoring and sampling programs. Businesses are encouraged to adopt best management practices whenever possible and to concentrate physical improvements and expansions in already developed areas rather than impact the remaining undisturbed areas. Citizens are encouraged to actively participate in the educational programs and advisory committees that deal with ACEC related issues. Perhaps, most importantly, these same nongovernmental groups and citizens who helped initiate the ACEC process, need to carefully monitor the progress of the implementation of tasks and responsibilities identified in the RMP and continue to voice support for all efforts to restore and protect this valuable area.

5. Resolution of Conflicting Goals/Strategies

There will be situations in which there are conflicting visions of the future of the Neponset River Estuary, as well as conflicts among users of the estuary. Many opportunities exist for conflict resolution and proactive citizen input to avoid conflicts, within the local and state permitting processes, within public advisory groups, and other public participation models. Conservation Commissions hold public hearings for their review of applications for permits to undertake activities in wetlands and the wetland buffer zone. Should a dispute arise for an Order of Conditions issued by the Conservation Commission, an appeal to the regional office of DEP is provided for in the DEP Wetlands Regulations. Within the Estuary, several public advisory groups already exist for input into the future public use of the area, including the Citizens' Advisory Committee for the MDC Master Plan for the Lower Neponset River, and the BNAF Neponset Greenway Council. Citizens can make their voice heard through voting and attendance at a variety of municipal meetings and hearings. These are all proactive ways for the public to participate in seeking to resolve issues without conflict.

Where new issues arise that are not already addressed in the existing process, one recommendation is to try focus group discussion to resolve potential conflicts among Neponset Estuary stewards and other involved local, regional, or state agency representatives. The process outlined below for a Neponset Estuary ACEC Stewardship Council provides for this mechanism.

For conflicts that may involve several parties, such as municipal, state, or federal agencies, and businesses or private individuals, and especially regarding environmental disputes over land

use of regulated activities, an alternative approach to legal action is offered through mediation by the Massachusetts Office of Dispute Resolution . This state agency has a unique public-private partnership that offers fee-for-service mediation, training, and conflict resolution services. In cooperation with the DEP, their Wetlands Appeals Mediation Program and Hazardous Waste Site Cleanup Mediation Program help to expedite hazardous waste site cleanups, environmentally sensitive areas, and involve people in creating collaborative and efficient solutions to environmental problems. This approach appears so effective that recent amendments to the state superfund law (MGL Ch. 21E, Sec. 4A) requires parties involved in hazardous waste site cleanups to try to resolve their disputes through negotiation.

B. Plan Evaluation and Revisions

The Steering Committee guiding the development and revision of this RMP recommends that a Neponset River Estuary ACEC Stewardship Council become the operating process for evaluating the implementation of this plan. One definition of a council is "an assembly of persons called together for consultation, deliberation, or discussion (American Heritage Dictionary).

1. Neponset River Estuary ACEC Stewardship Council

It is recommended that the ACEC Stewardship Council be organized and function in a manner similar to the Neponset River Watershed Community Council (WCC) established under EOEA's Neponset Watershed Project. The WCC exists not as a structured group, but as a process in which the stakeholders come together periodically at a series of working sessions to contribute to the development of the basin-wide plan, seek consensus, and coordinate actions. Membership of the WCC is open and fluid, which provides for a diversity of participation from stream team, municipal, nonprofit, business, and agency interests.

Participation in the ACEC Stewardship Council will be sought from the nominators of the Neponset River Estuary ACEC, the ACEC Resource Management Plan Steering Committee members, Friends of the Estuary, and representatives of other associated nonprofit, neighborhood, municipal, and state agencies, the business and development community, and other with scientific/technical expertise. However, anyone with an interest in the estuary and/or the ACEC will be eligible and welcome to participate in the Council. Similar to the WCC, the work of the ACEC Stewardship Council would be done through a process of schedules (semiannual) Council meetings to review and advise on implementation of the resource management plan. The Council would also consider general issues of the ACEC, supplemented, as and when necessary, with specialized ad hoc subcommittee meetings to respond to pending issues.

In order to evaluate the implementation of the plan, the Council will review task tables to update the status of tasks due to be implemented each year. The tasks enumerated in the plan (and summarized in the "Action Table") all include a time table for completion. This time table is intended to serve as an evaluation agenda for the Council's meeting. Based on its review, the Council (with support from the Coordinator) will direct appropriate action, e.g., review the completed products, adjust the scopes of tasks suggest alternative approaches, request additional resources, or extend a time table. Brief annual reports would be written based on these status decisions.

2. Neponset River Coordinator

With several significant initiatives ongoing in the watershed—ACEC, Neponset Watershed Project, MDC Master Plan, Neponset Greenway Plan, Joint Beaches Commission—and the active involvement of numerous neighborhood associations and subwatershed groups, there is a real need for a single point of coordination. A Neponset River Coordinator would provide the function of a clearinghouse of information from all projects as well as provide needed support and technical assistance for particular efforts. Since all of these efforts promote river-based planning and decision making and all feature considerable involvement of the citizens in the watershed, it makes the most sense for this function to be situated within the watershed and at an independent organization.

An ideal location for the coordinator is within the watershed, logically at the Neponset River Watershed Association. Since EOEA is sponsoring or involved in some capacity with all of the projects, it would be a prudent and effective investment for EOEA to provide funding to support this full-time position. NepRWA's contribution would be to provide office space and overhead support.

Proposed responsibilities of the Coordinator could include:

Neponset Estuary ACEC RMP revisions

- convene and facilitate meetings twice a year for the Neponset River Estuary ACEC Stewardship Council
- convene issues or focus groups during the year as needed
- call and correspond with cooperating parties identified in the plan for first year tasks
- based on semiannual meetings, update Neponset River Estuary ACEC action tables and mail to distribution list
- produce brief annual report on the plan
- coordinate revision of the plan in 3 to 5 years

Neponset Estuary Public Outreach

- provide a clearinghouse for Neponset Estuary information, coordinating notices of various events, meetings, projects
- create and mail newsletters, meeting announcements, and minutes of meetings
- Neponset Estuary Liaison
- act a coordinating contact person for issues in the Estuary that may need attention from the municipal and state agencies or community and nonprofit groups
- maintain a list of agency and group contacts
-

Potential other duties:

- provide technical assistance to the subwatershed groups
- provide public outreach for the subshed groups
- provide a coordinating role for the Fowl Meadow & Ponkapoag Bog ACEC

3. Plan Revision Schedule

An annual update report will be prepared by the Neponset River Coordinator for review and approval by the Stewardship Council. The report will describe the status and timetable for each implementation task in the RMP and will report on other related activities as well.

It is envisioned that the Stewardship Council will hold semiannual meetings in September and March and other meetings as deemed necessary. Achieving the goals of the ACEC will be an iterative and dynamic process, and the Stewardship meetings and annual report will help focus and evaluate the numerous activities that will be involved.

As tasks are completed, as changes in the natural or built conditions of the estuary occur, or as new information is developed, the Neponset River Estuary ACEC Resource Management Plan should be updated to incorporate or reflect this information. The Certificate of the Secretary of Environmental Affairs on the ENF for the Draft Resource Management Plan (dated 12/1/95) directs that "updates to the plan should be prepared every three to five years in order to address the results of ongoing planning efforts within the ACEC, as well as to incorporate any further amendments or exemptions that may be needed." To accomplish this, the Council, at each of its meetings, should review new information produced or amendments suggested, and determine what additions and revisions to the plan should be proposed. The Coordinator will then consult with DEM-ACEC Program regarding the need for formal review and approval by the Secretary. For example, if the proposal is to revise the plan for Chapter 91 Waterways regulations requirements for private docks and piers, it will need formal review and approval by the Secretary. In instances where Secretarial approval is needed, the process outlined in the "Policy Guidelines for the Review and Approval of ACEC Resource Management Plan" will be followed. Otherwise, the Council should take action to incorporate the changes within an appropriate time frame.

The procedures for amending the ACEC designation itself are contained in the regulations of the Executive Office of Environmental Affairs (301 CMR 12.00). Changes to the boundary, allowance for improvement dredging, or exempting activities from the stricter standard of the ACEC are examples of changes that would require amendment to the designation. Such proposals should first be considered and endorsed by the Stewardship Council before being formally considered by the Secretary.

The rich and varied resources of the Neponset Estuary ACEC have been shaped by the interaction of complex natural processes and intense human activities. Its present highly stressed condition is troublesome. The potential for restoration and enhancement of its environmental quality and economic viability is substantial; but the challenge can be daunting. The first steps have been taken. The citizens have clearly voiced their concern and desire for improvements. The ACEC designation has focused responsible agencies and individuals' attention on the critical issues and goals. Now, the Resource Management Plan provides the first set of strategies and tasks needed to achieve those goals. Every task will require significant coordination and collaboration. The RMP, itself a product of wide collaboration among the interested parties, needs to be viewed as a dynamic mechanism that should be implemented immediately, re-evaluated periodically, and adjusted as new issues arise.

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Appendices

DESIGNATION of the

NEPONSET RIVER ESTUARY

AREA OF CRITICAL ENVIRONMENTAL CONCERN

located in portions of the municipalities of

Boston, Milton, and Quincy

WITH SUPPORTING FINDINGS

Following an extensive formal review required by the regulations of the Executive Office of Environmental Affairs (301 CMR 12.00) including nomination, review, on-site visits, research, public information meetings, a public hearing and written comment period, and evaluation of all public comment and assembled data, I, the Secretary of Environmental Affairs, hereby designate the Neponset River Estuary, located in portions of the municipalities of Boston, Milton, and Quincy, as an Area of Critical Environmental Concern (ACEC). I take this action pursuant to the authority granted me under Massachusetts General Law Chapter 21A, Section 2(7).

I also hereby find that the wetland resource areas included in the Neponset River Estuary are significant to the prevention of pollution, flood control, the prevention of storm damage, the protection of fisheries, the protection of land containing shellfish, and the protection of wildlife habitat - all of which are public interests defined in the Wetlands Protection Act and regulations promulgated thereunder.

In addition, with regard to the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, I recommend that the current Class SB water quality standards and antidegradation provisions continue to be applied to the waters of the Neponset River Estuary ACEC.

Introduction: Effective Date of Designation and Development of Neponset River Estuary ACEC Resource Management Plan

Pursuant to the ACEC Regulations at 301 CMR 12.11(1), which authorize the Secretary to provide the effective date of designation, the effective date of this designation shall be December 1, 1995.

I am directing the agencies of the Executive Office of Environmental Affairs (EOEA) to collaborate with municipalities, environmental and community groups and organizations, local businesses and residents, and other interested parties to prepare a Resource Management Plan for the Neponset River Estuary ACEC. The resource management plan will address the preservation, restoration, enhancement, use and management of the resources of the Neponset River Estuary ACEC, and address the regulatory and

boundary questions raised in the course of the public review of the nomination (see sections III. Boundary of the Neponset River Estuary ACEC and IV. Discussion of the Criteria for Designation below for additional description of these issues). The resource management plan, to the greatest extent possible, will guide the implementation of the Neponset River Estuary ACEC designation and coordinate the activities and interests of federal, state and local agencies and the public and private sectors.

The resource management plan should be completed by November 1, 1995. The plan should include recommendations for any proposed changes or modifications to this designation that may be needed. Because the ACEC Regulations at 301 CMR 12.13(2) state that an ACEC designation may be amended after one year, if there is a need to amend the designation before this one year period, I will entertain a waiver to the ACEC Regulations as provided for at 301 CMR 12.15.

In addition to directing EOEa agencies to participate in the development of a resource management plan, I hereby direct all EOEa agencies as of the date of this decision to take actions to preserve, restore and enhance the resources of this area, and to subject projects and activities in or impacting the area to the closest scrutiny to assure that they are carried out so as to minimize adverse effects on the resources and values of the ACEC. Furthermore, all EOEa agencies shall work to expedite all environmental restoration projects and other projects beneficial to public health, welfare and safety, such as landfill closures, hazardous waste site clean-ups, wetlands and fisheries habitat restoration, and public park and recreation planning and development.

As EOEa agencies are currently focusing and coordinating many actions and programs in the context of the Governor's Neponset River Watershed Initiative, those activities will further guide and support the directives described above and the purpose of this ACEC designation.

I. Procedures Leading to ACEC Designation

Background, Previous Neponset River ACEC Nominations

In May, 1991 a letter of nomination for a Neponset River Basin-wide ACEC signed by the Neponset River Watershed Association (NepRWA) and twelve Conservation Commissions was submitted to the Secretary. This nomination was a revised and updated version of an original nomination for the Neponset River Basin prepared in February, 1981. Following an initial review, the Neponset River Basin nomination was rejected for full review in July, 1991. This letter recommended that NepRWA and the Conservation Commissions consider potential separate nominations for the Fowl Meadow and the Neponset River Estuary.

A nomination for the Fowl Meadow and Ponkapoag Bog ACEC then was submitted in January, 1992 by NepRWA and the eight Conservation Commissions of cities and towns affected by the potential designation. Following a full review of this nomination pursuant to the ACEC Regulations, the Fowl Meadow and Ponkapoag Bog ACEC was designated in August, 1992.

Neponset River Estuary ACEC Nomination

A nomination for the Neponset River Estuary was submitted to me on September 30, 1994. I acknowledged receipt of the nomination in correspondence dated October 3, 1994, and accepted the nomination for full review in correspondence dated November 8, 1994. Copies of the acceptance letter and a summary of the nomination were sent to the Neponset River Watershed Association and the boards of selectmen, mayors and city councils, conservation commissions, and planning boards in Boston, Milton, and Quincy; state legislators representing the area; regional and state agencies; environmental organizations; and other interested parties. The November 8 correspondence included information regarding the scheduling of four public information meetings to be held in November and December. In addition, this correspondence distributed Draft Resource Management Goals and Objectives for public review and comments. These draft goals and objectives were based upon EOE's initial review of the nomination and Draft Resource Management Goals prepared by the Neponset River Watershed Association (NepRWA). A copy of the NepRWA draft goals was also included with the November 8 mailing.

An initial series of public information meetings was held on November 29, 1994 at the Dorchester VFW Post in Dorchester; November 30, 1994 at the McKeon VFW Post in Dorchester; December 5, 1994 at the Milton High School in Milton; and December 8, 1994 in the City Council Chambers in Quincy. In EOE's correspondence dated December 22, 1994 public notice was sent to the above-mentioned parties describing two additional public information meetings for January 11 and January 19, 1995; a public hearing for January 25, 1995; and a ten-day written comment period following the hearing. Public notice of the meetings, hearing and comment period was also published in The Patriot Ledger on December 22, 1994, and in the December 23, 1994 issue of the Environmental Monitor. The December 22, 1994 correspondence also included an alternative method of describing the boundary of the nominated area, in response to questions raised in the review process and following discussions with NepRWA. In this correspondence I asked for comments from the nominators, state and municipal agencies, interested parties and the general public regarding this method of delineating a potential ACEC boundary, based more directly upon the resources of the nominated area. I also requested comments regarding draft resource management goals and objectives and commitments for participation in the development of a resource management plan if the area was designated an ACEC.

The last two public information meetings were held on January 11, 1995 at Cunningham Hall in Milton and January 19, 1995 at the Beachwood Community Life Center in North Quincy. A public hearing regarding the nomination was conducted on my behalf by Peter Webber, Commissioner of the Department of Environmental Management (DEM), on January 25, 1995 at the McKeon VFW Post in Dorchester. Twenty-four persons representing individual residents and a variety of groups and organizations presented oral testimony. A ten-day period for the submission of additional written comment followed the public hearing. In response to requests, the comment period was extended from February 6 to February 16, 1995. Notice of the extended comment period was published in The Patriot Ledger, The Dorchester Reporter, and the Milton Record Transcript and in numerous press articles. Throughout the public review process numerous newspaper articles and mailings from NeprWA provided additional information regarding the nomination and the review.

Written testimony was received from numerous individuals, state legislators, private organizations, and public agencies. Copies are on file at the offices of the DEM Division of Resource Conservation in Boston. Over seventy comments were received in the course of the public participation and review process. Additional information regarding these comments is described below in section IV. Discussion of the Criteria for Designation.

II. Description of the Resources of the Neponset River Estuary ACEC

A summary and overview of the resources and their critical interrelationships are provided here. Information, testimony, comments and materials submitted for the review of the nomination, some of which are specifically referenced in this document, are on file with the Department of Environmental Management.

Resource Overview

The central resource features of the Neponset River Estuary ACEC are the Neponset River and portions of its tributaries, the estuary, salt marshes, floodplains, fishery habitat, and diverse wildlife habitat. The ACEC begins at the Lower Mills Dam in Milton and Dorchester, which separates the coastal estuary from the inland fresh water portion of the Neponset, and extends to the mouth of the river at Commercial Point in Boston and Squantum Point in Quincy. Highly significant historical and archaeological resources, recreational areas, and scenic and educational values within this area contribute to the overall significance of the ACEC to the people and communities of the region. Thus the area reflects eight out of eleven of the resource features listed at 301 CMR 12.06.

Surface Waters

As mentioned above, within the ACEC the Neponset River flows from the Lower Mills Dam to its mouth at Commercial Point and Squantum Point. This section of the Neponset River is approximately 4.2 miles in length. The overall length of the Neponset River is approximately 28 miles from its source in Foxborough to its mouth in Dorchester Bay. Portions of Gulliver Creek in Milton and Sagamore Creek in Quincy flow into the Neponset River within the ACEC.

Estuarine Wetlands, Inland Wetlands and Floodplains

The predominant ecological and visual features of the Neponset River Estuary ACEC are the extensive salt marshes that are located along the Neponset River as it winds its way from the Lower Mill dam to Dorchester Bay. According to GIS data, salt marsh comprises approximately 320 acres within the ACEC, or 26 per cent of the total area of the ACEC. Large expanses of salt marsh are located below the Lower Mills Dam in Boston and Milton, along the south shore of the Neponset at the Milton and Quincy municipal boundary, and in Quincy north of the Conrail bridge to Squantum Point. Other smaller areas of salt marsh are found within the ACEC. Important inland wetlands are located at Squantum Point.

Overall, the combined acreage of open water at high tide, estuarine wetlands, and other wetland resource areas totals approximately 830 acres, or 66 per cent of the total area of the ACEC. In addition, floodplains overlay most of the ACEC, especially the wetlands. Floodplains cover approximately 1,005 acres or 80 per cent of the ACEC. This estuarine wetland system is a highly productive ecosystem, supporting important marine fisheries and diverse wildlife habitat. It is unique in its size and proximity to a highly urbanized area.

Fishery Habitat

According to comments regarding the nomination provided by the Massachusetts Division of Marine Fisheries (DMF), dated January 23, 1995, the Neponset River supports valuable anadromous fish populations, including one of the largest smelt runs in Massachusetts Bay. This run supports a hook and line, recreational fishery in the fall and winter. In addition, blueback herring spawn in the Neponset River, and are valued for roe harvest and are an important forage species in the Bay. American shad have been observed by biologists below the Lower Mills Dam. DMF supports ACEC designation in the interest of conserving anadromous fish populations and the potential benefits of future restoration projects.

In regard to shellfish resources, DMF states that there are substantial soft-shell clam beds at the mouth of the Neponset

River. A limited survey of Buckley's Bar was conducted in 1989 and found very high densities of soft-shell clams, with a potential yield of 68 clams per square foot. DMF estimates that the 50 acres of Buckley's Bar could produce approximately 12,500 bushels per year, with a current market value of \$1 million per year to local harvesters. However, recent water samples from this area found continued high levels of contamination, with DMF concluding that "open shellfish harvest is not likely in the near future for this area, although restricted classification (harvest by permitted master diggers with depuration) is a feasible goal, especially with plans underway to improve water quality in Boston Harbor and the Neponset River."

DMF comments regarding the ACEC nomination concentrated on anadromous fish and shellfish resources "because there are important habitat areas within the proposed ACEC and because of the magnitude of these resources relative to other locations in Massachusetts Bay." DMF adds that there are numerous fish species that enter the Neponset River estuary as seasonal migrants for feeding purposes, with striped bass, bluefish and winter flounder considered significant for commercial and recreational importance. It is important that water and forage quality be improved for these species, as well as sportfishing access.

Habitat Resources

Comments regarding the nomination provided by the Massachusetts Natural Heritage & Endangered Species Program (NHP), Division of Fisheries and Wildlife, dated February 1, 1995 focus on state-listed rare species and non-game wildlife in the Squantum Point area, in Quincy. According to NHP, this area "provides habitat for a tremendous diversity of bird species and is one of the most important wildlife habitats in the urbanized Boston area."

NHP goes on to state that, "For over 30 years, Squantum Point has been known as a feeding area, roosting area, and migratory stopover for over 200 species of birds. State-listed rare species known to utilize this area are the Short-eared Owl (Asio flammeus), Northern Harrier (Circus cyaneus), and Least Tern (Sterna antillarum).... other bird species that use this area, and are uncommon but not state-listed, include the Snowy Owl, Great Blue Heron and Osprey among many others."

In regard to the wildlife habitat of this area, NHP explains that, "One of the primary reasons that Squantum Point supports both an unusual abundance of birds and a high diversity of species is the variety of habitat types occurring within a relatively small area. This area includes mudflats, sandy beaches, saltmarshes, freshwater wetlands and shrubby upland." Another reason for the heavy use by birds is because so few suitable areas exist in the greater Boston area. NHP recommends including all of these habitats within the boundary of the ACEC, and to designate the area as an ACEC to help

"protect an area that is unique because it is one of the few remaining natural ecosystems in our urban environment."

Historical/Archaeological Resources

Layers of archaeological and historical resources are concentrated in the area of the Neponset River estuary. These resources are described and documented in the 1989 publication of the Metropolitan District Commission, A History and Guide to the Restoration of Dorchester Shores. The geographical location and ecological richness of the area has attracted human use and settlement for 10,000 years. As summarized in the MDC publication, "the area is well endowed with abundant natural resources, and during the 10,000 years that humans have occupied the Boston Basin, the Neponset River would have been utilized during different seasons, and at different levels of intensity throughout prehistory." At the time of the first European contact with the region, Lower Falls was the seat of the Neponset tribe of the Massachusetts Indians. At least nine archaeological sites have been recorded along the lower Neponset River.

The MDC publication further describes colonial settlement and evolving historical development and industrial use of the area. The Lower Mills and Neponset marshes area, Port Norfolk and Commercial Point are highlighted in the narrative. Visible reminders of the colonial and industrial periods remain, but much of this history, like the archaeological resources from native settlement patterns and uses, are not readily apparent without guides such as the MDC publication or longtime residents of the area. High formal recognition has been awarded to the Dorchester and Milton Lower Mills Industrial District, which has been on the State and National Registers of Historic Places. Continued education and interpretation of human history and its interaction with the natural resources of the area are an essential element of preserving and restoring the ecological integrity of this area.

Special Use Areas

According to the ACEC regulations, "special use areas" are defined as "undeveloped natural areas, public recreational area, or significant scenic site(s)." The importance of this category of features to the nominated area is demonstrated by the number of scenic sites and views of the river and estuary available from a number of locations, the currently undeveloped and scenic nature of the salt marshes, and the large proportion of public lands for recreation that are located within the ACEC. Many of these features are linked to the Metropolitan District Commission's ownership of approximately 490 acres within the ACEC (39 per cent of the total acreage).

According to MDC comments regarding the nomination dated February 16, 1995, MDC owns approximately 270 acres known as the Neponset

River. A limited survey of Buckley's Bar was conducted in 1989 and found very high densities of soft-shell clams, with a potential yield of 68 clams per square foot. DMF estimates that the 50 acres of Buckley's Bar could produce approximately 12,500 bushels per year, with a current market value of \$1 million per year to local harvesters. However, recent water samples from this area found continued high levels of contamination, with DMF concluding that "open shellfish harvest is not likely in the near future for this area, although restricted classification (harvest by permitted master diggers with depuration) is a feasible goal, especially with plans underway to improve water quality in Boston Harbor and the Neponset River."

DMF comments regarding the ACEC nomination concentrated on anadromous fish and shellfish resources "because there are important habitat areas within the proposed ACEC and because of the magnitude of these resources relative to other locations in Massachusetts Bay." DMF adds that there are numerous fish species that enter the Neponset River estuary as seasonal migrants for feeding purposes, with striped bass, bluefish and winter flounder considered significant for commercial and recreational importance. It is important that water and forage quality be improved for these species, as well as sportfishing access.

Habitat Resources

Comments regarding the nomination provided by the Massachusetts Natural Heritage & Endangered Species Program (NHP), Division of Fisheries and Wildlife, dated February 1, 1995 focus on state-listed rare species and non-game wildlife in the Squantum Point area, in Quincy. According to NHP, this area "provides habitat for a tremendous diversity of bird species and is one of the most important wildlife habitats in the urbanized Boston area."

NHP goes on to state that, "For over 30 years, Squantum Point has been known as a feeding area, roosting area, and migratory stopover for over 200 species of birds. State-listed rare species known to utilize this area are the Short-eared Owl (Asio flammeus), Northern Harrier (Circus cyaneus), and Least Tern (Sterna antillarum).... other bird species that use this area, and are uncommon but not state-listed, include the Snowy Owl, Great Blue Heron and Osprey among many others."

In regard to the wildlife habitat of this area, NHP explains that, "One of the primary reasons that Squantum Point supports both an unusual abundance of birds and a high diversity of species is the variety of habitat types occurring within a relatively small area. This area includes mudflats, sandy beaches, saltmarshes, freshwater wetlands and shrubby upland." Another reason for the heavy use by birds is because so few suitable areas exist in the greater Boston area. NHP recommends including all of these habitats within the boundary of the ACEC, and to designate the area as an ACEC to help

"protect an area that is unique because it is one of the few remaining natural ecosystems in our urban environment."

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According to the ACEC regulations, "special use areas" are defined as "undeveloped natural areas, public recreational area, or significant scenic site(s)." The importance of this category of features to the nominated area is demonstrated by the number of scenic sites and views of the river and estuary available from a number of locations, the currently undeveloped and scenic nature of the salt marshes, and the large proportion of public lands for recreation that are located with the ACEC. Many of these features are linked to the Metropolitan District Commission's ownership of approximately 490 acres within the ACEC (39 per cent of the total acreage).

According to MDC comments regarding the nomination dated February 16, 1995, MDC owns approximately 270 acres known as the Neponset

Marshes, and approximately 220 acres that include several other properties - Squantum Point Park in North Quincy, and Ventura Park Playground, Tenean Beach, Victory Road Park, Pope John Paul II Park (the Hallet Street/Neponset Drive-In Site), and the former Conrail right-of-way and Shaffer Paper Company site in Boston. MDC divides these properties into three categories: natural areas like the Neponset Marshes and portions of Squantum Point Park; developed sites such as Ventura Park Playground, Tenean Beach, and Victory Road Park; and undeveloped sites such as Pope John Paul II Park, portions of Squantum Point Park, the Shaffer site, and the former Conrail line, which need recreational access, development and enhancement and environmental reclamation and restoration.

MDC is committed to providing a "green connection" from Mattapan to Castle Island, which traverses the ACEC along the Boston side of the river and includes a bicycle and park corridor connection. To this end MDC has initiated a major master planning program for the Neponset estuary which includes all of the properties described above, located in Boston, Milton and Quincy. According to MDC most of these sites have complicated development and management issues associated with them. MDC stewardship of these areas is an essential element of achieving the goals of ACEC designation, and the MDC master plan is a key element of the larger Neponset River Estuary ACEC resource management plan to be prepared.

In addition to MDC lands, other public recreation and open space areas highly important to local residents and the region include The Trustees of Reservations' Governor Hutchinson's Field in Milton, the Milton Town Landing, and the President's Golf Course in Milton and Quincy.

III. Boundary of the Neponset River Estuary ACEC

Description of Boundary Review Process

The boundary as recommended in the nomination employed several different types of boundary delineation, such as roads, county lines, zoning district lines, property lines, natural resources, setback distances from natural resources, and straight line distances between two points. About ten different types of delineation were used, and the overall sequence of describing the proposed boundary used over thirty changes from one type of description to another.

Several questions were raised in the course of the initial review and the first round of public meetings regarding the proposed method of describing the boundary of the nominated area. In discussions between NepRWA and EOEA staff, it was agreed that alternative methods of delineating a boundary for the proposed ACEC were appropriate for public review. Both the nominators and EOEA staff recognized that by so doing, they were continuing to describe

the same set of resources and the same ecosystem as had been proposed for protection in the nomination.

A method of delineating the boundary, based upon the Wetlands Protection Act Regulations (wetlands resource areas and a 100-foot buffer) plus adjacent public open space and historic districts, was distributed in EOEa correspondence dated December 22, 1994, and at the public information meetings and public hearing in January, 1995, on a geographic information systems (GIS) map. Differences between the nominated boundary and the alternate method of resource-based delineation are relatively few, reducing the total of 1540 acres nominated by fewer than 300 acres, according to GIS calculations. Commercial Point, primarily a gas tank facility, was originally included in its entirety, and is now only affected as to the 100-foot wetlands buffer. Open water between Commercial Point and the tidal flats at Buckley's Bar and the county line which extends northeasterly from Dorchester Bridge is not included in the current boundary. Extensive freshwater wetlands and a smaller saltwater wetland on Squantum Point are included in the resource-based boundary. A tract of commercial, residential, and industrial land in North Quincy outside of the 100-foot wetlands buffer zone is not included within the resource-based boundary. Two other residential areas, and an industrial area between the Southeast Expressway and MDC's proposed rail trail in Boston that were included based on roadway delineation are not included now other than within the 100-foot wetlands buffer. In other words, some properties and portions of properties included in the original proposed boundary due to using roads, property lines and other means are eliminated in the final boundary, and additional resource areas are added.

The consistency and rationale of the resource-based boundary regarding the protection of resources themselves, and the lack of clear consensus concerning boundaries among the nominating parties, municipal boards, and other public comment leads me to choose the resource-based boundary described in detail below. The overriding rationale for this boundary delineation is that it is directly based on and includes the wetland resource areas of the Neponset Estuary, from the mouth of the estuary up to the Lower Mills Dam in Milton and Boston, which divides the coastal estuary from the inland fresh water portion of the Neponset River.

Several comments regarding the proposed boundary, and concerns and suggestions regarding the regulatory effect of ACEC designation on important public environmental restoration and improvement projects were submitted in the course of the public review. These comments ranged from suggestions to exclude certain commercial and residential properties to proposals for language that would expedite landfill closures, hazardous waste site cleanups, and other beneficial environmental restoration and public recreation projects. Many concerns regarding the clean-up, restoration and

recreational development of MDC lands, which comprise approximately 500 acres of the ACEC, were expressed to me.

However, I have not included language in this designation document to exclude or exempt specific properties, activities or projects from the regulatory effects of ACEC designation. The intent of this designation - to preserve, restore and enhance the resources of the ACEC, including the provision of safe public access and recreation on public lands - should guide the actions and regulatory decisions of EOEA agencies. I expect that EOEA agencies, municipalities, community and environmental groups, and local businesses and residents will participate in the development of the Neponset River Estuary ACEC resource management plan over the next several months to address any unresolved issues regarding final boundary delineation and regulatory effects of ACEC designation prior to the effective date of this designation.

The final boundary is based on the wetland resource areas of the Neponset River marshes and estuary, as defined by the Wetlands Protection Act Regulations (Wetlands Regulations). The boundary generally follows the jurisdiction of the Wetlands Regulations, including the edge of the resource area and a 100-foot buffer. However, it does not include the floodplain of this area where the floodplain, in several locations, extends beyond the 100-foot buffer of these resource areas.

The boundary is approximated by that boundary shown on the GIS map produced by the Department of Environmental Management for the review of the Neponset River Estuary ACEC nomination. Actual delineation of the 100-foot buffer of the wetlands resource areas would be made during the course of a request for determination of applicability or notice of intent submitted by a project proponent to the Conservation Commissions of Boston, Milton, and Quincy, following the procedures specified by each Conservation Commission as provided in the Wetlands Protection Act, M.G.L. Ch.131, sec. 40, the Wetlands Protection Regulations, 310 CMR 10.00, and subject to their agreement. It is my intention that the Resource Management Planning process will also serve to identify a better approximation of the boundary on town assessor maps.

The official GIS map at 1:7500 scale and the supplemental maps listed below are on file at the offices of the DEM, Division of Resource Conservation. Reduced versions of the GIS map at a scale of 1:20,000 and copies of the supplemental maps are available upon request.

The GIS map is supplemented by the following maps:

- 1) City of Boston Planimetric Survey 14N-14E
- 2) City of Quincy Assessors Map 6143
- 3) Town of Milton map Roll 10A, Sheet 1
- 4) Town of Milton map Roll 7, Sheet 1
- 5) Dorchester/Milton Lower Mills National Register District map

The size of the Neponset River Estuary ACEC, according to GIS data, is approximately 1,260 acres. The respective acreage located in each municipality is as follows:

Boston - 435 acres
Milton - 355 acres
Quincy - 470 acres

Final Boundary Description of the Neponset River Estuary ACEC

Beginning at the bulkhead terminus of the walkway at the end of Victory Road overlooking the estuary at Commercial Point in Dorchester (Boston), as shown on the City of Boston Planimetric Survey 14N-14E, the boundary follows a straight line due east to 100 feet below Mean Low Water (MLW, or the edge of the tidal flats) of the Neponset River Estuary (near the Boston-Quincy municipal boundary) as shown on the DEM GIS map of the Neponset River Estuary ACEC.

It then follows the 100-foot line below MLW in a northerly, northeasterly, southerly, and southeasterly direction to the intersection of the Metropolitan District Commission (MDC) property line on land just west of the Marina Bay complex in Quincy, also shown on the DEM GIS map of the Neponset River Estuary ACEC.

Then southerly and westerly along the MDC property line to the edge of the 100-foot wetlands buffer.

It then follows along the 100-foot wetlands buffer line southeasterly and westerly, and includes the freshwater wetland areas located within and south of MDC's Squantum Point Reservation.

Then along the 100-foot wetlands buffer southerly and easterly towards East Squantum Street, then southerly, westerly, southerly, and westerly, thus including the extensive coastal marsh at the beginning of Squantum Point.

Then along the 100-foot wetlands buffer southerly, easterly, westerly, and southerly, thus including the next coastal marsh area to the south along the Neponset River.

Then along the 100-foot wetlands buffer along the Neponset River southerly, and then along the 100-foot wetlands buffer easterly around Sagamore Creek to the intersection of the drainage right-of-way that joins Sagamore Creek to the salt marsh wetlands to the southeast.

Then along and including the drainage right-of-way to the salt marsh wetlands to the southeast, along the 100-foot wetlands buffer around the wetland, and then back northwesterly along the drainage easement to the 100-foot wetlands buffer of Sagamore Creek.

Then along the 100-foot wetlands buffer northwesterly, southwestly and southeasterly to the intersection with the President's Golf Course property line in Quincy.

Then southerly and westerly along the President's Golf Course property line (as shown on City of Quincy Assessors Map 6143) across the Quincy-Milton municipal boundary, and southerly along the property line in Milton (as shown on Town of Milton map Roll 10A, Sheet 1) until the intersection with the 100-foot wetlands buffer, thus including the public open space of the golf course.

Then along the 100-foot wetlands buffer in Milton westerly, to include the freshwater wetlands of the golf course, across Granite Ave., and southwesterly and northerly along the 100-foot wetlands buffer, across the Southeast Expressway, and southerly along the 100-foot wetlands buffer to the intersection with the MDC Neponset River Reservation property line, enclosing the saltwater wetlands that drain into Gulliver's Creek.

[Explanatory note: By following the 100-foot wetlands buffer a "pocket" of upland is not included within the ACEC boundary in the approximate area of the intersection of Granite Avenue and the Southeast Expressway.]

Then southerly along either the MDC property line or the 100-foot wetlands buffer, whichever is further from the saltmarsh, then northwesterly and westerly along the 100-foot wetlands buffer until the intersection with the Trustees of Reservations (TTOR) Governor Hutchinson's Field property line, thus enclosing the saltwater wetlands as well as the MDC public open space property.

Then southerly, westerly, southwesterly, northwesterly, and northeasterly around the TTOR property line back to the 100-foot wetlands buffer, thus enclosing the TTOR public access open space parcel.

Then northwesterly along the 100-foot wetlands buffer to the intersection with the Town of Milton's Captain's Landing property, as shown on Town of Milton map Roll 7 Sheet 1.

Then around the Town of Milton's Captain's Landing property line back to the 100-foot wetlands buffer.

Then northwesterly along the 100-foot wetlands buffer to the intersection with the Town of Milton's Town Landing and Town open space parcels, as shown on Town of Milton map Roll 7 Sheet 1.

Then around the Town of Milton's Town Landing and Town open space parcels back to the 100-foot wetlands buffer.

Then along the 100-foot wetlands buffer northwesterly to the Lower Mills Dam across the Neponset River in Milton and Dorchester (Boston), and including any adjacent parcels of the Dorchester/Milton Lower Mills National Register District, as shown on the Dorchester/Milton Lower Mills National Register District map.

Then along and including the Lower Mills Dam structure across the Milton-Boston municipal boundary to the 100-foot wetlands buffer in Boston; along the 100-foot wetlands buffer easterly to the MDC property line along Ventura Street in Boston, and including any adjacent parcels of the Dorchester/Milton Lower Mills National Register District, as shown on the Dorchester/Milton Lower Mills National Register District map.

Then northeasterly along the MDC property line and the 100-foot wetlands buffer to the MDC property line east of the Southeast Expressway.

Then northeasterly, northerly, westerly, southerly, northwesterly, and northeasterly along the MDC property line and the 100-foot wetlands buffer, whichever is further from the Neponset River, back to the intersection of the 100-foot wetlands buffer with the walkway at Commercial Point, as shown on the City

of Boston Planimetric Survey 14N-14E and back to the beginning point of the boundary description, thus including the MDC open space properties, and the wetlands resources, including the tidal inlet west of the Port Norfolk neighborhood.

IV. Discussion of the Criteria for Designation

In the review process leading to the designation of a nominated area, the Secretary must consider the factors specified in section 12.09 of the ACEC Regulations. As stated in the regulations, the factors need not be weighed equally, nor must all of these factors be present for an area to be designated. The strong presence of a single factor may be sufficient for designation.

Based on the information presented in the letter of nomination, at the public hearing, in written comments received throughout the public review process, and in agency research and review, I make the following findings in support of the designation of the Neponset River Estuary ACEC.

(1) Threat to the Public Health Through Inappropriate Use

As mentioned in the above Description of the Resources of the Neponset River Estuary ACEC, much of the ACEC is floodplain, a natural hazard area. Although much of the upland portions of the ACEC are already developed, I find that potential future inappropriate development in sensitive areas, increased impervious surfaces, and inadequately designed and constructed storm water measures constitute a threat to the resources of the ACEC and to public health and safety.

Contaminated shellfish beds due to poor water quality resulting from inappropriate development also constitute a potential threat to public health and safety. Although shellfish harvesting is restricted, attempts to harvest shellfish threaten public health. In addition, poor water quality threatens public health through the public use of beaches and swimming areas.

Finally, there is a threat to public health resulting from the location of at least 13 potential hazardous waste sites (also known as 21E sites) listed by the Department of Environmental Protection (DEP) as located within the nominated area as of December 16, 1994. This number includes the former Neponset Drive-In site owned by MDC. In finding that ACEC designation is appropriate because of threats associated with inappropriate use, I recommend that this ACEC designation be implemented to facilitate and expedite the clean-up of hazardous waste sites located within the ACEC by the DEP, MDC and authorized parties to protect public health and to restore and preserve the resources of the ACEC.

(2) Quality of the Natural Characteristics

The undeveloped Neponset marshes are an outstanding natural characteristic significant to the region, and the recreational opportunities afforded by the river for boating, swimming and fishing, and by MDC lands and other open space areas for other forms of recreation strongly support ACEC designation.

(3) Productivity

Estuarine wetland systems are among the richest and most biologically productive ecosystems on earth, and the Neponset River estuary is no exception. Furthermore, comments from the Massachusetts Division of Marine Fisheries and the Natural Heritage & Endangered Species Program (see above Description of the Resources of the Neponset River Estuary ACEC), underline the significance of the area regarding biological productivity and diversity of wildlife.

(4) Uniqueness of Area

The uniqueness of the area is defined from a regional, state or national perspective, considering features such as endangered plant and animal species, archaeological/historic/cultural resources, or other resources of educational value. Once again referring to section II. above, Description of the Resources of the Neponset River Estuary ACEC, I find that the uniqueness of this area supports ACEC designation, through the presence of state-listed rare species and archaeological and historic resources, and the educational value this riverine, salt marsh ecosystem to the Boston metropolitan area.

(5) Irreversibility and Magnitude of Impact, and Imminence of Threat to the Resources

I find that the resources of the Neponset River Estuary are subject to heavy historical and current development pressures that threaten their continued viability as a healthy and productive ecosystem. The condition of and threats to resources are similar if not identical to those described in the designation document for the Fowl Meadow and Ponkapoag Bog ACEC: "Historically, discharges to the Neponset River from a variety of sources resulted in extremely poor water quality. Water quality has improved since the passage and implementation of the Clean Water Act, but according to recent information from the DEP Bureau of Resource Protection (BRP), the river does not meet Class B standards. According to BRP, 'Through the discharge permit and construction grant programs, point sources have largely been cleaned up, but unless nonpoint sources are addressed, the river will not meet Class B standards. The river does not meet its designated uses because of high coliform bacteria counts, nutrient enrichment, and low dissolved oxygen levels. The

sources of these pollutants are CSOs (Combined Sewer Outflows), exfiltration, urban runoff and septic systems"

It is essential that these kinds of conditions, combined with continued urban use and development pressures, do not result in irreversible environmental degradation of the Neponset River estuary. Therefore, as with the previous ACEC designation of Fowl Meadow and Ponkapoag Bog, I find that the Neponset River Estuary ACEC designation is warranted to protect the resources from imminent threats, and highly significant, adverse and irreversible impacts.

(6) Economic Benefits

Economic benefits are described in the ACEC Regulations in terms of intrinsic values important to a region's economic stability, such as recreation, tourism, and fisheries development. Recreation values of the area associated with the Neponset River, and the extensive public recreation and open space areas described above, strongly support designation. Fisheries development supporting designation is also clearly documented in section II. above, Description of the Resources of the Neponset River Estuary ACEC.

(7) Supporting Factors

Over 70 comments were received regarding the nomination. Written or oral testimony was received from three state legislators; five municipal boards and commissions; 16 environmental and community organizations; three businesses; ten federal and state agencies; and over thirty citizens. Although not all comments supported ACEC designation, and many expressed concerns or reservations regarding designation, the large majority of comments recognized the intrinsic value and importance of the area.

Considering 1) the characteristics of the resources of the area as described above; 2) the significance of the area in the context of the factors supporting designation; 3) that the area is located in three different municipalities without coordinated local control; and 4) that significant portions are owned by public agencies, the recommendations and comments submitted by the Massachusetts Coastal Zone Management (MCZM) Office, dated February 6, 1995, are especially relevant to my decision to designate the Neponset River Estuary as an ACEC.

The following statements paraphrase MCZM's comments and recommendations.

- The Neponset Estuary represents a unique opportunity to protect and restore a suite of valuable resources.
- An ACEC designation requires a coordinated state review of activities proposed in the area designated, and given the incremental nature of the environmental insults to an urbanized

ecosystem, a coordinated review is important to future restoration efforts.

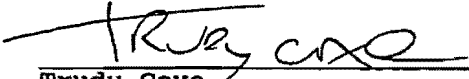
- The nomination process has pointed out the large number of conflicting visions that exist for parts of the Neponset Estuary, and without a context for resolution of these differences, it is likely that they will be settled by default. The resource management plan that is to be a part of the proposed designation process provides an appropriate forum for resolution of these conflicts.

- A major value of ACEC designation is the educational function that it performs. The focus on the ecosystem, the coordinated review process, and the work to develop resource management goals all make the public and government agencies more aware of the critical nature of the assets that are to be protected. An informed constituency is more likely to work to improve an ecosystem's environmental values.

I find that these supporting factors further justify ACEC designation.

Conclusion

Therefore, I am pleased to exercise the authority granted to me pursuant to M.G.L. Chapter 21A, Section 2(7), to designate the Neponset River Estuary as an Area of Critical Environmental Concern.


Trudy Cox
Secretary of Environmental Affairs

MARCH 27 1995
Date

DESIGNATION OF AMENDMENTS to the
NEPONSET RIVER ESTUARY
AREA OF CRITICAL ENVIRONMENTAL CONCERN
WITH SUPPORTING FINDINGS

Following an extensive formal review required by the regulations of the Executive Office of Environmental Affairs (301 CMR 12.00), including the preparation of a draft resource management plan, acceptance of proposed amendments for public review, public information meetings, a public hearing and written comment period, and evaluation of all public comment and assembled data, I, the Secretary of Environmental Affairs, hereby amend, as described herein, the Neponset River Estuary Area of Critical Environmental Concern (ACEC) as designated on March 27, 1995. I take this action pursuant to the authority granted me under Massachusetts General Law Chapter 21A, Section 2(7).

I. Findings of Fact

1. On March 27, 1995, I designated the Neponset River Estuary, located in portions of the municipalities of Boston, Milton and Quincy, as an Area of Critical Environmental Concern. Furthermore, pursuant to the ACEC Regulations, 301 CMR 12.11(1), which authorize the Secretary to provide the effective date of designation, I determined the effective date of this designation to be December 1, 1995.
2. At the time of designation I also directed the agencies of the Executive Office of Environmental Affairs (EOEA) to collaborate with municipalities, environmental and community groups and organizations, local businesses and residents, and other interested parties to prepare a Resource Management Plan for the Neponset River Estuary ACEC. At this time I stated that the intent of the resource management plan is to address the preservation, restoration, enhancement, use and management of the resources of the Neponset River Estuary ACEC, and regulatory and boundary questions raised in the course of the public review of the nomination, including the preparation of recommendations for any proposed amendments to the designation that may be needed.
3. At the time of designation I also stated that if there was a need to amend the ACEC designation within one year of the date of designation, I would entertain a waiver to the ACEC regulations as provided for at 301 CMR 12.15, since the ACEC regulations at 301 CMR 12.13(2) state that an ACEC designation may be amended after one year.

4. On October 2, 1995 pursuant to 301 CMR 12.15 I issued a Limited Waiver from the Provisions of the ACEC Regulations regarding Amendments to the Neponset River Estuary ACEC Designation (see copy attached), in order to accept for public review proposed amendments to the Neponset River Estuary ACEC Designation developed in the course of the preparation of a draft Resource Management Plan for the ACEC.

5. On October 2, 1995 pursuant to 301 CMR 12.13(2) and 12.07, I accepted for public review proposed amendments submitted to me by the Department of Environmental Management.

6. Public notice of a hearing regarding the proposed amendments and the draft Resource Management Plan was published in the October 14, 1995 editions of the Boston Globe and The Patriot Ledger, and the October 10, 1995 edition of the Environmental Monitor. Copies of the notice were also mailed to affected municipalities and interested parties in correspondence from me dated October 12, 1995. The notice included the scheduling of a November 1 public information meeting in Quincy and a November 15 public hearing in Dorchester, with a 10-day comment period following the public hearing, to November 27, 1995.

7. A concurrent review of the draft Neponset River Estuary Resource Management Plan was undertaken pursuant to the Massachusetts Environmental Policy Act (MEPA) Regulations, following the submission of an Environmental Notification Form (ENF) to the MEPA Unit by the Department of Environmental Management on October 16, 1995. My findings regarding the draft Resource Management Plan are provided separately in the Certificate of the Secretary of Environmental Affairs, EOE #10516, Neponset River Estuary ACEC Resource Management Plan, dated December 1, 1995, and are hereby incorporated by reference.

8. A public information meeting was held in Quincy on November 1, 1995 and a public hearing was held in Dorchester on November 15, 1995. Written comments were received until the close of the public comment period on November 27, 1995.

II. Decision

After a detailed and thorough evaluation of the information received and the public comment provided, I have decided to amend the Neponset River Estuary ACEC to provide for a technical clarification of the ACEC boundary and limited exemptions for environmentally beneficial activities. These amendments are further explained and described below, III. Amendments to the Neponset River Estuary ACEC Designation.

The language of the amendments is essentially the same that I accepted for public review on October 2, 1995 and subsequently circulated for public review and comment as described herein,

except that the exemption for the Hallet Street and Neponset Drive-in landfills is changed to include all landfill closures; the exemption for hazardous waste sites is expanded to include redevelopment activities undertaken as part of the assessment and remediation of the hazardous waste site located at #2 Granite Avenue in Milton; and additional limited exemptions for improvement dredging are added - for improvement dredging associated with the Pine Neck Creek stormwater outfall; improvement dredging or trenching that may be necessary for utility crossings; and improvement dredging that may be necessary for marina facilities. These changes were proposed and supported by the Metropolitan District Commission (landfill closures), Milton Board of Selectmen (#2 Granite Avenue hazardous waste site) and the Department of Environmental Protection (landfill closures, hazardous waste sites, and additional improvement dredging projects) to promote the purpose and objectives of ACEC designation.

Discussion of the Criteria Specified in Section 12.09 of the ACEC Regulations

In the review process leading to the decision regarding amendments to an ACEC designation, the Secretary must consider the factors specified in section 12.09 of the ACEC Regulations. Based on the information presented in the proposed amendments and in the draft Resource Management Plan, at the public hearing, in written comments received throughout the public review process, and in agency research and review, I make the following findings in support of the amendments described herein:

1. As stated below, the boundary of the ACEC best delineates the most critical natural resources of the estuarine ecosystem. It also provides a reasonable and consistent boundary for the three municipalities in which the ACEC exists and one that is already utilized by local boards in conducting their permitting and planning responsibilities. I find that the delineation of this ACEC boundary is supported by the quality of the natural characteristics and the uniqueness of the area.

2. The limited exemptions for environmentally beneficial activities address the closure of landfills, hazardous waste sites, and improvement dredging for stormwater outfall projects, Metropolitan District Commission recreation facilities located within the boundary of the ACEC, potential utility crossing projects, and marina facilities. I find that these limited exemptions are supported because they will address threats to public health, improve the quality of the natural characteristics of the area, improve or enhance the uniqueness of the area, improve and enhance recreational access and use, and provide economic benefits to the area. The limited exemptions regarding landfill closure, hazardous waste sites and stormwater projects will also address potentially

significant, irreversible or imminent threats to the resources of the area.

3. Supporting factors listed at 310 CMR 12.09(9) also contribute to the adoption of these amendments to the Neponset River Estuary ACEC.

- Approximately 24 comments were received regarding the proposed amendments or the draft resource management plan. Of the comments received regarding the proposed amendments, the large majority supported them, reflecting a public awareness of the value and importance of the area and these environmentally beneficial projects.

- Further, criteria regarding the lack of coordinated local control because the area is located within more than one municipality; ownership of a large portion of the resource area by the state government; and the existence of supplementing management programs in the area all support the need for ACEC designation and the need for limited exemptions to help expedite, streamline and coordinate efforts by municipal and state agencies, and environmental and community organizations, to preserve, restore, enhance, use and manage the natural and cultural resources of this area.

- It is important to add that the public has been informed of the preparation of the Neponset River Estuary Resource Management Plan since last March when the ACEC designation was made. A Steering Committee was formed to help prepare the plan, and meetings and input from the public since June, 1995 have contributed to the development of the draft plan and the proposed amendments.

In summary, I find ample justification to amend the Neponset River Estuary ACEC designation as described herein.

Ongoing Neponset River Estuary Planning and Management and Potential Future Amendments to the ACEC

It is important to state that, at the time of the effective date of the Neponset River Estuary ACEC designation and these amendments, there are several ongoing planning and management activities within this area. These include, but are not limited to, the preparation of:

- the final "Neponset River Estuary ACEC Resource Management Plan;"
- the Metropolitan District Commission (MDC) "Neponset River Estuary Master Plan;"
- the Boston Natural Areas Fund and Trust for Public Land "Neponset River Greenway Project;"
- the Neponset River Watershed Association Estuary Subwatershed Group "Action Plan;"
- the Massachusetts Wetlands Restoration and Banking Program "Neponset River Watershed Wetlands Restoration Plan;" and
- the Department of Environmental Protection "Neponset Watershed Management Plan."

I understand that every effort has been made prior to December 1, 1995 to identify potential amendments to guide and improve the implementation of this ACEC designation. I also understand that the various planning and management efforts underway may identify further amendments to the ACEC that may be needed to implement important recommendations and projects. In particular, the Metropolitan District Commission has commented that the Master Plan currently being developed for the Neponset River Reservation properties may identify further amendments that may be needed for environmentally and recreationally beneficial projects and activities.

The preparation and implementation of ACEC resource management plans and other planning efforts within ACECs should be a dynamic process, and future changes to this ACEC designation should be made where appropriate and where justified and supported by public planning and management efforts. The ACEC Regulations provide a clear and straightforward process for amending ACEC designations, especially where proposed amendments are identified as part of a dynamic and ongoing planning, management, and implementation process.

III. Amendments to the Neponset River Estuary ACEC Designation

1. ACEC Boundary

The final boundary is based on the landward boundary of the wetlands resource areas of the Neponset River marshes and estuary, as defined by the Wetlands Protection Act (Chapter 131, Section 40) and Regulations (310 CMR 10.00) plus a 100' buffer area. This boundary best delineates the most critical natural resources of the estuarine ecosystem. It also provides a reasonable and consistent boundary for the three municipalities in which the ACEC exists and one that is already utilized by local boards in conducting their permitting and planning responsibilities.

However, a technical amendment is necessary regarding ACEC designation maps that show a boundary that appears to be inclusive of all property known as #2 Granite Ave. at the intersection of Route 3/I-93 in Milton. A consistent application of the natural resource based boundary with the 100' buffer, includes the perimeter of this property but leaves a portion of the middle upland outside of the ACEC boundary.

The revised technical boundary language, to replace paragraph two of page 12 of the designation document for the Neponset River Estuary ACEC, is as follows:

[Explanatory note: By following the 100-foot wetlands buffer two "islands" of upland are not included within the ACEC boundary. The first lies within the property known as #2 Granite Avenue,

Milton. The second is in the vicinity of the intersection of Granite Avenue and the Southeast Expressway (Route 3/I-93), Milton.]

2. Limited Exemptions for Environmentally Beneficial Activities

The designation of an urban area, especially the Lower Neponset with its long history of human uses and accompanying impacts, adds an extra measure of complexity to the designation of this ACEC. One strong concern raised by state agencies and other interested parties is that the increased scrutiny and more stringent standards for permitting within the ACEC may unnecessarily delay the implementation of rehabilitation, restoration, and public use projects.

Both the Wetlands Protection Act and the Chapter 91 Waterways regulations set stricter standards for projects in coastal ACECs. The Wetlands regulations allow "no adverse impact" to any coastal wetland from any activity within an ACEC (310 CMR 10.24(5)(b)). For freshwater wetlands, only limited projects are allowed to alter Bordering Vegetated Wetlands (310 CMR 10.53 and 10.54). The Waterways Regulations prohibit improvement (new) dredging in an ACEC except for the sole purpose of fisheries or wildlife enhancement (310 CMR 9.40(1)(b)). These restrictions make sense when applied to activities which adversely impact pristine wetlands or waterways without at the same time having any positive environmental impact. The restrictions do not make sense, however, when an activity to be undertaken within an urban ACEC is designed to enhance the environment or the public's enjoyment of it.

Because the major purposes of ACEC designation are to "preserve, enhance, restore, manage, and encourage appropriate use of the natural and cultural resources" (emphasis added), the following environmentally beneficial activities are exempt from this ACEC designation, so that they may go forward without the ACEC-related permitting restrictions contained in the Wetlands and Waterways Regulations. Such activities will continue, of course, to be subject to all other requirements of wetland, waterways, and other environmental laws and regulations.

Landfill Closures

Exemptions are granted from this ACEC designation for all activities undertaken within the Neponset River Estuary ACEC boundaries which are required to be taken by the owner of any landfill as part of landfill assessment actions (Initial and Comprehensive Site Assessments) and landfill closure construction, as determined through DEP/DSWM's Corrective Alternative Action Analysis (CAAA), process and/or the Massachusetts Contingency Plan. Actions necessary for remediation include, but are not limited to: dredging contaminated sediment from perimeter of landfill in

wetlands or buffer zone and its disposal on upland portions of the site; installation of leachate cut-off walls along perimeter of landfill within wetlands or buffer zone; the collection, treatment and discharge of leachate into wetlands (if the Comprehensive Site Assessment determines discharge is not a significant public health or ecological risk); the placement of grading material and/or cap materials or erosion controls along perimeter of site within wetlands or buffer zone; the installation of boring/monitoring wells; temporary installation/operation of barging facilities at the site; remedial work on bridges and culverts; and any closure/post closure actions required by DEP. These and other associated corrective actions are exempted on the condition that the landfill owner (or its agents) takes all practicable measures to avoid and minimize further degradation of adjacent resources and to mitigate any unavoidable impacts to the greatest extent possible during site assessment and closure activities.

Hazardous Waste Sites

Exemptions are granted from this ACEC designation for response actions performed in compliance with M.G.L. c.21 E and the Massachusetts Contingency Plan 310 CMR 40.0000 for the assessment and remediation of releases of oil and/or hazardous material located within the Neponset River Estuary ACEC boundaries. These activities are also granted an exemption from the ACEC Designation for the purposes of Wetlands and Waterways regulations. These activities include but are not limited to the activities listed under the waiver language for actions required for landfill closures. These activities are exempted on the condition that project proponents (and their agents) take all practicable measures to avoid and minimize further degradation of adjacent resources and to mitigate any unavoidable impacts to the greatest extent possible and that the proponents obtain the applicable approvals pursuant to Wetlands and Waterways regulations.

This exemption shall apply to any future sites that may need to perform response actions under M.G.L. c.21 E and the Massachusetts Contingency Plan within the Neponset River Estuary ACEC. These sites include, but are not limited to, the Bureau of Waste Site Cleanup Disposal Site List and other unpublished lists provided by DEP. These exemptions shall remain in effect for each site until certification by DEP or the Licensed Site Professional overseeing the remediation activities that the remediation process has been satisfactorily completed at which time all provisions of the ACEC designation will be in effect except for any closure/post closure remediation actions required by DEP.

The exemption from the ACEC designation shall also apply to activities related to the redevelopment of the property at #2 Granite Avenue in Milton undertaken as part of the assessment and remediation of the hazardous waste site at this location.

Improvement Dredging

Exemptions are granted from this ACEC designation for the following improvement dredging activities for the purposes of Wetland and Waterways regulations and CZM Federal Consistency Review: improvement dredging associated with the stormwater outfalls at Tenean and Lawley Streets and Pine Neck Creek, Boston; dredging/sediment removal to allow for installation or modification of stormwater outfalls necessary to allow MWRA and the Boston Water & Sewer Commission to separate the existing combined sewers located in the ACEC; sediment removal and resanding at Tenean Beach, Boston; dredging that may be necessary to access recreational boating facilities (launch ramps and docks) included in the MDC "Neponset River Estuary Master Plan", as approved; dredging or trenching that may be necessary for utility crossings; and, dredging that may be necessary for marina facilities provided the marina owners work with Chapter 91 Waterways staff and EOEA agencies to delineate work areas. These activities are exempted on the condition that project proponents (and their agents) take all practicable measures to avoid and minimize further degradation of adjacent resources and to mitigate any unavoidable impacts to the greatest extent possible and that the proponents obtain the applicable approvals pursuant to Wetlands and Waterways regulations and CZM Federal Consistency review.

The effective date of these amendments shall be December 1, 1995.

Trudy Cox
Trudy Cox
Secretary of Environmental Affairs

DEC 1 1995
Date



The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Boston, 02202

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**LIMITED WAIVER FROM THE PROVISIONS OF THE ACEC REGULATIONS
REGARDING AMENDMENTS TO THE NEPONSET RIVER ESTUARY ACEC DESIGNATION**

Findings of Fact

1. On March 27, 1995 I designated the Neponset River Estuary, located in portions of Boston, Milton and Quincy, as an Area of Critical Environmental Concern (ACEC). Furthermore, pursuant to the ACEC Regulations, 301 CMR 12.11(1), which authorize the Secretary to provide the effective date of designation, I determined the effective date of designation to be December 1, 1995.

2. At the time of designation I also directed the agencies of the Executive Office of Environmental Affairs (EOEA) to collaborate with municipalities, environmental and community groups and organizations, local businesses and residents, and other interested parties to prepare a Resource Management Plan for the Neponset River Estuary ACEC. The plan is intended to address the preservation, restoration, enhancement, use and management of the resources of the ACEC, and the regulatory and boundary questions raised in the course of the public review of the plan. Furthermore, the plan should include recommendations for any proposed changes or modifications to the designation that may be needed.

3. A draft Resource Management Plan has been completed, and includes recommendations for amendments to the ACEC designation. A public hearing regarding the Resource Management Plan and the proposed amendments is scheduled for November 15, 1995.

4. The ACEC regulations, 301 CMR 12.13(2) provide that an ACEC designation may be amended at any time after an ACEC has been designated for one year. In order to amend the Neponset River Estuary ACEC designation within one year, a waiver from the ACEC regulations, as provided at 301 CMR 12.15, is required by the Secretary.

Decision

In order to accept for public review the proposed amendments to the Neponset River Estuary ACEC Designation, I hereby grant a limited waiver from the provisions of the ACEC Regulations at 301 CMR 12.13(2) which allow amendments to be made to the designation only after one year from the date of designation. Strict compliance with the provision of 301 CMR 12.13(2) would result in an undue hardship upon the public and municipalities and residents of the area and would not serve to further the intent of M.G.L. c.21, s.2(7).



Trudy Cox
Secretary of Environmental Affairs

October 2, 1995

Date



The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Boston, 02202

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December 1, 1995

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CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Neponset River Estuary ACEC Resource Management Plan
 PROJECT LOCATION : Boston, Milton and Quincy
 EOE NUMBER : 10516
 PROJECT PROPONENT : Massachusetts Department of Environmental Management
 DATE NOTICED IN MONITOR : October 23, 1995

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that the above project does not require the preparation of an Environmental Impact Report (EIR).

The project consists of the submission of the Draft Neponset River Estuary Area of Critical Environmental Concern (ACEC) Resource Management Plan as prepared for the Massachusetts Department of Environmental Management (DEM). DEM has prepared the draft Resource Management Plan (RMP) in accordance with the Neponset River Estuary ACEC designation and in collaboration with the affected municipalities and other interested parties. The purpose of the RMP is to guide the implementation of the Neponset River Estuary ACEC designation and to address the regulatory and boundary questions raised in the course of the public review of the nomination.

On March 27, 1995, the Neponset River Estuary was designated as an ACEC. However, the effective date of the designation was scheduled to be December 1, 1995. The ACEC area encompasses approximately 1,260 acres in Boston, Milton and Quincy.

As proposed, the draft RMP requires no state permits. However, the Environmental Notification Form (ENF) was submitted for MEPA review in accordance with 301 CMR 11.15(3)(b) for agency planning activities within an ACEC. On November 1, 1995, a MEPA

responsibilities will be coordinated so as to avoid inconsistency or conflict.

According to the comment letter from the Massachusetts Coastal Zone Management (MCZM) office, the recommendations contained in the draft RMP have not yet been formally endorsed by the ACEC Steering Committee. It is important to ensure an opportunity for full review and endorsement of the final RMP and its recommendations by the ACEC Steering Committee. This must be reflected in the schedule for finalizing the RMP.

Under the circumstances, it is clear that additional time is needed to prepare and review a final Neponset River Estuary ACEC RMP. MCZM's comment includes a proposed outline, which I ask the proponent to consider. I have also directed the MCZM office to prepare an Action Plan, which I understand is close to being completed. The Action Plan will specify the data to be collected, analyses to be performed, implementation tasks to be developed or executed, parties responsible for carrying out these tasks, and the timetables for doing so. In addition, the Action Plan will propose mechanisms for coordinating current and future planning efforts and incorporating their results into the RMP.

The final RMP should be responsive to the many thoughtful comments on the draft. It should address ways to further the recreational value of the area as recommended by the NRWA and others. It should present criteria and mechanisms for evaluating the effectiveness of the RMP and its applicability to other ACECs. It should identify an on-going management (coordinating) entity with specific responsibilities and authority to act.

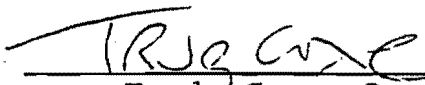
I expect the final RMP to be submitted to me for my review in the Spring of 1996. Updates should be prepared every three to five years in order to address the results of ongoing planning efforts within the ACEC, as well as to incorporate any further amendments or exemptions that may be needed.

I believe that the Designation of the Neponset River Estuary ACEC, as amended, will not slow the momentum of ongoing efforts to protect the Neponset River. Given the amendments and exemptions now available, such efforts as the MDC cleanup of Hallet Street landfill site, the cleanup of other 21E sites, improvement dredging projects and other activities highlighted by concerned commenters do not require further postponement of the designation. Other restoration and rehabilitation projects that are found to have long-term benefits to the resource area can be considered for exemption during the review of RMP updates.

Given that a final RMP will be prepared and that the RMP will serve to protect environmental resources, it is not necessary to require preparation of an EIR. However, it remains important to provide adequate opportunity for input by affected municipalities, agencies, organizations, individuals and the public in general. Accordingly, I require that the final RMP be submitted to the MEPA Unit for notice in the Environmental Monitor, to be followed by a public comment period. I direct the MEPA Unit and the ACEC program to coordinate carefully so as to avoid unnecessary duplicative process or delay. Following the public comment period, I will issue my final findings on the RMP.

December 1, 1995

Date


Trudy Cox, Secretary

Comments received : MAPC, 11/8/95
Quincy Citizens & Wollaston Park
Associations, 11/15/95
New England Power Company & Massachusetts
Electric Company, 11/15/95
Katherine Haynes Dunphy, 11/15/95
Melissa Creed, 11/15/95
Ellie Spring, 11/15/95
J.E. Ingoldsby & Assoc., 11/15/95
Robert L. Teagan, 11/16/95
Water Supply Citizens Advisory Committee,
11/21/95
Boston Natural Areas Fund, 11/21/95
Neponset River Watershed Assoc., 11/21/95
Senator Michael W. Morrissey, 11/21/95
Bruce J. Ayers-Quincy City Council, 11/22/95
Save the Harbor Save the Bay, 11/22/95
MDC, 11/24/95
BWSC, 11/24/95
Boston Harbor Assoc., 11/27/95
EOTC, 11/27/95
BED, 11/27/95
MWRA, 11/27/95
MCZM, 11/27/95
Boston GreenSpace Alliance, Inc., 11/27/95
DEP/Boston, 11/28/95

TC/WTG/wg

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permittee	Agency	Dredging	Activity Structures	Fill	Conditons
Milton Yacht Club							
5/83	Contract No. 3002	DEQE-Division of Waterways		maintenance dredge channel in Neponset River to -6.0 MLW (min width 100')			COE 404 permit prohibits dredging between March 1 through June 30 for protection of anadromous fishery
7/67	Contract No. 2585	DPW-Division of Waterways	DPW	dredge channel and basin in Neponset River to -6.0 MLW (min width 100'; plan shows wider area)			
Neponset River south of Neponset Avenue Bridge							
8/20/23	Contract No. 84; Authorized by chapter 353 of the Acts of 1923			Neponset Avenue Bridge to Granite Ave bridge: 100' wide, -6.0 MLW Granite Ave. Bridge to Godfrey's Coal Wharf: 75' wide, -6.0 MLW In front of Godfrey's Coal Wharf: not less than 50' Mooring basin in front of Vose's Grove to -6.0 MLW Dredge and maintain a 2 mile reach of channel between the Neponset Bridge and Milton Mills to -6.0 MLW. (This dredging was required of the Commonwealth as a condition of ACOE dredging north of Neponset Bridge in 1907.			Narrative with ACOE's condition survey of 1986 states this dredging was done and has been maintained since 1910.)

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permitee	Agency	Dredging	Activity Structures	Fill	Conditons
224 Adams Street, Milton							
8/3/84	C. 91 #1098	Marion R. Lynch	DEQE		maintain a pier and float; construct and maintain a boat launching ramp and wall		
12/29/83	WQ Certification #83W-140	Marion R. Lynch	DEQE/DWPC		maintain existing pier and float, construct and maintain a boat launching ramp	remove unauthorized fill	
5/17/76	C. 91 #125	Teresa L. Grogan	DEQE	dredging 37'X75' to depth of -4.0 MLW	build and maintain a pier and float; asphalt boat launching ramp extending 95' into tidewaters		
Neponset Valley Yacht Club							
3/56	Contract No. 1594	DPW-Division of Waterways	DPW	dredge channel to -8.0 MLW (min width 200')			
State Street South							
11/3/80	C. 91 License No. 687	SSB Realty, Inc.	DEQE	construct 400'X18' open channel between Sagamore Creek and existing 18'X10'6" box culvert		with associated filling and excavation in Sagamore Creek	
4/30/80	Water Quality Certificate	SSB Realty	Water Resources Commission/ DWPC			relocate 145' of a channel leading to and place fill in wetlands	

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permittee	Agency	Dredging	Activity		Conditions
					Structures	Fill	
10/8/69	License No. 5593	SSB Realty Trust	DPW		Construct 1200' X18'X10'6" box culvert to handle drainage formerly carried by Sagamore Creek.	Fill, pipe, and otherwise relocate and modify the main channel and estuaries of Sagamore Creek. Place solid fill in Sagamore Creek over a distance of 980'.	
	C. 91 License No. 5731 (referenced on Plan 687)						
	C. 91 License No. 3662 (6 plan sheets)	SSB Realty, Inc.				maintain and 8-story office and retail building and 4-story parking garage in and over the filled waters of Sagamore Creek	Licensee shall maintain public walkways and the ground level publicly accessible areas outside the footprint of buildings as shown on the plan. Place 4 benches as shown on sheet 6A. Place appropriate signage
Sagamore Creek at Walnut Street							
10/26/90	C. 91 License No. 2427	Hardwood N.V.	DEP		maintain existing concrete platform and timber bulkhead and remove 5 piles		remove piles within 2 years
Sagamore Creek between Walnut and Newbury Streets							
2/25/59	C. 91 License No. 4196	Charles M. McConaghy	DPW			relocate existing tidal creek and fill existing location of creek	

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permitee	Agency	Dredging	Activity Structures	Fill	Conditions
2 Hancock Street, Quincy							
3/30/93	Dredging # 239	Neponset Landing Trust	DEP	maint. dredge 9,000 cy; max depth -7.0 MLW; disposal at MBDS			dredging by mechanical means; no dredging 3/1 - 5/31
1/29/93	WQ certification BRP WP 39, T #22481		DEP/WPC		dredging area 50' to 100' X 460' long		no dredging between 2/1 and 6/15; environmental bucket plus reduced size of hinge openings and flaps covering hinge openings; no dredging within 25' of saltmarsh
	Lic no. 5050 & 5690; pier repair (referenced on No. 239)		DEP?				
12/18/91	Order of Conds. 59-356		Quincy Con Com	dredging	4 commercial floats 10'X30'; maint of existing pier		no dredging 3/16 - 10/14 (dredging to be done 10/15 - 3/15); no vehicles or equipment stored within the 100' coastal bank buffer zone; no servicing of equipment on site; catch basins with gas/oil interceptors, cleaned bi- annually; no storage
Taylor Street, north of MBTA bridge							
3/7/86	1190	National Data Verification Service	DEQE	dredge 24,000 cy; for commercial marina facility	construct and maintain pile-supported piers and walkways, travel-lift slip and dock, steel sheet piling, timber pile breakwater; removal of steel barge;		
12/7/84	Order of Conditions (referenced in 1190)	same	Boston Con Com				

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permittee	Agency	Dredging	Activity		Conditions
					Structures	Fill	
10/2/84	Water Quality Certification (referenced in 1190)		DEQE				
Neponset River between Squantum Point and MBTA bridge							
1/11/67	C. 91 License No. 5186	Boston Edison Company	DPW			place and maintain solid fill and stone slope proection; construct and maintain culverts	
	C. 91 License No. 5185	Mass. Bay Transportation Authority				place solid fill with stone faced slope in Neponset River	
Bay State Road							
10/11/89	C. 91 License No. 2075	City of Quincy Department of Public Works	DEP		construct storm drain, tide gate and stone headwall for shoreline stabilization and flood control		

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permittee	Agency	Dredging	Activity	Structures	Fill	Conditons
Port Norfolk Condominiums, Boston								
	C. 91 #1601	Port Norfolk Condominium, Inc.			construct multi-unit residential buildings and site work, construct public waterfront walkway, viewing platform, place granite block seawall in and over existing filled tidelands			Public pedestrian accesse walkways leading to and along the site's waterfront area. The walkway along the waterfront of the site shall be a minimum of 6' wide. The permittee shall connect the site's waterfront walkway with future public walkway
2/10/87	Superseding Order of Conditions	Port Norfolk Condominium, Inc.	DEQE					
4/18/86	Water Quality Certificate	Port Norfolk Condominium, Inc.	DEQE/DWPC					
1905	C. 91 License No. 2944		Harbor and Land Commissioner				fill tidelands	
Port Norfolk Yacht Club, 179 Walnut Street								
3/30/93	Dredge Permit No. 243	Port Norfolk Yacht Club	DEP	maintenance dredge 9,200 cy; max depth -6.0 MLW; disposal at MBDS				dredging by mechanical means
	C. 91 Lic no. 4593 (referenced on plan for #243)		DPW			marine railway & filled steel barge		
	Lic no. 2083 (referenced on plan for #243)		DPW			floating dock		
	Lic no. 1596 (referenced on plan for #243)		DEQE			floating docks		

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permitee	Agency	Dredging	Activity Structures	Fill	Conditons
1/5/93	WQ cert. BRP WP 39, T # 40204		DEP				silt curtain; no dredging 2/1 to 6/15 to protect winter flounder spawning and the anadromous (smelt, blue back herring, shad) fish run; modified clamshell bucket; no dredging within 25' of salt marsh
10/17/91	Order of Conds 6-488		Boston Con Com				no dredging from 2/1 to 6/15; no dewatering; waste oil disposal facility; absorption pillows accessible
4/11/90	C. 91 Lic no. 2303 (2023 referenced on plan for #243) License No. 3 (reference on Lic. Plan 2303)	Port Norfolk Yacht Club, Inc.	DEP		construct retaining wall with rip-rap toe apron		
			Port of Boston		timber pier		
12/18/85	Dredge Permit #150	DEM-Division of Waterways	DEQE	dredge 16,000 cy of subaqueous material from irregularly shaped area			
and 8/2/84	Water Quality Certification 84W- 009D	DEM-Division of Waterways	DEQE/DWPC	dredge 16,000 cy of sediment; disposal at MBDS			disposal of material to be capped because of accumulation of PCBs; dredging to be done during the least productive periods of estuarine species, 10/1 to 2/1
7/84	Contract No. 3045	DEM	DEM-Division of Waterways	maintenance dredge basin to -6.0 MLW			
5/3/84	Order of Conditions 6-253	DEM-Division of Waterways	Boston Con Com	dredge 16,000 cy			no dredging between February 1 and May 15
2/19/93	C. 91 License No. 3244	Port Norfolk Yacht Club	DEP		construct a concrete boat ramp		

Ericsson and Walnut Street, Boston

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permitee	Agency	Dredging	Activity		Fill	Conditions
					Structures			
4/28/87	C. 91 #1606	Boston Water and Sewer	DEQE	dredge 50 cy material	construct 36" storm drain outfall, associated riprap			
2/17/87	Water Quality Certification No. 86W-242	Boston Water and Sewer Commission			36" storm drain			
Old Colony Yacht Club (and Port Norfolk Yacht Club)								
12/18/85	Dredge Permit #150	DEM-Division of Waterways	DEQE	dredge 13,000 cy at the Old Colony YC (see also Port Norfolk YC, dredge 16,000 cy)				
7/84	Contract No. 3045	DEM-Division of Waterways	DEM	maintenance dredge basin to -6.0 MLW				
5/3/84	Order of Conditions 6-254	DEM-Division of Waterways	Boston Con Com					no dredging between February 1 and May 15
4/17/84 (Old Colony)	Water Quality Certificate 84W-009D	DEM-Division of Waterways	DEQE/DWPC	dredge 13,000 cy at Old Colony YC; disposal at MBDS; (see also Port Norfolk YC)				Old Colony: no dredging between February 15 and May 15
1982	Section 404 and Section 10 (referenced in WQ cert.)		U.S. ACOE					
	License No. 5736	Old Colony Yacht Club	DPW	dredge area adjacent to seawall to depth of -5.0' MLW	place timber piles, floats, and steel barge bulkhead			

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permittee	Agency	Dredging	Activity Structures	Fill	Conditions
Victory Road Park							
6/8/87	C. 91 License No. 1635	Metropolitan District Commission	DEQE	dredge two areas on either side of bridge: 1,900 cy to the east, 1,200 cy to the west; on-site upland disposal	place 135 l.f. of rip-rap, construct 60' timber bridge		
3/18/87		Water Quality Certification	DEQE				
6/13/86	Order of Conditions	MDC	Boston Con Com				
MWRA Pier, west of Marina Bay, Quincy							
10/27/89	Dredge Permit #187	DEM-Division of Waterways	DEP	dredge 51/000 cy to max depth of -10.0' MLW; disposal MBDS			
10/26/89	Water Quality Certification	DEM-Division of Waterways	DEQE/DWPC	dredge channel to -10 feet MLW, 51,000 cy; disposal at MBDS			dredging to be completed by February 15; dredging by tight-closing bucket to reduce sediment resuspension; silt curtain not suitable in this location
9/19/89	Order of Conditions #59-302	DEM-Division of Waterways (and MWRA)	Quincy Con Com				separate NOI required for proposed personnel pier project and all landward activities
5/16/90	C. 91 License No. 2350 (6 plan sheets)		DEP		construct a pier, ramp, floating dock, shore protection, and parking facility		

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permittee	Agency	Dredging	Activity Structures	Fill	Conditions
Marina Bay, Quincy							
4/28/87	C. 91 No. 1617 (plan: 3 sheets)		4/23/84		construct pile-supported pier to support floats		
12/3/86	C. 91 License No. 1572	Boston Harbor Marina Company	DEQE		maintain existing pile-held dock extension for commercial boating facilities		
10/22/85	C. 91 License No. 1329	Boston Harbor Marina Co.	DEQE		construct timber open-pile pier, 2 gangways, "U" shaped floating dock, and associated piles for berthing of commercial and private vessels		
2/24/85	Order of Conditions (referenced in C. 91 Lic. No. 1329)						
4/23/84	C. 91 #1081	Boston Harbor Marina Co.			install five steel mooring piles with batter piles to provide fixed mooring anchorage for "Edmund Fitzgerald"		
	Water Quality Certification No. 84W-024				5 steel mooring piles		
	Water Quality Certification No. 84W-025	Boston Harbor Marina Co.			construct a 70'X30' timber, open-pile deck adjacent to existing seawall and wood wharf for commercial marina		
10/30/75	C. 91 #54	Boston Harbor Marina, Inc.	DEQE		place and maintain rubber tire breakwater, construct travel lift piers and place pile held floats		

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permitee	Agency	Dredging	Activity		Conditions
					Structures	Fill	
	C. 91 License No. 4568 (referenced in license #54)		DPW				
	C. 91 License No. 1082	Boston Harbor Marina Co.	DEQE		construct 2 open-pile wooden deck extensions appurtenant to an existing, previously authorized (Lic. No. 4234) wooden deck for additional commercial docking facilities and waterfront access for transient vessels.		
	C. 91 License No. 4234 (referenced in Lic. 1082)						
Surrounding Harborside Condominiums, Quincy							
8/30/85	C. 91 License No. 1306	Boston Harbor Marina Co.			maintain existing multi-unit residential buildings, associated structures, construct multi-unit residential buildings; construct open-pile access pier and viewing platform; 2 drainage ditch catwalks over filled tidelands	open-pile timber public access walkway, octagonally-shaped viewing platform and catwalks to be constructed within 6 months; public access signage; public access easement to Quincy for general public use of 89.5 acres of coastal beach, saltmarsh	

Neponset River Dorchester Bay to Neponset Avenue/Hancock Street

Permits and Licenses for Previous Structures, Dredging and Fill in the Neponset River Estuary ACEC

Date Issued	Permit	Permittee	Agency	Dredging	Activity		Conditions
					Structures	Fill	
completed in 1909	Authorized by the River and Harbor Act in 1907	U.S. Army Corps of Engineers		100' wide channel dredged to -15.0 MLW. Last dredged in 1966-1967. Condition survey in 1978 revealed no hazards to			Commonwealth of Mass must dredge and maintain a 2 mile reach of channel between the Neponset Bridge and Milton Mills to -6.0 MLW

A Checklist of Massachusetts Birds 1990-1995

Observed by Ron Donovan, Steven Donovan, and others
 Provided by Massachusetts Natural Heritage and Endangered
 Species Program

Name of Species	Locality		
	Squantum Point	Neponset River Marshes	Status
Common Loon	M	M	SC
Red-throated Loon	M	M	
Red-necked Grebe	M		
Horned Grebe	M		
Pied-billed Grebe	M	M	T
Northern Fulmar			
Cory's Shearwater			
Greater Shearwater			
Sooty Shearwater			
Manx Shearwater			
Leach's Storm-Petrel			
Wilson's Storm Petrel			
Gannet			
Great Cormorant		M	
Double-crested Cormorant	P.R.	P.R.	
Great Blue Heron	P.R.	P.R.	
Green Heron	M	M	
Little Blue Heron	M	M	
Cattle Egret		V	
Great Egret	M	M	
Snowy Egret	M	M	
Louisiana Heron	M		
Black-crowned Night Heron	P.R.	P.R.	
Yellow Crowned Night Heron	M		
Least Bittern		V	

Name of Species

Locality		Status
Squantum Point	Neponset River Marshes	
American Bittern	M	E
Glossy Ibis	M	
Mute Swan	M	
Canada Goose	P.R.	P.R.
Brant	M	
Snow Goose	V	
Mallard	P.R.	
Ruddy-Sheduck	escaped bird	
Black Duck	P.R.	P.R.
Gadwall		M
Pintail	M	M
Green-winged Teal	M	M
Blue-winged Teal	M	M
European Wigeon		
American Wigeon	M	
Northern Shoveler		M
Wood Duck	M	M
Redhead		V
Ring-necked Duck		M
Canvasback	M	M
Greater Scaup	M	M
Lesser Scaup		
Common Goldeneyes	M	M
Barrow's Goldeneyes		
Bufflehead	M	M
Oldsquaw		
Harlequin Duck		
Common Eider	M	
King Eider	V	
White-winged Scoter	M	V
Surf Scoter	M	

KEY M = Migrants; V = Vagrant; F = Formerly more common; P.R. = Permanent resident; breeds = Nesting bird. **Status** E = Endangered; T = Threatened;
 SC = Special Concern

Name of Species	Locality	Status
	Squantum Point Neponset River Marshes	
Black Scoter	V	
Ruddy Duck	V	
Hooded Merganser	M M	
Common Merganser	M M	
Red-breasted Merganser	M M	
Turkey Vulture	M M	
Goshawk	V	
Sharp-skinned Hawk	M M	SC
Copper's Hawk	M M	
Red-tailed Hawk	P.R. P.R.	
Red-shouldered Hawk	M	
Broad-winged Hawk	M	
Rough-legged Hawk	M M	
Bald Eagle	V	
Northern Harrier	M M	T
Osprey	M M	
Peregrine Falcon	M M	T
Merlin	M M	
American Kestrel	P.R. P.R.	
Ruffed Grouse	V	
Bobwhite	M	
Ring-necked Pheasant	P.R. P.R.	
Turkey		
King Rail	V V	T
Clapper Rail	M	
Viginia Rail	M P.R.	
Sora	M M	
Common Gallinule	V	
American Coot	M	
American Oystercatcher	M	
Semipalmated Plover	M M	
Piping Plover		

Name of Species	Locality	Status
	Squantum Point Neponset River Marshes	
Killdeer	P.R. breeds P.R.	
American Golden Plover	M M	
Black-bellied Plover	M M	
Ruddy Turnstone	M M	
American Woodcock	breeds M	
Common Snipe	M M	
Whimbrel	M M	
Upland Sandpiper	V M	E
Spotted Sandpiper	M M	
Solitary Sandpiper	M M	
Willet	M	
Greater Yellowlegs	M M	
Lesser Yellowlegs	M M	
Red Knot	M	
Purple Sandpiper		
Pectoral Sandpiper	M M	
White-rumped Sandpiper	M M	
Baird's Sandpiper	M	
Least Sandpiper	M M	
Yellow Rail		M
Little Stint	V	
Curlew Sandpiper	M	
Dunlin	M M	
Short-billed Dowitcher	M M	
Long-billed Dowitcher	V M	
Stilt Sandpiper	M	
Semipalmated Sandpiper	M M	
Western Sandpiper	M	
Buff-breasted Sandpiper	M	
Marbled Godwit		
Hudsonian Godwit	M V	
Ruff	V	

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Name of Species	Locality	
	Neponset River Marshes	Status
Squantum Point		
Sanderling	M	
Red Phalarope	V	
Wilson's Phalarope	M	
Northern Phalarope		
Pomerine Jaeger	dead ad.	
Parasitic Jaeger	V	
Glaucous Gull	M	
Iceland Gull	M	
Great Black-backed Gull	P.R.	
Herring Gull	P.R.	
Ringed-billed Gull	P.R.	
Black Headed Gull	M	
Laughing Gull	M	
Bonaparte's Gull	M	
Little Gull	V	
Black-legged Kittiwake		
Forster's Tern	M	
Common Tern	breeds	SC
Arctic Tern		
Roseate Tern	M	E
Least Tern	breeds	SC
Caspian Tern	M	
Black Tern	M	
Black Skimmer	V	
Razorbill		
Thick-billed Murre		
Dovekie		
Black Guillemot		
Rock Dove	P.R.	P.R.
Mourning Dove	P.R.	P.R.
Yellow-billed Cuckoo	M	M
Black-billed Cuckoo	M	M

Name of Species	Locality	
	Neponset River Marshes	Status
Squantum Point		
Royal Tern	M	
Gull-billed Tern	V	
Barn Owl	F	SC
Screech Owl		
Great Horned Owl	M	P.R.
Snowy Owl	M	M
Barred Owl		
Long-eared Owl		
Short-eared Owl	M	M
Saw-whet Owl		E
Whip-poor-will		
Common Nighthawk	M	M
Chimney Swift	M	M
Ruby-throated Hummingbird	M	M
Belted Kingfisher	P.R.	P.R.
Common Flicker	P.R.	P.R.
Pileated Woodpecker		
Red-bellied Woodpecker		M (V)
Red-headed Woodpecker		
Yellow-bellied Sapsucker	M	M
Hairy Woodpecker	M	M
Downey Woodpecker	P.R.	P.R.
Eastern Kingbird	breeds	M
Western Kingbird		
Great Crested Flycatcher	M	M
Eastern Phoebe	M	M
Yellow-bellied Flycatcher	M.F.	
Acadian Flycatcher		
Willow Flycatcher	breeds	breeds
Alder Flycatcher		
Least Flycatcher	M	M
Eastern Wood Pewee	M	M

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Name of Species	Locality		
	Squantum Point	Neponset River Marshes	Status
Olive-sided Flycatcher			
Horned Lark	M	M	
Tree Swallow	M	breeds	
Bank Swallow	M	M	
Rough-Winged Swallow	M	M	
Barn Swallow	breeds	breeds	
Cliff Swallow	M	M	
Purple Martin		M	
Blue Jay	P.R.	P.R.	
Common Crow	P.R.	P.R.	
Fish Crow	M	M	
Black-capped Chickadee	P.R.	P.R.	
Boreal Chickadee			
Tufted Titmouse	P.R.	P.R.	
White-breasted Nuthatch	P.R.	P.R.	
Red-breasted Nuthatch	M	M	
Brown Creeper	M	M	
House Wren	breeds	breeds	
Winter Wren	M	M	
Carolina Wren	P.R.	P.R.	
Marsh Wren		breeds	
Sedge Wren		M	
Mockingbird	P.R.	P.R.	
Gray Catbird	breeds	breeds	
Brown Thrasher	breeds	M	
American Robin	M	M	
Wood Thrush	M	M	
Hermit Thrush	M	M	
Swainson's Thrush	M	M	
Gray-cheeked Thrush	M.F.		
Veery	M	M	
Eastern Bluebird			

Name of Species	Locality		
	Squantum Point	Neponset River Marshes	Status
Blue-gray Gnatcatcher	M	M	
Golden-crowned Kinglet	M	M	
Ruby-crowned Kinglet	M	M	
Water Pipit	M	M	
Cedar Waxwing	M	M	
Northern Shrike	M	M	
Loggerhead Shrike	M.F.	V	E
Starling	P.R.	P.R.	
White-eyed Vireo			
Yellow-throated Vireo		M	
Solitary Vireo	M	M	
Red-eyed Vireo	M	M	
Philadelphia Vireo		M	
Warbling Vireo	M	M	
Black-and-white Warbler	M	M	
Worm-eating Warbler			
Golden-winged Warbler			
Blue-winged Warbler	M.F.	M	
Tennessee Warbler	M.F.		
Orange-crowned Warbler	M	M	
Nashville Warbler	M	M	
Northern Parula	M	M	T
Yellow Warbler	P.R.	breeds	
Magnolia Warbler	M	M	
Cape May Warbler	M.F.	M	
Black-throated Blue Warbler	M	M	
Yellow-rumped Warbler	M	M	
Black-throated Green Warbler	M	M	
Blackburnian Warbler	M.F.	M	
Chestnut-sided Warbler	M	M	
Bay-breasted Warbler	M.F.	M	

KEY M = Migrants; V = Vagrant; F = Formerly more common; P.R. = Permanent resident; breeds = Nesting bird. **Status** E = Endangered; T = Threatened; SC = Special Concern

Name of Species	Locality		
	Squantum Point	Neponset River Marshes	Status
Blackpoll Warbler	M.F.	M	SC
Pine Warbler	M.F.		
Prairie Warbler	M.F.	M	
Palm Warbler	M	M	
Ovenbird	M	M	
Northern Waterthrush	M	M	
Louisiana Waterthrush			
Connecticut Warbler		M	
Mourning Warbler	M.F.	M	SC
Common Yellowthroat	P.R.	breeds	
Yellow-breasted Chat		M	
Hooded Warbler			
Wilson's Warbler	M	M	
Canada Warbler	M.F.	M	
American Redstart	M	M	
House Sparrow	P.R.	P.R.	
Bobolink	M	M	
Eastern Meadowlark	M.F.	M	
Redwinged Blackbird	P.R.	breeds	
Orchard Oriole	M.F.		
Northern Oriole	P.R.	breeds	
Rusty Blackbird	M	M	
Common Grackle	M	M	
Brown-headed Cowbird	M	M	
Blue Grosbeak		M	
Scarlet Tanager	M.F.	M	
Cardinal	P.R.	M	
Rose-breasted Grosbeak	M	M	
Indigo Bunting	M	breeds	
Dickcissel	V	M	
Evening Grosbeak		M(V)	
Purple Finch	V	V	

Name of Species	Locality		
	Squantum Point	Neponset River Marshes	Status
House Finch	P.R.	P.R.	
Pine Grosbeak			
Common Redpoll	M	M	
Pine Siskin		V	
American Goldfinch	P.R.	P.R.	
Red Crossbill			
White-winged Crossbill			
Rufous-sided Towhee	M	M	
Savannah Sparrow	M	M	
Grasshopper Sparrow		M	
Sharp-tailed Sparrow	breeds	breeds	
Seaside Sparrow	M	V	
Vesper Sparrow		M	
Lark Sparrow		M	
Dark-eyed Junco	M	M	
Tree Sparrow	M	M	
Chipping Sparrow	M	M	
Field sparrow	M	M	
White-crowned Sparrow	M	M	
White-throated Sparrow	M	M	
Fox Sparrow	M	M	
Lincoln's Sparrow	M	M	
Swamp Sparrow	M	breeds	
Song Sparrow	breeds	breeds	
Lapland Longspur		V	
Snow Bunting	M	M	
Henslow's Sparrow	M.F.		
Clay-colored Sparrow		M	
Total Number	231	223	

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Addenda

- A. Action Plan of the Friends of the Estuary Subwatershed Group
- B. MDC Master Plan for the Lower Neponset River

Note: The Resource Management Plan (RMP) for the Neponset River Estuary ACEC refers to these two plans, and the implementation of important aspects of the RMP depends on the implementation of these plans. The Action Plan, including a detailed shoreline survey of the Estuary, is incorporated into the RMP as an addendum. To obtain a copy, call the Neponset River Watershed Association at (617)575-0354. The MDC plan, scheduled to be completed after the completion of this RMP, is intended to be incorporated in the RMP as an addendum after the completed MDC plan is reviewed and approved by the Secretary of EOEA. To obtain a copy, call the MDC at (617)727-9693 ext. 264.

Appendix D: PRELIMINARY BPDA CHECKLISTS

Climate Change Preparedness and Resiliency Checklist for New Construction

In November 2013, in conformance with the Mayor's 2011 Climate Action Leadership Committee's recommendations, the Boston Redevelopment Authority adopted policy for all development projects subject to Boston Zoning Article 80 Small and Large Project Review, including all Institutional Master Plan modifications and updates, are to complete the following checklist and provide any necessary responses regarding project resiliency, preparedness, and to mitigate any identified adverse impacts that might arise under future climate conditions.

For more information about the City of Boston's climate policies and practices, and the 2011 update of the climate action plan, *A Climate of Progress*, please see the City's climate action web pages at <http://www.cityofboston.gov/climate>

In advance we thank you for your time and assistance in advancing best practices in Boston.

Climate Change Analysis and Information Sources:

1. Northeast Climate Impacts Assessment (www.climatechoices.org/ne/)
2. USGCRP 2009 (<http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts/>)
3. Army Corps of Engineers guidance on sea level rise (<http://planning.usace.army.mil/toolbox/library/ECs/EC11652212Nov2011.pdf>)
4. Proceeding of the National Academy of Science, "Global sea level rise linked to global temperature", Vermeer and Rahmstorf, 2009 (<http://www.pnas.org/content/early/2009/12/04/0907765106.full.pdf>)
5. "Hotspot of accelerated sea-level rise on the Atlantic coast of North America", Asbury H. Sallenger Jr*, Kara S. Doran and Peter A. Howd, 2012 ([http://www.bostonredevelopmentauthority.org/planning/Hotspot of Accelerated Sea-level Rise 2012.pdf](http://www.bostonredevelopmentauthority.org/planning/Hotspot%20of%20Accelerated%20Sea-level%20Rise%202012.pdf))
6. "Building Resilience in Boston": Best Practices for Climate Change Adaptation and Resilience for Existing Buildings, Linnean Solutions, The Built Environment Coalition, The Resilient Design Institute, 2103 ([http://www.greenribboncommission.org/downloads/Building Resilience in Boston SML.pdf](http://www.greenribboncommission.org/downloads/Building_Resilience_in_Boston_SML.pdf))

Checklist

Please respond to all of the checklist questions to the fullest extent possible. For projects that respond "Yes" to any of the D.1 – Sea-Level Rise and Storms, Location Description and Classification questions, please respond to all of the remaining Section D questions.

Checklist responses are due at the time of initial project filing or Notice of Project Change and final filings just prior seeking Final BRA Approval. A PDF of your response to the Checklist should be submitted to the Boston Redevelopment Authority via your project manager.

Please Note: When initiating a new project, please visit the BRA web site for the most current [Climate Change Preparedness & Resiliency Checklist](#).

Climate Change Resiliency and Preparedness Checklist

A.1 - Project Information

Project Name:	Neponset Wharf
Project Address Primary:	24 Ericsson Street, Boston, MA 02127
Project Address Additional:	N/A
Project Contact (name / Title / Company / email / phone):	Ryan Sillery / Manager / CPC Ericsson Street LLC RSillery@citypointcapital.com / (857) 496 - 0425

A.2 - Team Description

Owner / Developer:	CPC Ericsson Street LLC
Architect:	RODE
Engineer (building systems):	Cosentini
Sustainability / LEED:	Soden Sustainability Consulting /Thorton Tomasetti
Permitting:	VHB/MLF Consulting
Construction Management:	TBD
Climate Change Expert:	Soden Sustainability Consulting/VHB/Cosentini/Thorton Tomasetti

A.3 - Project Permitting and Phase

At what phase is the project – most recent completed submission at the time of this response?

PNF / Expanded PNF Submission	Draft / Final Project Impact Report Submission	BRA Board Approved	Notice of Project Change
Planned Development Area	BRA Final Design Approved	Under Construction	Construction just completed:

A.4 - Building Classification and Description

List the principal Building Uses:	Residential, Boat Storage, Restaurant/Café, Hotel, Amenity
List the First Floor Uses:	Parking, Lobby, Boat Storage, Public Amenity

What is the Construction Type – select most appropriate type? *TBD*

Wood Frame	Masonry	Steel Frame	Concrete
------------	---------	-------------	----------

Describe the building?

Site Area:	3.4 acres (land area)	Building Area:	307,000 GSF
Building Height:	Up to 86 Ft.	Number of Stories:	Up to 8
First Floor Elevation (reference Boston City Base):	21 BCB (AE Zone) 25 BCB (V Zone)	Are there below grade spaces/levels, if yes how many:	TBD

A.5 - Green Building

Which LEED Rating System(s) and version has or will your project use (by area for multiple rating systems)?

Select by Primary Use:	New Construction (version 4)	Core & Shell	Healthcare	Schools
	Retail	Homes Midrise	Homes	Other
Select LEED Outcome:	Certified	Silver	Gold	Platinum

Will the project be USGBC Registered and / or USGBC Certified?

Registered:	TBD	Certified:	TBD
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A.6 - Building Energy

What are the base and peak operating energy loads for the building?

(Note – Heating and cooling loads were derived from the energy model and do not represent connected utility loads)

Electric:	800 kW	Heating:	6500 MBH
What is the planned building Energy Use Intensity:	50 KBTU/SF	Cooling:	750 TON

What are the peak energy demands of your critical systems in the event of a service interruption?

Electric:	450 kW	Heating:	6500 MBH
		Cooling:	0 TON

What is nature and source of your back-up / emergency generators?

Electrical Generation:	450 kw	Fuel Source:	Diesel
System Type and Number of Units:	Combustion Engine	Gas Turbine	Combine Heat and Power
			TBD (Units)

B - Extreme Weather and Heat Events

Climate change will result in more extreme weather events including higher year round average temperatures, higher peak temperatures, and more periods of extended peak temperatures. The section explores how a project responds to higher temperatures and heat waves.

B.1 – Analysis

What is the full expected life of the project?

Select most appropriate:	10 Years	25 Years	50 Years	75 Years
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What is the full expected operational life of key building systems (e.g. heating, cooling, ventilation)?

Select most appropriate:	10 Years	25 Years	50 Years	75 Years
--------------------------	----------	-----------------	----------	----------

What time span of future Climate Conditions was considered?

Select most appropriate:	10 Years	25 Years	50 Years	75 Years
--------------------------	----------	----------	-----------------	----------

Analysis Conditions - What range of temperatures will be used for project planning – Low/High?

7° F Deg.

What Extreme Heat Event characteristics will be used for project planning – Peak High, Duration, and Frequency?

87° F Deg.	Multiple Days	Events / yr.
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What Drought characteristics will be used for project planning – Duration and Frequency?

Days	/ yr.
-------------	--------------

Drought tolerance will be addressed through a combination of native/adaptive plantings that require less water and maintenance, and a water-efficient irrigation system.

What Extreme Rain Event characteristics will be used for project planning – Seasonal Rain Fall, Peak Rain Fall, and Frequency of Events per year?

44 inches / yr.	6.19 Inches	127 / yr.
------------------------	--------------------	------------------

What Extreme Wind Storm Event characteristics will be used for project planning – Peak Wind Speed, Duration of Storm Event, and Frequency of Events per year?

There is still significant uncertainty with respect to how wind patterns and intensities will change with respect to future climatological conditions. Some models predict that a warming would lessen the difference in air mass temperatures, others show a decrease in atmospheric wind shear aspects – both of which would potential lead to less intense wind events. Other models predict an increase in wind intensities based on the increase of energy in the atmosphere. El Nino/La Nina add another layer of complexity to the projections. Based on this uncertainty, current wind design criteria are adopted for the Project.

B.2 - Mitigation Strategies:

What will be the overall energy performance, based on use, of the project and how will performance be determined?

Building energy use below code:

15%

How is performance determined:

Whole Building Energy Model eQuest 3.65
--

What specific measures will the project employ to reduce building energy consumption?

Select all appropriate:

High performance building envelope	High performance lighting & controls	Building daylighting	EnergyStar equip. / appliances
High performance HVAC equipment	Energy recovery ventilation	No active cooling	No active heating

Describe any added measures:

Garage Ventilation Control

What are the insulation (R) values for building envelop elements?

Roof:	R = 35	Walls / Curtain Wall Assembly:	R = 20
Foundation:	R = NA	Basement / Slab:	R = 30
Windows:	R = 2.8 / U = 0.36	Doors:	R = / U = 0.5

What specific measures will the project employ to reduce building energy demands on the utilities and infrastructure?

On-site clean energy / CHP system(s) TBD	Building-wide power dimming	Thermal energy storage systems	Ground source heat pump
On-site Solar PV	On-site Solar	Wind power	None

	Thermal		
Describe any added measures:	Small scale CHP to be evaluated		
Will the project employ Distributed Energy / Smart Grid Infrastructure and /or Systems? - No			
Select all appropriate:	Connected to local distributed electrical	Building will be Smart Grid ready	Connected to distributed steam, hot, chilled water
			Distributed thermal energy ready (can be retrofitted)
Will the building remain operable without utility power for an extended period?			
	Yes / No	If yes, for how long:	N/A Days
If Yes, is building "Islandable?"	No. Emergency power is for building evacuation only.		
If Yes, describe strategies:			
Describe any non-mechanical strategies that will support building functionality and use during an extended interruption(s) of utility services and infrastructure:			
Select all appropriate:	Solar oriented – longer south walls	Prevailing winds oriented	External shading devices
	Tuned glazing,		
	Building cool zones	Operable windows	Natural ventilation
			Building shading
	Potable water for drinking / food preparation	Potable water for sinks / sanitary systems	Waste water storage capacity
			High Performance Building Envelope
Describe any added measures:			
What measures will the project employ to reduce urban heat-island effect?			
Select all appropriate:	High reflective paving materials	Shade trees & shrubs	High reflective roof materials
			Vegetated roofs
Describe other strategies:			
What measures will the project employ to accommodate rain events and more rain fall?			
Select all appropriate:	On-site retention systems & ponds	Infiltration galleries & areas	vegetated water capture systems
			Vegetated roofs
Describe other strategies:	Over 50% site area open green space		
What measures will the project employ to accommodate extreme storm events and high winds?			
Select all appropriate:	Hardened building structure & elements	Buried utilities & hardened infrastructure	Hazard removal & protective landscapes
			Soft & permeable surfaces (water infiltration)
Describe other strategies:	Rising of critical building elements above projected 2070 base flood elevations.		

C - Sea-Level Rise and Storms

Rising Sea-Levels and more frequent Extreme Storms increase the probability of coastal and river flooding and enlarging the extent of the 100 Year Flood Plain. This section explores if a project is or might be subject to Sea-Level Rise and Storm impacts.

C.1 - Location Description and Classification:

Do you believe the building to be susceptible to flooding now or during the full expected life of the building?

Yes / No

Describe site conditions?

Site Elevation – Low/High Points:

14 – 18.8 ft BCB

Building Proximity to Water:

0 Feet

Is the site or building located in any of the following?

Coastal Zone:

Yes / No

Velocity Zone:

Yes / No

Flood Zone:

Yes / No

Area Prone to Flooding:

Yes / No

Will the 2013 Preliminary FEMA Flood Insurance Rate Maps or future floodplain delineation updates due to Climate Change result in a change of the classification of the site or building location?

2013 FEMA
Prelim. FIRMs:

Yes / No

Future floodplain delineation updates:

Yes / No

What is the project or building proximity to nearest Coastal, Velocity or Flood Zone or Area Prone to Flooding?

0 Ft

If you answered YES to any of the above Location Description and Classification questions, please complete the following questions. Otherwise you have completed the questionnaire; thank you!

C - Sea-Level Rise and Storms

This section explores how a project responds to Sea-Level Rise and / or increase in storm frequency or severity.

C.2 – Analysis

How were impacts from higher sea levels and more frequent and extreme storm events analyzed:

Sea Level Rise:

3 Ft.

Frequency of storms:

Not Analyzed

C.3 - Building Flood Proofing

Describe any strategies to limit storm and flood damage and to maintain functionality during an extended periods of disruption.

What will be the Building Flood Proof Elevation and First Floor Elevation:

Flood Proof Elevation:

21 BCB (AE Zone)
25 BCB (V Zone)

First Floor Elevation:

TBD

Will the project employ temporary measures to prevent building flooding (e.g. barricades, flood gates):

Yes / No	If Yes, to what elevation	TBD
If Yes, describe: Specific flood controls have not yet been determined		

What measures will be taken to ensure the integrity of critical building systems during a flood or severe storm event:

Systems located above 1st Floor.	Water tight utility conduits	Waste water back flow prevention	Storm water back flow prevention
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Were the differing effects of fresh water and salt water flooding considered:

Yes / No

Will the project site / building(s) be accessible during periods of inundation or limited access to transportation:

Yes / No	If yes, to what height above 100 Year Floodplain:	Boston City Base Elev. (Ft.)
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Based on the current 100 year flood elevation, portions of the Project Site along the waterfront would not be accessible during the 100 year flood event

Will the project employ hard and / or soft landscape elements as velocity barriers to reduce wind or wave impacts?

Yes / No
If Yes, describe: Specific measures are currently under consideration

Will the building remain occupiable without utility power during an extended period of inundation:

TBD	If Yes, for how long:	TBD
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Describe any additional strategies to addressing sea level rise and or sever storm impacts:

Critical mechanical and life safety/standby emergency building systems outside of vulnerable elevations.

C.4 - Building Resilience and Adaptability

Describe any strategies that would support rapid recovery after a weather event and accommodate future building changes that respond to climate change:

Will the building be able to withstand severe storm impacts and endure temporary inundation?

Select appropriate:	Yes / No	Hardened / Resilient Ground Floor Construction	Temporary shutters and or barricades	Resilient site design, materials and construction
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Can the site and building be reasonably modified to increase Building Flood Proof Elevation?

Select appropriate:	Yes / No	Surrounding site elevation can be raised	Building ground floor can be raised	Construction been engineered
Describe additional strategies:	Specific measures are currently under consideration			

Has the building been planned and designed to accommodate future resiliency enhancements?

Select appropriate:	Yes / No	Solar PV	Solar Thermal	Clean Energy / CHP System(s)
		Potable water storage	Wastewater storage	Back up energy systems & fuel
Describe any specific or additional strategies:	Specific measures are currently under consideration			

Thank you for completing the Boston Climate Change Resilience and Preparedness Checklist!

For questions or comments about this checklist or Climate Change Resiliency and Preparedness best practices, please contact: John.Dalzell.BRA@cityofboston.gov

Accessibility Checklist

(to be added to the BRA Development Review Guidelines)

In 2009, a nine-member Advisory Board was appointed to the Commission for Persons with Disabilities in an effort to reduce architectural, procedural, attitudinal, and communication barriers affecting persons with disabilities in the City of Boston. These efforts were instituted to work toward creating universal access in the built environment.

In line with these priorities, the Accessibility Checklist aims to support the inclusion of people with disabilities. In order to complete the Checklist, you must provide specific detail, including descriptions, diagrams and data, of the universal access elements that will ensure all individuals have an equal experience that includes full participation in the built environment throughout the proposed buildings and open space.

In conformance with this directive, all development projects subject to Boston Zoning Article 80 Small and Large Project Review, including all Institutional Master Plan modifications and updates, are to complete the following checklist and provide any necessary responses regarding the following:

- improvements for pedestrian and vehicular circulation and access;
- encourage new buildings and public spaces to be designed to enhance and preserve Boston's system of parks, squares, walkways, and active shopping streets;
- ensure that persons with disabilities have full access to buildings open to the public;
- afford such persons the educational, employment, and recreational opportunities available to all citizens; and
- preserve and increase the supply of living space accessible to persons with disabilities.

We would like to thank you in advance for your time and effort in advancing best practices and progressive approaches to expand accessibility throughout Boston's built environment.

Accessibility Analysis Information Sources:

1. Americans with Disabilities Act – 2010 ADA Standards for Accessible Design
 - a. http://www.ada.gov/2010ADASTandards_index.htm
2. Massachusetts Architectural Access Board 521 CMR
 - a. <http://www.mass.gov/eopss/consumer-prot-and-bus-lic/license-type/aab/aab-rules-and-regulations-pdf.html>
3. Boston Complete Street Guidelines
 - a. <http://bostoncompletestreets.org/>
4. City of Boston Mayors Commission for Persons with Disabilities Advisory Board
 - a. <http://www.cityofboston.gov/Disability>
5. City of Boston – Public Works Sidewalk Reconstruction Policy
 - a. http://www.cityofboston.gov/images_documents/sidewalk%20policy%200114_tcm3-41668.pdf
6. Massachusetts Office On Disability Accessible Parking Requirements
 - a. www.mass.gov/anf/docs/mod/hp-parking-regulations-mod.doc
7. MBTA Fixed Route Accessible Transit Stations
 - a. http://www.mbta.com/about_the_mbta/accessibility/

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Project Information

Project Name:	Neponset Wharf
Project Address Primary:	24 Ericsson Street, Boston, MA 02127
Project Address Additional:	N/A
Project Contact (name / Title / Company / email / phone):	Ryan Sillery / Manager / CPC Ericsson Street LLC RSillery@citypointcapital.com / (857) 496 - 0425

Team Description

Owner / Developer:	CPC Ericsson Street LLC
Architect:	RODE
Engineer (building systems):	Cosentini
Sustainability / LEED:	Soden Sustainability Consulting/Thorton Tomasetti
Permitting:	VHB/MLF Consulting
Construction Management:	TBD

Project Permitting and Phase

At what phase is the project – at time of this questionnaire?

PNF / Expanded PNF Submitted	Draft / Final Project Impact Report Submitted	BRA Board Approved
BRA Design Approved	Under Construction	Construction just completed:

Building Classification and Description

What are the principal Building Uses - select all appropriate uses?

Residential – One to Three Unit	Residential - Multi-unit, Four +	Institutional	Education
Commercial	Office	Retail	Assembly
Laboratory /	Manufacturing /	Mercantile	Storage, Utility

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Medical	Industrial		and Other
First Floor Uses (List)			
Parking, Lobby, Boat Storage, Public Amenity			

What is the Construction Type – select most appropriate type? *(To Be Confirmed)*

Wood Frame	Masonry	Steel Frame	Concrete
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Describe the building?

Site Area:	3.4 acres (land area)	Building Area:	307,000 SF
Building Height:	86 Ft.	Number of Stories:	Up to 8
First Floor Elevation:	21 BCB (AE Zone) 25 BCB (V Zone)	Are there below grade spaces:	TBD

Assessment of Existing Infrastructure for Accessibility:

This section explores the proximity to accessible transit lines and proximate institutions such as, but not limited to hospitals, elderly and disabled housing, and general neighborhood information. The proponent should identify how the area surrounding the development is accessible for people with mobility impairments and should analyze the existing condition of the accessible routes through sidewalk and pedestrian ramp reports.

Provide a description of the development neighborhood and identifying characteristics.

The Project is located in the the gateway to the South Boston neighborhood between the marine industrial uses of the South Boston Designated Port Area and Raymond L. Flynn Marine Industrial Park to the north and east, and residential areas to the south. The Project is bounded by East 1st Street to the south and Summer Street to the west. The Project Site has served industrial power generation uses for over a century.

List the surrounding ADA compliant MBTA transit lines and the proximity to the development site: Commuter rail, subway, bus, etc.

There are no MBTA Transit lines in the immediate vicinity of the Project Site. The nearest MBTA bus stop is Route 210 at Neponset Circle which is 0.5 miles from the Project Site.

List the surrounding institutions: hospitals, public housing and elderly and disabled housing developments, educational facilities, etc.

The Project is located in proximity to the following institutions:

- UMASS Boston (2.5 miles)
- Neighborhood House Charter School (1.3 miles)
- Richard J Murphy Public School (1.2 miles)
- Thomas J Kenny Public School (1.5 miles)
- Housing Opportunities Unlimited (.6 miles)
- Carney Hospital (2.2 miles)
- Seven Hills Foundation (.3 miles)

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Is the proposed development on a priority accessible route to a key public use facility? List the surrounding: government buildings, libraries, community centers and recreational facilities and other related facilities.

The following public use facilities are within proximity of the Project Site:

- Boston Bowl (.9 miles)
- Devine Rink/Garvey Playground (1.4 miles)
- Super Stop & Shop (1.1 miles)
- Lambert's Rainbow Fruit (2.0 miles)
- Tenean Beach (.5 miles)
- Neponset River Reservation (2.2 miles)
- Pope John Paul II Park (2.0 miles)
- Dorchester Shores Reservation Victory Island (1.2 miles)
- Shaffer Park (.25 miles)
- Adams St Branch Boston Public Library (1.8 miles)
- Leahy Holloran Community Center (1.2 miles)
- Boston Housing Authority (1.8 miles)
- Boston Police Superior Officers Federation (.9 miles)

Surrounding Site Conditions – Existing:

This section identifies the current condition of the sidewalks and pedestrian ramps around the development site.

Are there sidewalks and pedestrian ramps existing at the development site?

No

If yes above, list the existing sidewalk and pedestrian ramp materials and physical condition at the development site.

Are the sidewalks and pedestrian ramps existing-to-remain? **If yes**, have the sidewalks and pedestrian ramps been verified as compliant? **If yes**, please provide surveyors report.

Is the development site within a historic district? **If yes**, please identify.

Surrounding Site Conditions – Proposed

This section identifies the proposed condition of the walkways and pedestrian ramps in and around the development site. The width of the sidewalk contributes to the degree of comfort and enjoyment of walking along a street. Narrow sidewalks do not support lively pedestrian activity, and may create dangerous conditions that force people to walk in the street. Typically, a five foot wide Pedestrian Zone supports two people walking side by side or two wheelchairs passing each other. An eight foot wide Pedestrian Zone allows two pairs of

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people to comfortably pass each other, and a ten foot or wider Pedestrian Zone can support high volumes of pedestrians.

Are the proposed sidewalks consistent with the Boston Complete Street Guidelines? See: www.bostoncompletestreets.org

If yes above, choose which Street Type was applied: Downtown Commercial, Downtown Mixed-use, Neighborhood Main, Connector, Residential, Industrial, Shared Street, Parkway, Boulevard.

What is the total width of the proposed sidewalk? List the widths of the proposed zones: Frontage, Pedestrian and Furnishing Zone.

List the proposed materials for each Zone. Will the proposed materials be on private property or will the proposed materials be on the City of Boston pedestrian right-of-way?

If the pedestrian right-of-way is on private property, will the proponent seek a pedestrian easement with the City of Boston Public Improvement Commission?

Will sidewalk cafes or other furnishings be programmed for the pedestrian right-of-way?

If yes above, what are the proposed dimensions of the sidewalk café or furnishings and what will the right-of-way clearance be?

Yes. Proposed sidewalks along and internal to the Site will be constructed consistent with Boston Complete Streets Guidelines.

Shared Street

Varies

Material selection is to be determined.

Undetermined at this time.

Undetermined at this time.

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Proposed Accessible Parking:

See Massachusetts Architectural Access Board Rules and Regulations 521 CMR Section 23.00 regarding accessible parking requirement counts and the Massachusetts Office of Disability Handicap Parking Regulations.

What is the total number of parking spaces provided at the development site parking lot or garage?

The Project will provide approximately 185 structured parking spaces

What is the total number of accessible spaces provided at the development site?

The Project will comply with City requirements.

Will any on street accessible parking spaces be required? **If yes**, has the proponent contacted the Commission for Persons with Disabilities and City of Boston Transportation Department regarding this need?

The provision of street parking is yet to be determined. The Proponents have not yet contacted the CPD or BTD regarding this need, but will do so when details of on street parking are prepared.

Where is accessible visitor parking located?

Accessible visitor parking locations have not yet been determined.

Has a drop-off area been identified? **If yes**, will it be accessible?

Yes, each building and the marina will have an accessible drop-off zone.

Include a diagram of the accessible routes to and from the accessible parking lot/garage and drop-off areas to the development entry locations. Please include route distances.

All pedestrian pathways will be accessible, and all buildings will feature accessible entrances.

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Circulation and Accessible Routes:

The primary objective in designing smooth and continuous paths of travel is to accommodate persons of all abilities that allow for universal access to entryways, common spaces and the visit-ability* of neighbors.

**Visit-ability – Neighbors ability to access and visit with neighbors without architectural barrier limitations*

Provide a diagram of the accessible route connections through the site.

Refer to Figures associated with Chapter 2, *Urban Design*. All pedestrian pathways will be accessible, and all buildings will feature accessible entrances.

Describe accessibility at each entryway: Flush Condition, Stairs, Ramp Elevator.

Entries are anticipated to have a combination of flush conditions, stairs, and accessible ramps

Are the accessible entrance and the standard entrance integrated?

Undetermined at this time.

If no above, what is the reason?

Will there be a roof deck or outdoor courtyard space? **If yes**, include diagram of the accessible route.

Undetermined at this time.

Has an accessible routes way-finding and signage package been developed? **If yes**, please describe.

No. Such signage will be developed further into the design process.

Accessible Units: (If applicable)

In order to facilitate access to housing opportunities this section addresses the number of accessible units that are proposed for the development site that remove barriers to housing choice.

What is the total number of proposed units for the development?

150 residential units

How many units are for sale; how many are for rent? What is the market value vs. affordable breakdown?

Undetermined at this time.

How many accessible units are being proposed?

The number of accessible units at the Project will be determined as the Project advances, however, as required by 521 CMR, it is anticipated that 5% will be designed to be accessible.

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Please provide plan and diagram of the accessible units.

Details will be determined as the designed advances

How many accessible units will also be affordable? If none, please describe reason.

The number of affordable accessible residential units will be determined as the Project design advances.

Do standard units have architectural barriers that would prevent entry or use of common space for persons with mobility impairments? Example: stairs at entry or step to balcony. **If yes**, please provide reason.

The interior building design is early in its development, however, it is not anticipated that either residential units or common spaces will have any architectural barriers.

Has the proponent reviewed or presented the proposed plan to the City of Boston Mayor's Commission for Persons with Disabilities Advisory Board?

The Project has not yet been presented to the City of Boston Mayor's Commission for Persons with Disabilities Advisory board. The Project Team will meet with the Board as the Project design advances and is fully committed to delivering a Project that is ADA compliant.

Did the Advisory Board vote to support this project? **If no**, what recommendations did the Advisory Board give to make this project more accessible?

The Project has not yet been reviewed by the Advisory Board.

Thank you for completing the Accessibility Checklist!

For questions or comments about this checklist or accessibility practices, please contact:

patricia.mendez@boston.gov | Mayors Commission for Persons with Disabilities