

Open Space Plan 2015-2021

Section 7

Analysis of Needs

Section 7.1.3 Resource Protection

**URBAN WILDS &
NATURAL AREAS**

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Section 7.1.3: Resource Protection URBAN WILDS & NATURAL AREAS

OVERVIEW

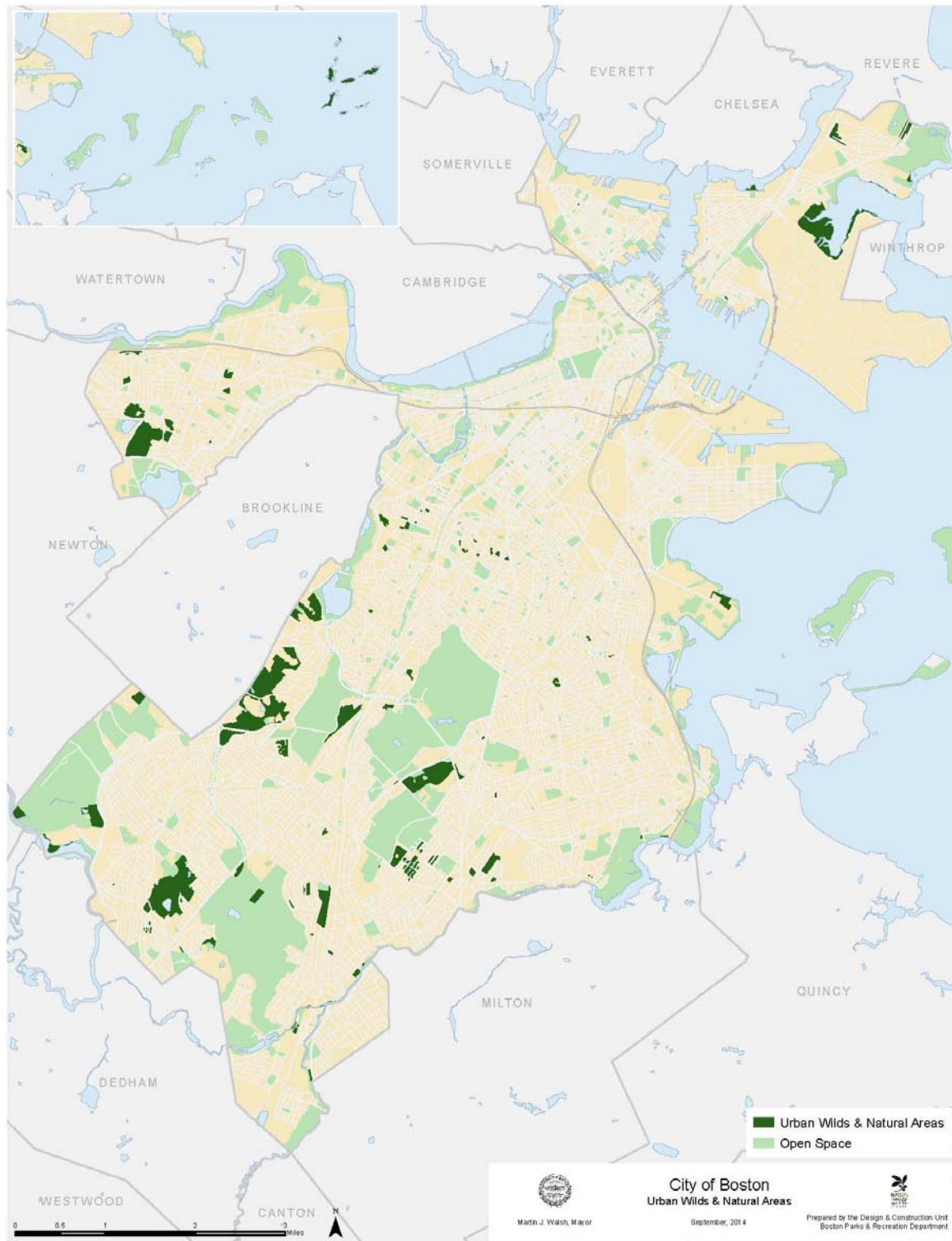
Boston's remaining urban wilds and natural areas represent unique resources of natural heritage and biological diversity and are crucial components of the city's open space system. The geographic position and geologic history of the city's landforms has led to a complex array of wetland and upland habitats. 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 a haven 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

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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 (now 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, the state's largest land preservation organization. The Trustees manage many natural resource conservation areas throughout the state, so their involvement in Boston's urban wilds management spectrum is welcome.

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.

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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. Important sites in this ownership category include the West Roxbury High School Urban Wild, owned by the Boston School Department, and Calf Pasture, owned by the Boston Water and Sewer Commission, but scheduled to be transferred to the University of Massachusetts-Boston.

Several large urban wilds, 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 unprotected and privately owned, whether 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 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.

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However, 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.

In 2008, the UWI started installing signs at approximately one third of the Parks-managed urban wilds. The new signage was intended to identify the sites, welcome visitors, and inform the public about the UWI program mission and site rules. Typically the signs have been installed to coincide with significant site improvement projects. More signs will be installed as funding allows.

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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).

While the major objective for most sites is to accommodate public access, passive recreation, and expand environmental education opportunities, 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 2002, as shown below.

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Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/		Open Space Mgt Protection	POS	C	Neighborhood	General Zoning Districts	Open Space Type
				Jurisdiction	Open						
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/Ch21E	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
Dell Rock I	1.30	X	COB	BPRD	NULL	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
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
Warren Gardens/Gendrot Trust	1.48	X	BRA	NULL	BPRD	A97	X		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
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
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
Blue Hill Rock	0.45		BHA	NULL	NULL				Dorchester	Residential District	Urban Wilds & Natural Areas
Calf Pasture I	1.91	X	COB	NULL	NULL	WPA/Ch91			Dorchester	Institutional 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
Belle Isle Coastal Preserve	1.47	X	COB	NULL	BPRD	WPA/Ch91/ACEC/Ch21E			East Boston	Open Space District	Urban Wilds & Natural Areas
Boundary I	0.06	X	COB	NULL	NULL				Hyde Park	Residential District	Urban Wilds & Natural Areas
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
Forest Hills Preserve	2.45	X	BHA	NULL	NULL				Jamaica Plain	Open Space District	Urban Wilds & Natural Areas
Williams Street III	0.31		COB	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
Rivermoor II	1.03		BRA	NULL	NULL	WPA			West Roxbury	Open Space 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

Table UWNA-1: City-Owned Urban Wilds & Natural Areas

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Site-Specific Initiatives

Belle Isle Fish Company (Belle Isle Coastal Preserve)

This small coastal site is a City-owned inholding within the state-owned Belle Isle Marsh Reservation in East Boston. Historically used by a sport-fishing club, the site was acquired by the City for tax foreclosure in the 1960s. Chronic dumping and nearby industrial operations had seriously degraded the site's ecological integrity, recreational value, and aesthetics. The City completed a state-mandated soil remediation program at this site in 2005. The Urban Wilds Initiative seized upon this opportunity to restore the site back to its original condition as a salt marsh. Contaminated soil was removed from the site and the area was re-graded to allow restored tidal flows and the establishment of native salt marsh vegetation. This project has provided about 1.6 acres of intertidal habitat for fish, shellfish, and birds. Since its restoration several ospreys have been observed nesting at the site for the first time since a nesting platform was installed decades ago at the edge of the property. Moreover, having connected the main section of the Belle Isle Marsh Reservation on the north side of the site with the access road off Saratoga Street, the project has restored a missing link integral to the future East Boston Greenway extension and has greatly enhanced coastal access to residents in this part of the city.

Condor Street Marsh

Similar to the Belle Isle Fish Company Urban Wild, this site along the Chelsea River in East Boston was also subject to a state-mandated soil remediation project. During 20 years of City ownership, the site had not been publicly accessible and had turned into a blighted dumping ground. The Urban Wilds Initiative used the soil remediation project as an opportunity to transform this urban brownfield into a scenic and accessible natural area. The restored site features walking paths, a boardwalk and viewing platform overlooking the Chelsea River, a salt marsh, a meadow, and interpretive displays highlighting the ecology and history of the Chelsea River. Remediation and restoration of this project was completed in 2004.

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Nira Rock

This small (1.8 acres) urban wild in Jamaica Plain features a dramatic rock outcrop, a meadow, and a small orchard. In 2004, the UWI hired the Community Outreach Group for Landscape Design to develop an ecology-based restoration design plan for this site. This project was selected to complement the planned improvements at the Jefferson Playground, and the re-establishment of a local advocacy group, the Friends of Nira Rock. Through grants, gifts, enormous volunteer efforts organized by the UWI, and some capital enhancements (i.e., site regrading and formalized connection to Jefferson Playground with a more defined public entrance), the site has been slowly transformed through a series of small phased projects. A major planting project was completed in spring 2007. In spring 2008, site identification signs were installed. In 2012, an adjacent parcel was acquired and used for the development of a formalized entrance at Arcola Street. The culmination of all these projects is an ecologically enhanced, more publicly accessible, and safer site that is better linked to and used by its surrounding neighborhood.

Geneva Avenue Cliffs

This 2-acre urban wild is located in the Bowdoin-Geneva area of Dorchester. Primarily composed of woods and outcroppings, this area was renovated to provide increased access via new trails and other passive recreation amenities. Funding was provided by, among others, the Barr Foundation, the Department of Neighborhood Development's Grassroots Program (based on federal Community Development Block Grant funds), and the Edward Ingersoll Browne Fund. The construction was completed in the summer of 2008. Science, art, and recreational events have been held at this site in subsequent years to promote public use and stewardship.

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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.

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THE NEXT SEVEN YEARS

The strides made by City agencies toward the protection and management of urban wilds should be augmented to address the considerable challenges of the next several years. Based upon preliminary site evaluations and the work projects undertaken at urban wild sites to date as described above, 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 all 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 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.

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- 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 systematic trail/path systems and site-specific maps, 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.*

- Seek additional staffing as outlined in the Boston Urban Wilds and Natural Areas Management Plan to help manage and administer the many facets of this underfunded, volunteer-based program.
- Develop site-based volunteer stewardship and advocacy groups to implement limited work projects and provide local support for urban wilds and natural areas.

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- Establish sufficient yearly capital budget funds for implementation of basic necessary improvements at all City-owned urban wild sites.
- 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.