
Open Space Plan 2008-2012

Section 7
Analysis of Needs

Section 7.1.3 Resource Protection
URBAN WILDS &
NATURAL AREAS

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OVERVIEW

Boston's remaining islands of natural heritage and biological diversity 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, harboring 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. It 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

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description of the irreplaceable nature of these sites reinforced the need for protection.

The Boston Natural Areas Fund (BNAF or the 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, also developed environmental educational programs at several urban wilds to encourage understanding and proper use of these sites. In 1990, BNAF also 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.

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 have identified urban wilds under their jurisdiction, which are not designated reservations, and, therefore, are not protected from public improvements, development, or encroachment. These include the Massachusetts Port Authority's Wood Island Bay Marsh in East Boston and the Massachusetts Bay Transportation Authority's (MBTA's) New Haven Street Urban Wild in West Roxbury.

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.

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Important sites in this ownership category include the West Roxbury High School Urban Wild, owned by the 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 Woods 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. 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 1989, the Parks Department has been responsible for the maintenance of most city-owned urban wilds under its Urban Wilds Initiative. The Boston Youth Fund (BYF) has provided regular summer clean-ups and vegetation control in the summer months. 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, with some limited support from the Parks Department Maintenance Division.

However, as staffing and funding levels have continued to stagnate with only one contract employee (urban wilds program manager) and no maintenance operating budget, while maintenance burdens have simultaneously increased with the addition of more parkland, the maintenance of urban wilds continues to be sporadic and uneven. In addition, maintenance staff and summer work crews, such as the BYF, do not have the specialized ecological landscape management training or supervision required for the care of sensitive natural areas.

In 1992, the Parks Department and Environment Department installed signage at 12 city-owned urban wilds. However, today many of these signs are in disrepair and require replacement.

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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 Urban Wilds Initiative has compiled an inventory of all city-owned urban wilds (see Table UWNA-1 at right).

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 to native plants and animals; and ability to perform other ecological services 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 city-wide, various significant site-specific projects have been undertaken since 2002, as shown below.

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Site-Specific Initiatives

Belle Isle Fish Company (Belle Isle Coastal Preserve)

This small (about two acres) 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 is 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. In 2006, osprey were 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 of 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 has not been publicly accessible and had devolved 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, an upland meadow, and interpretive displays highlighting the ecology and history of the Chelsea River. Remediation and restoration of this project was completed in 2004.

Nira Rock

This small (1.8 acres) urban wild in Jamaica Plain features a dramatic rock outcrop, a meadow, and a small orchard maintained by the Friends of Nira Rock, with technical assistance from Earthworks Projects, Inc.. In 2004, the UWI hired the Community Outreach Group for Landscape Design to develop an ecology-

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based restoration design plan for this site. This project was selected to complement the planned improvements at the Jefferson Playground, and the reformation of a local advocacy group called the “Friends of Nira Rock.” Through grants, gifts, enormous volunteer efforts organized by the UWI, and some capital enhancements (i.e., site regrading and connection with Jefferson Playground with a more defined public entrance), the site has been slowly transformed in a series of small phased projects. In spring 2007, site identification signs will be installed and a major planting project will be conducted. The culmination of all these projects will be an ecologically enhanced, more publicly accessible, and safer site that is better linked to and used by its surrounding neighborhood.

Puddingstone Garden

Responding to community needs for open space and passive recreation in the densely developed Grove Hall section of Roxbury, the Urban Wilds Initiative completed a grant-funded renovation of this small 1.5 acre site in the fall of 2003. Working with the local neighborhood association and a volunteer design team from the Community Outreach Group for Landscape Design, the UWI developed and implemented a plan to rehabilitate the site with the installation of a stone dust pathway, native trees, shrubs and forbs, and benches. As part of this project, asphalt, a broken brick pathway, and a decaying arbor were removed, hazardous trees along the site borders were pruned, and ornamental perimeter fencing was repaired and repainted. .

Site Identification Signs

In the past year, an urban wilds logo and sign layout was designed by a BPRD graphic arts intern for use by the UWI. The signs will serve to identify the sites, welcome visitors, outline UWI program mission, list site rules, and offer contact information for the public to learn more about the UWI, offer assistance, or to report problems. Fabrication and installation of signs at selected sites is scheduled for 2007.

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City-wide Site Clean-ups

In addition to the special projects described above, the Urban Wilds Initiative has organized and overseen general clean-ups and routine maintenance at all city-owned sites. This work has included litter and trash removal, fence repair, mowing, and trail maintenance. The work has been primarily conducted by volunteer groups including corporate partners, non-profit groups, academic institutions, city and county community service workers, and, to a lesser extent, by summer youth conservation crews and local friends groups.

Landscape Restoration

In addition to city-wide clean-ups, the UWI has partnered with Earthworks Projects, Inc. since 2001 to enhance site ecology at approximately one dozen sites through invasive plant removal, the planting of native trees, shrubs and forbs, and soil stabilization through the installation of waterbars, cribbing and other other methods. While this partnership has been scaled down to focus on just several sites due to funding constraints and the UWI has taken on the lead role in volunteer recruitment, Earthworks continues to play a key role in restoration component of the UWI. Earthworks received a grant last year to develop an report analyzing the successes and challenges of a long-term volunteer-based landscape restoration program. The report, which will analyze restoration efforts conducted at selected site from 2001 – 2005, is expected to be released in 2007.

Land Protection

The period from 2002-2006 was characterized by tremendous progress in the area of land protection. A significant number of properties that were owned by other City Departments or quasi-state agencies have been transferred to the PRD or BCC. Two notable examples of these properties include over two dozen parcels which make up most of the Roslindale Wetlands Urban Wilds (a 10-acre red-maple swamp that was previously classified as Eldon Street I and Eldon Street II and owned by DND) and Gladeside Urban Wild (a scenic 10.25 acre site in Mattapan with an oak/hickory upland, a buttonbush/red maple swamp, and a recently enhanced ridge and loop trail system that was previously owned by the Boston Public Health Commission). In addition, new urban wilds in Hyde Park and West Roxbury have been added to the inventory of urban wilds.

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THE NEXT FIVE 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.*

- Document the ownership status and agency jurisdiction of all parcels comprising presumed city-owned urban wilds and other natural areas.
- 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.

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

- Continue to work with community service groups, friends groups, the Parks Department Maintenance Division, and the Boston Youth Fund, and year-round to implement 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 acres of forest, wetlands, and/or open water.
- Develop and implement projects at selected sites, as appropriate and feasible, to encourage establishment of native

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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, environmental education, and other uses in keeping with their natural character.*

- Produce a map and brochure describing city-owned urban wilds and other natural areas and discussing 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 printed 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.

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 permanent, salaried staffing as outlined in the Boston Urban Wilds and Natural Areas Management Plan to help manage and administer the many facets of this unfunded, 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.
- 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 for expanded operational expenses (e.g., dedicated work crews, continued clean ups, restoration efforts, and interpretive tours by groups such as Earthworks), special projects, and other capital needs.
- 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.

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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 work with the city's Open Space Acquisition Program in 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 Earthworks, Boston Natural Areas Network, and neighborhood-based groups in facilitating ecologically-based land management activities for all natural areas in Boston.