

## **Section 7.1**

# Analysis of Needs: Resource Protection

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## Section 7.1.1.1:

**GREENWAYS AND BIKEWAYS****Overview****Restoring Health, Maintaining Wellness**

The rationale for urban parks posed by Frederick Law Olmsted, Sr. in the late 19<sup>th</sup> century was the need to restore health. This need was to be satisfied through a separation from both the hustle and bustle and confined spatial experiences of urban life. Olmsted sought to provide opportunities for the quiet contemplation of pastoral scenery as the preferred means of retreat from urban life.

By the beginning of the 20<sup>th</sup> century, others felt that, due to the limited land resources available within cities, more active recreation in smaller spaces could restore the health of urban dwellers. Joseph Lee pioneered and championed this concept when, here in Boston, he developed the first children's play lot in the United States (at Charlesbank, located in what is now known as the Esplanade). Play and physical activities even within the confines of small courts and play lots were felt to be as necessary for health as the quiet enjoyment of the large-scale pastoral landscape parks of the Olmsted model. The recreation model based on playlots would involve the purchase and maintenance of many smaller but more scattered spaces that would be accessible to residents on a day-to-day basis. These smaller spaces would also be more attractive fiscally, given the limitations of municipal budgets.

Both the Olmsted parks and the active playlot model of smaller interspersed play spaces endure because they do address our health and recreation needs. However, just as advances in public health led to these different types of parks, so too the more recent focus on greenways, trails, and bikeways in the urban environment has also been driven in part by health considerations. Certainly the activities fostered by these linear facilities are fun and worthy of being addressed for that reason alone. But one consensus among public health and medical experts that has developed during the late 20<sup>th</sup> century has been that aerobic activity can provide significant overall health benefits, including the prevention of disease and the improvement in general mood and attitude.<sup>1</sup>

The general preference in this country for outdoor aerobic activity has been to favor pathways that also involve a contact with scenic, naturalistic surroundings.

**Protecting the Environment**

Certain ecological assets, particularly oceanfronts, rivers, and streams, lend themselves to support linear recreational facilities. Environmentalists see public access to such resources via linear recreational facilities as a means of protecting the resource; first, by bringing "eyes" out to it so that threats and harms can be identified and then addressed; second, by creating a constituency to advocate for long-term protection and improvement of these facilities.

**Adaptive Re-Use of Abandoned Rail Lines**

Another factor has been the trend toward abandonment of underused rail corridors. The Rails-to-Trails Conservancy, a national organization, supports the conversion of such abandoned rail lines into linear recreational facilities. The most prominent example here in eastern Massachusetts is the Minuteman Bikeway that extends from Cambridge to Lexington and Bedford. It is well used for commuting and recreation and is often crowded on weekends. Many businesses along the bikeway try to capture this market, posting signs to attract customers from the trail. Before the bikeway was built, these businesses had turned their backs to this abandoned industrial corridor.

**Presidential Commissions and Congressional Acts: the Policy Spur**

From a policy point of view, the current emphasis on linear recreational facilities emerged in large part in response to the 1986 Report of the President's Commission on Americans Outdoors, which called for a focus on greenways. This was a response to two phenomena. One was the rising value of land. The purchase of large tracts for use as parks was seen as becoming increasingly costly and beyond the reach of many government agencies. The other was the concern about close-to-home recreation. Providing recreation experiences like hiking and bicycling in a natural, scenic setting close to home, while limiting land costs, led to a focus on the linear nature of these activities. Could such activities be accommodated in long linear park systems? The land costs could be reduced while careful design would either mask out unwanted visual intrusions or celebrate the existing and prior land uses adjacent to these facilities.

In urban areas, these linear facilities could be used to link existing parklands and natural areas. This open space linkage could help generate a feeling of connectedness and continuity ("connectivity") that would, like an Olmsted park, provide relief from the confined, maze-like spatial experience of city streets typical of the urban public realm.

The 1986 report spurred a greenway movement that has continued unabated. Grassroots groups and professionals in parks and ecology have worked to create many such linear facilities, identifying corridors based on either man-made elements such as abandoned rail lines or natural elements such as rivers. The momentum in the greenway movement advanced considerably with the passage by Congress of the Intermodal Surface Transportation Efficiency Act (ISTEA) in the early 1990s. This act changed the focus of federal surface transportation funding from solely highway- and arterial-oriented to a focus on coordinating different surface transportation modes. Bicycle and pedestrian facilities were to receive greater encouragement, especially through the Act's Transportation Enhancements Program. This program, continued in subsequent reauthorizations of the Act under new names, has provided grants to create "enhanced inter-modal surface transportation systems" enabling users to change from one mode to another or use different modes depending on trip purpose or timing. A major program category has been bicycle and pedestrian facilities, with

greenway projects, environmental groups interested in low-emission transportation, and bicycle advocacy groups targeting this funding resource.

### Changes in Climate and Urban Sensibility

The centuries-long accumulation of carbon dioxide in the atmosphere that has led to human-caused global warming is well-documented elsewhere, as is the growing awareness of it among the public. The phenomenon of a rising desirability in urban living is less well known. There was a time when middle class families led an exodus from the cities to the suburbs, leading to a significant decline in the fortune of many cities. Since at least the 1980s, however, a new movement has emerged of folks returning to the cities to pioneer a renaissance of residential and downtown neighborhoods. With the new century, and the rising awareness of global warming, there grew a new understanding that motor vehicles were major contributors to this worldwide environmental crisis. Cities, where many needs can be accessed without driving a car, came to be seen as not a defiler of nature, but one significant answer to this crisis. In the design of new communities, the New Urbanism movement arose expressing the need for walkability as a key determinant of successful community building. The bicycle became part of the toolbox urban advocates could use to help confront the global warming crisis on a day-to-day basis, to address congestion and the high cost of urban transportation, and to enjoy healthier lifestyles. Bicycle advocacy rose dramatically in the United States in the 21<sup>st</sup> century, especially in urban areas. Bike lanes, bike sharing programs, and the like became a notable addition to the menu of actions proposed or taken by progressive mayors throughout the country. This movement has a strong transportation focus, but it is complementary to the greenway movement previously discussed.

### Defining Terms

These linear facilities, i.e., greenways and bikeways, are often confused with one another. In this section of the plan, we will refer to them generally as “linear [recreation] facilities.” However, some sense of the differences between them should be conveyed, as these facilities have frequently become the subject of planning and management activities.

#### Greenway Corridors

Four types of resources can form the components of greenways: natural resource preservation areas; parks and other open spaces; cultural and historic resources; and corridors. Natural resource preservation areas are what greenways are meant to buffer and at the same time they are environments that, because of their scenic qualities, often attract users to greenways. The need to balance access and protection in these areas is an important function of greenway planning and management.

Parks and recreation areas are ideal candidates for inclusion in greenways. Other open spaces to consider are plazas and malls, estates and institutional campuses, and golf courses.

Cultural and historic resources are features of human origin, which have special meaning or help define the character of places along a greenway. Old mill buildings, landmark houses, and other historic structures, churches, burying grounds, town

commons, and museums are examples of such features. They can provide the special nodes along a greenway route that attract a diverse set of users and stewards for the greenway.

Greenways inherently must include the corridor component<sup>2</sup> and are generally off-road. Corridors can be natural, of human origin, or a mix of the two. These stretches of land, water, or both link the various resource areas spatially and can be made up of at least one of the other three greenway components. Rivers, streams, canals, coastlines, rights-of-way for railroads or utility lines, trails, paths, scenic roads, and even city sidewalks, arterials, and boulevards are examples of corridors. The spatial linkage is the corridor’s most important characteristic: According to the Massachusetts Department of Conservation and Recreation (DCR) “[b]y joining different resources together into an integrated network, each individual resource becomes part of a greater whole whose utility, accessibility, and environmental value are far greater than any of the separate pieces.”<sup>3</sup> Often, some significant portion of the greenway corridor will likely have a buffer to protect one or more of the resource components. Such buffering is typical for greenway corridors that include natural resource preservation areas. An example of institutionalized buffering is the Massachusetts Rivers Protection Act, which mandates a development setback (25 feet in Boston and other urban areas) from the water’s edge.

One commentator, Dr. Julius Fabos of the University of Massachusetts, has categorized three types of greenways: greenways based on ecologically significant corridors and natural systems, such as rivers, coastlines, and ridgelines; recreation-oriented greenways, based on trails, paths, or water routes to link recreation and scenic areas; and heritage and cultural-oriented greenways, based on historic and cultural resources and often created with a tourism motivation.<sup>4</sup> Yet “on the ground” these greenway categories often overlap as Dr. Fabos readily admits. In an older, highly urbanized state like Massachusetts, this overlap is almost inevitable and part of the attraction and excitement of our greenways.

An additional point to be mentioned pertains to the nature-based greenways. We typically think of “ways” as a travel route for humans. However, a nature-based greenway can be designed to enable wildlife species to travel/migrate or have sufficient space for its habitat needs. Through a greenway linkage, two separate natural resource preservation areas can better support certain species that could not be supported by each on their own. Such wildlife corridors may be designed with a travel way for humans to appreciate the natural resources there.

#### Bikeways

Bikeways are on-road travel ways for bicycling. The 2013 Boston Bike Network Plan proposes four types of bikeways<sup>5</sup>:

- Shared Road, such as the neighborway and shared street;
- Protected lane, such as one-way and two-way cycle tracks. (Cycle tracks differ from bike lanes in that they add a degree of separation from vehicular traffic. They are exclusive bicycle facilities separated from motor vehicle lanes and sidewalks by fixed objects such as parked cars, curbing, bollards, or flexposts.)
- Shared Lane, such as the bus/bike lane, advisory bike lane, priority shared lane, and marked shared lane; and
- Exclusive Lane, such as the bike lane, buffered bike lane, contraflow bike lane, and the climbing lane.



On-road/on-street bike lanes are portions of the roadway marked off by pavement striping. The bicycle travel lane may have markings on the pavement indicating designation for bicycle use, such as the international bicycling symbol. Signage may accompany bike lanes. Thanks to the Boston Bikes Program, bike lanes on major thoroughfares have been installed or are in the design stages throughout the city. Shared lanes (formerly known as sharrows) have pavement markings indicating bicycle travel on the vehicular travel lane when the street width does not allow a full bicycle lane to be installed. Shared lane markings are often installed to connect exclusive bicycle lane segments, and to remind motor vehicle drivers that bicycles have the same rights to use the vehicular right-of-way as the motor vehicle driver.

On-road/on-street bike routes known as Shared Roads are either paved shoulders (sometimes marked off by striping) or wide curb lanes (the traffic lane closest to the sidewalk curb whether or not there is a parking lane next to the curb). Signage usually accompanies bike routes, such as a sign with the international bicycling symbol and the words “Bike Route,” or a sign with the symbols for a car and a bicycle side-by-side with the words “Share the Road.” Recreational bike routes are typically used where traffic volumes permit or where required bike lane widths are not feasible.

### Greenway Planning Efforts

There have been efforts to plan for improved existing and new greenways in Boston and the surrounding metropolitan area. The actors have been both governmental and non-governmental organizations, and sometimes a mix of the two.

The state Department of Conservation and Recreation (DCR) has an existing plan for the Charles River Reservation from the Charles River Dam to the Watertown Dam. In 2013, it issued a Charles River Basin Pedestrian and Bicycle Connectivity Study for Pathways and Bridges to help update and advance the connectivity facet of the Reservation’s improvement. Its conceptual recommendations are seen as a first step as DCR and the state Department of Transportation (MA DOT) refine and finalize designs for improvements to paths and vehicular bridges in the Reservation system.

The MA DOT has a study underway to determine whether, where, and how to add ramps for the Massachusetts Turnpike (I-90 Extension) in Boston. Part of that study is the review of the need for the Bowker Overpass that connects Storrow Drive to Boylston Street and passes over the Turnpike itself, as well as Charlesgate. Charlesgate was the green connection between the Charles River Reservation and the Back Bay Fens park. Since the post-war period, the Overpass has overshadowed Charlesgate as a park, and the removal of the overpass and the restoration of Charlesgate as a park has been a goal of open space advocates and is a recommendation of the Emerald Necklace Parks Master Plan (updated 2001).

A group of greenway advocates, under the auspices of the Livable Streets Alliance, has gathered to look at a possible regional “green route” system. Called the Green Routes Coalition (GRC), it has garnered the financial support of the Trustees of Reservations and the Solomon Foundation, the technical support of the Metropolitan Area Planning Council and the Northeastern University civil engineering department, and the staffing of the Livable Street Alliance (LSA). A GRC charrette,

hosted by the LSA and the Boston Society of Architects Urban Design Committee, has taken place in mid-2014, as part of an effort called the Green Links Initiative, with juried awards for presentations by volunteer design teams of ideas for specific greenway segments in the Metropolitan Boston system, with all the award-winning ideas focused on Boston-sited projects.

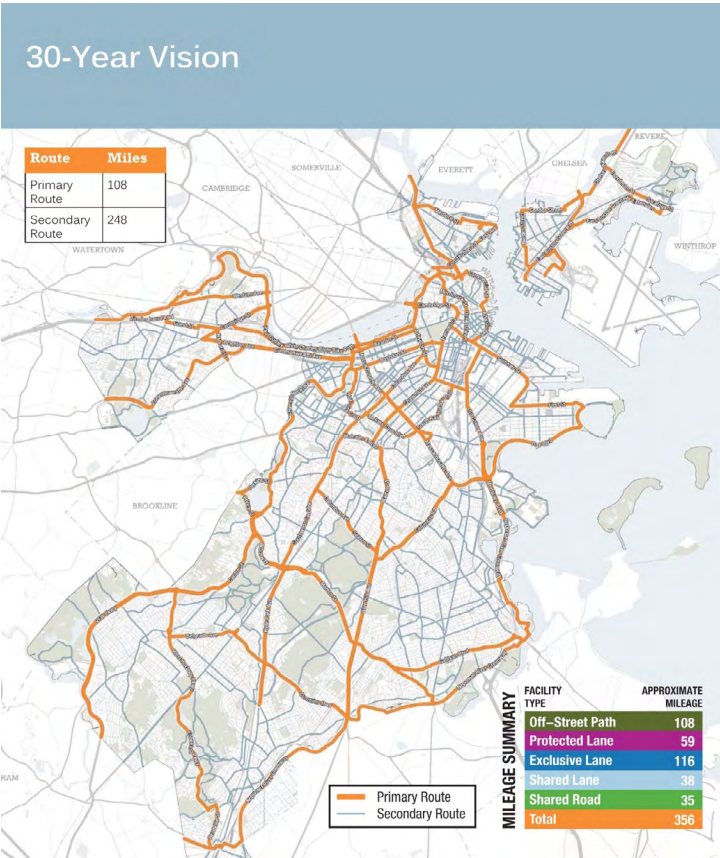


A planning study will begin soon by the Boston Transportation Department “to inventory existing greenways and off-road paths in the city, and identify key missing links that would be needed to create a truly connected network.” This “Green Links” study would complement the GRC efforts by focusing on the system inside Boston city limits.

### Bikeway Planning Efforts

As previously mentioned, bicycle advocacy increased in public consciousness in the late 1990s and early 2000s. Given the progressive leadership Boston has enjoyed at the mayoral level, a director of bicycle programs reporting directly to the Mayor was appointed in 2007. From 2007 to 2014 the Boston Bikes Program generated 62 miles of bicycle lane and shared lane markings, more than 3,000 new bicycle parking spaces across Boston neighborhoods, and a bike share (on-street rental) system with 700 bikes and 72 stations. As a result, Boston has increased bicycle ridership by nearly 82% since 2007.

To create a more systematic approach to the planning of bicycling travel ways, the Boston Bikes Program spearheaded the City’s Bike Network Plan. This 2013 Plan lays out “a comprehensive network of bicycle routes through the city, calling for 75 miles of new facilities in the next five years and reaching a network of 353 miles within 30 years.” The hope is that an improved bikeway system will make the city’s parks and open spaces more accessible to more people beyond the typical half-mile walk-based service area.



From the *Boston Bike Network Plan* (2013)

# Assessment and Recommendations

## Assessment: Greenways

### Emerald Necklace

Treated as a series of parks and sensitive environmental areas elsewhere in the Open Space Plan, in this chapter the Emerald Necklace is treated primarily in its capacity to support linear recreation activities and in its state of continuity or connectivity.

In the first international publication on greenways<sup>6</sup>, the authors noted repeatedly that Frederick Law Olmsted was the first greenway planner in the United States. Certainly the Emerald Necklace park system is an example to support that designation. Olmsted had designed a linked series of landscaped parks from Boston’s Back Bay southward to the Arnold Arboretum, then eastward to Franklin Park. At the Back Bay end, this linked park system was connected to the major parks of Boston proper: Commonwealth Avenue Mall; the Public Garden; and Boston Common. The section of the Olmsted-designed system from Charlesgate to the Back Bay Fens, the Riverway, Olmsted Park, and Jamaica Pond Park coincides geographically with the route of the Muddy River. Sinuous parkways, designed for horse-drawn carriages and now conveying automobiles, paralleled these parks and connected them to the outlying parks of the Arnold Arboretum and Franklin Park.

As mentioned in this chapter’s Overview, Olmsted sought to provide opportunities for quiet contemplation of pastoral scenery. Naturally this required a spatial buffer from existing and proposed development. Thus, a rationale existed for a corridor to provide both the scenic parklands—the pastoral landscapes – and the travel ways for pedestrians and horseback riders traveling at a slower pace than the parkway users. The corridor was sufficiently large in most places to buffer the users and the resources from the built environment. In both the Arboretum and Franklin Park, the parklands were large enough to provide an opportunity for trails that not only conveyed users from one park to another, but also allowed for exploration within the park. Franklin Park itself was so large as to provide several trail systems within it, such as the Scarborough Hill paths, the paths in the Wilderness, and the circuit paths.

Rivers and streams, ponds, lakes, woodlands, rock outcrops, and salt, brackish, and freshwater marshes were among the resource areas featured in this system. Through the use of grade changes, vegetation, and the corridor’s width, Olmsted was able to spatially and visually buffer these resource areas.

Therefore, the Emerald Necklace park system was the first greenway built in Boston, even though it was not called that then. The term “Emerald Necklace Greenway” arose only in the late 1990s. A group of community and bicycle activists, primarily from the Jamaica Plain neighborhood, assisted by BikeBoston, an affiliate of MassBike, a statewide bicycle advocacy group, prepared a report and a poster on the Emerald Necklace Greenway. The report, funded with a grant from the Department of Environmental Management (a predecessor agency to DCR) Greenways Program, outlined the gaps in continuity posed by



changes to the system's landscape and parkways. These changes have accrued over the years due to many accommodations to the needs of automobile traffic. As these defined gaps occur typically on the DCR parkways, state action is needed to address these issues. However, as municipal park properties are immediately adjacent to these gaps, the impacts of potential solutions may affect them as well. Thus, any process to address these gaps will necessarily involve the Parks Department, the Boston Transportation Department, and the Brookline Public Works Department, in addition to the pertinent state agencies.

Within the parkland portions of the Emerald Necklace, much has been done to increase continuity/connectivity and promote bicycle and pedestrian use. In the late 1980s, a Parks Department project funded in part by DEM paved an former bridle path in Olmsted Park and Jamaica Pond Park and dedicated it for multipurpose use including bicyclists. This project represented the beginning of the Emerald Necklace Bike Path.

In the mid-1990s, a series of ISTEA grants were obtained by the Parks Department to address other pedestrian and bicycle improvements for the Emerald Necklace. The first project involved the improvement of a vacant parcel that the Department acquired, the first acquisition of parkland in the Emerald Necklace in decades. The South Street Tract had been added to the Arnold Arboretum, and with federal and state funds from the ISTEA Enhancement Program, construction was completed for a landscaped addition to the Arboretum with a stone dust path leading from an entrance near the Forest Hills MBTA station to another entrance on South Street across from the original Arboretum tract.

The second project was a three-pronged effort to improve Jamaica Pond Park. The three elements of the Connecting Jamaica Pond project were the reconstruction of the pedestrian paths around much of the pond, including the banks of the pond; the installation of a storm water pollution control measure – an oil and grit separator – to further improve the high water quality of Jamaica Pond; and the installation of pavement markings for bike lanes, the city's first, on Perkins Street to connect the Emerald Necklace Bike Path to Parkman Drive and Prince Street. The Emerald Necklace Master Plan has proposed the banning of motor vehicles on Parkman Drive, therefore this project provides a connection in anticipation of the proposed change at some indeterminate point in the future. This project was essentially completed in 2000.

The third ISTEA-funded project is currently under design. It consists of two major elements: the first is the reconstruction of pedestrian paths and the paving of an obsolete bridle path to allow for multi-purpose use, both in the Back Bay Fens; the second is the enhancement of Forsyth Street from the Fenway parkway to Ruggles Street for pedestrians and bicycles to create a connection between the Emerald Necklace at the Back Bay Fens to the Southwest Corridor Park at Ruggles Street near Boston Police Headquarters and the Ruggles MBTA station. The linkage between two of the city's most significant greenway corridors led to the project's name, Linking the Corridors. Once this project is complete, the two major outstanding greenway

issues for the Emerald Necklace will be the closing of remaining open space gaps and the clean-up of its major natural resource area, the Muddy River (discussed elsewhere in this plan).

Based on advocacy by the Arborway Coalition, the Parks Department, with funding from the DCR Historic Landscapes Program, produced the Arborway Master Plan to improve the landscape character of this parkway which connects Jamaica Pond Park, Centre Street, the Arnold Arboretum, and Franklin Park. One of the goals of this 2004 plan is to improve the linear greenway function of this segment of the Emerald Necklace. It calls for both a continuous off-road shared use path and sidewalks that would increase the non-motorized realm of this parkway.

The Arborway Master Plan assumed the existence of the Casey Overpass that formed the southeastern end of the Arborway. By 2010 however, the MADOT determined that the overpass structure was deficient and needed to be torn down. A planning process was undertaken to explore alternatives from creating a new overpass to at-grade alternatives. In 2012, the MADOT decided to design a "new, multimodal at-grade ... boulevard," to be known as the Casey Arborway. Construction is expected to begin in 2014 that will allow for improved pedestrian and bicycle accommodation in this section of the Emerald Necklace greenway corridor.

### ***Charles River Reservation and Dr. Paul Dudley White Bike Path***

Under DCR jurisdiction, this greenway corridor is as defining of Boston as is the Emerald Necklace. It occupies both banks of the Charles; we will look only at the portion of the Reservation within Boston city limits. This section will also include both the new and historic Charles River Reservation areas.

The Charles River Reservation is the centerpiece of the Metropolitan Park District, the array of parks throughout the metropolitan Boston area. During 1892 and 1893, Charles Eliot, a protégé of Olmsted and the son of a Harvard College president, worked to get the state legislature to set up the Metropolitan Parks Commission (the forerunner of the DCR) and produced a report recommending the acquisition of thousands of acres of land in the Boston region. Three years later, the Metropolitan Parks Commission acquired most of the Charles River shoreline between Leverett Circle and Watertown Square. Yet the estuary conditions still left polluted mud flats and poor rowing conditions, so the concept of damming the Charles at its mouth to create a large lake or basin took on great importance. By 1908, a dam was in place, replacing the tidal saltwater estuary with a freshwater lake. A widened embankment was created in 1936. However, the pressure of automotive traffic asserted itself after World War II, with the legislature brushing aside the express wishes of the donor who funded the embankment by authorizing a parkway (Storrow Drive) on the inner edge of the embankment, which created obstacles to access that remain to this day.

Dr. Paul Dudley White, President Dwight D. Eisenhower's personal doctor, advocated for the use of bicycles on the Esplanade, which use was first allowed in 1960. By 1970, a continuous bicycle path around the entire Basin was finally developed and named in honor of Dr. White.<sup>7</sup>

Constructed with mitigation funds from the Central Artery/Tunnel Project, an eastward extension of the Reservation, known as the New Charles River Reservation, was created. Below the old Charles River Dam, a series of parks—the Paul Revere Landing Park and North Point Park in Charlestown, and the Nashua Street Park in Central Boston—were built with pathways along the Charles River near its confluence with Boston Harbor. The New Charles River Reservation therefore links the “old” Charles River Reservation with the Harborwalk and city and federal parks in Charlestown and the North End, helping to extend waterfront access along the two major water bodies, the Inner Harbor and the Charles River, that surround much of Boston.

While the Emerald Necklace is beloved because it epitomizes the Olmsted pastoral landscape park with its contemplative, intimate effects, the Charles River Reservation is beloved for a different reason. Its much larger scale, particularly due to the Basin, has made for a much grander, spectacular scenic resource. As noted in DCR’s master plan, “views of the boat-dotted Basin framed by Beacon Hill, the Esplanade, the Longfellow and Harvard Bridges, and the Massachusetts Institute of Technology symbolize the region, its vibrancy, and its livability.”<sup>8</sup>

However, the Reservation is in need of significant reinvestment according to the current (2002) DCR Master Plan. Master Plan recommendations that are of significance to linear recreation in the Reservation include:

- “Improve 8 and add 11 parkway pedestrian crossings” to improve access to this regional greenway;
- “Narrow ... parkways ... to broaden green space along the river;”
- “Improve the multi-use pathways and add separate pedestrian and bicycle paths where space permits;” and
- “Link the Basin to Boston Harbor at the New Charles River [Reservation] and to the Emerald Necklace at the Charlesgate.”<sup>9</sup>

Citizen support for the Charles River Reservation Master Plan will be crucial to its success, as the multi-million dollar price tag for improvements will be a daunting obstacle for a Legislature faced with fiercely competing demands for funds. As earlier mentioned, DCR has developed conceptual plans for pedestrian and bicycle improvements to the Charles River Reservation paths and vehicular bridges, while the MADOT I-90 Boston Ramp Study will look into the possibility of improving the linkage between the Reservation and the Emerald Necklace at the Back Bay Fens via Charlesgate.

### ***Neponset River Greenway***

In 2006, DCR completed a Neponset River Reservation Master Plan Phase II for the section of the Reservation between Paul’s Bridge in Milton and Central Avenue in Boston. In 2009 construction of an early action item, bike lanes and a pedestrian path along Truman Highway in Milton and Hyde Park took place.

In 2013, the DCR was given \$1.9 million for the design of the completion of the Neponset River Greenway. Several segments from the National Grid property at the mouth of the Neponset to Mattapan Square will be the subject of this design effort. The approximately \$15 million cost of the construction itself will be expended by 2016.

The Neponset River Greenway is a significant open space resource for Boston’s Hyde Park, Mattapan, and Dorchester communities. It is discussed in further detail in Sections 7.2.5 (Dorchester), 7.2.8 (Hyde Park), and 7.2.10 (Mattapan) of this plan.

### ***East Boston Greenway***

A neighborhood greenway linking old and new parks is being created in East Boston. The current segments of the Greenway include the Parks Department-owned segment between Marginal Street (near the harbor) and Porter Street (near East Boston Memorial Park, the segment between Porter Street and the Day Square area known as Bremen Street Park (owned by MADOT and managed by Massport), Constitution Beach (DCR), the Belle Isle Coastal Preserve (City of Boston), and the Belle Isle Marsh Reservation (DCR).

Currently the Massachusetts Port Authority is constructing the Wood Island Marsh Link, a half-mile section of the Greenway which will connect Bremen Street Park to Wood Island Bay Marsh. It will include open space areas at Neptune Road and an overlook park at the Wood Island Marsh.

The City of Boston is also designing the Narrow Gauge Link of the Greenway which will transform an old railroad bed adjacent to the MBTA’s Blue Line, further extending the Greenway from Wood Island Bay Marsh to DCR’s Constitution Beach. This will complete the connection from Bremen Street Park to Constitution Beach.

Once these segments are completed, the areas at the northern end, near Belle Isle Marsh, and the southern end, near Piers Park, will become a greater focus of efforts to improve this neighborhood greenway.

### ***Rose Fitzgerald Kennedy Greenway***

By virtue of state legislation in 1996, the surface restoration performed as part of the CA/T work on the downtown portion of the Central Artery was formally named the Rose Fitzgerald Kennedy Greenway in honor of the mother of President John Fitzgerald Kennedy and Senators Robert and Edward Kennedy. Mrs. Kennedy was born and raised from 1890-1897 in the North End neighborhood now abutting the Greenway. She was the daughter of John “Honey Fitz” Fitzgerald, Mayor of Boston from 1906 to 1908 and 1910 to 1914 (the now depressed Central Artery is formally known as the John Fitzgerald Expressway).

This greenway corridor stretches for 1¼ miles in a highly dense section of downtown Boston and contains 11 acres of protected parkland. While owned by the Massachusetts Department of Transportation, which also owns and manages the “Tip” O’Neill Tunnel underneath, these parklands are managed and maintained by the Rose Fitzgerald Kennedy Greenway Conservancy. This nonprofit organization is a partner with the state, which provides 40% of its funding. The other 60% is provided through donations, endowment income, and earned revenue.

It has several enhanced features that are emblematic of its highly urbanized location: a carousel, a labyrinth, many public art pieces, a pavilion for visitors to the Boston Harbor Islands National Recreation Area, several fountains, various horticultural beds and an urban arboretum. In 2011, one of the



Greenway parks became the temporary site of the Occupy Boston protest, an offshoot of the Occupy Wall Street protest movement, entering the history books like Boston Common as a site for political speech and assemblage. The Conservancy is currently engaged in a five-year public art strategy to help enliven the spaces.

This greenway helps to connect users to the New Charles River Reservation, Harborwalk, and the Boston Harbor Islands via the Visitor Pavilion found on the Greenway. It has become an important corridor for residents in abutting neighborhoods, downtown workers, tourists, and regional recreation enthusiasts.

### ***Southwest Corridor Park***

Opened in 1987, this greenway corridor stretches 4.7 miles from the South End and Back Bay to Roxbury, Mission Hill and Jamaica Plain. It contains about 50 acres of parkland, owned by the Massachusetts Bay Transportation Authority (MBTA) and managed by the Massachusetts Department of Conservation and Recreation (DCR). Besides walking paths, it includes the 3.5 mile Pierre Lallement Bicycle Path, heavily used for recreation and commutation. Other features within it include eleven children's play lot areas, two spray pools, seven basketball courts, five tennis courts, two street hockey rinks, and two amphitheaters. Approximately a quarter of the parkland is decked over the railroad tracks. An advisory committee provides public input to help DCR manage this park, and a nonprofit conservancy raises funds for maintenance activities in concert with DCR. The re-design of the Casey Arborway area will involve connection to the southern terminus of the Southwest Corridor Park and the Pierre Lallement Bicycle Path.

### ***East Coast Greenway***

Since 1991, a group of greenway activists along the Atlantic Coast has worked with local citizens and organizations, as well as local, state, and federal agencies, to create a multi-use "urban Appalachian Trail." The East Coast Greenway will be nearly 3,000 miles long, from Key West, Florida to Calais, Maine, serving the full range of non-motorized users, not only hikers, but also bicyclists, in-line skaters, skateboarders, etc., much of which will be ADA-compliant. The nonprofit organization behind the effort is the East Coast Greenway Alliance (ECGA). Volunteers organized by the Alliance in each state work together to link existing and proposed greenway segments.

The East Coast Greenway is a work-in-progress, with 30% complete—that is, exists as a path or some other feature outside the street network—as of 2013. The Massachusetts chapter of the ECGA has identified a main (spine) route corridor through the state, and three scenic or historic alternates; all four routes pass through Boston. The spine route includes the paths on the Charles River Reservation. Alternates are routed within Boston on the Southwest Corridor Park pathways, the Emerald Necklace pathways, and the Neponset River Reservation Bikeway. Routing decisions are always made by stakeholders at the local level.

The ECGA pursues agreements with pertinent trail managing agencies for installation of signage identifying the trail as part of the East Coast Greenway. The ECG route is also identified for trail users through the publication of user-friendly maps and cue

sheets, some of which are available through their website, [www.greenway.org](http://www.greenway.org), or through their smart phone app. Please visit their website to learn more about these tools and for more information about the East Coast Greenway.

### **Assessment: Bikeways**

Given the on-road nature of bikeways, the planning for these facilities are the responsibility of the Boston Transportation Department and the Mayor's Boston Bikes program. We incorporate by reference the Bicycle Network Plan prepared by the Boston Bikes program, with the following caveat:

Boston's City-owned parks are a critical resource for residents and visitors. City demand for open space is intense, and Boston's parks provide essential space for environmental and recreational benefit to residents and visitors citywide. There are many demands for parkland—some are easily compatible, others can be in competition. At the most fundamental level, new uses cannot interfere with the normal use and enjoyment of the parks. The Parks Department works with community members, regulatory agencies, and other City departments to balance varying demands and responsibilities, and to provide clean, green, safe and accessible parks.

The Boston Bikes Network Plan includes both short-term and long-term proposals for use of parkland for bicycling. Most of these proposed routes are intended to provide neighborhood connections rather than park-specific recreational opportunities. The Network Plan will help communities see opportunities for bicycling connections through parkland, but does not address the site-specific design challenges and compatibility of uses that will need to be considered at each park during the implementation process.

The primary uses in our parks are recreational, all park paths are open to pedestrians, and bicycling is permitted only in those areas specifically designated for this use by the Parks Commission. Unless a specific designation is made by the Parks Commission, use of bicycles is not permitted in parks. The Parks Department has worked with community groups to open appropriate park pathways to bicycling—like some of those in Franklin Park – and have continued the prohibition on those park paths that are not able to accommodate biking in addition to their current use—such as those in Boston Common. We will continue to work with communities to consider the opening of park paths to bicycles as each park identified in the Network Plan comes up for capital reinvestment.

Changes to parks proposed in the Network Plan will be considered for implementation over time when park improvements are scheduled. It is important to note community needs change over time, therefore current or even future paths may not exist long term. A decision to add biking into the parks and designate space to accommodate this activity will be the result of an inclusive process with discussion open to all park users in each community and at each park. As the Bicycle Network Plan states, Boston Bikes will participate in the community planning and design for each capital project proposed by the Parks

Department that can advance the network plan. In addition, any opening of existing or proposed park paths to bicycling will require a vote of the Park Commission.

## The Next Seven Years

Historically, Boston has played a leading role in providing opportunities to enjoy various recreational pursuits in linked environs to promote health and well-being. Given projects already underway and proposed, this city will continue to excel in this role.

An overall vision to inspire and guide future efforts will be needed as interest in these facilities intensifies and other urban development pressures compete. Such a vision will see Boston within a regional context, as certain linear recreation users such as bicyclists have a farther range than pedestrians. From a regional tourism focus, greenways, trails, and bikeways can be a significant means of drawing people into the city for leisure pursuits. These linear open space elements can also provide opportunities for local residents to explore other areas of the city and to appreciate their built and natural beauty, thus naturally breaking down social barriers. They can also help diminish the sense of limited open space in certain neighborhoods by providing access to open space throughout the city.

By advancing connectivity, the movement to link open spaces will yield dividends for recreation enthusiasts, families, and communities while advancing Boston's agenda as a livable and ecologically sound community.

### General Recommendations

- Support the regional effort to create a greenway network plan to provide the vision and prioritization needed to protect existing facilities and nurture proposed facilities.
- Encourage strongly, where feasible, the separation of pedestrians from other path users via separate paths. Allow shared-use paths only where space limitations or other constraints are present.
- Coordinate with the Boston Bikes program as capital improvements affect parks which are shown in the Bicycle Network Plan.
- Explore the development of a wayfinding and signage system for greenways and bikeways that promotes a cohesive, coordinated appearance that fosters a sense of connectivity while allowing for the distinctiveness needed for each greenway's and bikeway's identity.
- Coordinate with the Boston Bike Network Plan Six E's Program to increase pedestrian and bicycle safety.<sup>10</sup>

### Emerald Necklace

- Support the effort to improve the Arborway and implement the Casey overpass replacement project. Protect abutting parkland in the process of closing gaps and re-aligning parkways. Provide additional signage to direct bicyclists and pedestrians to various destinations and paths.
- Complete the Muddy River Rehabilitation Project Phase II to restore the key natural resource conservation area in the Emerald Necklace greenway system, and improve pedestrian and bicycle accommodations in the Brookline Avenue/Fenway/Park Drive area.

### Charles River Reservation and Dr. Paul Dudley White Bike Path

- Support the DCR Master Plan recommendations for improving access via parkway crossings, narrowing parkways to increase greenspace, improving the shared-use paths and creating separate pedestrian paths where space permits, linking the old Charles River Reservation to Boston Harbor via the new Charles River Reservation, and linking the old Charles River Reservation to the Emerald Necklace via Charlesgate. Support DCR and MADOT coordination as they implement improvements suggested in the 2013 Charles River Basin Pedestrian and Bicycle Connectivity Study.

### Other Linear Facilities

- Support DCR implementation of its plan to complete the Neponset River Greenway.
- Work with the DCR and Massport on the extension of the East Boston Greenway to Constitution Beach and Belle Isle Marsh.
- Support the Rose Fitzgerald Kennedy Greenway and assure its long-term success through adequate maintenance funding by the Greenway Conservancy. Promote bicycle safety with Share the Road signage along the length of the surface road.
- Work with the East Coast Greenway Alliance to plan for the alignment through Boston of the proposed interstate greenway.

<sup>1</sup> National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, 1999. Surgeon General's Report on Physical Activity and Health. U. S. Government Printing Office (S/N 017-023-00196-5). See also [www.cdc.gov/nccdphp/sgr/sgr.htm](http://www.cdc.gov/nccdphp/sgr/sgr.htm). See also O'Sullivan, E., 2001. "Repositioning Parks and Recreation as Essential to Well-Being." In *Parks and Recreation*, Vol. 36, No. 10, October 2001, p. 91: "Linear Trails and Greenways – When walking trails were expanded in 12 southeastern Missouri counties, a study found that 40% of people with access used them and 50% of the trail walkers increased their walking since they started using the trails. Lower income groups who are at greater risk for non-activity were more likely to have increased walking as a result of the trail use (St. Louis University School of Public Health)."

<sup>2</sup> Greenways should be more properly termed greenway corridors, since paths and bikeways can be referred to as "greenways," as both are "ways" using non-polluting ("green") means of travel. Since for many people "greenways" implies the character of the path's surroundings, "greenway corridor" would be the more appropriate term.

<sup>3</sup> Massachusetts Department of Conservation and Recreation, Greenways Program, 2000. *Creating Greenways: A Citizen's Guide*, p. 6.

<sup>4</sup> Fabos, J. Gy., 1995. "Introduction and Overview: the Greenway Movement, Uses and Potentials of Greenways." In *Landscape and Urban Planning*, Vol. 33, (Nos. 1-3, Special Issue: Greenways), p. 5.

<sup>5</sup> Boston Bikes, 2013. Boston Bike Network Plan, Appendix B, Facility Types. Found at [http://www.cityofboston.gov/images\\_documents/Appendices\\_tcm3-40548.pdf](http://www.cityofboston.gov/images_documents/Appendices_tcm3-40548.pdf)

<sup>6</sup> Fabos, J. Gy., "The Greenway Movement," p. 3.

<sup>7</sup> Metropolitan District Commission, 2000. Charles River Basin: The Second Century (poster).

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Boston Bikes, 2013. Boston Bike Network Plan, Appendix A, The Six E's. Found at [http://www.cityofboston.gov/images\\_documents/Appendices\\_tcm3-40548.pdf](http://www.cityofboston.gov/images_documents/Appendices_tcm3-40548.pdf)

## Section 7.1.2

## RESOURCE PROTECTION

### HARBOR OPEN SPACE

## Introduction: A Planning Framework

This chapter presents a planning framework that has been designed to guide the continuing revitalization of Boston Harbor's open space and Harborwalk systems. In keeping with the intent of this Open Space Plan, it recommends the enhancement of existing open space facilities while identifying opportunities to be realized by future programs and projects along the shoreline and on the islands. The framework builds on and extends the work of public agencies, including the Boston Redevelopment Authority (BRA), the Boston Conservation Commission (BCC), the Massachusetts Department of Environmental Protection (MADEP), the Massachusetts Department of Conservation and Recreation (DCR), and the Massachusetts Port Authority (Massport), as well as non-profit organizations and waterfront property owners, in an effort to promote and provide public access to waterfront open space.

The proposed framework reflects the larger vision of the City to share equitably among all the city's residents the resources of the harbor for recreational as well as economic benefits. Boston Harbor's clean-up project has fostered a resurgence in water-related activities and a desire for broad public access to the water's edge.

Boston's municipal harbor planning efforts, the product of a waterfront district specific community-based planning, articulates this vision through four comprehensive planning policies:

- Universal access to opportunities on the harbor;
- Year-round activation of the waterfront through public, cultural, and water-dependent uses;
- Enhancement of maritime activities; and
- Growth that is appropriately designed and brings vitality.

## Guidelines

District-associated themes underpin the open space recommendations outlined in the pages below. In addition, the following guidelines serve as criteria for waterfront areas to ensure a rich mix of open spaces and uses in each district:

- Projects should maximize active and passive recreational potential with the creation of destination-oriented facilities such as recreational/cultural centers, historic interpretive exhibits, expanded sports facilities and water-dependent uses and activities, public art and performances, and the like.
- Projects should ensure the enhancement of environmental resources through the stabilization and restoration of natural ecosystems, provision of educational programs, and expansion of visitation access and opportunities. The city's youth should be especially targeted to enjoy and maintain these resources.
- Projects should include open space improvements along with a mix of housing, cultural/civic, retail, hotel, and commercial

development. Waterfront projects should encourage water-related activity, including public docks and transient berthing, boat ramps, boat rentals, recreational marinas, fishing, and water taxi or water shuttle facilities, with supporting cafes and restaurants as well as swimming opportunities where possible. These diverse uses will activate the open spaces and support year-round, 24-hour activity.

## Connectivity

While each district will have its own unique attractions derived from the above mix of activities, critical to waterfront open spaces are improved connections for pedestrians, cyclists, transit users (including water transportation users), and those coming by automobile. Improved access should continue to be addressed through access plans connecting inland facilities to the Harborwalk and the waterfront.

A system of desirable connections would include the following:

- Completion of a Harborwalk public access network along East Boston, Dorchester, Fort Point, South Boston, Charlestown, and North End.
- Improved Harborwalk wayfinding and interpretive signage program.
- Links to Harborwalk from inland facilities like neighborhood parks, the Emerald Necklace system, Rose Kennedy Greenway, Charles River Reservation, East Boston Greenway, South Bay Harbor Trail, and the Neponset River Trail especially through pedestrian paths, bikeways, and public transit.
- An expanded ferry network which links the Harbor Islands and existing downtown piers to docking areas in neighborhood locations.

## Management

The implementation of this chapter's recommendations requires long term investment of capital and human resources that may be beyond the limited city, state, and federal means currently available. The State Chapter 91 Tidelands regulations have developed a series of agreements with private and public waterfront landowners that promote public access and mandate maintenance of public amenities. The Boston Harbor Islands Partnership, which includes the Boston Harbor Island Alliance, is another step towards broadening beyond limited city and state resources.

The planning framework in establishing well-defined district boundaries will facilitate the complex exercise of implementing potential projects and programs. Within the confines of a manageable area, ownership, jurisdiction, and operations responsibilities will be fine-tuned or, conversely, consolidated under an appropriate agency or entity in each district. A full matrix of management models can be considered, ranging from the National Park Service management coordination model to a leasehold arrangement with a non-profit corporation, depending on the attributes of a particular district.



## Districts

As a first step toward understanding the context and the implementation of the above policies, this blueprint establishes districts that encompass neighborhood-level open space systems. The intention is to emphasize the distinct local character that makes each area unique. Existing shoreline features, neighborhood land uses, zoning boundaries, and history of public use provide the context to delineate and establish themes that characterize a particular district. The framework establishes the following districts and themes:

- **Orient Heights Bay:** Creating New Linkages
- **The East Boston Waterfront:** Reclaiming an Historic Harbor
- **The Charlestown Waterfront:** Diversifying the Open Space Experience
- **The North End/Downtown Waterfront:** Realizing the Public Realm
- **Fort Point Channel:** Creating an Urban Water Park System
- **The South Boston Waterfront/Innovation District:** Opening and Accessing a Renewing District
- **The South Boston Historic Shoreline:** Enhancing Olmsted's Vision
- **The Columbia Point Promenade:** Linking Institutional Development
- **The Savin Hill Bay Area:** Creating Recreational Opportunities
- **The Boston Harbor Islands:** Building a User Base through Partnership

The range of these themes and corresponding districts asserts the inherent character of an urban waterfront, reflecting the diversity of the city with a rich and varied choice of physical settings, cultural experiences, and recreational opportunities for residents. Further community-based planning will seek to blend neighborhood and citywide use, private development and public access, and natural resources protection and resource areas visitation.

## Creating New Linkages: Orients Heights Bay

With the linking of Belle Isle Marsh and Wood Island Bay Marsh to the Constitution Beach area, a series of complementary open space experiences along Orient Heights Bay can become accessible to all of East Boston. These connections would open up new harbor recreation opportunities.

### Recommendations

- Create a link between Constitution Beach and the Bayswater Street Urban Wild/Airport Buffer Project through a Harborwalk and/or public access path past the Orient Heights Yacht Club. Support the provision of a public docking pier at the Orient Heights Yacht Club.
- Complete the Narrow Gauge Link Pathway to provide access to Wood Island Bay Marsh from Constitution Beach as part of the East Boston Greenway expansion.
- Transfer the restored wetland at the Belle Isle Coastal Preserve to DCR for incorporation into the management of Belle Isle Marsh Reservation. Include a public access link via the East Boston Greenway to both the Bayswater Street Urban Wild and the Belle Isle Marsh Reservation.

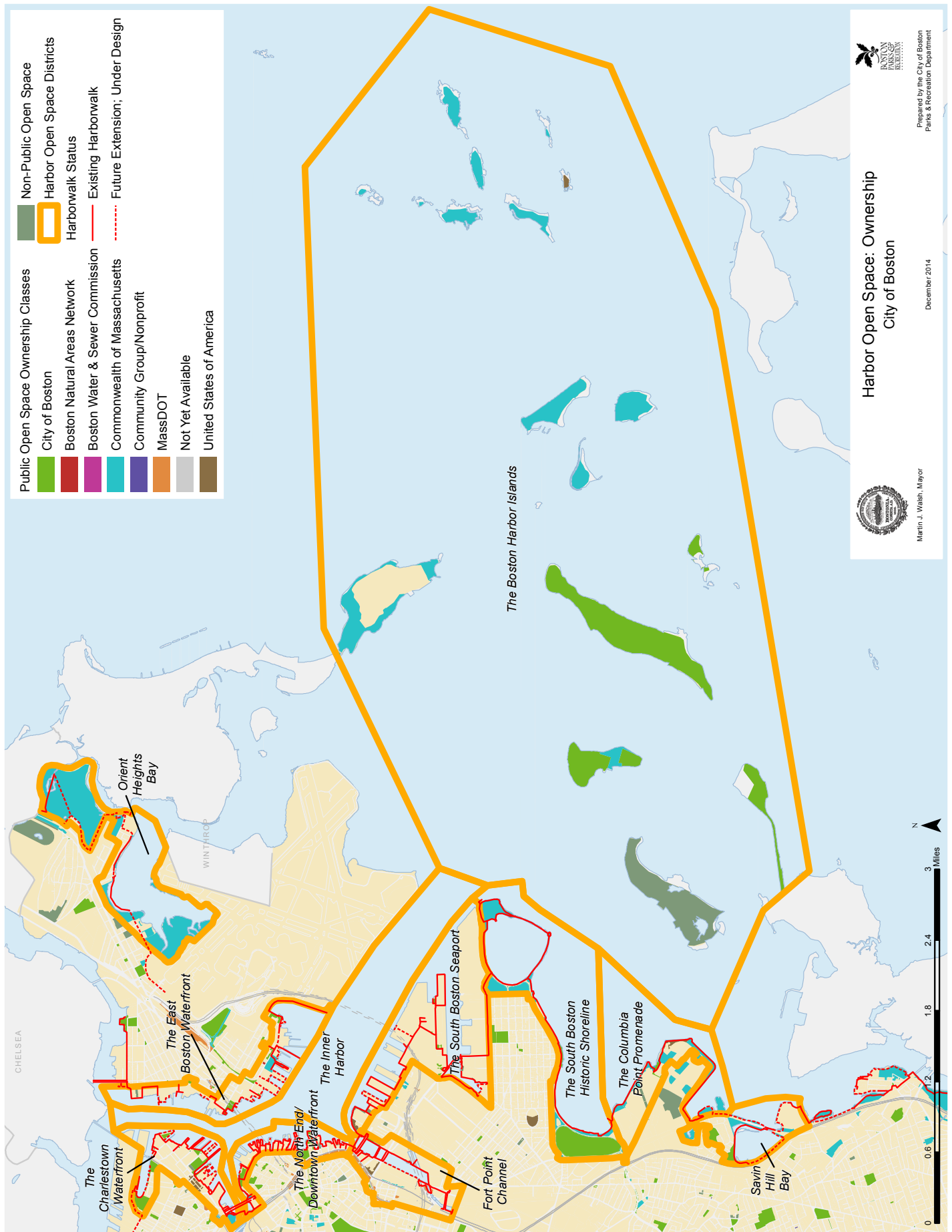
- Implement the East Boston Greenway Access Plan recommendations for connecting the inland neighborhood to the Greenway in the sections from Neptune Road to Belle Isle Marsh.
- Develop a system of wayfinding and interpretive signage for this area's growing system of harbor open space that is integrated with the Harborwalk signage system.

## Reclaiming an Historic Harbor: The East Boston Waterfront

East Boston's waterfront, for many decades neglected, is now beginning to undergo a transformation. The efforts of partners such as the Boston Natural Areas Network and Jeffries Point residents have resulted in new open spaces along the waterfront. During the past three years, the Boston Parks and Recreation Department and the Massachusetts Port Authority have made improvements to the neighborhood's open spaces. As deteriorated or underutilized piers are redeveloped, an active promenade will be created with active and passive recreation, housing, and maritime industrial uses.

### Recommendations:

- Extend the Harborwalk from Porzio Park in Jeffries Point to the Condor Street Overlook Urban Wild at the confluence of the Inner Harbor and Chelsea Creek. Use signage and landscaping to draw users to Harborwalk point access in maritime industrial areas. Develop an interpretive signage system to explain the maritime industrial and related uses, and integrate public art into these areas, much as has been done by Harbor Arts in the East Boston Shipyard.
- Restart Massport's planning for the expansion (Phase II) of Piers Park. Support the BRA East Boston Master Plan recommendation to create a waterfront park at Pier 5 in concert with local residents and organizations. Work with the Parks Department on the linkage between Golden Stairs Terrace Park, the Rockies open space, Piers Park (Phases I and II), and Pier 5 open space development.
- Renovate Lewis Mall as a major landscaped pedestrian and water transportation connection from the Maverick Square neighborhood to the waterfront, and coordinate with the newly constructed Portside at Pier 1 project.
- Establish a pedestrian and bicycle connection between Piers Park (Phases I and II) and the first segment of the East Boston Greenway.
- Continue the East Boston Greenway northward from Bremen Street Park to enable better access to Piers Park and Harborwalk from inland neighborhoods.
- Support the East Boston Municipal Harbor Plan to create public parks and new Harborwalk segments as part of private development along the waterfront. Integrate such parks and rights-of-way into a cohesive waterfront open space system through each site's design to ensure public accessibility visually as well as legally, and to provide activating destinations along the Harborwalk.
- Develop a "low tide trail" to connect Constitution Beach with "other than beach" access points, per the Metropolitan Beaches Commission's 2014 report. Support capital improvements to allow better ADA and stroller access to the beach and to expand water-based activities such as boating and swimming through a floating dock and small boat storage and rental facility, per the Metropolitan Beaches Commission's 2014 report.



## Diversifying the Open Space Experience: The Charlestown Waterfront

Charlestown's waterfront from the Little Mystic Channel through the historic Navy Yard to Paul Revere Park affords unique opportunities for creating a variety of open space and recreational uses on both land and water. Rich in history, skirting a densely populated neighborhood, in close proximity to downtown Boston, and with links to the DCR Charles River Reservation, this area of Boston's waterfront has the potential of providing its open space users a diverse and enriching outdoor experience.

### Recommendations:

- Realize the potential of the Little Mystic Channel as a unique open space resource, building upon the new Harborwalk segments, the newly built Thomas Menino Park, and the Weingarten Adaptive Sports and Recreation program for Spaulding Rehabilitation Hospital patients and others.
- Use signage and landscaping to draw users to Harborwalk point access, where possible, in maritime industrial areas. Develop an interpretive signage system to explain the maritime industrial and related uses
- Expand the Courageous Sailing Center facilities at Pier 4 and increase programming for Boston's youth and new members.
- Support the BRA Charlestown Navy Yard Master Plan and Charlestown Navy Yard Waterfront Activation Plan which will create a public access and open space network that will reinforce the site's unique historical character and common identity. . Improve the Harborwalk connection from Tudor Wharf along Constitution Marina and coordinate Harborwalk segments and signage with the National Park Service and the Massachusetts Port Authority.
- Support waterside infrastructure allowing public access to the water such as the Spaulding Rehabilitation Hospital's adaptive marine program at Building 114, additional public touch and go docking facilities at marinas within the Navy Yard and water transit facilities at Piers 1 and 3.
- Support the development of the Maritime Interactive Park Network, a system of physical and programmatic maritime and historic interpretation to attract year-round use along Harborwalk and to protect public access.
- Study potential links to the Mystic River Trail System.

## Realizing the Public Realm: The North End/Downtown Waterfront

The North End/Downtown waterfront has the most diverse recreational and open space opportunities of any waterfront neighborhood, including some of the highest concentrations of active and passive open spaces and recreational facilities. Open space mitigation efforts, as well as improvements by the Department of Conservation and Recreation and the Parks and Recreation Department, have resulted in attractive, well-used public spaces along the waterfront.

### Recommendations

- Support the completion of the remaining pedestrian bridge and open space mitigation commitments as part of the Central Artery Tunnel Charles River Crossing to integrate Boston Harbor with the New Charles River Basin park system and the Esplanade. Complete open space improvements on the south bank of the Charles River and the pedestrian bridge over the tracks at North Station that connects Charles River Basin Park system to the Harborwalk at Lovejoy Wharf.
- Continue the Harborwalk through all upcoming private wharf/waterfront developments. Ensure that public parks that are part of development sites' designs are physically and/or visually linked to the Harborwalk and nearby streets.
- Improve Harborwalk conditions at Lewis and Union Wharves and complete Harborwalk connection along the north and southern sides of Commercial Wharf to Boston Yacht Haven.
- Provide, where appropriate, piers for docking with sewer pumpouts as part of the "No Discharge Area" designation.
- Unify the planned/completed pedestrian pathways and open spaces adjoining the waterfront with the Rose Kennedy Greenway. Support the BRA's Crossroads Initiative work to link downtown to the Greenway and the waterfront and the Connect Historic Boston project to link the downtown's transit to its historic resources.
- Support the development of the Historic Piers Network, a system of physical and programmatic historic interpretation to attract year-round use along the Harborwalk and to protect public access.

## Creating an Urban Water Park System: The Fort Point Channel

South Boston's Fort Point District has seen significant change, with new open spaces, Harborwalk segments, and boat docks along the channel. Amenities include interpretive signage, public art, seating areas, and enhanced landscaping. Consistent with the goals of the Fort Point Channel Watersheet Activation Plan, a boat dock for non-motorized recreational boats, together with new docks for water taxis and a new "Cultural Connector" boat, make this area a truly urban water park area. The renovation and expansion of the Boston Children's Museum, together with the opening of the InterContinental Hotel and Residences, Atlantic Wharf, and Commonwealth Ventures properties have added open spaces and enhanced Harborwalk segments by the Fort Point Channel, complementing Harborwalk segments and open spaces created by the Central Artery/Tunnel Project as part of its environmental mitigation requirements.

Further anticipated improvements to the open space system include the Harborwalk along the South Station Postal Annex and proposed parks of the 100 Acres Master Planning Area and public amenities in and along the Channel.



## Recommendations

- Establish a strong link on the cross-channel bridges between the Rose Kennedy Greenway and the enhanced Fort Point Channel through the Crossroads Initiative.
- Seek continued expansions of the water transportation system linking inner-harbor neighborhoods and, especially, waterfront attractions museums, etc., (through the Cultural Connector boat service) which are accessible from the harbor. Support the BRA's Inner Harbor Water Transportation Study recommendations for this area including service from the regional water transit terminal, to be constructed by the Massachusetts Department of Transportation at the InterContinental Hotel.
- Implement public amenities, including parks, community boating, watersheet sculpture garden, restaurants, etc. along the Channel in accordance with the Fort Point Channel Watersheet Activation Plan, the blueprint for this urban water park.
- Support the development of the South Bay Harbor Trail linking Fort Point Channel to the South End, Roxbury, and the Fenway, as well as to the Southwest Corridor Park and the Emerald Necklace.
- Work with the BRA to disperse funds from the development of tidelands out of the South Boston Waterfront Account of the Fund for Parks and Recreation to support open space and recreational activation in the Fort Point District.
- Support the Public Works Department's efforts to rehabilitate and restore the Old Northern Avenue Bridge, an historic resource and vital pedestrian and bicycle connection between the Rose Kennedy Greenway, Downtown Waterfront, Fort Point District, and the South Boston Waterfront/Innovation District.
- Support the development of the Historic Piers Network, a system of physical and programmatic historic interpretation to attract year-round use along the Harborwalk and to protect public access.

## Opening and Accessing a Renewing District: The South Boston Waterfront/Innovation District

Thanks to critical public projects such as the Moakley Federal Courthouse, the I-90 Connection to Logan Airport, the MBTA Silver Line, and the Boston Convention and Exhibition Center, a transformation of the South Boston Waterfront is well underway. This burgeoning area of the City will require the continued integration of industrial, commercial, residential, cultural, civic, and open space/recreational uses to form a lively district.

Significant public planning has taken place for more than a decade to develop a framework for the current development projects in the district including Fan Pier, Seaport Square, and Pier 4. The Seaport Public Realm Plan, South Boston Waterfront District Municipal Harbor Plan, Commonwealth Flats Master Plan, and 100 Acres Master Plan have laid out a vision and a framework to guide developers, designers, and community preservationists. The waterfront will be made accessible to the public via a continuous Harborwalk and linked to an inland park system by tree-lined thoroughfares and other public amenities. The

Harborwalk and inland park system will be supported by a variety of cultural and commercial uses, including the Institute of Contemporary Art, Boston Children's Museum, and District Hall, to enliven and activate this area.

## Recommendations

- Work to complete the Harborwalk public access network in the South Boston waterfront, including measures to assure broad public access from inland neighborhoods. Extend and connect the Harborwalk network from the Fan Pier and the Institute of Contemporary Art to Pier 4 and the pier buildings at Commonwealth Pier and the Boston Fish Pier. Consider where feasible further extensions or point access to the Boston Marine Industrial Park, to Dry Dock No. 3, and to the Reserved Channel, as well as connecting across the Summer Street Bridge to L Street Beach and Castle Island in the South Boston Historic Shoreline District. Encourage pedestrian links and view corridors to enable maximum public awareness and use of the Harborwalk. Use signage and landscaping to draw users through public access segments to the Harborwalk. Develop an interpretive signage system to explain the maritime industrial and related uses found in the District. Ensure adjacent ground floor uses are compatible with and encouraging of the public's use of the Harborwalk. Develop implementation tools for the Seaport Public Realm Plan and the South Boston Waterfront District Municipal Harbor Plan urban design guidelines so as to assure human-scale development along pedestrian corridors to the Harborwalk.
- Encourage recreational use of the watersheet itself via zoning and planning tools, and the Chapter 91 tidelands regulations. Ensure these activities are available for patronage by the public. Support accessory land side uses such as boathouses, restroom facilities, fishing gear rental and sales, and associated food service to promote public use.
- Support active recreation uses in the parkland envisioned by the open space plans of both the Seaport Public Realm Plan and South Boston Waterfront District Municipal Harbor Plan at the southwest end of the Reserved Channel to ensure balanced recreation opportunities in the South Boston Waterfront District.
- Support the implementation and refinement of the recommendations contained in the BRA's Seaport Public Realm Plan. Work through the implementation process (urban design guidelines, zoning amendments, etc.) to assure varied active and passive open space and recreation needs are met for present and future users.
- Support the development of the Historic Piers Network, a system of physical and programmatic historic interpretation to attract year-round use along Harborwalk and to protect public access.

## Enhancing Olmsted's Vision: The South Boston Historic Shoreline

The rich history of this section of Boston's shoreline can be the central theme to guide the next phase of its revitalization. Fort Independence has a military history going back to the 17<sup>th</sup> century. Castle Island and Marine Park are the waterfront segments of Olmsted's vision for the 19<sup>th</sup> century. The history of

the 20<sup>th</sup> century recreation movement is reflected in the City-improved facilities at the L Street Bathhouse and Joe Moakley Park, further supporting this district's historical theme.

The 1993 “Back to the Beaches” report by the city/state Joint Commission on the Future of the Boston Harbor Beaches laid the groundwork for the Department of Conservation and Recreation's beach restoration projects. Two Metropolitan Beaches Commission reports, in 2007 and 2014, reviewed improvements which have been made to date, and suggested additional initiatives to further enhance Carson Beach and Pleasure Bay. Concerted regional access improvements must also be made to these enhanced regional waterfront attractions.

### Recommendations

- Continue to invest in improvements to the Castle Island area to enhance its use with an eye toward balancing local neighborhood and citywide visitation interests. Establish Castle Island as a museum and historical interpretative center. Increase the number of visitation days at Fort Independence.
- Provide Beach Shuttle bus connections from the UMass/JFK MBTA station to Carson Beach and Castle Island in accordance with the Back to the Beaches plan and the 2014 Metropolitan Beaches Commission report, and extend bus service from Columbia Road to Carson Beach.
- Provide designated pedestrian-activated crossings from Joe Moakley Park to Carson Beach.
- Support ongoing water quality improvement efforts that sustain swimmable conditions in these waters.
- Provide designated pedestrian paths through a wayfinding system from Telegraph Hill and Independence Square to the shoreline.
- Support the recommendations of the Metropolitan Beaches Commission 2014 Report, including the creation of a “signature” bathhouse at Pleasure Bay, reuse of the “Pickle Jar” building, improved lighting along Day Boulevard, full signalization at the L Street intersections with Columbia Road and Day Boulevard, and pedestrian-activated crossing signals in front of the Curley Community Center.

## Linking Institutional Development: The Columbia Point Promenade

Columbia Point continues to evolve with a rich mix of residents, students, workers, and visitors. During the past decade, expansion of the John F. Kennedy Library and Museum, construction of the new Edward M. Kennedy Institute for the U.S. Senate, and implementation of UMass Boston's 25-year Master Plan have brought thousands of additional visitors and students to Columbia Point annually. Hundreds of residents, including many long-time residents, live at Harbor Point Apartments and the more recently-constructed Peninsula Apartments. Additional housing is planned on Mt. Vernon Street by Corcoran Jennison Companies.

Residents, students, workers, and visitors enjoy the local open space system that takes advantage of the water's edge. The Department of Conservation and Recreation's Old Harbor Park at Harbor Point, built in the 1980s, was a key open space amenity

for residents. West Link followed in 2006, linking Old Harbor Park to Carson Beach. More recently, new segments of the Harborwalk, including at the Kennedy Library and a UMass segment opening in 2015, will further enhance public access to the water's edge. The Boston Redevelopment Authority's pending re-design of Mt. Vernon Street will help increase inland access to the waterfront.

### Recommendations

- Reuse the Calf Pasture Pumping Station in concert with the needs of the public as well as its owner, UMass Boston, so as to provide a destination use and an activity node for the Columbia Point Promenade area.
- Support expansion of the UMass Boston Marine Operations Waterfront Recreation Program, which currently provides introductions to sailing, kayaking, and stand-up paddling from its Fox Point dock. Continue to support this program's operation of Monday Lunchtime Harbor Cruises for the UMass population and the general public.
- Explore with the Department of Conservation and Recreation the possible use of the John T. Fallon State Pier located at the Kennedy Library and Museum for water transportation to Columbia Point.
- Develop shuttle bus loops between the JFK Library and Carson Beach/Castle Island via the JFK/UMass Red Line station.
- Continue to link programmatically both the State Museum and the University of Massachusetts to the waterfront open space in this area including the Arts on the Point Project.
- Advance the open space goals and objectives of the 2011 Columbia Point Master Plan as they relate to the waterfront, including providing physical and visual links between key open spaces and across Columbia Point to Boston Harbor; developing a public open space system of active and passive parks, squares and streets, connected to the water's edge; creating a sense of place along the waterfront with active uses and amenities; and, preserving and enhancing public access to the waterfront and activating the water's edge.

## Creating Recreational Opportunities: The Savin Hill Bay Area

In the past decade, significant improvements have occurred at some of Dorchester's beaches, which are important and well-used assets for the community. Water quality is very high at Savin Hill Beach, and its walkways are well-maintained. Water quality improvements are still needed at Malibu and Tenean Beaches, where illegal sewer connections can drain into the harbor and limit the number of days that residents can safely swim and play at those beaches. Moreover, while Malibu Beach is easily accessible and well maintained, Tenean Beach is in need of repair, and has been damaged by storms and high tide. (While not part of the Savin Hill Bay district, connections to and improvement of Tenean Beach is mentioned here given the importance of connectivity to the success of the city's harbor open space.)

## Recommendations

- Develop Savin Hill Bay's protected waters as an aquatic park for passive and active water-oriented recreation.
- Enhance the developed Malibu Beach and supporting facilities by the provision of a dinghy dock and boat rental.
- Support ongoing efforts to improve water quality at Savin Hill Bay and Malibu Beach.
- Integrate McConnell Park with Malibu Beach and Savin Hill Bay by landscaped lawns and paths.
- Support connecting Tenean Beach to Savin Hill Bay through the construction of a boardwalk along the Southeast Expressway embankment to Victory Road Park.
- Identify new locations for public boat launching ramps.
- Extend public access from McConnell Park via a boardwalk along the periphery of the expressway to connect the public beach at Clam Point.
- Support the connectivity recommendations of the 2014 Metropolitan Beaches Commission report: "Increase public transit options and new connections between beaches in Dorchester and South Boston; provide connections to the Harborwalk, [beaches,] and the Neponset River Greenway/Trail from neighborhoods that are not directly contiguous, such as Bowdoin/Geneva, Fields Corner, Clam Point, Popes Hill, Codman Square, Ashmont, and Lower Mills. Strengthen connections to the waterfront at UMass Boston and Columbia Point; consider a potential transportation partnership with UMass Boston and a seasonal shuttle from Franklin Park down Columbia Road."
- Support capital and other recommendations of the 2014 Metropolitan Beaches Commission report, such as a redesign and redevelopment of Tenean Beach, a new bathhouse at Savin Hill Beach, sediment dredging for improved water flow and quality, beach connections for cyclists and pedestrians, boat/kayak rentals, and more concessions/food trucks.
- Complete Harborwalk links along Port Norfolk linking Tenean Beach with Port Norfolk Park, Pope John Paul II Park, and the Neponset River Greenway

## Building a User Base through Partnership: The Boston Harbor Islands

With the success of the Boston Harbor Cleanup Project, the 2006 opening of the restored Spectacle Island to the public, and the 2011 opening of a visitor pavilion on the Rose Kennedy Greenway, the Boston Harbor Islands National Recreation Area (BHINRA), with its 34 islands and peninsulas, continues to attract a growing number of visitors (18 of the 34 islands are within Boston city limits). This is one of America's few urban national recreation areas. The Boston Harbor Islands Partnership consists of the owners, including city, state and federal governments, and two non-profit organizations, who manage the park. The City of Boston Parks and Recreation Department and the state's Department of Conservation and Recreation own Spectacle Island, a major hub to the rest of the islands.

Six islands, including Spectacle, Georges, Peddocks, Lovells, Grape, and Bumpkin are serviced by public ferry. Spectacle, Georges, and Peddocks Islands have visitor/welcome centers. Some of the more rustic islands, such as Peddocks, Bumpkin, Grape, and Lovells, offer camping experiences, including yurts on Peddocks Island for less seasoned campers. Free daily programs on the islands make them one of the most popular visitor destinations in the state.

The recently built Camp Harbor View, on the City-owned Long Island, affords inner city kids the opportunity through summer camps to experience this Distinctive Landscape (as designated by the state Department of Conservation and Recreation in its Scenic Landscape Inventory) as do more affluent visitors.

The Boston Harbor Islands, though beloved and enjoyed by many, are isolated and buffeted by their aquatic setting, making them among the most fragile and vulnerable resources in Boston's open space system. Continued investment in this national recreation area is needed, especially in light of predicted sea level rise and extreme storm events.

## Recommendations

- Support the Camp Harbor View program to give inner city kids opportunities to experience the harbor environment at the summer camp grounds on Long Island.
- Build upon the success of the Island Alliance and National Park Service's \$4 million Harbor Islands Pavilion on the Rose Kennedy Greenway, and work to enhance wayfinding from the Greenway to the Long Wharf water transportation gateway to the Harbor Islands.
- Work with the University of Massachusetts and the Kennedy Library on the development of a Dorchester-based gateway to the Harbor Islands, and with Fan Pier developers on the implementation of a Harbor Island gateway in the South Boston Seaport District in accordance with the South Boston Waterfront District Municipal Harbor Plan.
- Support ferry service from Lynn, Squantum Point in Quincy, and Point Allerton in Hull to the BHINRA as recommended by the 2014 Metropolitan Beaches Commission Report to diversify the visitor base.
- Support the recommendations of the 2014 Metropolitan Beaches Commission Report to remediate the asbestos at Gallops Island, invest in the Georges Island marina and terminal, and dredge the marina area of Spectacle Island.
- Document and map all conservation lands on the islands, specify those of critical environmental concern, and develop a natural resource protection plan for their permanent maintenance. Continue to separate these lands from recreational and intensive use areas.
- Continue the City's stewardship plan for Rainsford Island, including an archaeological reconnaissance-level survey, to identify cultural and natural resources and formulate recommendations for protection and use.



## Section 7.1.3

## RESOURCE PROTECTION

### URBAN WILDS AND NATURAL AREAS

#### Overview

Boston's remaining urban wilds and natural areas represent unique resources of natural heritage and biological diversity and are crucial components of the city's open space system. The geographic position and geologic history of the city's landforms has led to a complex array of wetland and upland habitats. Vast salt marshes once covered most of East Boston and the Dorchester shoreline, meadows dotted the hilltops of Roxbury, and pristine streams coursed through the forests of Hyde Park and West Roxbury.

Though almost all significant portions of these habitats have been lost due to extensive human-induced manipulation of land and water, we are fortunate today to have remnants of these original ecosystems. These areas provide a glimpse of the past, when most land in Boston was relatively undisturbed by people. They provide habitat for native plants and animals, harbor the city's remaining native biodiversity, and perform a wealth of ecological services such as storing floodwater, producing oxygen, and filtering stormwater run-off. They offer an oasis for people seeking a refuge from hectic city streets and serve as outdoor classrooms for children and adults learning about the natural world. Urban wilds and other natural areas expand the range of landscape experiences beyond that of the dense built environment and the designed and manicured landscapes of Boston's parklands.

#### History and Ownership of Urban Wilds

In 1976, the Boston Redevelopment Authority issued a landmark document that inventoried and offered recommendations for Boston's remaining natural areas. Boston's Urban Wilds: A Natural Area Conservation Program identified 143 areas throughout the city, whether privately or publicly owned, and categorically ranked them for significance. The document also offered strategies for their preservation within a then-limited spectrum of protection mechanisms. The BRA study offered a plan for land protection by identifying particular available spaces, defining priorities, and suggesting an aggressive strategy for acquisition. The report's description of the irreplaceable nature of these sites reinforced the need for protection.

The Boston Natural Areas Fund (later known as the Boston Natural Areas Network [BNAN]) was incorporated in 1977 as a non-profit organization to work with city and state agencies to secure urban wilds inventoried in the 1976 report. In the early 1980s, using available federal funding programs for environmental protection, BNAF successfully assisted the City of Boston and conservation entities with acquisition, advocacy, and planning for several sites in need of permanent protection. The City acquired more than 48 acres of land with BNAF's assistance. This included BNAF's purchase of eight sites which were then

transferred to the City's Conservation Commission. The Fund, in cooperation with the Massachusetts Audubon Society, developed environmental educational programs at several urban wilds to encourage understanding and proper use of these sites. In 1990, BNAF released an updated urban wilds report, documenting the loss of several important sites and stressing the need for increased protection of privately-owned natural areas. As of 2014, BNAN has become the Boston region office of The Trustees of Reservations (TTOR), the state's largest land preservation organization. In addition to its core focus of managing its many community gardens throughout the city, TTOR Boston Region will continue to provide advocacy and programming support for greenways and urban wilds in Boston.

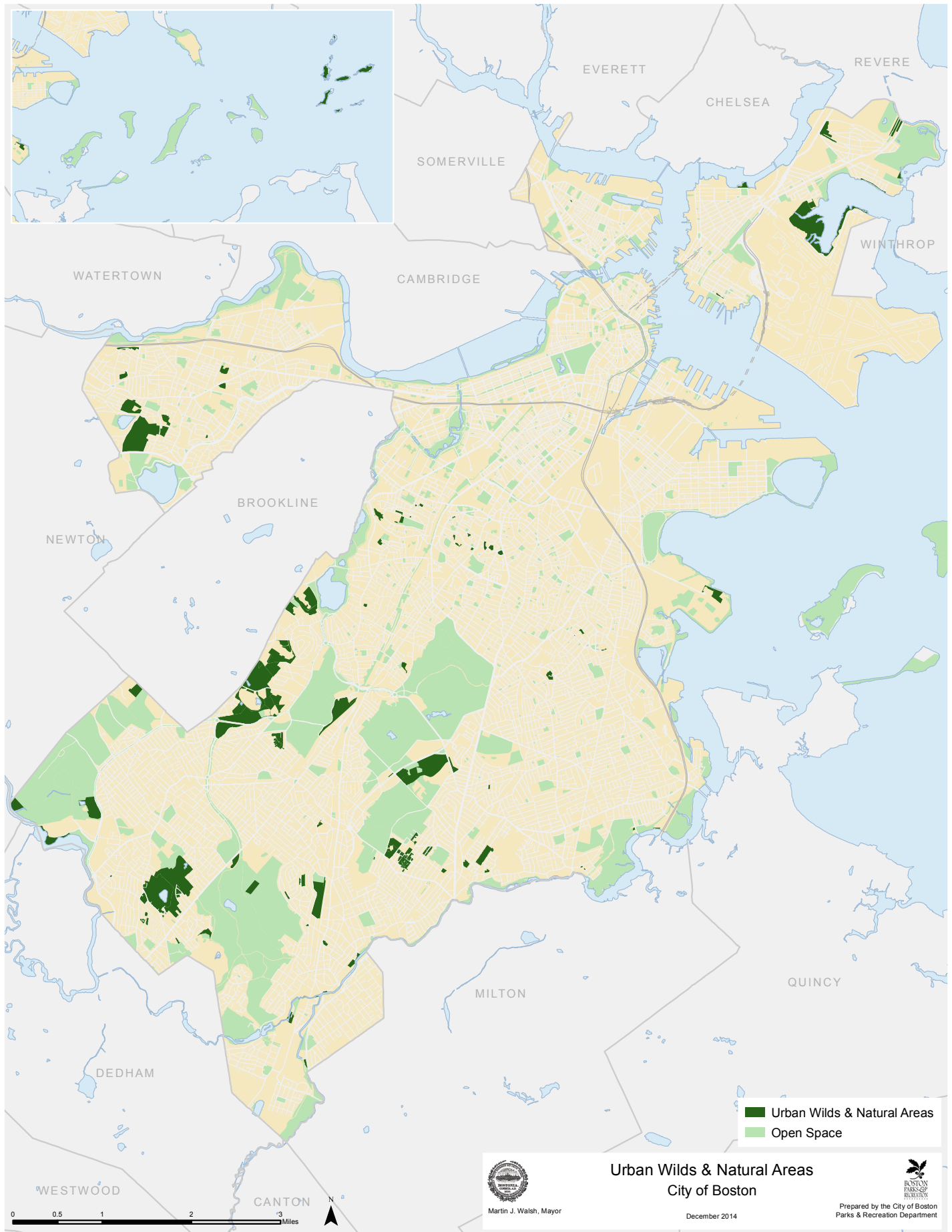
The Department of Conservation and Recreation (DCR) has also aggressively sought to protect significant parcels of land. Large sites identified in the BRA report, such as Sawmill Brook (Brook Farm) in West Roxbury and the Belle Isle Marsh Reservation in East Boston, are now owned by the DCR, as are a series of open spaces along the Dorchester shoreline and Neponset River. These acquisitions provide permanent protection to the city's largest and most important remaining habitats. Several of these have also broadened waterfront access for the city's residents.

Other state agencies whose mission is not natural resource protection have urban wilds under their jurisdiction, and therefore these wilds are not protected from public improvements, development, or encroachment. This includes the Massport's Wood Island Bay Marsh in East Boston.

With the exception of properties under the jurisdiction of the Boston Conservation Commission and the Parks Department, other urban wilds under City ownership are generally unprotected and subject to potential development. Several other City agencies own designated urban wilds, including the Department of Neighborhood Development, the Property Management Department, the Boston Redevelopment Authority, and the Boston Housing Authority.

Several large unprotected woodlands, such as St. John's Seminary in Brighton, Roxbury Latin School Woodlands and West Roxbury Quarry in West Roxbury, and the Daughters of Saint Paul in Jamaica Plain, are privately owned by private non-profit institutions, individuals, or businesses. Some successes have been found in the use of conservation restrictions held by the Conservation Commission in protecting natural areas at the Cenacles in Brighton, within Allandale Woods in West Roxbury, and atop Parker Hill in Mission Hill. Tax-exempt non-profit institutions such as churches and schools, however, cannot take advantage of the tax relief offered to other private entities upon the donation of conservation easements.

Since 1998, the Parks Department has been responsible for the maintenance of most City-owned urban wilds under its Urban Wilds Initiative (UWI). The UWI, in turn, has partnered with organizations such as BNAN (now TTOR Boston Region), Southwest Boston CDC (SWBCDC) and the Student Conservation Association (SCA) to create and run youth conservation programs at the Parks Department to better maintain its larger urban wilds sites while helping young Bostonians to develop leadership and technical landscaping skills. The Boston Youth



Fund (BYF) has funded summer youth jobs for site clean-ups, trail maintenance, and vegetation control. Many corporate firms, non-profit organizations, academic institutions, City and county court community service programs, as well as neighborhood and local community groups, have been enlisted to conduct clean-ups, plantings, and special landscape restoration projects in the urban wilds.

Staffing and funding levels have continued to be very limited with only one urban wilds program manager on staff while maintenance burdens have simultaneously increased with the addition of more parkland. As a consequence a great deal of the necessary maintenance needs for these sites depends on the availability of volunteer help.

## Recent and Ongoing Initiatives

### Site Inventory and Master Planning

In 2002, the UWI developed the Boston's Urban Wilds and Natural Areas Management Plan, a comprehensive master plan for urban wild and natural area site management, program development, and administration. In addition to detailed site descriptions and assessments, the plan outlines a prioritized maintenance and management scheme, and presents a programmatic strategy for further outreach, resource development, increased site protection, and enhanced levels of stewardship and program administration. The UWI has compiled an inventory of all City-owned urban wilds (see Table UWNA-1).

### Landscape Restoration

Some of the larger, more ecologically important sites have been selected for long-term habitat restoration. These sites include Roslindale Wetlands, Allandale Woods, Sherrin Woods, and Gladeside Urban Wild. Corporate and non-profit partners, in addition to local friends groups, have been helpful in conducting multi-year habitat restoration efforts to manage invasive plants, improve soil conditions, and install appropriate, site-specific plants. Summer youth conservation crews from BNAN, the Student Conservation Association, and the Southwest Boston Community Development Corporation's Green Team have also been useful in maintaining restored landscapes during the summer months in addition to their trail design, installation and maintenance work.

While the major objective for most sites is to accommodate public access, passive recreation, and expand environmental education opportunities where appropriate, projects are also pursued at high-priority sites where restoration of ecological functions and values is feasible. Restoration projects are being implemented based on their cost effectiveness, potential to provide habitat for native plants and animals, and ability to perform other ecological functions such as filtering and reducing storm-water run-off, producing oxygen, mitigating the warming effects of urban development, reducing soil erosion, and furthering a sense of environmental stewardship within the community.

In addition to ongoing management and general maintenance of urban wilds citywide, various significant site-specific projects have been undertaken since 2012, as shown below.

### Site-Specific Initiatives

#### *Puddingstone Garden and Buena Site Renovations*

In 2014, the Parks Department received \$450,000 in grant funding from the Massachusetts Executive Office of Energy and Environmental Affairs' Signature Urban Park Program. Two of the three projects funded by the state include urban wilds: Puddingstone Garden and Buena Vista (also known as Gendrot Trust/Warren Gardens), both in Roxbury.

A product of the 1960s Roxbury Beautification Program, Puddingstone Garden is an important neighborhood pocket park in Grove Hall. The latest round of improvements include plans for minor site regrading for accessibility, tree pruning, installation and/or repairs of pathways, fencing and stone steps, and the installation of signage, landscaping and a memorial boulder.

The Buena Vista site is the last natural area of note in the Dudley Square section of Roxbury. The land around this site was originally pasture lands belonging to local missionary John Eliot. In the late 19<sup>th</sup> century, clothing merchant Isaac Fenno built his mansion on highest ridge in this area and named it "Buena Vista." When his wife, aspiring artist Amira Fenno (Gendrot) died in 1955, she left the property to the City to "be forever kept open, an object of beauty with its rocks and trees." Since the estate was leveled in the 1960s as part of the BRA development of Warren Gardens Housing Development, this project is the first significant effort to restore and beautify the site. The program developed for the site honors the site history with interpretive historical signage, an artistic moss mural, trailhead construction, wall repair, site identification signs, a city overlook, minor regrading, tree pruning and landscape plantings.

#### *Allandale Woods Trailhead and Wayfinding Project*

Allandale Woods is the largest city-owned Urban Wild. At approximately 100 acres, it touches three neighborhoods and abuts the Brookline town border. As the first capital project of its kind, the City initiated design work for this urban wild in 2014 with the goals of increasing visibility and improving accessibility to this largely hidden site on a comprehensive, site-wide basis. While focusing on the renovation of trailhead entrances and the installation of site identification signage and internal wayfinding, this project also includes features such as grading and drainage improvements, invasive plant management, wetland restoration plantings, wetland trail crossings, historical interpretive signage and stream bank stabilization.

## The Next Seven Years

The land protection accomplishments achieved by the City and its partners over the last thirty-five years should now be complemented to address the considerable land management challenges that lay ahead. Based upon preliminary site evaluations and the work projects undertaken at urban wild sites to date, generalized recommendations for urban wild and natural areas



site management and program administration are summarized below. Boston's Urban Wilds and Natural Areas Management Plan will explore these goals and objectives in more detail.

**Goal:** Protect City-owned urban wilds and other natural areas from development, encroachment, and uses that degrade their natural character.

- Complete a boundary survey of all parcels and verify that existing boundaries conform to current ownership records. Document and rectify any boundary encroachments encountered.
- Work with the appropriate City agencies to transfer jurisdiction of remaining City-owned urban wilds and other natural areas to either the Parks Department or the Boston Conservation Commission. If outright transfer of jurisdiction cannot be facilitated, conservation restrictions should be placed on parcels to ensure their preservation as natural areas.
- Continue to use the Parks Commission's 100-foot rule jurisdiction, the Conservation Commission's wetlands protection powers, and other land use regulatory tools to prevent impacts to the urban wilds and other natural areas from nearby developments, uses, and encroachments; and,
- Achieve improved coordination with other City agencies seeking to conduct work on urban wilds.

**Goal:** Manage and maintain City-owned urban wilds and other natural areas to facilitate public access and recreation where appropriate and to promote site ecology.

- Work with community service groups, friends groups, the Parks Department's Maintenance Division, and the Boston Youth Fund year-round to conduct clean-ups and basic maintenance and improvements at each site.
- Continue site-specific inventories and assessments at a scale and scope appropriate for each site. Continue to adapt and modify maintenance/management plans as conditions and circumstances change.
- Develop and implement cost-effective ecological restoration projects at priority sites, generally those containing significant areas of forest, wetlands, and/or open water.
- Develop and implement projects at selected sites, as appropriate and feasible, to encourage establishment of native plant communities, control invasive plant species, and curtail soil erosion.
- Explore the feasibility of hiring a year-round, specially-trained work crew committed to implementing projects at urban wilds and other natural areas.

**Goal:** Promote the use of City-owned urban wilds and other natural areas for passive recreation, science and arts-related education, and other uses in keeping with their natural character.

- Produce a map and brochure describing City-owned urban wilds and the role of the Parks Department in managing the Urban Wilds Program.
- Develop trail systems and site-specific maps highlighting sites' ecological as well as health and physical fitness benefits,

signage, information kiosks, and interpretative material for each site, as appropriate.

- Work with the Boston Park Rangers, local schools, scout troops, and environmental education organizations such as Massachusetts Audubon Society in using urban wilds and other natural areas as outdoor classrooms and natural history study sites for school groups, children's nature programs, families, and adults. Focus programs especially on biodiversity and interdependence of species.

**Goal:** Develop administrative, fiscal, and programmatic resources to ensure ongoing, long-term maintenance and management of City-owned urban wilds and other natural areas.

- Secure staffing as outlined in the Boston Urban Wilds and Natural Areas Management Plan to help manage and administer this program.
- Continue to recruit volunteer stewardship and advocacy groups to implement limited work projects and provide local support for urban wilds and natural areas.
- Establish sufficient yearly capital budget funds for implementation of prioritized renovation improvements at urban wild sites.
- Establish a sufficient yearly operation budget to fund urban wild maintenance items that are key to public health, safety, and well-being (i.e. sidewalk snow removal, hazardous tree removal, etc).
- Continue efforts to raise funds from other private and public funding sources to cover operational expenses (e.g., tool and supplies, year-round landscape maintenance crews, plant materials for restoration efforts, and staffing for interpretive tours by groups such as Audubon).
- Develop a system for monitoring of urban wild and natural area management activities, with an aim toward measuring progress on stated goals and objectives.
- Develop and implement an outreach strategy to ensure effective communication of urban wilds and natural areas management activities, successes, and notable achievements.

**Goal:** Advocate for the long-term protection and stewardship of other (non-City) publicly- and privately-owned urban wilds and other natural areas.

- Continue to use the City's Open Space Acquisition Program for the identification, assessment, and acquisition of high priority privately-owned urban wilds and other natural areas.
- Work with private landowners, other public natural area management agencies, such as the DCR, and other concerned parties such as Boston Natural Areas Network, and neighborhood-based groups in facilitating ecologically-based land management activities for all natural areas in Boston.

# City-Owned Urban Wilds

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/ Jurisdiction	Open Space Mgt	Protection	POS	Neighborhood	General Zoning Districts	Open Space Type
Fernald Rock	0.06	X	COB	BCC	BPRD	A97	X	Dorchester	Residential District	Urban Wilds & Natural Areas
Geneva Cliffs	1.80	X	COB	BCC	BPRD	A97	X	Dorchester	Residential District	Urban Wilds & Natural Areas
Willowwood Rock	0.56	X	COB	BCC	BPRD	A97	X	Dorchester	Open Space District	Urban Wilds & Natural Areas
Condor Street Beach I	2.74	X	COB	BCC	BPRD	A97/LWCF/ Ch91/ WPA/AUL	X	East Boston	Open Space District	Urban Wilds & Natural Areas
Condor Street Overlook	0.42	X	COB	BCC	BPRD	A97/WPA/ Ch91	X	East Boston	Open Space District	Urban Wilds & Natural Areas
The Rockies	0.71	X	COB	BPRD	NULL	A97	X	East Boston	Open Space District	Urban Wilds & Natural Areas
Blake Estates Urban Wild	0.34		COB	BCC	NULL	A97/CR/ WPA	X	Hyde Park	Industrial District	Urban Wilds & Natural Areas
DeForest Urban Wild I	0.91	X	COB	BCC	BPRD	A97	X	Hyde Park	Residential District	Urban Wilds & Natural Areas
Monterey Hilltop I	4.18		COB	BCC	BPRD	A97	X	Hyde Park	Residential District	Urban Wilds & Natural Areas
Mother Brook III	3.91	X	COB	BCC	BPRD	A97/WPA	X	Hyde Park	Industrial District	Urban Wilds & Natural Areas
Sherrin Woods I	23.95	X	COB	BCC	BPRD	A97	X	Hyde Park	Residential District	Urban Wilds & Natural Areas
West Austin Rock	0.30	X	COB	BCC	BPRD	A97	X	Hyde Park	Residential District	Urban Wilds & Natural Areas
West Street	2.51		COB	BCC	BPRD	A97/WPA	X	Hyde Park	Industrial District	Urban Wilds & Natural Areas
Dell Rock I	1.30	X	COB	BPRD	NULL	A97	X	Hyde Park	Residential District	Urban Wilds & Natural Areas
Bussey Brook Meadow I	24.68	X	COB	BPRD	BPRD	A97	X	Jamaica Plain	Open Space District	Urban Wilds & Natural Areas
Nira Rock	1.45	X	COB	BPRD	NULL	A97	X	Jamaica Plain	Open Space District	Urban Wilds & Natural Areas
Gladeside I	10.29	X	COB	BCC	BPRD	A97/WPA	X	Mattapan	Open Space District	Urban Wilds & Natural Areas
Mattahunt Woods I	6.01	X	COB	BCC	BPRD	A97/WPA	X	Mattapan	Residential District	Urban Wilds & Natural Areas
Woodhaven	1.22	X	COB	BCC	BPRD	A97	X	Mattapan	Residential District	Urban Wilds & Natural Areas
Back of the Hill	3.72	X	COB	BCC	BPRD	A97	X	Mission Hill	Open Space District	Urban Wilds & Natural Areas
Roslindale Wetlands Urban Wild I	8.05	X	COB	BCC	BPRD	A97/WPA	X	Roslindale	Residential District	Urban Wilds & Natural Areas
Rockledge Street Urban Wild	0.51	X	COB	BCC	BPRD	A97	X	Roxbury	Open Space District	Urban Wilds & Natural Areas
Buena Vista	1.48	X	BRA	NULL	BPRD	A97	X	Roxbury	Open Space District	Urban Wilds & Natural Areas
Allandale Woods II	10.60	X	COB	BCC	BPRD	A97/WPA	X	West Roxbury	Open Space District	Urban Wilds & Natural Areas
Dunbarton Woods	0.74	X	COB	BCC	Private	A97	X	West Roxbury	Residential District	Urban Wilds & Natural Areas
Millennium Park II	8.33	X	COB	BCC	BPRD	A97/WPA	X	West Roxbury	Open Space District	Urban Wilds & Natural Areas
Rivermoor III	0.52	X	COB	BCC	BPRD	A97/WPA	X	West Roxbury	Open Space District	Urban Wilds & Natural Areas
Allandale Woods I	49.58	X	COB	BPRD	BPRD	A97/WPA	X	West Roxbury	CPS	Urban Wilds & Natural Areas
Euston Path Rock	0.39		COB	NULL	NULL			Allston-Brighton	Open Space District	Urban Wilds & Natural Areas
Charlestown Overlook	0.21		BRA	NULL	NULL			Charlestown	Residential District	Urban Wilds & Natural Areas
Meetinghouse Hill Overlook	0.34		COB	NULL	NULL			Dorchester	Residential District	Urban Wilds & Natural Areas
The Humps	0.93		COB	NULL	NULL			Dorchester	Residential District	Urban Wilds & Natural Areas
Blue Hill Rock	0.45		BHA	NULL	NULL			Dorchester	Residential District	Urban Wilds & Natural Areas
Belle Isle Coastal Preserve	1.47	X	COB	NULL	BPRD	WPA/Ch91/ ACEC		East Boston	Open Space District	Urban Wilds & Natural Areas

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mgt	Protection	POS	Neighborhood	General Zoning Districts	Open Space Type
Dana Avenue Urban Wild II	0.03		COB	NULL	NULL	WPA		Hyde Park	NULL	Urban Wilds & Natural Areas
Dell Rock II	0.04	X	COB	NULL	BPRD			Hyde Park	Residential District	Urban Wilds & Natural Areas
Pleasant View I	0.07		COB	NULL	NULL			Hyde Park	Comm/Off/Bus District	Urban Wilds & Natural Areas
Williams Street III	0.31		COB	NULL	NULL			Jamaica Plain	Open Space District	Urban Wilds & Natural Areas
Forest Hills Preserve	2.45	X	BHA	NULL	NULL			Jamaica Plain	Open Space District	Urban Wilds & Natural Areas
Babson-Cookson Tract	2.41		COB	NULL	NULL			Mattapan	Residential District	Urban Wilds & Natural Areas
Currier Woods I	1.43		COB	NULL	NULL			Mattapan	Residential District	Urban Wilds & Natural Areas
Mattahunt School Woods	2.98	X	COB	NULL	NULL			Mattapan	Residential District	Urban Wilds & Natural Areas
Mattahunt Woods III	3.57		COB	NULL	NULL	WPA		Mattapan	Residential District	Urban Wilds & Natural Areas
Savannah Woods I	3.19		COB	NULL	NULL			Mattapan	Residential District	Urban Wilds & Natural Areas
Boundary I	7.01	X	COB	NULL	NULL			Roslindale	Residential District	Urban Wilds & Natural Areas
Canterbury I	1.23		COB	NULL	NULL			Roslindale	Residential District	Urban Wilds & Natural Areas
John Eliot Square Urban Wild I	0.23		COB	NULL	BCCBPRD			Roxbury	Residential District	Urban Wilds & Natural Areas
Dana Road I	2.73		COB	NULL	NULL			West Roxbury	Residential District	Urban Wilds & Natural Areas
Ohrenberger Woodland	3.78	X	COB	NULL	NULL			West Roxbury	Residential District	Urban Wilds & Natural Areas
West Roxbury High School Marsh	21.48	X	COB	NULL	NULL	WPA		West Roxbury	Institutional District	Urban Wilds & Natural Areas
Rivermoor II	1.03		BRA	NULL	NULL	WPA		West Roxbury	Open Space District	Urban Wilds & Natural Areas

## Legend:

<b>PA</b>	Publicly Accessible
<b>POS</b>	Protected Open Space
<b>Open Space Mgt</b>	Open Space Management Entity