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DRAFT

2023-2029 OPEN SPACE AND RECREATION PLAN

COMMENT PERIOD CLOSES: MAY 21, 2023

BOSTON.GOV/OPEN-SPACE-PLAN

Thank you for taking the time to review the draft plan and provide your comments. Submitted comments will be taken into account before the final plan is issued.

The planning and recommendations in this document represent recent and ongoing work by the Boston Parks and Recreation Department. The plan is fully updated every seven years, and analysis and recommendations continue to be advanced between plan updates.

If you are interested in learning more about the project, the link above will bring you to the project page where you can find this document, comment form, contact information, and the previous 2015-2021 plan.

At this time, the draft includes maps at the city scale. A selection of neighborhood-scale maps will be published for download at the time of final publication.

Please submit your comments using the comment form on the [project page](#) or call 617-961-3025.

Sincerely,

Boston Parks and Recreation Department



City of Boston
Parks and Recreation

OPEN SPACE AND RECREATION PLAN

April 2023

OPEN SPACE AND RECREATION PLAN

2023-2029

CITY OF BOSTON

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April 2023

DRAFT

ACKNOWLEDGMENTS

We'd like to thank the many residents who use the parks of Boston, attended numerous community meetings on park efforts, and submitted input, comments, and suggestions to us through surveys and by correspondence. They made their recommendations known and shared their invaluable insights and knowledge.

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We also thank xxxxx for their assistance and review in the drafting of the xxxxxx chapters, respectively. There are many other community members, too numerous to mention, who reviewed and commented on sections of the plan draft. We thank them as well.

We also thank the Massachusetts Office of Geographic Information Services (MassGIS) for much of the data that we used for our own mapping and analysis.

Note: Data provided in the open space property inventories and the maps contained in this plan were developed for general planning purposes only, and as such are the best available data. However, readers are cautioned that use of such data may not be appropriate or sufficient for legal, design, or other site-specific purposes. For such purposes, only research in the Registry of Deeds or other appropriate offices, property surveys, and field-checked research can be considered appropriately reliable.

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SECTION 1

EXECUTIVE SUMMARY

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SECTION 1

EXECUTIVE SUMMARY

The Boston Parks and Recreation Department (BPRD) is the largest landowner within City government and the second largest owner of land in Boston overall. BPRD owns 2,196 acres of permanently protected open space, 1,000 acres of which make up the historic Emerald Necklace. This inventory includes 283 properties with two golf courses, 72 squares, 17 fountains, 210 courts, 12 street hockey rinks, 16 historic burying grounds and three active cemeteries. Additionally, BPRD maintains 27 urban wilds, four high school athletic fields and a total of 37 properties which it does not own. BPRD also manages the care of more than 38,000 public street trees in addition to the trees within its parks.

The City's open space system is critical to the quality of life of its residents. BPRD acts as a steward of publicly owned parks on behalf of the people of Boston, it owns and maintains clean and safe open spaces, and focuses on access, equity and excellence so that every neighborhood has open space that serves people and the environment. It advocates for open space to balance real estate development and population growth, updates aging infrastructure that is heavily used, and in some places historically significant, with sustainable design that is climate resilient.

The 2023-2029 *Open Space and Recreation Plan* (OSRP) provides BPRD an opportunity to assess the current open space system through data analysis, research, mapping and public input. This assessment is the basis of an action plan that will guide the City's work heading towards 2030. It will inform investment, programming, operations, citywide initiatives, and evaluation of ongoing policy work.

The inventory and analysis of existing open space (Sections 4, 5, and 7) and the public input process (Sections 2 and 6) found that the park system currently includes:

- Exceptional walkable access to existing open spaces for most residents in the city.
- Decreased ratio of permanently protected open space per 1,000 residents.
- Increased impacts due to density of development.
- Increased importance for park land to provide climate resilience.
- Increased need for tree canopy to combat heat impacts of climate change.
- Increased park demand due to COVID-19.
- Increased value of publicly-owned open space for civic, social and community building.
- Disparities in the distribution of open space acreage, features and amenities, leading to inequities in the city related to the benefits open space provides.
- A need to provide facilities and features to serve park users of all ages and abilities.
- A treasured system of historic parks that require improvements to meet current use.
- Increased demand for active recreational space for organized sports at all levels.

BPRD sees three broad challenge areas within the plan:

1. open space quantity and distribution,
2. open space quality and improvements, and
3. open space functionality and resilience.

OPEN SPACE QUANTITY AND DISTRIBUTION

POPULATION GROWTH

The Metropolitan Area Planning Council (MAPC) has projected a total population of 709,400 residents in Boston by 2030 (MAPC 2014).¹

The Boston Planning and Development Agency (BPDA) has projected a total population of 740,286 residents in Boston by 2030. That number is anticipated to rise to 800,000 by 2050.

Mayor Michelle Wu has stated the following about projected population growth in Boston (qtd. in Marchese):

“I have in my head the number 800,000, which was the peak of Boston’s population in the 1950s. So the question is: How do we ensure that we can be a green and growing city that’s healthy and affordable for everyone? We need to have the infrastructure to be able to support getting back to that height of our population with growth that is equitable and sustainable.”

BPRD sees this goal of being a “green and growing city” as the core of our work as outlined in this plan.

OPEN SPACE ACREAGE

At the time of the 2015-2021 OSRP, Boston had 617,594 residents and 4,689 acres of permanently protected open space, primarily owned by the City and State. This meant there was a ratio of 7.6 acres of protected open space per 1,000 residents.

Since 2015, the ratio of open space to residents has decreased as density has increased. Boston currently has 689,326 residents and 4,874 acres of permanently protected open space. This is a

ratio of 7.1 acres of permanently protected open space per 1,000 residents – a reduction of a ½ acre of open space per 1,000 residents in seven years.

Setting aside whether the ratio of 7.6 acres per 1,000 residents adequately and equitably serves the people of Boston, it has been the ratio we all benefited from in recent years. With a current ratio of 7.1 acres per 1,000 people, the City is at a point where it needs to be strategic in addressing open space needs alongside population growth so that it doesn’t continue down a path of progressively reduced levels of open space access. As the City’s population reaches 700,000, another 75 acres of protected open space needs to be added to maintain our current ratio of 7.1 acres per 1,000 people.

Looking ahead at the impacts to open space access that comes with population growth, with projected growth to 740,286 residents by 2030 the city would need 5,224 acres of permanently protected open space in order to maintain a 7.1 acres per 1,000 ratio. This would mean adding 357 acres of protected open space to the current inventory by 2030. To maintain the same ratio with the projected growth to 800,000 residents by 2050 the City would need 5,648 acres of permanently protected open space. This would mean adding 781 acres of open space to the current inventory by 2050.

BALANCING OPEN SPACE AND DEVELOPMENT

The provision of significant open space is a difficult challenge in the face of additional land use priorities such as the projected need to build 6,000 housing units a year leading up to 2030 to try to address the acute housing shortage in our city.

The need to protect or acquire hundreds of acres of open space is particularly difficult given the demand for development that fuels the regional economy and provides for the tax base, and also the desire for increased density and more affordable housing to offset the significant provision of high-end housing in the recent past. The provision of housing is a priority for a livable

¹ The Metropolitan Area Planning Council (MAPC) projected that there could be a “Status Quo Scenario” with a total population of 664,867 residents in Boston by 2030. MAPC projected that there would be 285,176 households and 307,504 housing units in Boston by 2030. MAPC projected a “Stronger Region Scenario” with a total population of 709,400 residents in Boston by 2030. MAPC projected that there would be 301,774 households and 324,975 housing units in Boston by 2030.

city for all, and there is a significant equity issue in the need to provide open space to serve housing - particularly affordable housing.

As the City plans for permanently protected open space into 2030, the projected 8.7% population growth will need to be strategically factored in, so that residents can continue to expect a comparable level of service from the City's open space system. New open space opportunities will need to be identified through planning, policies and partnerships across agencies in order to sustain the shared benefits that our open space system provides Bostonians today.

OPEN SPACE IN PLANNING AND DEVELOPMENT REVIEW

BPRD continually advocates for open space as critical infrastructure that balances development and maintains the quality of life and sense of place in the city. The goal is to increase the inventory of permanently-protected, publicly-accessible open space that is subject to *Article 97 of the Amendments of the Constitution of the Commonwealth*.

OPEN SPACE ACCESS

Boston's projected growth has the potential to widen disparities in open space distribution. Many of the densest neighborhoods will be experiencing additional residential development, increasing pressures on existing parks. Creation of new or expanded recreation areas in these neighborhoods will be challenging. Strategic assessment of potential new park spaces (looking at all potential sites - vacant or not), an enhanced public realm, and strong connections to existing green spaces from these neighborhoods are critical.

WALKING DISTANCE TO OPEN SPACE

The Trust for Public Land's (TPL) *10-Minute Walk Campaign* highlights the importance of park distribution throughout a city. The goal is that all residents should be able to walk to

publicly owned open space within ten minutes of where they live. TPL ranks Boston as offering 100% of residents access to a park or schoolyard within a 10-minute walk from home.

BPRD has built on TPL's work and developed its own walkshed analysis that provides a more fine-grained consideration of the open space system and who it serves. BPRD's walkshed maps illustrate where park access should be improved in order to meet the goal of access to a high-quality park system for all. Most residents benefit from access to open space of varying types throughout the city, but there are gaps. Service area gaps mean that residents in those areas cannot readily access the benefits of nearby open space. This is discussed in Section 7: Analysis of Needs.

The gaps include current and former industrial areas that have added residential and commercial uses without commensurate protected open space. Gaps exist in areas that haven't benefited from public investment to establish larger parks. There are gaps in areas where the population and park needs are so great that the demand on existing parks is significant. Lastly, there are gaps in areas where residents don't have access to specific types of parks.

PARCEL PRIORITY PLAN

BPRD has developed a *Parcel Priority Plan (PPP)* to guide the acquisition of open space. The goal of the PPP is to understand where the best opportunities are for enhancing and enlarging the network of parks in Boston. Parcels are identified in terms of benefits such as providing respite from heat, managing flood waters, expanding access in underserved communities, enhancing wildlife habitat, and connecting existing parks to each other. This is discussed in Section 7: Analysis of Needs.

OPEN SPACE QUALITY AND IMPROVEMENTS

Parks must be equitable not only in their distribution but also their quality - including environmental, health, civic and social, economic and aesthetic factors. Some of these factors are

explored in the coming chapters and others are highlighted in Section 9: Action Plan. The multiple uses and values of open space are discussed in Section 2: Introduction.

Designing and sustaining quality parks is one of the highest priorities of the OSRP. What cannot be achieved through creation of new park land must be realized through improving and sustaining the quality and functionality of existing resources, so that these spaces can meet or exceed the level of service that residents and visitors expect.

Stewardship activities include capital reinvestment, maintenance, renovation, restoration, and historic preservation. However, BPRD must focus on innovation to ensure a high quality parks system. Best practices, partnerships and optimization of operations must be explored, implemented, and evaluated. This work requires significant annual funding to sustain, and these investment needs will increase with population growth and increased impacts on park facilities.

OPEN SPACE FUNCTIONALITY AND RESILIENCE

Parks and open spaces are central to the future health, resilience, and livability of Boston. The OSRP complements the City's *Climate Vulnerability Assessment* and *Climate Action Plan*. These documents identify major climate hazards and set goals and actions for addressing these risks while meeting the City's 2050 carbon-neutrality target. These planning efforts share fundamental objectives to improve quality of life while preparing for climate change.

Strengthening the city's green infrastructure systems can help withstand and temper the impacts of climate change through storm water absorption, tree canopy benefits, and walkable access to active and passive recreational facilities. Expanded open space systems can provide physical buffers to increasingly powerful storms, support systems of non-vehicular transportation, and mitigate the health risks associated

with warming urban environments. Park design strategies can ensure that these open space resources are able to bounce back after flood events and some properties can play a key role in providing protection for flood pathways.

CONCLUSION

Section 8: Goals and Objectives introduces the goals and objectives that will lead to success in meeting the interrelated challenges of open space quantity and distribution, open space quality and improvements, and open space functionality and resilience. The goals are as follows:

1. Protect, maintain, manage and improve the City of Boston's open space system to maximize the benefits that this infrastructure provides.
2. Sustain and expand an open space system that is equitable, publicly-owned, permanently protected and available to all.
3. Promote resilience by supporting the critical relationship between the urban natural environment and quality of life in the city.

Section 9: Seven-Year Action Plan presents the action items that will guide BPRD in making informed decisions to improve the inventory of permanently protected open space in the city. Ongoing assessment will be as important as implementation so that corrective action can be taken when needed.

2022 marked the 200th anniversary of the birth of Frederick Law Olmsted, the founder of American landscape architecture and creator of the Emerald Necklace and other parks in Boston. For nearly 150 years, the Parks Commission has been a steward of the City's open space on behalf of the people of Boston. BPRD looks forward to continuing to work with constituents, stakeholders, partners, community leaders and elected officials - to build a better open space system for all.

SECTION 2

INTRODUCTION

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SECTION 2.1:

INTRODUCTION**A NATIONAL CHALLENGE**

On January 27, 2021, President Joe Biden signed *Executive Order 14008: Tackling the Climate Crisis at Home and Abroad*. He issued a challenge to conserve at least 30% of U.S. land and freshwater and 30% of U.S. ocean areas by 2030. The 30x30 challenge seeks to protect natural areas and increase access to nature for communities that lack it, in an effort to reverse the impacts of climate change and biodiversity decline (The White House 2021). The 30x30 challenge is the first-ever national goal for the stewardship of nature in America.

The U.S. Department of the Interior then released the *Conserving and Restoring America the Beautiful* report which recommended a ten-year, community-led, nationally-scaled campaign to conserve and restore the country's lands and waters (DOI 2021). It included the following principles:

- Pursue a collaborative and inclusive approach to conservation;
- Conserve America's lands and waters for the benefit of all people; and
- Support locally led and locally designed conservation efforts.

The report noted:

“While the coronavirus pandemic inflicted tragedy, grief, and pain, the natural world offered peace, escape, and hope for many. Now, as the nation recovers and rebuilds, it is time to do right by the lands and waters that sustain every community in every part of the country: returning American wildlife to abundance; safeguarding the health and productivity of the nation's working lands and waters; giving every child the chance to play and explore in a safe, close-to-home park; honoring and supporting the natural and cultural resource priorities of Tribal Nations; and far more.”

The report included the following recommendations:

- Create more parks and safe outdoor opportunities in nature-deprived communities;
- Expand conservation of fish and wildlife habitats and corridors; and
- Increase access for outdoor recreation.

The 30x30 initiative calls for a more inclusive model of conservation that is science-based, locally driven, and engages all stakeholders. The report also highlighted the need to bring diverse voices together—including voices that have often been excluded from the decision-making processes around conservation (O'Shea et al. 2021).

OFFICE OF CLIMATE INNOVATION AND RESILIENCE

On January 6, 2023, Governor Healey signed *Executive Order No. 604: Establishing the Office Of Climate Innovation and Resilience Within the Office Of the Governor*. The Office is charged to advance climate innovation, mitigation, adaptation, and resilience policies. Each Cabinet Secretary is required to appoint a Climate Officer responsible for implementing climate-related efforts within their department. The order included a “Whole of Government Approach” towards implementation. Independent agencies and authorities, public institutions of higher education, the judiciary, and other public entities are encouraged to participate in climate initiatives and otherwise to adopt policies consistent with those advanced by the Office (Commonwealth of Massachusetts 2023).

PLANNING FOR A GREEN NEW DEAL AND A JUST RECOVERY

While City Councilor, Michelle Wu issued *Planning for a Green New Deal and Just Recovery* which called people to “envision a city where every resident enjoys a healthy home, beautiful public spaces, plentiful local food options, fresh air and clean water, and strong social safety networks,” (“Green New Deal” 2020).

The plan proposes that there should be clear, standard Community Benefits Agreements for development projects over a certain size or impact, in order to guarantee transparency, predictability, and public benefit at the scale to match community impacts. These agreements can include requirements regarding resiliency, open space, and public amenities.

BOSTON PARKS AND RECREATION DEPARTMENT

BPRD advocates for permanently-protected, publicly-owned open space that ensures that: all residents have equitable access to a wide range of passive and active recreation; open space acreage is maximized for climate resiliency; natural urban wilds provide respite for all living things; tree canopy is preserved to mitigate global warming and heat islands; an abundance of open space options allow people to be in community in the COVID-era; and civic space is provided for civil engagement and discourse in a democracy, such as demonstrations and protests that are only truly possible in publicly-owned open spaces.

SECTION 2.2:

STATEMENT OF PURPOSE

WHAT IS OPEN SPACE?

Open space is commonly defined as lands that are not developed for building purposes. The term is synonymous with “green space” and can include parks, natural areas, athletic fields or courts, plazas, waterfront areas, community gardens, and cemeteries. The OSRP uses a broad definition of open space to cover open space that is managed for conservation and recreation purposes and is largely permanently protected and publicly accessible.

Ownership of these open space properties varies from the City of Boston’s Parks and Recreation Department and Conservation Commission, to the Commonwealth of Massachusetts Department of Conservation and Recreation (DCR). Other public entities like the National Park Service, the Massachusetts Port Authority (MassPort), the MBTA, and the State Department of Transportation (MassDOT) also own and steward public open spaces.

VALUE OF PARKS

Public parks and open space contribute to the quality of life and sense of place in the city. Parks express our history and culture, cultivate community by drawing people to a shared space, and connect city residents to the natural world. Green spaces offer opportunities for stakeholders to engage through participation in activities and events, community design, and stewardship.

PARK BENEFITS

Open space provides significant environmental, health, civic/social, and economic benefits:

Environmental benefits of open space include: buffering increasingly extreme storm events; absorbing stormwater run-off; reducing strain on traditional infrastructure systems; providing shade and cooling; and enabling carbon sequestration from tree canopies. Urban parks and open

space systems also support wildlife habitat and provide opportunities for city dwellers to engage with the natural world.

Health benefits of open space include access to opportunities for physical activity for children and adults, as well as access to the mental health benefits associated with the restorative aspects of green space. Urban trees offer health benefits by improving air quality and creating cooler environments which make our city more livable year-round (“Quantifying the Contribution” 2014). This has become particularly critical in the era of COVID-19.

Civic and social benefits of parks are largely supported by public access and ownership of these spaces. Public spaces provide a platform for civic life including protests, rallies, events, and gatherings that may be truly possible only in publicly-owned parks. Public parks are shared spaces where children play, where neighbors come together to create communities, and where the diversity of urban life is celebrated. Parks provide venues for arts and performance of all scales. These spaces also hold cultural meaning for their role in the history of our city and our nation as well as their role as a stage for contemporary events. Privately-owned parks and open space can offer health, economic and environmental benefits, but the full spectrum of social benefits of parks are only found in the public foundation of these places.

Economic benefits of parks are multi-faceted. Parks and the events they support draw people and that foot traffic can benefit local businesses and vendors. Many of Boston’s parks are cultural destinations which contribute to the economic engine of tourism. Parks are venues for programmed activities that provide economic benefits to the city, and help sustain a quality of life in the city that’s highly valued (“Measuring the Economic Value” 2009). Presence of nearby green space can increase the property values of homes, which in turn brings benefits to those homeowners as well as the municipality. While park stewardship and improvements benefit existing park users, creation of new parks can

lead to gentrification and displacement. Park creation must be complemented by anti-displacement strategies where such impacts are a possibility.

The OSRP takes a full accounting of all green spaces in the city which enables an understanding of the system in place and envisions the open space needed in the future. Boston benefits from the open space vision that our predecessors provided for the city 150 years ago. The value that these spaces bring to the quality of life and sense of place needs to be ensured in the future.

SECTION 2.3:

PLANNING PROCESS AND PUBLIC PARTICIPATION

As the owner and caretaker of the largest and most complex municipal park system in the Commonwealth, BPRD has taken a multi-layered approach with several methods and approaches for raising awareness about the 2023-2029 OSRP and soliciting input.

BPRD used **two survey questionnaires** to gather information about use of the city's open spaces, changes desired by respondents, and priorities for future investments. The first survey was part of the *Parcel Priority Plan* effort and focused on priorities for open space protection and acquisition for expansion of the park system. The second survey was dedicated entirely to OSRP input and focused on use and needs within the current park system.

An element of the Parcel Priority Plan outreach involved the development of the **Virtual Public Open House** for learning about and participating in the project's analysis and survey. The virtual format for this engagement grew out of necessity during the Covid-19 pandemic, but resulted in an engagement model that continues to be incorporated into ongoing project work. BPRD has seen an increase in participation in meetings and outreach efforts for all projects as we've shifted to a virtual format for those events.

An information sharing and engagement initiative called **Healthy Places** explicitly tied together resources and updates about concurrent and complementary City of Boston planning efforts into one website and newsletter to make it easy for constituents to stay up to date and engaged. Healthy Places updates included the *Heat Resilience Solutions for Boston* report, the *Urban Forest Plan*, and the *Open Space and Recreation Plan* so that constituents who engaged in one of these planning efforts could connect in with the others.

For more information: boston.gov/healthy-places

Direct constituent engagement took place in spring and summer of 2022 while the dedicated OSRP public survey was active. BPRD planning staff attended each Mayor's Coffee Hour event which brought staff to 16 different neighborhoods for outreach and conversations. This **tabling effort** allowed us to engage in **face-to-face conversations in each neighborhood** about open space priorities, and encourage attendees to provide their input via the online survey.

Further complementing all of these efforts, BPRD staff attended **neighborhood meetings hosted by others** to bring the OSRP engagement efforts to those existing groups. The intent of this method was to reach people at meetings they were already attending, rather than asking them to attend additional meetings for our specific benefit. The content and discussions at these neighborhood meetings focused on the same questions that were being asked via the online survey.

Outreach and information gathering for the OSRP extended through the pandemic and required consistent adaptation to incorporate new strategies and evolving best practices for engagement. All efforts incorporated the following strategies:

- Surveys translated into the top languages spoken in Boston.
- Communications about the survey availability, website, duration, and project purpose also translated into the top languages.
- Efforts to capture the broadest constituency in the city by sharing information with media targeted to different ethnicities, social media platforms, and different city websites.
- Sustained social media outreach - BPRD dedicated Instagram, Facebook and Twitter - throughout the times when surveys were active to encourage participation.

We used various means of notification to inform constituencies of the public participation processes. Project email communication from BPRD reaches the following target audiences:

- 150+ Park Partner Organizations (non-profits, Friends groups, volunteer networks)
- Mayor's Office of Neighborhood Services
- All City Councilors and State Representatives for Boston Districts
- City of Boston Main Streets Organizations
- Neighborhood Associations
- BCYF Community Centers
- Boston Public Schools
- Churches and religious institutions throughout the city

Press releases about the OSRP survey, the *Parcel Priority Plan* survey, and neighborhood coffee hour meetings were issued to all major and neighborhood press outlets. A notice among the rotating banner items was provided on the City's website home page. A special web page on the Parks Department website boston.gov/departments/parks-and-recreation/updating-seven-year-open-space-plan served as a portal to OSRP information and was complemented by other City-hosted websites for the *Parcel Priority Plan* and Healthy Places. A notice on the Parks Department home page also alerted viewers to the survey. Community design review meetings for park projects during the survey period also gave notice to attendees of the survey's availability.

SECTION 2.4:

ENHANCED OUTREACH AND PUBLIC PARTICIPATION FOR ENVIRONMENTAL JUSTICE COMMUNITIES

Boston is an immigrant city and a majority-minority city. The total population of Boston that falls within an Environmental Justice Block Group is 544,030 or 79% of the population.

Our public outreach program aimed to better reach environmental justice populations, and that program was described in the previous Section 2.3: Planning Process and Public Participation. We will highlight here the more specific measures we undertook to reach out to environmental justice populations.

The surveys used for this project were offered in languages other than English. The first survey was offered in six languages: English, Cape Verdean, Haitian Creole, Spanish, Chinese, Vietnamese. With revised Language and Communications Access guidance, the second survey was offered in the 11 most commonly used languages in the city: Spanish, Chinese, Haitian Creole, Vietnamese, Portuguese, Cape Verdean Creole, French, Russian, Somali, Arabic, and English.

Parks Department planning staff attended community and neighborhood meetings in environmental justice communities to expand input and target communities that are often under-represented in survey responses. In most cases we attended existing community meetings hosted by neighborhood-based groups. These meetings are often well-attended and have established meeting schedules that local residents can predict and plan ahead to attend.

Neighborhood meetings attended included:

- Allston Brighton Community Development Corporation
- Jamaica Plain Neighborhood Council
- Hyde Park Neighborhood Association
- Fields Corner Main Street

- Garrison Trotter Neighborhood Association
- Orient Heights Neighborhood Association
- Greater Mattapan Neighborhood Council
- Boston Green New Deal Coalition

BPRD planners also sought opportunities to layer outreach onto other City planning work (i.e. the Healthy Places initiative), which led to engagement via the following BPDA meetings:

- PLAN: Charlestown
- PLAN: Roxbury

Other targeted outreach to environmental justice communities included tabling at an Earth Day event held in Chinatown, as well as engagement with the SPARK Boston Council which is composed of 20-35 year olds from throughout the city.

SNAPSHOT

PPP survey was active:

January 2020– November 2020

- Number of respondents: 1,218 and 1,943 pins placed on map
- Respondent or someone respondent lives with has a disability or chronic health condition that affects access to, or enjoyment of, open space (14%)
- Greatest number of responses from:
 - People aged 35-54 (36%)
 - Identifies as a woman (55%)
 - Identifies as white (70%)
 - Does not identify as Hispanic or of Latino origin (82%)
 - English language response (99%)
 - Has dependents (54%)
 - Zip codes containing Roslindale, Charlestown, Jamaica Plain, and Back Bay/Beacon Hill (combined shared of 34% of total responses)*

*Of the responses that had zip codes.

OSRP survey was active:

April 14, 2022 – May 31, 2022

- Number of respondents: 1,054
- Respondent or someone respondent lives with has a disability or chronic health condition that affects access to, or enjoyment of, open space (13%)
- Greatest number of responses from:
 - People aged 35-54 (49%)
 - Identifies as a woman (63%)
 - Identifies as white (68%)
 - Does not identify as Hispanic or of Latino origin (83%)
 - English language response (one response out of 1,054 in language other than English)
 - Zip codes containing Roslindale, Charlestown, and Jamaica Plain (combined share of 37% of total responses)

SECTION 3

COMMUNITY SETTING

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SECTION 3.1:

REGIONAL CONTEXT**PHYSICAL LOCATION AND WATERSHED ADDRESS****GEOGRAPHICAL LOCATION**

Boston is in eastern Massachusetts on the coast of the Atlantic Ocean, at the westernmost point of Massachusetts Bay where the Mystic, Charles, and Neponset Rivers meet the sea. Boston is located within two major watersheds, the Boston Harbor Watershed and the Charles River Watershed. The Boston Harbor Watershed includes the Mystic River sub-watershed to the north and the Neponset River sub-watershed to the south and the lowest point of the city is at sea level. The highest point is at Bellevue Hill in West Roxbury which is 325 feet above sea level. The city has 48.4 square miles of land (not including islands) and 41.2 square miles of water. The City of Boston is the county seat of Suffolk County and the capital of the Commonwealth of Massachusetts.

The city is made up of many neighborhoods, but for the purposes of the Open Space and Recreation Plan, 16 neighborhoods were used: Allston-Brighton, Back Bay/Beacon Hill, Central Boston, Charlestown, Dorchester, East Boston, Fenway/Longwood, Hyde Park, Jamaica Plain, Mattapan, Mission Hill, Roslindale, Roxbury, South Boston, the South End, and West Roxbury. Many of these neighborhoods were once cities or towns that were annexed (See MAP 1: REGIONAL CONTEXT).

The region as a whole is known as the Boston Basin, the lowlands and Boston Harbor surrounded by a series of hills. These hills, the Blue Hills to the south, the Arlington Heights to the west, and the Middlesex Fells to the north, define the outer rim of this basin. The Shawmut Peninsula, where the City of Boston began, was the center of this basin, and where the major rivers of this basin (the Mystic, Charles, and Neponset) radiated toward, making this a strategic location from which people, goods, and

services could spread. It is also strategic from a military defense point of view, this position deep within Massachusetts Bay surrounded by lands north and south of the water access to the center of the basin (See MAP 2: WATERSHEDS AND WETLANDS).

ADJACENT LAND USES AND RESOURCES SHARED WITH NEIGHBORING COMMUNITIES**COASTLINE NORTH OF BOSTON HARBOR**

The large coastal wetlands area known as the Belle Isle Marsh Reservation, under Massachusetts Department of Conservation and Recreation (DCR) jurisdiction, is located in Winthrop as well as East Boston. Revere owns open space across Belle Isle Inlet from East Boston, and both East Boston and Revere will be affected by the proposed redevelopment of the Suffolk Downs site; there will be planned new open spaces that will be available for public access and use in that redeveloped area.

Chelsea Creek is a resource shared by East Boston, Revere, and Chelsea. Another river shared by Chelsea and Boston, here the Charlestown section, is the Mystic River. The Chelsea section of the Mystic includes O'Malley Memorial Park, while in Charlestown, Ryan Playground is on the Mystic.

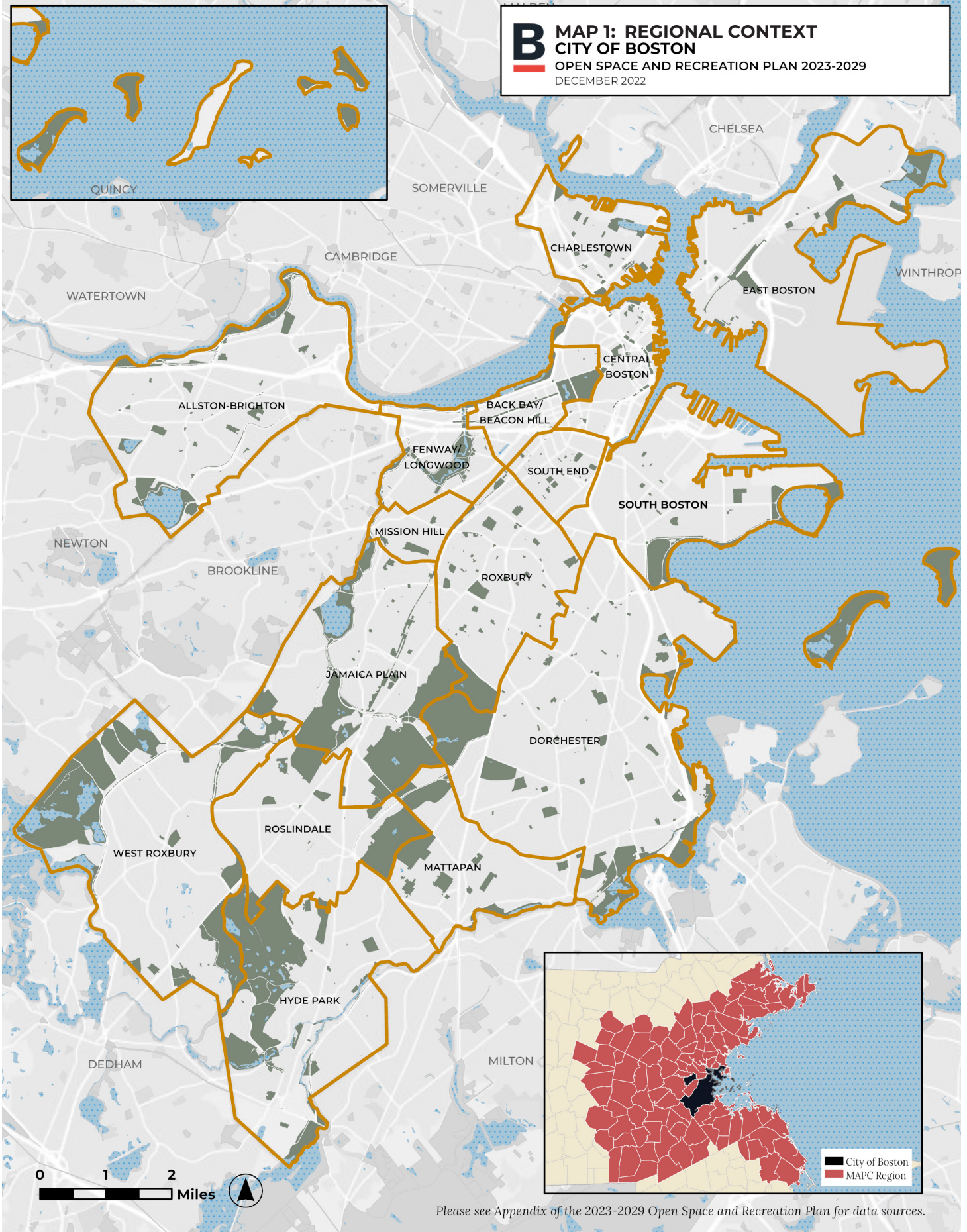
The Mystic River is also the setting for intense industrial, commercial, and transportation uses on the Everett, Somerville, and Charlestown riverbanks. The major exception is Ryan Playground in Charlestown.

WEST OF BOSTON HARBOR

The Charles River and its tributaries create the natural resource based open space opportunities shared by Boston and nearby towns such as Cambridge, Watertown, Newton, Brookline, Needham, and Dedham. Boston shares with Cambridge, Watertown, and Newton the benefits of the DCR's management of the Charles

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B MAP 1: REGIONAL CONTEXT
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



Please see Appendix of the 2023-2029 Open Space and Recreation Plan for data sources.

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River Reservation. Chandler Pond, an inland water body with adjacent city parkland, is downstream of the Newton Commonwealth Course, and part of the Charles River watershed. Another tributary of the Charles that forms the backbone of a major park resource for both Boston and Brookline is the Muddy River, which flows through much of the Emerald Necklace. Newton, Needham, and Dedham share an upstream section of the Charles at the West Roxbury section of the river, which is under management as open spaces by the Boston Parks Department at Millennium Park, by the DCR at Cutler Park Reservation, and by Dedham at Riverdale Park. Not on the Charles River itself, but in the watershed are a series of open spaces along the Boston-Brookline border thanks to parklands, former large estates, or institutional uses that provide a greenbelt.

COASTLINE SOUTH OF BOSTON

The Neponset River, its marshes and its tributary the Mother Brook, form the basis of opportunities for recreation and natural resource conservation for Boston, Milton, Dedham, and Quincy. The Neponset River Reservation straddles much of both the Milton and Boston shorelines. The DCR Pope John Paul II Park, Port Norfolk Park, Tenen Beach, and Victory Road Park are located on the Boston side, and Squantum Point Park is located on the Quincy side. The Mother Brook, a man-made channel, diverts some water from the Charles River to the Neponset, and provides parkland with river access both in Hyde Park and in Dedham.

SOCIO-ECONOMIC CONTEXT

Boston is the largest city in the state, and the largest city in New England. In 2020, Boston had a (2016-2020 American Community Survey) population of 689,326 making it the 29th largest city in the U.S. Boston has a land area of 48.4 square miles making it the second smallest major U.S. city in terms of land area, after San Francisco (Frey 2021). Boston has a population

density of 14,301 persons per square mile, which is greater than Chicago at 12,060 persons per square mile (CMAP 2022).

The city is the anchor of the Boston-Cambridge-Newton, MA-NH Metropolitan Statistical Area (MSA), which is the tenth-largest in the U.S., with a total 2020 Census population of approximately 4,941,632. The Boston-Worcester-Providence Combined Statistical Area is the sixth largest in the U.S. with more than 8.4 million residents. This MSA represents the commuting region of Boston.

With the strong presence of several institutions of higher learning and research hospitals, which attract private investment and businesses, the City of Boston is positioned to maintain its momentum for being a city that attracts capital and people, which thereby generates pressures for development and the need for further open space protection and development to complement this growth. Pricewaterhouse Cooper notes that the Greater Boston metro area has the sixth-largest economy in the country and the twelfth-largest economy in the world (“Largest City Economies” 2009). The 2022 *Global Power City Index* by Japan’s Institute of Urban Strategies ranked Boston as fifth among the U.S. cities listed among the 48 international cities in terms of “their ‘magnetism,’ or their comprehensive power to attract people, capital, and enterprises from around the world (2022). While Boston is among the most economically powerful cities in the world, it also struggles with worsening wealth inequality and declining economic mobility.

The COVID-19 pandemic worsened the tangled inequities of structural racism, income inequality, job stability, access to healthcare, and housing stability.

The Boston’s Economy 2022 report by the BPDA summarizes Boston as follows:

“[Boston has experienced] substantial progress in Boston’s economic recovery from the COVID-19 pandemic. The worst fears from the early months of COVID-19 – that the pandemic would lead to prolonged economic stagnation and a permanent urban exodus – have not come to pass.

Instead, unemployment has fallen rapidly by the standards of prior recessions, residential demand has returned, and developers are betting on Boston's future as the hub of life science innovation. Still, many parts of the economy are far from full recovery, and questions remain about what to expect going forward."

The report highlights that recovery is not even for everyone:

"The industries with the largest share of Boston residents continuing to claim unemployment benefits in October 2020 were the industries broadly categorized as in-person and support services – restaurants, hotels, retail stores, entertainment venues and cultural institutions, personal services such as hair salons, and support services such as janitorial work. These industries were hard hit on several levels. They generally require in-person work, often in close physical proximity or with large groups of people. As such, they were initially closed by government mandate and continue to be limited by customer health concerns."

Additionally, in-person and support service jobs in Boston rely on commuters and visitors whose numbers declined due to the pandemic. Cell phone data suggest that the number of commuters to Boston fell by about half during the pandemic (BPDA, "Economy", 2022).

And Boston Indicators reports:

"...top earners have experienced a tremendous amount of growth over the last half-century, while people in the middle saw only modest increases and those in the bottom tenth percentile saw hardly any progress at all. As a result, the likelihood that people in Boston can earn more than their parents as working adults has plummeted since the mid-20th century. And Boston's high-cost housing market is pushing many middle-income residents out of the city," ("Boston's Booming" 2018).

These findings are echoed in MAPC's 2020-2025 Economic Development Strategy where they found stagnant wages and income inequality between the top 1% and bottom 99% of workers is "among the worst in the country" – a gap that continues to grow. Furthermore, vast wealth disparities persist across racial lines with Latinx and Black workers paid less than white workers at "nearly every education level," (2021).

These disparities and the stresses they perpetuate can lead to displacement. From Heat Resilience Solutions for Boston:

"Displacement: Occurs as a result of gentrification where residents move out of their community to another. This outcome is typically involuntary and occurs when residents can no longer afford to live in their neighborhoods/communities. Displacement can also occur if the character of the neighborhood transforms and remaining residents feel a sense of dislocation despite remaining in the neighborhood. Displacement can also occur to local businesses for similar reasons," (qtd. Environment Department 2022).

Beyond the mission of supplying access to well-maintained and programmed parks, what role does the park system play in stabilizing communities and combating structural inequities? And, given the rapidly changing situation, will the work of today lead to a park system that equitably serves Boston's residents ten years from now?

The City of Boston is increasingly taking steps, both large and small, to address entrenched inequities and protect against displacement. As one piece of their mission, the Office of Economic and Opportunity and Inclusion aims to root out systemic barriers that have created deep economic inequities.

In 2022, the Parks Department launched the Open Space Acquisition Program to implement open space expansion that will address needs across the city.

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During the Covid-19 pandemic, residents relied more heavily than ever on the availability of public open space to relieve the mental and physical burdens of the lockdown and social distancing. Parks provided safe spaces to gather, a place to escape the confines of home, and take in the healing effects that nature has to offer. People who lived within close walking distance to large public open spaces benefits from this proximity during the pandemic. Yet this benefit is not equitably shared across the city. Open Space Acquisition Funds will aid park system expansion so that all residents, regardless of where they live, have access to permanent and public parkland. However, building out a robust program of park system expansion in Boston, a city where land values are high and still rising, will require steady investment to build a fund capable of sustained work within this landscape.

Complementary to this effort to expand parkland is a need to implement anti-displacement strategies that help stabilize communities alongside open space investments. These strategies extend across multiple City departments and initiatives, focusing on protecting renters, homeowners, and small businesses.

For more information:

- boston.gov/departments/housing
- boston.gov/government/cabinets/economic-opportunity-and-inclusion

REGIONAL WATERSHED PLANNING

Regional watershed planning efforts include those of the Boston Harbor Watershed and its Mystic River and Neponset River sub-watersheds, and the Charles River Watershed. The Mystic River Watershed Association (MRWA) reports that the Resilient Mystic Collaborative Communities received nearly \$13 million in grants from the FY 23 Consolidated Appropriations Act signed by President Biden. Those monies are proposed for flooding, heat,

and carbon neutrality projects throughout the Mystic River watershed. Bringing this work to the site scale, the MRWA has initiated a planning effort to create a more resilient Little Mystic Channel through a combination of paths and open space. The Charles River Conservancy in partnership with DCR launched a floating wetland in the Charles River to “demonstrate the importance (and absence) of shoreline vegetation; [r]esearch the impact on local zooplankton populations and quantify the scale at which water quality could be affected and improved; [and] engage the public on the river’s health,” (“Floating Wetlands” n.d.). The Neponset River Watershed Association continues its advocacy efforts to clean up a portion of the Neponset River and re-establishing fish runs for herring and shad which has gained momentum through the EPA’s designation on March 14, 2022 of the Lower Neponset River as a Superfund site. This designation brings federal resources to conduct “an extensive study of the contamination and potentially responsible parties, opportunities for public input, possible implementation of initial cleanup actions in certain areas, and eventual implementation of comprehensive cleanup efforts,” (“EPA Designates” 2022).

Also thinking regionally but acting locally are the municipalities of Cambridge, Somerville, Brookline, and Boston. Each city has completed an urban forest plan within the last few years and have served as mutual resources in forestry planning and pest response.

Parks Friends Groups, groups like the Esplanade Association, and large land trusts such as the Trustees of Reservations and MassAudubon, all continue to provide vital stewardship of the natural resources within parks and, ultimately, the watershed itself.

OPEN SPACE RESOURCES OF REGIONAL SIGNIFICANCE

Resources of regional significance located in Boston include the parks of the Emerald Necklace, the Charles River Reservation, the Neponset River Reservation, the Stony Brook Reservation, the Belle Isle Marsh Reservation, the Dorchester Shores and Old Harbor Reservations, the Arnold Arboretum, two municipal golf courses, active and historic cemeteries, greenways, parkways, the Harborwalk, urban coastal beaches, the Boston Harbor Islands, Forest Hills Cemetery, and Soldiers Field. The Blue Hills Reservation is immediately adjacent to Boston, and also has regional significance.

Some of the most extensive and significant regional scale open spaces in the Boston metropolitan area are found in Boston's communities, and these resources are available to users beyond the City's boundaries. Many of the neighboring communities that are smaller in population lack the significant open space resources that can be found in Boston. It can be presumed that adjacent communities meet at least some recreational needs by making use of the facilities located in Boston.

Being the center of a large metropolitan region, and a major tourist destination, generates significant impacts on Boston's open space resources of regional significance. See Sections 5 and 7 for further discussion of these spaces.

SHARED PROTECTION STRATEGIES

Watershed and river planning has offered the best examples of shared protection efforts. It appears that waterfront land uses may offer the greatest disparity between adjacent municipalities, and the greatest opportunities for regional planning. There is also opportunity for shared protection strategies between the State, the

City of Boston, and other municipalities for regional scale or shared open space, beyond the awareness of protection needs of rare species.

A review of municipal open space plans indicates that a goal of some neighboring communities is to form coalitions, communications, and connections with neighbors on open space initiatives. There are opportunities for Boston and adjacent municipalities to work together with MAPC and the Commonwealth on waterfront and riverfront planning, linear parks, green infrastructure, alternative transportation, social equity, and climate change on a regional level and between adjacent municipalities. The opportunity exists for the City of Boston to be partners with its neighbors over shared resources and environmental issues that exist beyond the boundaries of the city.

SECTION 3.2

HISTORY**INTRODUCTION**

We will cover Boston's history and archeology from the perspective of how it has shaped our land uses, especially those pertinent to our environmental and recreational pursuits.

HISTORY OF SETTLEMENT AND DEVELOPMENT IN BOSTON**PREHISTORIC ERA (12,000 – 400 BP)**

Boston's human history began approximately 12,000 years ago. The first Native People were hunters following migrating herds of large game like mastodon or caribou. These nomadic people settled on the ring of hills overlooking low-lying areas with rivers and wetlands where animals gathered.

The landscape and environment that the Native People encountered would have been far different than today. The one mile thick glaciers that once covered the area were retreating but still retained vast quantities of water, causing a sea level nearly 250 feet lower than today. Boston's shoreline would have extended nearly 10 miles east of its current location due to the lower sea level. The cold environment and lack of soil due to glacial erosion resulted in a tundra with low shrubs, mosses, and few trees. There is little evidence of human settlement from this early period due to seasonal movement, the tendency to locate within estuaries, the use of organic building materials, the consequent human development that may have eradicated these sites, and changes in land forms and sea level rise.

The Archaic Period (10,000-3,000 BP) saw an increase in the native population, now using many areas of Boston. The development of forests and major rivers allowed Native People to begin establishing seasonal camp sites at the

location of resources such as wild berries, hunting areas, and stone outcrops that could provide the material for tools. The Woodland Period (3,000-400 BP) saw the stabilization of the overall climate and the formalization of settlements in villages at river confluences and outlets in Boston.

There were two major factors that occurred in Boston's environmental history 3,000 years ago. The first was the flooding of Boston Harbor. Up to this point, the Harbor was a hilly plain similar to Jamaica Plain and Roxbury today. Rising sea levels quickly transformed the area into a shallow harbor filled with islands. The shellfish in the harbor came to provide a reliable food source.

The second major development 3,000 years ago was the adoption of pottery and agriculture, which helped to transition the Native population from nomadic hunters to life in more formally established villages in places like Charlestown, downtown Boston, and the Lower Mills area of Dorchester. These villages contained the populations of Native People who were encountered by Europeans when they first began exploring and settling what would become Boston in the early 1600s.

CONTACT PERIOD (1500-1620 AD)

The *Historic and Archaeological Resources of the Boston Area* notes there likely developed a seasonal migration pattern, where in the spring and fall the native populations settled along the Neponset and Mystic River estuaries, and the nearby Harbor Islands, while during the summer and winter, they would likely have dispersed to smaller sites along upland tributaries and ponds (beyond the limits of present Boston) for greater protection from storms and the opportunity for ice fishing and hunting (MHC 1982).

The Native American settlement along the coast probably increased during the Contact Period because the presence of Europeans provided opportunity for trade, yet also reduced their population through infectious diseases brought by the European traders.

The primary transportation system during the Contact Period was a complex network of trails that followed the natural contours of the landscape, changed elevation at an easy grade, and favored the sunny rather than shady slope. The trail network provided alternative routes for crossing the landscape. Examples of native trails include Shawmut Avenue in Boston proper and Mishawam Street in Charlestown.

Fords were located where trails crossed rivers, usually at the first fall line such as the Charles River at Watertown Square and the Neponset River at Lower Mills. Archaeological evidence on the Harbor Islands indicates that water transport was used.

PLANTATION PERIOD (1620-1675 AD)

This period is defined by the establishment of permanent English settlement along the coast, and expansion inland along major tidal rivers. The initial European settlements of coastal trading posts and plantations clustered with the native population around the Mystic, Neponset, and Charles River estuaries.

This period is also characterized by the virtual removal of the native population from the Boston area. By the end of the 1600s, the remnants of the native population had retreated to upland sites such as the Blue Hills, or moved west and north of Boston.

There were two types of settlement patterns in this era – the planned town and the organic village. Charlestown is the only planned town within Boston, characterized by a regular street grid and formal market squares (Harvard Square in Cambridge is another local example). Partial attempts at formal street plans were made in Boston.

The most common type of settlement pattern was the organic village which was usually located at the intersection of existing native trails, and centered on a meetinghouse and burying ground, perhaps with a tavern and common ground. Early examples developed in Dorchester and Roxbury.

By the mid-1600s, most towns consisted of a small meeting house center with individual farms set in a grid of divided fields. Boston itself had developed in a more intense pattern by this time, with an urban density with separate residential and commercial districts.

The colonists used the native trail system to get around difficult terrain, and improved ford sites by building bridges. Planned towns such as Charlestown had street grids. Rangeways – long, straight roads that ignored changes in topography – were added to the trail network.

COLONIAL PERIOD (1675-1775 AD)

Boston emerged, during the Colonial Period, to become one of the most important port cities on the Atlantic coast in the New World. Boston and Charlestown had key port facilities, and the Charles River continued to grow as the regional focus.

Settlement followed a pattern of infill and consolidation of the previously developed areas. Colonial settlement in Boston focused on many of the areas previously occupied by native villages including Charlestown, downtown Boston, and Savin Hill in Dorchester. Roxbury, Jamaica Plain, and areas along the Mystic River became fashionable for country estates in the early 1700s. Several of the Harbor Islands were used for grazing, fishing, and institutional purposes.

Boston proper had an increase in population and commercial activity that led to distinct social and economic districts. Three and four story brick building along Corn Hill (Washington) Street were the civic and commercial heart of the city. The area from Town Cove to the North End and Fort Hill was a district of wharves and shipyards, much of it built on filled land.

The water transport system grew, particularly to Portsmouth, Salem, and Plymouth. It was often easier to get to a local destination by boat than by road, and a large number of wharfs were built for passenger and freight use. The same corridors of enhanced native trails connected Boston to adjacent areas, and development

focused along these routes. Many of these routes terminated in Roxbury, as Boston proper remained isolated on a peninsula. Roxbury controlled the access to Boston proper.

FEDERAL PERIOD (1775-1830)

Boston saw a dramatic increase in population and prominence during the Federal Period, establishing itself as a major source of goods and supplies including ships, lumber, cod, and other material goods while also being a major port for immigrant arrival.

This period marked the beginning of the most extensive landscape transformation in Boston that rapidly expanded its land mass. By this time Boston reached the physical limits of its shoreline. The core city began to develop more density. It also expanded outward and absorbed adjacent communities. Toll bridges on causeways, turnpikes, and omnibus service (horse drawn carriage) encouraged residential development beyond the urban core. Another solution was to expand the land mass, a process which began as hills were excavated and used to fill the surrounding tidal marshes and waters.

The newly filled land was platted in planned grids. Large speculative grids were also laid out in South Boston and Roxbury. Residential and industrial uses were often mixed. An institutional area of hospitals, prisons, almshouses, and naval facilities developed on the fringes of waterfront and filled land, between the central core city and the outlying residential areas of Roxbury and South Boston.

EARLY INDUSTRIAL PERIOD (1830-1870)

The industrial revolution in Boston was fueled by the Stony Brook and Muddy Rivers as well as by a thriving sea port and large population of immigrants, making it one of the biggest producers of goods in the world.

Boston's central core increased in density with greater height and proximity of buildings, and differentiation of a central business and commercial district and high-density residential areas. Residential development in the central

core of the city included high density rowhouses built in planned street grids around London-style residential parks. This pattern was realized in parts of the South End, Charlestown, and East Boston.

The settlement beyond the central core was defined by innovations in transportation including steam ferry, suburban commuter rail service, and horse-drawn street railways.

Important events in landscape and urban planning include an emerging green belt of landscaped cemeteries and municipal properties such as reservoirs. These were accessible by street railway and provided important areas for recreational and social activity for people in the inner city and outer suburban areas.

LATE INDUSTRIAL PERIOD (1870-1915)

Development in this period was influenced by electrical- powered technology. The electrification of the street railway system and the opening of the subway and elevated lines generated development away from the core, now known as "streetcar suburbs" (Warner 1978). Larger buildings with elevator shafts were built in the urban core of Boston, increasing density.

During this era, secondary commercial areas developed at Kenmore Square on the end of downtown, and in Fields Corner, Uphams Corner, Dudley Station and Jamaica Plain along major transit routes. These nodes served the immediate residential population of an expanding city.

In reaction to the rapid urbanization of the early and late industrial periods, both a comprehensive system of parks and parkways within the City of Boston (1875) and a comprehensive metropolitan park system (1892) were created and provided open spaces and recreation areas amidst dense urban and suburban development. Parkway were new then transportation corridors connecting parks that stimulated residential and commercial development in the areas beyond the park boundaries.

EARLY MODERN PERIOD (1915-1940)

This era was defined by two World Wars and the Great Depression. The population in the core of Boston decreased for the first time in history. Railroad and waterfront facilities began to become obsolete as highways and new fuel storage facilities replaced coal yards and older wharves and warehouses. Military docks, shipyards, and facilities expanded and overwhelmed the communities of Charlestown and South Boston. Industrial activity began to decline in the Boston core.

The widespread use of automobiles and commercial air service had an influence on the development of Boston, where construction of Boston Municipal Airport (now Logan Airport) (1923), the Sumner Tunnel (1934), and the regional highway system (1931-1936) meant that people were no longer restricted to recreational facilities served by trolley or train lines, and that land from existing parks and potential open spaces were used to support this new infrastructure. On the other hand, greater mobility allowed people to enjoy ponds, woods, and other scenic or historic areas that were on the periphery of the city.

A series of parkways was developed by the Metropolitan District Commission. These were scenic routes that connected the suburban residential areas to the urban core. These included the West Roxbury Parkway, Neponset River Parkway (now Truman Parkway), Brook Farm Parkway (now Veterans of Foreign Wars Parkway), and Morrissey Boulevard.

URBAN RENEWAL

Boston was in decline in the mid-1900s, as factories became old and obsolete, and businesses moved out of the region for cheaper labor elsewhere, and population was not replaced as people moved to the suburbs or elsewhere. The city was in need of infrastructure improvements, as well as economic infusion. The Boston Planning and Development Agency (BPDA) was established in 1957 and responded to this disinvestment by undertaking

urban renewal projects. One project significant for its open space was the creation of Government Center which included City Hall Plaza.

GEOGRAPHIC EXPANSION

The city of Boston has grown to 40 times its original size from its original 783 acres at the time of settlement in 1630. Boston was originally about 1.2 square miles, and currently has a land area of 48.4 square miles. It is the second smallest major US city in terms of area, and that land mass was hard earned through the filling of wetlands and annexation of neighboring municipalities.

ORIGINAL LAND MASS

In 1630, the 783-acre Shawmut peninsula was surrounded by the Boston Harbor and the tidal land of the Back Bay, part of the Charles River estuary. To the south, a narrow isthmus which was 120 feet wide at high tide supported the single road (now Washington Street) that connected the peninsula to Roxbury on the mainland.

The peninsula originally had five hills – Copp’s Hill (in the North End); Fort Hill (in the Financial District); and the Trimount (meaning triple mountain) which actually consisted of the three hills of Mt. Vernon, Beacon Hill and Pemberton Hill.

LAND MAKING

The first land making in Boston began with the “wharfing out” from the mainland. The area between the wharves was then often filled in, creating more land.

Except for the wharves that were built, there was little change in the topography and landform of Boston until 1775. Then the landscape was radically transformed over a period of 100 years to accommodate and encourage growth. Expanding onto the mainland was not considered first because of the maritime economy. The solution was to fill the tidal flats.

A second motivation for filling the tidal flats was to deal with sewage. For several hundred years animal, human, commercial and industrial waste was disposed of by piping it to the tidal flats where it was washed away. However, mill dams that were built in multiple places enabled industry to thrive but prevented the tides from flushing the flats. Sewage and trash built up and created a noxious condition. Much of the new land was created by filling in the sewage- and trash-filled tidal areas with earth from Boston's original hills.

From 1857 to 1894, the Back Bay was filled in behind the Boston & Roxbury Mill Dam. This added about 700 acres and nearly doubled the size of the original peninsula. This area became the Back Bay neighborhood.

Charlestown and the Fenway area were filled in a short while later. The end of the 1800s included fill projects in East Boston, Marine Park, and Columbus Park (now Moakley Park) to the south.

The area which would become Logan Airport began to be filled in 1922.

Land making in relation to parks and open space in Boston is discussed in the history of Boston parks section below.

ANNEXATION

The city has also grown significantly through annexation of adjacent towns over the years. Boston annexed South Boston in 1804, East Boston in 1836, Roxbury in 1868, Dorchester including Mattapan and a portion of South Boston in 1870, Roslindale in 1873, Brighton including Allston in 1874, West Roxbury including present day Jamaica Plain and Roslindale in 1874, Charlestown in 1874, and Hyde Park in 1912.

EFFECT OF LOCATION AND THE ECONOMY ON OPEN SPACE

Boston has changed over the centuries from an area of Native American encampment, to a coastal colonial outpost, to a major metropolis of global significance. The provision and protection of open space has changed along with the economy, politics, and the population's needs.

The harbors, shoreline, tidal flats, lakes, ponds, marshes, and riverbanks have provided food and water, enabled transportation, encouraged trade, and influenced development throughout the history of Boston. The landscape of steep hills and small valleys with ponds, streams, and rivers was amenable to early agriculture. The early economy and survival was strongly supported by fishing and seafaring. Settlement followed the rivers inland.

This setting made possible a seaborne commerce that flourished with protected deep-water harbors. Early manufacturing utilized the water power of streams, rivers and tides. The terrain provided space for farmland, then suburban estates, and then streetcar suburbs as the population increased throughout the 19th century.

Demand for development in Boston resulted in many of the original landscape features being altered or obliterated through the centuries. Hills were used to fill wetlands; streams were culvertized; and the shoreline was extended.

The Great Migration of colonists began a continual influx of newcomers that peaked during the Industrial Revolution. In the mid-1800s, Boston was a densely populated city with a seafaring- and industrial-based economy that relied on its tidal flats for domestic and commercial waste elimination. Immigrants lived in heavily populated neighborhoods where parks, playgrounds, and other public open spaces became important to populations with limited resources and time for recreation.

The industrial uses along the harborfront and along the Charles and Neponset Rivers and other waterways helped to build a city and create a strong economy, but left behind significant pollution. Costly cleanup efforts have begun to alleviate these problems, thus enabling such areas to be used more extensively for water-based recreation.

Seaport commerce defined the economy of Boston for centuries, and shaped its landscape with wharves and human made land. But

seaborne commerce declined (but has not disappeared) and freight and passenger traffic at Logan Airport increased. This led to runways and aviation facilities that spread across islands, tidal lands, and a city park (Wood Island Park designed by Frederick Law Olmsted, Sr.), to the bitterness of many East Boston residents.

Railroad tracks were converted to the Massachusetts Turnpike, enabling the flow of workers into the city, but with accompanying noise and air pollution, and the loss of land.

After World War II, the population declined as many families left the city, either to other parts of the country, or for the suburbs, trading apartment blocks and triple-deckers for single-family homes separated by private yards and linked by wide, tree-lined streets. The population decline had a significant adverse impact on several neighborhoods in Boston.

A rise in abandoned buildings and vacant lots resulted, affecting the property tax-based municipal budget and local private investment. Pressure grew to reduce labor-intensive municipal functions such as park maintenance. City parks deteriorated during the 1960s and 1970s with the loss of constituents and reduced maintenance. In the 1980s, the passage of Proposition 2½ capped the rate at which local property taxes could rise, further limiting municipal revenues and services, especially those related to park functioning.

In the mid-1980s, open space activists formed a coalition to strengthen their voice in City Hall. With local philanthropists, they put together an effort to focus on the critical deterioration of municipal and metropolitan parks.

Based on that effort, *The Greening of Boston* report (The Boston Foundation 1987) stimulated the City to develop an open space plan in 1987 that outlined a program to rehabilitate the park system. The strong economy in the 1980s allowed the City to enjoy large increases in property taxes, which funded the multi-million dollar capital rehabilitation campaign.

As important as the rehabilitation of the parks was the recognition at the policy level that beautiful, safe, clean, and functional parks were needed to revitalize neighborhoods and stimulate private re-investment. Parks were seen as a key quality of life factor by which individuals and businesses assessed the value and stability of a neighborhood and the potential for return on investment in it.

Boston's population and demand for development continues to grow. High density and small geographic size put developable parcels at a premium, and tax existing infrastructure systems such as open space. New and expanding residential buildings, office towers, and university campuses compete with parks, playgrounds, and other open space for land. Achieving a balance of development, grey infrastructure, and green infrastructure so that the city becomes an integrated whole remains a critical focus for policy and practice in the future.

HISTORY OF PARKS AND OPEN SPACE IN BOSTON

City of Boston Parks

Boston's park system includes the oldest public open space in the nation, Boston Common, established in 1634. The Public Garden was the next significant addition, developed more than 200 years later in 1838.

The park movement in the U.S. began in the mid-1800s in response to urbanization and the sanitary reform movement (which believed that disease was caused by bad odors, dirt, and dampness). Sanitarians sought to eliminate places that were overcrowded, dark, damp, and contained organic waste by introducing sunlight, fresh air, dry land, and pure water – parks were seen as one desirable solution. Parks were for the public and were a place where city residents could escape to a country setting.

The Office of the Superintendent of Public Grounds was established by ordinance on February 28, 1870. The Superintendent had charge of all public grounds – Boston Common, the Public Garden, and residential squares and small parks created before 1975.

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In 1875, Boston's voters approved an act that set up a Board of Park Commissioners to establish and run public parks. In 1876, the Commissioners recommended a comprehensive system of seven parks in the inner city and four in outlying areas which would be connected by parkways. By 1881, the City appropriated the funds for the parks.

In 1878 the Commissioners hired Frederick Law Olmsted, Sr., America's first and then most prominent landscape architect, to design and supervise the development of a comprehensive park system. Olmsted proposed to create a network of parks linked by parkways. The resulting park system is now known as the Emerald Necklace which then included the Charles River embankment, the Back Bay Fens, the Riverway, Leverett Park (now Olmsted Park), Jamaica Pond Park, the Arnold Arboretum, West Roxbury Park (now Franklin Park), and Marine Park. The parkways to connect these parks included the Arborway, Fenway, Jamaica Way, and Riverway.

The Park Commissioners also proposed to locate a park in each section of the city. Some parts of the city did not have enough remaining open land, so in those sections the parks were placed on the shore where land had to be filled in. Parks in this original system that required filling included Charlesbank in the West End, Marine Park in South Boston, and Wood Island Park in East Boston.

In the early 20th century, Boston created many playgrounds, mostly in parts of the city without squares or other public grounds, as the playground movement sought to improve the lives of the poor urban children through organized activities in smaller spaces closer to home. Some of these playgrounds were also on the shore and required landfilling, such as Charlestown Playground (now Ryan Playground).

The Park Department continued until 1913, when the Public Grounds, Bath, and Music Departments were merged with it to become the Park and Recreation Department. In 1920, the Cemetery Department was merged with the Park Department.

Land continued to be made in the 20th century to create public parks. The narrow Esplanade was filled along the Charles River as part of the Charles River Dam construction. Playgrounds and beaches were created by filling such as McConnell Park, Tenney Beach, Moakley Park, Carson Beach, Noyes Playground, and Constitution Beach. Storrow Drive was created in 1950 on part of the Esplanade; to compensate for the parkland that was taken, some filling was done along the river, creating a series of connected islands.

By 1950, most of Boston's parks and playgrounds were in place. As described previously, after World War II the budget for parks declined, and was then cut by more than half with the passing of Proposition 2½ in 1982, resulting in a period of severe deterioration for the City's park system.

By the mid-1980s, along with increased interest in urban living and improved economic conditions, citizen outcry brought attention to the poor condition of the parks. As a result, in 1987 the Mayor and the City Council approved \$75 million for a program to rebuild City parks and playgrounds.

In the early 21st century, the Central Artery/Tunnel Project (the "Big Dig") removed the elevated Central Artery through downtown and created a new highway tunnel. This project created a total of 300 acres of new and restored open space, including 45 parks and major plazas, among them the Rose Kennedy Greenway in downtown Boston managed by the Rose Kennedy Greenway Conservancy, and the Bremen Street Park in East Boston managed by MassPort. Material from the Big Dig tunnel excavation was used to cap landfills as part of creating Millennium Park in West Roxbury and the park land at Spectacle Island.

Metropolitan Park System

Boston was the first American city to create a metropolitan park system and the first to undertake regional planning (Penna & Wright 2009). The Metropolitan Park System was established in 1893 and Frederick Law Olmsted's concept of

networked parks was applied to the metropolitan region. The metropolitan parks and parkways were the first regional effort to protect environmentally significant areas and provide a physical framework for suburban growth.

The leading advocates of this effort were Charles Eliot, a landscape architect who had worked with Olmsted, and Sylvester Baxter, a social reformer. These men believed that a metropolitan government was needed to carry out major public works projects and provide the planning that would create a rational spatial and infrastructure framework for development.

Eliot and Baxter advocated for the creation of the Metropolitan Park Commission to develop a plan for a regional parks system to fulfill this vision. In 1892, the Metropolitan Parks Commission (MPC) was formed to provide for regional open space needs of Boston and its metropolitan area, and given eminent domain powers.

The Commission issued the 1893 *Report of the Metropolitan Park Commissioners*, which was the country's first regional plan, and was a blueprint for preserving Greater Boston's natural areas. The plan focused on the forests on the edge of the city, in the Middlesex Fells, the Blue Hills, and Stony Brook, and on riverbanks along the Charles, Mystic, and Neponset Rivers, and called for reservations to protect and manage them. A third focus was oceanfront beaches and many were preserved in outlying towns such as Revere. Eliot further proposed that the Harbor Islands be preserved as parkland. Finally, the plan proposed parkways between the city and the reservations.

The plan for the Metropolitan Parks system was soon implemented. By 1900, the Metropolitan Park Commission had acquired 9,177 acres of reservations, 13 miles of oceanfront, 56 miles of riverbanks, and had built seven parkways.

The State created the Metropolitan District Commission (MDC) in 1919, subsuming the MPC. In the 1920s, the MDC converted the parkways to four lane motorways. By the 1930s, these regional parks were evolving from beautification and

preservation of nature to providing opportunity for recreation. The MDC added recreational facilities to its park system, including ball fields, golf courses, tennis courts, swimming facilities, and a ski run at the Blue Hills Reservation.

The Metropolitan District Commission had water and sewer responsibilities as well as the park development and management responsibilities held by its predecessor agency, the Metropolitan Parks Commission. The MDC's water and sewer responsibilities were eventually re-allocated to the Massachusetts Water Resource Authority (MWRA) in 1985. Without this burden, the MDC was able to reinvest more effort to its parks mission. In 2003, the MDC merged with the Massachusetts Department of Environmental Management (DEM) to form a new agency, the Massachusetts Department of Conservation and Recreation (DCR), putting non-metropolitan Boston and metropolitan Boston parks under one agency.

As a result, the Boston Harbor Islands State Park, part of the assemblage of 34 islands ranging in size from less than 1 acre to 274 acres that total about 1,600 acres at high tide and 3,100 acres at low tide, and among the few DEM holdings in Boston, came under the purview of the DCR. In turn, that state park is a part of the Boston Harbor Islands National Recreation Area, an administrative unit under the National Park Service (a U.S. Department of the Interior agency), that extends 11 miles seaward from downtown Boston.

SECTION 3.3

POPULATION CHARACTERISTICS**POPULATION**

For Boston overall, the trend has been toward increasing total population: 4.8% for the period between 2000 and 2010, and 11.6% between 2010 and 2020. Given the 2.6% increase in the 1990 to 2000 period, we can see an accelerating rate of population increase.

American Community Survey data (see following tables) indicate that a majority of Boston's neighborhoods experienced 10% or more population growth from 2010 to 2020, with the high at 28.5% in Hyde Park and the low at 11.8% in Dorchester. Among the six neighborhoods with less than 10% population growth in the 2010-2020 period are three that had shown significant drops in population growth rate previously in the 2000-2010 period: Fenway/Longwood, Mission Hill, and Allston-Brighton. While all three neighborhoods are highly developed and may be close to the limit of full build-out, another factor, more temporary, may be at play here: the late winter 2020 outbreak of the Covid-19 pandemic. All three neighborhoods are heavily affected by student residents, and given the initial response by the universities and colleges to turn to online classes meant that many students may have left their Boston residences for temporary quarters elsewhere, and did not respond to the Census form on April 1, 2020 from their usual student location in these neighborhoods.

The Massachusetts Statewide Comprehensive Outdoor Recreation Plan 2017 ("2017 SCORP") (EOEEA 2017) notes that Massachusetts had 6,811,779 residents in 2016. It is the third most densely populated state in the country at 871 persons per square mile. Only Rhode Island and New Jersey are more densely populated.

Boston's population density rose from 21.3 persons per acre in 2010 to 23.8 in 2020, a 2.5 persons per acre increase versus the 1.0 persons per acre increase in the 2000 to 2010 period.

This shows a significant acceleration of the population density increase trend. This density trend indicates that the need for more open space should be addressed, as more people will put greater pressure on existing spaces.

Note: Unless otherwise noted, 2020 figures are based on the 2016-2020 American Community Survey and figures compiled by the Boston Planning and Development Agency (BPDA). 1990, 2000, and 2010 figures are derived from the Census.

Boston's Population				
1990	2000	2010	2020	2030 projected*
574,283	589,141	617,594	689,326	740,286

Neighborhood Population				
	2010	2020	2010-2020 change	2010-2020 % change
Allston-Brighton	74,997	74,620	-377	-0.5%
Back Bay/Beacon Hill	27,111	27,158	47	0.2%
Central Boston	31,821	35,983	4,162	13.1%
Charlestown	16,439	20,504	4,065	24.7%
Dorchester	14,235	127,680	13,445	11.8%
East Boston	40,508	47,804	7,296	18.0%
Fenway/Longwood	37,581	39,126	1,545	4.1%
Harbor Islands	535	434	-101	-18.9%
Hyde Park	30,637	39,359	8,722	28.5%
Jamaica Plain	37,468	43,309	5,841	15.6%
Mattapan	22,600	26,854	4,254	18.8%
Mission Hill	16,305	16,380	75	0.5%
Roslindale	8,680	32,707	4,027	14.0%
Roxbury	48,454	52,856	4,402	9.1%
South Boston	5,200	41,217	6,017	17.1%
South End	24,577	29,298	4,721	19.2%
West Roxbury	30,446	34,037	3,591	11.8%
BOSTON	617,594	689,326	71,732	11.6%

* 2000 and 2010 figures use census data and the 2020 figure is derived from 2016-2020 American Community Survey data.

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Population Density (persons per acre)					
	Acres with airport	Acres without airport	2010 density*	2020 density*	2010-2020 Population Density Change (persons / acre)*
Allston-Brighton	2,839	2,839	26.4	26.3	-0.1
Back Bay/ Beacon Hill	599	599	45.3	45.3	0.1
Central Boston	833	833	38.2	43.2	5.0
Charlestown	872	872	18.9	23.5	4.7
Dorchester	4,913	4,913	23.3	26.0	2.7
East Boston	3,012	1,509	26.8	31.7	4.8
Fenway/ Longwood	749	749	50.2	52.2	2.1
Hyde Park	2,927	2,927	10.5	13.4	3.0
Jamaica Plain	2,603	2,603	14.4	16.6	2.2
Mattapan	1,352	1,352	16.7	19.9	3.1
Mission Hill	351	351	46.5	46.7	0.2
Roslindale	1,678	1,678	17.1	19.5	2.4
Roxbury	1,701	1,701	28.5	31.1	2.6
South Boston	2,062	2,062	17.1	20.0	2.9
South End	472	472	52.1	62.1	10.0
West Roxbury	3,516	3,516	8.7	9.7	1.0
BOSTON	30,479	28,976	21.3	23.8	2.5

* Population density based on acres without Airport

Age		
	2020	Percent of population
19 and under	139,893	20.3%
20-34	238,796	34.6%
35-64	159,499	23.1%
55-64	69,854	10.1%
65+	81,284	11.8%
BOSTON	689,326	100.0%

Teens			
	2020	Percent of 10-17 pop	Percent of total City pop
10-14	28,909	62.5%	4.2%
15-17	17,323	37.5%	2.5%
BOSTON	46,232	100.0%	6.7%

Race and Ethnicity		
	2020	Percent population
White Alone	359,219	52.1%
Black or African American Alone	166,796	24.2%
Native American and Alaska Native Alone	2,127	0.3%
Asian/Pacific Islander Alone	68,069	9.9%
Some Other Race Alone	43,173	6.3%
Two or More Races	49,942	7.2%
BOSTON	689,326	100.0%

Hispanic or Latino		
	2020	Percent population
Hispanic or Latino	134,703	19.5%
Not Hispanic or Latino	554,623	80.5%
BOSTON	689,326	100.0%

Disability		
	2020	Percent population
Identifies as having a disability	80,836	11.7%

Housing Tenure		
	2020	Percent of units
Total Housing Units Occupied	273,188	91.5%
Owner Occupied Units	96,502	35.3%
Renter Occupied Units	176,686	64.7%

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Family Income

	2020 Families	Share of families
\$0 to \$24,999	20,807	16.0%
\$25,000 to \$49,999	20,198	15.5%
\$50,000 to \$74,999	15,542	12.0%
\$75,000 to \$99,999	13,765	10.6%
\$100,000 to \$149,999	21,904	16.8%
\$150,000 or greater	37,836	29.1%
BOSTON	130,052	100.0%
Median income	\$89,270	

Poverty Status by Age*

	2020 residents in poverty	Poverty rate
0-4	7,336	22.2%
5-17	19,258	26.2%
18-24	23,004	34.5%
25-34	19,928	12.0%
35-64	30,904	13.6%
65+	15,672	19.8%
BOSTON	116,102	18.0%

*Poverty rates based on population for whom poverty status is determined which comes to 646,429 people.

Means of Commuting

	2020	Percent Total Workers
Total car, truck, or van*	162,688	43.3%
Drove alone	141,079	37.5%
Carpooled	21,609	5.7%
Public transport	115,561	30.7%
Bus or trolley bus	45,045	12.0%
Streetcar or trolley car	2,360	0.6%
Subway or elevated	63,456	16.9%
Railroad	4,297	1.1%
Ferryboat	403	0.1%
Taxi	2,292	0.6%
Motorcycle	249	0.1%
Bicycle	8,202	2.2%
Walked	54,979	14.6%
Other means	4,377	1.2%
Worked at home	27,564	7.3%
TOTAL WORKERS	375,912	100.0%

Industry

	2020	Percent of employed population
Management, business, science, and arts	200,933	52.3%
Service	73,164	19.0%
Sales and office	70,946	18.5%
Natural resources, construction, and maintenance	14,596	3.8%
Production, transportation, and material moving	24,601	6.4%
Civilian employed population 16 years and over	384,240	55.7% of city population

Vehicles per household (share of neighborhood households)						
	No vehicle	1	2	3	4	5 or more
Allston-Brighton	34.8%	39.3%	19.4%	4.7%	1.4%	0.4%
Back Bay/Beacon Hill	50.2%	40.9%	7.7%	1.0%	0.1%	0.1%
Central Boston	53.9%	37.5%	7.8%	0.6%	0.1%	0.0%
Charlestown	22.0%	55.0%	21.0%	1.7%	0.0%	0.4%
Dorchester	28.1%	42.3%	22.5%	5.7%	1.1%	0.4%
East Boston	37.8%	40.7%	18.1%	2.6%	0.6%	0.2%
Fenway/Longwood	59.8%	34.4%	5.0%	0.7%	0.0%	0.0%
Hyde Park	16.2%	37.3%	31.8%	11.6%	2.3%	0.7%
Jamaica Plain	25.6%	48.8%	20.2%	4.4%	0.7%	0.2%
Mattapan	27.1%	42.7%	21.3%	6.2%	1.7%	0.9%
Mission Hill	57.2%	37.7%	3.4%	1.6%	0.1%	0.0%
Roslindale	13.9%	46.5%	30.8%	5.9%	2.6%	0.4%
Roxbury	44.0%	40.0%	12.0%	3.4%	0.6%	0.0%
South Boston	28.7%	47.5%	20.4%	2.7%	0.7%	0.1%
South End	35.5%	49.4%	13.7%	1.2%	0.2%	0.0%
West Roxbury	10.6%	42.9%	35.8%	8.3%	2.1%	0.3%
BOSTON	33.5%	42.5%	18.8%	4.1%	<1%	<1%

INDUSTRIES, OCCUPATIONS, EMPLOYERS, AND EMPLOYMENT TRENDS

The *Largest Employers in the City of Boston* report provides an overview of the largest private sector employers, defined as having 500 employees or more. The analysis revealed that there are 121 private sector companies in Boston with more than 500 employees. These companies account for 196,446 jobs. Massachusetts General Hospital, Brigham and Women's Hospital, and Boston University together provide more than 35,000 jobs (BRA 2013).

Boston's largest employers are now mainly providers of Health Care and Social Assistance, Finance and Insurance, and Professional and Technical Services. These three sectors, in 2021, account for 303,423 jobs, representing 47% of all employment. Thanks to the pandemic shut-down, employment in nearly all the industrial sectors dipped in 2020 and then generally made a substantial recovery in 2021. The two sectors with the least amount of bounce back are Accommodations and Food Services, and Arts, Entertainment, and Recreation, which are the most vulnerable to the pandemic's lingering effects due to their being considered discretionary activities (BPDA, "Boston's Economy", 2022).

However, not all business is big business in Boston. *Boston's Neighborhood Business Patterns* states that the majority of firms in Boston are small employers with almost half of the establishments having 1-4 workers. There are 8,800 immigrant-owned small businesses in Boston that generate almost \$3.7 billion in annual sales and employ 18,500 people (BRA 2014).

The *Student Housing Trends 2018-2019 Academic Year* report notes that the city is the location of 35 public and private colleges and universities. There are more than 137,000 students enrolled in Boston's institutions of higher learning. The concentration of students ranks at the top in the nation and the world (DND n.d.).

Currently, nearly 70% of people living in Boston 25 and older have had some college or attained an Associates, Bachelors, or Masters degree (BPDA, "In Context", 2022). The combination of the large number of colleges and universities and skilled jobs results in a highly educated workforce and a population that is relatively younger than other cities.

The city is home to a number of technology companies and is a hub for biotechnology. In 2021, Boston institutions received \$2.4 billion from the National Institutes of Health, which was the second highest funding to any city in the U.S., just behind New York City (BPDA, "In Context", 2022).

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Tourism forms a large part of the local economy. The October 2022 report *Revive and Reimagine: A Strategy to Revitalize Boston's Downtown* cites that downtown, historically the focus of Boston's tourism industry has seen a downturn in economic of about 20-40% below pre-pandemic levels in hard hit industries (e.g., accommodation, retail, restaurants, tourism) (City of Boston, "Revive", 2022). Boston has made an effort to broaden and reframe what tourism in Boston looks like, particularly where it takes place. Former Mayor Kim Janey launched the All Inclusive Boston campaign in 2021 alongside the B-Local program as part of an equitable recovery initiative.

"The All Inclusive Boston campaign has played a key role in keeping our tourism industry and small businesses afloat during this difficult time," said Mayor Kim Janey. "It is important that we continue this campaign to encourage our visitors to explore parts of our City that they may not have been to before and to continue to support our businesses and workers in this time of renewal."

B-Local is a free mobile app that supports small businesses by incentivizing residents and visitors to shop locally, driving Boston's economic activity. By integrating this app with the All Inclusive Boston campaign, the hope is to increase visibility and support Boston's vibrant small business community (City of Boston, "B-Local", 2021).

Lastly, Boston is a state capital and county seat, and the home of federal, state, county and municipal agencies, law offices, and other government services, which are another major component of the city's economy.

ENVIRONMENTAL JUSTICE

The Executive Office of Environmental Affairs (EOEA) enacted an Environmental Justice Policy in 2002. EOEEA notes that Environmental Justice (EJ) is based on the principle that all

people have a right to be protected from environmental pollution, and to live in and enjoy a clean and healthful environment. Environmental justice is the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits.

EOEEA established an Environmental Justice Policy to address the disproportionate share of environmental burdens generally experienced by lower-income people and communities of color who, at the same time, often lack environmental assets in their neighborhoods. The policy is designed to help ensure protection from environmental pollution as well as promote community involvement in planning and environmental decision-making to maintain and/or enhance the environmental quality of their neighborhoods.

Environmental Justice neighborhoods are those areas that EOEEA has determined to be most at risk of being unaware of, or unable to participate in, environmental decision-making or to gain access to environmental resources.

As of 2023 the criteria for defining an environmental justice community is:

- the annual median household income is 65% or less of the statewide annual median household income
- minorities make up 40% or more of the population
- 25% or more of households identify as speaking English less than "very well"
- minorities make up 25% or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150% of the statewide annual median household income.

Boston meets the criteria for being defined overall as an environmental justice community. The total population of Boston that fell within

an Environmental Justice Block Group was 544,030 or 79% of the population (MassGIS, “Environmental Justice”, 2022). All of Boston’s neighborhoods contain at least one or more census block groups that meet the criteria (See MAPS 3+4 ENVIRONMENTAL JUSTICE POPULATIONS).

The *State of Equity in Metro Boston* addresses equitable access to open space. The report calls for land use decisions that provide equitable access to open space and address issues of safety. MetroFuture Goal #23 addresses environmental justice and states that “all neighborhoods will have access to safe and well-maintained parks, community gardens, and appropriate play spaces for children and youth. Even as density increases, MetroFuture will protect and enhance access to open space. The region will...focus on areas currently underserved by open space,” (MAPC 2011). Such improvements will not only help children, but will also meet MetroFuture Goal #25 that all of the region’s residents build more physical activity into their lives.

The 2015 *Shape of the City* report by the Boston Indicators project notes “[i]n Greater Boston, the highest concentration of environmental hazards are located in cities and towns with higher poverty rates and larger concentrations of children, such as ... Boston with 121 per square mile[.]” i.e., that communities of color and low-income neighborhoods in Boston shoulder a disproportionate share of environmental and environmental health burdens (“Upward Mobile City” 2015). A 2002 Northeastern University study documented cumulative exposures to 17 different types of environmentally hazardous sites and facilities, and found nine in Boston neighborhoods, particularly in communities of color (Faber and Krieg 2002). As a result, Boston was ranked among the 20 most environmentally overburdened communities in Massachusetts.

SECTION 3.4:

GROWTH AND DEVELOPMENT PATTERNS

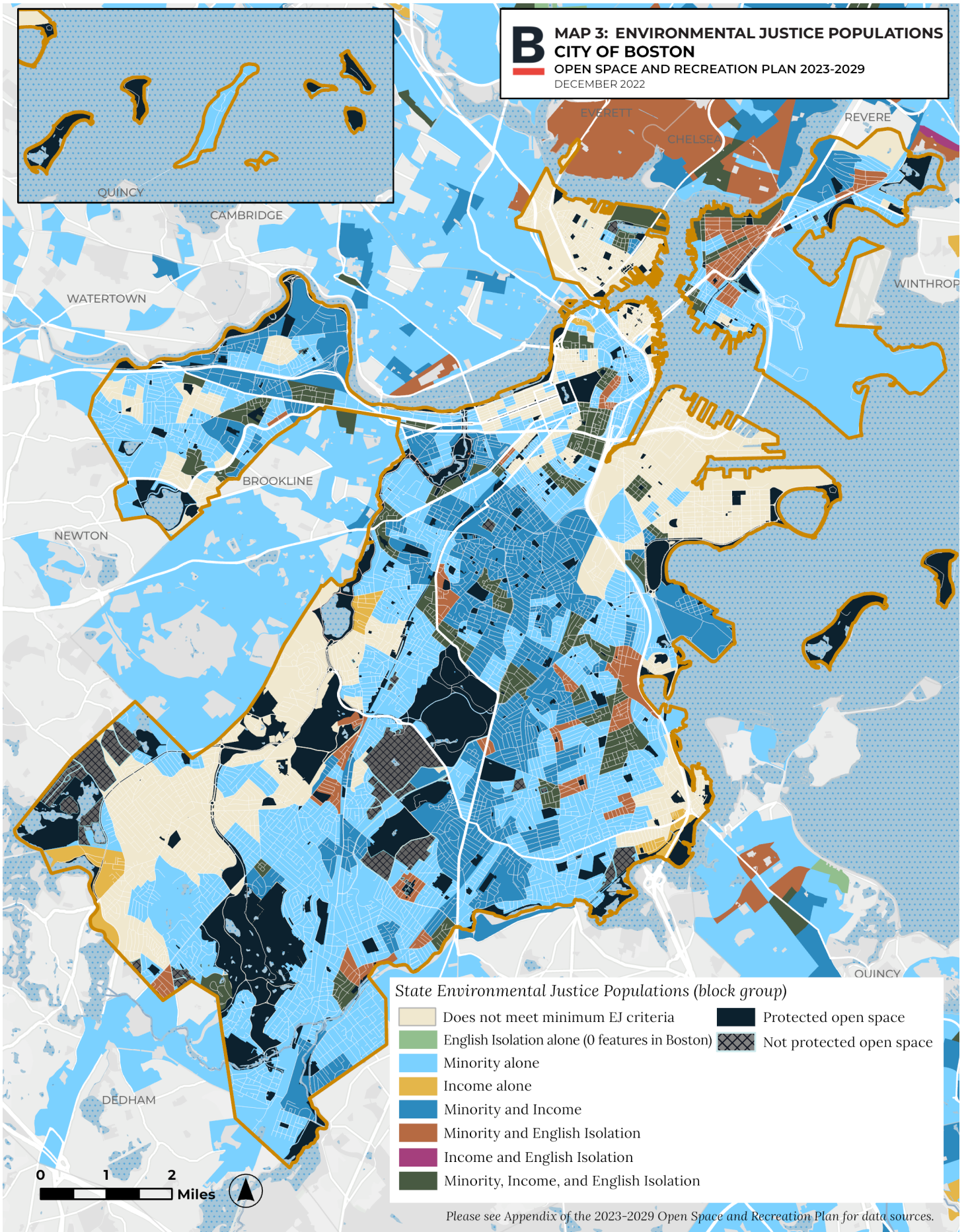
INTRODUCTION

Boston’s historical growth and development has been discussed in Section 3.2, History. To briefly summarize Boston’s development and growth, Boston’s location on the Atlantic coast at the confluence of several rivers gave it great advantages that were used to make it a maritime port of international significance. When the industrial revolution occurred, its location near rivers allowed for transportation and power sources, and its port gave it worldwide market reach. The development of educational and cultural institutions from its beginnings gave it further advantages that continue to be exercised in the knowledge- and information-based economy. Thanks to this knowledge base, industries such as cutting-edge health care, advanced technologies, and advanced financial services are a robust part of the city’s current growth. Its historical resources have provided the basis for a strong tourism economic sector, and its leadership role in the development of public open spaces, as well as strong support for the arts and culture, has helped make Boston a highly desirable place to live and work. Those assets help attract strong talent to Boston’s knowledge- and information-based economy, as does the public transportation system and the varied housing stock, from high rise apartment towers to triple-deckers and stately Victorian homes.

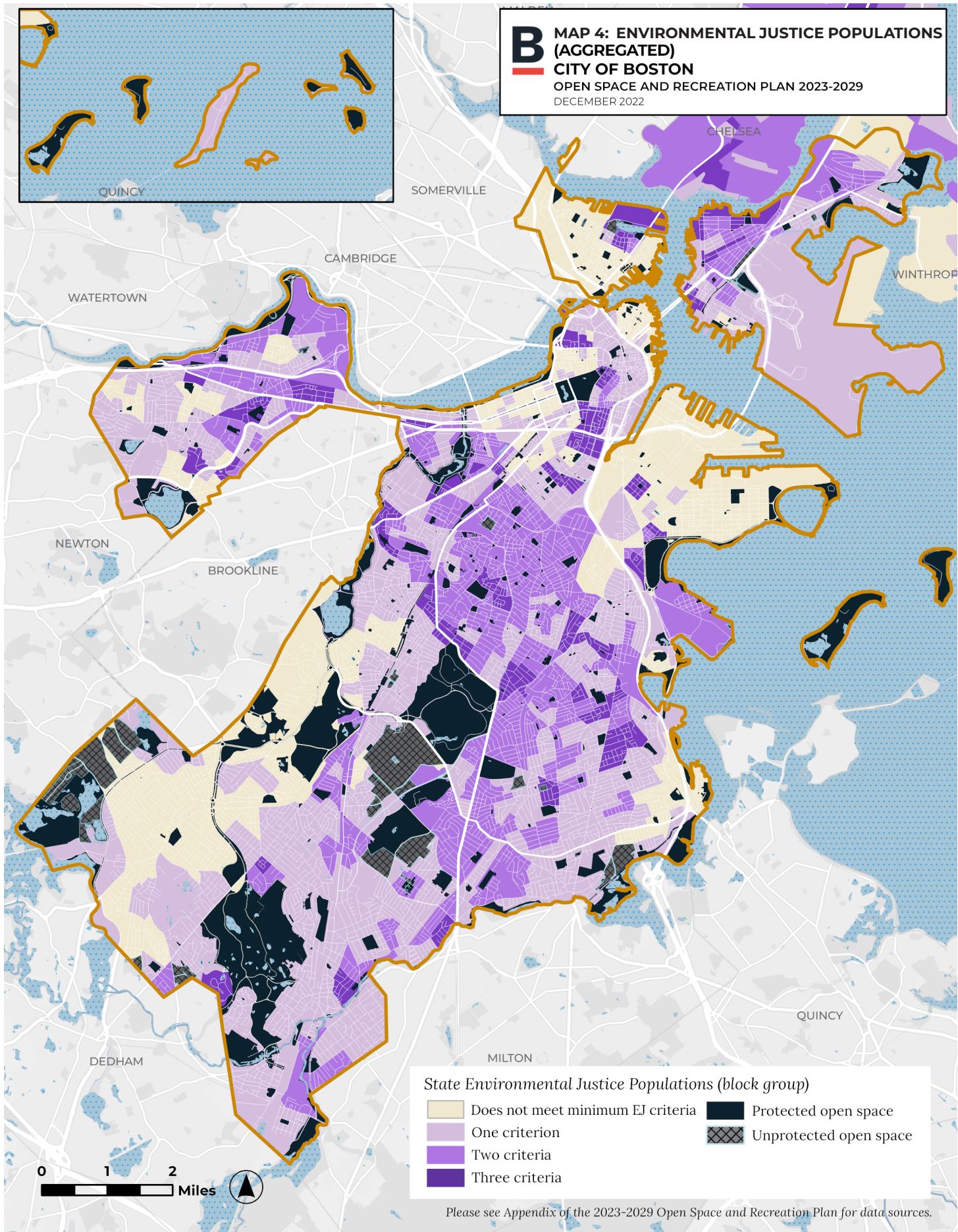
OPEN SPACE: CHARACTER AND CHANGE

Boston’s open space has been a function of its growth and a definer of its growth. In the early 19th century, the small squares were assets to attract dense residential development. When in the later 19th century, rapid development greatly reduced informal access to open space in the countryside, and its density led to the call for a park system that would be pastoral

B MAP 3: ENVIRONMENTAL JUSTICE POPULATIONS
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landscape-oriented, as exemplified by the Olmsted-designed Emerald Necklace parks. This gave the public a more formalized access to green landscapes that would also define and attract development. However, it proved difficult to provide large landscape-oriented parks throughout the city. That combined with the new recreation movement that saw physical activity as one means to counteract the ills of poverty in dense urban settings led to the movement to create smaller parks more oriented to sports and games, where the spaces were dedicated to them.

As development continued in the 20th century, with building technology allowing for tall buildings for residential and commercial purposes, the additional population and ensuing congestion again sought relief in the movement for on-site open space, either plazas for commercial buildings or parks with passive and/or active recreation elements in residential buildings or building complexes. Toward the latter part of the 20th century and into the early 21st century, there is more of a movement toward more intensive programming of parks, not just for physical activity, but also for entertainment, arts, and cultural events. This movement sees open space as an interactive realm, where society is limited to intimate encounters, as in the pastoral landscape park, but well integrated into the landscape/cityscape.

Of course, like many forms of technology, all these forms of open space have come to occupy their own niche, just as hard copy books are still published in the digital age, and radio and television have not been superseded by internet streaming services. The Emerald Necklace parks, probably among Boston's most defining physical elements, has taken on a historical character, yet is amenable to carefully wrought changes that fit into its own defining elements, such as the golf clubhouse in Franklin Park that blends into the landscape.

With preventive-oriented health care the focus of cost-cutting policy makers, active recreation

will not fade as an important subject of park design, but will experience change as new immigrants bring new pursuits to the fields and courts, or whole new sports and games are created, or existing ones modified thanks to new technology.

Of course, demographic, socio-economic, and land use changes will affect open space needs and designs. As it has throughout Boston's history, open space will reflect and be part of the wider currents of its development and growth, helping to define community character and meet community needs.

CURRENT LAND USE AND DEVELOPMENT TRENDS

The Metropolitan Planning Council (MAPC) classifies Boston as a Metropolitan Core Community. These communities have a historic, high-density, urban character, with a range of housing from traditional triple-deckers and row houses to large multifamily buildings. New growth occurs mostly through redevelopment, infill, or conversion from industrial uses to residential or mixed uses. Minority, immigrant, and low-income populations comprise a large share of the population (MAPC 2008).

FUTURE TRENDS

Population and Housing Demand Projections for Metro Boston provides projections for Metro Boston through 2040 to help municipalities form policies to ensure that the region continues to grow. The report states that the aging and retirement of the Baby Boomers will have implications for the region, and the economic future depends on attracting more young workers from other places. The report states that 435,000 new housing units - mostly multifamily, and mostly in urban areas -- will be needed by the year 2040 to accommodate these young workers and the growing senior population. This implies that all types of publicly accessible open space, active, passive, and natural resource-based, will

be needed to accommodate this increase in population. This will be especially so given that most of these new units will be of a multifamily, urban nature, where onsite open space, if any, will be limited (MAPC 2014).

The report offers two possible scenarios – “Status Quo” and “Stronger Region.” The Status Quo scenario is based on the continuation of existing rates of birth, death, migration, and housing occupancy. The Stronger Region scenario explores how changing trends could result in higher population growth, greater housing demand, and substantially larger workforce. The key findings are below:

- **Population:** The Status Quo Scenario assumes a population growth of 6.6% over thirty years. The Stronger Region projects a 12.6% growth in population.
- **Workforce:** More than a million of the workers in the region will retire by the year 2030. Young people will need to be retained and attracted from other places in order to fill those jobs. The Status Quo scenario notes that the current weak in-migration of younger workers will result in 0.4% growth in the labor force. The Stronger Region scenario projects that more young people will be attracted from outside the region and then retained, adding 175,000 new workers to the labor force and growing it by 7%.
- **Housing:** Under the Status Quo scenario, the need for more housing will require 305,000 new housing units by 2040. Under the Stronger Region scenario, there will be a need for 435,000 new units.
- **Households:** There will be a need to provide housing for a growing number of households of declining size due to single person households (especially seniors), divorced households, and fewer children. An increasing percentage of senior-headed households will choose to downsize from single family homes to apartments and condominiums. The sale of single family homes by the aging Baby Boomer generation will provide an adequate supply for younger families. With smaller households,

public open spaces will serve as community gathering spaces where social isolation can be reduced.

- **Housing Preferences:** Attracting more young people to the region with the kinds of housing they prefer could result in a “Stronger Region” scenario with a total population increase of 12.6%. This report confirms the need for significant new supplies of rental and owner multi-family housing to attract young people. The Status Quo scenario requires 48% of units to be multi-family in urban communities. The Stronger Region scenario requires 62% of the units to be multi-family in urban communities.

The report says that many signs point to the resurgence of inner core urban communities. An increasingly diverse population attracted by job proximity, transit access, community vibrancy, and cultural assets is likely to drive continued population growth in inner urban areas. More than half of housing demand will be in urban communities under either scenario – as much as 56% in the Stronger Region scenario.

- **Children:** The number of children in the region peaked in 2000 and is likely to decline over the coming decades. The population aged 5 to 14 is projected to fall another 8% to 9% by 2020 and is not likely to fully rebound, even under the Stronger Region scenario.
- **Economy:** MAPC’s economic development strategy report includes trends in the Boston Metropolitan Regional Economy. It notes that in the colonial era, the region focused on international trade and building global connections. The economic security that resulted allowed governance that supported growth and universities that ensured an educated population. As manufacturing increased, there was greater investment in education, cultural institutions and physical development that enhanced the quality of life. The region is now undergoing an economic transition with core strengths in education, healthcare and finance that form the basis of an innovation and knowledge economy. To support this transition will demand further investments in education

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for economic/workforce development, and in cultural institutions and recreational venues and opportunities (including open space) that will attract an educated, skilled workforce to an area with a high quality of life.

- **Climate Change:** The *Boston Indicators Project* notes that the city is among the most vulnerable in the US to climate change and rising seas. Models that showed an ice-free status in the Arctic by 2050 are being revised to project open seas in a decade. Projections are for a 7-foot rise in sea level in a century. The report states that the Northeast coast is at a disproportionate risk compared to the nation and world. Among Boston's approaches to address this issue includes the provision and use of open space to accommodate temporary periods of inundation and to provide barriers for coastal flood protection.

CURRENT INFRASTRUCTURE

Boston's land use is compact, mixed-use, pedestrian-oriented, and well served by transit. Land is at a premium and development competes with open space. The infrastructure systems necessary to support a dense city include multi-modal transportation, electrical services, gas lines, water and waste systems, and recreational and ecological open space. Achieving a balance of infrastructure systems that allow for growth and maintains a superior quality of life requires the careful development and application of public policy.

WATER TRANSPORTATION

Natural water bodies provided the earliest means of transport in Boston. The sea and the harbor (including the Mystic River and Chelsea Creek) continue to be important avenues of international commerce, although Boston's share of this trade has fallen behind other port cities such as New York and Montreal. Today cruise liners calling in Boston are a bigger business than container ships. Harbor channel maintenance dredging under the direction of

the US Army Corps of Engineers was completed in 2008. The next project is a channel deepening project that will enable larger container cargo ships to enter the Port of Boston.

In recent years the water ferry system for passenger transport has been revived and expanded. In a region defined by its access to water, ferry service will become an alternative to clogged highways and packed transit trains as population and development densities increase.

STREETS, ROADS, AND HIGHWAYS

Native People had a hierarchy of paths throughout the region that responded to topography, landforms, sun, and shade. The European settlers first adopted these paths and eventually augmented them, before then imposing straight line "rangeway" roads. Boston's colonial-era streets have grown into an 800-mile network that varies from narrow cobblestone alleys on Beacon Hill dating back several centuries to the massive and congested Massachusetts Turnpike Extension (I-90) and John F. Fitzgerald Expressway (I-93). The more significant highways that serve the city include Interstates 90 and 93, Massachusetts Routes 1A, 2, 3, 3A, 9, 28, 30, 99, and 203, and U.S. Routes 1 and 20.

As the ownership of privately-owned vehicles increases, traffic adversely impacts the quality of life in the city. The conflict between personal choices and public good remains ongoing, from residential neighborhoods where merchants and residents call for more parking, to the heavily-used Interstate Highway System that cuts through and surrounds Boston. Traffic delays and air, water, and noise pollution are constant reminders of the impacts of an auto-dependent transportation system.

Some reductions in auto ownership and use may be coming, as some residents take advantage of car sharing systems like ZipCar, or bike sharing systems (see below) like Hubway, for personal mobility. At least one high rise residential development in downtown Boston was approved without any parking garage onsite or associated with it elsewhere, in recognition of a market for

carless-lifestyle housing. This could potentially free up land for other uses, including open space, but such urban-oriented residents will also seek close-to-home recreation, which may lead to further pressures on existing limited open space.

BRIDGES AND TUNNELS

In many instances, colonial-era ferries and then bridges were developed at the fording places of the Native Peoples. The bridges and tunnels that now serve the city include the Callahan, Sumner, and Ted Williams Tunnels crossing Boston Harbor to East Boston, the Thomas P. “Tip” O’Neill, Jr. Tunnel (I-93) under downtown Boston, the Tobin Bridge (U.S. Route 1) crossing the Mystic River, and the Leonard P. Zakim Bunker Hill Memorial Bridge (also I-93) crossing the Charles River.

The Thomas P. “Tip” O’Neill, Jr. Tunnel is located below the Rose F. Kennedy Greenway in downtown Boston. It was built as part of Central Artery/Tunnel Project (aka “The Big Dig” or the CA/T Project), which removed the deteriorating elevated Central Artery. This project created a total of 300 acres of open space, including 45 parks and plazas in downtown Boston, Charlestown, East Boston, and South Boston.

MASS TRANSIT

Railroads were first built in Boston during the 1830s. The tracks required flat land so wetlands were often filled to serve that purpose. This technology thereupon made possible the extensive filling in of tidal flats, wetlands, and other lowlands by transporting fill, thereby creating new land for neighborhoods, roads, and railroads.

Boston residents were served by horse drawn buses in colonial times. By the late 1800s, streetcar suburbs grew along trolley lines in Roxbury, Brighton, Dorchester, and other areas around Boston.

Boston developed the first subway system in the country. The MBTA is the largest transit system in the commonwealth and one of the largest in the country as measured by ridership (subway, bus, feet, Commuter Rail). It serves nearly 200

cities and towns with a daily ridership of approximately 1 million passengers. The MBTA maintains 171 bus routes, 4 rapid transit bus routes, 5 local subway lines, 13 commuter rail lines, 3 ferry routes, and a flexible paratransit service. This system allows for better public access to public open spaces throughout the city, whether local or regional scale open spaces. This system can help increase public open space use of unused land, but there are also trends toward sale of such assets or use of or impact upon public open spaces to improve or expand the transit network.

PEDESTRIANS AND BICYCLES

MassDOT’s *Capital Investment Plan* for FY2014–FY2018 notes that \$144 million will be provided for the construction or reconstruction of bikeway and bike path improvements, including rail trails and scenic byways, across the Commonwealth (2014).

The *Boston Regional Pedestrian Transportation Plan* 2010 identifies actions that local governments, advocacy organizations, citizen groups, the private sector, and individuals can take to encourage walking (MAPC 2010).

Hubway is a public bicycle sharing system with stations throughout Boston and adjacent towns. This builds on the past decade’s extensive laying out of bicycle lanes on city streets and arterial routes, and the installation of bicycle parking stands throughout the city.

WATER SUPPLY INFRASTRUCTURE

The water supply infrastructure for Boston is the responsibility of both the Massachusetts Water Resources Authority (MWRA) and the Boston Water and Sewer Commission (BWSC).

Water services had a modest beginning in colonial Boston, as early settlers relied on water from cisterns and underground wells, but the quality was poor and the supply inadequate. The first attempt to provide an alternative came when the Aqueduct Corporation began delivering water from Jamaica Pond through wooden pipes in 1796 (MWRA 2015).

Through the 1800s, Boston sought water supply sources further away from the city: 1848, from Lake Cochituate via the Cochituate Aqueduct and the Brookline Reservoir; 1870, the Chestnut Hill Reservoir, with the construction of reservoirs on the Sudbury River to feed the Chestnut Hill Reservoir through the Sudbury Aqueduct soon following. A regional approach, the Metropolitan Water District, was formed in 1895 and by 1908 the Wachusett Dam, Reservoir, and Aqueduct were completed.

By the early 1900s, the Boston metropolitan area required additional water supplies and a more comprehensive plan to ensure its delivery. The Metropolitan District Commission (MDC) Water Supply Division was created in 1926 as the agency responsible for building these new facilities, among them Quabbin Reservoir, the Quabbin Aqueduct, and the Hultman Aqueduct.

Today, the MWRA supplies water to Boston and 60 other communities, where 2.5 million people are served in 890,000 households. Some 230 million gallons daily come from the Quabbin Reservoir which is 65 miles west of Boston, and the Wachusett Reservoir which is 35 miles west of the city. The water is conveyed via aqueducts from the two reservoirs to the Weston and Norumbega reservoirs.

The MWRA water reaches Boston after passing through treatment plants, storage tanks, and aqueducts. The BWSC owns and operates a system for the distribution of drinking water within Boston. The BWSC purchases water (disinfected and fluoridated) from the MWRA, and is the MWRA's largest single customer for both water and sewer services.

The BWSC's water supply distribution system consists of approximately 1,096 miles of pipe, 13,074 hydrants, and 16,885 valves. The system serves approximately 88,000 accounts through four major service networks (BWSC 2015).

The most significant assets of the water supply system which exist in Boston and that have a relationship to the open space system are the

Chestnut Hill Reservoir, where no water contact is allowed, but a path on the perimeter of the water body allows for walking and running, and the Bellevue Hill storage tank that helps maintain water pressure in the system for the southwestern section of the Boston area, and is located within the Bellevue Hill Reservation under the control of DCR. Paths are located within this reservation.

SEWER INFRASTRUCTURE

The BWSC owns and operates a system for the collection and transport of wastewater and storm drainage. The sewer system consists of conduits ranging in size from six-inch clay lateral sewers to 20-foot by 15.5-foot concrete culverts. The 1,450-mile system has 600 linear miles of sanitary sewers, 550 miles of storm drains, and 300 miles of combined sewers. Other facilities include eight pumping stations, two gatehouses, 40 permitted combined sewer overflow outlets, 185 regulators, and 200 tide gates.

In 1985, legislation transferred the possession, control, and operation of the MDC Water and Sewerage Divisions to the newly created Massachusetts Water Resources Authority (BWSC 2015). Today, all wastewater collected by BWSC facilities is conveyed to the MWRA's Deer Island Treatment Plant for treatment. The MWRA has created a 44-acre park around the plant which is located within Boston, thus offering a harbor island experience accessible by land from Winthrop (MWRA 2015).

The Deer Island Treatment Plant is part of the federal court-ordered cleanup of Boston Harbor. The court ordered the MWRA to build the wastewater and sludge facilities as well as improved combined sewer overflow facilities, all on a court-set schedule.

These sewer renovations and the wastewater and sludge treatment made up the largest public works project to be built in New England up to that time and had a final cost estimated at up to \$6.1 billion. This undertaking included a 9-mile effluent tunnel to carry treated water hundreds of feet below Boston Harbor and into Massachusetts Bay.

This vast undertaking was driven by the 2.5 million people (almost half of the state’s population) and the 5,500 businesses and industries that send their waste to Boston Harbor. It was also driven by the high value of the Boston waterfront, where commercial, residential, and recreational interests have been positively affected by the cleanup of the harbor waters. The harbor beaches in Boston have come back as a recreational destination thanks to this cleanup of the effluent flowing into the harbor waters.

STORMWATER BEST MANAGEMENT PRACTICES

The *Stormwater Best Management Practices: Guidance Document* calls for green stormwater infrastructure (GSI) that uses stormwater runoff management practices to mimic the natural hydrologic cycle. Site planning includes reducing impervious areas, fitting the proposed improvements to the site terrain, preserving and using the natural drainage systems, and replicating pre-development hydrology (BWSC 2013).

The Commission has implemented demonstration projects at Audubon Circle (Beacon Street/Park Drive area), Central Square in East Boston, and Cambridge Street at City Hall Plaza. Ongoing efforts to expand the use of GSI include right-of-way projects and park projects with increased stormwater retention and infiltration.

FUTURE DEVELOPMENT

Boston’s long term development is largely a function of the economy, the local land use controls, and the amount of remaining, buildable land. There is a need to provide open space in a balanced manner to augment the build-out in these neighborhoods as discussed in Section 7.

LOCAL LAND USE CONTROLS: PLANNING

The City’s comprehensive plan, *Imagine Boston 2030*, knits together and establishes a context for the individual neighborhood plans.

LOCAL LAND USE CONTROLS: ZONING

The City of Boston prescribes land use through citywide districts and special districts zoning. Specific to this plan, the zoning designations include Open Space Districts and Conservation Protection Subdistricts (see MAP 5: ZONING OF OPEN SPACE). The City’s Zoning Code has several articles that relate to open space that are summarized in Section 5. These include the following:

- Article 29 Greenbelt Protection Overlay District
- Article 33 Open Space Subdistricts
- Article 49A Greenway Overlay District
- Article 56 Conservation Protection Subdistrict
- Article 89 Urban Agriculture

Open space zoning is designated for lands in public ownership that are currently used for open space purposes. Open space zoning prohibits or limits to varying degrees the development of open space. The type of open space typically governs what degree of development can be allowed. The protection of open space through zoning has limitations as a project that does not meet zoning requirements may seek a variance.

Private property owners may have their property zoned for open space if they so desire. Residential zoning prescribes areas to be provided for open space on-site, as in Article 17, Open Space Requirement for Residences. New residential uses may be required to provide a minimum usable open space per dwelling unit on the project site. This requirement may be met by balconies or on the roofs. Required front, side, and rear yards are included in computing the usable open space.

Meeting the minimum usable open space per dwelling unit zoning requirement onsite has become a challenge in densely developing neighborhoods like South Boston where developers are maximizing the development on a site and seeking variances by which to do so, including seeking relief from the minimum onsite open space requirements. This puts pressure on existing open space in already dense neighborhoods with limited open space.

Article 80 Development Review: The Article 80 process is intended to protect and enhance the public realm and to mitigate the impacts of development projects on their surroundings and on City resources. One of the specific goals of Article 80 is “to encourage new buildings and public spaces that are designed to enhance and preserve Boston’s system of parks, squares, walkways, and active shopping streets.” However, the Article 80 review criteria do not specifically address a project’s potential impact to the park system.

Planned Development Areas: The BPDA may approve a Planned Development Area (PDA), a special feature of Article 80, for a project that codifies the development potential of a particular parcel through an extensive public process, review, and negotiation. The end result is that the required provision of open space on a site may be changed during this approval.

Institutional Master Plans: The BPDA may also approve an Institutional Master Plan (IMP) under Article 80 that determines how a school or hospital will grow over a decade. There are no requirements for open space in this process. Open space may be provided in the IMP, but a later amendment, or a future IMP, may utilize that open space. The institution may eliminate the open space within its holdings, and instead look to the City’s already oversubscribed public open spaces to serve its own users.

LOCAL LAND USE CONTROLS: PARKS AND RECREATION COMMISSION REVIEW

The Boston Parks and Recreation Department reviews development projects for the impacts to open space through the Section 7.4-11 (the 100’ rule) and Article 80.

Municipal Code Section 7.4-11 Permission for Construction near Parks or Parkways: The City’s Municipal Code requires that the Parks and Recreation Commission must approve in writing construction or alteration of all buildings and structures within 100 feet of a public park or parkway. This review process is conducted either administratively or through the monthly public hearings of the Parks and Recreation Commission.

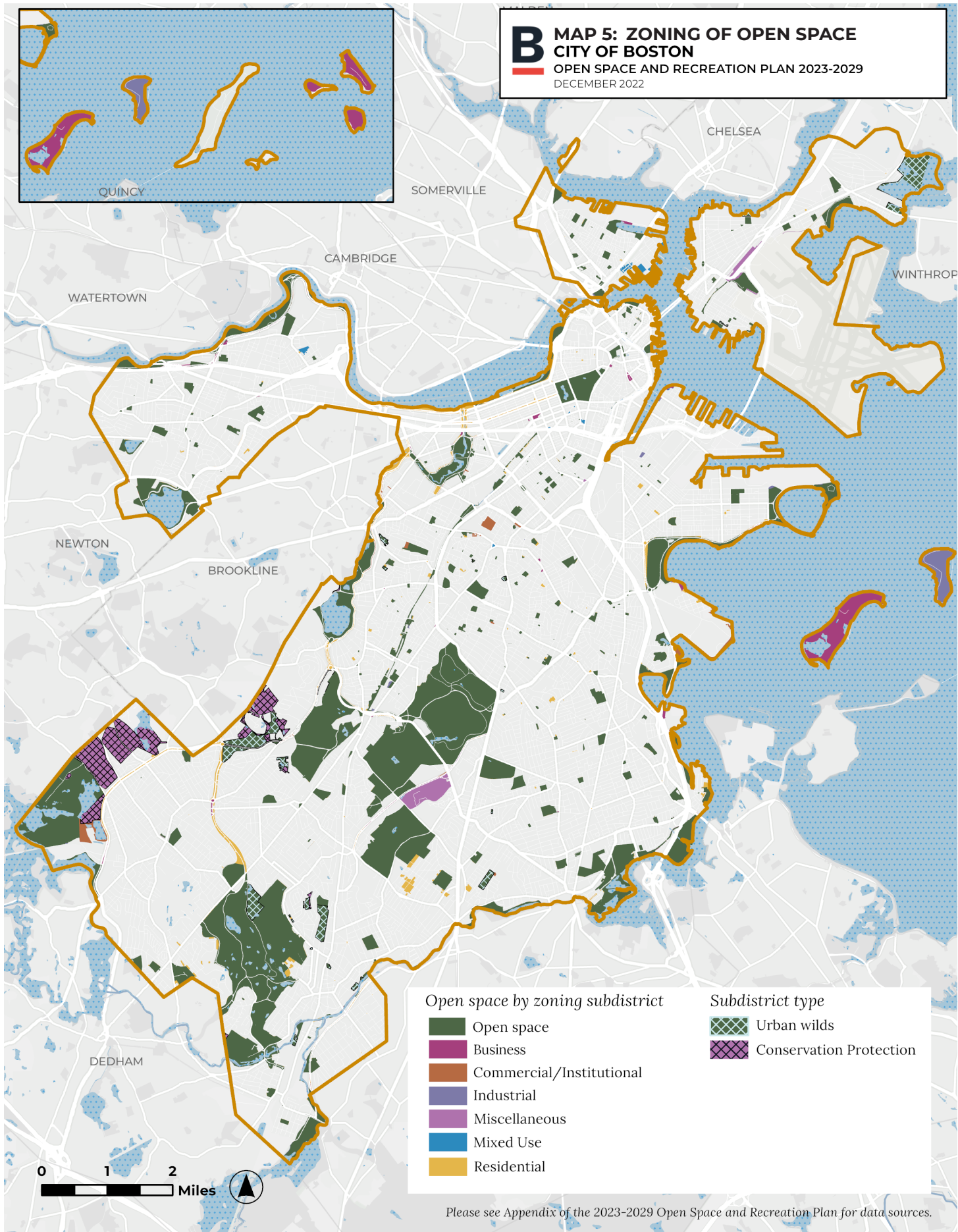
INFRASTRUCTURE IMPROVEMENTS

The assets of a region that support an innovation/knowledge-based economy include its residents, its public and civic institutions, and its physical and virtual infrastructure that allows people to live in the region and businesses to thrive. The provision of an infrastructure of parks and open space can be considered part of this vision.

The MAPC’s economic development strategy report (MAPC undated) notes that Boston overall has good infrastructure systems that have contributed to general economic success. The future challenges include the maintenance, modernization, and expansion of these systems due to the age of the systems, changing demographics, development, and lack of funding sources. Of particular note are needs related to transit systems, stormwater infrastructure, and energy infrastructure. The need to provide equitable distribution of infrastructure investments is critical, because it will determine where growth occurs and who benefits from it.

Development decisions in the future will be influenced by the preferences of the baby boomers and the millennials. These two groups have trended towards a distinct preference for urban environments, with living and working environments that require less automobile dependence for access to a wide array of entertainment, services, and innovative economic opportunities. From an infrastructure perspective, this creates a need for more urban investments, particularly with regard to transit which enables higher density environments, and stormwater management which helps to mitigate the adverse environmental impacts of development.

The transit systems of Boston require significant investments to support improvements and expansion. Transit in this region must offer higher quality and greater efficiency. It must also be expanded to support greater density and enhance connectivity.



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Stormwater management is also an issue of increased concern because the need to manage flooding and water quality in urban and suburban areas has necessitated the development of practices that create additional costs for municipalities and developers.

IMPACTS OF GROWTH

The regional 2012 to 2013 *Annual Update, Comprehensive Economic Development Strategy* report states a goal to promote economic development policies and practices driven by Smart Growth Principles. It notes that regional development patterns of the past have ceased to be in the long term self-interest of future generations (MAPC n.d.).

Smart growth will focus a larger share of regional growth in central cities, urbanized areas, near transportation nodes, and in communities already served by adequate infrastructure. The intent is to encourage density in some places in order to save open land in other places. This is a goal, however, that can have a negative impact on the provision of parks within Boston, since as density increases, open space needs and pressures on open space both increase. This goal therefore needs further development to limit adverse impacts on Boston residents.

The MAPC encourages policies to promote the redevelopment of brownfields and regulate the development of greenfields in order to enable compact growth, protect natural landscapes, and focus economic growth.

The MAPC has a goal to develop the region's Green Economy. It supports the development and implementation of local and regional, state, and interstate plans that foster development projects, land and water conservation, transportation, and housing that have a regional benefit. The *MetroFuture Plan* includes goals to protect natural landscapes and conserve natural resources (MAPC, "MetroFuture", 2008).

The MAPC has projected that there will be a need for 435,000 more housing units created in the region by 2040 in order to accommodate and encourage growth. This growth will be primarily in multi-family housing, as lifestyles change to accommodate younger workers and aging baby boomers. This added density in housing units that are typically without private open space will thus need to be served by public open space. There is already a heavy demand put on open space resources in Boston and the Metropolitan Boston Region, a highly urbanized and densely populated area (MAPC 2014).

SECTION 4

ENVIRONMENTAL INVENTORY & ANALYSIS

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SECTION 4.1

GEOLOGY, SOILS, AND TOPOGRAPHY**INTRODUCTION**

Boston is situated in topographic lowland, referred to as the Boston Basin. This lowland is surrounded by a ring of hills that circle it from the Middlesex Fells to the north, inland to the Belmont Hills and Newton Highlands to the west, and around to the Blue Hills to the south. Boston's geology is attributed to several different geologic processes. The geology of Boston can be described by its bedrock, structural, and surficial features including glacial, fluvial, and wind deposited sediments. The soils of Boston reflect these geological factors, as well as influences due to vegetation and humans.

GEOLOGICAL HISTORY

A distinctive grain of bedrock runs northeast through Boston and follows the Appalachian tectonic plate. This grain is most obvious in the course of the Neponset River, in the angle of the bedrock Harbor Islands, and in the angle of cliffs of the Middlesex escarpment north of the city. This ancient fault system is active and Boston is subject to earthquake shocks.

The existence of ancient volcanoes is evidenced in the granite outcrops to the north and west of the city. This rock was important to native people for tools, and was later quarried for local structures such as the Bunker Hill Monument and Quincy Market.

Much of Boston is located in a large lowland basin, which is underlain with blue clay and slate. Quarries in South Boston provided material for building foundations, roofing and gravestones for the early development of the city. Local clays were used to make pottery and bricks.

A conglomerate rock commonly known as Puddingstone is unique to the area, and gives Roxbury and Stony Brook their names. It can be found in Franklin Park and other parks throughout the city, that were likely created around rock

formations that were difficult to remove or quarry. However, it was used as a building material in Roxbury, Brookline and throughout Boston, and also as a material for Victorian Gothic churches.

The Great Ice Age (Pleistocene Epoch) began to end around 10,000 BP as the glaciers and ice sheets that had covered North America for 1.8 million years retreated. As the glaciers melted, they changed the course of rivers like the Mystic, and created large bogs. Shallow kettle lakes formed throughout greater Boston, which later became important locations for natural ecology, prehistoric settlement, colonial country estates, ice harvesting, recreational areas and reservoirs for Boston's water supply.

The glacial retreat also formed the drumlin hills that shaped the landscape of Boston. Beacon Hill, Bunker Hill, and some of the Boston Harbor Islands remain as examples, though many of the gravel hills were removed during the filling of the wetlands.

Much of the glacial plain was flooded by sea level rise as the ice melted, so the level, well-drained soil in Boston is limited. Early development was limited to these areas.

SURFICIAL GEOLOGY

The surficial geology of the Boston Basin is the dominant factor of the landscape. The surficial geology of Boston includes glacial drift, glacial outwash, riverine deposits, and marine clays, as well as loess, which is fine silt deposited by wind (see MAP 6: SURFICIAL GEOLOGY AND SOILS).

Glacial landforms dominate the local topography. These landforms resulted from periods of extensive glaciation approximately 10,000 to 50,000 years ago. Repeated advances of thick glacial ice resulted in deformation of the earth's crust. Valleys that existed 50,000 years ago were scoured, deepened, and widened by the ice. Glacial till—unconsolidated, non-stratified glacial drift—was deposited in depths of up to 150 feet.

This till was commonly deposited as smooth, oval shaped hills known as drumlins. The Boston Basin has more than 100 of these drumlin features including the Harbor Islands, Breeds Hill, and Bunker Hill. A major factor in the Boston Harbor Islands' designation by the National Park Service as a National Recreation Area is that it is the only drumlin field in North America to intersect a coastline.

Deglaciation of the basin had a profound effect on the current landscape. As glacial ice began to melt, the run-off deposited sands, gravel, and silts that had been trapped in the glacial ice. Changing sea levels, freshwater streams, wind, and erosion then modified these glacial deposits, thereby forming varied, sorted layers throughout the basin.

The prominent deposits on Boston's current topography include sand, gravel, till, bedrock, and silt and clay deposited by both fresh and estuarine water. Sand and gravel deposits run north/south through Boston. These deposits represent glacial outwash that was deposited as glacial ice melted. These deposits are found in abundance in Allston, Hyde Park, Jamaica Plain, North Dorchester, Roslindale, the South End, and West Roxbury. These deposits are well suited for development, as they are relatively stable and flat. Sand and gravel deposits typically, however, have a high water table, which may cause basements to be more susceptible to flooding. A high water table and the speed at which fluids move through sand and gravel can increase a surface release's capability to pollute groundwater.

Till and bedrock are found throughout the city and are characteristic of areas which contain drumlin hills. Neighborhoods that are dominated by till and bedrock deposits include Brighton, Central Boston, Dorchester, Mattapan, Roslindale, Roxbury, and West Roxbury. Till and bedrock are considered to be extremely stable materials for development, although they also present constraints. Bedrock presents difficulties in excavation while till is commonly found as a drumlin hill, possibly causing topographic restraints for development.

Floodplain alluvium consists of fine-grained material such as fine sands and silts that are found adjacent to, and deposited by, rivers and tidal marshes. These deposits underlie the Back Bay, Fenway/Kenmore, and South Boston. These deposits are now covered by artificial fill that was laid down in the late 18th and 19th centuries to allow development of these lands. The obvious development constraints associated with this material include instability and a high water table. The material does, however, possess a low permeability, thus trapping pollutants and resulting in a slow migration which can be contained should a release of pollutants occur.

The soils of the Boston Basin are derived from natural glacial processes and artificial processes attributed to the extensive filling of lands by humans. The three largest generalized soil units in Boston are Udorthents-Urban Land, Canton-Charlton-Hollis, and Newport-Urban Land units. These units are typically deep deposits found on land with a topographic range from nearly level to moderately steep.

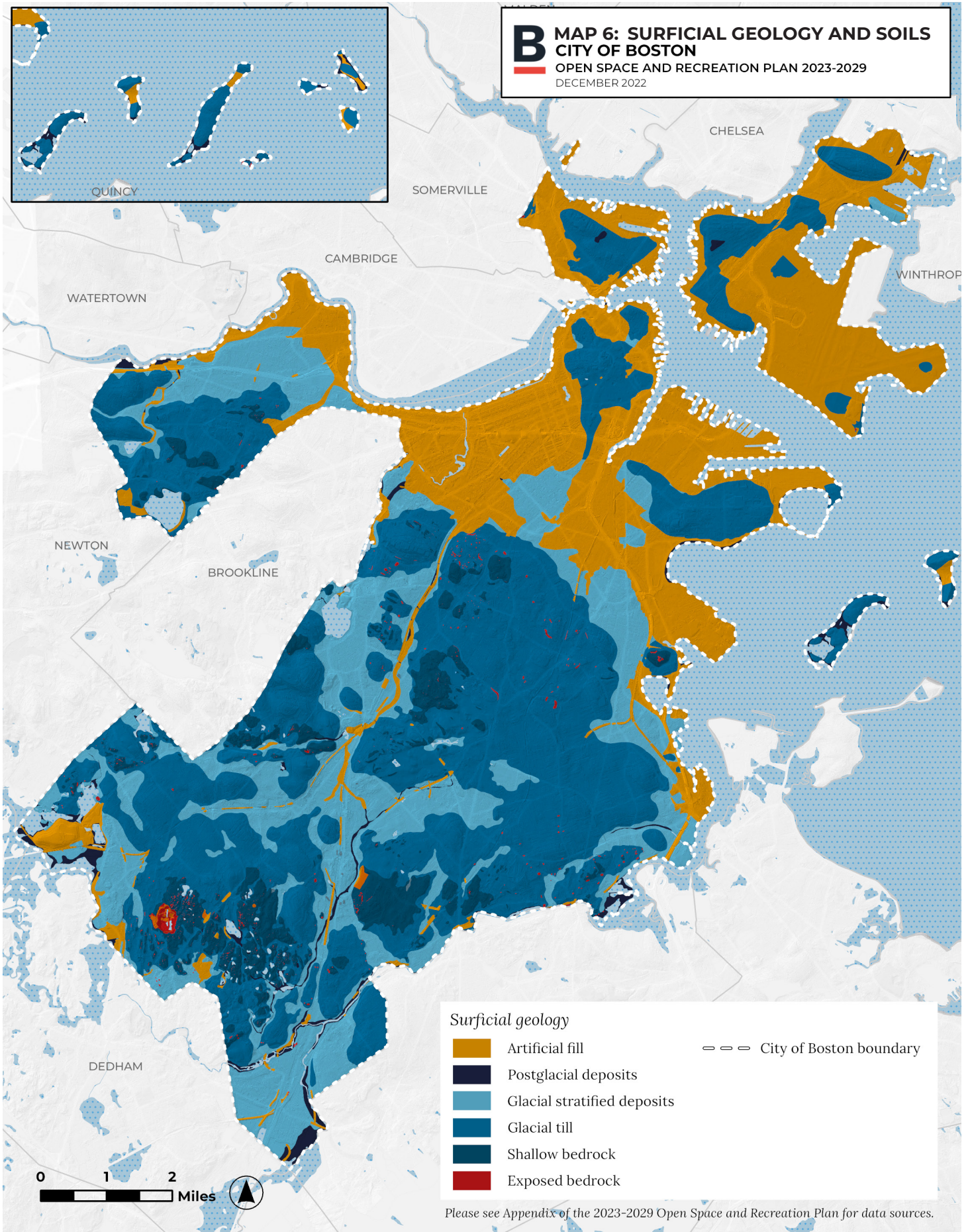
The surficial geology of the Boston Basin is the dominant factor of the landscape. Structurally, several features distinguish the Boston Basin. These include plunges, folds, anticlines, synclines, and faults. These structural features are found throughout the many rock units in the Boston Basin. Geologists use these features to date rock units relative to each other.

BEDROCK GEOLOGY

The principal bedrock in the Boston Basin include the Cambridge Argillite, Roxbury Conglomerate, Mattapan Volcanic Complex, and the Dedham Granite (see MAP 7: BEDROCK GEOLOGY).

Dedham Granite is most likely the oldest rock unit found in Boston. This unit, which is found below the southern portions of Hyde Park and West Roxbury, is a Precambrian age rock that indicates an age well in excess of 600 million years.

B MAP 6: SURFICIAL GEOLOGY AND SOILS
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Mattapan Volcanic Complex is one of the oldest rock units found in Boston. These volcanic rocks are primarily granite. This unit lies under the southern portion of Mattapan and large portions of Hyde Park.

Cambridge Argillite is classified as a shale or mudstone. This fine-grained sedimentary unit was most likely deposited in deep oceanic waters millions of years ago when the area was below sea level. This unit currently lies well below Allston, Back Bay, Central Boston, Charlestown, East Boston, South Boston, and the South End.

Roxbury Conglomerate is known as Puddingstone. This unit consists of pebbles and cobbles within a matrix of varying rock types. The range of size of the cobbles suggests that a river or stream deposited this unit. The Roxbury Conglomerate underlies much of Boston including Brighton, Fenway/Longwood, Jamaica Plain, Mission Hill, Dorchester, Roxbury, and the northern portions of Mattapan, Roslindale, and West Roxbury.

While ancient soils and bedrock still very much shape Boston's landscape, colonization and subsequent urbanization has rapidly and fundamentally changed the landscape here and beyond. Sea walls and river dredging change the coastal flow of sediment, exporting and importing soil to and from other lands for development alters soils profiles and land cover, building an underground infrastructure that carve a complex second city underfoot that changes drainage patterns- all these and more are changing the nature of soil and hydrography throughout the city.

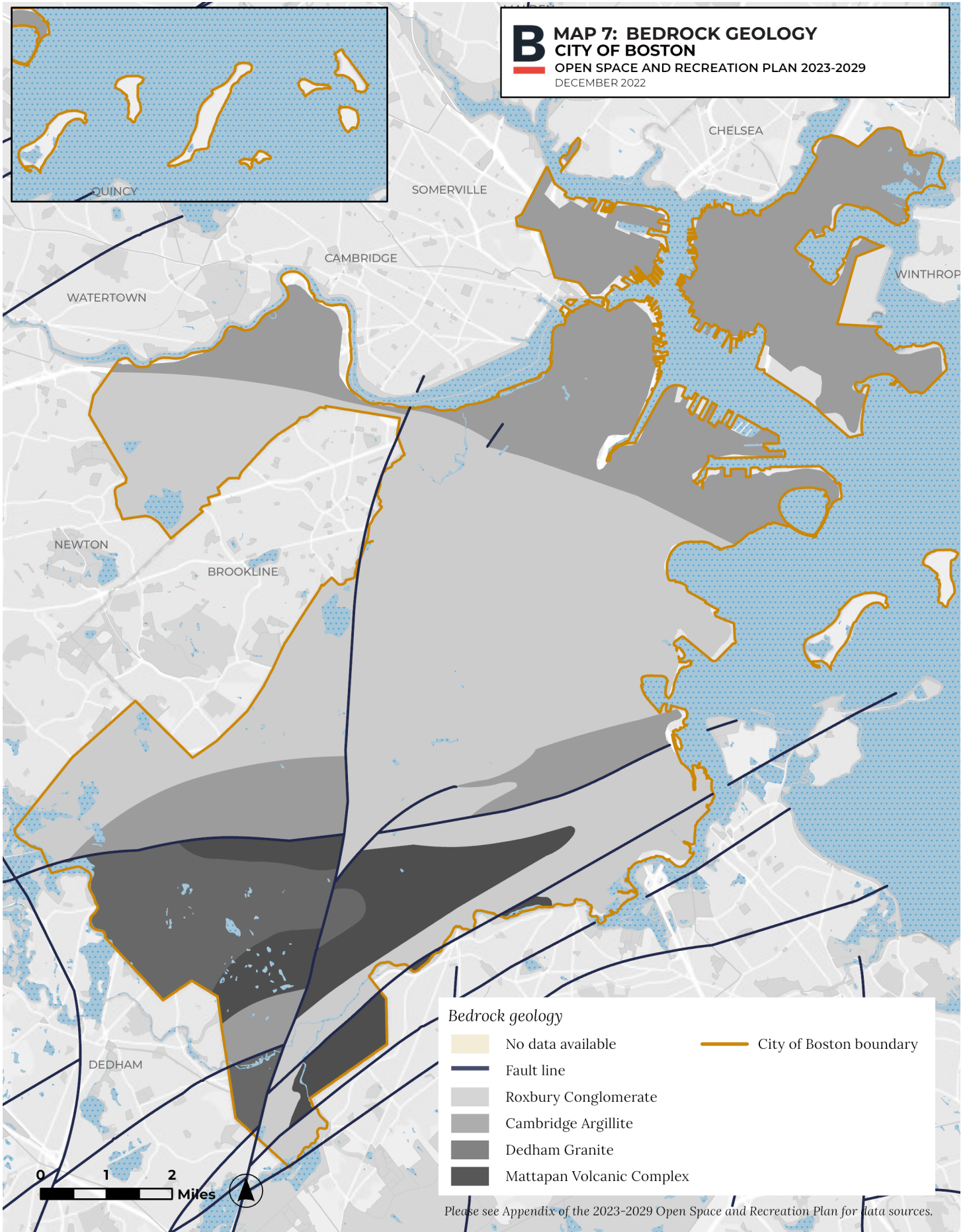
TOPOGRAPHY

Overall, the terrain of Boston is gently rolling, with heights ranging from near sea level along the coast to 370 feet above sea level at the highest point, Bellevue Hill in West Roxbury, within the Department of Conservation and Recreation's (DCR) Bellevue Hill Reservation. But ten to twelve thousand years ago, glaciers shaped the landscape that subsequently Native Americans inhabited and Europeans colonized. These massive sheets of ice moved across the land, totally displacing all flora and fauna in the area. The ice sheets' great weight caused the coastal lands to sink below the surface of the ocean.

After the glaciers retreated, the most prominent landscape features were the drumlins, hills made up of glacial till. They tend to have an oval shape, with the "points" of the oval aligned in the direction of the glacial retreat. (Many of the harbor islands are such drumlins.)

Glacial ice was so massive that it could cause land to bulge or depress. As the glacial ice receded, so did its heavy weight. Since then, land has been going through a process of glacial isostatic adjustment where land that was depressed is rising (rebound) and areas that bulged are sinking (subsidence). Cities like Boston and London, are experiencing subsidence. The impact of subsidence is significant enough to be included in sea level rise modeling for Boston.

B MAP 7: BEDROCK GEOLOGY
 CITY OF BOSTON
 OPEN SPACE AND RECREATION PLAN 2023-2029
 DECEMBER 2022



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SECTION 4.2:

LANDSCAPE CHARACTER**HISTORY OF THE LANDSCAPE**

Boston's landscape is rich in history. It has been changing since the city's founding in 1630. These changes have left traces on the landscape of the city. The growth of the city's landmass has been the most significant evidence of the change of this landscape. The history of land making in Boston is discussed in Section 3.

CURRENT ASSESSMENT

The current assessment of the landscape is also described in Section 3 and Section 7.

Boston has become a highly urbanized area. High- and low-density residential developments dominates the landscape throughout the neighborhoods of Boston. Despite this historical spread of development, the municipal and the metropolitan park systems preserve much of the original landscape character.

Water is a prominent part of the landscape character of Boston. With extensive miles of coastline and riverfront, Boston is blessed with aquatic resources, coastal and estuarine wetlands, and scenic vistas. Within city limits are many of the Boston Harbor Islands that now make up the Boston Harbor Islands National Recreation Area. Much of this area is considered a "noteworthy landscape," by the Department of Conservation and Recreation's statewide Landscape Inventory.

Boston's open lands are a mixture of uplands and wetlands. Most of the upland areas consist of forest, with the remainder in fields and meadows. These upland areas are generally either publicly-owned parklands and cemeteries or privately-owned cemeteries. The larger, expansive wetland areas are primarily under public ownership. Boston is a highly mature, developed community.

Developable land that is as yet undeveloped is extremely limited. The protection of the natural resources and open areas of Boston's landscape is as vital a function now as it was in the 19th and 20th centuries.

SECTION 4.3:

WATER RESOURCES**INTRODUCTION**

The settlement of the Shawmut Peninsula took place due to the area's outstanding water resources. Mainland Boston is bordered by water to the north, south, and east. These water resources include an ocean harbor, rivers, streams, ponds, and wetlands.

BOSTON HARBOR

To the east, ten miles of the city's shoreline lies on Boston Harbor. The Harbor consists of several unique areas which border Boston, more specifically, its Charlestown, Central Boston, East Boston, South Boston, and Dorchester neighborhoods. Sections of the Harbor include the Inner Harbor, the Outer Harbor, and Dorchester Bay.

The Inner Harbor is bounded by Charlestown, East Boston, Central Boston, and South Boston. The Inner Harbor stretches from the confluence of the Mystic and Chelsea Rivers to the Fort Independence and Fort Winthrop sections of South and East Boston, respectively. The Inner Harbor is used for recreational fishing and boating, and maritime/industrial uses. Freighters and ferries are common in its shipping channels and designated deep port areas. The Inner Harbor includes three channels: the Little Mystic, Fort Point, and the Reserved Channel. These channels are large capacity docking points that can provide protection during rough seas.

The Outer Harbor includes dozens of islands, many of which were once used as military forts, hospitals and industrial plants but have generally reverted to a more natural state. The City owns four islands: Long Island, Moon Island, Rainsford Island, and a large portion of Spectacle Island. The islands are partly submerged drumlin hills formed through glacial action. Rounded hills, open fields, forests, and historical sites characterize these islands.

Beaches are found on Spectacle Island, Long Island, Lovell's Island, Thompson Island, and Gallops Island. The water of the Outer Harbor is typically used for swimming, boating, fishing, and navigation by commercial ships.

Constitution Beach Bay (aka Orient Heights Bay) is located on the eastern coast of East Boston between Logan Airport and Orient Heights. Swimming and fishing are common activities there. The bay includes 275 acres in Belle Isle Marsh, which is part of the designated Rumney Marshes Area of Critical Environmental Concern (ACEC).

These marshes are important biological resources and are host to numerous species of waterfowl, wading shore birds, migrant songbirds, invertebrates, and fish. Constitution Beach is a small beach area on tidal flats located in the northern section of the bay. Marshes to the west and the Belle Isle Marsh to the east border the beach.

Dorchester Bay stretches from Castle Island at Pleasure Bay in South Boston to the mouth of the Neponset River at Commercial Point in southern Dorchester. Dorchester Bay is used primarily for boating, fishing, and swimming. Swimmers gain access to the water at several locations along the bay in both South Boston and Dorchester. Access points include the beaches of Pleasure Bay, L and M Street Beaches, and Carson Beach in South Boston, and Savin Hill and Malibu Beaches in Dorchester.

WATERSHEDS

BOSTON HARBOR WATERSHED

Boston is located within the Boston Harbor Watershed which encompasses about 293 square miles of land, including all or part of 45 municipalities. This watershed includes the Mystic River Watershed to the north, the Charles River Watershed to the north and west, and the Neponset, Fore, Back, and Weir river watersheds to the south.

The Boston Harbor watershed has metropolitan beaches such as Constitution Beach, Pleasure Bay, Carson Beach, Savin Hill Beach, and Tenean Beach. It also contains the Boston Harbor Islands National Recreation Area in the Outer Harbor. These islands contain trails, paths, campsites, beaches, and vistas that attract many visitors.

A publicly accessible, privately-owned HarborWalk is being developed on waterfront properties through the Coastal Zone Management program and the Chapter 91 regulations, as well as Boston Planning and Development Agency (BPDA) policy.

Boston is contained within the Mystic River Watershed, the Charles River Watershed, and the Neponset River Watershed. These watersheds are described below.

CHARLES RIVER WATERSHED

The Charles River is 80 miles long and flows through 23 towns and cities southwest of Boston, beginning at Echo Lake in Hopkinton and ending in Boston Harbor. The river forms part of the southwest boundary of Boston, and also follows the north boundary of the city. The watershed comprises 308 square miles and includes 35 towns and cities.

The Charles River watershed has heavily used park systems such as the Charles River Reservation and the Emerald Necklace, as well as Stony Brook Reservation, Cutler Park, and Millennium Park.

NEPONSET RIVER WATERSHED

The Neponset River Watershed includes about 130 square miles of land southwest of Boston. The river starts in Foxboro near Gillette Stadium and runs for 30 miles, through 14 cities and towns. It forms the southern boundary of the Boston and ends in Dorchester Bay/Boston Harbor, near the landmark gas tank along I-93.

MYSTIC RIVER WATERSHED

The Mystic River Watershed covers 76 square miles and includes 21 municipalities. It begins north of Boston in Reading, then flows into the Upper Mystic Lake in Winchester, to Lower Mystic Lake, through Arlington, Somerville, Medford, Everett, Chelsea, Charlestown, East Boston and into Boston Harbor.

RIVERS

The City of Boston is traversed by five rivers: the Charles River, the Muddy River, the Neponset River, the Chelsea River, and the Mystic River.

CHARLES RIVER

The Charles River comprises eight miles of shoreline within the city including the Charles River Reservation and the parkways of Soldiers Field Road and Storrow Drive. The portion of the Charles between the Charles River Dam and Boston University Bridge is referred to as the Charles River Basin. This section of the river, which once inundated the Back Bay, is a wide and deep impoundment of freshwater used extensively for rowing and sailing.

NEPONSET RIVER

The Neponset River flows east along seven miles of natural, meandering banks to the south of Boston through Hyde Park and along Mattapan and South Dorchester. This section of the River is bordered by the Neponset River Reservation, which includes a large tidal wetland in South Dorchester. The lower four miles of the river from Dorchester Bay to the Lower Mills Dam in southern Dorchester are tidal and frequently used for bird watching, picnicking, canoeing, and fishing.

MUDDY RIVER

The Muddy River originates at Jamaica Pond and flows north 3.5 miles before joining the Charles River. It flows through four distinct parklands designed by Frederic Law Olmsted: Olmsted Park from Ward's Pond to Leverett Pond, the Riverway from Leverett Pond to Park Drive and Brookline Avenue, the Back Bay Fens from Park

Drive and Brookline Avenue to the Boylston Street Bridge, and Charlesgate from the Boylston Street Bridge to the Charles River.

The river's watershed drains 8.6 square miles of land, only 25% of which are in Boston. From Jamaica Pond to Leverett Pond, the 2% gradient is steep—an average of a two-foot drop in elevation every 100 feet downstream. This section flows through Olmsted Park, including Ward's Pond, Willow Pond, and several small waterfalls.

The lower section of the river flows from Leverett Pond to the Charles River with a gradient of less than 0.01%, causing the river to be essentially flat with little current. From Leverett Pond, the Muddy meanders through the Riverway before reaching the Brookline Avenue gates at Park Drive. When these gates are opened during times of flood, a portion of the river's flow is directed through the Muddy River Conduit under Brookline Avenue and is emptied directly into the Charles River. During periods of normal flow, river water travels one and one-half miles through the Back Bay Fens to the Charles River.

CHELSEA CREEK

Chelsea Creek (a.k.a. Chelsea River) is 2.6 miles long. It runs along Revere, Chelsea and East Boston and feeds part of the Belle Isle Marsh Reservation. The creek starts as Mill Creek in Revere, and flows east for a half mile, then turns south where it becomes Chelsea Creek. It widens as it runs between Chelsea and East Boston, then turns southwest and runs into the Mystic River shortly before it empties into Boston Harbor.

MYSTIC RIVER

There are approximately two miles of Mystic River frontage on Charlestown's north shore, and most of this is dominated by industrial marine transportation enterprises. The Mystic meets the Chelsea River under the Tobin Bridge to form the northern part of the Inner Harbor.

BROOKS AND STREAMS

STONY BROOK

Stony Brook once traversed Boston for approximately seven miles. Most of the stream has been culvertized to accommodate development and stormwater conveyance. Currently, the only portion remaining above ground is at its origin in the Stony Brook Reservation in West Roxbury. The conduit carries mostly brook flow in dry weather and combined sewer overflows and stormwater flows in wet weather.

CANTERBURY BROOK

Canterbury Brook is a tributary of Stony Brook. It is a partially culvertized and partially exposed body of water that is fed by Scarborough Pond in Franklin Park, and storm drains from Mattapan and Roslindale. The brook flows southwest through sections of the former Boston State Hospital, along the edge of the Boston Nature Center, through part of the Canterbury I Urban Wild on the edge of the Greenleaf Composting operation, through part of St. Michael's Cemetery, and then briefly along the northern side of American Legion Highway south of Walk Hill Street. The brook disappears and reappears at various points along its route, dropping underground south of Walk Hill Street and ultimately merging with the Stony Brook Conduit.

MOTHER BROOK

Mother Brook was the first canal constructed in the New World. Originating at a diversion dam on the Charles River in Dedham, it flows east through Hyde Park where it joins the Neponset River. The first three-quarter mile section of Mother Brook, located in Dedham, is an artificial canal excavated to connect the Charles River to a branch of the Neponset River formerly known as East Brook. Mother Brook diverts one-third of the flow of the Charles River.

BUSSEY BROOK

Bussey Brook flows through portions of West Roxbury, Roslindale, and Jamaica Plain before discharging underground into the Stony Brook

Conduit near the Forest Hills MBTA station. Like other streams in Boston, it has been almost completely buried, though remnant above-ground sections can be found in Allandale Woods and the Arnold Arboretum. Though seriously degraded by culverting and urban run-off, these remaining sections of Bussey Brook represent an important aquatic resource in Boston.

SAWMILL BROOK

Sawmill Brook traverses the perimeter of both Millennium Park (the former Gardner Street landfill) and the DCR Brook Farm Reservation in West Roxbury. Though channelized in sections and diverted by construction of the landfill, it is an important tributary to the Charles River. Small, wooded sections of Sawmill Brook occurring within the Brook Farm Reservation are critical habitat to a number of wildlife species, including a state-listed rare amphibian (see Wildlife section).

DANA BROOK

Dana Brook was formerly the main drainage channel in West Brighton. It now lays completely underground from Chandler Pond to the Charles River, a distance of approximately one and one-half miles. Segments of Dana Brook still exist upstream of Chandler Pond, on the Newton Commonwealth Golf Course within Newton. This is the main inlet for Chandler Pond.

PONDS

Boston contains several ponds and a reservoir. These bodies of water vary in nature and origin from glacial ponds to river ponds to artificial ponds and reservoirs. Glacial ponds, called kettle ponds" were formed by glacial processes involving melting water and large blocks of ice deposited upon Boston's landscape, forming ponds. Kettle ponds are common in the Boston Basin. One example is Jamaica Pond, at approximately 80 acres the largest natural pond in Boston.

Turtle Pond is located within the Stony Brook Reservation in Hyde Park and is another natural pond of great significance. It is a popular fishing

spot and, despite the presence of the adjacent Turtle Pond Parkway, is relatively undisturbed and has generally good water quality. In addition, several small, unnamed ponds within the Stony Brook Reservation provide critical habitat to a number of important wildlife species. Other small woodland ponds occur in Allandale Woods.

Boston also contains many artificial ponds, and ponds that are part of river systems. One of the most notable artificial ponds is the Public Garden Lagoon. This pond was created in 1838 during the construction of the Public Garden. Mill Pond in Hyde Park is an artificial pond that was created through an impoundment of Mother Brook. Chandler Pond, located in Brighton, was originally excavated for the purpose of producing ice. It is the last of more than 20 ponds once found in Brighton. Scarborough Pond in Franklin Park was dug out in the 1890s during the park's construction.

The DCR Chestnut Hill Reservoir, located in Brighton, is an artificial impoundment of water that once served as Boston's only water supply. The Reservoir was discontinued as a source of drinking water following completion of the Quabbin Reservoir in Western Massachusetts. The largest body of water located within Boston, the Reservoir is now used for scenic recreation purposes.

Among Boston's ponds that are part of river systems are Cow Island Pond which is a still water section of the Charles River in West Roxbury. The DCR-owned Havey Beach borders this pond. Ward's, Willow and Leverett Ponds are part of the Muddy River system located in Olmsted Park in Jamaica Plain.

WETLANDS

Wetlands serve a vital function for Boston. They assist in flood control, treat stormwater run-off, and provide food and shelter to fish, birds, amphibians, and other important animals. However, in the last 100 years, 6,000 acres of coastal wetlands and approximately 50% of Boston's inland wetlands have been destroyed.

The largest single wetland in Boston, at 275 acres, is the Belle Isle Marsh in East Boston. Other substantial wetlands are found in the Neponset River Reservation in South Dorchester, the Stony Brook Reservation in Hyde Park, and the Brook Farm Reservation in West Roxbury.

Smaller yet still significant forested wetlands are found near the Leatherbee/Hancock Woods in West Roxbury, at Sherrin Woods in Hyde Park, and at Allandale Woods in Roslindale/West Roxbury. Wetlands associated with rivers and streams include those along the banks of the Muddy River, Mother Brook, the Charles River, and Saw Mill Brook (see Section 4.4 for further description of wetland resources).

AQUIFER RECHARGE AREAS

Aquifers are areas beneath the surface of the earth that contain water, whether composed of permeable rock or unconsolidated materials such as gravel, sand, silt or clay. If they are uncontaminated and of sufficient yield, aquifers serve as a source of drinking water for people throughout the world, as well as here in Massachusetts.

In Boston, high and medium yield aquifers are found in two limited locations. Both types are found in West Roxbury along the Charles River, where open spaces uses, such as Cutler Park, Millennium Park, the Rivermoor Urban Wild, Havey Beach, the West Roxbury High School athletic fields and marsh, and cemeteries dominate the landscape. Some residential, commercial, and industrial uses are also located in this area.

The second area is associated with the Fowl Meadows Area of Critical Environmental Concern (ACEC) in Hyde Park, at the southernmost tip of the city. Most of this medium yield aquifer is within the Fowl Meadows ACEC. Some of this aquifer lies within parklands held by DCR. Other portions are overlain by a residential area. One large portion is overlain by a warehouse complex.

The city of Boston is dependent on the DCR-MWRA regional system of water supply, which is based on surface water reservoirs located at great distances from Boston. Therefore, aquifer recharge area protection is not a critical issue for drinking water supply for this community. However, should the City desire at some point in the future to extract groundwater for non-drinking water supply purposes, development over these recharge areas may become an issue worth some consideration. The fact that much of these high and medium yield aquifers found within Boston's city limits are located in areas with some form of protection from development will help future generations, should the need ever arise.

FLOOD HAZARD AREAS

Areas with a greater chance of severe flooding are known as flood hazard areas. For purposes of federal and State law and policy, they are known to be areas where there is a 1% annual chance of flooding (aka the “100-year floodplain” or “FEMA Zone A”), or a 1% annual chance of flooding and an additional hazard associated with storm waves for coastal areas (aka “100-year floodplain” or “FEMA Zone V”). See MAP 8: FEMA FLOOD ZONES for the most recent FEMA maps (2015) available at the time of this plan's writing.

The citywide map titled “FEMA Flood Zones” shows the location of both FEMA Zones A and V. These areas tend to be associated with major freshwater or coastal surface water bodies, such as Boston Harbor, Dorchester Bay, the Charles River, the Neponset River, and the Muddy River. The Flood Zones map also shows open space in the city, and these areas often overlap. Major exceptions tend to be found along coastal areas, such as the downtown, East Boston, Charlestown, South Boston, and Dorchester waterfronts. Flood hazard areas not within designated open spaces are found in some smaller inland areas in East Boston, West Roxbury, Hyde Park, and the Kenmore sub-neighborhood.

Many of the flood hazard areas are found within protected open spaces, ensuring that development in these areas, if any, will be limited. In those flood hazard areas not within open spaces, protected or not, such sites are typically highly developed. Whatever redevelopment takes place in such areas will be the subject of the State Wetland Protection Act and other laws affecting development in flood hazard areas. Flood hazard mapping is periodically revised to reflect changing flood risk factors such as sea level rise. Such a map revision is currently underway at the time of this writing.

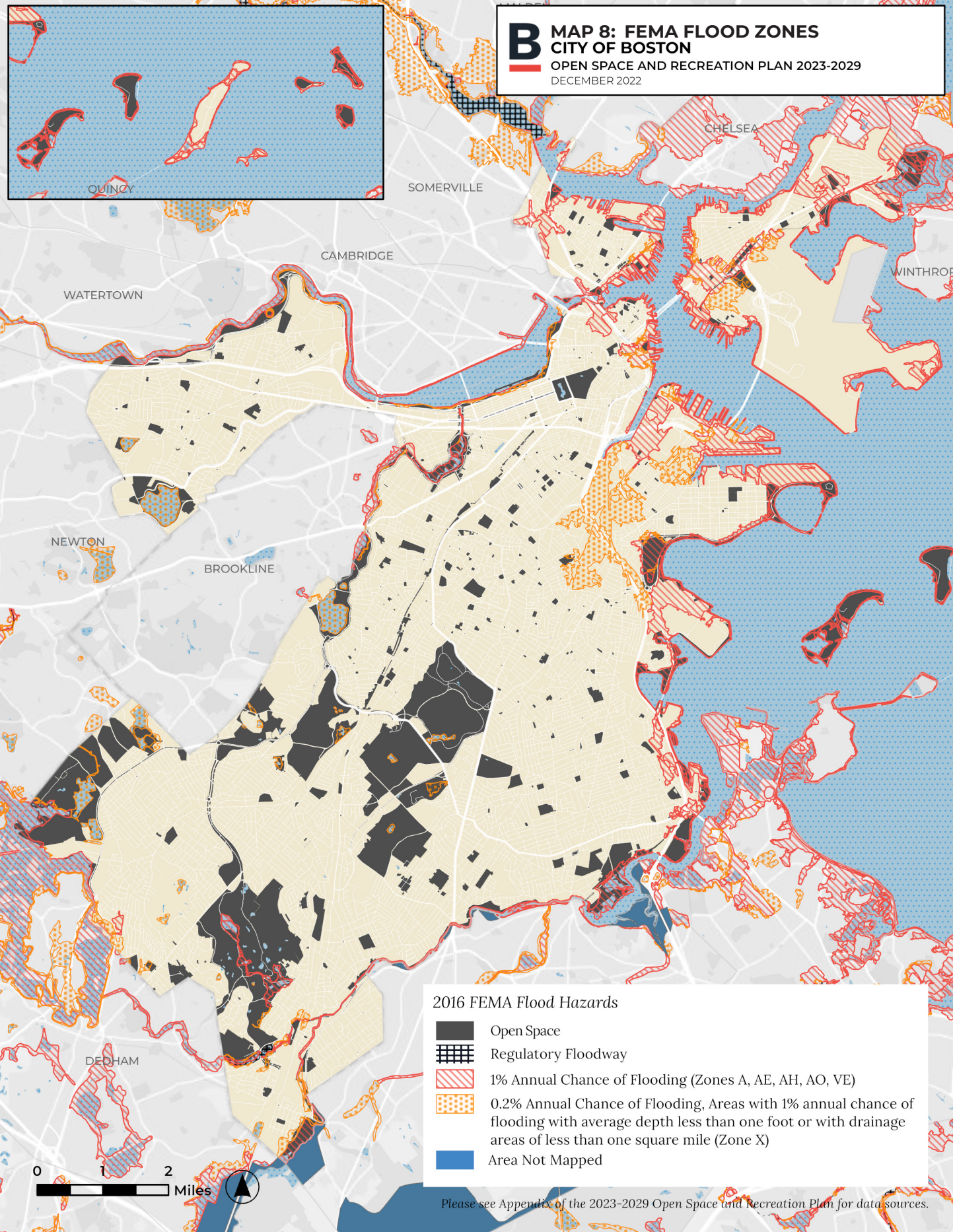
The Chapter 91 regulations mandate public access and use along the water's edge and can help reduce flood impacts along flood hazard areas that may be valuable resources.

Boston Planning and Development Agency (BPDA), has developed municipal harbor plans that cover such areas as the downtown, Fort Point Channel, East Boston, and South Boston waterfronts in accordance with Chapter 91 and Coastal Zone Management policies. These plans and associated policies work with applicable regulatory review processes to ensure that development in coastal areas does not harm the environment, and is resilient in the face of coastal flooding.

The BPDA also seeks to extend the HarborWalk along the coastal shoreline of Boston (except in working waterfront areas including Logan Airport and Designated Port Areas). BPDA is assisted by the City's Conservation Commission which encourages public access along the water as part of its approvals, and by non-profit groups such as the Boston Harbor Now and Save the Harbor/Save the Bay.

There are *Resilient Boston Harbor Vision* and *Coastal Resilience Solutions* studies for each of Boston's waterfront neighborhoods directly affected by sea level rise and flooding: Central Boston, Charlestown, Dorchester, East Boston, and South Boston.

For more information see Section 7 Analysis of Needs or visit: www.boston.gov/departments/environment/preparing-climate-change



SECTION 4.4:

VEGETATION**INTRODUCTION**

The natural vegetation of Boston is chiefly influenced by the city's geographic position along the Atlantic coast, the presence of landforms resulting from glaciation, and a long history of human land use and manipulation of native habitats.

UPLAND VEGETATION**FORESTED UPLANDS**

The Boston area, like most of eastern Massachusetts, lies in the Appalachian oak-hickory forest zone. This forest type occurs from southern Maine, throughout southern New England, south to Georgia at higher elevations, and west to western New York. Red, white, and black oaks, with lesser densities of pignut, shagbark, bitternut, and mockernut hickories are species found in the plant communities that dominate the Appalachian oak-hickory forest zone. Other trees commonly found are white ash, black cherry, black birch, hophornbeam, and red maple.

Numerous species of shrubs including lowbush blueberry, maple-leaved viburnum, witchhazel, flowering dogwood, and beaked hazelnut.

In Boston, the oak-hickory forest is mixed with patches of other forest types found in adjacent northern and southern regions. Elements of the northern hardwood forest, such as sugar maple, eastern hemlock, yellow birch, and American beech can be found in Boston's forested areas, especially on north and west facing ridges. These species are generally prevalent throughout northern New England and southeast Canada.

Conversely, areas in the city with well-drained, sandy soils and southeast exposures support woodland species more typical of Cape Cod and other coastal areas, such as pitch pine, scrub oak, and sweet fern. White pine is a ubiquitous

species throughout the region, frequently occurring in abandoned pastures and other open, sunny locations.

Given the long history of industrial and residential development within Boston, it is not surprising that natural forests and other native plant communities occur today in remnants and small patches. The largest forested area remaining in the city is the 466-acre Stony Brook Reservation in Hyde Park, Roslindale, and West Roxbury.

Other significant forested areas are Allandale Woods (100 acres, West Roxbury), Hancock Woods (55 acres, West Roxbury), Sherrin Street Woods (25 acres, Hyde Park), the Wilderness (100 acres, Franklin Park), Olmsted Park (50 acres, Jamaica Plain), Brook Farm (120 acres, West Roxbury), parts of the Arnold Arboretum (Jamaica Plain), and sections of several Boston Harbor Islands.

Boston's forests provide a range of recreational, scenic, and ecological benefits. They are the city's lungs, cleansing the air of carbon dioxide and producing oxygen. Summer temperatures are up to ten degrees cooler in city forests, helping to mitigate the effects of urban development and activity, and global warming. They also help control stormwater and filter pollutants from urban runoff. Healthy forest communities are essential for preventing excess sedimentation of waterways, wetlands, storm sewers, and catch basins by stabilizing erodible soils and steep slopes.

Many of Boston's forested areas are open to the public providing both formal and informal environmental education opportunities to schoolchildren, families, and adults. Recreational activities such as hiking, trail running, cross country skiing, wildlife viewing and tracking, and nature photography offer city residents and visitors the unique opportunity to experience and observe nature up close within the confines of an urban environment.

Though many of these areas are publicly owned and protected from outright development, they

still suffer from a host of problems. Some, such as the Stony Brook Reservation, have been fragmented by the construction of parkways, creating more edge habitat, less interior habitat, and interrupting established wildlife corridors.

The habitat value of all forested areas is seriously degraded by the prevalence of non-native, invasive plant species. These plants were either purposely or accidentally introduced to the area and, because of their tolerant and hardy nature, have become major threats to the sustainability of native forest ecosystems. Among the most destructive non-native invasive plants in Boston forests are Norway maple, Japanese knotweed, European buckthorn, multiflora rose, Asiatic bittersweet, and Japanese barberry. In addition, people sometimes subject forested areas in Boston to direct abuse. Severe littering, illegal dumping, vandalism, and trampling by foot and vehicles are chronic problems in many urban forests.

Serious pests and diseases are reoccurring natural phenomena within the world as it is now. Their impacts range from mild illness to widespread tree death. They sometimes specialize in a specific tree species or are able to thrive with a range of species. A climate resilient forest relies on nurturing healthy ecosystems and routine, proactive actions against pest and disease.

For more information on the state of tree pests and disease and how Boston is planning for a healthier, more resilient forest, see Section 7 Analysis of Needs or the Urban Forest Plan (boston.gov/urban-forest-plan).

NON-FORESTED UPLANDS

Non-forested uplands, primarily meadows, are a dwindling resource in Boston. Often a remnant of past agricultural use, virtually all meadows and pastures throughout the city have been subject to intense residential and commercial development. Most of those not developed have been left to grow into shrubby thickets and early successional forests dominated by non-native, invasive plant species.

Meadows and pastures provide critical habitat to many species of plants and wildlife that are rarely found in Boston and are increasingly uncommon throughout the northeast. These habitats offer great scenic value, breaking up the monotony of dense residential areas and providing expansive views of the city, Boston Harbor, and the surrounding landscape. Boston's meadows are frequently found atop hills and other steep slopes subject to erosion problems. Viable, healthy meadow plant communities are thus important to stabilize vulnerable soil.

Significant upland meadows today can be found in the Arnold Arboretum, Franklin Park, the Boston Nature Center, Calf Pasture, the Walter Street Tract, Allandale Farm, and on several Boston Harbor Islands. Most of these sites are current or former agricultural or horticultural sites. Turf grasses and opportunistic wildflower species of Eurasian origin are dominant. Farmers during the 17th and 18th centuries deliberately or accidentally introduced these species and turf grasses.

The acreage of meadow found in Boston increased substantially in 2000 with the opening of Millennium Park, a new park on top of the former Gardner Street landfill in West Roxbury. This 100-acre park includes over 70 acres of grassland comprised of both native and Eurasian grass species.

Because of the suppression of natural wildfires and the disappearance of farming practices such as haying and grazing, meadows now require regular intentional maintenance to sustain their open, pastoral character. Mowing is the most common method of maintenance; however in many cases mowing is done too frequently to allow for the development of a diverse meadow plant community. Such areas are generally devoid of any habitat value. To maximize floristic diversity and ecological value, most meadow habitats should be mowed only once per year, at the most, in the late summer.

The Parks Department through its Urban Wilds Initiative, conducts selective, low-impact

mowing regimes at several meadows throughout the city's urban wilds and other natural areas. Community groups and other volunteers have also been involved in introducing native meadow plants, such as goldenrod and aster, and controlling non-native, invasive plant species at many sites.

WETLAND VEGETATION

FRESHWATER WETLAND VEGETATION

As throughout all of Massachusetts, Boston has lost a substantial percentage of its original freshwater wetlands to development. Intense filling and subsequent construction has occurred in the extensive marshes once found along Stony Brook, Bussey Brook, and the upper Charles River. Isolated wetlands, bogs, vernal pools, and small ponds have been filled for residential development. Remaining wetlands have been affected by changes to hydrology as streams have been buried and diverted to storm sewers.

Wetlands serve a vital function for the city. They help to store, control, and cleanse stormwater run-off, a function that becomes increasingly important as additional impervious surfaces are created. They also provide essential habitat for a wide array of wildlife (see Section 4.5).

Several distinct plant communities are present in freshwater wetlands in Boston. Forest wetlands—such as red maple swamps and floodplain forests—are typified by large trees, such as red maple, willows, basswood, green ash, silver maple, and a diverse shrub layer of dogwoods, alder, winterberry holly, viburnums, and swamp azalea.

An outstanding remnant of the southern New England floodplain forest, a rare community type recognized by the Massachusetts Natural Heritage Program, occurs along the Charles River shoreline of Millennium Park in West Roxbury. Other significant forested wetlands are found in the Stony Brook Reservation, Brook Farm, Sherrin Street Woods, and Leatherbee/Hancock Woods.

Non-forested wetlands – marshes, shrub swamps, and wet meadows – are dominated by shrubs, such as buttonbush, highbush blueberry, dogwoods, and elderberry, along with an extremely diverse collection of grasses, grass-like plants, and herbs typified by cattails, water willow, pickerel weed, arrow arum, bulrushes, and sedges. Typical marshes are found at Allandale Woods, West Roxbury High School, Brook Farm, along the West Roxbury stretch of the Charles River, and the Boston Nature Center.

COASTAL WETLAND VEGETATION

Coastal wetlands, primarily salt marshes in Boston, were once the most dominant plant community within the city. Thousands of acres occurred along the harbor shoreline and up into the estuaries of the Charles, Chelsea, Mystic, and Neponset Rivers. Over the past 350 years, these salt marshes have been lost to filling, alterations to hydrology, pollution, and other drastic changes to the shoreline. Today only about 400 acres of salt marsh remain. These are primarily found at the DCR's Belle Isle and Neponset River Reservations in East Boston and Dorchester, respectively, and at MassPort's Wood Island Marsh in East Boston.

Salt marshes comprise one of the richest and most biologically productive ecosystems on Earth. The precisely balanced cycles of tide, sedimentation, and decomposition all contribute to the production of up to ten tons per acre per year of vital nutrients, minerals, and organic material to nearby aquatic and terrestrial habitats. Healthy salt marshes support dozens of animal species. Some species (ribbed mussel, salt marsh dragonfly, fiddler crab, for example) are restricted to this habitat for the duration of their lives, while other animals (sharp-tailed sparrow, mummichogs, meadow vole) use salt marshes for breeding or feeding but can also be found in other habitats.

Overwhelmingly dominated by salt marsh cordgrass and salt meadow grass, salt marshes also protect sensitive, low-lying coastal areas from flooding and other damage resulting from

strong storms. They are vital to the maintenance of clean water in Boston Harbor. Other plants adapted to withstand the unique physical conditions in and around salt marshes include marsh elder, black rush, spike grass, glasswort, and sea lavender.

WETLANDS DEGRADATION

Both coastal and freshwater wetlands are particularly susceptible to the deleterious effects of urban development because they form the interface between surface waters and groundwater and developable or developed uplands. Public ownership alone is insufficient to protect them and preserve the vital functions they provide.

All of the wetlands occurring in Boston are degraded to a certain extent. They have been at least partially filled or drained, have received either too much or too little water, have been subjected to pollutants, and have been invaded by non-native, invasive plants that have out-competed the native species. The most destructive non-native plants in Boston wetlands are giant reed (*Phragmites australis*) and purple loosestrife.

PUBLIC SHADE TREES

The Parks and Recreation Department cares for more than 38,000 street trees. These public shade trees are a vital part of Boston's urban forest, providing public access to trees and their shade, reducing temperatures by shading concrete and asphalt, and creating a beautiful and meaningful public realm. As of 2019, trees in the public right-of-way account for 18% of Boston's canopy. The urban forest includes all the trees in Boston, across public and private land, and is part of an ecosystem that plays an important role in cultural and spiritual practices, providing shade, protecting people and property from wind and weather, reducing air conditioning and heating costs for adjacent buildings, helping to filter stormwater, and generally contributing to the physical well-being of the city's residents.

See Section 7 Analysis of Needs or the Urban Forest Plan for a more in-depth discussion of the state of the urban forest, goals, and next steps: boston.gov/urban-forest-plan

STATUTORY RESPONSIBILITY AND REGULATIONS

The Parks Commissioner is by statute (Chapter 87, Massachusetts General Laws) the Tree Warden of the city. Together with the Tree Warden, the Commissioner is responsible for establishing a work plan for trees within the statutes and regulations that have already been established.

MAINTENANCE

The Maintenance Division's Urban Forestry Unit is responsible for the pruning and removal of all trees under the jurisdiction of the Parks Department. In addition they supervise specialized treatments for disease such as Dutch Elm Disease and respond to emergencies like windstorms, snowstorms, and hurricanes.

RARE SPECIES

Given the history of scholarly study in the Boston area, it is not surprising that the city's natural areas were well-traveled by knowledgeable botanists and naturalists during the 19th century and the city's flora well documented. The Massachusetts Natural Heritage and Endangered Species Program (MNHESP) lists several dozen rare plant species that are known to have occurred in Boston. Currently threatened plant species still present in Boston include pale green orchis, Long's bulrush, and Britton's violet.

The vast majority of rare plant species habitat is long gone in Boston, but isolated occurrences may still exist in a few locations. In 2003, the New England Wildflower Society conducted botanical inventories at selected urban wilds in Boston. These inventories noted two potentially rare species that are listed by the MNHESP on their "watch" list. These species are Black Oat Grass (*Piptochaetium avenaceum*) and Violet Bush Clover (*Lespedeza violacea*).

CULTURAL COMMUNITIES

As one of the oldest cities in the U.S., Boston has a very long tradition of agriculture and horticulture. At one time, the majority of what is now the city was farmland. Jamaica Plain, Mission Hill, Dorchester, Roxbury, and Hyde Park were all intensely farmed into the early 20th century, providing food and supplies to the burgeoning industrial and commercial center in central Boston. Pieces of this activity still remain. Allandale Farm in West Roxbury and Brookline is the lone remaining working farm in Boston. It is planted with vegetables, fruit, hay, and cover crops that are sold at the farm's retail stand.

The Arnold Arboretum, managed by Harvard University on land owned by the Parks Department, is a world-famous facility with a collection of trees and shrubs from around the globe. The site contains several expansive, naturalistic meadows and unmanicured woodlands that provide excellent wildlife habitat and give visitors a sense of the area's pastoral history. The 25-acre Bussey Brook Meadow Urban Wild is one of the few areas within the Arboretum that is truly managed as a natural area.

SECTION 4.5:

FISH AND WILDLIFE

INTRODUCTION

Approximately half of Boston's 5,800 acres, is comprised of land that provides important habitat for a large number of plant and animal wildlife species. These areas are made up of reservations, beaches, urban wilds, portions of parklands, sections of the Boston Harbor Islands, campus areas, and privately-owned land. The diversity of these areas and the plant communities found at each, support an abundant collection of both native and non-native animal species.

FISH

The city's most diverse habitat for fish is Boston Harbor. This is probably one of the few habitats in Boston that supports a generally native wildlife population. It is also a major recreational resource for sport fishing. The commercial aspect of fishing, though integrally tied to the historic economic development of Boston, is almost completely limited to charter boats and other activity supporting sport fishermen.

The most significant fish in Boston Harbor are striped bass, winter flounder, cod, mackerel, bluefish, and monkfish. Other important species are pout, hake, dogfish, menhaden, and killifish. The clean-up of Boston Harbor has improved the habitat for all marine wildlife, though populations of several fish species are still imperiled by overfishing and degraded habitats. Good access for onshore fishing is found at Castle Island, Long Island, Harbor Point and along the Dorchester and East Boston shorelines.

Boston's shellfish beds have been officially closed for many years. Abundant populations of clams, mussels, quahogs, and to a lesser extent, oysters, are still found within Boston Harbor. However, water quality has still not improved to the level required for state officials to allow their consumption, except for those found in certain small beds in Dorchester Bay and

Constitution Beach Bay. Shellfish in those beds can be harvested with the proper license and made fit for human consumption with post-harvest cleansing at a shellfish purification facility.

Sport fishing also occurs on several of Boston's rivers and ponds such as Scarborough Pond, Chandler Pond, Turtle Pond, the Charles River, and most notably Jamaica Pond. The State stocks Jamaica Pond with hatchery-raised trout and smallmouth bass. Native species found in Boston's ponds include golden shiner, bluegills, pumpkinseed, chain pickerel, and American eel. These populations have suffered from generally poor water quality and non-native species such as carp, bass, trout, and goldfish.

The Charles River still supports seasonal migrations of some anadromous fish (species that generally live in salt water and return to freshwater for breeding), most notably Atlantic herring and American shad.

One State-listed rare species of fish occurs in Boston, the three-spined stickleback. This small, inconspicuous fish lives in a small pool in the Olmsted Park area. The species occurs commonly in marine habitats, but freshwater populations are rare in New England. The Boston population is the southernmost freshwater occurrence and the only one in Massachusetts.

BIRDS

Urban natural areas provide important, valued habitat for birds, other fauna, and wild plant species. More than 200 species of birds can be seen within Boston in one calendar year. This diversity stems from Boston's location on the Atlantic Flyway migration corridor and the diverse collection of habitats found within the city limits. Boston Harbor and its associated estuaries, salt marshes, beaches, and mud flats support numerous species of waterfowl, shorebirds, and seabirds. Forested areas and wetlands are home to resident songbirds and dozens of species of neotropical migrants in the spring and fall. Meadows and other open areas attract raptors and owls.

Birdwatching is an increasingly popular recreational activity in urban areas as more people discover the great array of birds found even in the midst of extensive development. In the Back Bay Fens area, over 170 species of birds have been documented by local birders, all within the shadows of Fenway Park and the Hancock Tower. At the Boston Nature Center in Mattapan, naturalists have documented approximately 150 species of birds. Other important and well-documented habitat areas for birds are the Arnold Arboretum, the Belle Isle Reservation, Franklin Park, and the Stony Brook Reservation.

The Massachusetts Natural Heritage Program lists six species of rare birds that have nested in Boston: vesper sparrow, common tern, least tern, barn owl, peregrine falcon, and upland sandpiper. Currently, the upland sandpiper is listed as endangered, the grasshopper sparrow is listed as threatened, and the least tern and common tern are listed as of special concern. In addition, several state-listed rare species, such as pied-billed grebe and piping plover, have nested in towns adjacent to Boston and could just as easily nest within the city boundaries.

Wild turkeys have returned to the city after an absence of many years. Several Boston Harbor Islands host nesting colonies of egrets and herons. Given the colonial and sensitive nesting habits of these birds, these rookeries are of great regional significance.

The city also contains significant wintering habitat for several important bird species. Examples of this are the snowy owls and other birds of prey that spend most winters along the runways at Logan Airport. This phenomenon has been well documented by researchers at the Massachusetts Audubon Society with the cooperation of MassPort.

Falling partly within the limits of the City of Boston are three Important Bird Areas (IBAs). Important Bird Areas have been identified and designated in more than 130 countries in order to focus attention on the significance of

protecting critical bird habitats. The Massachusetts Audubon Society has taken the lead in identifying IBAs in Massachusetts. The Massachusetts IBA program may be viewed online through the Mass Audubon website. The three IBAs falling partly in the city of Boston are Belle Isle Marsh, the Boston Harbor Islands National Recreation Area, and the Mystic River Watershed. Mass Audubon has urged that any public open space within these areas be managed in a manner compatible with the goals of the IBA program.

Several species of birds, both native and non-native, have grown in population to be considered public nuisances. The common pigeon, for example, was developed from the European rock dove and introduced into this country as a domesticated bird, but many of these birds escaped and formed feral populations. Today the pigeon is found in association with human habitations and regarded as a pest.

Other non-native bird species, such as the house sparrow, European starling, and house finch, are also abundant in Boston and wreak havoc among populations of native birds. Humans introduced all of these species to North America. These non-native species have grown to a population size where they outcompete native species for food, nesting sites, and other resources.

Canada goose and American crow, both native species, have also experienced recent population explosions, causing a variety of problems among other native bird populations. The Canada goose population has also created a negative impact on the quality of lawns and playing fields in parks, as well as water run-off from park lands.

MAMMALS

Like the rest of eastern Massachusetts, Boston is experiencing rapid and dramatic changes to its resident wild mammal population. A combination of factors—explosive residential development in the suburbs, intentional and inadvertent

creation of forested wildlife corridors, and the continued habituation of animals to human activity, among others—has caused the sighting of species traditionally associated with remote wilderness areas to be an increasingly common occurrence within the city.

White-tailed deer, rarely seen within the Route 128 beltway only 25 years ago, are now year-round residents in Boston. Deer and signs of their presence—tracks, scat, antler rubbings, and browse—are frequently seen in Franklin Park, the Arnold Arboretum, Allandale Woods, and near Millennium Park, among other locations. As the presence of deer has become more common, concern may develop over the possible impacts deer have on public and private lands and public safety. Shrubbery browsed by deer, the prevalence of Lyme disease, and the potential for deer-car collisions all contribute to the public's eventual intolerance for large populations of deer in dense residential areas.

Coyotes have also made a dramatic comeback to eastern Massachusetts, after being almost completely extirpated by a government-sponsored eradication program during the 19th century. Coyote sightings in areas of the city, such as along the Neponset River, have become more common in recent years.

Small mammals adaptable to humans and human settlements, such as raccoons, possum, striped skunk, and cottontail rabbits, abound throughout the city, in both developed and undeveloped areas. Less conspicuous mammals, such as mice, voles, shrews, and moles, though rarely seen, are also common in natural habitats.

OTHER VERTEBRATES

Reptiles and amphibians, commonly grouped as herpetiles, are imperiled animals, and their presence is used as an ecological indicator to gauge the health of an ecosystem. Common species found in Boston include green frog, bullfrog, painted turtle, red-eared slider (non-native), snapping turtle, garter snake,

red-backed salamander, and two-lined salamander. Though these species are common elsewhere, their occurrence in Boston is sporadic at best, with only scattered records existing in a few neighborhoods.

The Massachusetts Natural Heritage Program lists the blue-spotted salamander as a species of special concern in Boston. In addition, two state-listed rare herpetiles occur in West Roxbury. Species that should occur in Boston but have not been recently documented include milk snake, black racer, northern-water snake, ribbon snake, American toad, and wood frog. Significant herpetile habitats are in the Stony Brook Reservation, the Brook Farm Reservation/Millennium Park area, and Allandale Woods.

INVERTEBRATES

Insects and other invertebrates are also commonly used indicators of ecosystem viability, particularly for aquatic ecosystems. Preliminary studies of benthic macroinvertebrates conducted by the Parks Department at Chandler Pond, Scarborough Pond, Wards Pond, Willow Pond, and the Muddy River have shown very low species diversity, thereby confirming the poor water quality of these water bodies.

WILDLIFE CORRIDORS

The undeveloped vegetated lands and the water bodies of the City of Boston play an important role in supporting wildlife. While in some cases, these are islands in a sea of urbanization, many of these lands and water bodies are connected so that even species with lesser mobility than birds and insects can traverse the cityscape.

Corridors associated with water bodies are the dominant corridors in the City of Boston. Much of the undeveloped harborfront serves as a wildlife corridor, and the Harbor itself and associated bays and estuaries serve as aquatic wildlife corridors. The Chelsea, Mystic, Charles, and Neponset Rivers also serve as terrestrial and aquatic wildlife corridors. Thanks to state,

city, and federal agencies, these water-based corridors have protected lands that are vegetated and provide the ability for wildlife to move along them. The Charles River Reservation, the Neponset River Reservation, and the Belle Isle Marsh Reservation are among the largest of such land holdings. Smaller holdings also help, such as Millennium Park along the Charles, Constitution Beach along Winthrop Bay, and the Old Harbor Reservation along Dorchester Bay.

Then there are corridors that connect inland from these river- and harbor-based corridors. One of the most significant of these is the Emerald Necklace park system from Charlesgate at the Charles to the Back Bay Fens, the Riverway, Olmsted Park, and Jamaica Pond Park, linked by the Muddy River tributary to the Charles. There is a further land-based connection via the Arborway to the Arnold Arboretum. Then again, there is another land connection, either from the Arboretum to the nearby Allandale Woods tracts, or from Jamaica Pond Park through vegetated lands in the Jamaica Hills neighborhood and southern Brookline to Allandale Woods. From Allandale Woods, wildlife can connect via two parkways to two large vegetated areas of the city. Southward from West Roxbury Parkway, wildlife can connect to the Stony Brook Reservation & George Wright Golf Course area, and then connect to the Neponset via the Mother Brook, which is tributary to both the Charles and the Neponset. Westward from the VFW Parkway, wildlife can connect through the large group of lands in northwest West Roxbury, primarily cemeteries, but also conservation lands such as Hancock Woods and Brook Farm, and parkland such as Millennium Park, to the Charles River. The Neponset Valley Parkway serves as a corridor from the Stony Brook Reservation southward to the Neponset River Reservation and the Blue Hills Reservation in Milton and Canton.

A more isolated wildlife corridor of lands exists in what was once termed “the Heart of the City.” This assemblage of vegetated lands exists surrounded by the neighborhoods of Jamaica Plain,

Roxbury, Dorchester, Mattapan, and Roslindale. The biggest parcel is Franklin Park, but this corridor also includes the Boston Nature Center, and the following cemeteries: Forest Hills Cemetery, St. Michael's Cemetery, Calvary Cemetery, New Calvary Cemetery, and Mount Hope Cemetery.

Railroad corridors and associated lands can also serve as wildlife corridors. With Boston as a rail hub, many rail corridors from more rural parts of the state cross into the city. The Southwest Corridor and its associated Park serves as a wildlife corridor linking the highly developed Back Bay neighborhood to both the Emerald Necklace corridor and the Heart of the City corridor. It is likely that such a rail corridor or perhaps the Charles River Reservation was the likely route for the deer sighted in May 2009 in such downtown locations as Boston Common, the Public Garden, and City Hall Plaza. (It was killed when struck by a car on the Massachusetts Turnpike near Fenway Park.)

SECTION 4.6:

SCENIC RESOURCES AND UNIQUE AREAS

SCENIC LANDSCAPES

Boston has many scenic and significant landscapes that define the city's character. The most extensive landscape type is the waterfront. Whether along Dorchester Bay, the Inner Harbor, Belle Isle Inlet, the Mystic, or the Chelsea, saltwater-oriented landscapes form much of the basis for Boston's attractiveness.

Freshwater-oriented landscapes, such as the Neponset, Mother Brook, Bussey Brook, Scarborough Pond, and Chandler Pond also have great scenic charm. The two most notable scenic landscapes based on fresh water are the Charles River Reservation and the Emerald Necklace. In the midst of a densely developed urban area, these green corridors provide a visual and recreational respite. As envisioned by Frederick Law Olmsted and Charles Eliot, the views they afford, and the opportunity to stroll away from streets and through naturalized and recreational landscapes, provide relief from the hectic pace of urban life.

Some parklands developed on former landfills provide scenic landscapes themselves as well as the opportunity for viewing scenic vistas. Pope John Paul II Park along the Neponset in southern Dorchester provides views of the Neponset Estuary, including extensive estuarine wetlands. Millennium Park in West Roxbury forms a prominent hill along the banks of the Charles, a unique landform in the valley of a mature, meandering river. It provides vistas, especially to the west, that some have said are more typical of views from hilltops in rural Central Massachusetts. Of course, the exception is the view to the northeast, which shows the top of the glass Hancock Tower peeking over a wooded skyline.

GEOLOGICAL FEATURES

Geologic features are described elsewhere in this section. The one geologic feature most appropriate for discussion in this particular section is Roxbury Conglomerate, also known as Roxbury Puddingstone, the State Rock of Massachusetts. This particular bedrock unit is unique to the Boston Basin, yet quite prevalent within the Basin. Its presence as a rock outcrop is seen occasionally in parts of the city, often-times because of the expense of blasting it to provide room for development. It forms a prominent feature in some parks and natural areas/urban wilds, such as Franklin Park, Allandale Woods, Hancock Woods, and Stony Brook Reservation. Such outcrops are natural play areas for children, who love to climb them.

CULTURAL AND HISTORIC AREAS

Boston has numerous properties designated as historically significant, as well as entire districts so designated. Much of the Emerald Necklace is so designated as well as several other parks. The protection of such cultural and historical resources has become City policy and a facet of the character and strategy for redevelopment of neighborhoods, commercial areas, and parklands.

A map has been included in this plan that shows the extensive designation of districts and sites throughout the city. These designations offer some degree of protection with a review process if federal or state monies, approvals, or licenses are required. Preservation of these areas not only protects the cultural heritage of Boston, but also maintains the visual character of the city.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

The Massachusetts Department of Conservation and Recreation (DCR) administers the Area of Environmental Concern (ACEC) program in order to identify, inventory, and ensure careful stewardship of the Commonwealth's outstanding natural resource areas. The City of Boston contains portions of three ACECs—Rumney Marshes, Neponset Estuary, and Fowl Meadow/Ponkapoag Bog.

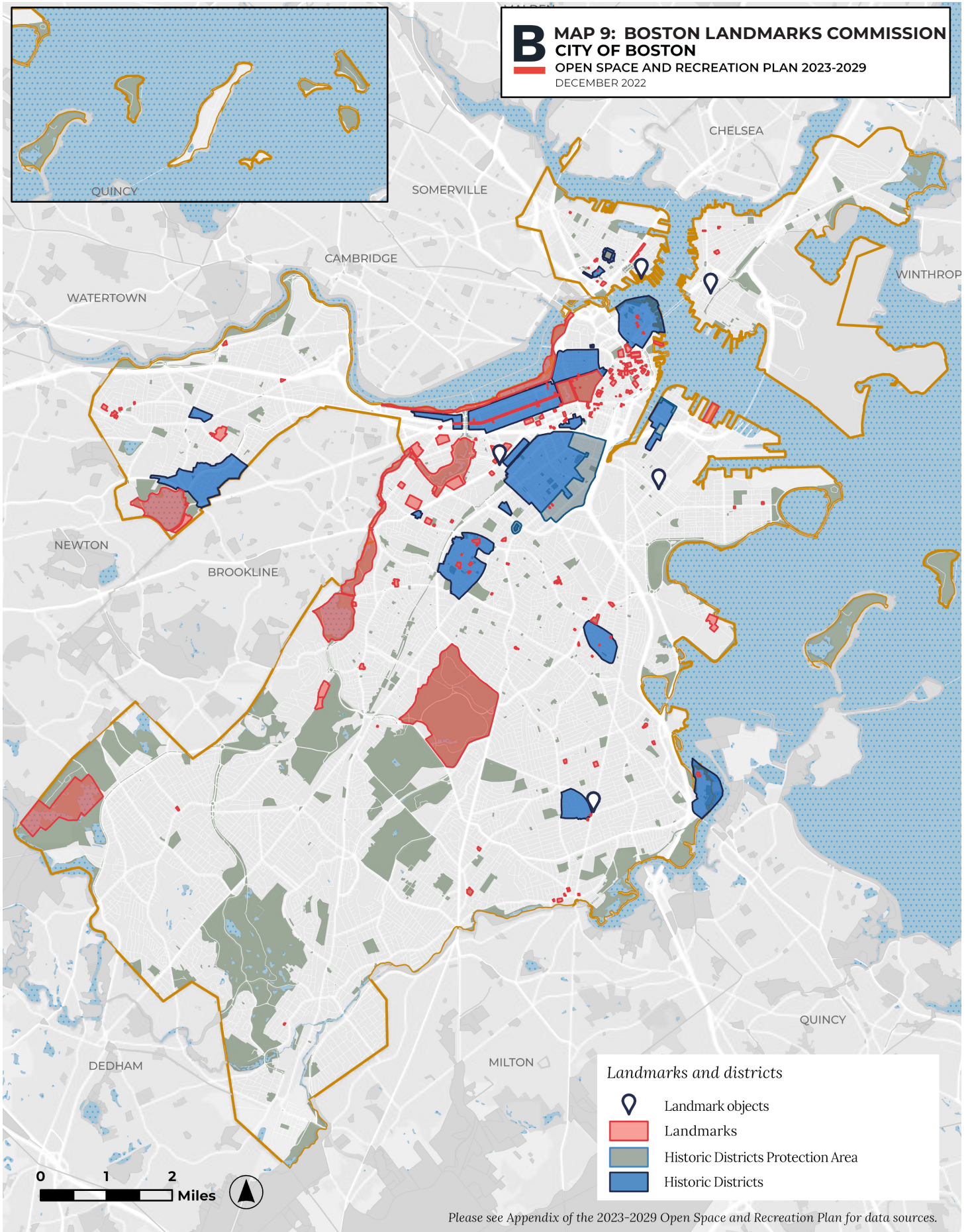
THE RUMNEY MARSHES

According to DCR's Office of Natural Resources, the U.S. Fish and Wildlife Service has characterized the Rumney Marsh ACEC as one of the most biologically significant estuaries in the state. The area includes approximately 1,000 acres of highly productive salt marsh, tidal flats, and shallow channels. The Belle Isle Marsh in East Boston is wholly included in the Rumney Marsh ACEC and comprises 275 acres of salt marsh, salt meadow, and tidal flats, providing critical wildlife habitat, flood storage, and water quality improvement functions. All of the Belle Isle Marsh is publicly owned by the DCR, except for small parcels owned by the Town of Winthrop and the City of Boston-owned Belle Isle Coastal Preserve, formerly known as Belle Isle Fish Company Urban Wild.

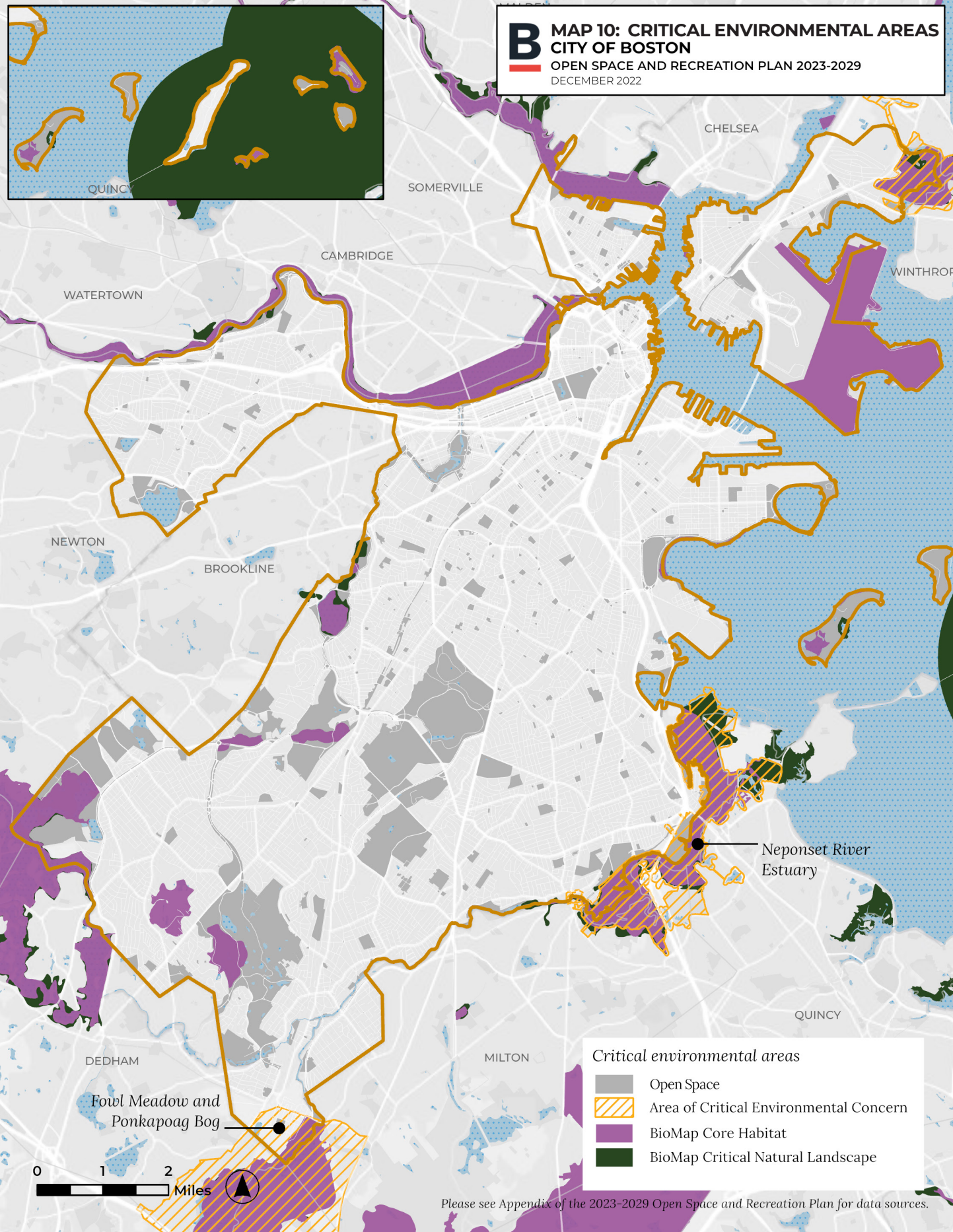
THE NEPONSET ESTUARY

The Neponset Estuary ACEC extends from the mouth of the Neponset River to the Lower Mills Dam, which separates the tidal and freshwater sections of the river. About 435 acres of the 1,260-acre ACEC are located in Boston with the remainder located in Milton and Quincy. The Neponset Estuary provides valuable habitat for anadromous fish species, including smelt and blueback herring. Most of the open space along the Boston side of the estuary is owned by the DCR, providing a variety of public open space and recreational opportunities. The DCR's

B MAP 9: BOSTON LANDMARKS COMMISSION
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



DRAFT



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Lower Neponset River Reservation Master Plan provides a vision for the long-term development of these properties.

THE FOWL MEADOW/PONKAPOAG BOG

The Fowl Meadow/Ponkapoag Bog ACEC is also located along the Neponset River, from the Readville section of Hyde Park and through the towns of Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood. Large areas of the 8,350-acre ACEC are part of the DCR's Blue Hills Reservation. This ACEC protects habitat for at least 13 rare species, several aquifers and public water supplies, floodplains, and wetlands associated with the Neponset and its tributaries. In Boston, Sprague Pond and the Sprague Pond Shoreline Reserve, Boston's newest park as of January 2023, are located within this ACEC.

SECTION 4.7:

ENVIRONMENTAL CHALLENGES

INTRODUCTION

Boston's intense land use can pose threats to several different components of the environment. Recognizing and planning for these different threats is essential for the environmental protection of Boston and the region.

For example, most reflective of an environment's health is its water quality. Threats to water quality include hazardous waste sites, landfills, and sewer discharges. However, water itself poses a threat to the landscape. Flooding, erosion, and sedimentation threaten the constructed and natural landscapes of Boston.

The preservation and expansion of Boston's green spaces contribute to both climate mitigation and adaptation. Green spaces keep the city cooler in summer, thereby reducing the urban heat-island effect (black pavement and other urban structures absorb more solar energy than grass and trees). This reduces the amount of electricity (and associated greenhouse gasses) needed for air conditioning and reduces the risks of more frequent heat waves posed by climate change. Greenery also increases the amount of groundwater recharge, thereby lowering flood risks.

HAZARDOUS WASTE SITES

As of January 2023, there were 5,718 reported releases in the City of Boston, both active or inactive (usually resolved) (MassDEP n.d.). A hazardous waste site is an area in which a hazardous substance has been released into the ground. The most common hazardous waste released is petroleum-based. Therefore, the most common hazardous waste site is one that has a land use associated with motor vehicles. This may be a gas station, service garage, or junkyard. Leaking underground tanks are responsible for a substantial amount of

contaminated sites. These tanks commonly hold fuel oil for homes and businesses, or gasoline for service stations. Other typical locations of hazardous waste include dry cleaners and industrial land uses which use various chemicals in manufacturing or processing.

Once released into the ground, pollutants may migrate towards ground and surface water resources. If the contaminated soil is exposed to the air (not covered by concrete or asphalt) the pollutant may vaporize causing unusual odors and harmful vapors. Physical contact with contaminated soil may cause skin irritation. Remediation or cleansing of contaminated soils is necessary because of these threats.

The Massachusetts Department of Environmental Protection (MassDEP) is responsible for enforcing laws that require remediation of contaminated sites (primarily MGL Chapter 21E). The hazardous waste sites in Boston are either considered to be of highest priority for clean up, and therefore require MassDEP permitting, or where classification is unconfirmed or not yet determined, so that many of these sites may not be seriously contaminated, making remediation a financially feasible possibility for reuse.

LANDFILLS

Boston does not currently have an active landfill, but does have several areas that have operated as landfills, dumps, or waste transfer stations. Former landfills include the Spectacle Island and Gardner Street landfills. Both facilities have undergone a capping that has resulted in the safe containment of waste and the creation of open space.

The Gardner Street landfill site is located on the banks of the Charles River in West Roxbury. The landfill's operation began in the 1930s and closed in 1980 but not capped. Contaminated surface runoff and groundwater flow posed a threat to the water quality of the nearby Charles River and its associated wetlands and groundwater resources. Excess material from the Central

Artery Project was used to cap the landfill in 1997, which created the 105-acre Millennium Park which was dedicated in 2000. This park features several athletic fields, passive recreation areas, a canoe/kayak launch on the Charles River, six miles of paths, grasslands, and nature study areas.

The Spectacle Island landfill was located on Spectacle Island in the Boston Harbor. It operated until the 1950s. In an uncapped state, the dump presented a threat to water quality in the Boston Harbor. Excess material from the Central Artery Project was used to cap the landfill, which created 105 acres of primarily passive parkland. The park was opened to the public in 2006 with the completion of a visitor's center, walking paths, and a swimming beach. The Parks Department and the Massachusetts Department of Conservation and Recreation jointly manage this park.

The Hallet Street and Neponset Avenue Landfills are also capped and used as open space. DCR closed and capped the landfills, and created the Pope John Paul II Park which opened in 2000 as part of the Lower Neponset River Reservation. This park includes active and passive features as well as improvements for access to the water.

The other closed landfills in Boston are at Columbia Point in Dorchester along Dorchester Bay where UMass Boston and housing uses are found, and the Barry Quarry in Hyde Park, which is also known as the Oak Lawn Driving Range.

EROSION SEDIMENTATION

Channelized streams and ocean walls have historically controlled erosion along the city's waterways. Pavement or structures cover a large percentage of Boston's surface area, served by an extensive stormwater drain system. This minimizes most land erosion, yet also contributes to localized erosion problems both by increasing surface run-off volume and speed, and by concentrating flows at specific discharge points. Erosion also occurs in areas that are undeveloped and not served by storm drains.

Urbanization is associated with impervious surfaces that speed the delivery of water to the river channel and result in larger and quicker peak flows. These increased peak flows transport large sediment loads that are dumped upon reaching low energy environments (i.e., slower moving waters contained in broader, shallower channels).

In association with chronic erosion and uncontrolled run-off in Boston's open spaces, deposition of sediments has posed a threat to areas such as the Back Bay Fens and Muddy River system. The Muddy River is an area of intensive sedimentation within Boston (and Brookline). The Muddy River receives a large volume of inorganic sediment from storm runoff caused by the intense urbanization within the river's drainage basin. Large deposits of sediments are concentrated along the Riverway and Back Bay Fens sections of the Muddy River.

Construction of the Charles River Dam in 1910 prevented tidal flow into the Muddy therefore decreasing salinity and preventing flushing of river sediment. This river sediment has remained along the Muddy River's banks, creating point bars that contribute to the proliferation of the non-native, invasive *Phragmites*—a tall freshwater grass with robust, hollow stems and dense, tasseling flower heads that can be seen flourishing, up to 20 feet tall, along the banks of the Muddy River. *Phragmites* contributes to sedimentation of the river by trapping sediment, which then encourages further *Phragmites* growth. While the *Phragmites* trap sediment, pollutants chemically bound to the sediment seriously degrade water quality in the river. Pollutants found in sediment include trace metals, inorganic nutrients, and organic compounds.

FLOODING

Boston is served by an extensive stormwater drainage system of dams, berms, and seawalls that have been designed to prevent flooding. However, changing weather patterns, coupled with aging infrastructure, are straining the system. Annual precipitation is expected to increase by 5%–8% by 2050, and 7% to 14% by 2100 according to the 2011 *Massachusetts Climate Adaptation Report*. In addition, the National Oceanic and Atmospheric Administration anticipates sea levels in Boston to rise by up to 2.2 feet by 2050 and up to 6.86 feet by 2100 (EOEEA 2011).

Major storms between 2010–2013 caused substantial flooding in both coastal and inland neighborhoods. During a storm in March 2010, the City of Boston broke the record of 11 inches of rain previously set in 1953. Storm surge reached 6.5 feet. Major flooding was experienced. The MBTA's Green Line D branch was hindered by a sinkhole that washed out a track.

From December 2010 through February 2011, the City of Boston saw a series of winter storms that led to a record snowfall of over 70 inches, more than 45 inches above the average. Heavy snow, combined with rain led to numerous collapsed roofs, downed trees and utility lines and flooding problems throughout the City.

In October 2012, Hurricane Sandy brought high winds and coastal flooding to Boston. Sustained wind speeds of 41 mph and gusts to 62 mph were reported at Logan Airport. Seas were 20–25 feet just off the coast with a storm surge generally about 2.5 feet to 4.5 feet. Luckily, storm surge peaked at 4.57 feet in between high tide cycles, and as a result only moderate coastal flooding occurred within Boston. If the peak surge had hit five hours earlier at high tide, the city would have experienced severe flooding.

In February 2013, a blizzard known as Winter Storm Nemo, produced moderate to major coastal flooding, most notably during the time

of the high tide Saturday morning. The 5th largest snow accumulation ever recorded of 24.9 inches occurred at Logan.

The City of Boston anticipates working with the Commonwealth of Massachusetts on planning for climate adaptation for the parks along the coast in light of the predicted increased flooding and sea level rise in the foreseeable future. City parks such as Condor Street Beach, the East Boston Greenway, Umana School Park, LoPresti Park, Porzio Park, Charlestown Naval Shipyard Park, Ryan Playground, Barry Playground, Little Mystic Access Area, Menino Park, Langone Park, Puopolo Park, Christopher Columbus Park, Long Wharf, Children's Wharf Park, L Street Beach, and McConnell Park will be affected by more frequent and intensive salt water inundation.

State parks along the coast in Boston are numerous and large in size. City and State parklands are often located side-by-side so an integrated system of adaptation is possible. Areas under the control of National Park Service, MassPort, and private owners of the publicly accessible HarborWalk will also be affected by coastal flooding and its aftereffects, and could share common adaptation policies and practices.

Flooding in the Fenway/Longwood area is caused by the Muddy River system. High water levels in the Muddy River can occur as a result of intense surface runoff from storm events, high water levels in the Charles River, and the nearly level gradient of the Muddy River in the Fenway area. These high water levels impede discharge from the Stony Brook Conduit, which carries stormwater, brookflows, and combined sewage from West Roxbury, Hyde Park, Roslindale, Jamaica Plain, and Roxbury.

SEWAGE DISCHARGE

Millions of gallons of effluent (treated sewage) are released into Massachusetts Bay each day. Sewage from Boston and outlying communities is treated by the MWRA at the Deer Island Sewage Treatment Plant. The volume discharged is roughly equivalent to the combined flow of the Charles, Mystic, and Neponset Rivers. The Deer Island treatment facility now also treats sewage that is pumped under the Harbor from the former Nut Island treatment plant in Quincy.

The Deer Island treatment plant is the second largest in the nation. It uses two phases of treatment, primary and secondary. Primary treatment separates the sewage by allowing sludge (primarily human waste) to settle from the water. Secondary treatment uses microorganisms to consume the remaining human waste and toxic chemicals. The effluent is then disinfected with chlorine and is 90% free of human waste and 70% free of toxic chemicals. It is released from the facility via a 9.5-mile, 24-foot diameter deep rock tunnel. At its end, the tunnel diffuses the effluent into Massachusetts Bay where ocean currents mix and further dilute the effluent. This largely minimizes the impact of treated wastewater on Boston Harbor.

The most prominent point source pollution in Boston is discharge from combined sewer overflow systems (CSOs). Combined sewer overflow systems collect both sewage and surface water runoff from rainfall and snowmelt. During wet weather conditions, surface runoff causes sewer lines to overload. To prevent this overload from backing up into streets or basements, designated overflow discharge points are located along Boston Harbor and the Charles and Muddy Rivers.

Due to the various sources of CSO discharges, many pollutants may be present. These pollutants include fecal coliform bacteria, suspended solids, nutrients, metals, and floatable material. Discharges containing such pollutants create potential health impacts near areas such as swimming beaches and shellfish beds.

WATER QUALITY

The following reporting on water quality is derived from the Final Massachusetts Integrated List of Waters for the Clean Water Act 2018/2020 Reporting Cycle (MassDEP 2021).

CHELSEA RIVER (CHELSEA CREEK)

Public access

The first direct public access to the Chelsea River from East Boston was developed when the City's Parks and Recreation Department and the Urban Wilds Initiative, constructed a hazardous waste remediation and urban open space reuse project at the Condor Street Beach urban wild. The public now has access to view the river and the industrial activity and traffic. A portion of the site is now a restored coastal wetland.

Water quality challenges

CSO discharge, industrial activities, salt storage on banks, dredging and nutrient overload. Per the Clean Water Act 2018/2020 Reporting Cycle report, "The Aquatic Life Use of the Chelsea River MA71-06 AU remains Not Supporting due to un-ionized ammonia, petroleum hydrocarbons, and contaminants in aquatic wildlife as measured in sediment screening values (Cause Unknown). However, based on the extensive MWRA data set, Dissolved Oxygen is being delisted (see Removal Comment for full rationale). An Alert for DO supersaturation is being added."

MYSTIC RIVER

Public access

The only public access to the Mystic River in Charlestown is from Ryan Playground, where the Parks Department provides a shoreline boardwalk, and at the Schaffts Center, which has a boardwalk installed as a result of the state-mandated Chapter 91 and the BPDA-mandated HarborWalk requirements.

Water quality challenges

Metals, other inorganics, priority organics, unionized ammonia, organic enrichment/low DO, pathogens, oil and grease, taste, odor, and color. During summer months, the river is on "Alert Status" due to organic enrichment and low DO that can impact aquatic life. During wet weather, elevated pathogen counts can impact primary and secondary contact recreation. Per the Clean Water Act 2018/2020 Reporting Cycle report, "The Aquatic Life Use of Mystic River MA71-03 is assessed as Not Supporting. Indicators of enrichment (>10% of surface chlorophyll a samples >10 µg/L and DO saturation >125% multiple times per year) warrant adding an impairment for "Nutrient/Eutrophication Biological Indicators." Problems with low DO at the bottom persist, so that impairment is being retained. Without additional data, the prior impairments for Un-ionized Ammonia, Cause Unknown, and Petroleum Hydrocarbons are also being retained."

INNER HARBOR

Consists of the Chelsea Creek and Mystic River confluence, the Upper Inner Harbor, Fort Point Channel, the Lower Inner Harbor, and the Reserved Channel.

Public access

There are many points of public access to the Inner Harbor thanks to public parks and the Harborwalk system based on the state Public Waterfront Act (Chapter 91). A continuous public access system along the waterfront here is not yet realized, in part thanks to areas that require no public access, such as at Logan Airport or the Coast Guard station, or due to marine industrial uses.

Water quality challenges

While water quality has improved, the Clean Water Act 2018/2020 Reporting Cycle report states that, "[t]he Aquatic Life Use of Boston Inner Harbor (MA70-02) will continue to be assessed as Not Supporting[.]" thanks to dissolved oxygen (DO) impairment and the impact of water and sediment quality in Fort Point Channel.

PLEASURE BAY

Part of the Olmsted-designed waterfront recreation area on the South Boston shoreline. It is mostly enclosed, with flow restricted to two channels between Castle and Head Islands.

Public access

A beach stretches for two-thirds of its shoreline, and a pedestrian causeway links Castle and Head Islands for the remainder of the length.

Water quality challenges

Data was not “available to assess the Aquatic Life Use for Pleasure Bay, so it is Not Assessed[.]” per the Clean Water Act 2018/2020 Reporting Cycle report.

DORCHESTER BAY

Dorchester Bay stretches from the mouth of the Neponset River, Boston/Quincy to the line between Head Island and the north side of Thompson Island, and the line between the south point of Thompson Island, Boston and Chapel Rocks, Quincy.

Public access

mix of industrial, commercial, residential, and recreational uses. Major points of public access include Malibu Beach, UMass Harborwalk, Old Harbor Beach, and the beaches in South Boston.

Water quality challenges

The Clean Water Act 2018/2020 Reporting Cycle report states that, “[t]he Aquatic Life Use of Dorchester Bay (MA70-03) is assessed as Fully Supporting due to the generally good water quality The alert for degraded sediment quality is being carried forward due to lack of recent data and in acknowledgement of the relatively low macroinvertebrate species in the bay.”

OUTER HARBOR AND HARBOR ISLANDS:**Public access**

From the Inner Harbor and surrounding bays, there are access points for ferries or boat launches to reach the Harbor Islands. Except for Thompson Island and Long Island, the other islands are publicly accessible.

Water quality challenges

Typically meets water quality standards for its SB:SFR (shellfishing restricted) classification. This qualifies these waters for primary and secondary contact recreation, as well as aquatic life. However, per the Clean Water Act 2018/2020 Reporting Cycle report, “[t]he Alert Status associated with fin erosion, bent fin ray and flounder liver disease at Deer Island Flats will be carried forward due to a lack of recent data.”

WINTHROP BAY/ORIENT HEIGHTS BAY

Between East Boston and Winthrop

Public access

The major means of public access here are the Belle Isle Marsh Reservation and Constitution Beach. Much of the shoreline does not allow for access thanks to Logan Airport.

Water quality challenges

Winthrop Bay/Orient Heights Bay as the SB:SFR water quality standard classification. The Clean Water Act 2018/2020 Reporting Cycle report states, “Aquatic Life Use for Winthrop Bay is assessed as Fully Supporting based on the generally good water quality conditions documented by MWRA between 2009 and 2018.” Belle Isle Inlet, which feeds into Orient Heights Bay, is a Class SA: Outstanding Resource Water, Shellfishing Open estuary. Per the Clean Water Act 2018/2020 Reporting Cycle report, “[w]ith no data available for this reporting cycle, the Aquatic Life Use of Belle Isle Inlet...remains Not Assessed.”

NEPONSET RIVER

Public access

There are numerous places to access the Neponset River and the Mother Brook in their Boston stretches, thanks to public parklands, both city and state. Some major ones include Victory Road Park, Tenen Beach, Port Norfolk Park, and Pope John Paul II Park in Dorchester, Ryan Playground in Mattapan, and Reservation Road Park, Martini Playground, the Neponset River Reservation at the Neponset Valley Parkway, and Mill Pond Reservation in Hyde Park.

Water quality challenges

Per the Clean Water Act 2018/2020 Reporting Cycle report, the Neponset River upstream of the Baker Chocolate Dam is freshwater Class B: Wet Weather Flow, and Not Supporting of Aquatic Life Use, partly due to low DO and to metals and PCBs in the sediment. Downstream of the Baker Chocolate Dam, the Neponset is an SB: Shellfishing Restricted estuary, supporting of Aquatic Life Use, but with an Alert due to the PCBs found upstream in the freshwater portion of the river. Mother Brook is a Class B tributary to the Neponset; Per the Clean Water Act 2018/2020 Reporting Cycle report, “the Aquatic Life Use of Mother Brook will continue to be assessed as “Not Supporting” based on existing impairments for Dewatering, Dissolved Oxygen, and Total phosphorus.” Sprague Pond is considered a Class B freshwater lake; per the Clean Water Act 2018/2020 Reporting Cycle report, “With no available data for this reporting cycle, the Aquatic Life Use for Sprague Pond is Not Assessed.”

CHARLES RIVER

Traces a considerable amount of the northern edge of Boston and a portion of the southwestern edge of the city in West Roxbury. There are also three ponds within the watershed that provide public access: Chandler Pond, Jamaica Pond, and Scarboro Pond.

Public access

Much of the banks along this stretch are protected parklands and wetlands, while some land uses along these banks are industrial, commercial, and residential.

Water quality challenges

The Charles River segment in West Roxbury is considered a Class B: Wet Weather Flow freshwater river where per the Clean Water Act 2018/2020 Reporting Cycle report, “Aquatic Life Use of Charles River MA72-06 should remain Not Supporting due to multiple prior enrichment related impairments. An Alert is being added due to a potential infestation of curly-leaf pondweed (*Potamogeton crispus*).” The Charles River segment east of the Watertown line is considered a Class B: Wet Weather Flow (CSO) freshwater river, due to the New Charles River Dam impeding the normal flow of salt water into this segment. Per the Clean Water Act 2018/2020 Reporting Cycle report, “Aquatic Life Use of Charles River MA72-06 should remain Not Supporting due to...prior impairments.” Chandler Pond, in Brighton, is a Class B freshwater lake where per the Clean Water Act 2018/2020 Reporting Cycle report, “Aquatic Life Use...is assessed as Not Supporting due to prior impairments for enrichment related causes.” Jamaica Pond, in Jamaica Plain, is a Class B freshwater lake where per the Clean Water Act 2018/2020 Reporting Cycle report, “...Aquatic Life Use remains assessed as Not Supporting”, due to continued DO and total phosphorus impairment and “...an infestation of the non-native Eurasian water milfoil (*Myriophyllum spicatum*).” Scarboro Pond, in Franklin Park, is a Class B freshwater lake that, per the Clean Water Act 2018/2020 Reporting Cycle report, “Aquatic Life Use...will continue to be assessed as Not Supporting due to the presence of this non-native [aquatic macrophyte] species *Nymphoides peltata* [(water fringe)].”

MUDDY RIVER

A tributary to the Charles that forms the “backbone” for three of the Olmsted-designed Emerald Necklace parks—Olmsted Park, the Riverway, and the Back Bay Fens.

Public access

Nearly all of its banks are parkland.

Water quality challenges

The river drains a highly urbanized watershed. Transportation corridors cross the river, such as State Route 9, the Massachusetts Turnpike, and commuter rail tracks. Per the Clean Water Act 2018/2020 Reporting Cycle report, “[t]he Muddy River is a Class B (CSO): Wet Weather Flow river in a pond or reservoir condition thanks to the New Charles River Dam. Aquatic Life Use for the Muddy River...will continue to be assessed as Not Supporting with all former impairments being carried forward. An Alert is being added due to a potential infestation of curly-leaf pondweed at the mouth of the river.”

CLIMATE CHANGE: MITIGATION AND ADAPTATION

Boston is already experiencing the effects of increasing storm intensity, rising seas, heavier downpours, and hotter summers. These effects are projected to grow over the coming decades. The City of Boston continues to study climate change and develop strategies to equitably protect residents from climate impacts that we are experiencing and that we are projecting in the future (Environment Department 2022). The following excerpts from the *Climate Ready Boston program*, *Heat Resilience Solutions for Boston report (Heat Plan)*, and the *Natural Hazard Mitigation Plan update (NHMP)* help provide a broad overview of some key changes:

- *Climate Ready Boston*: By 2070, Boston anticipates approximately 40 inches of sea-level rise across the city, which includes 36 inches of sea-level rise and 4 inches of land subsidence, which is the gradual sinking of land. Sea-level rise in Boston is likely to be greater than the global average, because Boston’s land mass is subsiding, or sinking, at about six inches per century, and changing ocean currents and other features are affecting the distribution of ocean water.
- MAP 11: SEA LEVEL RISE shows that the areas of Boston that are vulnerable to climate change

and sea level rise include parts of Charlestown, East Boston, South Boston, the South End, Fenway, Downtown, and along the Charles, Muddy and Neponset Rivers.

- *NHMP*: Between 2000 and 2020, 20 flood events, specific to Boston or reported as a county-wide event, were recorded in the NOAA Storm Events Database (NOAA 2020a) with an additional nine flash flood events.... With this projected increase in rainfall, waterbodies in and around the City will be increasingly likely to overtop their banks and cause localized flooding. As the frequency and severity of rain events continues to increase, it will become more difficult for the system to convey collected stormwater without associated flooding...Green infrastructure or low impact development improvements can help reduce demand on the existing stormwater system by increasing infiltration on-site...According to NOAA’s Storm Event Database there were 32 occurrences of coastal flooding in Suffolk County between 2000 to 2020. These events did not result in any injuries or deaths but did produce \$3.63 million in damages (NOAA 2020a).
- *Heat Plan*: Between 2010 and 2020, Boston experienced more hot days than any decade in the previous 50 years. This trend is projected to continue. If emission trends continue as they are, it’s predicted that there will be up to 25 to 42 days above 90°F, including up to 1 to 6 days above 100°F by the 2050s.¹

There may be more time between precipitation events, producing more severe periods of drought. Snow or rain, when it does fall, will likely fall in more concentrated bursts. According to a recently published report, *Climate Change Impacts on Groundwater in MAPC Communities*, changes in the timing and intensity of precipitation will also affect groundwater elevations which are projected to rise in New England through 2030 and then begin to decline due to decreased snowpack and increased evapotranspiration in vegetated areas.

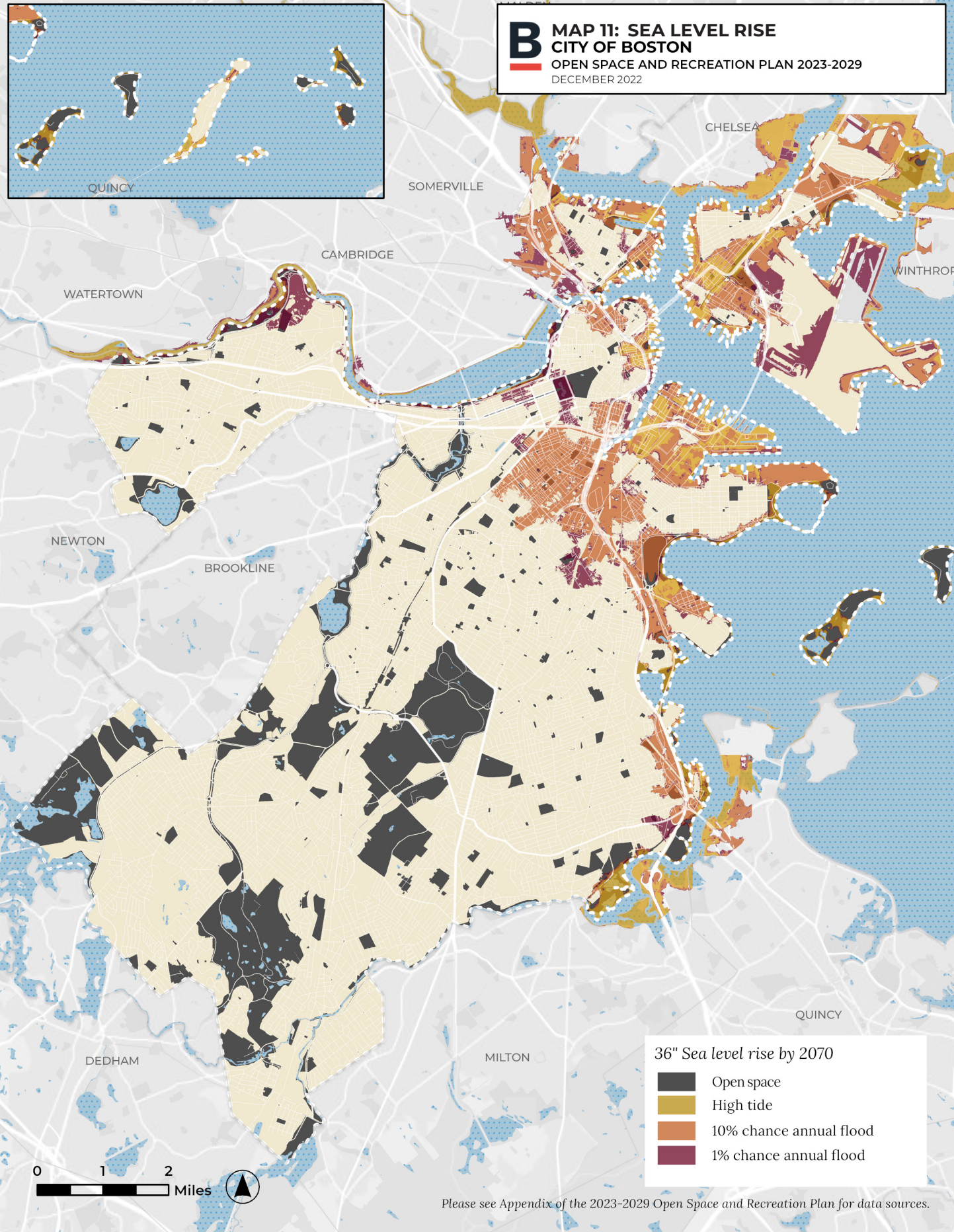
¹ These ranges present 17–83% confidence interval projections for RCP 8.5.

Rising sea levels along the coast introduce the possibility of saltwater intrusion and higher groundwater levels (MAPC 2022).

Groundwater in New England is generally held in soils and supplies water to plants, household wells, and surface waters. In fact, rivers receive a considerable amount of their volume from groundwater. When groundwater levels are high enough, they can rise up through the soil and be seen as ponding.

The impacts of changing groundwater dynamics in Boston are varied and require closer inspection to understand how Boston's wildlife and natural areas, buildings, underground and above ground infrastructure, and even drinking water supplies from the Quabbin Reservoir will be affected.

To learn more about projected changes in groundwater levels, visit: www.umb.edu/editor_uploads/images/centers_institutes/urban_harbors_institute/GBRAG_GW_report.pdf



DRAFT

SECTION 5

**INVENTORY OF LANDS
OF CONSERVATION
AND
RECREATION INTEREST**

DRAFT

SECTION 5:

INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST (OPEN SPACE INVENTORY)

INTRODUCTION

Boston's open spaces are a system that includes parks, urban wilds, community gardens, and cemeteries. This system provides nearly 6,000 acres of public and private open space (see follow maps). These open spaces provide both active and passive recreation, scenic enjoyment, and a sense of well-being and community pride. They provide relief from the densely confined aspects of the urban environment.

However, the vital role of open space in urban areas is not to be taken for granted. Development pressures threaten many open spaces at some point. Consequently, to ensure that cherished open spaces remain for their use and the use of future generations, people will need to consider issues such as the ownership of open space parcels and the degree of protection from adverse uses.

OWNERSHIP

Ownership is a key aspect of the system of open space protection, as certain owners have a major institutional mission to protect and maintain open space.

The largest holder of property in Boston is the Parks and Recreation Department. The Parks Department has jurisdiction and management of a majority of Boston's parks, playgrounds, squares, malls, and cemeteries. The Parks Department also holds a limited number of urban wilds and community gardens.

Other owners of open space land include City agencies, State agencies, non-profit organizations, individuals, private entities, and institutions. The Boston Conservation Commission (BCC) has jurisdiction over a number of passive recreation areas, and especially urban wilds and natural areas, while the State Department of

Conservation and Recreation (DCR) owns and maintains a variety of parks, parkways, playgrounds, beaches, natural areas, and urban wilds.

Private owners of open space include conservation organizations such as The Trustees of Reservations (TTOR), and the Massachusetts Audubon Society (MAS). These non-profit organizations have sizable holdings of community gardens and urban wilds.

Additional owners of open space include educational and religious institutions and private Bus organizations.

PROTECTION: A MATTER OF DEGREE

The term “protection” generally refers to the ease with which an open space property can be converted from an open space use to a non-open space use. Some properties have permanent (“in perpetuity”) restrictions on development. Others have lesser degrees of protection, while many have only the restriction imposed by the owner's own intentions or means.

This Open Space and Recreation Plan considers properties to be protected if they are publicly-owned lands under the jurisdiction of the National Park Service, Department of Conservation and Recreation, Boston Parks and Recreation Department, and the Boston Conservation Commission. It also includes properties held by government agencies that are restricted by deed or statute to “conservation” purposes.¹ In 2022, there were 4,549 acres of protected open space on mainland Boston. Including the Harbor Islands within city limits, there were 4,867 acres of protected open space.

Article 97 is the major reason such public land held for conservation purposes is considered protected (see description below, under the heading, “Types of Protection”). This State constitutional amendment requires a process for the conversion of such lands to non-conservation purposes.

Some of these lands are further protected by State and federal requirements as part of accepting grant assistance for the purchase, development, or redevelopment of these properties if they were the subject of a grant award. These grant programs are the federal Land and Water Conservation Fund (LWCF), the federal Urban Park and Recreation Recovery Program (UPARR), and the State Local Acquisitions for Natural Diversity (LAND) and Parkland Acquisitions and Renovations for Communities (PARC) Programs (formerly the Self-Help (SH) and Urban Self-Help (USH) Programs, respectively). The requirement for receiving the assistance is that land of equal or greater monetary value and equal or greater conservation (including recreation) utility must replace land that was the subject of a grant award. This provides a more stringent degree of protection beyond Article 97 (in almost all cases, lands covered by this more stringent grant requirement are or will be subject to protection under Article 97).

The Massachusetts Preservation Projects Fund, administered by the Massachusetts Historical Commission, also contains requirements for grant-funded projects to maintain their historical integrity after completion of the project. For historic parks or open spaces associated with historic properties, this can also be a means of protection.

¹ Conservation has a broad definition. According to the June 6, 1973 Opinion of the Attorney General (No. 45, found at page 139 of Public Document No. 12, Report of the Attorney General for the year ending June 30, 1973), also known as the “Quinn Opinion,” “... parks, monuments, reservations, athletic fields, concert areas and playgrounds clearly qualify” as “covered by Article 97” as they were “taken or acquired for the protection of the people in their right to the conservation, development, and utilization of the agricultural, mineral, forest, water, air and other natural resources[.]” (Pages 142–143). The opinion goes on to state that Article 97 declares as a public purpose “the protection of the people in their right to the conservation, development, and utilization of the agricultural, mineral, forest, water, air and other natural resources....” It further states that given such a major public purpose, “[p]arkland protection can afford not only the conservation of forest, water and air but also a means of utilizing these resources in harmony with their conservation.” (Page 142).

Given this Attorney General opinion, well known as the basis for application of Article 97 to parkland, it would appear that parkland and park uses serve conservation purposes. As indicated by Attorney General Quinn’s list (“parks, monuments, reservations, athletic fields, concert areas and playgrounds”), all outdoor recreation, whether active or passive, is therefore a conservation use.

Private lands where the deed is permanently restricted by a conservation easement or restriction, an agricultural preservation restriction, an historic restriction, an open space restriction, or a wetlands restriction are also considered protected.

TYPES OF PROTECTION

Open space can be protected in a variety of ways and to different levels. Whether owned publicly or privately, limitations on the use of ownership rights may either be self-imposed or externally imposed, permanent or temporary, revocable or irrevocable.

The different methods of protecting open space in Boston include Article 97, zoning, historical designation, environmental regulations, conservation restrictions, conservation land trusts, and Municipal Code 7-4.11 (the “100-foot rule”).

ARTICLE 97

Article 97 is an amendment to the Massachusetts Constitution that was passed in 1972. This provision prevents publicly-owned lands or interests in land (see for example conservation restrictions below) held for park, recreation, and conservation purposes from being used or disposed of for other purposes without a majority vote of the Park Commission or Conservation Commissions and the City Council, the approval of the Mayor, and a two-thirds vote of both houses of the State Legislature and the approval of the Governor.

In the late 1990s, the state Executive Office of Energy and Environmental Affairs (EOEEA) issued a policy regarding disposition of Article 97 lands. It posited review of any disposition proposal so that EOEEA’s Secretary would issue an advisory opinion to the Governor and the Legislature regarding the advisability of the proposal. The policy also stated a no net loss of Article 97 lands goal. The main incentive to comply with the policy on the part of many municipalities is the willingness by EOEEA to declare non-complying municipalities ineligible

for grants such as the Land and Water Conservation Fund, the Parkland Acquisitions and Renovations for Communities program, and the Local Acquisitions for Natural Diversity program. This incentive may be of limited value to a community which may feel a different municipal goal must override the ability to obtain grant funds for open space-related projects.

In light of this, the Legislature late in 2022 passed the Public Lands Protection Act (Chapter 274 of the Acts of 2022). It makes the disposition process much more transparent. For the disposition of Article 97 land, it mandates that state agencies or municipal governments must notify the public of the proposed action, make public an alternatives analysis to show that no other course of action is feasible, identify replacement land in a comparable location and of equal or greater value for natural resource or recreational uses (including monetary and acreage), and then acquire said replacement and dedicate it in perpetuity for Article 97 purposes. This act also creates flexibility by allowing state agencies or municipal governments to provide funding or a combination of funding and replacement land if the EOEEA Secretary reports to the Legislature that the new use of the disposed land “serves a significant public interest”, there are no adverse impacts on environmental justice populations, the alternatives analysis shows no feasible alternative exists, and “it is not feasible to contemporaneously designate [acquire comparable value] replacement land [in a comparable location].” Said funding must be at least “110 % of the fair market value or value in use of the” disposed land as determined by the EOEEA Secretary based on an independent appraisal, held aside in the municipality’s Community Preservation Fund, or its land preservation (acquisition) account, or in a new segregated account, and said funds shall be used within three years to acquire replacement land in comparable location and value. The public will be notified of and be able to comment on the alternatives analysis, an important transparency

factor that will provide more information for decision makers and the public at large. This new law mandates that EOEEA promulgate implementing regulations by July 2024.

OPEN SPACE ZONING

The City of Boston Zoning Ordinance includes zoning for open space which prohibits or limits the development of structures or other features on open space. Open space protection through zoning has limitations, as zoning is subject to change, and variances and special permits may be granted thereby allowing development or alternative use of open space lands. The articles that relate to open space protection are below.

Article 29 Greenbelt Protection Overlay District

The City has designated Greenbelt Protection Overlay Districts (GPOD). Development along these corridors, generally within 500’ of the centerline of the right of way, requires the review of the Parks and Recreation Department. The purpose of this article is to preserve and protect the amenities of the city of Boston; to preserve and enhance air quality by protecting the supply of vegetation and open space along Greenbelt roadways; to enhance and protect the natural scenic resources of the city; to protect Greenbelt roadways from traffic congestion and to abate safety concerns. Such roadways are typically considered parkways.

Article 33 Open Space Subdistricts

The open space district designation can be given to public lands, or to private property with the written consent of the owner. The designation can be given alone, or in conjunction with a subdistrict designation: community garden, parkland, recreation, shoreland, urban wild, waterfront access area, cemetery, urban plaza, or air-right.

The purpose of this designation is to encourage the preservation of open space and to enhance the quality of life of the city’s residents by protecting its open space resources; to distinguish different open space areas in order to provide

for uses appropriate to each open space site on the basis of topography, water, flood plain, scenic value, forest cover, urban edge, or unusual geologic features; to prevent the loss of open space to commercial development; to restore Boston's conservation heritage of Olmsted parks; to coordinate state, regional, and local open space plans; to provide and encourage buffer zones between incompatible land uses and mitigate the effects of noise and air pollution; to promote and maintain the visual identity of separate and distinct districts; to enhance the appearance of neighborhoods through preservation of natural green spaces; and to ensure the provision of adequate natural light and air quality by protecting the supply of vegetation and open space throughout Boston.

ARTICLE 49A GREENWAY OVERLAY DISTRICT

This article established guidelines and design controls for parcels adjacent to the Rose Kennedy Greenway. The objective of the guidelines is to establish a set of design controls for these parcels that preserves the newly created open spaces environmentally and aesthetically; activates the broader public realm in and surrounding the parks; ensures the long term value of the public's investment in creating the Greenway; and balances the development pressures in the Greenway District with other growth areas and development opportunities in the City as a whole.

Article 56 Conservation Protection Subdistrict

Of interest to open space and environmental activists is a special type of residential sub-district, the Conservation Protection Subdistrict. As the city goes through a slow on-going re-zoning, neighborhood by neighborhood, the Conservation Protection Subdistrict (CPS) has become a presence in more parts of the city. These CPS zones are typically established on large privately-owned tracts that possess natural features deemed worthy of protection and preservation. CPS zones mandate that the site plan be reviewed first by the BPDA which will

determine if the site plan protects large-diameter trees, stream beds, wetlands, and other natural features, wherever they appear on the site. The Environment Department can render advisory comments to the BPDA regarding development proposals and the accompanying site plans as part of the required site plan review process. In exchange, the CPS zone will allow higher density if the development envelope is significantly narrowed over what would be allowed by as-of-right zoning.

Article 89 Urban Agriculture

The City has adopted Article 89 to regulate the provision of urban agricultural activities in its neighborhoods, in order to meet a growing interest in producing foods locally and maximizing underutilized land. The purpose of this Article is to establish zoning regulations for the operation of Urban Agriculture activities and to provide standards for the siting, design, maintenance and modification of Urban Agriculture activities that address public safety, and minimize impacts on residents and historic resources in the City of Boston.

HISTORICAL DESIGNATION STATUS

Federal, State, and local laws provide for designation of certain parcels, structures, or districts as "historic" or "architectural." As such, these laws require review by designated deliberative bodies or agencies, such as the Boston Landmarks Commission and the Massachusetts Historical Commission. Such review is meant to ensure that the proposed project will at a minimum limit damage to the historical, architectural, or cultural artifacts or values of the subject property or properties.

Many of Boston's parks have historical designation status—either on the National Register of Historic Places, as outright designated Landmarks, or as parcels within an historic or architectural district. Several of these that have received historical designation are part of the Emerald Necklace park system. Given the number and significance of these and other parks of historical designation, the Parks and Recreation

Department has staff capable of handling the restoration and protection of these parks. This staffing commitment further ensures the protection of these open spaces that help define Boston's character and quality of life.

DEVELOPMENT REVIEWS

Some development reviews at the State and federal level are described below in “environmental regulations.” Development at the local level that takes place in compliance with the zoning ordinance, also known as developing “as-of-right,” is not subject to public review and comment. Proposals that seek to develop beyond allowed by zoning as-of-right often require an extensive review by the Boston Planning and Development Agency (BPDA) through the Article 80 review process, and can require review by the Zoning Board of Appeals for variances..

CITY OF BOSTON MUNICIPAL CODE,

Chapter 7, Section 4.11 (the “100-Foot Rule”)

In Boston, the Parks and Recreation Commission carries out a City ordinance, Chapter 7, Section 4.11 of the City of Boston Code of Ordinances, known colloquially as the “100-foot rule.” This ordinance mandates that the Commission render its approval before construction or alteration begins on any structure(s) within 100 feet of any park or parkway within the city. This allows the Commission the opportunity to review projects that may have direct or indirect physical or visual impacts on adjacent or nearby parkland. Such parkland or parkways may be under City, State, or Federal ownership.

ENVIRONMENTAL REGULATIONS

The environmental laws at the federal, State, and local level provide an array of protection for various types of environmental resources, including open spaces. The National Environmental Policy Act (NEPA) and the Massachusetts Environmental Policy Act (MEPA) provide procedures for public review of projects or policies of a magnitude that may possibly result in significant adverse effects on the environment.

The MEPA procedure specifically calls for review of projects that may convert lands protected by Article 97, i.e., that may change the use or purpose of a property from an open space or conservation purpose protected by Article 97.

Certain regions or sub-regions may be generally acknowledged as possessing sensitive and valued resources that require additional review.

The MEPA process allows for the designation of such regions or sub-regions as Areas of Critical Environmental Concern (ACEC). Projects or policies proposed for such areas are required to undergo the initial MEPA review regardless of the proposed extent of the project or policy.

Both NEPA and MEPA are full disclosure laws: they help reveal potentially significant adverse environmental impacts, but on their own, the reports generated by these laws do not limit or halt development projects. However, reports that reveal such potentially significant adverse environmental impacts can influence specific reviews related to permits that are capable of modifying or halting such projects.

Other environmental laws include the Wetlands Protection Act, the Rivers Protection Act, the Public Waterfront Act (MGL Chapter 91), and the Natural Heritage Program.

WETLANDS PROTECTION ACT

The Wetlands Protection Act (WPA) seeks to protect the lands continually or intermittently inundated by water. These are deemed to inherently possess values to be protected, such as flood storage and wildlife habitat. Many open spaces in Boston are wetlands or border on wetlands. The Boston Conservation Commission (BCC) carries out this State-mandated review process within the city limits, with an eye to protecting these resources and assuring their preservation through controlled public access and regular inspections for enforcement. This law allows individual cities and towns to adopt municipal wetland protection law and regulations that are stricter than those found in the state law. In 2019, the City passed an ordinance to create such a municipal wetlands protection

process with stricter provisions than those in the state law. Some of the implementing regulations are approved and parts are being drafted.

RIVERS PROTECTION ACT

The Rivers Protection Act is an amendment to the Wetland Protection Act, designating a special resource protection area known as the Riverfront Protection Zone. In accordance with this law, the Riverfront Protection Zone in Boston is 25 feet wide. By limiting development activities within this zone, it may be possible to create and protect open space corridors along rivers.

PUBLIC WATERFRONT ACT (MGL CHAPTER 91)

The State DEP administers the Public Waterfront Act, known as Chapter 91. Chapter 91 charges DEP to preserve the tidelands for water-dependent uses or uses that otherwise serve a proper public purpose. It also allows municipalities to develop a municipal harbor plan for the implementation of the Chapter 91 regulations for tidelands within their jurisdiction. Chapter 91 and associated municipal harbor plans mandate provision of open space amenities along the water's edge. In Boston, the Municipal Harbor Plan mandates a continuous 47-mile Harborwalk for public access to the waterfront from Dorchester to Central Boston, and along Charlestown's and East Boston's waterfronts. This law provides a strong basis for open space planning along the waterfront, and for linking such waterfront open spaces to inland communities.

SPECIES PROTECTION

The State Division of Fisheries and Wildlife administers the Natural Heritage Program. One aspect of this program is the designation and mapping of rare species habitats. Habitats of endangered, threatened, or special concern species are also designated and mapped. Proposed projects or policies that are reviewed under the Massachusetts Environmental Policy Act (MEPA) or the Wetlands Protection Act are required to disclose whether the project is

within such designated habitat areas and if so, what will be done to prevent significant adverse effects on such species or habitats.

CONSERVATION RESTRICTIONS (CRS)

Conservation restrictions are legally enforceable agreements voluntarily imposed by a landowner on their own land. These restrictions restrict the use of the property for a specific purpose for the duration of the CR. The landowner retains private ownership but surrenders certain rights in exchange for a lower property tax rate and an income tax charitable deduction. State and federal guidelines apply in order to qualify for such tax advantages. These restrictions are considered to provide a high level of protection against development pressures. However, some are temporary, imposed for only a fixed period of time. Conservation restrictions can be used for the protection of lands with important natural resource features and lands with important recreational features, whether for active or passive recreation.

A state law known as the Community Preservation Act (CPA) allows cities and towns to adopt this law as a means to generate funds through real estate transactions that are then allocated to three "community preservation purposes": affordable housing, open space, and historic preservation. A majority of Boston's voters approved the adoption of the CPA in 2016. By 2018, the City's Community Preservation Committee (CPC) began the disbursement of funds from the Community Preservation Fund. This disbursement now occurs on an annual basis. In 2021, the CPC approved an expenditure of funds for a Open Space Acquisition Fund (the Fund) under the management of the Parks and Recreation Department, which was ratified by the City Council and the Mayor. An additional expenditure for this Fund was approved in 2022.

Besides development or redevelopment of parks and open spaces, the CPA allows for expenditures for the acquisition of land for the creation of new parks or natural areas or to add to existing parks or natural areas. However, such lands

must be encumbered by a conservation restriction held by a third party that secures the open space status of the acquired land in perpetuity. It is anticipated that in the years ahead the City will have new lands protected by CRs as a result of being acquired using monies from the Fund.

CONSERVATION LAND TRUST

A conservation land trust is a non-profit organization that protects land for its natural, recreational, scenic, historical, or productive value. Some land trusts are involved solely in negotiating land transactions, while others purchase land outright or purchase the development rights. Some conservation land trusts may have charters that require all land held by it to be preserved in perpetuity as open space, while other conservation land trusts may not have such restrictions. For example, some lands held by a less restrictive land trust may be sold, perhaps to raise funds for purchases of more significant lands. Some lands in such a land trust's portfolio may be partially developed, perhaps to protect the higher priority, undeveloped portion of the original parcel with funds received from the developed portion. Some land trusts, whether restrictive or not, may hold parcels temporarily until a public agency can purchase them for inclusion in its inventory of protected lands.

CHAPTER 114, SECTION 17 OF THE MASSACHUSETTS GENERAL LAWS

The Parks Department administers the City owned cemeteries. These cemeteries are protected under Article 97. Additional protection is provided under Chapter 114, Section 17 of the Massachusetts General Laws. This law states that municipal cemeteries over 100 years old cannot be used for anything but a cemetery, and that use of any portion of such cemeteries for another public use needs special authorization by the legislature. All cemeteries owned by the City of Boston are over 100 years old.

TYPES OF OPEN SPACE

PARKS

The history of the park system in Boston is presented in Section 3.2.

The Boston Parks and Recreation Department has jurisdiction and care of over 2,000 acres of parks, including the nearly 1,000-acre Emerald Necklace, most of which was designed by Frederick Law Olmsted. The Emerald Necklace is made up of Charlesgate, the Back Bay Fens, the Riverway Park, Olmsted Park, Jamaica Pond Park, the Arnold Arboretum, and Franklin Park. The Commonwealth Avenue Mall connects the Olmsted-designed Emerald Necklace to the pre-Olmsted Public Garden and Boston Common.

Boston parks contain monuments, fountains, statues, footbridges, trees, flower gardens, athletic fields, golf courses, playgrounds, squares, malls, and parkways.

The Department of Conservation and Recreation (successor to the MDC and the Department of Environmental Management (DEM)) cares for and maintains significant parks in Boston including: the Belle Isle Marsh, Charles River, Stony Brook, Old Harbor, Dorchester Shores, and Neponset River Reservations, as well as Castle Island, the Southwest Corridor Park, and the Franklin Park Zoo (zoo operation and maintenance performed by the Commonwealth Zoological Corporation [aka Zoo New England]).

DCR also maintains parkways such as the Arborway, the Jamaicaway, the Riverway, the Fenway, Park Drive, VFW Parkway, Storrow Drive, Soldiers Field Road, Morrissey Boulevard, Columbia Road, Turtle Pond Parkway, Morton Street, and Day Boulevard.

URBAN WILDS

In 1976, the Boston Planning and Development Agency (BPDA), formerly the Boston Redevelopment Authority, issued a landmark document that inventoried and offered recommendations for Boston's remaining unprotected

natural areas. Boston's Urban Wilds: A Natural Area Conservation Program designated 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 BPDA 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 urban wilds reinforced the need for protection.

In 1977 a private, non-profit organization, the Boston Natural Areas Fund (later known as the Boston Natural Areas Network, which later merged into The Trustees of Reservations), formed to work with City and State agencies to secure urban wilds inventoried in the BPDA report. Since then, the City itself has developed an acquisition, advocacy, maintenance, and planning program for sensitive natural areas in need of permanent protection.

Today, the Urban Wilds Program, administered through the Parks Department, manages 29 City-owned sites comprising more than 180 acres. The program's staff collaborates with staff from the Boston Conservation Commission, which holds jurisdiction over most of the City-owned urban wilds, and serves as the legal guarantor of their natural ecosystem values and functions.

These marshes, woodlands, pastures, meadows, swamps, hilltops, ponds, and streams provide a vital ecological role as a repository for much of the remaining local biodiversity, and contribute to the maintenance of clean air and water throughout the city. Urban wilds expand the range of landscape experiences beyond that of the dense built environment and the designed and manicured landscapes of Boston's parkland. In traditionally underserved neighborhoods, 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.

However, these sites have in many cases suffered from years of neglect and abuse. Soil erosion, fires, illegal dumping of trash and debris, filling of wetlands, alterations in hydrology, and the presence of non-native, invasive plant species are chronic problems in nearly all urban wilds and other natural areas.

In 1998, the Boston Parks and Recreation Department made a major commitment toward addressing these problems by reviving the Urban Wilds Initiative, now known as the Urban Wilds Program. For the first time, a natural resource manager with ecological training was hired to administer the program on a full-time basis. Enhancing public access and use, where appropriate, is a major mission of this initiative. With a strong focus on ecological restoration and stewardship, the revitalized Urban Wilds Program seeks to restore and enhance biological diversity and ecological values, such as flood storage, water filtration, wildlife habitat, and control of air quality, while accommodating and enhancing passive recreation and environmental education. Recent efforts, such as the trailhead renovation and wayfinding project at Allandale Woods in West Roxbury, the site renovation at Buena Vista (Warren Gardens) in Roxbury, and the woodland trail creation and repair project at Sherrin Woods in Hyde Park, are aimed at accommodating access for a wide range of users and helping people understand and appreciate the importance of these vital natural areas.

COMMUNITY GARDENS

Community gardening in Boston originally began in 1895. The Industrial Aid Society for the Prevention of Pauperism established a Committee for the Cultivation of Vacant Lots. This committee leased a farm on the outskirts of the city and provided plots for elderly men and women. Shortly after, the School Department and the Massachusetts Horticultural Society initiated a School Gardens Program.

Community gardening increased during the World War Victory Gardens program. This program was a national effort to increase locally grown produce, allowing more commercially grown produce to be shipped to troops overseas. Boston participated in this program by contributing schoolyards and parkland, including Boston Common, for use as gardens. The plots in the Back Bay Fens, now known as the Parker Memorial Victory Gardens, are the only remaining Victory Gardens in Boston.

In the 1970s, community gardens regained popularity due to factors such as the creation of new vacant lots as a result of both a decrease in the city's population and an increase in property disinvestment; the community empowerment movement; the recommendation of nutritionists and the medical profession as a whole to eat fresh produce for personal health, which encouraged food-producing gardening overall, and the immigration of persons from agrarian-based cultures into the city.

In 1974, a bill encouraged gardening on unused portions of State lands. The city's largest community garden was created at the Boston State Hospital site in Mattapan (now incorporated as part of the Boston Nature Center). The following year, the City initiated the Revival Program, which was responsible for the construction of 30 gardens. By 1978, garden groups and coalitions had formed in several neighborhoods. These gardens provided important contributions to Boston's open space.

Community gardens are typically planted on underutilized land and vacant lots. These gardens range in size from one-tenth of an acre to 32 acres, although most are very small. Due to their small size, the piecemeal assembly of these gardens, and the continual organization and energy needed on the part of a number of community residents for their ongoing life, they are often subject to development pressures.

These gardens, however, are productive ventures and assists low- and moderate-income families in meeting their food supply needs and budgets.

Community gardens also have aesthetic and social qualities that strengthen their surrounding community. Gardens often fill vacant lots that would otherwise serve as possible dumping locations causing a sense of blight in the neighborhood. The gardens not only fill a physical void, they also serve as a common ground for residents, bringing them together through a common interest, for a common goal: to increase the quality of life in their neighborhood.

CEMETERIES AND BURYING GROUNDS

The City has sixteen historic burying grounds and three large cemeteries, which date between 1630 and 1892, are located in 13 Boston neighborhoods. More than 15,000 grave markers in these cemeteries honor founders of Boston, Revolutionary War heroes, and many other historical figures. Four burying grounds are located on the Freedom Trail, seen by approximately 3,000 visitors per day who view the grave markers of such historical figures such as John Hancock and Paul Revere. Eleven other burying grounds are listed on the National Register of Historic Places, with several of those located in historical and architectural conservation districts.

In addition to providing a link to Boston's Puritan and Colonial past, these cemeteries provide relief in the form of open space. Many of these cemeteries and burying grounds are located in dense areas of the city in which open space is otherwise not abundant. The three larger City-owned cemeteries are still active, and are operated by the Cemeteries Division of the Parks Department. The historic burying grounds are under the oversight of the Historic Burying Grounds Initiative, a Parks Department program led by a historic preservationist who seeks to restore the markers, the tombs, other structures, and the landscapes of these important sites.

While privately-owned cemeteries exist in Charlestown and East Boston, the most significant private cemeteries are located in

Dorchester, Jamaica Plain, Roslindale, and West Roxbury. Forest Hills Cemetery is the largest private cemetery in Boston, and also its most significant. Its attractive landscape design has inspired other cemetery landscape designs. Its proximity to Franklin Park, Arnold Arboretum, the Boston State Hospital site, and Mount Hope Cemetery helps create a sizable green oasis for the city, giving relief from the sense of density in the heart of the city.

Cedar Grove Cemetery in Dorchester helps provide an open space corridor between Dorchester Park and the Neponset River. The cemeteries in West Roxbury along the Newton border provide a large open space assemblage in this southwestern part of Boston, along with the DCR's Brook Farm and the City's Millennium Park at the former Gardner Street Landfill site.

PRIVATE OPEN SPACE

Boston's open space system includes 1,114 acres of privately-owned open space, 802 (or 72%) of that is unprotected. These 1,100+ privately-held acres represent 19% of the city's total open space. This includes educational institution campuses and athletic fields, office tower plazas, religious institution campuses, Harborwalk segments, cemeteries, stadia and racetracks, a working farm, vacant lands, and private recreational land.

This open space is unprotected, controlled by private owners who may choose to develop or otherwise alter their property so that land throughout the city that is taken for granted as open space may well disappear over time. Such development would likely alter the visual and social character of parts of Boston. Such change may not take place overnight, but usually occurs incrementally.

The inventory of unprotected, private open space includes parcels that may not have much open space significance due to their isolation, character, or size. However, many are important based on their location abutting existing protected areas or in a neighborhood with a deficiency of open space, as links in green space

corridors, as components of a large cluster of open space, or due to their special landscape character.

While these lands are unprotected in the legal sense, several are important features for their owners from a functional point of view, so that total conversion would not appear likely. For example, the openness of college campuses does erode over time (especially recently), but the bucolic image of a New England college campus with a leafy quad and sports fields in the distance can still be a powerful marketing tool in the competitive higher education environment. Private cemeteries can obtain permits to move graves, but such action would be highly unlikely.

Still, many private unprotected parcels are vulnerable to development. One example was Lawrence Farm in Jamaica Plain, which is part of the working farm more commonly known as Allandale Farm that straddles both Brookline and Boston. Two out of the four parcels in this assemblage receive a preferential assessment for property tax purposes under MGL Chapter 61A, a State law that seeks to promote agricultural land preservation. However, for the purposes of this inventory, lands assessed under MGL Chapters 61, 61A, and 61B are not considered protected. These statutes enable property owners to gain a preferential property tax assessment for land in forestry, agricultural, or recreational use. These laws help preserve open space by relieving pressure on property owners to develop in order to pay their property taxes. With the exception of Lawrence Farm, no other property owners in Boston have applied for the preferential tax assessment under MGL Chapter 61, 61A, and 61B.

A condition of the preferential assessment is that the City holds the first right-of-refusal on any sale. However, these properties are not considered fully protected because the City would have to secure a relatively large sum of money in a short period of time (120 days) to exercise its right. The owner may also remove the property from the program by paying

rollback or conveyance taxes. Therefore, the City must assume these properties are capable of being partially or fully developable at some time in the future. Thankfully, the owners of this property have placed an agricultural preservation restriction on one parcel in this assemblage (this parcel is considered protected, similar to a conservation restriction). The restriction is being held by The Trustees of Reservations, the Commonwealth's oldest private conservation organization.

HARBORWALK

Boston's Harborwalk program aims for a continuous shoreline walking path and is one of the most important components of the City's waterfront revitalization program. The privately held, publicly accessible system connects neighborhoods to the harbor, leading recreational, cultural and historic attractions, and water transportation facilities.

The Harborwalk stretches over 43 miles from Dorchester to East Boston and connect to inland paths and trails, including the South Bay Harbor Trail (from Roxbury), Walk to the Sea (from the State House), and the Neponset and East Boston Greenways.

Pursuant to the City's zoning code, new waterfront developments are required to set buildings back from the shoreline and construct a portion of the Harborwalk in that setback. This is to ensure waterfront access to pedestrians. The Harborwalk is also a result of state Chapter 91 permits that ensure public access to the water's edge. Developments that are deemed "water-dependent" such as maritime industrial port areas, are exempt from the public access requirements of Chapter 91. Typically such uses are found in areas called "Designated Port Areas" (DPAs). This therefore creates a discontinuous shoreline access system, but given that such areas are an important part of the economy of the state, the region, and the city, this provides a challenge to planners to create a way to connect the system through inland wayfinding.

PUBLIC UNPROTECTED OPEN SPACES

Boston's open space includes 128 acres of publicly-owned open space that is not protected via Article 97, a permanent deed restriction, or some other legislative restriction. This represents 2% of the total open space acreage.

State and City agencies and authorities own these public unprotected open spaces. Some of these lands may be publicly accessible while others are not. Types of open spaces included in this category are vacant lands, wetlands, Harborwalk segments, squares and plazas, landscaped traffic islands, passive parks, steep slopes, abandoned rail lines, schoolyards, campuses, school athletic fields, community gardens, harbor shorefronts, rock outcrops, arterial medians, and children's play lots.

While unprotected according to the definition described at the beginning of this section, some of these properties are restricted to open space uses by other constraints. For example, the Wetlands Protection Act will prevent development on public and private properties that are in wetland resource areas, so that properties such as Wood Island Bay Marsh (MassPort) and West Roxbury High School Marsh (City of Boston) are essentially undevelopable.

On the other hand, the development and expansion plans of various agencies and authorities may require them to use a property that is now prized as open space, for other purposes. For example, schools may need to expand, increasing the school building's footprint at the expense of the schoolyard or campus, or the configuration of a road may change, leading to the reduction or elimination of a landscaped traffic island. A large portion of the community may support these goals, while others in the community may wish to retain the current open space uses.

Alternatively, the development plans of an agency or authority may lead to the creation or retention of open space. An example of this is

the creation of Children’s Wharf Park near the Children’s Museum at Fort Point Channel. This park was constructed by the MBTA as part of the South Boston Transitway Tunnel project, to serve as mitigation for project impacts on Chapter 91 interests. It has subsequently become redeveloped as Martin’s Park, a new Parks Department park that honors the memory of Martin Richard, a young boy from Dorchester who was killed as a result of the April 2013 Boston Marathon terrorist bombing.

Nevertheless, some of the 130 acres of public unprotected open space may be at risk of being transformed into a non-open space use in the foreseeable future. The visual and social character of certain parts of Boston may change incrementally because of such development. Each public unprotected open space parcel has its own degree of risk, and its own potential to become a valued and protected open space. The assessment of risk and potential has been presented elsewhere in this text, primarily in Section 7.

LANDS OF CONSERVATION INTEREST

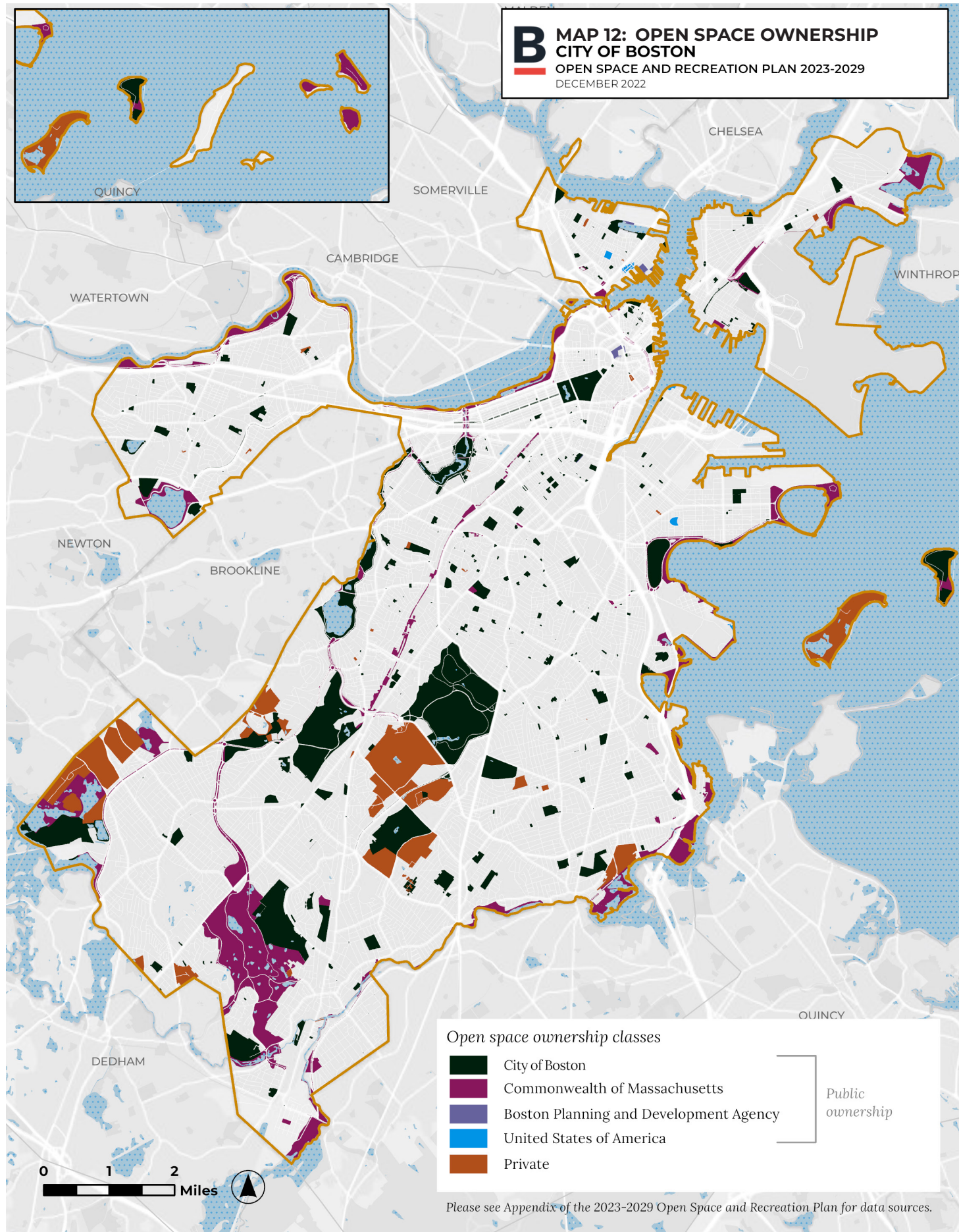
Lands of Conversation and Recreation Interest are sites that are not currently considered to be a part of the permanent and public park system but could be valuable additions. The Lands of Interest Map (MAP 16: LANDS OF INTEREST) illustrates potential areas of open space protection or acquisition by layering together an analysis of sites, property data, and open space needs.

The Lands of Conservation and Recreation Interest maps will be used to help inform ongoing efforts to expand access to and protection of open space across the city. Sites indicated on these maps offer a range of open space benefits. Inclusion of a site, or an area of interest, does not indicate a commitment by the City to pursue acquisition but it can indicate a recognition of the open space value a particular site may offer.

Potential sites can be seen on MAPS 16–20. To help direct efforts and prioritize resources, sites were broken out into four categories, described below.

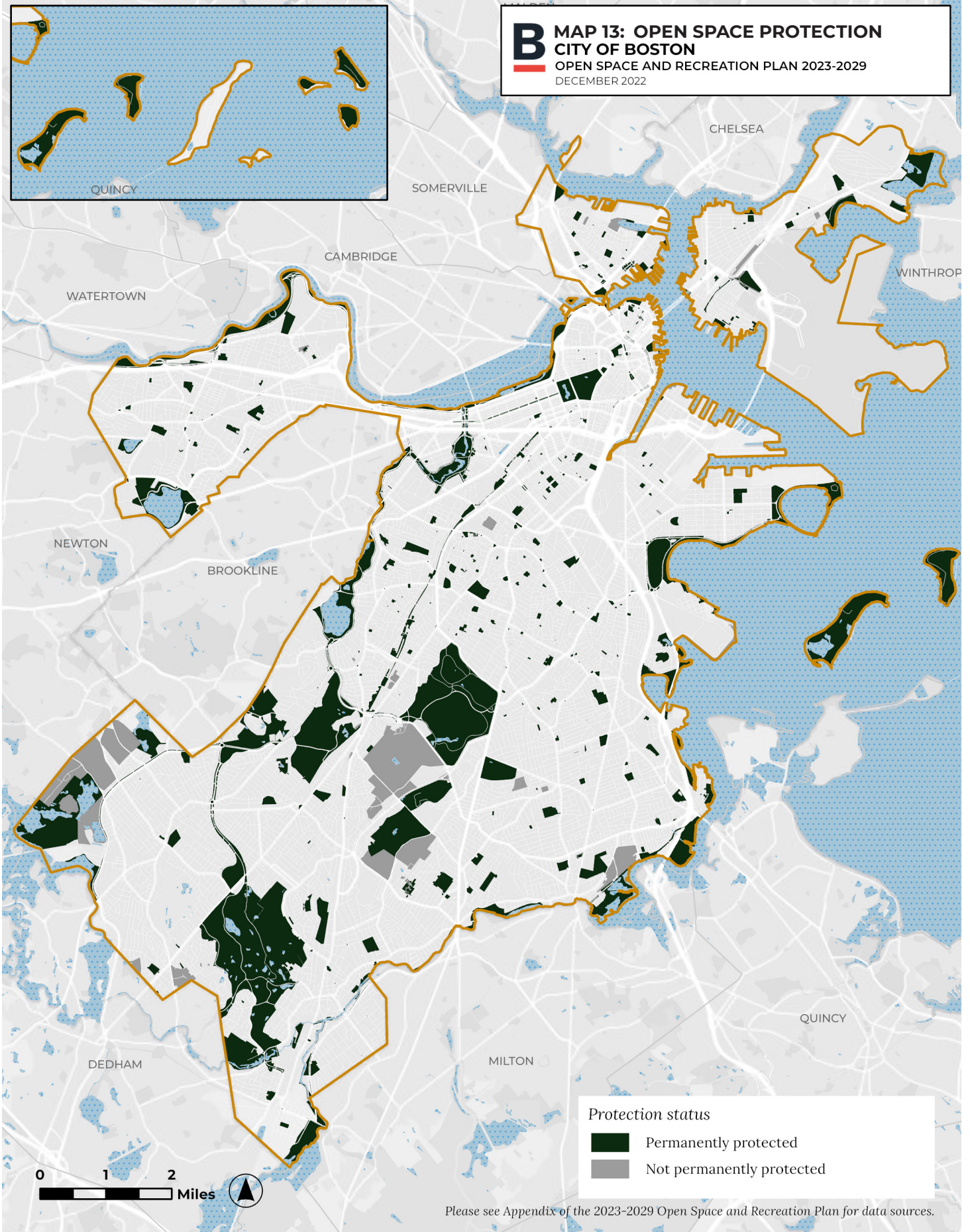
- **Areas of Interest (AOI):** These are places in the city where open space needs have been identified through mapping, analysis, public and staff input, but specific sites to meet those needs have not. Development is anticipated in many of these areas, increasing the demand for open space resources. Sites in Sites of Open Space of Value, Sites of Potential Open Space Value, or on the Unclassified Speculative layer may fall into these Areas of Interest.
- **Sites of Open Space Value:** Sites in this group often function as open space already, many are adjacent to existing protected open space, some are sites of natural resource value, some have been identified by both the City and the community as valuable for open space purposes, and may be at risk for conversion to other/developed use.
- **Sites of Potential Open Space Value:** Sites in this group meet multiple criteria for open space value per the Parcel Priority Plan, but acquisition or protection may be more complicated than the sites included in Sites of Open Space Value. Most of the sites in this group are in private ownership, and may currently be used for other purposes which would make converting them to protected open space a longer range effort. There may be opportunities to convert portions of these sites to open space purposes, ideally with public access and permanent protection.
- **Unclassified Speculative Sites:** This map shows sites with varying levels of potential to become open spaces for public access, recreation, natural resource function. These sites are not currently officially designated as publicly accessible, may not be managed for recreation or natural resource stewardship, and/or are not permanently protected. The goal with these sites may not be for them to be acquired for public park purposes, but rather to consider opportunities to incorporate a layer of land protection where feasible. Many sites on this layer may warrant further review and assessment to determine if they should be reclassified as Sites of Open Space Value or Sites of Potential Open Space Value.

Each of these categories will be regularly reviewed and edited to incorporate new information and reflect changing city development conditions and public input.

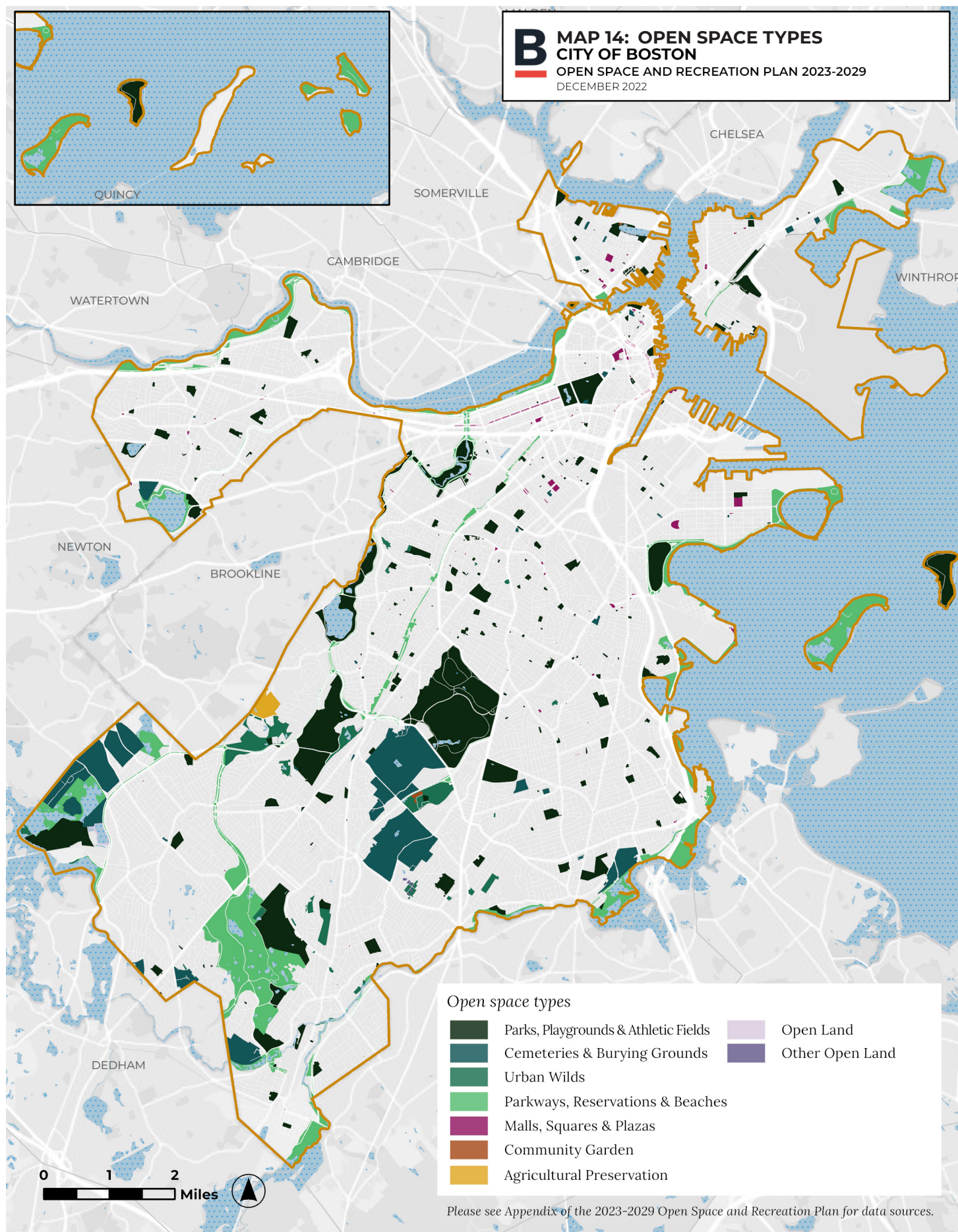


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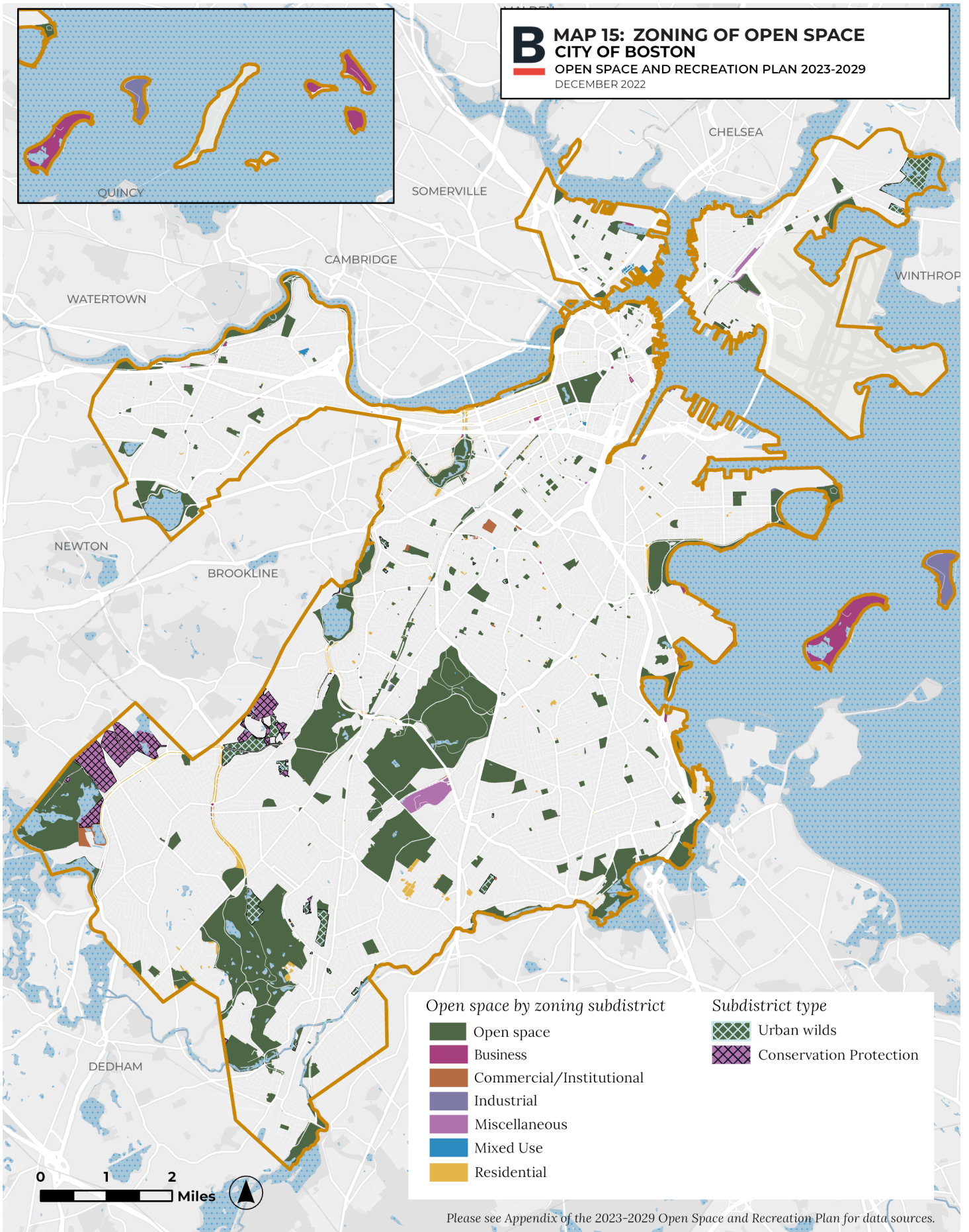
B MAP 13: OPEN SPACE PROTECTION
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



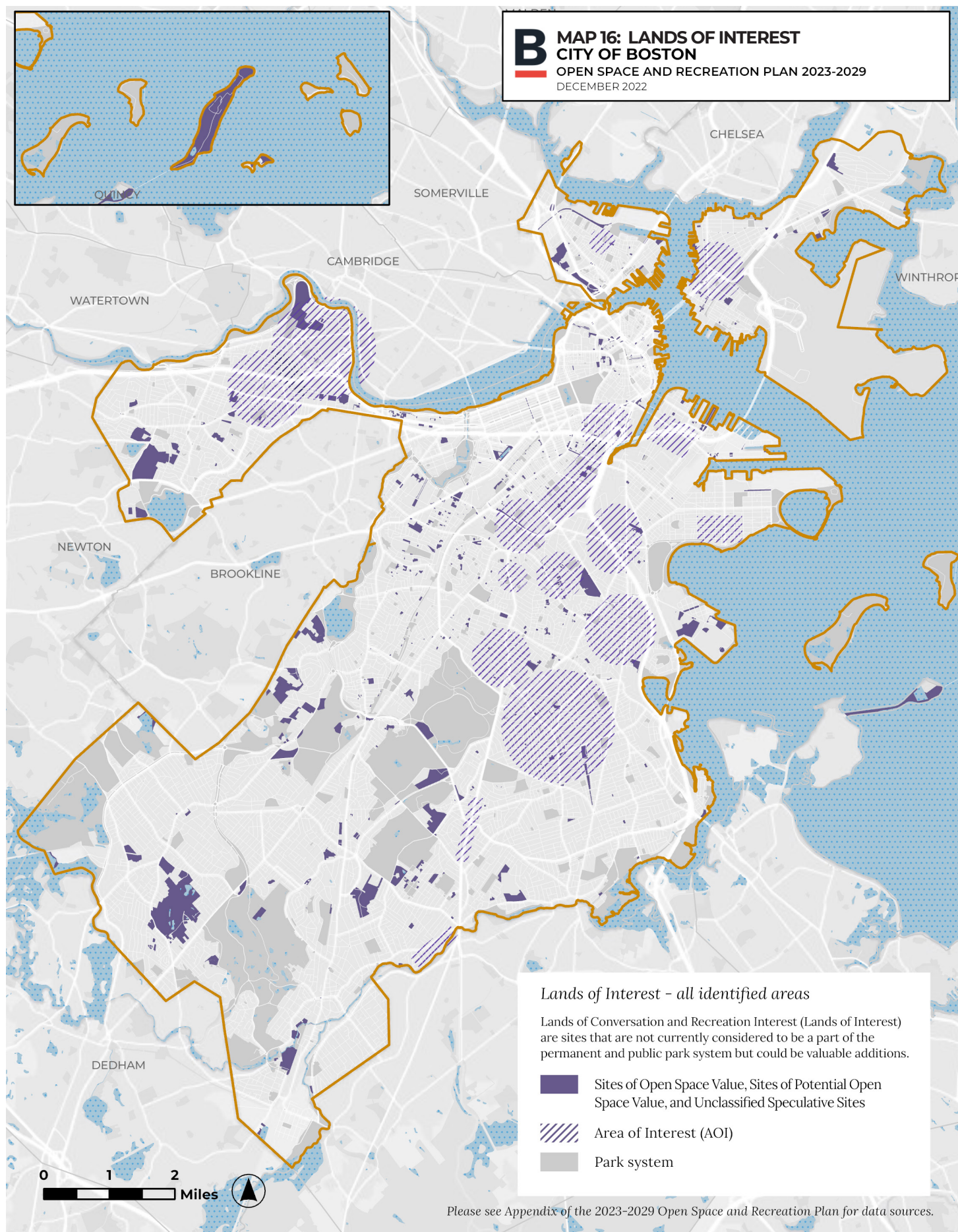
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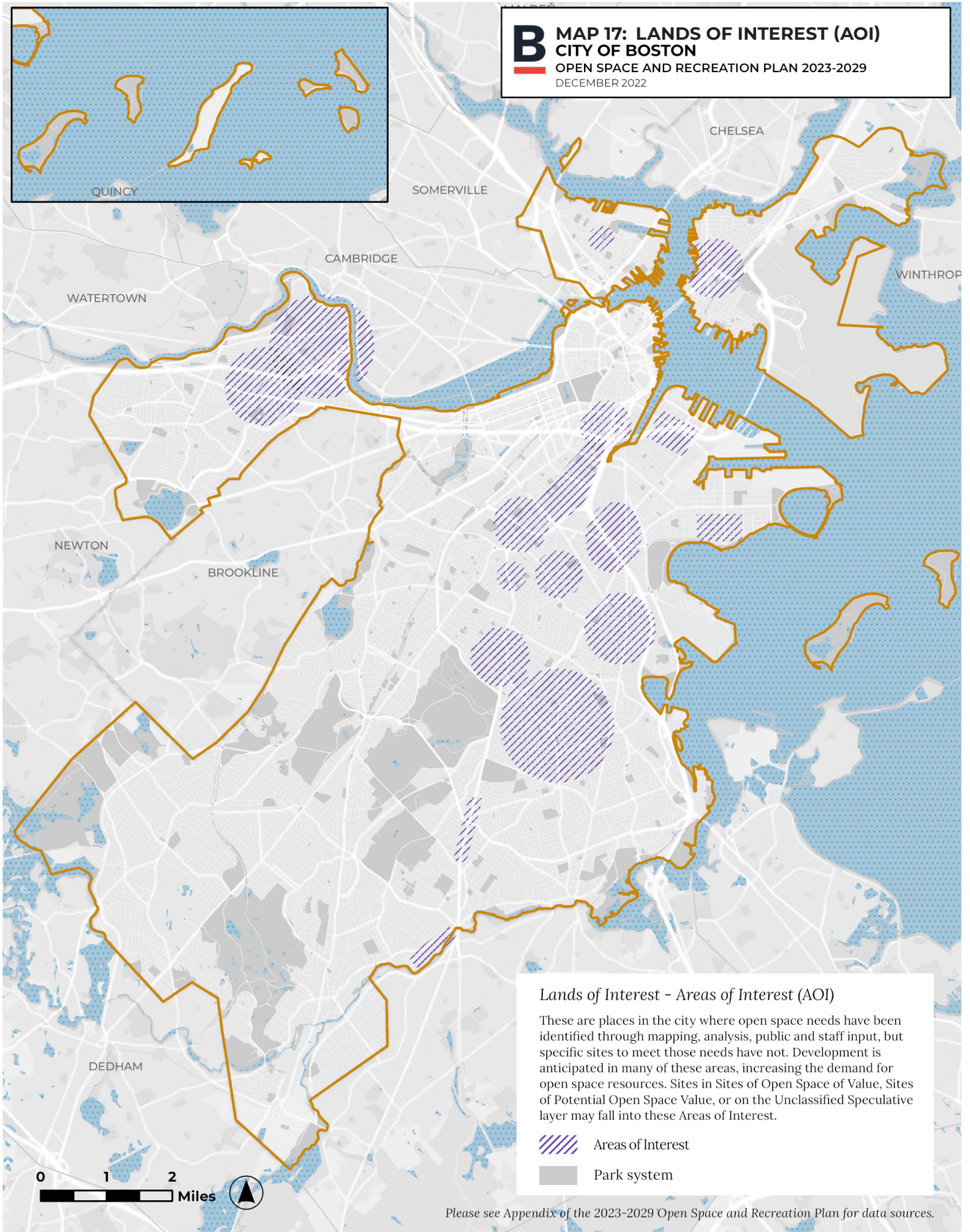
B MAP 15: ZONING OF OPEN SPACE
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



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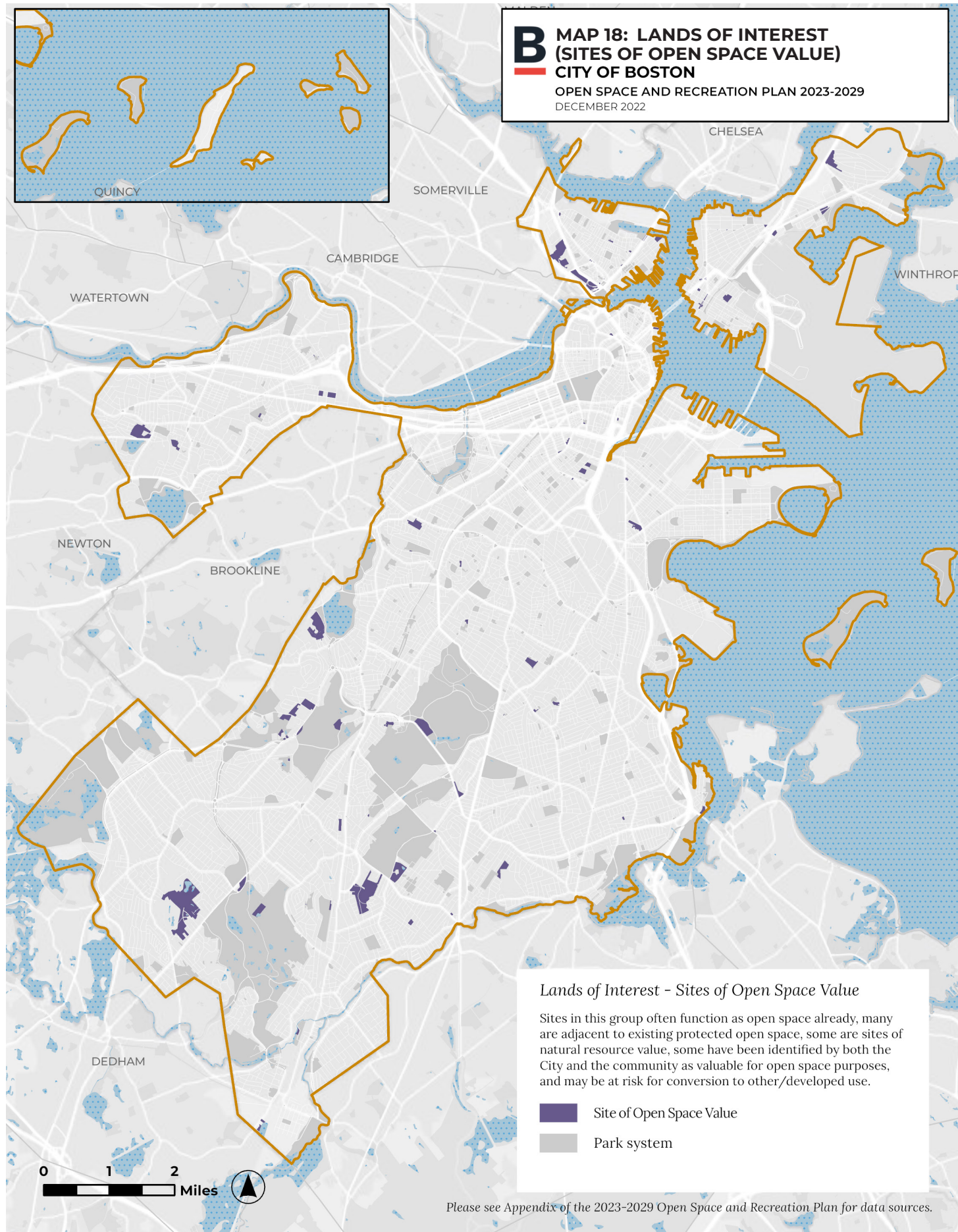


B MAP 17: LANDS OF INTEREST (AOI)
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



Please see Appendix of the 2023-2029 Open Space and Recreation Plan for data sources.

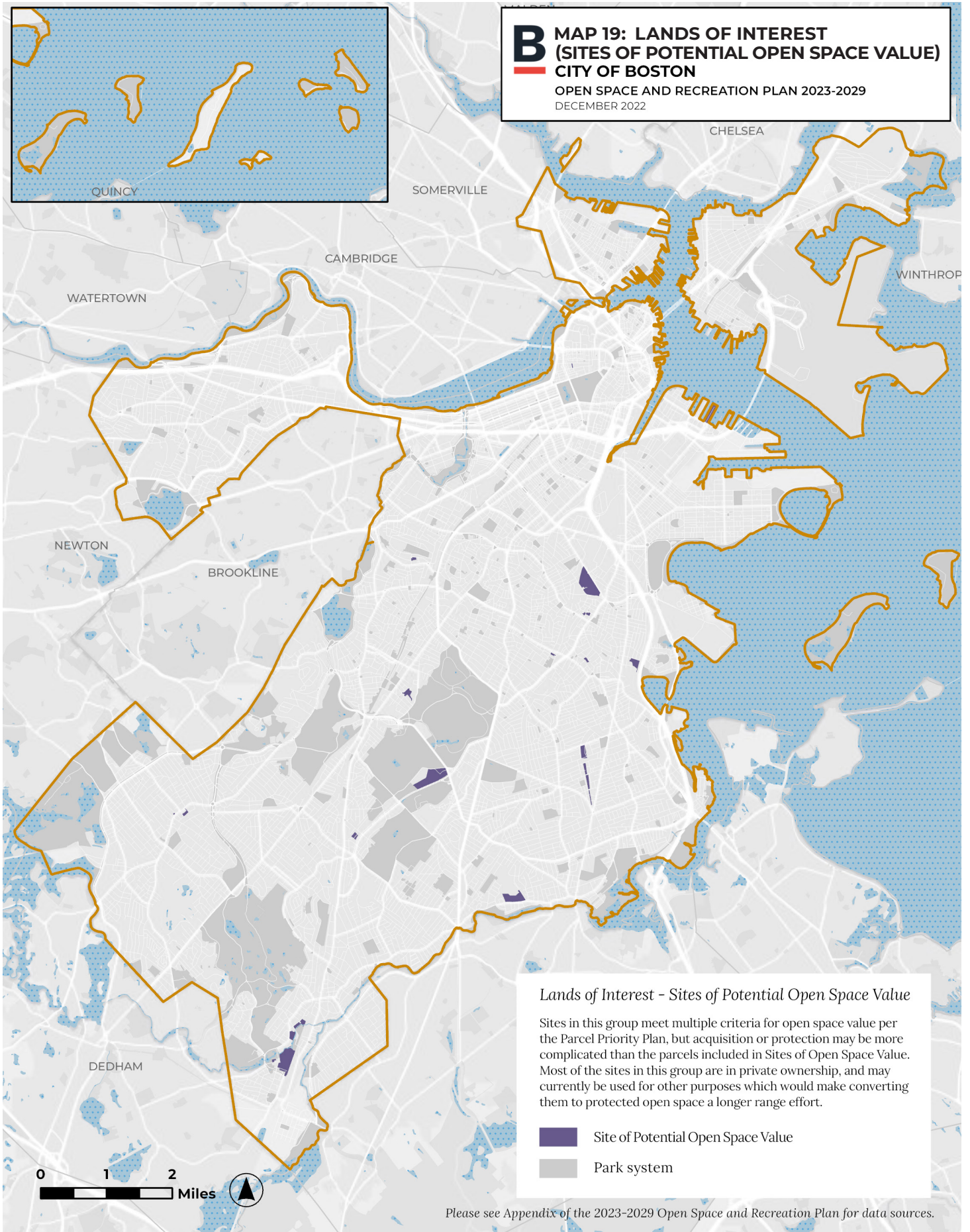
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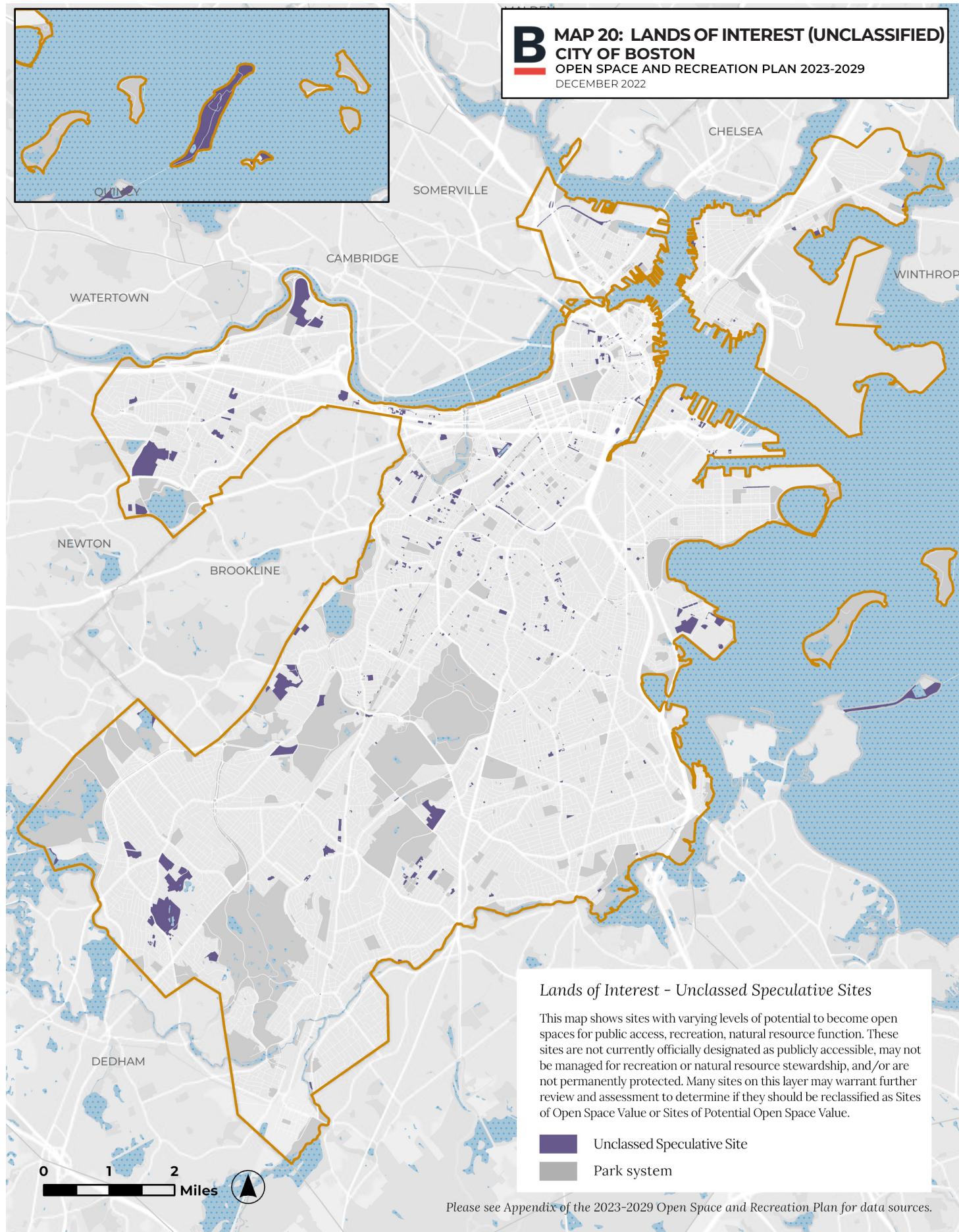
B MAP 19: LANDS OF INTEREST (SITES OF POTENTIAL OPEN SPACE VALUE) CITY OF BOSTON

OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



Please see Appendix of the 2023-2029 Open Space and Recreation Plan for data sources.

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LEGEND

Ownership, Open Space Ownership/ Jurisdiction & Open Space Management

BCC	Boston Conservation Commission
BFD	Boston Fire Department
BHA	Boston Housing Authority
BPD	Boston Police Department
BPHE	Public Health Commission
BPRD	Boston Parks & Recreation Department
BPS	Boston Public Schools (Boston School Department)
BPWD	Boston Public Works Department
BRA	Boston Redevelopment Authority (also known as Boston Planning and Development Agency)
BTB	Boston Transportation Department
BWSC	Boston Water and Sewer Commission
CG/NP	Community Group or Non-Profit Organization
COB	City of Boston
COM	Commonwealth of Massachusetts
DCR	Department of Conservation and Recreation (COM)
DND	Department of Neighborhood Development (COB)
MA DOT	Massachusetts Department of Transportation
MAS	Massachusetts Audubon Society
MassPort	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MWRA	Massachusetts Water Resources Authority
NPS	National Park Service
Private (or "Pvt")	Land Owned by Private Individuals, Organizations, Institutions, Corporations, Etc.
RFGKC	Rose F. Kennedy Greenway Conservancy
TTOR	The Trustees of Reservations (Boston Region) (formerly Boston Natural Areas Network/Fund)
US ACOE	US Army Corps of Engineers
US GSA	United States General Services Administration
USA	United States of America
USCG	US Coast Guard
White Fund	George Robert White Fund, City of Boston Trust
Zoo NE	Zoo New England

N.B.: The column titled "Ownership" refers to the fee simple owner of the property; the column titled "OS Ownership/Jurisdiction" refers to either the ownership of the open space rights to the property or to the agency with jurisdiction to manage the property as an open space; and the column titled "OS Management" refers to the entity which manages a property for open space purposes or uses.

Blank or "NULL" means either no information available or not applicable.

Example: Some parcels in Allandale Woods are owned in fee simple by a private owner (Ownership = Private), but the open space rights are held by the Boston Conservation Commission (Open Space Ownership/Jurisdiction = BCC); however, the

manager of these parcels for open space purposes or uses is the Boston Parks Department via its Urban Wilds Initiative (Open Space Management = BPRD).

Public Access*

PA	Publicly Accessible
X	Yes
	Blank = No or Unknown

* Public Access here means that either a space is legally accessible to the public or that there are no known barriers to access to open spaces on the identified properties.

Protection

100	"100' Rule" (COB Municipal Code, Ch 7, Section 4-11)
A97	Article 97, Amendments to the Massachusetts Constitution
ACEC	Area of Critical Environmental Concern (MEPA)
Acts 2008, Ch 306	Acts of 2008, Chapter 306
Agmnt	Agreement
Airport Mit	Logan International Airport Mitigation Program
AP	Agricultural Preservation Restriction
Art80	COB Zoning Code Article 80
AUL	Activity and Use Limitation Agreement under Chapter 21E (MCP)
BL	Boston (Historical) Landmark
CAT Mit	Central Artery/Tunnel Project Mitigation Program
Ch114s17	MGL Chapter 114 Section 17 (Cemetery Preservation)
Ch61A	MGL Chapter 61A (Property Tax Relief for Agricultural Uses)
Ch91	MGL Chapter 91 (Tidelands Protection)
Ch21E	MGL Chapter 21E (Massachusetts Contingency Plan (MCP))
CR	Conservation Restriction
DR	Deed Restriction
Esmnt	Easement for Open Space, Conservation, or Public Access Purposes
GPOD	Greenway Protection Overlay District (COB Zoning Code)
Land Trust	Land Trust or NonProfit Ownership
License	Non-Proprietary Permit for Use of Land
LWCF	Land and Water Conservation Fund (NPS)
MEPA	Massachusetts Environmental Policy Act
Mit	Mitigation (mandated by federal, state, or local laws)
MPPF	Massachusetts Preservation Projects Fund (Massachusetts Historical Commission)
NHESP	Natural Heritage & Endangered Species Program
NHL	National Historic Landmark
NRHP	National Register of Historic Places
OCB	Our Common Backyards (COM)
PARC	Parkland Acquisition and Renovations for Communities Program (COM)

Protection

PR	Historic Preservation Restriction (Massachusetts Historical Commission)
SH	Self-Help Program (COM)
SURF	Strategic Urban Recreation Fund (COM)
Temp CR	Temporary Conservation Restriction
UPARR	Urban Park & Recreation Recovery Program (NPS)
USH	Urban Self-Help Program (COM)
WPA	Wetlands Protection Act

Protected Open Spaces

POS	Protected Open Space
X	Yes
	Blank = No

Condition

C	Condition
E	Excellent
G	Good
F	Fair
P	Poor

N.B.: Condition is only noted for properties under the jurisdiction of the Boston Parks & Recreation Department

Current Use & Recreation Potential

Both the "Current Use" and "Recreation Potential" of the sites are indicated by generalized open space types.

Note: Data provided in the open space property inventories contained in this plan were developed for general planning purposes only, and as such are the best available data. However, readers are cautioned that use of such data may not be appropriate or sufficient for legal, design, or other site-specific purposes. For such purposes, only research in the Registry of Deeds or other appropriate Offs, property surveys, and field-checked research can be considered appropriately reliable.

The City of Boston recognizes the value and benefit gained by sharing data. Although the City has made reasonable efforts to provide accurate data, the City makes no representations or guarantees about the accuracy, completeness, or currency of the information provided.

The City of Boston provides this data as is and with all faults, and makes no warranty of any kind. Each user is responsible for determining the suitability of the data for their intended use or purpose. Neither the City nor its affiliates, employees, or agents shall be liable for any loss or injury caused in whole or in part by use of any data obtained from this publication, website, or other information conveyance. The GIS data the information presented in this plan is based on is updated and modified on an ongoing basis and users are encouraged to report any errors to the City.

PROTECTED OPEN SPACE

CITY-OWNED

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Brighton Common	0.51	X	COB	BPRD		A97	X	E	Allston-Brighton	Open Space District	Malls, Squares & Plazas
Cassidy Playground	9.61	X	COB	BPRD		A97/ LWCF	X	E	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Chandler Pond	19.03	X	COB	BPRD		A97/WPA	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Cunningham Park	0.18	X	COB	BPRD		A97	X	G	Allston-Brighton	Open Space District	Malls, Squares & Plazas
Evergreen Cemetery	20.77	X	COB	BPRD		Ch114S7/A97	X	G	Allston-Brighton	Open Space District	Cemeteries & Burying Grounds
Fern Square	0.04	X	COB	BPRD		A97	X	G	Allston-Brighton	Open Space District	Malls, Squares & Plazas
Fidelis Way Park	4.90	X	COB	BPRD	BPRD	A97/ LWCF	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Hardiman Playground	1.47	X	COB	BPRD		A97	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Hobart Park	0.81	X	COB	BPRD		A97/ LWCF	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Jackson Square	0.12	X	COB	BPRD	BPRD	A97	X	G	Allston-Brighton	Open Space District	Malls, Squares & Plazas
James H. Roberts Playground	1.00	X	COB	BPRD		A97	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Joyce Playground	1.36	X	COB	BPRD		A97/ PARC	X	E	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Market Street Burying Ground	0.40	X	COB	BPRD		Ch114S7/A97	X	G	Allston-Brighton	Open Space District	Cemeteries & Burying Grounds
McKinney Playground	5.89	X	COB	BPRD		A97/ USH	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Oak Square I	0.23	X	COB	BPRD		A97	X	G	Allston-Brighton	Open Space District	Malls, Squares & Plazas
Penniman Road Play Area	0.92	X	COB	BPRD		A97	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Portsmouth Street Playground	4.26	X	COB	BPRD		A97/ UPARR	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Public Ground	0.06	X	COB	BPRD		A97	X	G	Allston-Brighton	Comm/Off/Business District	Malls, Squares & Plazas
Raymond V. Mellone Park I	1.08	X	COB	BPRD	BPRD	A97	X	E	Allston-Brighton	Special District	Parks, Playgrounds & Athletic Fields
Ringer Playground	10.26	X	COB	BPRD		A97/ LWCF/USH	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Rogers Park	8.17	X	COB	BPRD		A97	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Shubow Park I	0.57	X	COB	BPRD	BPRD	A97	X	G	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Smith Playground	15.03	X	COB	BPRD		A97/ LWCF	X	E	Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Boston Common	45.74	X	COB	BPRD	BPRD	A97/ LWCF/NHL	X	E	Back Bay/Beacon Hill	Open Space District	Parks, Playgrounds & Athletic Fields
Central Burying Ground	1.49	X	COB	BPRD	BPRD	A97/ NHL/PR/BL	X	G	Back Bay/Beacon Hill	Open Space District	Cemeteries & Burying Grounds
Clarendon Street Playlot	0.32	X	COB	BPRD		A97	X	G	Back Bay/Beacon Hill	Residential District	Parks, Playgrounds & Athletic Fields
Commonwealth Avenue Mall I	10.87	X	COB	BPRD	BPRD	A97/ LWCF/NRHP	X	E	Back Bay/Beacon Hill	Residential District	Malls, Squares & Plazas
Copley Square Park	1.85	X	COB	BPRD		A97	X	G	Back Bay/Beacon Hill	Comm/Off/Business District	Malls, Squares & Plazas
Frieda Garcia Park	0.27	X	COB	BPRD	Private	A97	X	E	Back Bay/Beacon Hill	Comm/Off/Business District	Parks, Playgrounds & Athletic Fields
Myrtle Street Playground	0.16	X	COB	BPRD		A97/ LWCF	X	E	Back Bay/Beacon Hill	Residential District	Parks, Playgrounds & Athletic Fields
Phillips Street Play Area	0.12	X	COB	BPRD	BPRD	A97	X	E	Back Bay/Beacon Hill	Residential District	Parks, Playgrounds & Athletic Fields
Public Garden	23.51	X	COB	BPRD	BPRD	A97/ LWCF	X	E	Back Bay/Beacon Hill	Open Space District	Parks, Playgrounds & Athletic Fields
Temple Street Park	0.06	X	COB	BPRD	Private	A97/MPPF	X	G	Back Bay/Beacon Hill	Residential District	Malls, Squares & Plazas
Angell Memorial Square	0.18	X	COB	BPRD		A97	X	G	Central Boston	Comm/Off/Business District	Malls, Squares & Plazas
Bay Village Garden	0.02	X	COB	BPRD	Private	A97	X		Central Boston	Open Space District	Community Gardens
Bay Village Neighborhood Park	0.09	X	COB	PWD			X	G	Central Boston	Comm/Off/Business District	Malls, Squares & Plazas
Charter Street Park	0.24	X	COB	BPRD		A97	X	G	Central Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Christopher Columbus Park	4.87	X	COB	BPRD		A97/ LWCF/Ch91/WPA	X	G	Central Boston	Open Space District	Parks, Playgrounds & Athletic Fields

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
City Hall Plaza	6.01	X	BRA	NULL		A97	X	E	Central Boston	Open Space District	Malls, Squares & Plazas
Copp's Hill Burying Ground	1.98	X	COB	BPRD		A97/NRHP/PR	X	G	Central Boston	Open Space District	Cemeteries & Burying Grounds
Copp's Hill Terrace	0.61	X	COB	BPRD		A97/NRHP	X	G	Central Boston	Open Space District	Malls, Squares & Plazas
Cuttilo Park	0.29	X	COB	BPRD		A97/ LWCF	X	E	Central Boston	Open Space District	Parks, Playgrounds & Athletic Fields
DeFilippo Playground	1.12	X	COB	BPRD		A97	X	G	Central Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Elliot Norton Park	0.95	X	COB	BPRD	BPRD	A97/ LWCF	X	E	Central Boston	Special District	Parks, Playgrounds & Athletic Fields
Faneuil Square	0.82	X	COB	BPRD		A97	X	G	Central Boston	Open Space District	Malls, Squares & Plazas
Foster Street Play Area	0.11	X	COB	BPRD		A97	X	G	Central Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Granary Burying Ground	1.86	X	COB	BPRD		A97/NRHP/PR/BL	X	G	Central Boston	Open Space District	Cemeteries & Burying Grounds
King's Chapel Burying Ground	0.43	X	COB	BPRD		A97/NRHP	X	G	Central Boston	Comm/Off/Business District	Cemeteries & Burying Grounds
Langone Park	2.18	X	COB	BPRD		A97/Ch91/WPA	X	E	Central Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Lincoln Square	0.05	X	COB	BPRD		A97	X	G	Central Boston	Special District	Malls, Squares & Plazas
Long Wharf	3.90	X	BRA	National Park Service	BRA	LWCF /Ch91/WPA	X		Central Boston	Special District	Malls, Squares & Plazas
Mirabella Pool	1.36	L	COB	White Fund	BCYF	A97/Ch91/WPA	X		Central Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Paul Revere Mall	0.86	X	COB	BPRD	BPRD	A97	X	E	Central Boston	Open Space District	Malls, Squares & Plazas
Polcari Park	0.28	X	COB	BPRD		A97	X	G	Central Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Puopolo Playground	2.65	X	COB	BPRD		A97/Ch91/WPA	X	E	Central Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Rachel Revere Square	0.08	X	COB	BPRD		A97	X	E	Central Boston	Open Space District	Malls, Squares & Plazas
Statler Park	0.23	X	COB	BPRD		A97	X	E	Central Boston	Special District	Malls, Squares & Plazas
Tai Tung Park	0.03	X	COB	BPRD		A97	X	E	Central Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Union Street Park I	0.51	X	BRA	NULL	BPRD	A97	X	E	Central Boston	Open Space District	Malls, Squares & Plazas
Barry Playground	3.55	X	COB	BPRD		A97/ PARC /Ch91/WPA	X	G	Charlestown	Open Space District	Parks, Playgrounds & Athletic Fields
Bunker Hill Burying Ground	1.11	A	COB	BPRD		Ch114S7/A97	X	G	Charlestown	Comm/Off/Business District	Cemeteries & Burying Grounds
Caldwell Street Play Area	0.13	X	COB	BPRD		A97	X	E	Charlestown	Industrial District	Parks, Playgrounds & Athletic Fields
Charlestown Naval Shipyard Park I	9.58	X	BRA	NULL		A97/ LWCF /Ch91/WPA	X		Charlestown	Comm/Off/Business District	Parks, Playgrounds & Athletic Fields
Cook Street Play Area	0.10	X	COB	BPRD		A97	X	G	Charlestown	Residential District	Parks, Playgrounds & Athletic Fields
Doherty Playground	3.75	X	COB	BPRD		A97/ USH	X	G	Charlestown	Residential District	Parks, Playgrounds & Athletic Fields
Edwards Playground	1.34	X	COB	BPRD		A97	X	E	Charlestown	Comm/Off/Business District	Parks, Playgrounds & Athletic Fields
Essex Square	0.03	X	COB	BPRD	BPRD	A97	X	G	Charlestown	Residential District	Malls, Squares & Plazas
Hayes Square	0.17	X	COB	BPRD		A97	X	G	Charlestown	Comm/Off/Business District	Malls, Squares & Plazas
John Harvard Mall	0.83	X	COB	BPRD	BPRD	A97	X	E	Charlestown	Residential District	Malls, Squares & Plazas
Little Mystic Access Area	2.07	X	BRA	NULL		A97/ LWCF /Ch91/WPA	X	G	Charlestown	Special District	Parks, Playgrounds & Athletic Fields
Menino Park	1.24	X	COB	BPRD	Private	A97/WPA/Ch91	X	E	Charlestown	Special District	Parks, Playgrounds & Athletic Fields
Peter Looney Park	0.67	X	COB	BPRD	BPRD	A97	X	G	Charlestown	Residential District	Parks, Playgrounds & Athletic Fields
Phipps Street Burying Ground	1.72	A	COB	BPRD		Ch114S7/A97	X	G	Charlestown	Residential District	Cemeteries & Burying Grounds
Ryan Playground	8.78	X	COB	BPRD		A97/ USH /Ch91/WPA	X	G	Charlestown	Open Space District	Parks, Playgrounds & Athletic Fields
Winthrop Square	0.90	X	COB	BPRD		A97	X	E	Charlestown	Residential District	Malls, Squares & Plazas
Adams/King Playground	0.68	X	COB	BPRD		A97	X	E	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Algonquin Square	0.04	X	COB	BPRD	BPRD	A97	X	G	Dorchester	Residential District	Malls, Squares & Plazas
Allen Park	1.29	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Blue Hill Club Recreation Center	3.04	X	COB	White Fund	Private	A97	X		Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Byrne Playground	1.19	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Ceylon Park	4.64	X	COB	BPRD	BPRD	A97/ USH	X	G	Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields

SECTION 5 – INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST (OPEN SPACE INVENTORY)

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Children's Park	0.35	X	COB	BPRD		A97	X	E	Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Coppens Square	0.36	X	COB	BPRD	BPRD	A97	X	G	Dorchester	Residential District	Malls, Squares & Plazas
Daniel E. O'Connor Park	0.14	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Malls, Squares & Plazas
Deer Street Park	0.25	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Doherty/Gibson Playground	5.73	X	COB	BPRD		A97	X	E	Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Dorchester North Burying Ground	3.30	X	COB	BPRD		Ch114S7/A97	X	G	Dorchester	Comm/Off/Business District	Cemeteries & Burying Grounds
Dorchester Park	27.30	X	COB	BPRD		A97/USH	X	G	Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Dorchester South Burying Ground	1.93	X	COB	BPRD		Ch114S7/A97	X	G	Dorchester	Open Space District	Cemeteries & Burying Grounds
Downer Avenue Playground	0.78	X	COB	BPRD		A97	X	E	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Elmhurst Street Park	0.23	X	COB	BPRD	BPRD	A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Erie/Ellington Playground	0.37	X	COB	BPRD		A97/LWCF/OCB	X	G	Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Fenelon Street Playground	0.19	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Fernald Rock	0.06	X	COB	BCC	BPRD	A97	X	G	Dorchester	Residential District	Urban Wilds
Florida Street Reservation	0.07	X	COB	BPRD	BPRD	A97	X		Dorchester	Residential District	Malls, Squares & Plazas
Garvey Playground	5.26	X	COB	BPRD		A97	X	E	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Geneva Cliffs I	1.80	X	COB	BCC	BPRD	A97	X	G	Dorchester	Residential District	Urban Wilds
Harambee Park	44.75	X	COB	BPRD		A97/LWCF/UPARR/USH	X	E	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Hemenway Playground	4.40	X	COB	BPRD		A97/UPARR	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Henry Square	0.05	X	COB	BPRD	Private+BPRD	A97	X	G	Dorchester	Comm/Off/Business District	Malls, Squares & Plazas
Martin/Hilltop Playground	1.31	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
McConnell Park	6.76	X	COB	BPRD	BPRD	A97/LWCF	X	E	Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Mother's Rest at Four Corners	1.15	X	COB	BPRD		A97/LWCF/USH	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Mt. Bowdoin Green	0.54	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Malls, Squares & Plazas
Mullen Square	0.23	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Malls, Squares & Plazas
Nellie Miranda Memorial Park	0.09	X	COB	BPRD	BPRD	A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Nonquit Street Green	0.34	X	COB	BPRD	BPRD	A97	X	E	Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
O'Donnell Square	0.06	X	COB	BPRD	BPRD	A97	X		Dorchester	Residential District	Malls, Squares & Plazas
Peabody Square	0.05	X	COB	BPRD		A97	X	E	Dorchester	Comm/Off/Business District	Malls, Squares & Plazas
Puddingstone Park	0.55	X	COB	BPRD		A97	X	G	Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Quincy/Stanley Play Area	0.38	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Rev. Loesch Family Park	2.25	X	COB	BPRD		A97/UPARR/PARC	X	E	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Ripley Playground	0.85	X	COB	BPRD		A97/UPARR/PARC	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Roberts Playground	10.23	X	COB	BPRD		A97	X	E	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Ronan Park	11.24	X	COB	BPRD		A97/LWCF/USH	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Ryan Play Area	0.64	X	COB	BPRD		A97	X	E	Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Savin Hill Park	8.29	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Sharon's Park	0.31	X	COB	DCR	DCR	A97	X		Dorchester	Open Space District	Malls, Squares & Plazas
Stanley-Bellevue Park	0.36	X	COB	BPRD		A97	X		Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Tebroc Street Playlot	0.07	X	COB	BPRD	BPRD	A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Thetford/Evans Playground	0.68	X	COB	BPRD		A97	X	E	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Tremlett Square	0.16	X	COB	BPRD	BPRD	A97	X	G	Dorchester	Residential District	Malls, Squares & Plazas
Wellesley Park	0.71	X	COB	BPRD		A97	X	G	Dorchester	Residential District	Parks, Playgrounds & Athletic Fields

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Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Willowood Rock	0.56	X	COB	BCC	BPRD	A97	X		Dorchester	Open Space District	Urban Wilds
American Legion Playground	3.38	X	COB	BPRD		A97/ LWCF / UPARR / PARC	X	E	East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Bennington Street Cemetery	3.59	A	COB	BPRD		Ch114S7/A97	X	G	East Boston	Open Space District	Cemeteries & Burying Grounds
Brophy Park	0.78	X	COB	BPRD		A97/ LWCF	X	G	East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Central Square	0.91	X	COB	BPRD	BPRD	A97	X	E	East Boston	Open Space District	Malls, Squares & Plazas
Condor Street Beach I	2.74	X	COB	BCC	BPRD	A97/ LWCF / Ch91 /WPA/AUL	X	G	East Boston	Open Space District	Urban Wilds
Condor Street Overlook	0.45	X	COB	BCC	BPRD	A97/WPA	X	G	East Boston	Open Space District	Urban Wilds
Cuneo Park	0.23	X	COB	BPRD		A97	X	E	East Boston	Residential District	Parks, Playgrounds & Athletic Fields
East Boston Greenway	3.50	X	COB	BPRD	BPRD	A97/WPA	X	G	East Boston	Residential District	Parkways, Reservations & Beaches
East Boston Memorial Park I	17.68	X	COB	BPRD		A97/ UPARR	X	G	East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Golden Stairs Terrace Park I	0.17	X	COB	BPRD	BPRD	A97	X	G	East Boston	Residential District	Parks, Playgrounds & Athletic Fields
LoPresti Park	3.23	X	COB	BPRD		A97/ LWCF / PARC /WPA	X	E	East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
McLean Playground	0.43	X	COB	BPRD		A97	X	G	East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Noyes Playground	8.32	X	COB	BPRD		A97/ LWCF	X	E	East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Paris Street Playground	1.28	X	COB	BPRD		A97	X	E	East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Porzio Park	2.50	X	COB	BPRD	BPRD	A97/ LWCF /WPA/Ch91	X	G	East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Prescott Square	0.27	X	COB	BPRD		A97	X	G	East Boston	Open Space District	Malls, Squares & Plazas
Putnam Square	0.27	X	COB	BPRD		A97	X	G	East Boston	Open Space District	Malls, Squares & Plazas
Sumner & Lamson Street Playground	0.48	X	COB	BPRD		A97	X	E	East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
The Rockies	0.71	X	COB	BPRD	BPRD	A97	X	G	East Boston	Open Space District	Urban Wilds
Veterans Park II	0.20	X	COB	BPRD		A97	X	G	East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Back Bay Fens	70.10	X	COB	BPRD	BPRD	A97/ LWCF / UPARR / NRHP /WPA/Ch91	X	E	Fenway/Longwood	Residential District	Parks, Playgrounds & Athletic Fields
Boylston Street I	0.62	X	COB	DCR	DCR	A97	X		Fenway/Longwood	Residential District	Parkways, Reservations & Beaches
Commonwealth Avenue Mall II	0.97	X	COB	BPRD	BPRD	A97/ LWCF	X	E	Fenway/Longwood	Residential District	Malls, Squares & Plazas
Elderly Road Playground	0.12	X	COB	BPRD		A97	X	E	Fenway/Longwood	Special District	Parks, Playgrounds & Athletic Fields
Fire Alarm House Grounds	0.84	N	COB	BPRD	BFD	A97	X	G	Fenway/Longwood	Open Space District	Parks, Playgrounds & Athletic Fields
Joslin Park	0.31	X	COB	BPRD		A97	X	E	Fenway/Longwood	Institutional District	Malls, Squares & Plazas
Park Drive I	5.10	X	COB	DCR	DCR	A97/NRHP	X		Fenway/Longwood	Residential District	Parkways, Reservations & Beaches
Ramler Park	0.51	X	COB	BPRD		A97	X	E	Fenway/Longwood	Institutional District	Parks, Playgrounds & Athletic Fields
Riverway I	17.19	X	COB	BPRD	BPRD	A97/NRHP/GPOD	X	E	Fenway/Longwood	Institutional District	Parks, Playgrounds & Athletic Fields
Riverway V	0.45	X	COB	DCR	DCR	A97/NRHP/GPOD	X		Fenway/Longwood	Institutional District	Parkways, Reservations & Beaches
Symphony Community Park	0.48	X	COB	BPRD		A97	X	E	Fenway/Longwood	Comm/Off/Business District	Parks, Playgrounds & Athletic Fields
The Fenway I	6.75	X	COB	DCR	DCR	A97/NRHP	X		Fenway/Longwood	Residential District	Parkways, Reservations & Beaches
Spectacle Island I	86.00	X	COB	BPRD	DCR	A97	X		Harbor Islands	Industrial District	Parks, Playgrounds & Athletic Fields
Amatucci Playground	0.47	X	COB	BPRD		A97	X	E	Hyde Park	Comm/Off/Business District	Parks, Playgrounds & Athletic Fields
DeForest Urban Wild	1.02	X	COB	BCC	BPRD	A97	X		Hyde Park	Residential District	Urban Wilds
Dell Rock I	1.30	X	COB	BPRD	BPRD	A97	X		Hyde Park	Residential District	Urban Wilds
Fairview Cemetery	59.06	X	COB	BPRD		Ch114S7/A97	X	G	Hyde Park	Residential District	Cemeteries & Burying Grounds
Foley Square	0.14	X	COB	BPRD	BPRD	A97	X	G	Hyde Park	Residential District	Malls, Squares & Plazas
George Wright Golf Course	155.98	X	COB	BPRD		A97	X	E	Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields

SECTION 5 – INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST (OPEN SPACE INVENTORY)

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Iacono/Readville Playground	4.91	X	COB	BPRD		A97	X	E	Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Jeremiah Hurley Memorial Park	0.07	X	COB	BPRD	BPRD	A97	X	G	Hyde Park	Comm/Off/Business District	Malls, Squares & Plazas
Jones Square	0.04	X	COB	BPRD	BPRD	A97	X	G	Hyde Park	Residential District	Malls, Squares & Plazas
McGann Park	0.88	X	COB	BPRD		A97	X	G	Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Monterey Hilltop I	6.67	X	COB	BCC	BPRD	A97	X	G	Hyde Park	Residential District	Urban Wilds
Reservation Road Park	9.33	X	COB	BPRD	BPRD	A97/LWCF/WPA	X	E	Hyde Park	Industrial District	Parks, Playgrounds & Athletic Fields
Ross Playground	13.12	X	COB	BPRD		A97	X	E	Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Sherrin Woods I	23.95	X	COB	BCC	BPRD	LWCF/A97/WPA	X		Hyde Park	Residential District	Urban Wilds
Stonehill Park	0.37	X	COB	BPRD		A97	X	E	Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Webster Square	0.05	X	COB	BPRD	BPRD	A97	X	G	Hyde Park	Residential District	Malls, Squares & Plazas
West Austin Rock	0.30	X	COB	BCC	BPRD	A97	X		Hyde Park	Residential District	Urban Wilds
West Street	2.51	X	COB	BCC	BPRD	A97	X		Hyde Park	Industrial District	Urban Wilds
Williams Square	0.04	X	COB	BPRD	BPRD	A97	X	G	Hyde Park	Residential District	Malls, Squares & Plazas
Woodworth Square	0.03	X	COB	BPRD	BPRD	A97	X	G	Hyde Park	Residential District	Malls, Squares & Plazas
Amory Street Park	0.12	X	COB	BPRD	BPRD	A97	X	G	Jamaica Plain	Residential District	Parks, Playgrounds & Athletic Fields
Arnold Arboretum	224.27	X	COB	BPRD	Private	A97/GPOD/WPA	X		Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Beecher Street Play Area	0.17	X	COB	BPRD		A97	X	G	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Brewer-Burroughs Tot Lot	0.19	X	COB	BPRD		A97	X	G	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Bussey Brook Meadow I	24.68	X	COB	BPRD	BPRD	A97/WPA	X		Jamaica Plain	Open Space District	Urban Wilds
Flaherty Playground	1.31	X	COB	BPRD		A97	X	E	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Forbes Street Playground	0.09	X	COB	BPRD		A97	X	G	Jamaica Plain	Residential District	Parks, Playgrounds & Athletic Fields
Heath Square	0.10	X	COB	BPRD	BPRD	A97	X	G	Jamaica Plain	Residential District	Malls, Squares & Plazas
Jamaica Pond Park	97.74	X	COB	BPRD	BPRD	A97	X	E	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Jamaicaway	4.75	X	COB	DCR	DCR	A97/GPOD	X		Jamaica Plain	Institutional District	Parkways, Reservations & Beaches
Jefferson Playground	3.40	X	COB	BPRD		A97/USH	X	G	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Mahoney Square	0.06	X	COB	BPRD	BPRD	A97	X	E	Jamaica Plain	Comm/Off/Business District	Malls, Squares & Plazas
Mozart Street Playground	0.81	X	COB	BPRD		A97/LWCF/UPARR	X	G	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Nira Rock	1.45	X	COB	BPRD	BPRD	A97	X		Jamaica Plain	Open Space District	Urban Wilds
Oakview Terrace	0.10	X	COB	BPRD	BPRD	A97	X	G	Jamaica Plain	Open Space District	Malls, Squares & Plazas
Olmsted Park	42.83	X	COB	BPRD	BPRD	A97/NRHP/WPA/Ch91/NHESP/RSP	X	E	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Pagel Playground	2.72	X	COB	BPRD		A97/USH	X	G	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Parkman Memorial	6.71	X	COB	BPRD	BPRD	A97/GPOD	X	E	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Parkman Playground	2.07	X	COB	BPRD		A97/LWCF	X	E	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Paul Gore Street Park	0.73	X	COB	BPRD	BPRD	A97	X	G	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Rossmore/Stedman Park	0.07	X	COB	BPRD		A97	X	G	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Soldier's Monument	0.13	L	COB	BPRD	BPRD	A97	X	G	Jamaica Plain	Open Space District	Malls, Squares & Plazas
South Street Mall & Courts	0.43	X	COB	BPRD	BPRD	A97/Trust Fund	X	E	Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Babson Cookson Tract	2.41	N	COB	BCC	BPRD	A97/NHL	X		Mattapan	Residential District	Urban Wilds
Boston Nature Center_Visitor Ctr	2.33	X	COB	White Fund	MAS	Trust Fund	X		Mattapan	Industrial District	Parks, Playgrounds & Athletic Fields
Ernst Chery Jr. Playground	0.23	X	COB	BPRD	BPRD	A97	X	G	Mattapan	Residential District	Parks, Playgrounds & Athletic Fields
Gladeside I	10.29	X	COB	BCC	BPRD	A97/WPA	X		Mattapan	Open Space District	Urban Wilds
Hunt Playground	18.67	X	COB	BPRD	BPRD	A97	X	E	Mattapan	Open Space District	Parks, Playgrounds & Athletic Fields
Mattahunt Woods I	8.28	X	COB	BCC	BPRD	A97/WPA	X		Mattapan	Residential District	Urban Wilds

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Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Walker Playground	5.95	X	COB	BPRD		A97/ UPARR/USH	X	E	Mattapan	Comm/Off/Business District	Parks, Playgrounds & Athletic Fields
Walsh Playground	6.95	X	COB	BPRD		A97/ LWCF	X	G	Mattapan	Residential District	Parks, Playgrounds & Athletic Fields
Woodhaven	1.22	X	COB	BCC	BPRD	A97	X		Mattapan	Residential District	Urban Wilds
Back of the Hill Urban Wild	3.72	X	COB	BCC	BPRD	A97/ LWCF/USH	X		Mission Hill	Open Space District	Urban Wilds
Gibbons Playground	0.10	X	COB	BPRD		A97	X	G	Mission Hill	Open Space District	Parks, Playgrounds & Athletic Fields
Hanlon Square	0.04	X	COB	BPRD	BPRD	A97	X	G	Mission Hill	Open Space District	Malls, Squares & Plazas
McLaughlin Playground	11.67	X	COB	BPRD		A97/ LWCF	X	G	Mission Hill	Open Space District	Parks, Playgrounds & Athletic Fields
Mission Hill Playground	2.76	X	COB	BPRD		A97/ LWCF/PARC/UPARR	X	E	Mission Hill	Open Space District	Parks, Playgrounds & Athletic Fields
Riverway III	5.30	X	COB	BPRD	BPRD	A97/NRHP/GPOD	X	E	Mission Hill	Residential District	Parks, Playgrounds & Athletic Fields
Adams Park	0.71	X	COB	BPRD	Private	A97	X	E	Roslindale	Comm/Off/Business District	Parks, Playgrounds & Athletic Fields
Boundary I	6.93	X	COB	BPRD	BPRD	A97	X		Roslindale	Residential District	Urban Wilds
Emmel Square	0.02	X	COB	BPRD	BPRD	A97	X	G	Roslindale	Residential District	Malls, Squares & Plazas
Fallon Field	7.51	X	COB	BPRD		A97	X	E	Roslindale	Residential District	Parks, Playgrounds & Athletic Fields
Healy Playground	9.60	X	COB	BPRD		A97/ USH	X	E	Roslindale	Residential District	Parks, Playgrounds & Athletic Fields
Mount Hope Park	0.11	X	COB	BPRD	BPRD	A97	X	G	Roslindale	Residential District	Parks, Playgrounds & Athletic Fields
Mt. Hope Cemetery	125.05	X	COB	BPRD		Ch114S7/A97	X	G	Roslindale	Residential District	Cemeteries & Burying Grounds
Poplar Street Play Area	0.44	X	COB	BPRD		A97	X	G	Roslindale	Open Space District	Parks, Playgrounds & Athletic Fields
Roslindale Wetlands Urban Wild I	9.59	X	COB	BCC	BPRD	A97/LAND/WPA	X		Roslindale	Open Space District	Urban Wilds
Walter Street Cemetery	0.86	X	COB	BPRD	Private	Ch114S7/A97	X	G	Roslindale	Open Space District	Cemeteries & Burying Grounds
Beauford Play Area	0.24	X	COB	BPRD		A97	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Buena Vista	1.48	X	COB	BCC	BPRD	A97	X		Roxbury	Open Space District	Urban Wilds
Bynoe Park	2.68	X	COB	BPRD		A97/ UPARR/USH	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Carter Playground	4.91	X	COB	BPRD		A97/ LWCF	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Cedar Square	0.62	X	COB	BPRD		A97	X	G	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Clifford Playground	7.55	X	COB	BPRD		A97/ UPARR	X	G	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Crawford Street Playground	2.57	X	COB	BPRD		A97	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Dearborn Street Square	0.03	X	COB	BPRD	BPRD	A97	X	G	Roxbury	Industrial Development Area	Malls, Squares & Plazas
Dennis Street Park	0.69	X	COB	BPRD		A97/ USH	X	G	Roxbury	Residential District	Parks, Playgrounds & Athletic Fields
Denton Square	0.07	X	COB	BPRD		A97	X	G	Roxbury	Open Space District	Malls, Squares & Plazas
Dudley Town Common	0.62	X	COB	BPRD		A97	X	G	Roxbury	Comm/Off/Business District	Malls, Squares & Plazas
Eliot Burying Ground	0.79	A	COB	BPRD		Ch114S7/A97	X	G	Roxbury	Open Space District	Cemeteries & Burying Grounds
Elm Hill Park	0.12	X	COB	BPRD	BPRD	A97	X	G	Roxbury	Open Space District	Malls, Squares & Plazas
Father Jack Play Area	0.32	X	COB	BPRD		A97	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Franklin Park	392.19	X	COB	BPRD	BPRD	A97/WPA/NRHP	X		Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Franklin Park II	16.44	X	COB	DCR	Zoo New England	A97/ LWCF/USH/Lease	X		Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Franklin Park Zoo	63.83	X	COB	DCR	Zoo New England	A97/ LWCF/USH	X		Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
General Edward O. Gourdin African-American Veterans Memorial Park	0.50	X	COB	BPRD	BPRD	A97	X	E	Roxbury	Comm/Off/Business District	Malls, Squares & Plazas
Grove Hall Plaza	0.09	X	COB	BPRD	BPRD	A97	X	G	Roxbury	Open Space District	Malls, Squares & Plazas
Hannon Playground	1.97	X	COB	BPRD		A97/AUL	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Highland Park	3.63	X	COB	BPRD		A97	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Holborn Street Playlot	0.14	X	COB	BPRD		A97/ LWCF/USH	X	E	Roxbury	Residential District	Parks, Playgrounds & Athletic Fields

SECTION 5 – INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST (OPEN SPACE INVENTORY)

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Horatio Harris Park	2.52	X	COB	BPRD		A97/ LWCF	X	G	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Howes Playground	1.89	X	COB	BPRD		A97/ UPARR/ PARC	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Jeep Jones Park	1.82	X	COB	BPRD		A97/ PARC	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
King Street Play Area	0.13	X	COB	BPRD	Private	A97/Trust Fund	X	G	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Kittredge Park	0.12	X	COB	BPRD		A97/ PARC	X	E	Roxbury	Open Space District	Malls, Squares & Plazas
Lambert Avenue Playground	0.66	X	COB	BPRD		A97	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Laviscount Park	1.15	X	COB	BPRD	BPRD	A97/ PARC	X	G	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Linwood Park	0.07	X	COB	BPRD		A97	X	G	Roxbury	Open Space District	Malls, Squares & Plazas
Little Scobie Playground	0.79	X	COB	BPRD		A97	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Malcolm X Park I	15.24	X	COB	BPRD		A97/ LWCF	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Marcella Playground	5.09	X	COB	BPRD		A97/ LWCF	X	G	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Mt. Pleasant Play Area	0.40	X	COB	BPRD		A97	X	G	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Paula Titus Park	0.18	X	COB	BPRD	BPRD	A97	X	E	Roxbury	Residential District	Parks, Playgrounds & Athletic Fields
Quincy Street Play Area	0.55	X	COB	BPRD		A97/ USH	X	G	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Ramsay Park	5.49	X	COB	BPRD		A97/ UPARR/ USH	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Robert G. Lawson Park	0.12	X	COB	BPRD	BPRD	A97	X	G	Roxbury	Comm/Off/ Business District	Malls, Squares & Plazas
Rockledge Street Urban Wild	0.51	X	COB	BCC	BPRD	A97	X		Roxbury	Open Space District	Urban Wilds
St James Street Park	0.39	X	COB	BPRD		A97	X	G	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Trotter School Playground	1.24	X	COB	BPRD		A97/ UPARR	X	G	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Walnut Park	0.06	X	COB	BPRD	BPRD	A97	X	E	Roxbury	Open Space District	Malls, Squares & Plazas
White Stadium	12.57	X	COB	White Fund	BPS	A97	X		Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Winthrop Playground	1.56	X	COB	BPRD		A97/ PARC/ UPARR	X	E	Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Wolf Square	0.02	X	COB	BPRD	BPRD	A97	X		Roxbury	Open Space District	Malls, Squares & Plazas
A Street Park I	1.36	X	COB	BPRD	Private	A97	X	E	South Boston	Special District	Parks, Playgrounds & Athletic Fields
Buckley Playground	0.65	X	COB	BPRD		A97	X	G	South Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Christopher Lee Playground	5.44	X	COB	BPRD		A97/ LWCF	X	G	South Boston	Residential District	Parks, Playgrounds & Athletic Fields
Columbia Park	0.34	X	COB	BPRD	BPRD	A97	X	G	South Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Flaherty Park	0.25	X	COB	BPRD		A97	X	E	South Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Hawes Burying Ground	0.24	X	COB	BPRD		Ch114S7/A97	X	G	South Boston	Residential District	Cemeteries & Burying Grounds
L Street Beach	5.57	X	COB	BPRD	BCYF	A97/Ch91/ WPA	X		South Boston	Open Space District	Parkways, Reservations & Beaches
Lincoln Square	0.22	X	COB	BPRD		A97	X	G	South Boston	Residential District	Malls, Squares & Plazas
Mahoney Park	0.38	X	COB	BPRD	BPRD+ Community Group/ Non-Profit	A97	X	E	South Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Martin's Park	1.12	X	COB	BPRD	Private	A97/Ch91/ WPA	X	E	South Boston	Industrial District	Parks, Playgrounds & Athletic Fields
Medal of Honor Park	6.18	X	COB	BPRD		A97	X	E	South Boston	Residential District	Malls, Squares & Plazas
Moakley Park	58.78	X	COB	BPRD		A97/ UPARR	X	G	South Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Orton Field	1.59	X	COB	BPRD	BPRD	A97	X	E	South Boston	Residential District	Parks, Playgrounds & Athletic Fields
Sweeney Playground	0.46	X	COB	BPRD		A97	X	G	South Boston	Residential District	Parks, Playgrounds & Athletic Fields
Union Burying Ground	0.12	X	COB	BPRD		Ch114S7/A97	X	G	South Boston	Residential District	Cemeteries & Burying Grounds
Blackstone Square	2.44	X	COB	BPRD		A97	X	G	South End	Residential District	Malls, Squares & Plazas
Braddock Park	0.09	X	COB	BPRD	BPRD	A97	X	E	South End	Residential District	Malls, Squares & Plazas

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Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Bradford Street Play Area	0.04	X	COB	BPRD		A97	X	G	South End	Residential District	Parks, Playgrounds & Athletic Fields
Chester Square	0.89	X	COB	BPRD		A97	X	G	South End	Residential District	Malls, Squares & Plazas
Childe Hassam Park	0.06	X	COB	BPRD		A97	X	E	South End	Residential District	Malls, Squares & Plazas
Concord Square	0.15	X	COB	BPRD	BPRD	A97	X	G	South End	Residential District	Malls, Squares & Plazas
Franklin Square	2.48	X	COB	BPRD		A97/LWCF	X	G	South End	Residential District	Malls, Squares & Plazas
Harriet Tubman Square	0.14	X	COB	BPRD	BPRD	A97	X	E	South End	Open Space District	Malls, Squares & Plazas
Hayes Park	0.28	X	COB	BPRD		A97	X	G	South End	Residential District	Parks, Playgrounds & Athletic Fields
Hiscock Park	0.11	X	COB	BPRD		A97	X	G	South End	Residential District	Parks, Playgrounds & Athletic Fields
Msgr. Reynolds Playground	0.32	X	COB	BPRD		A97	X	E	South End	Residential District	Parks, Playgrounds & Athletic Fields
Newland Street Park	0.15	X	COB	BPRD	BPRD	A97	X	G	South End	Open Space District	Parks, Playgrounds & Athletic Fields
O'Day Playground	0.72	X	COB	BPRD		A97/PARC/UPARR	X		South End	Open Space District	Parks, Playgrounds & Athletic Fields
Peters Park I	3.33	X	COB	BPRD		A97	X	G	South End	Residential District	Parks, Playgrounds & Athletic Fields
Ringgold Park	0.45	X	COB	BPRD		A97	X	E	South End	Residential District	Parks, Playgrounds & Athletic Fields
Rotch Playground	2.75	X	COB	BPRD		A97	X	E	South End	Industrial District	Parks, Playgrounds & Athletic Fields
Rutland Square	0.16	X	COB	BPRD	BPRD	A97	X	G	South End	Residential District	Malls, Squares & Plazas
South End South Burying Ground	1.47	X	COB	BPRD		Ch114S7/A97	X	G	South End	Residential District	Cemeteries & Burying Grounds
St Helena's Park	0.17	X	COB	BPRD		A97	X	G	South End	Open Space District	Parks, Playgrounds & Athletic Fields
Titus Sparrow Park	1.80	X	COB	BPRD		A97	X	G	South End	Residential District	Parks, Playgrounds & Athletic Fields
Union Park	0.37	X	COB	BPRD	BPRD	A97	X	G	South End	Open Space District	Parks, Playgrounds & Athletic Fields
Waltham Square	0.12	X	COB	BPRD		A97	X	G	South End	Industrial District	Malls, Squares & Plazas
Watson Park	0.11	X	COB	BPRD	BPRD	A97	X	G	South End	Open Space District	Parks, Playgrounds & Athletic Fields
Worcester Square	0.34	X	COB	BPRD	BPRD	A97	X	G	South End	Residential District	Malls, Squares & Plazas
Allandale Woods I	48.15	X	COB	BPRD	BPRD	A97/WPA	X		West Roxbury	Conservation Protection Subdistrict	Urban Wilds
Allandale Woods II	10.60	X	COB	BCC	BPRD	LWCF/A97/WPA	X		West Roxbury	Open Space District	Urban Wilds
Beethoven School Play Area	0.52	X	COB	BPRD		A97	X	G	West Roxbury	Residential District	Parks, Playgrounds & Athletic Fields
Billings Field	10.78	X	COB	BPRD		A97/LWCF	X	G	West Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Carroll Pond Playground	0.48	X	COB	BPRD		A97/WPA	X	G	West Roxbury	Residential District	Parks, Playgrounds & Athletic Fields
Draper Playground	5.86	X	COB	BPRD	BPRD	A97	X	G	West Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Duffie Square	0.06	X	COB	BPRD	Private	A97	X	G	West Roxbury	Residential District	Malls, Squares & Plazas
Dunbarton Woods	0.74	X	COB	BCC	Private+ BPRD	A97	X		West Roxbury	Residential District	Urban Wilds
Hynes Playground	6.42	X	COB	BPRD		A97	X	G	West Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Millennium Park I	91.66	X	COB	BPRD	BPRD	SURF/WPA	X	E	West Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Millennium Park II	8.33	X	COB	BCC	BPRD	A97/SURF/WPA	X	E	West Roxbury	Open Space District	Urban Wilds
Piemonte Park	0.09	X	COB	BPRD		A97	X	G	West Roxbury	Open Space District	Malls, Squares & Plazas
Rivermoor II	1.03	X	COB	BCC	BPRD	A97	X		West Roxbury	Open Space District	Urban Wilds
Rivermoor III	0.52	X	COB	BCC	BPRD	A97	X		West Roxbury	Open Space District	Urban Wilds
VFW Parkway II	0.65	X	COB	BPRD	BPRD	A97	X	G	West Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Westerly Burying Ground	0.90	X	COB	BPRD		Ch114S7/A97/NRHP	X	G	West Roxbury	Open Space District	Cemeteries & Burying Grounds
Zero Quinn Way	0.03	X	COB	BPRD		A97	X	G	West Roxbury	Comm/Off/Business District	Parks, Playgrounds & Athletic Fields

STATE-OWNED

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Boyden Park	0.48	X	COM	DCR		A97	X		Allston-Brighton	Institutional District	Malls, Squares & Plazas
Chestnut Hill Reservoir	115.81	X	COM	DCR		A97/NRHP/WPA	X		Allston-Brighton	Open Space District	Parkways, Reservations & Beaches
Chestnut Hill Reservoir Garden	0.11	X	COM	DCR		A97	X		Allston-Brighton	Open Space District	Community Gardens
Leo M. Birmingham Parkway	6.98	X	COM	DCR		A97	X		Allston-Brighton	Comm/Off/Business District	Parkways, Reservations & Beaches
Reilly Playground	6.97	X	COM	DCR		A97	X		Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Armenian Heritage Park	0.25	X	MassDOT	RFK Greenway Conservancy	Armenian Heritage Foundation	A97/Acts2008 Ch306/CAT Mit	X		Central Boston	Special District	Malls, Squares & Plazas
Chinatown Park	0.84	X	MassDOT	RFK Greenway Conservancy		A97/Acts2008 Ch306/CAT Mit/RFK	X		Central Boston	Open Space District	Malls, Squares & Plazas
Dewey Square Parks	2.64	X	MassDOT	RFK Greenway Conservancy		A97/Acts2008 Ch306/CAT Mit/RFK	X		Central Boston	Special District	Malls, Squares & Plazas
Endicott Triangle	0.04	X	MassDOT	RFK Greenway Conservancy		A97/Acts2008 Ch306/CAT Mit/RFK	X		Central Boston	Special District	Malls, Squares & Plazas
Lincoln Street Green	0.18	X	MassDOT	RFK Greenway Conservancy		A97/Acts2008 Ch306/CAT Mit/RFK	X		Central Boston	Special District	Malls, Squares & Plazas
Nashua Street Park	2.03	X	COM	DCR		A97/Ch91/WPA	X		Central Boston	Open Space District	Parkways, Reservations & Beaches
North End Park	2.83	X	MassDOT	RFK Greenway Conservancy		A97/Acts2008 Ch306/CAT Mit/RFK	X		Central Boston	Special District	Malls, Squares & Plazas
North Point Park	2.34	X	COM	DCR		A97/WPA/Ch91	X		Central Boston	Special District	Parks, Playgrounds & Athletic Fields
Portal Park	0.37	X	MassDOT	DCR	DCR	A97/CAT Mit	X		Central Boston	Open Space District	Malls, Squares & Plazas
Prince Street Park	1.28	X	COM	DCR		A97/Ch91/WPA	X		Central Boston	Open Space District	Parkways, Reservations & Beaches
South Bank Park	2.40	X	COM	DCR	DCR	A97/CAT Mit/WPA	X		Central Boston	Open Space District	Parkways, Reservations & Beaches
Wharf District Park	4.71	X	MassDOT	RFK Greenway Conservancy		A97/Acts2008 Ch306/CAT Mit/RFK	X		Central Boston	Special District	Malls, Squares & Plazas
City Square	1.21	X	COM	DCR		A97/LL	X		Charlestown	Open Space District	Malls, Squares & Plazas
Paul Revere Park	6.40	X	COM	DCR		A97	X		Charlestown	Open Space District	Parkways, Reservations & Beaches
Rink Grounds	0.73	X	COM	DCR		A97	X		Charlestown	Open Space District	Parks, Playgrounds & Athletic Fields
Columbia Road Park	0.12	X	COM	DCR		A97	X		Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Commercial Point	2.38	X	COM	DCR	DCR	A97/WPA/Ch91/LWCF	X		Dorchester	Special District	Parkways, Reservations & Beaches
Gallivan/Hallet Circle	0.48	X	COM	DCR		A97	X		Dorchester	Comm/Off/Business District	Malls, Squares & Plazas
Malibu Beach	26.12	X	COM	DCR		A97	X		Dorchester	Open Space District	Parkways, Reservations & Beaches
McMorrow Playground	5.23	X	COM	DCR		A97	X		Dorchester	Industrial District	Parks, Playgrounds & Athletic Fields

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Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Meany Park	0.23	X	COM	DCR		A97	X		Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Old Harbor Park	8.04	X	COM	DCR		A97/ LWCF /WPA/Ch91	X		Dorchester	Comm/Off/Business District	Parkways, Reservations & Beaches
Patten's Cove	9.66	X	COM	DCR		A97/WPA/Ch91	X		Dorchester	Industrial District	Parkways, Reservations & Beaches
Pope John Paul II Park I	70.01	X	COM	DCR	DCR	A97/ACEC/WPA	X		Dorchester	Open Space District	Parkways, Reservations & Beaches
Port Norfolk Park	12.73	X	COM	DCR	DCR	A97/ACEC/WPA	X		Dorchester	Open Space District	Parkways, Reservations & Beaches
Richardson Park	1.11	X	COM	DCR	DCR	A97	X		Dorchester	Residential District	Malls, Squares & Plazas
Rink Grounds	2.53	X	COM	DCR	DCR+BPRD	A97	X		Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Savin Hill Beach	3.43	X	COM	DCR		A97	X		Dorchester	Open Space District	Parkways, Reservations & Beaches
Savin Hill Cove	1.77	X	COM	DCR		A97/WPA	X		Dorchester	Special District	Parkways, Reservations & Beaches
Tenean Beach	8.70	X	COM	DCR		A97/ACEC	X		Dorchester	Open Space District	Parkways, Reservations & Beaches
Toohig Playground	2.12	X	COM	DCR		A97	X		Dorchester	Residential District	Parks, Playgrounds & Athletic Fields
Ventura Playground	1.31	X	COM	DCR		A97	X		Dorchester	Open Space District	Parks, Playgrounds & Athletic Fields
Victory Road Park	6.16	X	COM	DCR		A97	X		Dorchester	Open Space District	Parkways, Reservations & Beaches
West Link Park	3.59	X	COM	DCR	DCR	A97/WPA/Ch91	X		Dorchester	Comm/Off/Business District	Parkways, Reservations & Beaches
Belle Isle Marsh Reservation	142.10	X	COM	DCR		A97/ LWCF /WPA/Ch91/ACEC	X		East Boston	Open Space District	Parkways, Reservations & Beaches
Constitution Beach	25.31	X	COM	DCR		A97	X		East Boston	Open Space District	Parkways, Reservations & Beaches
East Boston Piers Park	6.79	X	MassPort	COM	MassPort	Statute	X		East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
Agassiz Road	0.60	X	COM	DCR	DCR	A97/WPA	X		Fenway/Longwood	Open Space District	Parkways, Reservations & Beaches
Boylston Street II	1.78	X	COM	DCR	DCR	A97/WPA	X		Fenway/Longwood	Residential District	Parkways, Reservations & Beaches
Charlesgate I	6.59	X	COM	DCR	DCR	A97	X		Fenway/Longwood	Residential District	Parkways, Reservations & Beaches
Charlesgate II	1.49	X	COM	DCR	DCR	A97	X		Fenway/Longwood	Residential District	Parkways, Reservations & Beaches
Park Drive II	1.38	X	COM	DCR	DCR	A97/NRHP	X		Fenway/Longwood	Residential District	Parkways, Reservations & Beaches
Riverway II	2.36	X	COM	DCR	DCR	A97/NRHP/GPOD	X		Fenway/Longwood	Institutional District	Parkways, Reservations & Beaches
The Fenway II	0.77	X	COM	DCR	DCR	A97/NRHP	X		Fenway/Longwood	Residential District	Parkways, Reservations & Beaches
Gallops Island	25.10	X	COM	DCR		A97/Ch91/WPA	X		Harbor Islands	Comm/Off/Business District	Parkways, Reservations & Beaches
Georges Island	40.46	X	COM	DCR		A97/Ch91/WPA	X		Harbor Islands	Comm/Off/Business District	Parkways, Reservations & Beaches
Lovells Island	60.96	X	COM	DCR		A97/Ch91/WPA	X		Harbor Islands	Comm/Off/Business District	Parkways, Reservations & Beaches
Spectacle Island II	25.52	X	COM	DCR	DCR	A97	X		Harbor Islands	Industrial District	Parks, Playgrounds & Athletic Fields
Camp Meigs	2.87	X	COM	DCR		A97/ACEC	X		Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Colella Playground	0.66	X	COM	DCR		A97	X		Hyde Park	Comm/Off/Business District	Parks, Playgrounds & Athletic Fields
Connell Fields/Hickey Courts	16.78	X	COM	DCR		A97	X		Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Dana Avenue Urban Wild I	0.78	X	COM	DCR		A97	X		Hyde Park	Industrial District	Urban Wilds
Dooley Playground	0.54	X	COM	DCR		A97	X		Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Doyle Playground	0.94	X	COM	DCR		A97	X		Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields

SECTION 5 – INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST (OPEN SPACE INVENTORY)

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Martini Playground	5.78	X	COM	DCR		A97/LWCF/WPA	X		Hyde Park	Comm/Off/Business District	Parkways, Reservations & Beaches
Mother Brook Reservation	30.39	X	COM	DCR		A97	X		Hyde Park	Residential District	Parkways, Reservations & Beaches
Moynihan Playground	7.19	X	COM	DCR		A97	X		Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Neponset Valley Parkway	5.54	X	COM	DCR		A97	X		Hyde Park	Residential District	Parkways, Reservations & Beaches
Railroad Avenue	1.10	X	COM	DCR		A97	X		Hyde Park	Residential District	Urban Wilds
Stony Brook Recreation Complex	27.40	X	COM	DCR		A97	X		Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Stony Brook Reservation I	285.44	X	COM	DCR		A97/Wetlands	X		Hyde Park	Residential District	Parkways, Reservations & Beaches
Stony Brook Reservation III	70.24	X	COM	DCR		A97/WPA/NHP	X		Hyde Park	Residential District	Parkways, Reservations & Beaches
Truman Parkway	2.72	X	COM	DCR		A97	X		Hyde Park	Industrial District	Parkways, Reservations & Beaches
Weider Park	6.88	X	COM	DCR		A97	X		Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Arborway I	16.78	X	COM	DCR	DCR	A97/GPOD	X		Jamaica Plain	Open Space District	Parkways, Reservations & Beaches
Arborway Overpass Path	1.16	X	COM	DCR	DCR	A97	X		Jamaica Plain	Open Space District	Parkways, Reservations & Beaches
Centre Street I	2.25	X	COM	DCR	DCR	A97/100/GPOD	X		Jamaica Plain	Residential District	Parkways, Reservations & Beaches
Chestnut Street	1.04	X	COM	DCR	DCR	A97/GPOD	X		Jamaica Plain	Conservation Protection Subdistrict	Parkways, Reservations & Beaches
Johnson Park I	2.60	X	COM	DCR		A97	X		Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Johnson Park II	0.17	X	MBTA	DCR	DCR	A97	X		Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Perkins Street	0.23	X	COM	DCR	DCR	A97/GPOD	X		Jamaica Plain	Open Space District	Parkways, Reservations & Beaches
Willow Pond Meadow	6.25	X	COM	DCR	DCR	A97/WPA	X		Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Kennedy Garden	0.16	X	COM	DCR		A97	X		Mattapan	Open Space District	Community Gardens
Kennedy Playground	0.26	X	COM	DCR		A97	X		Mattapan	Open Space District	Parks, Playgrounds & Athletic Fields
Msgr. Francis A. Ryan Park	6.14	X	COM	DCR		A97	X		Mattapan	Open Space District	Parks, Playgrounds & Athletic Fields
Riverway IV	1.92	X	COM	DCR	DCR	A97/NRHP/GPOD	X		Mission Hill	Residential District	Parkways, Reservations & Beaches
Charles River Reservation	171.90	X	COM	DCR	DCR	A97/Ch91/WPA	X		Multi-District	Open Space District	Parkways, Reservations & Beaches
Neponset River Reservation I	183.50	X	COM	DCR	DCR	A97/WPA/ACEC	X		Multi-District	Open Space District	Parkways, Reservations & Beaches
Southwest Corridor Park	48.48	X	MBTA	DCR	DCR	A97	X		Multi-District	Industrial District	Parkways, Reservations & Beaches
Arborway II	1.15	X	COM	DCR	DCR	A97	X		Roslindale	Open Space & Residential Districts	Parkways, Reservations & Beaches
Centre Street II	0.34	X	COM	DCR	DCR	A97/100/GPOD	X		Roslindale	Residential District	Parkways, Reservations & Beaches
Melnea A. Cass Recreational Complex	2.58	X	COM	DCR	DCR	A97	X		Roxbury	Open Space District	Parks, Playgrounds & Athletic Fields
Morton Street	0.76	X	COM	DCR		A97	X		Roxbury	Comm/Off/Business District	Parkways, Reservations & Beaches
Roxbury Heritage State Park I	2.82	X	COM	DCR		A97	X		Roxbury	Institutional District	Parks, Playgrounds & Athletic Fields
Carson Beach	24.65	X	COM	DCR		A97	X		South Boston	Open Space District	Parkways, Reservations & Beaches
Columbia Road/Day Boulevard	16.85	X	COM	DCR	DCR	A97	X		South Boston	Open Space District	Parkways, Reservations & Beaches
M Street Beach	4.40	X	COM	DCR		A97	X		South Boston	Open Space District	Parkways, Reservations & Beaches

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Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Marine Park	17.20	X	COM	DCR		A97	X		South Boston	Open Space District	Parkways, Reservations & Beaches
Strandway/Castle Island	47.70	X	COM	DCR		A97	X		South Boston	Open Space District	Parkways, Reservations & Beaches
Bellevue Hill Reservation	26.67	X	COM	DCR		A97	X		West Roxbury	Open Space District	Parkways, Reservations & Beaches
Centre Street IV	0.32	X	COM	DCR	DCR	A97	X		West Roxbury	Conservation Protection Subdistrict & Residntl Dst	Parkways, Reservations & Beaches
Hancock Woods I	45.95	X	COM	DCR		A97/WPA	X		West Roxbury	Conservation Protection Subdistrict	Parkways, Reservations & Beaches
Havey Beach	15.20	X	COM	DCR	DCR	A97/WPA	X		West Roxbury	Open Space District	Parkways, Reservations & Beaches
Sawmill Brook/Brook Farm	149.44	X	COM	DCR		A97/NRHP/WPA	X		West Roxbury	Open Space District	Parkways, Reservations & Beaches
Stony Brook Reservation II	141.96	X	COM	DCR		A97	X		West Roxbury	Residential District	Parkways, Reservations & Beaches
VFW Parkway I	12.44	X	COM	DCR	DCR	A97	X		West Roxbury	Comm/Off/Business District	Parkways, Reservations & Beaches
West Roxbury Parkway	31.76	X	COM	DCR		A97	X		West Roxbury	Comm/Off/Business District	Parkways, Reservations & Beaches

FEDERALLY-OWNED

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Bunker Hill Monument	3.78	X	United States of America	NPS	NPS	NRHP/PR	X		Charlestown	Residential District	Malls, Squares & Plazas
Navy Yard Grounds	3.58	X	United States of America	NPS		NHL	X		Charlestown	Industrial District	Parks, Playgrounds & Athletic Fields
Dorchester Heights NHS	4.40	X	United States of America	NPS		NRHP	X		South Boston	Residential District	Malls, Squares & Plazas

PRIVATELY-OWNED

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Brian Honan Park	0.96	X	Private	BCC	Private	A97/CR	X		Allston-Brighton	Residential District	Parks, Playgrounds & Athletic Fields
Theresa Hynes Park	0.42	X	Private	BCC	Private	A97/CR	X		Allston-Brighton	Residential District	Parks, Playgrounds & Athletic Fields
Theresa Hynes Park Access Easement	0.02	X	Private	BCC	Private	A97/CR	X		Allston-Brighton	Residential District	Parks, Playgrounds & Athletic Fields
Norman Leventhal Park	1.54	X	Private	BRA	Private	Agrmnt	X		Central Boston	Comm/Office/Business District	Parks, Playgrounds & Athletic Fields
Patrick J. Kelly Park	0.25	X	Private	Private	Private	A97	X		Charlestown	Residential District	Parks, Playgrounds & Athletic Fields
Thompson Island	169.89	L	Private	DCR/NPS	Private	A97/CR	X		Harbor Islands	Comm/Office/Business District	Parkways, Reservations & Beaches
Blake Estates Urban Wild I	1.21	X	Private	BCC	Private	A97/CR/WPA	X		Hyde Park	Industrial District	Urban Wilds
Blake Estates Urban Wild II	0.35	N	Private	BCC	Private	A97/CR/WPA	X		Hyde Park	Residential District	Parks, Playgrounds & Athletic Fields
Stony Brook Reservation CR	2.56	N	Private	DCR	Private	A97	X		Hyde Park		Parkways, Reservations & Beaches
Lawrence Farm	41.16	N	Private	TTOR	Private	AP/Ch61A (Part)	X		Jamaica Plain	CPS	Agricultural Preservation
Parley Vale Preserve	0.72	N	Private	BCC	Private	A97/Easement	X		Jamaica Plain	Residential District	Parks, Playgrounds & Athletic Fields
Boston Nature Center	58.53	X	Private	MAS	MAS	LandTrust/Statt	X		Mattapan	Industrial District	Urban Wilds

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Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Clark/Cooper Community Garden	3.55	N	Private	MAS	Community Group/Non-Profit	LandTrust/Statt	X		Mattapan	Industrial District	Community Gardens
Parker Hilltop	1.69	X	Private	BCC	Private + BPRD	A97/CR	X		Mission Hill	Institutional District	Urban Wilds
Nancy Kafka Reserve	0.71	N	Private	BCC	Private	A97/CR	X		Roxbury	Residential District	Parks, Playgrounds & Athletic Fields
Children's Wharf Harborwalk	0.23	X	Private	BPRD	Private	A97/Ch91/WPA	X		South Boston	Industrial District	Malls, Squares & Plazas
Allandale Field	2.63	X	Private	BPRD	Private + BPRD	A97/Deed Restr	X		West Roxbury	CPS	Parks, Playgrounds & Athletic Fields
Allandale Woods III	16.73	X	Private	BCC	Private + BPRD	A97/CR/WPA	X		West Roxbury	CPS	Urban Wilds
Allandale Woods IV	6.29	X	Private	BCC	Private + BPRD	A97/CR/WPA	X		West Roxbury	CPS	Urban Wilds
Allandale Woods ROW	0.16	X	Private	BCC	BPRD	A97	X		West Roxbury	CPS	Urban Wilds
Allandale Woods V	2.78	X	Private	BCC & TTOR	BPRD	A97/Easmnt/WPA	X		West Roxbury	CPS	Urban Wilds

UNPROTECTED OPEN SPACE

CITY-OWNED

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Commonwealth Avenue Outbound	5.53	X	COB	BWSC			N		Allston-Brighton	Comm/Office/Business District	Parkways, Reservations & Beaches
Raymond V. Mellone Park II	0.48	X	COB	NULL	BPRD	100	N		Allston-Brighton	Special District	Parks, Playgrounds & Athletic Fields
Shubow Park II	0.16	X	COB	NULL	BPRD		N		Allston-Brighton	Open Space District	Parks, Playgrounds & Athletic Fields
Union Square Plaza	0.39	X	COB	NULL			N		Allston-Brighton	Open Space District	Malls, Squares & Plazas
Wilson Park	0.10	X	COB	NULL			N		Allston-Brighton	Open Space District	Malls, Squares & Plazas
Wilson Square	0.06	X	COB	NULL			N		Allston-Brighton	Open Space District	Malls, Squares & Plazas
BPL Courtyard	0.19	X	COB	NULL			N		Back Bay/Beacon Hill	Comm/Office/Business District	Malls, Squares & Plazas
Aquarium Harborwalk II	0.05	X	BRA	NULL	BRA	Ch91/WPA	N		Central Boston	Special District	Malls, Squares & Plazas
Federal Reserve Bank Harborwalk	0.08	X	COB	NULL			N		Central Boston	Comm/Office/Business District	Malls, Squares & Plazas
Charlestown HS Athletic Fields	10.42	X	COB	NULL	BPRD	Ch91/WPA	N		Charlestown	Open Space District	Parks, Playgrounds & Athletic Fields
Charlestown Sprouts Garden	0.48		COB	NULL			N		Charlestown	Open Space District	Community Gardens
Belle Isle Coastal Preserve	1.57	X	COB	NULL	DND	WPA/Ch91/ACEC	N		East Boston	Open Space District	Open Land
Bonito Square	0.06	X	COB	NULL	BPRD		N		East Boston	Residential District	Malls, Squares & Plazas
Golden Stairs Terrace Park II	0.08	X	COB	NULL	BPRD		N		East Boston	Residential District	Malls, Squares & Plazas
English H.S. Athletic Fields	7.63	X	COB	NULL	BPRD		N		Jamaica Plain	Open Space District	Parks, Playgrounds & Athletic Fields
Hunt Playground II	0.19	X	COB	NULL	BPRD		N		Mattapan	Open Space & Residential Districts	Parks, Playgrounds & Athletic Fields
American Legion Highway	6.78	X	COB	NULL	BPRD	100	N		Multi-District	Comm/Office/Business District	Parkways, Reservations & Beaches
Delano Park	0.21	X	COB	NULL	BPRD		N		Roslindale	Open Space District	Malls, Squares & Plazas
Madison Park H.S. Athletic Fields	9.61	X	COB	NULL	BPRD		N		Roxbury	Institutional District	Parks, Playgrounds & Athletic Fields
Peters Park II	0.51	X	BRA	NULL	BPRD		N		South End	Residential District	Parks, Playgrounds & Athletic Fields
Puerto Rican Veterans Memorial Park	0.13	X	COB	NULL	DND		N		South End	Open Space District	Malls, Squares & Plazas

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Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Union Park Street Playground	0.41	X	BWSC	BPRD	BPRD	Lease	N		South End	Special District	Parks, Playgrounds & Athletic Fields
Bellevue Street Green	0.12	X	COB	NULL	PWD		N		West Roxbury	Residential District	Malls, Squares & Plazas
Ohrenberger Play Area	0.67	X	COB	NULL			N		West Roxbury	Residential District	Parks, Playgrounds & Athletic Fields
West Roxbury H.S. Athletic Fields	13.43	X	COB	NULL	BPRD		N		West Roxbury	Institutional District	Parks, Playgrounds & Athletic Fields
West Roxbury High School Marsh	21.49	X	COB	NULL		WPA	N		West Roxbury	Institutional District	Open Land

STATE-OWNED

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Commonwealth Plaza	0.16	X	COM	NULL	Private		N		Allston-Brighton	Institutional District	Malls, Squares & Plazas
Pope John Paul II Park II	0.33	X	MBTA	NULL	DCR		N		Dorchester	Open Space District	Parkways, Reservations & Beaches
UMass Harborwalk	13.09	X	COM	NULL		Ch91/WPA	N		Dorchester	Institutional District	Parkways, Reservations & Beaches
Bremen Street Park I	17.79	X	COM	MA EOEEA	MassPort	CAT Mit	N		East Boston	Special District	Parks, Playgrounds & Athletic Fields
Bremen Street Park II	0.01	X	MassPort	MA EOEEA	MassPort	CAT Mit	N		East Boston	Industrial District	Parks, Playgrounds & Athletic Fields
East Boston Greenway Extension	1.24	X	MassPort	NULL	MassPort		N		East Boston	Multiple Districts	Parks, Playgrounds & Athletic Fields
East Boston Memorial Park II	1.80	X	MassPort	MA EOEEA	BPRD	CAT Mit/Esmnt	N		East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
East Boston Memorial Park III	3.26	X	COM	NULL		CAT Mit	N		East Boston	Open Space District	Parks, Playgrounds & Athletic Fields
MassPort Harborwalk	2.47	X	MassPort	MA EOEEA	MassPort	AM/Ch91/WPA	N		East Boston	Industrial District	Malls, Squares & Plazas
Navy Fuel Pier Airport Edge Buffer	0.84	X	MassPort	NULL	MassPort	Ch91/WPA	N		East Boston		Parks, Playgrounds & Athletic Fields
Wood Island Bay Edge Park	0.60	X	MassPort	NULL	MassPort		N		East Boston	Residential District	Parks, Playgrounds & Athletic Fields
Bussey Brook Meadow II	1.26	X	MBTA	NULL			N		Roslindale	Open Space District	Open Land
Tunnel Harborwalk	0.18	X	COM	NULL		Ch 91/WPA	N		South Boston	Special District	Malls, Squares & Plazas

FEDERALLY-OWNED

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
408 Atlantic Avenue Harborwalk	0.03	X	USA	NULL	Private	Ch91/WPA	N		Central Boston	Special District	Malls, Squares & Plazas
Kennedy Library Harborwalk	3.36	X	USA	NULL	US GSA	Ch91/WPA	N		Dorchester	Industrial District	Malls, Squares & Plazas
Fan Pier Plaza	2.36	X	USA	NULL		Ch91/WPA	N		South Boston	Special District	Malls, Squares & Plazas

PRIVATELY-OWNED

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Rena Park	2.22	X	Private	NULL	Private	Zoning Agrmnt	N		Allston-Brighton	Special District	Parks, Playgrounds & Athletic Fields
400R Atlantic Avenue Harborwalk	0.05	X	Private	NULL	Private	Ch91/WPA	N		Central Boston	Special District	Malls, Squares & Plazas
Aquarium Harborwalk I	0.57	X	Private	NULL		Ch91/WPA	N		Central Boston	Special District	Malls, Squares & Plazas
Commercial Wharf Harborwalk	0.19	X	Private	NULL	Private	Ch91/WPA	N		Central Boston	Special District	Malls, Squares & Plazas

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SECTION 5 – INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST (OPEN SPACE INVENTORY)

Open Space Site Name	Acres	PA	Ownership	Open Space Ownership/ Jurisdiction	Open Space Mngmnt	Protection (Grant Bolded)	POS	C	Neighborhood	General Zoning Districts	Current Use (Open Space Type)
Independence Wharf Harborwalk	0.18	X	Private	NULL	Private	Ch91/WPA	N		Central Boston	Industrial District	Malls, Squares & Plazas
India Wharf Harborwalk	0.42	X	Private	NULL	Private	Ch91/WPA	N		Central Boston	Special District	Malls, Squares & Plazas
Joe's American Harborwalk	0.04	X	Private	NULL	Private	Ch91/WPA	N		Central Boston	Special District	Malls, Squares & Plazas
Rowe's Wharf Harborwalk	1.26	X	Private	NULL	Private	Ch91/WPA	N		Central Boston	Special District	Malls, Squares & Plazas
Russia Wharf Harborwalk	0.06	X	Private	NULL		CAT Mit	N		Central Boston	Special District	Malls, Squares & Plazas
Tufts Wharf Harborwalk	0.74	X	Private	NULL		CATMit/Ch91/WPA	N		Central Boston	Special District	Malls, Squares & Plazas
Schraffts Centre Harborwalk	1.01	X	Private	NULL		Ch91/WPA/100	N		Charlestown	Industrial District	Malls, Squares & Plazas
Spaulding Rehabilitation Plaza	0.30	X	Private	NULL	Private	WPA/Ch91	N		Charlestown	Special District	Malls, Squares & Plazas
St Francis De Sales Cemetery	1.80		Private	NULL			N		Charlestown	Residential District	Cemeteries & Burying Grounds
10 Josephine Street Garden	0.07	N	TTOR	TTOR	Private	PDR/Land Trust	N		Dorchester	Residential District	Community Gardens
Cedar Grove Cemetery	54.19		Private	NULL			N		Dorchester	Residential District	Cemeteries & Burying Grounds
Codman Burying Ground	2.63	N	Private	NULL			N		Dorchester	Residential District	Cemeteries & Burying Grounds
Temple Ohabei Shalom Cemetery	2.34		Private	NULL			N		East Boston	Open Space District	Cemeteries & Burying Grounds
Stony Brook Sewer Easement	0.31	X	Private	NULL	Private	Sewer Easement	N		Fenway/Longwood	Residential District	Malls, Squares & Plazas
First Church Cemetery	0.63		Private	NULL			N		Jamaica Plain	Residential District	Cemeteries & Burying Grounds
Mattahunt Woods II	3.74		Private	NULL		WPA	N		Mattapan	Residential District	Other Open Land
New Calvary Cemetery	59.45		Private	NULL	Private		N		Mattapan	Open Space District	Cemeteries & Burying Grounds
St Mary's Cemetery	10.50		Private	NULL			N		Mattapan	Open Space District	Cemeteries & Burying Grounds
St Michael's Cemetery	46.50		Private	NULL			N		Mattapan	Open Space District	Cemeteries & Burying Grounds
Calvary Cemetery	47.24		Private	NULL	Private		N		Roslindale	Residential District	Cemeteries & Burying Grounds
Forest Hills Cemetery	243.79	X	Private	NULL			N		Roslindale	Open Space District	Cemeteries & Burying Grounds
Toll Gate Cemetery	0.90	N	Private	NULL			N		Roslindale	Open Space District	Cemeteries & Burying Grounds
Fan Pier Harborwalk	1.66	X	Private	NULL			N		South Boston	Special District	Malls, Squares & Plazas
Fort Point Channel Harborwalk	1.41	X	Private	NULL		CAT Mit	N		South Boston	Industrial District	Malls, Squares & Plazas
ICA Pier Walk	0.29	X	Private	NULL			N		South Boston	Comm/Office/Business District	Malls, Squares & Plazas
Pier Four Harborwalk	0.09	X	Private	NULL		Ch91/WPA	N		South Boston	Special District	Malls, Squares & Plazas
Reserved Channel Harborwalk	3.19	X	Private	NULL	Private	Ch91	N		South Boston	Industrial District	Malls, Squares & Plazas
St Augustine Burying Ground	0.91	N	Private	Private	Private		N		South Boston	Residential District	Cemeteries & Burying Grounds
Congregation Mishkan Tefia Cemetery	9.59		Private	NULL			N		West Roxbury	Open Space District	Cemeteries & Burying Grounds
Gethsemane Cemetery	20.84		Private	NULL			N		West Roxbury	Open Space District	Cemeteries & Burying Grounds
Grove Street Cemetery	25.38		Private	NULL			N		West Roxbury	Open Space District	Cemeteries & Burying Grounds
Mount Benedict Cemetery	79.31		Private	NULL			N		West Roxbury	CPS	Cemeteries & Burying Grounds
Mount Lebanon Cemetery	48.72	X	Private	NULL			N		West Roxbury	Open Space District	Cemeteries & Burying Grounds
St Joseph's Cemetery	129.11		Private	NULL			N		West Roxbury	CPS	Cemeteries & Burying Grounds

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LANDS OF CONSERVATION AND RECREATION INTEREST

SITES OF OPEN SPACE VALUE

Site Name / Parcel ID	Acres	Ownership	Neighborhood
2100478000	2.46	Private	Allston-Brighton
2100479000	0.80	Private	Allston-Brighton
2100481000	1.72	Private	Allston-Brighton
Foster Street Hill	4.14	Private	Allston-Brighton
ROW 10	0.11	Public	Allston-Brighton
ROW 9	0.11	Public	Allston-Brighton
SITE 2	0.67	Private	Allston-Brighton
The Cenacles	15.34	Private	Allston-Brighton
0301628000	0.09	Private	Central Boston
0301632000	0.20	Private	Central Boston
0301639000	0.11	Private	Central Boston
0303037000	2.25	Public	Central Boston
0500068020	0.20	Private	Central Boston
Reggie Wong Park	0.32	Public	Central Boston
0200440500	0.09	Public	Charlestown
0201227000	0.41	Private	Charlestown
0202192000	0.10	Public	Charlestown
0202670000	0.11	Private	Charlestown
0202732000	1.33	Public	Charlestown
0203517900	2.66	Private	Charlestown
0203627020	0.04	Public	Charlestown
0203734010	0.12	Public	Charlestown
Bunker Hill CC Athletic Fields	14.07	Public	Charlestown
Bunker Hill CC Campus Grounds	4.09	Public	Charlestown
Kennedy Family Service Cntr Playlot	0.20	Private	Charlestown
Mt. Vernon Street Plaza	0.15	Public	Charlestown
O'Reilly Way-Carney Court	0.61	Public	Charlestown
SITE 6	5.95	Public	Charlestown
SITE 8	5.13	Public	Charlestown
Thompson Square (ROW)	0.06	Public	Charlestown
1401148000	0.12	Public	Dorchester
1401193000	0.16	Private	Dorchester
1401194000	0.33	Public	Dorchester
1401324000	0.25	Private	Dorchester
1401325000	0.14	Public	Dorchester
1401360000	0.13	Private	Dorchester
1401361000	0.21	Private	Dorchester
1401362000	0.23	Private	Dorchester
1401362001	0.61	Private	Dorchester
1402488000	0.10	Public	Dorchester

Site Name / Parcel ID	Acres	Ownership	Neighborhood
1405196150	3.28	Public	Dorchester
1602776000	2.09	Private	Dorchester
1603411000	0.11	Private	Dorchester
1603412000	0.11	Private	Dorchester
1603449000	0.28	Private	Dorchester
0100395000	0.07	Public	East Boston
0100396000	0.07	Private	East Boston
0100397000	0.07	Public	East Boston
0100398000	0.06	Public	East Boston
0100399000	0.08	Public	East Boston
0100400000	0.07	Public	East Boston
0100401000	0.03	Public	East Boston
0100401001	0.01	Public	East Boston
0100402000	0.06	Public	East Boston
0100403000	0.06	Public	East Boston
0100404000	0.05	Public	East Boston
0100405000	0.06	Public	East Boston
0100406000	0.06	Public	East Boston
0100407000	0.06	Public	East Boston
0100408000	0.05	Public	East Boston
0100409000	0.06	Public	East Boston
0100410000	0.08	Public	East Boston
0100429000	0.11	Public	East Boston
0100430000	0.06	Public	East Boston
0100431000	0.08	Public	East Boston
0100432000	0.09	Public	East Boston
0100432001	0.01	Public	East Boston
0100432002	0.10	Public	East Boston
0100990000	1.06	Private	East Boston
0103709000	2.40	Private	East Boston
0103709001	0.31	Private	East Boston
0103710000	6.53	Private	East Boston
0103988001	0.48	Private	East Boston
0103989000	3.12	Public	East Boston
0104332000	0.68	Private	East Boston
0104332001	0.84	Private	East Boston
0105470000	0.31	Public	East Boston
0105533000	0.13	Public	East Boston
0105569000	0.22	Public	East Boston
0105609550	0.53	Private	East Boston
0105664000	0.60	Public	East Boston
Don Orione	9.09	Private AND Public	East Boston
ROW 2	0.08	Public	East Boston
ROW 3	0.08	Public	East Boston
ROW 4	0.49	Public	East Boston

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Site Name / Parcel ID	Acres	Ownership	Neighborhood
SITE 7	1.33	Public	East Boston
1803703000	1.56	Public	Hyde Park
1807234600	18.01	Private	Hyde Park
1807263500	10.31	Private	Hyde Park
1807317000	0.58	Public	Hyde Park
1807318100	1.34	Private	Hyde Park
1807321100	11.96	Private	Hyde Park
1808526000	0.07	Private	Hyde Park
1808585003	0.02	Private	Hyde Park
1808585004	0.02	Private	Hyde Park
1812160000	1.47	Private	Hyde Park
1812998000	1.12	Private	Hyde Park
1812999000	0.23	Private	Hyde Park
1813004000	0.39	Private	Hyde Park
1813005000	0.41	Public	Hyde Park
1103764000	1.27	Public	Jamaica Plain
1103765000	1.18	Public	Jamaica Plain
1203487000	13.16	Public	Jamaica Plain
1902226000	0.09	Private	Jamaica Plain
1902719000	7.08	Private	Jamaica Plain
1902797020	4.75	Private	Jamaica Plain
1902800000	1.48	Private	Jamaica Plain
Hellenic Hill I	15.26	Private	Jamaica Plain
Hellenic Hill II	6.37	Private	Jamaica Plain
SITE 4	4.79	Private	Jamaica Plain
1405147000	0.07	Private	Mattapan
1405148000	0.09	Private	Mattapan
1405149000	0.09	Private	Mattapan
1800113700	5.82	Public	Mattapan
1801134000	0.36	Public	Mattapan
1803370800	5.96	Private	Mattapan
1803370900	6.53	Private	Mattapan
Prendergast Entrance	1.03	Private	Mattapan
1000617000	0.23	Private	Mission Hill
1001220000	0.09	Public	Mission Hill
1001221000	0.11	Public	Mission Hill
Kevin Fitzgerald Park	6.58	Private	Mission Hill
1806011000	7.01	Public	Roslindale
1806466000	0.30	Public	Roslindale
1808198000	1.11	Private	Roslindale
1903862200	2.63	Public	Roslindale
2005139000	0.12	Private	Roslindale
2005142000	0.11	Private	Roslindale
2005166000	0.14	Private	Roslindale
2005167000	0.14	Private	Roslindale
2005168000	0.13	Private	Roslindale
Fredericks Middle School Playground	5.13	Public	Roxbury
NCAA Museum Grounds	0.84	Private	Roxbury
St. Monica's	0.80	Private	Roxbury
0600204000	0.50	Private	South Boston
0700238100	3.33	Private	South Boston

Site Name / Parcel ID	Acres	Ownership	Neighborhood
0700238200	1.36	Private	South Boston
0306509010	2.39	Private	South End
0306537000	1.05	Private	South End
0306539000	0.43	Private	South End
0500672000	0.68	Private	South End
0500678000	0.03	Private	South End
0500679000	0.03	Private	South End
0801148000	0.11	Public	South End
0801149000	0.04	Public	South End
0801150000	0.03	Public	South End
0801151000	0.03	Public	South End
SITE 5	0.31	Public	South End
2003592000	2.01	Private	West Roxbury
2003593000	2.01	Private	West Roxbury
2003597003	0.30	Private	West Roxbury
2003597004	0.19	Private	West Roxbury
2003600000	0.31	Private	West Roxbury
Shaw Woods	73.67	Private	West Roxbury
SITE 3	1.54	Private	West Roxbury
St. John Chrysostom Tract	4.29	Private	West Roxbury

SITES OF POTENTIAL OPEN SPACE VALUE

Site Name / Parcel ID	Acres	Ownership	Neighborhood
ROW 1	0.41	Public	Central Boston
0703584000	21.65	Private	Dorchester
0703602001	3.59	Private	Dorchester
0703842000	0.44	Public	Dorchester
0703894000	0.79	Public	Dorchester
1400140000	0.63	Private	Dorchester
1502805000	0.79	Public	Dorchester
1502806000	0.02	Public	Dorchester
1502807000	0.06	Public	Dorchester
1502808000	0.06	Public	Dorchester
1503130010	4.71	Private	Dorchester
ROW 5	5.13	Public	Dorchester
ROW 6	2.47	Public	Dorchester
ROW 7	2.07	Public	Dorchester
ROW 8	1.04	Public	Dorchester
1811886000	1.06	Private	Hyde Park
1811887000	1.12	Private	Hyde Park
1811889000	1.96	Private	Hyde Park
1812146001	1.92	Private	Hyde Park
1812146002	1.52	Private	Hyde Park
1812152010	23.29	Private	Hyde Park
1812167000	0.70	Private	Hyde Park
1102928050	0.12	Public	Jamaica Plain
1102943000	0.34	Public	Jamaica Plain
1102944000	0.52	Private	Jamaica Plain
1102945000	0.09	Private	Jamaica Plain
1102946000	0.11	Private	Jamaica Plain
1102947000	0.08	Private	Jamaica Plain
1102948000	0.06	Private	Jamaica Plain
SITE 1	2.29	Private AND Public	Jamaica Plain
1800113400	12.13	Public	Mattapan
Franklin Park Zoo Parking/DCR	26.16	Public	Mattapan
Butterfly Garden and Woods	1.08	Private	Mission Hill
1806270000	1.27	Private	Roslindale
1806282004	0.61	Private	Roslindale
0602673002	12.42	Public	South Boston
2005738010	0.91	Public	West Roxbury
2005738020	0.48	Public	West Roxbury
2006519000	0.18	Public	West Roxbury

ROW= right-of-way

UNCLASSIFIED SPECULATIVE PROPERTIES

Site Name / Parcel ID	Acres	Ownership	Neighborhood
Boston College Athletic Fields	9.72	Private	Allston-Brighton
Brighton HS Hillside	1.43	Public	Allston-Brighton
Brighton Police Station Campus	0.45	Public	Allston-Brighton
BU Grounds West	1.10	Private	Allston-Brighton
Commonwealth Tenants Association CG	0.35	Public	Allston-Brighton
Crittenton Hospital	2.93	Private	Allston-Brighton
Euston Path Rock	0.39	Public	Allston-Brighton
Foster Street Rock	4.63	Private	Allston-Brighton
Harvard Business School Athletic Fields	0.57	Private	Allston-Brighton
Kennedy Rock	2.21	Private	Allston-Brighton
Nickerson Field	6.35	Private	Allston-Brighton
North Beacon Allee	0.84	Private	Allston-Brighton
Oak Square II	0.04	Public	Allston-Brighton
Soldiers Field	54.74	Private	Allston-Brighton
St John's Seminary	59.98	Private	Allston-Brighton
St. Elizabeth's Hospital Campus	4.86	Private	Allston-Brighton
St. Joseph's Prep Athletic Fields	3.60	Private	Allston-Brighton
Belvidere/Dalton Plaza	0.16	Public	Back Bay/Beacon Hill
Blackwood/Claremont Garden	0.10	Public	Back Bay/Beacon Hill
Christian Science Plaza	9.40	Private	Back Bay/Beacon Hill
Copley Place Plaza	0.29	Public	Back Bay/Beacon Hill
Dartmouth Street Mall	1.01	Public	Back Bay/Beacon Hill
Follen Garden	0.10	Public	Back Bay/Beacon Hill
Greenwich/Cumberland Garden	0.10	Public	Back Bay/Beacon Hill
Harcourt/West Canton Garden	0.08	Public	Back Bay/Beacon Hill
Louisburg Square	0.32	Private	Back Bay/Beacon Hill
Mount Vernon Square	0.05	Private	Back Bay/Beacon Hill
State House Park	1.24	Public	Back Bay/Beacon Hill
Aquarium Plaza	0.66	Private	Central Boston
Ashburton Place Plaza	0.82	Public	Central Boston
Atlantic Avenue Plantings	0.58	Public	Central Boston
Ausonia Plaza	0.19	Public	Central Boston
Bowdoin Mall	0.50	Public	Central Boston
Brooke Courthouse Plaza	0.24	Public	Central Boston
Cardinal Cushing Park I	0.35	Public	Central Boston
Cardinal Cushing Park II	0.07	Public	Central Boston
Central Court	0.07	Private	Central Boston
China Gate Plaza	0.14	Public	Central Boston
Dewey Square Plaza	0.58	Public	Central Boston
Federal Reserve Plaza	2.09	Public	Central Boston
Government Center Garage Plaza	0.94	Private	Central Boston
Grain Exchange Plaza	0.05	Public	Central Boston
Hawkins-New Sudbury Mall I	0.10	Public	Central Boston

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Site Name / Parcel ID	Acres	Ownership	Neighborhood
Hawkins-New Sudbury Mall II	0.07	Public	Central Boston
I-90 Interchange	1.54	Public	Central Boston
Jenney Plaza	0.13	Private	Central Boston
Leather District Park	0.42	Public	Central Boston
Liberty Square	0.03	Public	Central Boston
Liberty Tree Park	0.09	Public	Central Boston
Long Wharf Boat Access	0.08	Public	Central Boston
Marketplace Plaza I	0.29	Public	Central Boston
Marketplace Plaza II	0.10	Private	Central Boston
Mary Soo Hoo Park	0.07	Public	Central Boston
New Chardon Square	1.91	Public	Central Boston
North Square	0.07	Public	Central Boston
North Street Park	0.24	Public	Central Boston
Oak Terrace Playlot	0.03	Private	Central Boston
Old City Hall Grounds	0.25	Public	Central Boston
Old West Church Yard	0.19	Private	Central Boston
Oxford Place Plaza	0.05	Private	Central Boston
Pemberton Square Access	0.13	Public	Central Boston
Pemberton Square I	0.18	Public	Central Boston
Pemberton Square II	1.06	Public	Central Boston
Pine Street Park	0.28	Public	Central Boston
Quincy Market Square	1.56	Public	Central Boston
RFK Greenway I	0.16	Public	Central Boston
RFK Greenway II	0.29	Public	Central Boston
Richmond & North Streets Park I	0.09	Public	Central Boston
Richmond & North Streets Park II	0.28	Public	Central Boston
School Street Park	0.07	Public	Central Boston
Somerset Street Plaza	0.68	Public	Central Boston
Thoreau Path	3.86	Private	Central Boston
Union Street Park II	0.03	Public	Central Boston
Urban Arboretum	1.95	Public	Central Boston
Valenti Square	0.12	Public	Central Boston
West End Park	0.14	Public	Central Boston
13th Street Circle Garden	0.06	Public	Charlestown
8th Street Circle Garden	0.05	Public	Charlestown
9th Street Circle Garden	0.05	Public	Charlestown
Charlestown Naval Shipyard Park II	0.75	Private	Charlestown
Corey Street Court	0.18	Public	Charlestown
Medford Street Corridor I	6.85	Public	Charlestown
Medford Street Corridor II	1.63	Private	Charlestown
Mishawam Playlots	0.24	Private	Charlestown
Sullivan Square	1.62	Public	Charlestown
29 Josephine Street Garden	0.11	Private	Dorchester
Audrey Jacobs Memorial CG	0.10	Private	Dorchester
Barry Street Garden	0.09	Private	Dorchester

Site Name / Parcel ID	Acres	Ownership	Neighborhood
Boston College HS Athletic Fields	18.55	Private	Dorchester
Bullard Street Garden	0.09	Private	Dorchester
Calf Pasture	7.44	Public	Dorchester
Centerville Park	0.20	Public	Dorchester
Clayborne Street Garden	0.08	Private	Dorchester
Claymont Terrace	0.61	Private	Dorchester
Clementine Park	0.02	Public	Dorchester
Codman Square	0.34	Public	Dorchester
Columbia Point Community Garden	0.05	Private	Dorchester
Columbia Road	0.58	Public	Dorchester
Columbia Road Mall	0.91	Public	Dorchester
Columbia Road Totlot	0.22	Public	Dorchester
Dever School Schoolyard	0.36	Public	Dorchester
Dickerman School Yard	0.55	Public	Dorchester
Edward Everett Square	0.09	Public	Dorchester
Erie/Wolcott Streets Park	0.25	Private	Dorchester
Esparanza Garden	0.11	Private	Dorchester
Fannie Lou Hamer Community Garden	0.10	Private	Dorchester
Franklin Field BHA Garden	0.10	Public	Dorchester
Franklin Hill Green	0.51	Public	Dorchester
Granite Avenue Ledge	0.38	Private	Dorchester
Greenwood Community Garden	0.20	Private	Dorchester
Harbor Point Boulevard	2.31	Private	Dorchester
Keystone Shoreline	0.52	Private	Dorchester
King School Park	0.82	Public	Dorchester
Leyland Street Garden	0.39	Private	Dorchester
Lucerne/Balsam Street Garden	0.23	Private	Dorchester
Lucy Stone Schoolyard	0.78	Public	Dorchester
Lydon Way Garden	0.19	Public	Dorchester
McCormack School Ball Field	1.40	Public	Dorchester
McCormack School Courts	0.32	Public	Dorchester
McCormack School Yard	0.58	Public	Dorchester
Meetinghouse Hill Overlook	0.34	Public	Dorchester
Melvinside Play Area	0.40	Private	Dorchester
Monadnock Street Garden	0.22	Private	Dorchester
Neponset River Reservation II	0.78	Public	Dorchester
Nightingale Garden	1.37	Private	Dorchester
Nonquit Green	0.41	Private	Dorchester
Nonquit Street Garden	0.15	Public	Dorchester
Norton Street Playground	0.07	Public	Dorchester
Norton/Stonehurst Garden	0.08	Private	Dorchester
Paul Sullivan House Comm Garden	0.05	Private	Dorchester

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Site Name / Parcel ID	Acres	Ownership	Neighborhood
Quincy/Coleman Garden	0.30	Private	Dorchester
ReVision House Urban Farm #1	0.35	Private	Dorchester
ReVision House Urban Farm #2	0.18	Private	Dorchester
Rupert-Trinity Park	0.07	Private	Dorchester
Scalia Square	0.01	Public	Dorchester
Spencer Street Garden	0.10	Private	Dorchester
UMass Boston Athletic Fields	1.71	Public	Dorchester
UMass Boston Campus Ctr Oval	1.67	Public	Dorchester
Washburn Street Green I	0.13	Public	Dorchester
Washburn Street Green II	0.01	Public	Dorchester
Wheatland Avenue Victory Garden	0.15	Private	Dorchester
William S. Britton Square	0.03	Public	Dorchester
YMCA Community Park	1.03	Private	Dorchester
Bayswater Street	1.70	Public	East Boston
Belle Isle Coastal Preserve	1.57	Public	East Boston
Condor Street Beach II	0.20	Public	East Boston
Condor Street Overlook Access Area	0.03	Public	East Boston
Eagle Hill Memorial Park Garden	0.15	Private	East Boston
East Boston Social Centers Playlot	0.34	Private	East Boston
Festa Field	0.99	Public	East Boston
Goodearl Square	0.01	Public	East Boston
Joe Ciampa Garden	0.22	Private	East Boston
London Street Park	0.14	Public	East Boston
Mendoza Square	0.03	Public	East Boston
Meridian-London Triangle	0.03	Public	East Boston
Our Garden	0.21	Public	East Boston
Solari Square	0.00	Public	East Boston
South Shore Plaza Park	0.50	Private	East Boston
Umana Schoolyard	2.70	Public	East Boston
Wood Island Bay Edge	2.90	Public	East Boston
Wood Island Bay Marsh	88.46	Public	East Boston
Avenue Louis Pasteur	1.49	Public	Fenway/Longwood
Beth Israel/Deaconess Plaza	0.50	Private	Fenway/Longwood
BU Grounds Central	4.88	Private	Fenway/Longwood
BU Grounds East	1.03	Private	Fenway/Longwood
BU Grounds South	0.91	Private	Fenway/Longwood
BU Yard	0.18	Private	Fenway/Longwood
Emanuel College Grounds	3.21	Private	Fenway/Longwood
Fenway Park Field	2.78	Private	Fenway/Longwood
Harry Ellis Dickson Park	0.08	Public	Fenway/Longwood
Harvard Medical School Quadrangle	1.71	Private	Fenway/Longwood

Site Name / Parcel ID	Acres	Ownership	Neighborhood
Huntington-Hemenway Mall	0.33	Public	Fenway/Longwood
Mass Art Campus	0.31	Public	Fenway/Longwood
Mass Art Park	0.16	Public	Fenway/Longwood
Oscar Tugo Circle	0.06	Public	Fenway/Longwood
Symphony Road Garden	0.30	Private	Fenway/Longwood
Wentworth Field	2.98	Private	Fenway/Longwood
Windsor School Athletic Field	1.37	Private	Fenway/Longwood
Calf Island	22.42	Public	Harbor Islands
Deer Island Park	91.34	Public	Harbor Islands
Great Brewster Island	23.94	Public	Harbor Islands
Green Island	1.75	Public	Harbor Islands
Little Brewster Island	3.12	Public	Harbor Islands
Little Calf Island	0.81	Public	Harbor Islands
Long Island	225.20	Public	Harbor Islands
Middle Brewster Island	13.65	Public	Harbor Islands
Moon Island	54.09	Public	Harbor Islands
Outer Brewster Island	20.12	Public	Harbor Islands
Rainsford Island	16.74	Public	Harbor Islands
Shag Rocks	1.32	Public	Harbor Islands
Cleary Square Plaza	0.07	Public	Hyde Park
Dell Rock II	0.04	Public	Hyde Park
Match Charter School Campus	1.13	Private	Hyde Park
Monterey Hilltop II	0.11	Private	Hyde Park
Mother Brook I	0.37	Private	Hyde Park
Neponset River Corridor	1.19	Private	Hyde Park
Shempa Square	0.03	Public	Hyde Park
Agassiz Community & School Garden	0.19	Public	Jamaica Plain
Anson Street Garden	0.17	Public	Jamaica Plain
Arcola Park Garden	0.08	Private	Jamaica Plain
Bowditch Garden	0.14	Private	Jamaica Plain
Bromley Heath Play Area	0.82	Public	Jamaica Plain
Brookside Community Garden	0.12	Private	Jamaica Plain
Centre Street III	0.01	Public	Jamaica Plain
Chapman I	1.04	Private	Jamaica Plain
Chapman II	1.87	Private	Jamaica Plain
Daughters of St. Paul	12.71	Private	Jamaica Plain
Dixwell Street Garden	0.10	Public	Jamaica Plain
Egleston Community Orchard	0.08	Public	Jamaica Plain
Egleston Plaza II	0.01	Public	Jamaica Plain
Egleston Square Peace Garden	0.12	Private	Jamaica Plain
Forbes Street Garden	0.37	Private	Jamaica Plain
Forest Hills Station Mall	1.34	Public	Jamaica Plain
Granada Park Garden	0.31	Private	Jamaica Plain
Hall/Boylston Street Garden	0.14	Public	Jamaica Plain
Harvard Tract I	5.11	Private	Jamaica Plain

Site Name / Parcel ID	Acres	Ownership	Neighborhood
Hellenic College Athletic Field	3.03	Private	Jamaica Plain
Hennigan Schoolyard	1.88	Public	Jamaica Plain
Hernandez Schoolyard	0.47	Public	Jamaica Plain
Kelly Outdoor Skating Rink	0.36	Public	Jamaica Plain
Lamartine/Hubbard Streets Garden	0.06	Public	Jamaica Plain
Lawndale Terrace Garden	0.09	Public	Jamaica Plain
Leland Street Herb Garden	0.25	Private	Jamaica Plain
Manning Schoolyard	0.22	Public	Jamaica Plain
McBride Garden	0.06	Public	Jamaica Plain
Murphy Playground I	2.45	Public	Jamaica Plain
Murphy Playground II	0.09	Public	Jamaica Plain
Nira Avenue Garden	0.18	Private	Jamaica Plain
Oakdale Street Community Garden	0.16	Public	Jamaica Plain
Paul Gore/Beecher Street Garden	0.51	Private	Jamaica Plain
Round Hill Street Garden	0.07	Private	Jamaica Plain
Showa	22.55	Private	Jamaica Plain
South St BHA Community Garden	0.21	Public	Jamaica Plain
South Street BHA Play Area	0.10	Public	Jamaica Plain
South Street Community Garden	0.47	Public	Jamaica Plain
Southwest Corridor Community Farm	0.61	Private	Jamaica Plain
St Rose Street Garden	0.07	Private	Jamaica Plain
Starr Lane Park	0.06	Public	Jamaica Plain
Walden Street Community Garden	0.25	Private	Jamaica Plain
Boston State Hospital Campus	17.69	Public	Mattapan
Currier Woods I	1.43	Public	Mattapan
Currier Woods II	0.56	Private	Mattapan
Gladeside II	0.90	Private	Mattapan
Mattahunt School Woods	2.98	Public	Mattapan
Mattahunt Woods Buffer	1.03	Private	Mattapan
Mattahunt Woods III	1.45	Public	Mattapan
Olmsted Green Park	0.09	Private	Mattapan
Orlando-Monterey Lot II	0.21	Private	Mattapan
Savannah Woods I	3.20	Public	Mattapan
Savannah Woods II	0.73	Private	Mattapan
State Public Health Campus	6.89	Public	Mattapan
Woodhaven Street Lot	1.20	Private	Mattapan
Alice Taylor Homes Playlots	0.15	Public	Mission Hill
BNAN Parcel	0.27	Private	Mission Hill
Brigham Circle Plaza	0.22	Private	Mission Hill
Hillside/Calumet	1.26	Public	Mission Hill
Huntington-Vancouver Triangle	0.14	Private	Mission Hill

Site Name / Parcel ID	Acres	Ownership	Neighborhood
Iroquois Street Woods	1.08	Private	Mission Hill
Judge Street	0.15	Private	Mission Hill
Lawn Street Garden	0.15	Private	Mission Hill
Mission Church Gardens	1.13	Private	Mission Hill
Mission Hill Community Garden I	0.34	Private	Mission Hill
Mission Hill Community Garden II	0.16	Public	Mission Hill
Mission Main Longwood Gate	0.11	Public	Mission Hill
Mission Main Park	0.71	Public	Mission Hill
Mission Main Playlots	0.82	Public	Mission Hill
Parker/Terrace	1.32	Public	Mission Hill
Southwest Corridor Park Extension	0.18	Public	Mission Hill
Tobin Community Center Garden	0.30	Public	Mission Hill
Tree House Plaza	0.18	Public	Mission Hill
Wentworth Grounds	3.29	Private	Mission Hill
Canterbury Brookside II	0.49	Private	Roslindale
Canterbury I	1.24	Public	Roslindale
Canterbury II	3.80	Private	Roslindale
Canterbury III	0.64	Private	Roslindale
Conley School Play Yard	1.42	Public	Roslindale
Philbrick Schoolyard	0.30	Public	Roslindale
Rowe Street Woods	2.64	Public	Roslindale
Southwest Boston Garden Club	1.52	Public	Roslindale
Stony Brook Commons Park	1.53	Private	Roslindale
Weld Hill Tract	14.11	Private	Roslindale
Allan Crite Garden I	0.38	Public	Roxbury
Allan Crite Garden II	0.04	Public	Roxbury
Bessie Barnes Garden	0.13	Private	Roxbury
Bessie Barnes Park	0.10	Private	Roxbury
Boston Evening Academy Garden	0.22	Public	Roxbury
Boys Club Park	0.82	Private	Roxbury
Carter Playground II	1.60	Private	Roxbury
Carter School Grounds	0.49	Public	Roxbury
Cedar Street Garden I	0.44	Public	Roxbury
Cedar Street Garden II	0.08	Public	Roxbury
Cedar-Juniper Natural Area	0.39	Private	Roxbury
Centre Place Garden	0.16	Public	Roxbury
Crawford Street Park	0.25	Private	Roxbury
Dacia/Woodcliff Community Garden	0.30	Private	Roxbury
Egleston Community Garden	0.24	Private	Roxbury
ELC Playlot	0.45	Public	Roxbury
First Church Yard	1.60	Private	Roxbury
Frederick Douglass Green	0.92	Private	Roxbury
Frederick Douglass Peace Garden	0.11	Public	Roxbury

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Site Name / Parcel ID	Acres	Ownership	Neighborhood
Higginson Schoolyard	0.42	Public	Roxbury
Highland Avenue Community Garden	0.10	Private	Roxbury
Highland Park 400 Garden	0.68	Private	Roxbury
John Eliot Square	0.13	Public	Roxbury
John Eliot Square Urban Wild	0.08	Private	Roxbury
Julian, Judson, Dean Garden	0.20	Private	Roxbury
Kendall & Lenox Streets Garden	0.43	Private	Roxbury
Kittredge-Linwood Parcel	0.15	Private	Roxbury
Madison Park Village CG	0.24	Public	Roxbury
Magazine Street Garden	0.19	Public	Roxbury
Magnolia & Woodford Streets Garden	0.15	Public	Roxbury
Malcolm X Park II	0.19	Public	Roxbury
Maple-Sonoma Streets Community Park	0.26	Public	Roxbury
Margaret Wright Memorial Garden	0.13	Private	Roxbury
Mason Schoolyard	0.38	Public	Roxbury
Melnea Cass Boulevard I	4.38	Public	Roxbury
New Academy Estates Courtyard	0.08	Private	Roxbury
New Academy Estates Half Court	0.09	Private	Roxbury
Northampton St Community Garden	0.22	Private	Roxbury
Nuestra Playground	0.23	Private	Roxbury
Phyllis Wheatley / Warren Place	0.15	Public	Roxbury
Piano Craft Garden	0.56	Private	Roxbury
Roxbury Heritage State Park II	0.35	Public	Roxbury
Salvation Army Field	1.48	Private	Roxbury
Saranac/New Castle Garden	0.15	Public	Roxbury
Sargent Street Park	0.30	Private	Roxbury
Savin/Maywood Street Garden	0.46	Private	Roxbury
Schroeder Plaza	0.28	Public	Roxbury
Shirley-Eustis House Grounds	1.30	Private	Roxbury
St. Joseph's Garden	0.20	Private	Roxbury
The Food Project Lot #1A	0.41	Public	Roxbury
The Food Project Lot #1B	0.19	Private	Roxbury
The Food Project Lot #2	1.38	Public	Roxbury
The Food Project Lot #3	0.12	Private	Roxbury
Tommy's Rock (Alpine)	0.23	Public	Roxbury
United Nbhd of Lower Roxbury CG	0.29	Public	Roxbury
Wakullah St. CG	0.09	Public	Roxbury
Waldren Road Garden	0.10	Public	Roxbury

Site Name / Parcel ID	Acres	Ownership	Neighborhood
Warren Gardens Community Garden	0.26	Private	Roxbury
Whittier Playground	0.28	Public	Roxbury
Winthrop Street Garden	0.11	Private	Roxbury
Woodcliff	1.30	Public	Roxbury
YMCA Athletic Field	2.34	Private	Roxbury
A Street Park II	0.25	Public	South Boston
Binford Street Park	0.45	Private	South Boston
Boston Design Center Plaza	0.76	Public	South Boston
Butler Memorial Park	2.51	Public	South Boston
Children's Museum Plaza	0.46	Private	South Boston
Dry Dock Plaza	0.24	Public	South Boston
Eastport Park	1.15	Public	South Boston
Foster's Nook Garden	0.11	Private	South Boston
Fourth Street Park	0.66	Public	South Boston
Marine Industrial Park Entrance I	1.25	Public	South Boston
Marine Industrial Park Entrance II	0.01	Public	South Boston
Pier 10 Mall	0.56	Public	South Boston
Podium Plaza	0.46	Public	South Boston
Q Park	0.60	Private	South Boston
Rolling Bridge Park	1.05	Public	South Boston
South Boston Maritime Park	0.88	Public	South Boston
St. Augustine's Park	0.11	Private	South Boston
Sterling Square	1.04	Public	South Boston
The Park at Fan Pier	1.26	Private	South Boston
Veterans Memorial Park	0.68	Public	South Boston
Williams Tunnel Portal Park	0.20	Public	South Boston
Wormwood Park	0.13	Public	South Boston
Berkeley Street Garden	1.10	Private	South End
Boston Medical Center Campus	1.31	Private	South End
Braddock Park Garden	0.09	Public	South End
Castle Square Parks	1.19	Public	South End
Chandler/Tremont Plaza	0.23	Public	South End
Dartmouth Green	0.07	Private	South End
Dartmouth Square	0.17	Private	South End
Harrison Urban Garden	0.20	Private	South End
Massachusetts Avenue Malls	0.43	Public	South End
Rutland Green	0.09	Public	South End
Rutland/Washington Community Garden	0.28	Private	South End
Rutland's Haven Community Garden	0.11	Private	South End
South End Library Park	0.19	Public	South End
Tent City Courtyards	0.53	Public	South End
Unity Towers Garden	0.07	Private	South End
Warren & Clarendon Streets Garden	0.05	Private	South End

Site Name/ Parcel ID	Acres	Ownership	Neighborhood
Washington Manor Community Garden	0.02	Public	South End
Wellington Common	0.04	Private	South End
Wellington Green	0.05	Private	South End
West Springfield Garden	0.16	Private	South End
Worcester Street Garden	0.57	Private	South End
Catholic Memorial H.S. Athletic Fld	7.26	Private	West Roxbury
Centre Marsh	3.72	Private	West Roxbury
Dana Road I	2.73	Public	West Roxbury
Dana Road II	0.20	Private	West Roxbury
Hancock Woods II	4.59	Private	West Roxbury
Leatherbee Woods	8.15	Private	West Roxbury
Ohrenberger Fields	2.70	Public	West Roxbury
Ohrenberger Woodland	3.79	Public	West Roxbury
Praught/Bunker Fields	4.92	Private	West Roxbury
Rivermoor I	7.74	Public	West Roxbury
Roxbury Latin Schl Athletic Fields	38.50	Private	West Roxbury
West Roxbury Quarry	60.17	Private	West Roxbury

SECTION 6

COMMUNITY VISION

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SECTION 6.1:

DESCRIPTION OF THE PROCESS

INTRODUCTION

This Open Space Plan comes out of the ideas and information provided by residents and staff over the course of seven years through programming, public meetings, surveys, field work, planning, and more. In preparation for this update, BPRD conducted two additional outreach efforts: the Parcel Priority Plan (PPP) outreach which focused on how to grow the park system and the Open Space and Recreation Plan (OSRP) outreach which asked about the existing park system and the services the Parks Department provides. Other work that informed this update include:

- More than 100 capital improvement projects across the city that included whole park renovations, court and field repairs
- Planning projects
- Urban Forest Plan
- Parcel Priority Plan
- Moakley Vision Plan
- Boston Common Master Plan
- Franklin Park Action Plan
- Recreational programming
- Land acquisition and protection: community-led and City-led projects
- Cultural programming
- Design and development review: large development project review (Article 80), construction within 100 feet of a park (Boston Municipal Code Section 7-4.11), design within the public right-of-way (Public Improvement Commission), Boston Planning and Development Agency neighborhood planning documents (PLAN), and Boston Transportation Department corridor planning.

The Planning Process and Public Participation portion of Section 2 (Introduction) described the use of meetings, online surveys, and social media to survey public opinion on the park system as it is now and the park system as it might be. The results of the surveys are presented in Section 6.2.

A brief statement of community goals and priorities will be presented in Section 6.3, Statement of Open Space and Recreation Community Goals.

SECTION 6.2:

SURVEY QUESTIONNAIRE AND RESULTS

PARCEL PRIORITY PLAN

SURVEY RESULTS

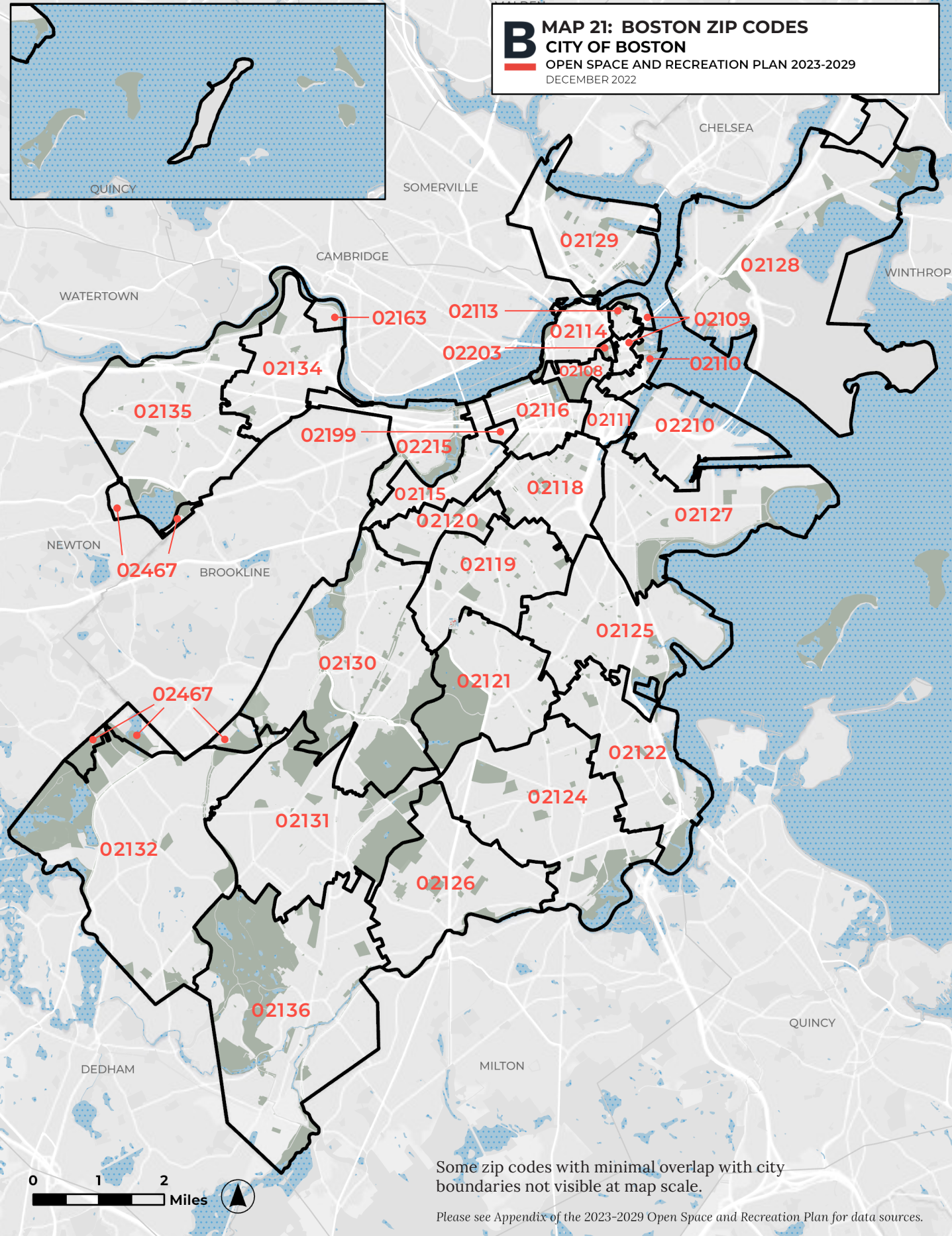
JANUARY 2020-NOVEMBER 2020

Does the city need more open space?	
	# of responses
More	1,137
Not more	47
Don't know	34
TOTAL RESPONDENTS	1,218

What should the City of Boston prioritize in identifying lands for protection or acquisition? Select all the apply.	
	Total votes
Increasing open spaces that provide opportunities for recreational activities and community events.	578
Increasing areas that help address climate-related issues -- such as excessive flooding or heat.	704
Providing areas that connect existing open spaces to each other.	617
Increasing open space in neighborhoods that have limited park access currently or are experiencing significant increases in population.	948
Protecting areas of conservation or ecological value.	708
Other	72

Where do you think it is important to have open space? (see MAP 22: PPP SURVEY (PINNED LOCATIONS))

B MAP 21: BOSTON ZIP CODES
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



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Why did you choose this location?

	Total votes
The surrounding community doesn't have enough green open space. Neighbors need access to green open space here.	676
This area is really hot and needs a shady space.	90
This area would connect to other open spaces and/or trail networks.	281
During strong storms, water flows into this area and causes flooding.	78
This is a natural area that should be protected.	672
Other	146
TOTAL LOCATIONS PINNED	1,943

Examples of write-in responses*:

- Prioritize protecting historic structures and spaces.
- More open space for neighborhoods of color.
- Maintain open space as development increases.
- This parcel is used and maintained by community members as a park.
- Address economic injustices that limit residence access to nature.
- Stop the loss of open space to large apartment buildings.
- This is a low-income area that's often overlooked when locating new parks
- Need more playgrounds, especially for ages 5+.
- Have numerous open spaces close together for climate resilience and better air quality.
- Enhance the tree canopy so we have healthy, thriving trees.
- We already have enough parks.
- Create accessible green space for all ages and abilities.
- Protect bird havens.
- Improve air quality.
- Connect the Emerald Necklace.

*Write-in responses may be edited for clarity or brevity.

Respondents by zip code

Zip code	# of respondents	Zip code	# of respondents
02021	1	01880*	1
02026	0	01801*	1
02108	13	01960*	1
02109	6	02133*	1
02110	13	02138*	2
02111	9	02140*	2
02113	3	02143*	1
02114	25	02144*	1
02115	37	02148*	3
02116	106	02169*	2
02118	45	02190*	1
02119	29	02218*	1
02120	50	02225*	1
02121	12	02315*	1
02122	17	02446*	6
02124	52	02451*	1
02125	64	02478*	1
02126	7	03301*	1
02127	36	06443*	1
02128	57	10524*	1
02129	92	14213*	1
02130	131	02476*	2
02131	132	01116*	1
02132	27	02482*	1
02134	27	01960*	1
02135	29	21113*	1
02136	42	TOTAL ALL ZIP CODES	1,169
02151	0	*Zip code outside Boston. Zip code margin of error: Some responses submitted via phone or email did not come with a respondent zip code. In these cases, the priority locations were mapped (as seen on the following map) but the respondents' zip code cannot be mapped. As a result, some zip codes may show a small undercount in the number of respondents.	
02152	0		
02163	0		
02186	0		
02199	2		
02203	0		
02210	11		
02215	55		
02459	0		
02467	2		

OPTIONAL DEMOGRAPHIC QUESTIONS

Do you or someone in your household have a disability or chronic health condition that affects access to, or enjoyment of, open space?

	# of responses
Yes	165
No	935
Prefer not to say	118
TOTAL	1,218

What is/are the age(s) of someone/the persons you care for in your home? Choose all that apply.

	# of responses
0-12	213
13-18	62
18-25	57
25+	451
This does not apply to me	443
Prefer not to say	61

What is your age?

	# of responses
0-9	2
10-19	3
20-34	278
35-54	433
55-64	175
65-84	225
85+	7
Prefer not to say	95
TOTAL	1,218

What is your gender?

	# of responses
Female	672
Male	421
Non-binary/third gender	12
Prefer to self-describe	0
Do not wish to answer	113
TOTAL	1,218

Are you of Hispanic, Latino, or Spanish origin?

	# of responses
Yes	56
No	996
Prefer not to say	166
TOTAL	1,218

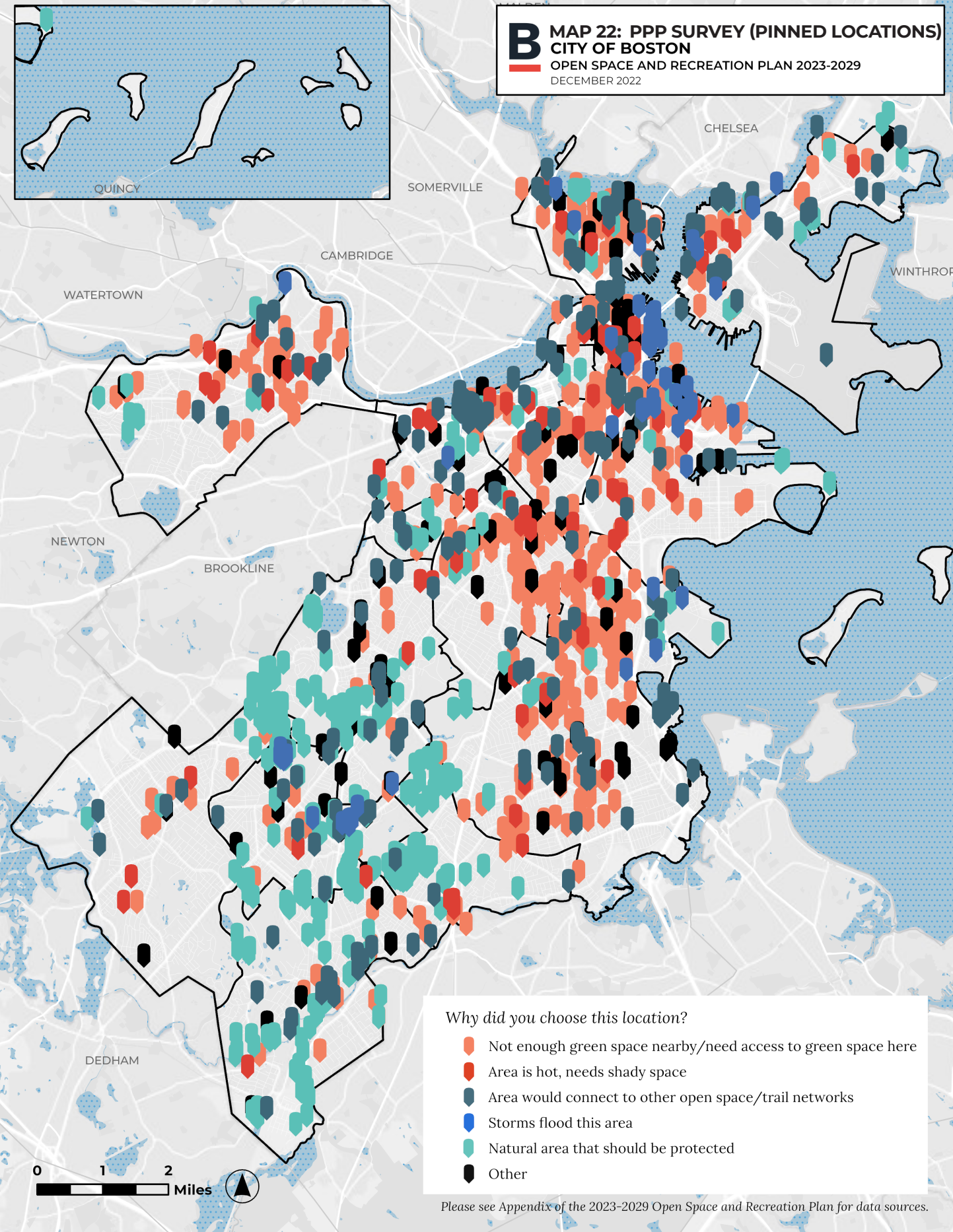
What is your race? Choose all that apply.

	# of responses
American Indian or Alaska Native	2
Asian Indian	16
Black or African American	63
Chinese	14
Filipino	1
Guamanian or Chamorro	0
Japanese	0
Korean	4
Native Hawaiian	0
Other Pacific Islander	0
Samoan	0
Vietnamese	0
White	855
Some other race	43
Prefer not to say	220

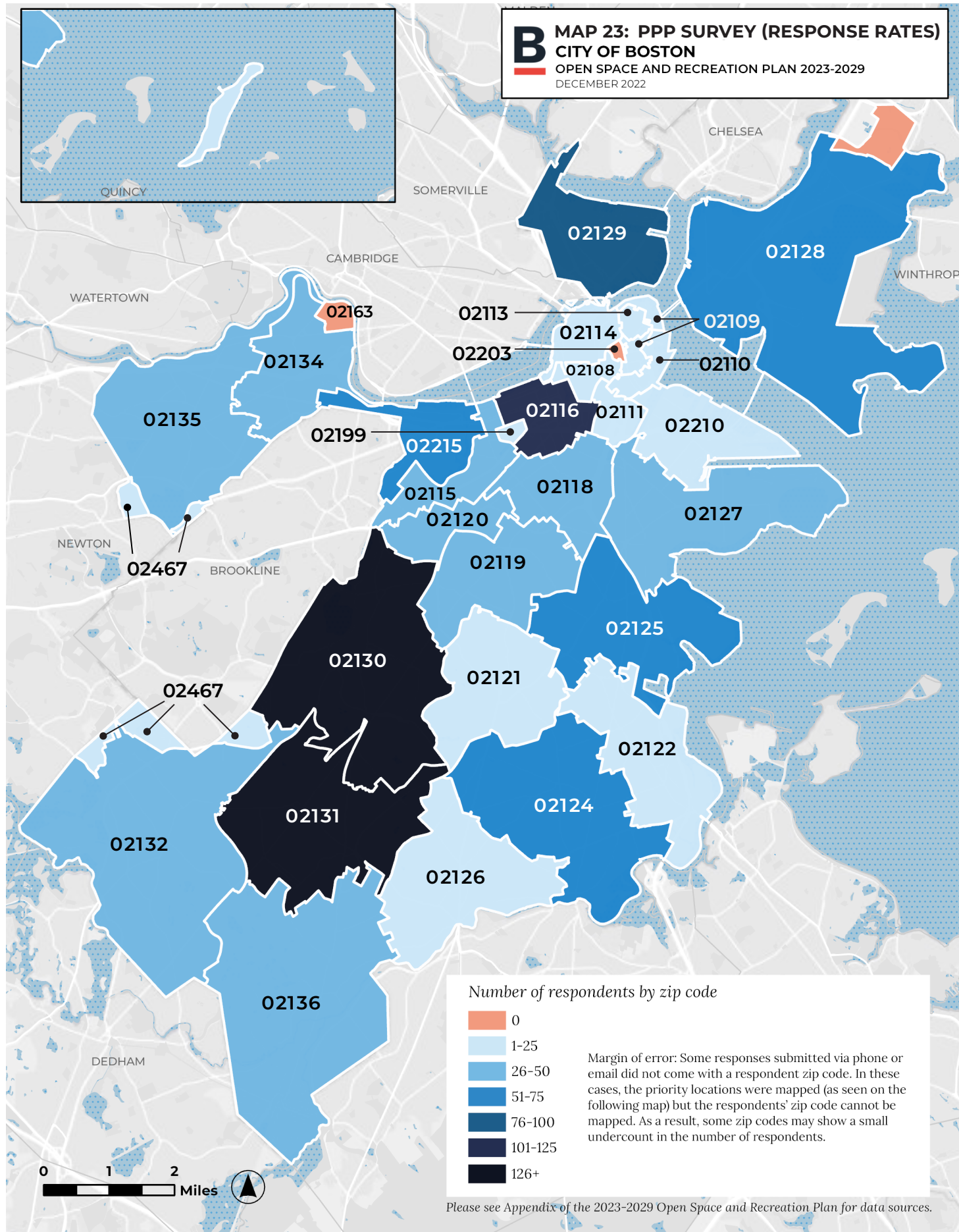
Survey responses by language

	# of responses
Spanish	5
Haitian Creole	0
Vietnamese	0
Traditional Chinese	3
Cape Verdean	0
Portuguese	0
English	1,210
TOTAL	1,218

See MAP 23: PPP SURVEY (response rates). Some zip codes not visible at map scale.



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OPEN SPACE AND RECREATION PLAN SURVEY RESULTS

APRIL 14, 2022–MAY 31, 2022

Part I of II: Are you aware of the...?

	Yes	No	Total # of responses
...City's 311 system for reporting park maintenance needs?	844	202	1,046
...free sports activities and fitness programs offered?	422	624	1,046
...online permitting system for reserving use of BPRD managed facilities (athletic fields, picnic areas, event spaces)	388	662	1,050
...opportunity to provide input at Parks Department-led community meetings during the design process for park improvement projects?	504	544	1,048
...programs and events that are provided by the Parks Department?	576	474	1,050

Part II of II: If you are aware, how satisfied are you with the...? (on a scale of 1-5 where 1 is "not at all satisfied" and 5 is "very satisfied")

	1	2	3	4	5	Total # of responses	Average score	Median score
...maintenance of the parks that you use?	84	150	291	284	122	931	3.2	3
...recreational sports and fitness activities offered?	9	25	161	159	55	409	3.5	4
...Boston Parks permitting system	24	43	144	105	42	358	3.3	3
...public input process for park improvement projects?	44	68	159	144	60	475	3.2	3
...events and programs offered?	16	26	248	221	56	567	3.5	3

Additional satisfaction questions

	1	2	3	4	5	Total # of responses	Average score	Median score
How satisfied are you with the quality of the Boston parks and recreation system as a whole?	36	105	405	422	80	1,048	3.4	3
Are the parks you visit welcoming?	58	166	330	348	134	136	3.3	3

Part I of II: Are the parks you visit providing high-quality spaces for you to do the activities you enjoy?

1	2	3	4	5	Total # of responses	Average score	Median score
58	166	330	348	134	136	3.3	3

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Part II of II: If not, what features or facilities should we provide to better meet your needs? Check all that apply.

	Total votes
More restrooms	632
More natural areas	474
More dog parks	352
More picnic or barbecue areas	330
More passive areas	278
More splash pads/water play features	244
More Youth soccer fields	203
More tennis courts	165
More tot lots/children's play areas	154
More Adult soccer fields/multi-sport fields	153
More pickleball courts	127
More synthetic turf fields	118
More basketball courts	114
I am satisfied	64
More ball diamonds	51

Examples of write-in responses*:

- Exercise equipment especially for seniors.
- More street hockey.
- More trees and other vegetation.
- More trash cans and trash pickup.

Are there any challenges or barriers that prevent you from enjoying Boston's parks and/or the programs we offer? Check all that apply.

	Total votes
Lack of information	331
Timing of programs + events is not convenient for me	151
Programs lack social or cultural relevance	91
Language barriers	9
Lack of parking	197
Limited bike or walking access	168
Limited access by transit	132
Lack of programs that interest me	154
Feeling unsafe at the park	190
Feeling unsafe getting to the park	97
I don't feel welcome	43
None	137

Examples of write-in responses*:

- Lack of restrooms and benches.
- Hard to find safe place to exercise unless you play a ball sport.
- Unclear permitting process.
- Trash and debris.

What can the Boston Parks and Recreation Department do to improve the quality of the parks in Boston? (write-in responses)

This question had 675 responses. Major themes included:

- Maintenance - more regular maintenance, better trash management (more barrels, more frequent emptying).
- More restrooms.
- Access to spaces within parks and programming and overall access getting to parks (esp. for adults, seniors, those with disabilities, bikes, pedestrians).
- Support community-run programming and artists, more art in parks.
- Lack of transparency and access to parks decision-making.
- Protect and preserve natural areas and features (esp. trees) and create more natural spaces.
- More shade.
- Regulate dogs in parks (more dog areas, strong enforcement of leash laws, pet waste issues).
- Increase budget for maintenance and staffing.

*Write-in responses may be edited for clarity or brevity.

What is the best way to reach you to share information about park events and activities? Check all the apply.

PART I	Email	Social media	Website/Event calendar
From a community group	518	352	337
From the City of Boston	833	546	596

PART II	# of responses
Community newsletter	568
Printed flyer or postcard	520
Temporary sign at the park	459

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Respondents by zip code

Zip code	# of respondents	Zip code	# of respondents
02021	0	01040*	1
02026	1	01230*	3
02108	6	01776*	1
02109	13	01864*	1
02110	4	01905*	1
02111	8	02123*	1
02113	11	02138*	2
02114	22	02139*	3
02115	30	02140*	3
02116	36	02141*	1
02118	28	02142*	1
02119	37	02144*	1
02120	12	02145*	1
02121	23	02322*	1
02122	19	02343*	1
02124	55	02445*	5
02125	30	02446*	1
02126	27	02458*	1
02127	49	02478*	1
02128	30	02730*	1
02129	95	03031*	1
02130	217	03130*	1
02131	80	03136*	1
02132	37	34231*	2
02134	18	TOTAL ALL ZIP CODES	1,054
02135	45	*Zip code outside Boston.	
02136	62		
02151	0		
02152	0		
02163	0		
02186	1		
02199	0		
02203	0		
02210	6		
02215	15		
02459	0		
02467	1		

See MAP 24: OSRP SURVEY (response rates).
Some zip codes not visible at map scale.

OPTIONAL DEMOGRAPHIC QUESTIONS

Do you or someone in your household have a disability or chronic health condition that affects access to, or enjoyment of, open space?

	# of responses
Yes	133
No	885
Prefer not to say	36
TOTAL	1,054

What is your age?

	# of responses
0-9	2
10-19	6
20-34	185
35-54	517
55-64	142
65-84	168
85+	5
Prefer not to say	29
TOTAL	1,054

What is/are the age(s) of the people in your household? Check all that apply.

	# of responses
This does not apply to me.	133
0-12	347
13-18	163
19-25	83
25 and over	754
Prefer not to say	56

What is your gender identity?

	# of responses
Female	666
Male	285
Non-binary/third gender	15
Prefer to self-describe	0
Do not wish to answer	88
TOTAL	1,054

Are you of Hispanic, Latino, or Spanish origin?

	# of responses
Yes	70
No	879
Prefer not to say	105
TOTAL	1,054

What is your race or ethnicity? Check all that apply.

	# of responses
American Indian or Alaska Native	13
Asian Indian	15
Black or African American	86
Black or Caribbean American	29
Cape Verdean	4
Chinese	24
Filipino	3
Guamanian or Chamorro	0
Japanese	7
Korean	5
Native Hawaiian	0
Other Pacific Islander	2
Samoan	0
Vietnamese	5
White	717
Some other race	51
Prefer not to say	156

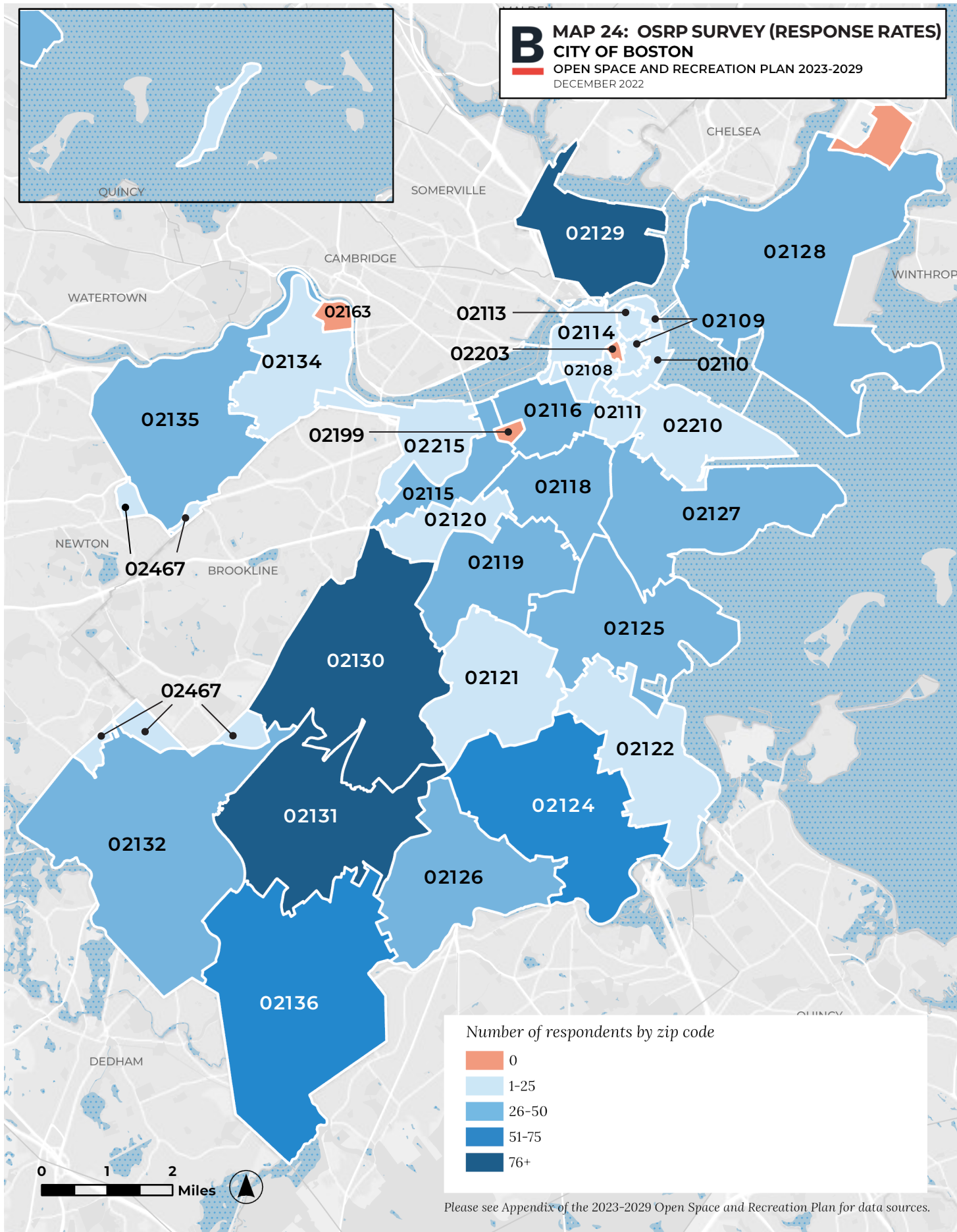
Survey responses by language

	# of responses
Arabic	0
Cape Verdean Creole	0
Chinese	1
English	1,051
French	0
Haitian Creole	1
Portuguese	0
Russian	0
Somali	0
Spanish	1
Vietnamese	0
TOTAL	1,054

RESPONDENTS

While efforts were made to engage residents from historically marginalized and currently excluded communities (see Section 2.3), we gathered very few survey responses in these areas. The majority of respondents identified as having one or more of these characteristics: woman, between the ages of 35-54, white, and not Hispanic or Latino. The vast majority of responses were through the English-language survey. Residents from the 02130 zip code, which is largely made up of Jamaica Plain, were overrepresented in the responses as was the case in the 2008-2014 and 2015-2021 surveys. Other areas of the city that made up a large share of responses were: Back Bay/Beacon Hill, Charlestown, and Roslindale zip codes. Areas of the city that received substantially fewer responses included zip codes for: Mattapan, the Fields Corner and Grove Hall areas of Dorchester, the Washington Park area of Roxbury, Allston-Brighton, Central Boston, and the Seaport area of South Boston.

Neither the PPP nor the OSRP survey received a statistically significant number of responses and so we will be careful in drawing broad conclusions from the surveys alone. This is where conversations and other projects over the last seven years come together to form a more complete picture.



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SECTION 6.3

STATEMENT OF OPEN SPACE AND RECREATION COMMUNITY VISION AND GOALS

INTRODUCTION

Based on community input, the City of Boston through its Parks and Recreation Department prepared a set of community goals that will inform the Analysis of Needs (Section 7) and develop the plan's Goals and Objectives (Section 8).

VISION

What is an ideal open space and recreation system? This is what we have heard through this planning process and over the course of work in the last seven years:

- Community-led decision making about the design, care, programming, and expansion of open spaces.
- Continual improvement and innovation in open space design, maintenance, and programming, with a particular emphasis on preparing for natural hazards and climate change.
- Improved access to open space through:
 - inclusive and culturally diverse design and programming,
 - well-designed streetscapes, greenways, trails, and bikeways between parks and along the seashore and riverbanks linking neighborhoods as well as open spaces, and
 - enhanced public transit, improved vehicular routes.
- Open space with access to public amenities that may affect ability to visit or stay in a park: drinking fountains, restrooms, shade structures, safety lighting, relevant and accessible passive or active park features.
- Spaces that are safe and welcoming to all walks of life.
- An equitable permitting process that is clear, accessible, and timely.
- Open space with robust, accessible, and culturally diverse programming for the arts, sports, fitness, and recreation.

- Park system that responds to changing demographics and provides youth and adults alike with opportunities for healthy activity.
- Open space that provides room for dog activity that enforces the rules around management of dog activity in parks.
- Open space that is well-maintained with clean spaces, safe equipment, and thriving vegetation. This includes natural areas and urban wilds with trails that are protected, maintained, and interpreted.
- Partnerships to create, fund, and enhance permanently protected and publicly accessible open space.
- Stable and enhanced funding for the citywide maintenance and expansion of the park system.
- Acquisition of key open space parcels to:
 - expand access to the park system,
 - provide permanent public spaces,
 - safeguard the ability to gather and protest freely,
 - provide safe, enjoyable space outside the home,
 - establish community gardens,
 - protect viewsheds, watersheds, and habitats, buffer existing open spaces,
 - provide needed recreational facilities, and
 - reduce community vulnerabilities to the impacts of climate change, including extreme heat, flooding and sea level rise.

GOALS

Based on a review of previous goals and policies, the current community setting, current assessment of environmental conditions, and a review of public input including the results of the open space plan survey, three primary goals emerged:

1. Protect, maintain, manage and improve the City of Boston's open space system to maximize the benefits that this infrastructure provides.
2. Sustain and expand an open space system that is equitable, publicly-owned, permanently protected and available to all.
3. Promote resilience by supporting the critical relationship between the urban natural environment and quality of life in the city.

SECTION 7

ANALYSIS OF NEEDS

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SECTION 7.1

RESOURCE PROTECTION NEEDS**INTRODUCTION**

Boston is fortunate to include a broad range of natural resource areas. Protecting, restoring and expanding these resource areas ensures that they can provide their full range of ecological functions and benefits now and into the future.

Key issues and concerns:

- Meeting operating needs.
- Proactive care for the urban forest.
- Expanding stewardship partnerships.
- Managing cross-collaboration with agencies and departments that share jurisdiction of these spaces.
- Inviting the public to use these public lands in ways that do not adversely impact the sometimes sensitive ecosystems they support.

OPEN SPACE EXPANSION AND LAND ACQUISITION

BPRD is building an Open Space Acquisition Program that's informed by planning and public input to begin to address the gaps in the existing open space system. Expansion of the park system has not kept up with the increase in population which means that the current open space system is being increasingly burdened. The existing park system serves the city well, but does not meet all of the open space needs of city residents (see Section 7.2). Natural resource areas, including woodlands, are at risk of loss without a complementary City program to acquire and protect these properties.

The foundation for BPRD's Open Space Protection and Acquisition Program is the *Parcel Priority Plan* (PPP), an analysis and information-gathering project that provides the framework for decision-making and priority-setting. The multi-year PPP planning effort created tools for analyzing property throughout the city for suitability for open space protection. The *Parcel*

Priority Plan helps shape an understanding of where to acquire or protect open space for the future use of Boston residents. By explicitly examining the value of parcels relative to various benefits, open space protection and acquisition can be based on thoughtful criteria rather than responding opportunistically.

Benefits considered by the PPP include, but are not limited to, providing respite from heat, managing flood waters, expanding access in underserved communities, enhancing wildlife habitat, and connecting existing parks to each other. By advancing these priorities—using data modeling, interdepartmental collaboration, and public recommendations—the *Parcel Priority Plan* informs an understanding to target our efforts for open space expansion to be implemented in part through the Open Space Acquisition Program.

The overarching goal of the *Parcel Priority Plan* is to understand where the best opportunities are for enhancing and enlarging Boston's network of parks. The planning process included development of a geospatial model that layers and analyzes information to help BPRD understand where there is an opportunity and/or significant need to provide or protect open space for the future use of Boston residents. Importantly, while the model provides important data-driven information, BPRD recognizes that using data alone to inform open space expansion efforts has limitations. The model will be used in conjunction with other critical sources of information including the institutional knowledge of staff and the wisdom of residents within our neighborhoods.

The PPP uses the framework of Boston's *Open Space and Recreation Plan* challenge areas (or goals) as an analytical structure by addressing open space access, equity, and climate resilience. The model integrates an overlay of environmental criteria through all of these analyses to ensure that the value of existing canopy, natural resource areas, and topography are part of all parcel prioritization efforts. With so many parcels in the City of Boston to consider, the tool can

HOW CAN THE PARK SYSTEM BE EXPANDED?

Protecting and expanding parkland will rely on work of government entities, non-profits, residents, landowners, and more.



Protection – legal protection is added to sites to limit development and ensure permanent and public access.



Acquisition – new protected parks are established or more acreage is added to existing parks.

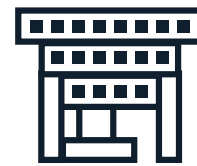
HOW ARE SITES IDENTIFIED?



Community recommendations

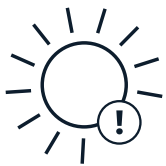


Geospatial modeling



Institutional knowledge and additional factors

WHAT WAS INCLUDED IN THE GEOSPATIAL MODELING PIECE?



Heat



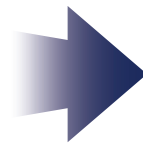
Flooding
(coastal and stormwater)



Park access



Demographics



COMBINED SCORE



LANDSCAPE

Why is landscape separate? There are a variety of landscape-based elements to consider when determining where parks might be sited (e.g., topography, wetlands, and state wildlife habitat priorities). Both the nature of landscape dynamics and the available data makes this consideration less suitable for a parcel-by-parcel scoring method.

Top: Permanent and public access is critical to any city's park system. It ensures that residents have a thriving park system now and 100 years from now, regardless of ownership or development pressure.

Middle: Identifying sites for future parks relies on bringing together multiple sources of knowledge.

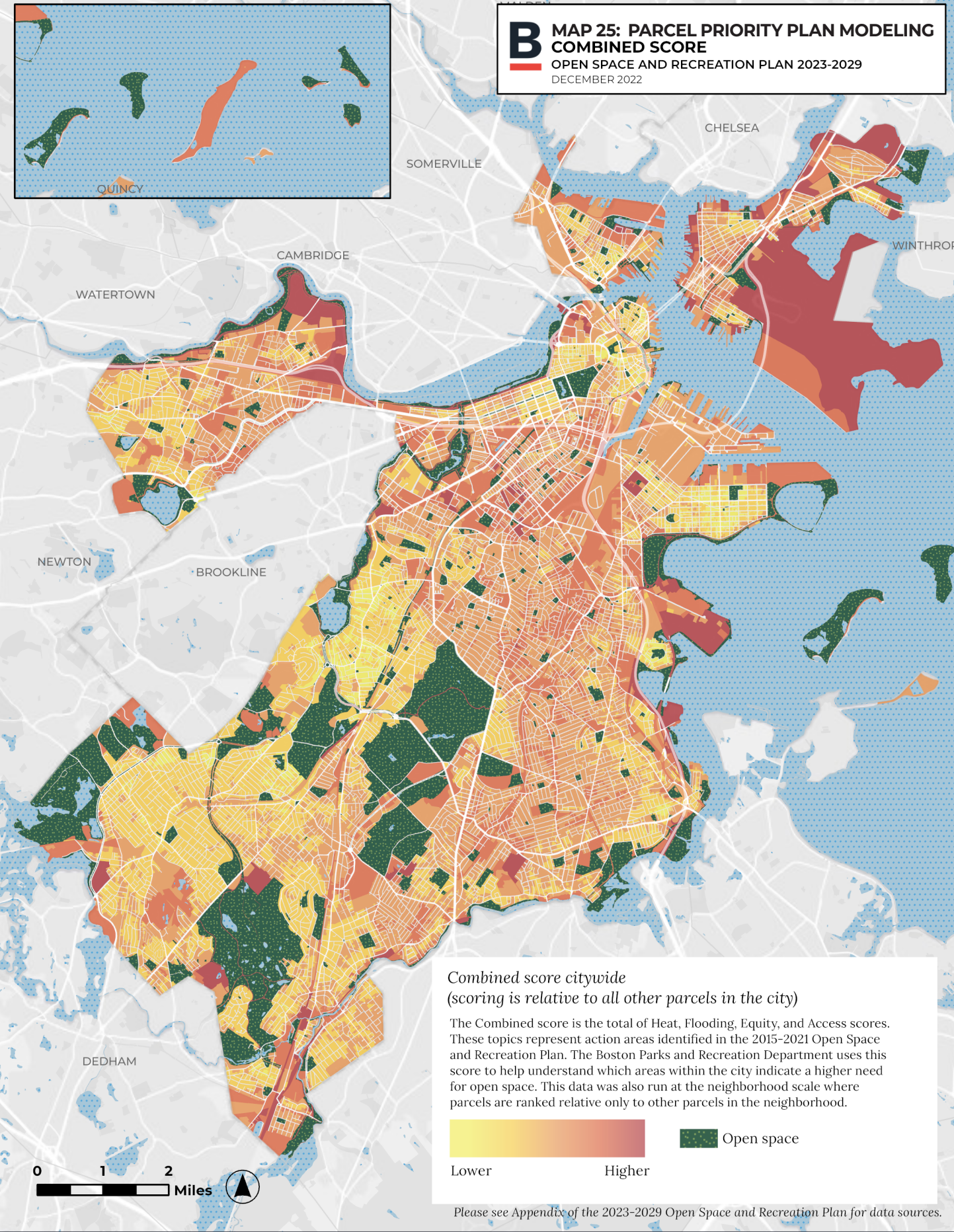
Bottom: Geospatial modeling, one element of identifying sites, is a helpful way to bring together many sources of data into a more digestible format and narrow down potential sites from nearly 100,000 parcels in Boston.

provide a “first pass” at ranking parcels for acquisition or protection. The tool can also be used to provide information on parcels that may be brought to the attention of BPRD from residents or stakeholder groups. See Section 6: Community Vision for maps and

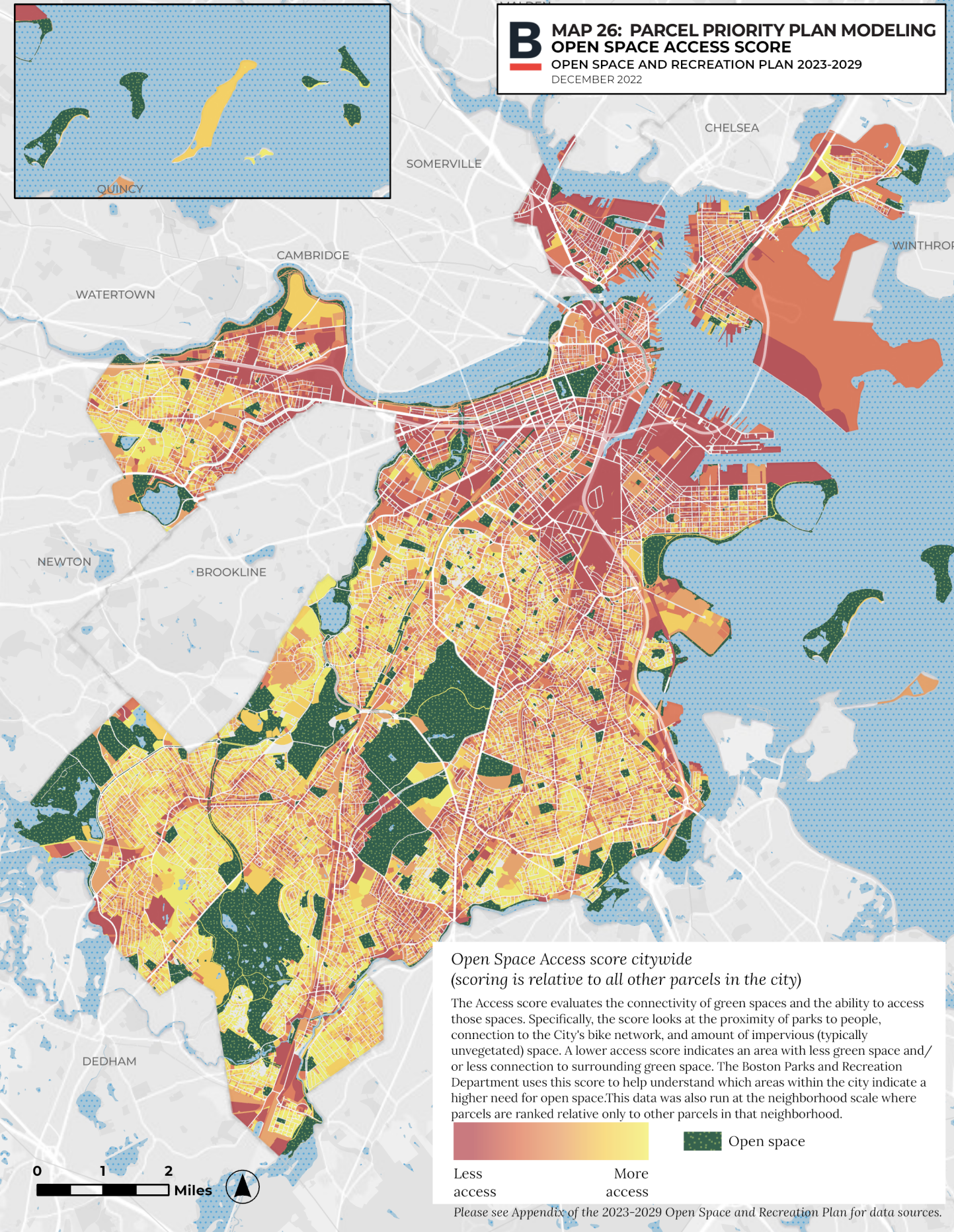
more information on community recommendations for park system expansion.

For more information: boston.gov/environment-and-energy/open-space-acquisition-program

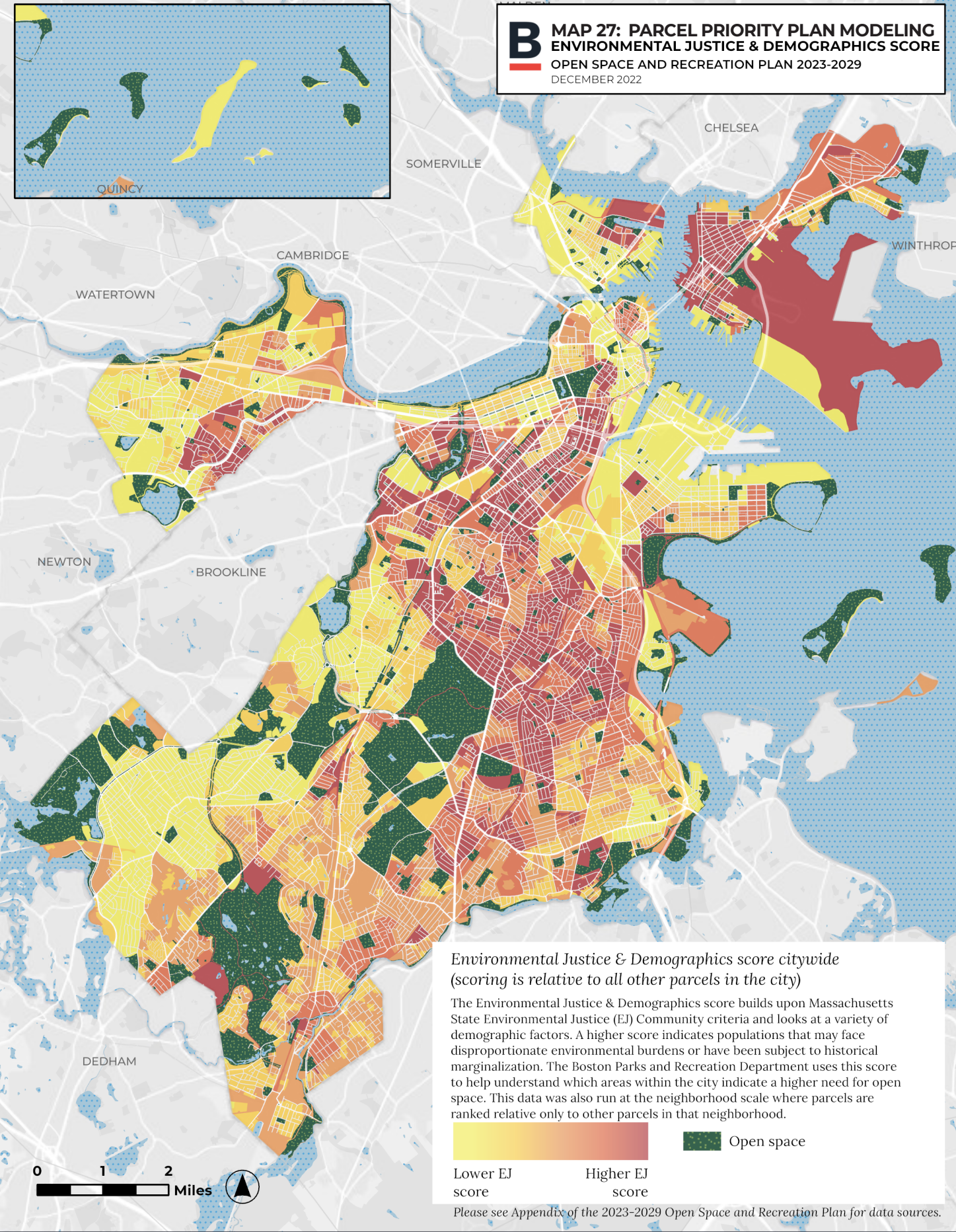
B MAP 25: PARCEL PRIORITY PLAN MODELING
COMBINED SCORE
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



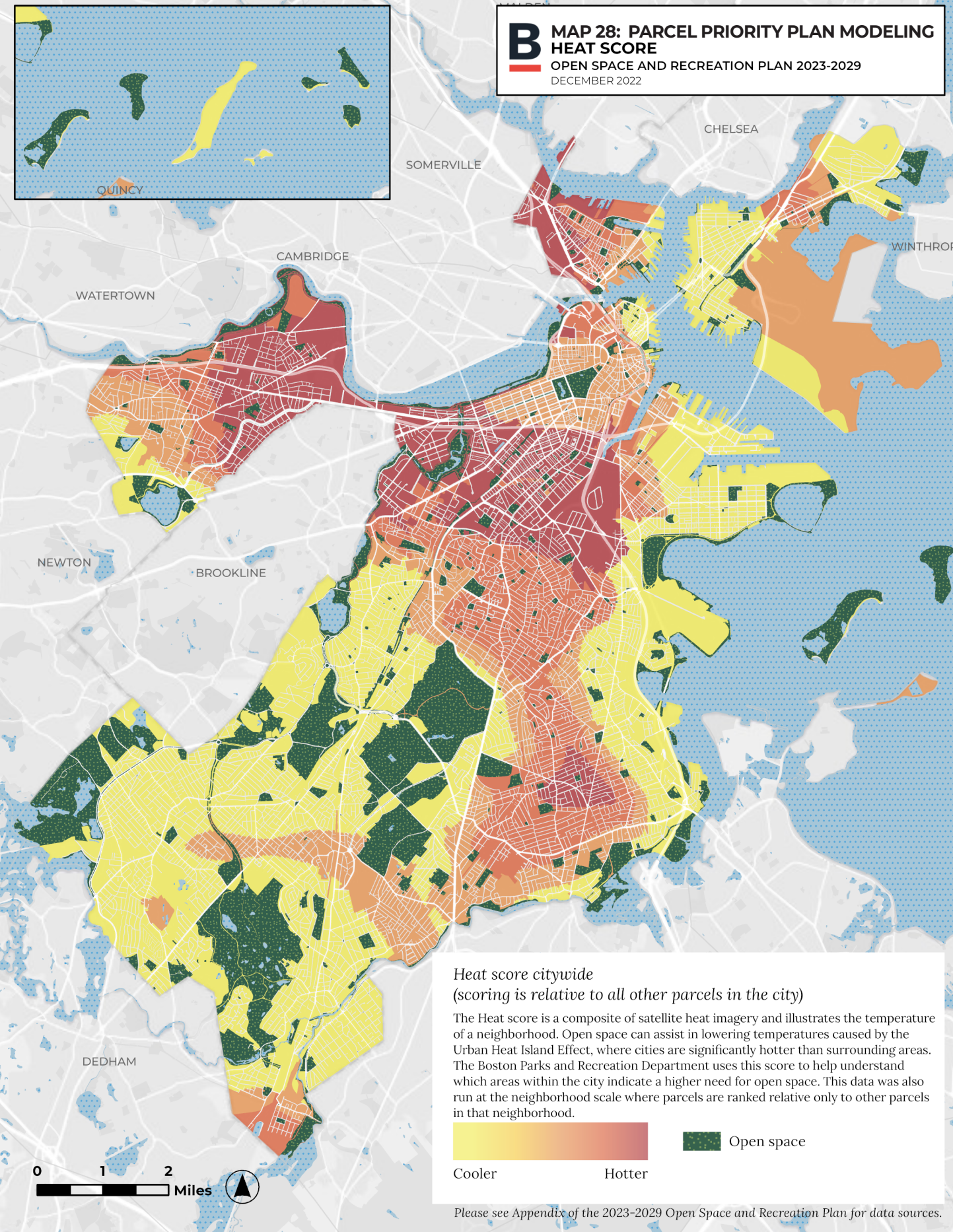
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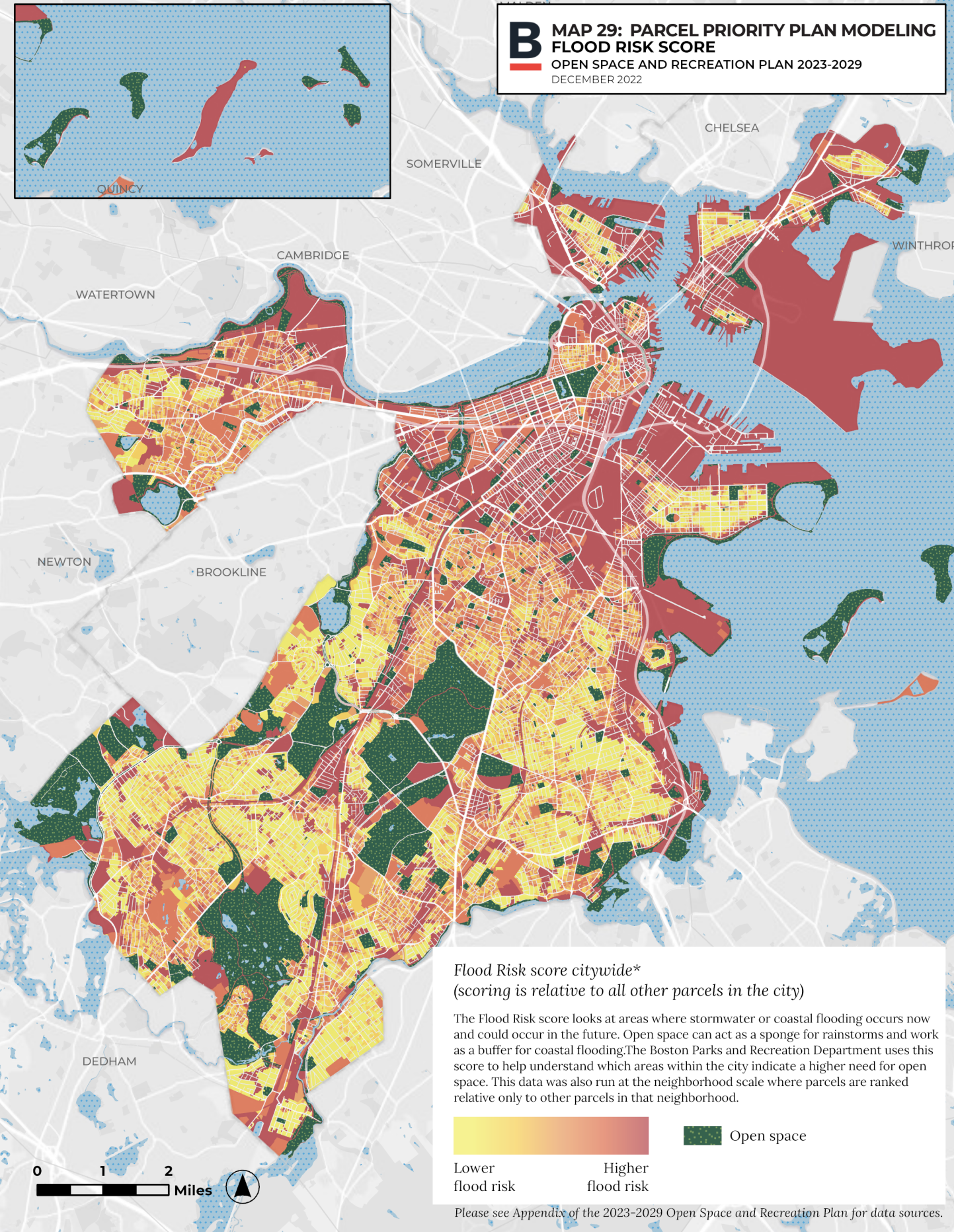
B MAP 27: PARCEL PRIORITY PLAN MODELING
ENVIRONMENTAL JUSTICE & DEMOGRAPHICS SCORE
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



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B MAP 29: PARCEL PRIORITY PLAN MODELING
FLOOD RISK SCORE
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



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URBAN WILDS AND NATURAL AREAS

Boston's urban wilds and natural areas are essential components of the City's open space system. They preserve the remaining native biodiversity and perform a host of ecological services including floodwater storage, carbon dioxide uptake, urban cooling, and stormwater filtration. Additionally, they provide important resources for residents and visitors. They offer a variety of landscapes for passive recreation, quiet contemplative spaces for people seeking a refuge from hectic city streets, and environmental education.

For the last 25 years, BPRD's Urban Wilds Program (UWP) has been largely responsible for the day to day management and maintenance of most City-owned urban wilds. While staff and funding levels have continued to be very limited, landscape maintenance needs have increased with the acquisition of more conservation land and higher levels of stewardship at newly renovated sites. As a result, site maintenance is still highly dependent on corporate and non-profit volunteer stewardship and partnerships with organizations such as the Southwest Boston CDC and the Student Conservation Association.

ANALYSIS OF NEEDS: RESOURCE PROTECTION

In 2002, the UWP developed 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 outlined a prioritized maintenance and management scheme, and presented a programmatic strategy for outreach, resource development, increased site protection, and enhanced levels of stewardship and program administration. Since this plan was developed, the urban wild portfolio has expanded considerably with the acquisition of land from other City departments, the Boston Planning and Development Agency, and private entities (see Section 5) (BPRD 2002).

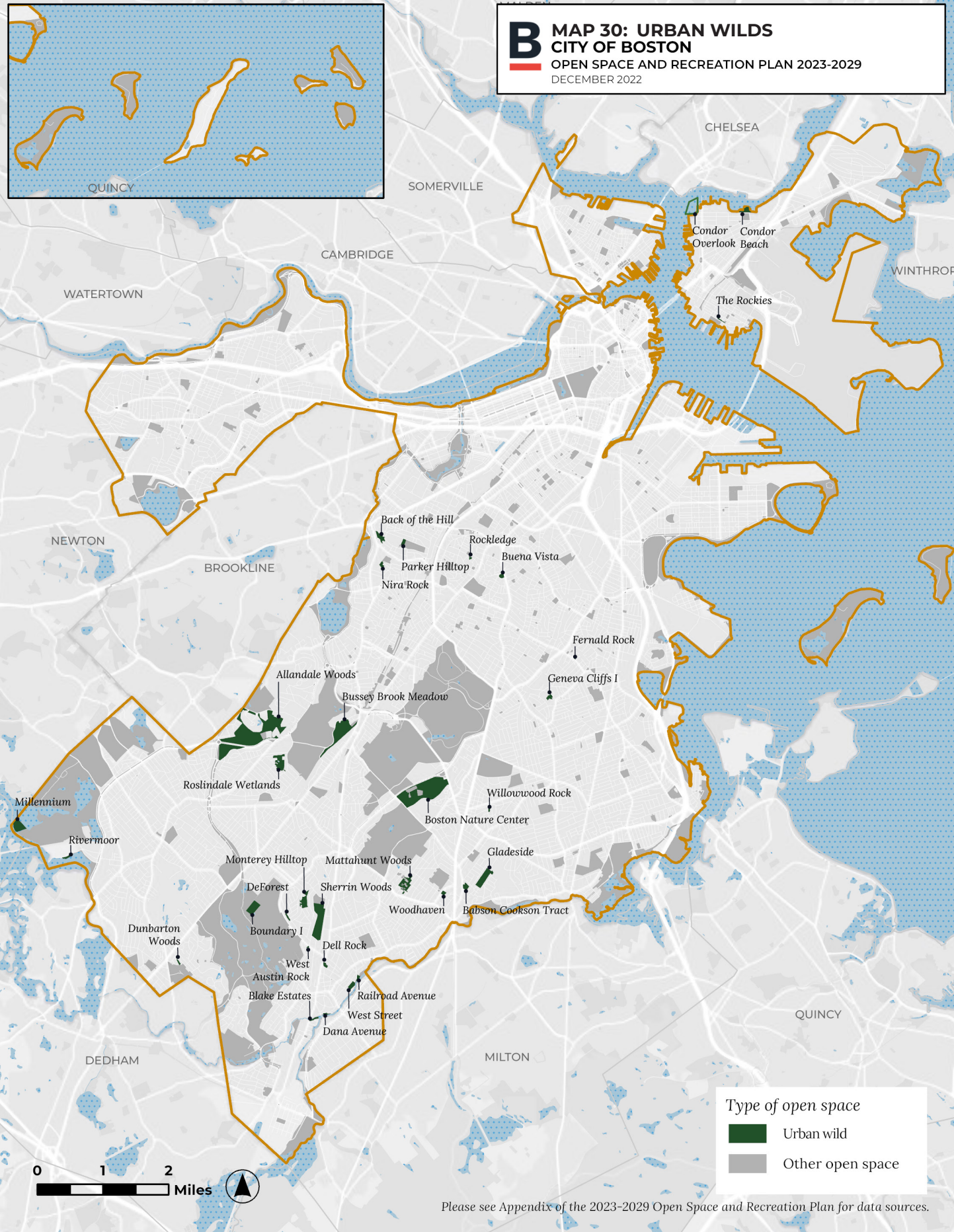
In order to fully assess current resource needs of both existing and new properties, capital funding has been requested for the development of a new management plan. To support a new management plan, the UWP has conducted property boundary and topographic surveys at many sites, and has worked with abutters to resolve associated encroachment. Additionally, the UWP has partnered with the Conservation Commission in designing a new site identification/rule sign with a goal of installing signs at each of the properties by the end of 2023.

RECENT AND ONGOING SITE-SPECIFIC INITIATIVES

In the past seven years, various ecological restoration and trail improvement projects have been successfully completed. In addition to the 2017 trailhead renovation and wayfinding project at Allandale Woods, subsequent trail and wetland restoration projects have been initiated in multiple phases at Sherrin Woods, Roslindale Wetlands, and, most recently at Mattahunt Woods. The ecological restoration components of these projects have been carefully implemented based on their cost effectiveness, potential to provide enhanced habitat for native plants and animals, and ability to perform other ecological functions.

Beyond capital projects, the City has made considerable gains in conservation land protection. Over this same seven year period, the City has finalized protection of environmentally and archaeologically sensitive areas such as the Rivermoor site along the Charles River in West Roxbury, the 108 Walter St. wetland buffer adjacent to the Roslindale Wetlands site, the native quarry at the Babson-Cookson Tract in Mattapan, and substantial hillside land holdings at Monterrey Hilltop in Hyde Park. Collectively, these acquisitions have constituted the most active period of land conservation since the 1970's and 1980's.

B MAP 30: URBAN WILDS
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



Please see Appendix of the 2023-2029 Open Space and Recreation Plan for data sources.

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PROTECTING AND EXPANDING THE URBAN FOREST

In 2022, the City of Boston released the first comprehensive Urban Forest Plan to guide equitable protection and expansion of the urban canopy to mitigate against the increasing risks associated with climate change, including extreme heat and flooding. The plan includes four overarching goals which will guide investments and decisions in the years to come:

1. Equity First
2. Community-Led
3. Proactive Care and Preservation
4. Prioritized and Valued Trees

Data collection and analysis for the plan included a citywide five-year canopy change analysis, a comprehensive inventory of all City street trees, extensive GIS mapping and analysis, public input through a community advisory board, an interdepartmental working group, and the general public, as well as input from expert consultants and contributors. This inventory, analysis and input informed seven plan strategies:

1. *Expand and Reorganize Urban Forest Management*: create an Urban Forestry Program
2. *Proactively Protect and Care for Existing Trees*: take care of what we have
3. *Strategically and Equitably Expand Tree Canopy*: the where, what and how of planting
4. *Make Space and Improve Conditions for Trees*: specifics around streets and right-of-ways
5. *Improve Communications*: key steps both internally and externally
6. *Data Improvements*: keep building on what was started during the planning process
7. *Utilize and Develop Local Talent*: urban forestry career pathways

For each of these strategies, the plan offers concrete next steps and detailed recommendations including:

- Neighborhood Strategies for the entire city that highlight priority planting zones
- Detailed analysis of the City right of ways including current street trees, open tree pits, sidewalk widths to inform the approaches that will need to be deployed to add street trees in those areas.
- Species selection information to expand diversity and adaptability.
- Partnership strategies
- Workforce development recommendations
- Peer city benchmarking

The implementation table within the plan provides an action plan for next steps including timeline, leadership responsibility, and staffing requirements.

For more information: boston.gov/urban-forest-plan

RESOURCE PROTECTION AND CLIMATE ACTION

The City of Boston's *Climate Vulnerability Assessment and Climate Action Plan* identify major climate hazards including extreme heat and flooding. They set goals and guide actions for addressing these risks while meeting the City's 2050 carbon-neutrality target.

EXTREME HEAT

As average temperatures rise, the city is vulnerable to health impacts of extreme heat, increased urban heat island effect and stress on the energy supply and related infrastructure. In 2021, Boston received a *Municipal Vulnerability Preparedness Program* (MVP) Grant to study and create a heat resilience plan. *Heat Resilience Resolutions for Boston* is a plan that identifies a range of strategies for creating cooler communities including the following related to parks, trees and open space:

- 6.1 Enhance cooling in pocket green spaces and street-to-green conversions
- 6.2 Increase shade on municipal sites
- 6.4 Planning for Future Parks

Other park design strategies to address the impacts of extreme heat include access to cooling features, expanded tree canopy, and consideration of heat retention in materials selection. Park programming and hours of operation can also become part of the City's strategy to promote safe, healthy access to outdoor spaces in areas of high heat.

For more information: boston.gov/departments/environment/preparing-heat

STORMWATER FLOODING

The frequency and intensity of wet weather events continues to increase with climate change. Combined with rising sea levels, intense precipitation can overwhelm existing stormwater infrastructure and result in localized flooding. To address this, Boston Water and Sewer Commission's (BWSC) inundation models analyze which parts of the city are most vulnerable to future flooding during different storm event scenarios and projected depth and duration of potential flooding. The City of Boston and BWSC are working to reduce the quantity of storm run-off and improve the water quality by supporting the use of green infrastructure and other approaches to absorb and infiltrate run-off.

COASTAL FLOOD PROTECTION

The *Resilient Boston Harbor Vision* and *Coastal Resilience Solutions* studies for each of Boston's waterfront neighborhoods provide a framework for adapting to the impacts of climate change as a coastal city. Coastal flood risk is a combination of sea level rise, storm surge and associated wave-action and erosion. Each neighborhood has different risks and requires a specific, publicly informed, research based response that will guide future investments for adaptation. The toolkit of strategies for coastal resilience range from nature-based solutions, to elevated parks and open space, to floodwalls, deployables and adapted structures.

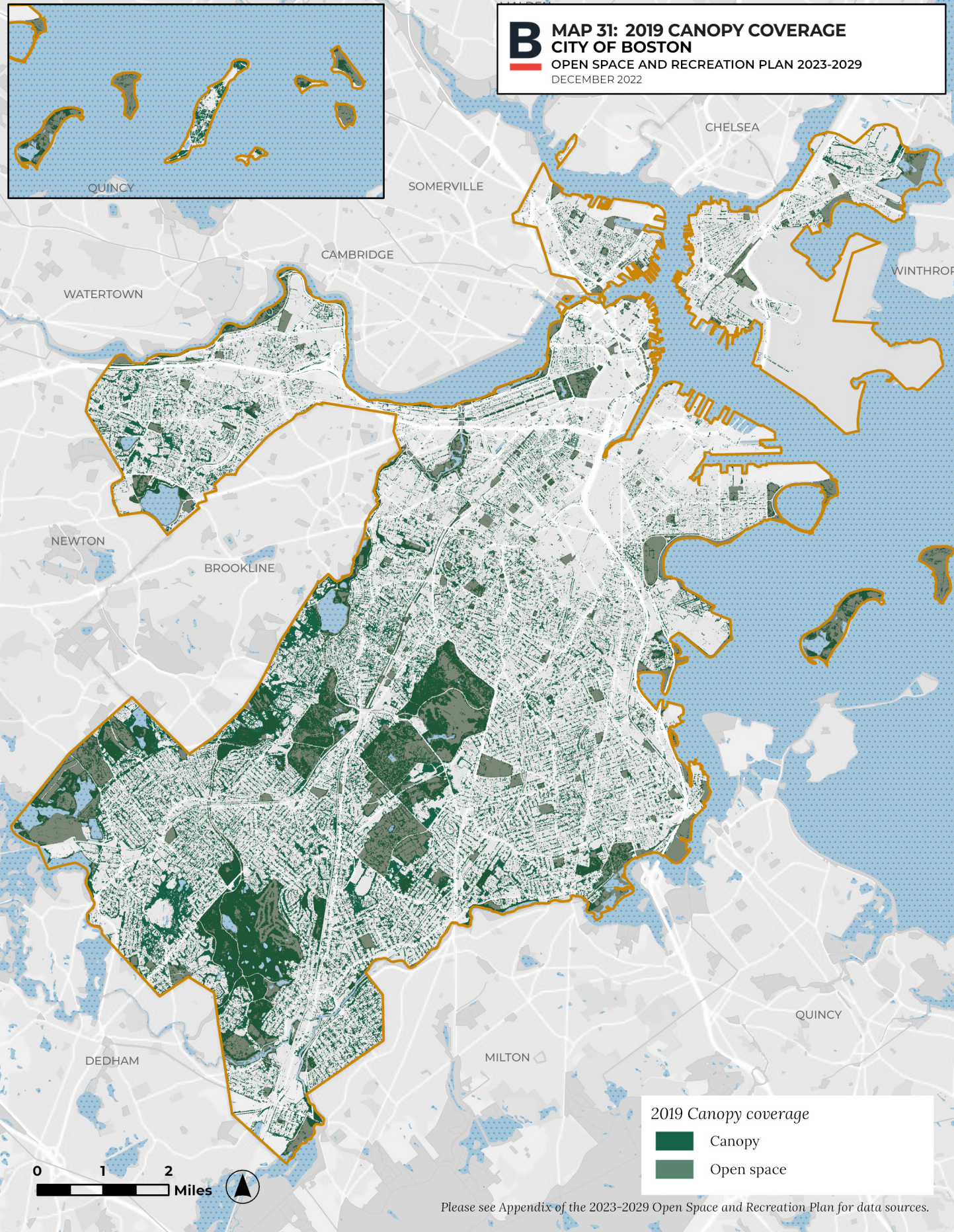
For more information: boston.gov/departments/environment/preparing-climate-change

PARKS AND OPEN SPACE

Expanded open space systems provide physical buffers to increasingly powerful coastal storms, and mitigation of the health risks associated with warming urban environments. Parks and open spaces are central to the future health, climate resilience and livability of the city. Park design strategies can ensure that these open space resources are able to bounce back after flood events and some properties can play a key role in providing flood protection for larger neighborhood flood pathways. Coastal flood protection projects are underway or complete at park properties including Moakley Park in South Boston, Ryan Playground in Dorchester, Langone Park in the North End, McConnell Playground in Dorchester, Fort Point/Channel Center parks, and others to come.

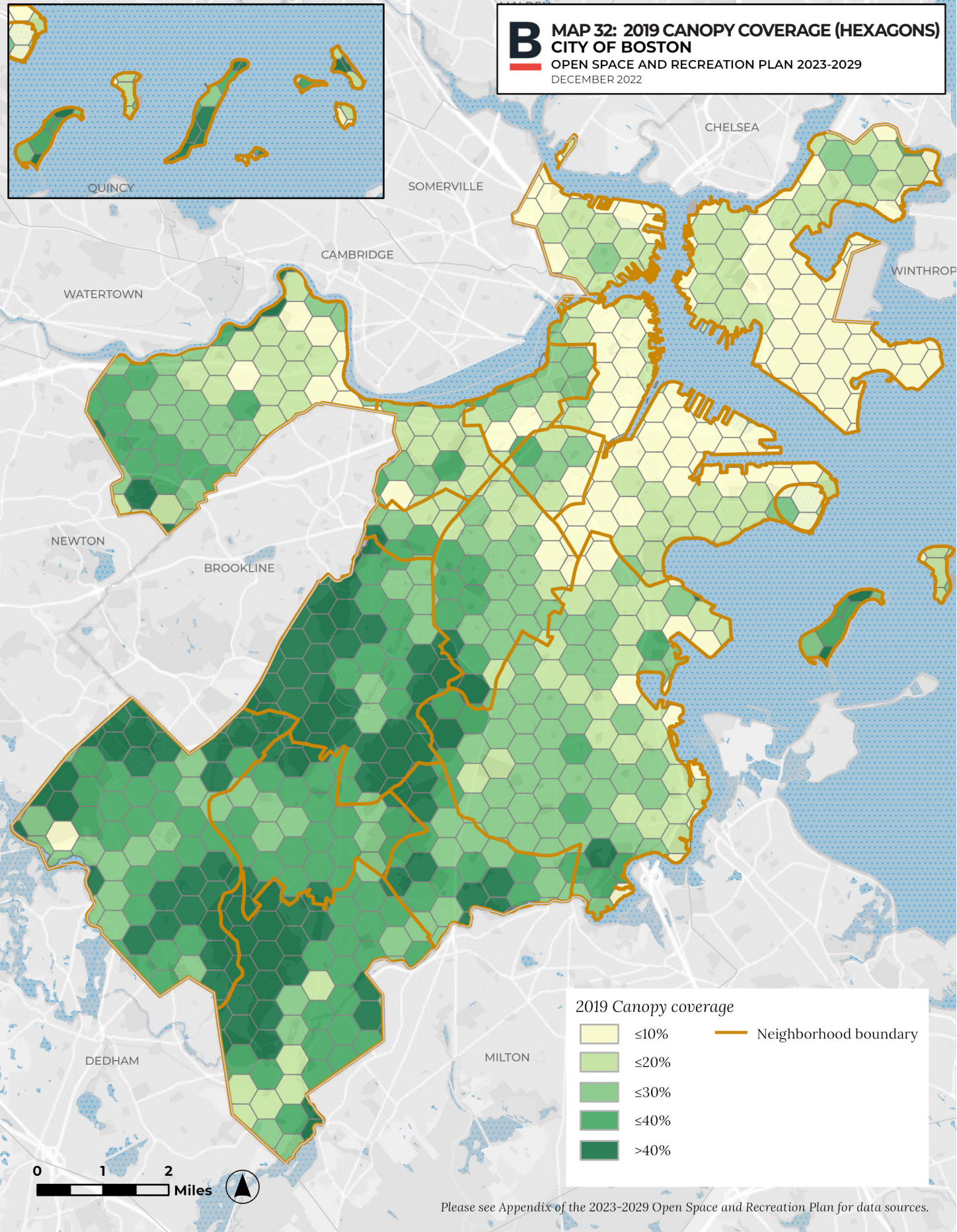
Other park considerations for climate adaptation include:

- natural areas management for canopy succession,
- invasive species and pest management,
- strong biodiversity, and
- improved energy management
 - lighting upgrades
 - conversion to electric vehicles and equipment
 - integration of lower-maintenance vegetation.

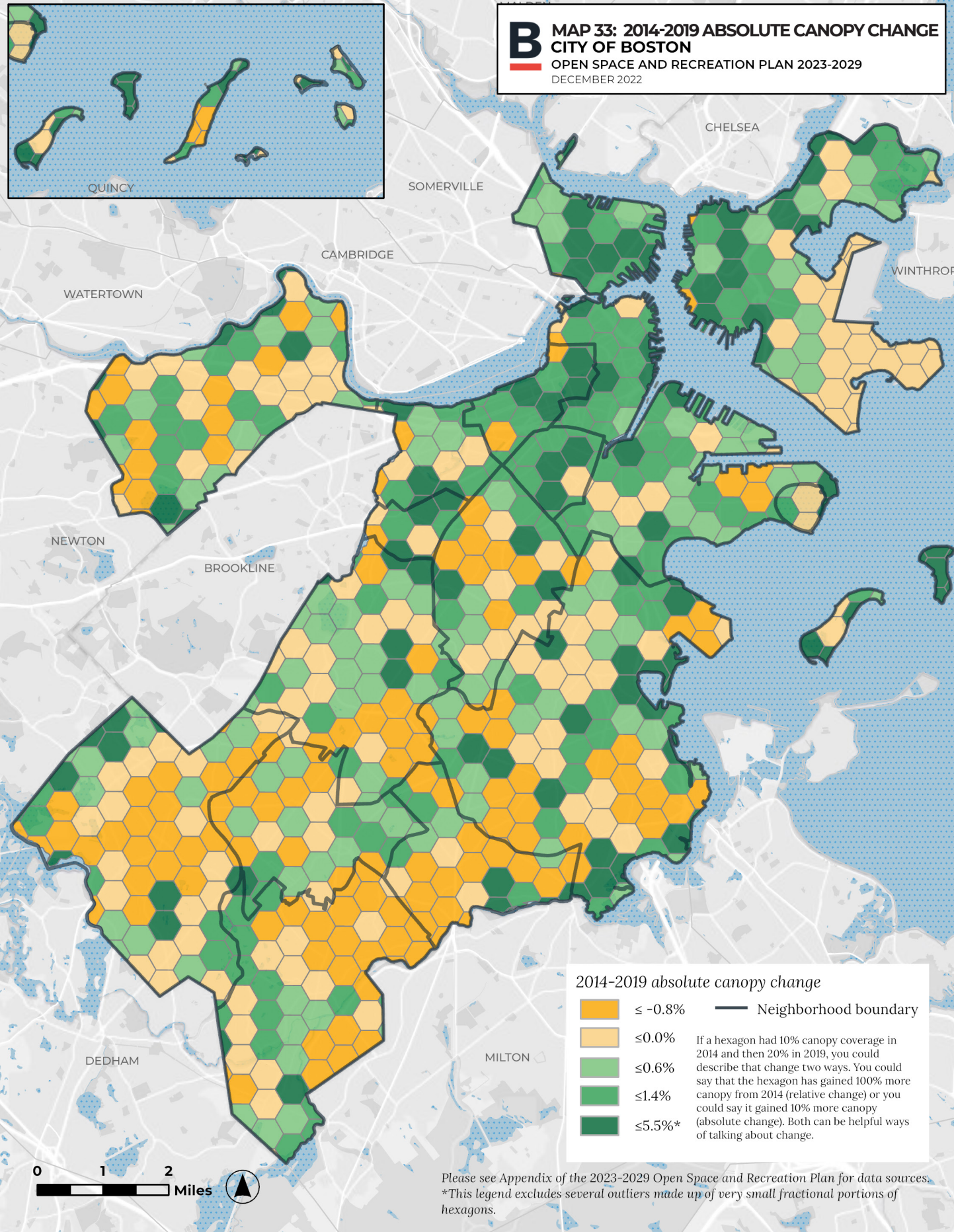


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B MAP 32: 2019 CANOPY COVERAGE (HEXAGONS)
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022

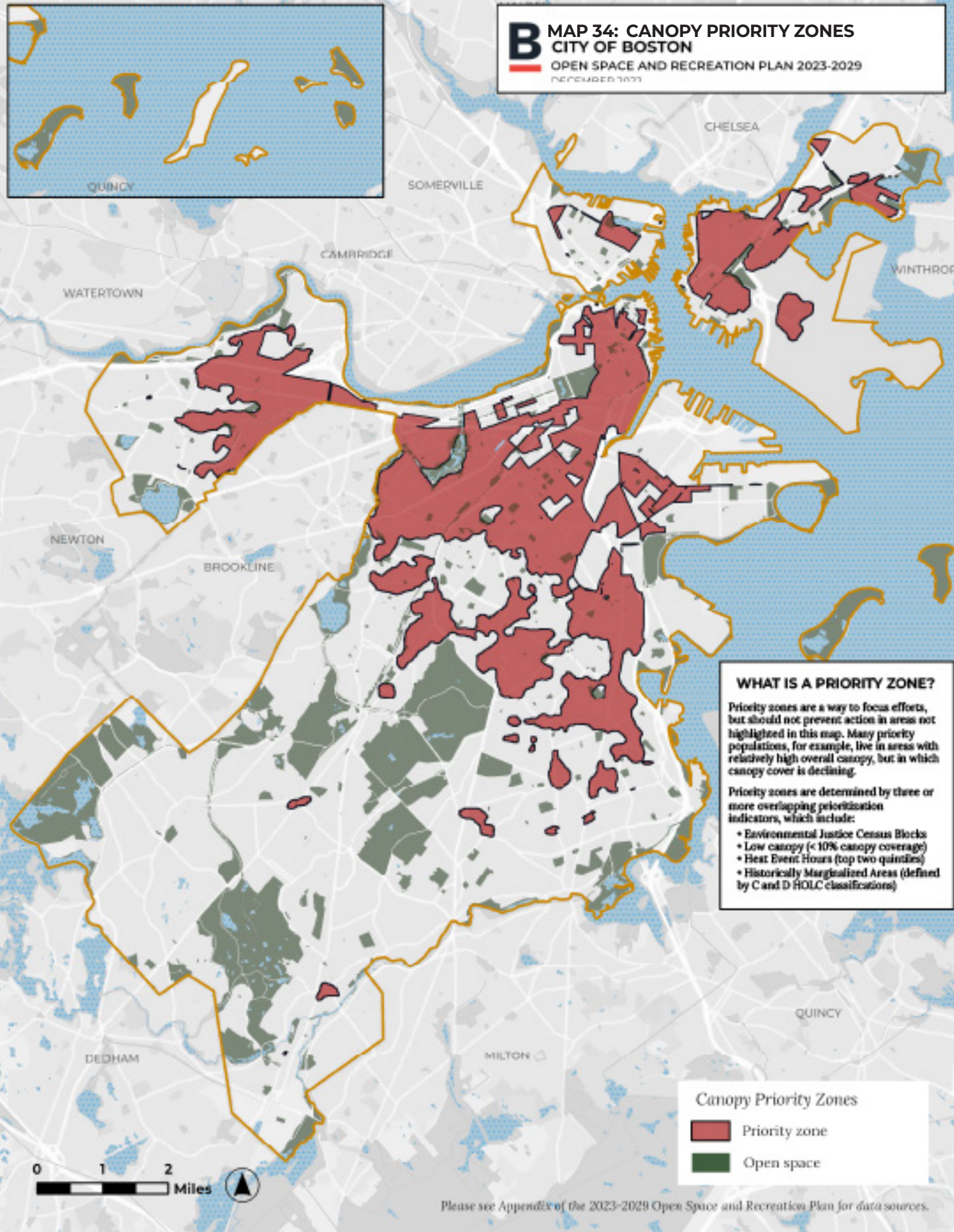


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B MAP 34: CANOPY PRIORITY ZONES
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2023



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SECTION 7.2
COMMUNITY NEEDS

INTRODUCTION

The open space system in Boston provides recreational space for youth and adults, community gathering space for neighbors, natural areas that support wildlife and connect urban dwellers with natural systems, gardens that provide beauty and seasonality, historic landscapes that connect us to the city’s past, waterfront parks, coastlines, and resource areas that open up access to our region’s waterfront assets and provide critical infrastructure in the face of climate change, event and cultural spaces that enrich our communities and our connections with each other. Evaluating the services and needs within this complex urban system is challenging. The approach of the Needs Analysis is to share an understanding of how we account for the resources we have and what the open space system provides to the public through its current distribution and facilities. From there, we identify the gaps in services and summarize what residents would like to see for improvements as informed by public input. Lastly, we evaluate how city growth impacts the demand on park resources and how we can strategically meet those demands through park investments and thoughtful expansion of the open space system.

BOSTON PARKS AND RECREATION DEPARTMENT

Note that while the OSRP includes a comprehensive analysis that extends across property ownership, the OSRP is produced by the City of Boston Parks and Recreation Department and as such best represents City’s perspective on challenges, needs, programs, facilities, and expansion.

BPRD owns and maintains clean, safe, and accessible public parks and open space. The department owns 2,196 acres of permanently protected open space- 1,000 acres of which make up the historic Emerald Necklace. This

inventory includes 283 properties across the city, two golf courses, 72 squares, 17 fountains, 210 courts, 12 street hockey rinks, 16 historic burying grounds and three active cemeteries. Additionally, BPRD maintains 27 urban wilds, four high school athletic fields and a total of 37 other properties which it does not own. BPRD also manages the care of more than 38,000 public street trees in addition to the trees within its parks.

Protected Open Space by Ownership	
	Acres open space owned*
City of Boston	2,412
BPRD	2,196
Other City Departments or Agreements	117
Conservation Commission	99
Commonwealth of Massachusetts	2,117
DCR	2,049
MBTA	49
MassDOT	12
MassPort	7
Private	312
Boston Planning and Development Agency	22
Federal	12
TOTAL	4,875

*figures rounded to the nearest whole number

KEY ISSUES AND CONCERNS

The work in the Design and Construction Unit of BPRD in the past seven years has focused on facility upgrades and capital improvements, improving public participation in park renovation projects, and developing planning project work. BPRD is engaging in citywide planning and development review efforts to ensure that the provision of open space and an understanding of open space impacts are part of this work. An environmentally just park system depends on *how* the work is done and the *outcomes* of that work. The Department aims to work from a foundation of equity and is evaluating our processes and revising practices, building and sustaining our operational capacity for park programming, recreation, maintenance, urban forestry and the delivery of capital improvement projects.

PARK ACCESS

The baseline evaluation for park system services across the city is distribution and size of properties in relation to the city's residential population. Nationally, the Trust for Public Land's (TPL) 10-Minute Walk Campaign has highlighted the importance of having park lands distributed throughout a city so that all residents can walk to usable, public open space within 10 minutes from where they live. TPL's analysis is a good initial overview, but it does not account for park size, location of park entrances, or open space access in areas of the city with low residential populations. At a high level, TPL ranks Boston as offering 100% of residents access to a park or schoolyard within a 10 minute walk from home. TPL's analysis includes Boston's Public Schools schoolyards as publicly accessible open space areas which provide essential access to residents in some parts of the city not well-served by traditional public park land.

Building from that analysis, BPRD has developed its own walkshed analysis framework that provides a more fine-grained look at the

city's open space system and who it serves. There are a range of benefits that come from nearby access to open space including shade and cooling, community gathering areas, access to natural features, and access to spaces for physical activity, all of which should be brought in closer proximity to people than a baseline of a ½ mile. BPRD's walkshed analysis distinguishes between three different types of parks based on size. The service area for each park type expands from 0.1 miles up to 0.5 miles as the park size increases. This analysis is built on a baseline 0.5 mile walkability standard (consistent with TPL's, and identified as a 10 minute walk for most people), complemented with an understanding that smaller parks (<5 acres) with fewer features likely draw users who live closer by. The smallest parks (those <¼ acre) likely only serve people who live immediately around the park.

BPRD's walkshed maps illustrate where in Boston park access should be improved in order to meet our goal of access to a high-quality park system for all. Service area gaps mean that residents in those areas cannot readily access the benefits of nearby parks and open space- whether that is a children's play area for connecting with other families, a recreational space for sports and exercise, a casual-use space for gathering with friends and neighbors, or a woodland trail for access to nature. Each of these kinds of open spaces offer significant value to urban quality of life, and gaps in access can also be indicative of environmental injustices. Parks provide cool spots with access to shade, and often water, in hot urban environments. Permeable surfaces in parks capture rainwater and can reduce the likelihood of neighborhood flooding. Being able to readily enjoy outdoor experiences and the health advantages they offer, even in extreme climate conditions, is a benefit which should be extended to all of the city's population.

To understand the walkshed maps, it helps to see that information is layered.

This map shows an example of the service area for a mini park (parks less than 0.25 acres in size and given a service area of 0.1 mile distance):



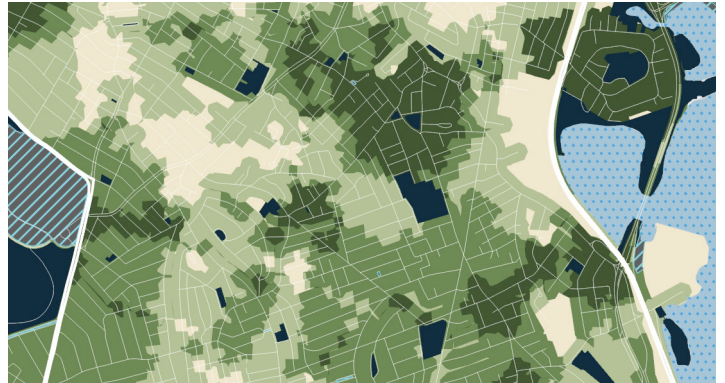
This map shows the service area from a neighborhood park (parks between 0.25 and 5.0 acres in size and given a service area of 0.25 mile distance):



This map shows the service area from a community park (parks greater than 5.0 acres in size and given a service area of 0.5 mile distance):



When these Service Areas are layered together, we can see which parts of the neighborhood have walkable access to one park, several parks, or no parks at all:



For the purposes of this analysis, community gardens and cemeteries are not included. This decision was made because community gardens provide an open space resource to their communities, but the facilities are dedicated to a particular use and oftentimes users are limited to only those who are assigned plots.

While many cemeteries provide passive open space to their surrounding community, their primary function is to provide or preserve burials, and there is much variability in each cemetery's public access and passive recreation opportunities.

ADDRESSING THE GAPS

While most of Boston's residents benefit from access to open space of varying types throughout the city, there are gaps. The gaps can be categorized in the following ways:

- Areas of the city that are outside of existing park walksheds. These are parts of the city that are predominantly supporting industrial uses, or have converted from industrial uses to more residential or mixed uses over recent decades. Park access gaps in these areas illustrate that permanent public open space has not been established as part of these redevelopment efforts. Gaps also exist in areas that simply haven't benefited from the public investment to establish larger, multi-purpose parks. This is illustrated in the Park Walksheds map (see MAP 35: WALKSHED

SERVICE AREAS) and the Gaps in Service Areas map (see MAP 36: GAPS IN SERVICE AREAS).

- Areas of the city where a minimum level of park distribution exists, but the population densities and park needs are so great that the demand on existing parks is significant. This is illustrated in the Acres of Open Space per 1,000 People series maps (see map series beginning with MAP 37: POPULATION DENSITY).

GAPS IN SERVICE AREAS/WALKSHEDS

Walkshed mapping clearly illustrates the areas in the city that do not have walkable access to adequate open space. Not all gaps are equally problematic—gaps in areas with high population densities, increasing development, significant urban heat impacts, or greater distances from park spaces in neighboring communities are more adversely impactful for residents who live within these areas. Understanding and responding to these myriad factors requires a layering of analysis to inform strategic responses.

POPULATION DENSITY AND ACRES PER THOUSAND ANALYSIS

Calculating the ratio of acres of protected parkland per 1,000 residents provides another metric for open space access and service across the city. There are different geographies that can be used to visualize population density: neighborhoods, zip codes, census tract, and so on. When population density is correlated with open space acreage in the same geography, patterns of how the existing open space system serves the city's residents emerge. Each analysis has its limitations in how the data is categorized and represented, so it's best to look across multiple maps and geographies to form a sense of the information being conveyed.

The analysis of protected open space per 1,000 people shows that while some neighborhoods or zip codes may look to be well served in overall park acreage, the distribution of that acreage

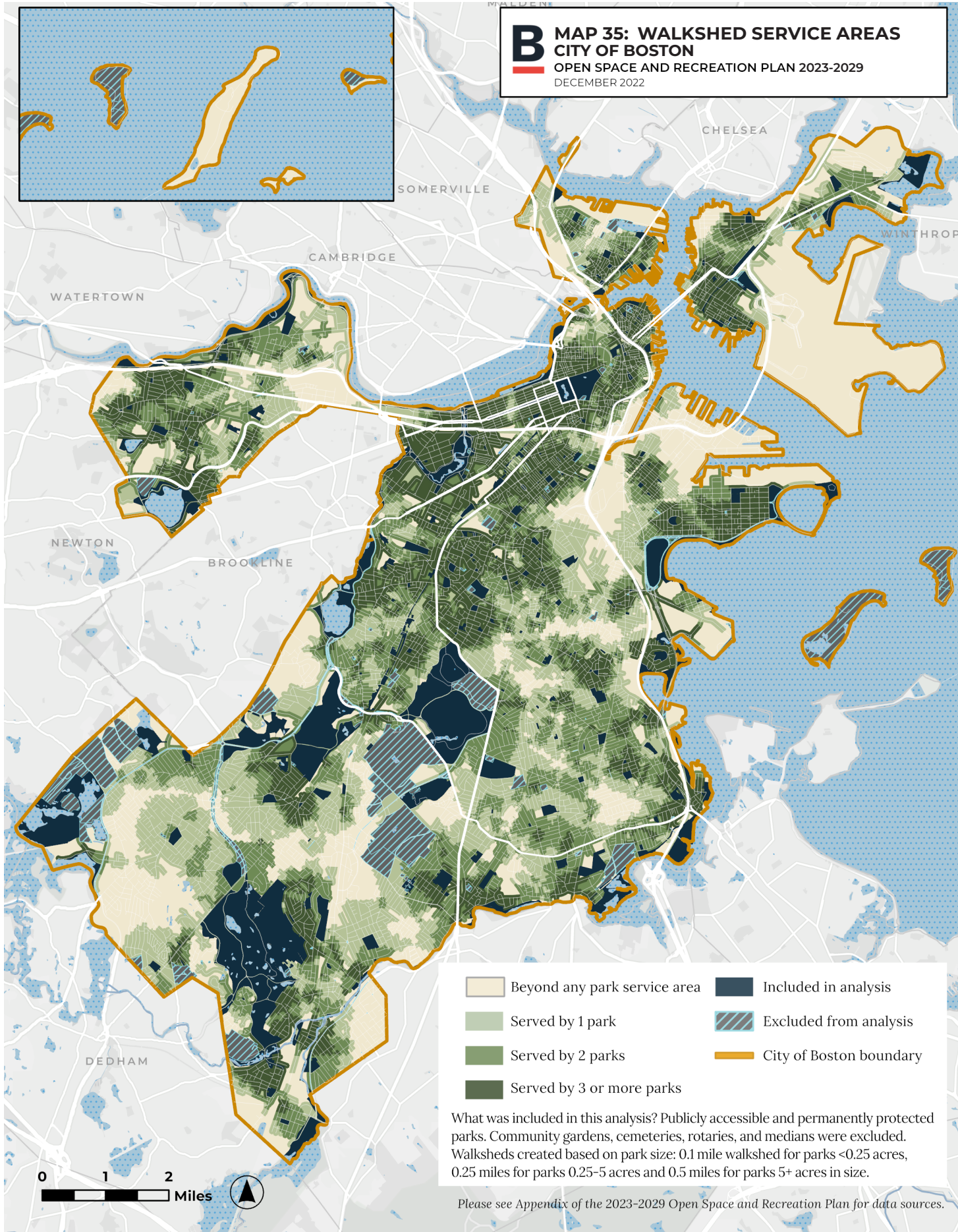
results in considerable disparities in open space per 1,000 people when reviewed at the census tract scale. Neighboring census tracts can have vastly different open space per capita ratios which emphasizes the importance of addressing not just open space distribution, but overall acreage/quantity of protected public park land in densely populated areas of the city. Small parks help address access, but can fall short on providing the full range of open space needs for urban populations.

LEVEL OF SERVICE

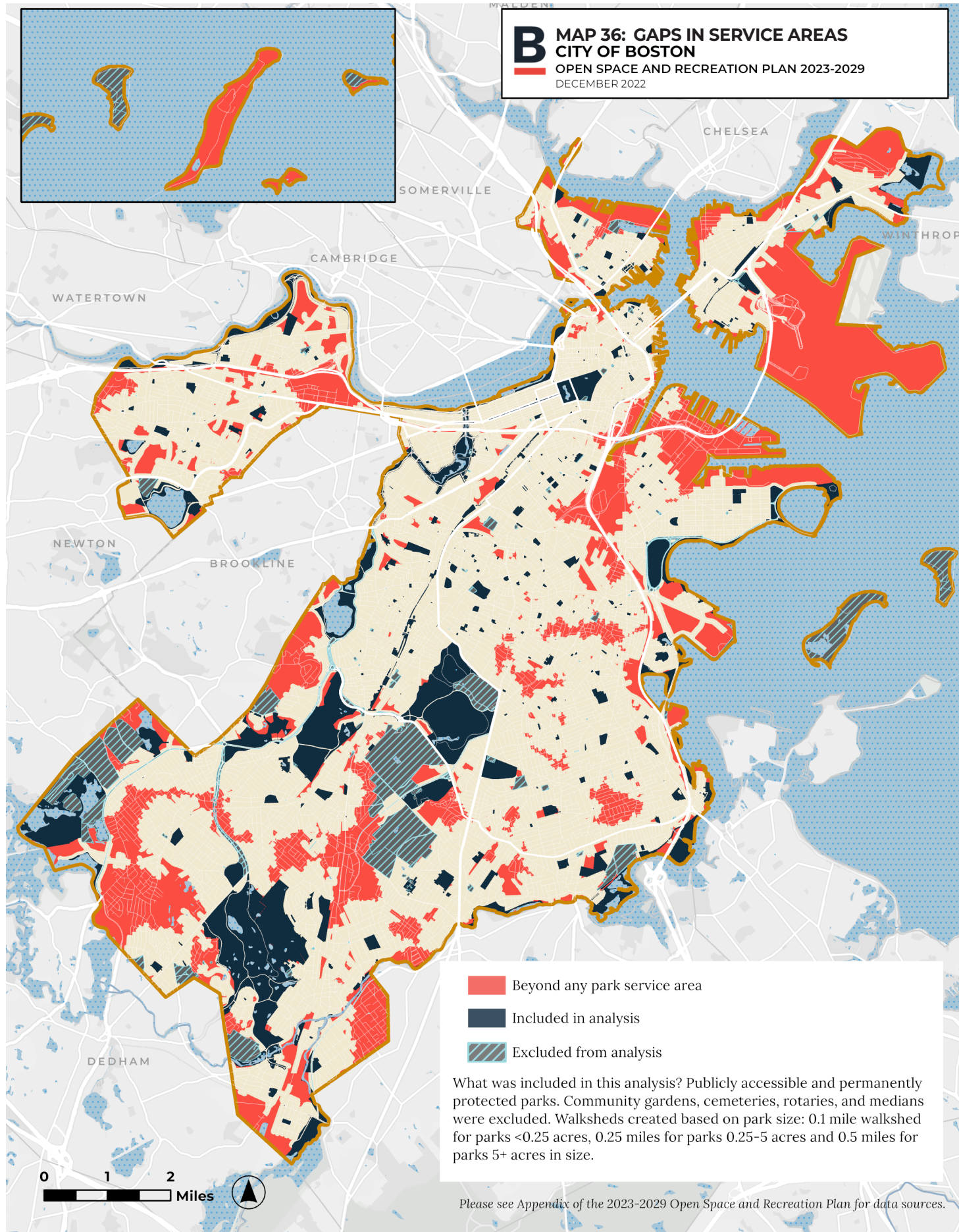
An analysis of park acreage and general distribution needs to be complemented with a study of level of service—where are various park and recreation amenities located and who has access to them? Level of service considers the features within parks, as well as the demographics of the people served by those features. It is understood that not all areas of the city can have the same access to recreational amenities—historic fabric, development density, transportation infrastructure, and natural resources (among myriad other factors) all affect park size and distribution. Nonetheless, stewardship and expansion of the park system and its features requires an understanding of the distribution of these features so that inequities can be strategically addressed.

Boston Parks' Level of Service analysis currently focuses on seven park amenities/features. This analysis will continue to be expanded as our data sets grow.

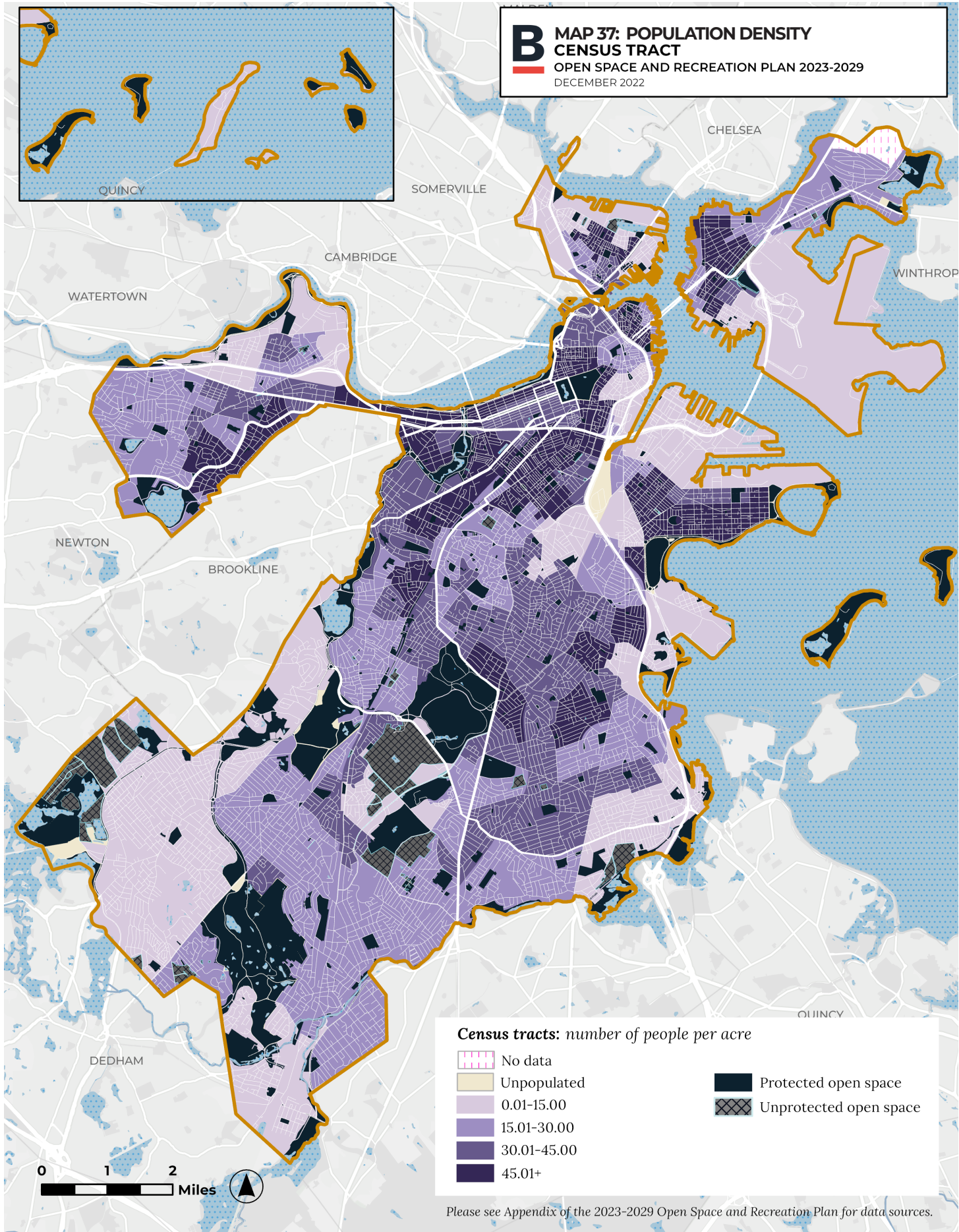
Future planning work within BPRD will focus on establishing benchmarks for level of service for specific facilities, and strategic plans for meeting those benchmarks through park improvements and facility expansion over time. Access to amenities will not necessarily be the same across the city. Facility distribution, walksheds, and population density all need to be used together to understand how many park facilities are needed and where.



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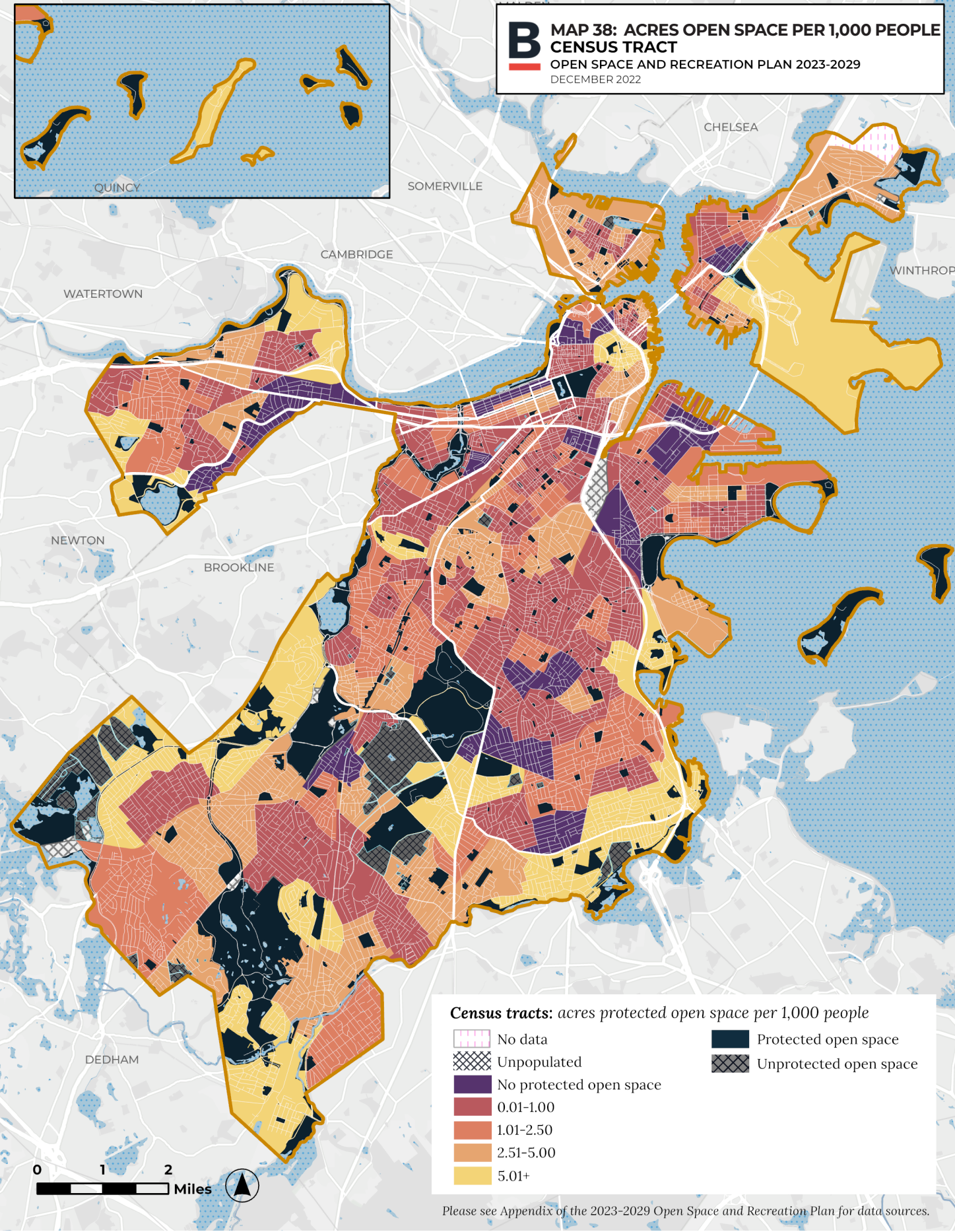


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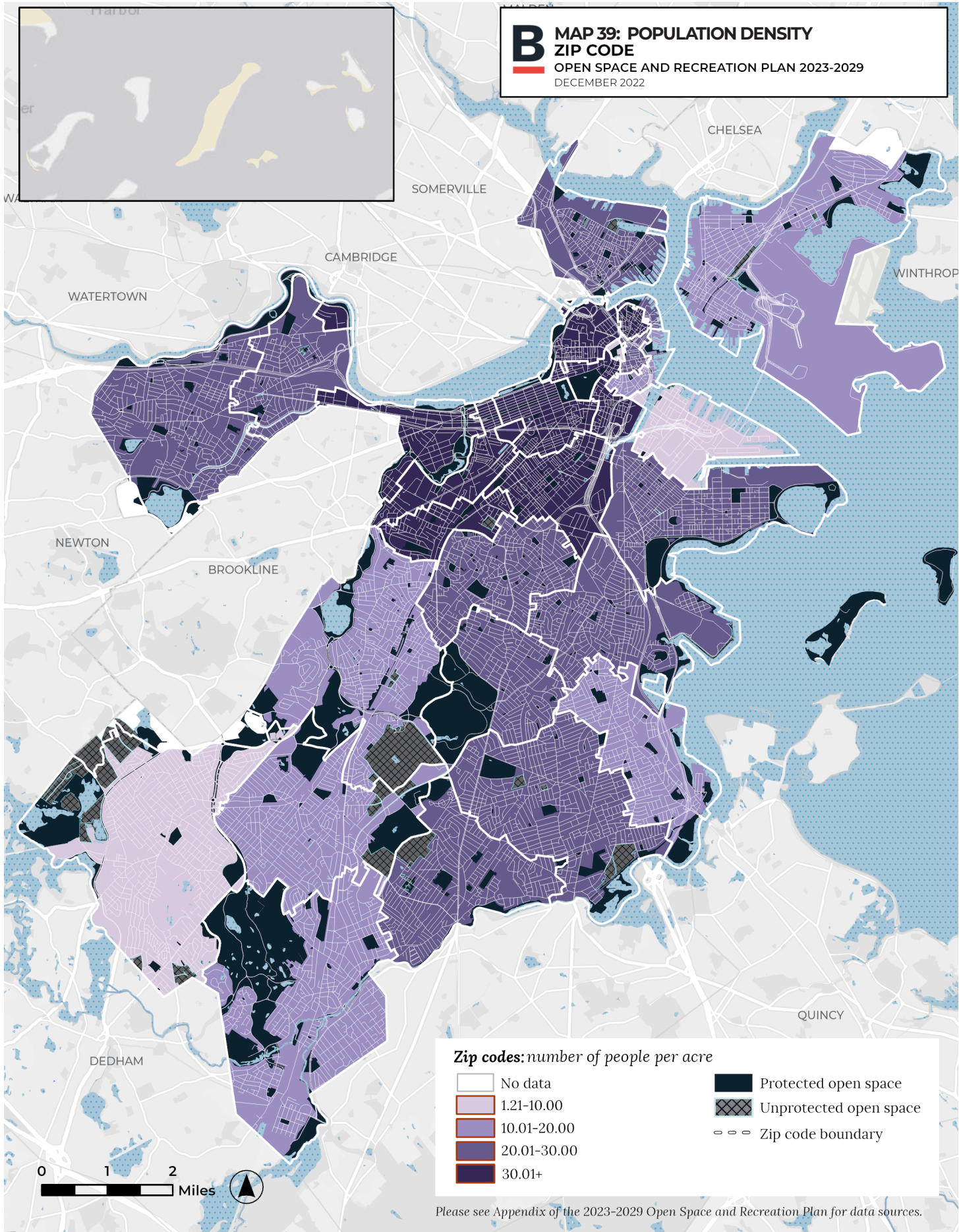


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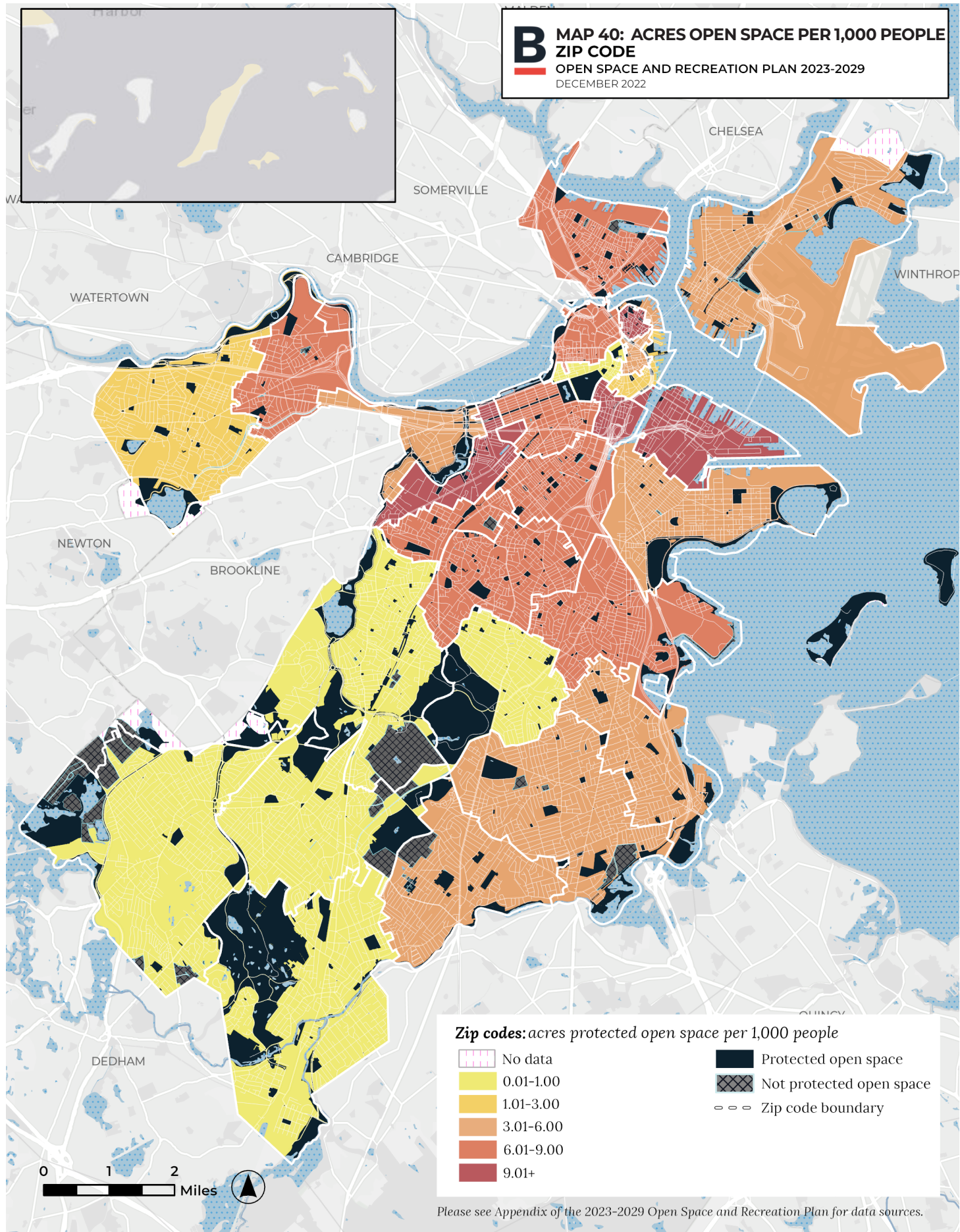
B MAP 38: ACRES OPEN SPACE PER 1,000 PEOPLE
CENSUS TRACT
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



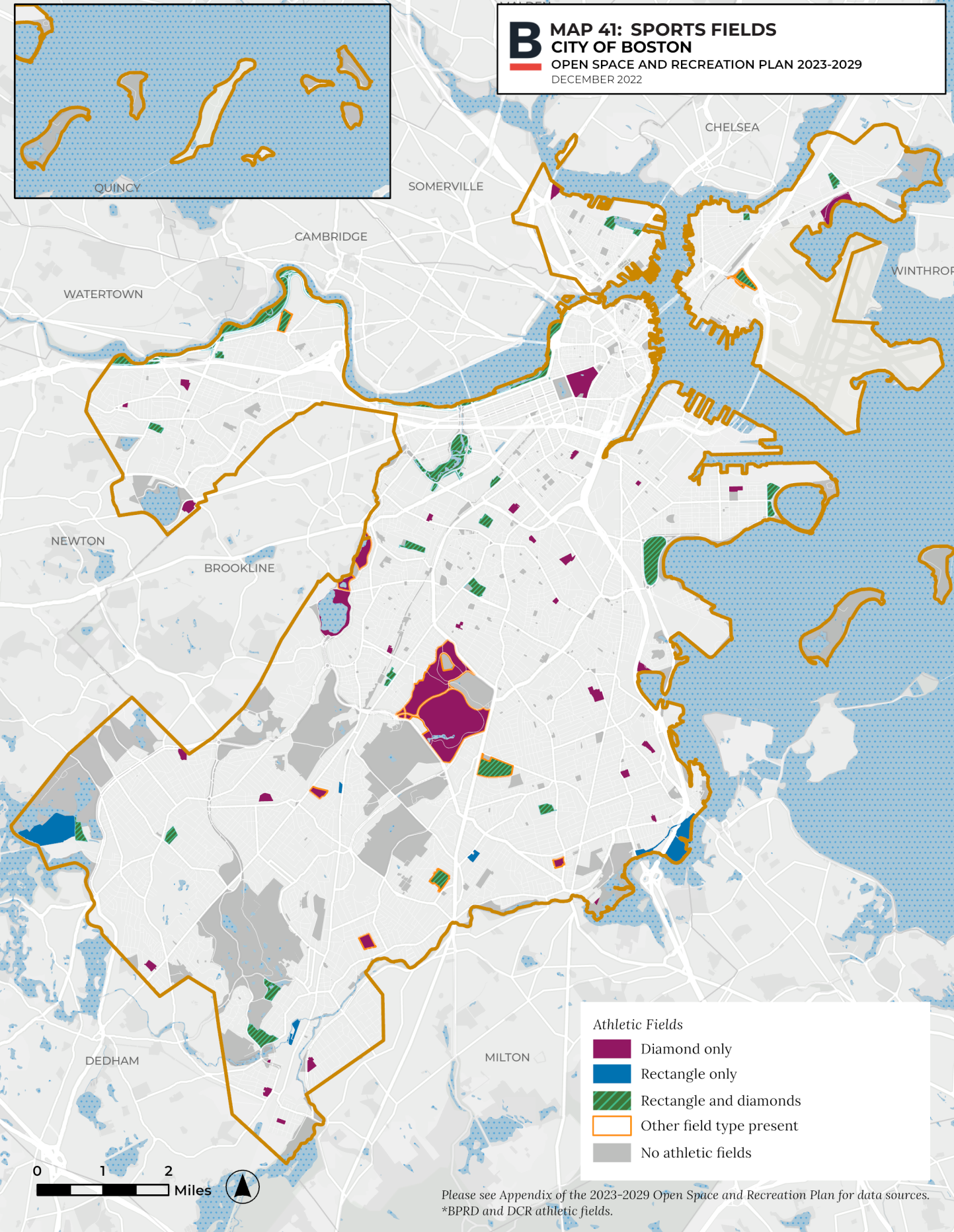
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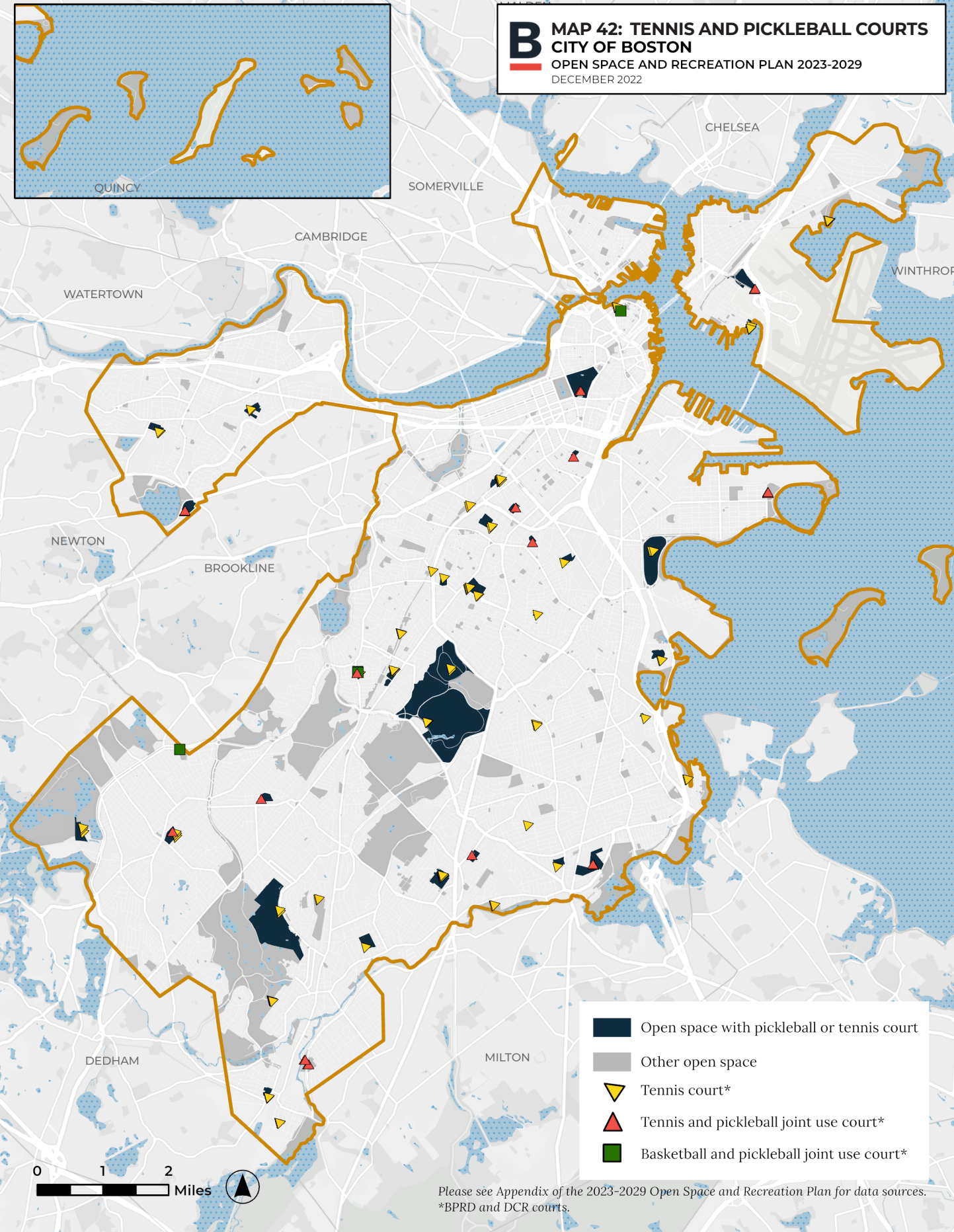


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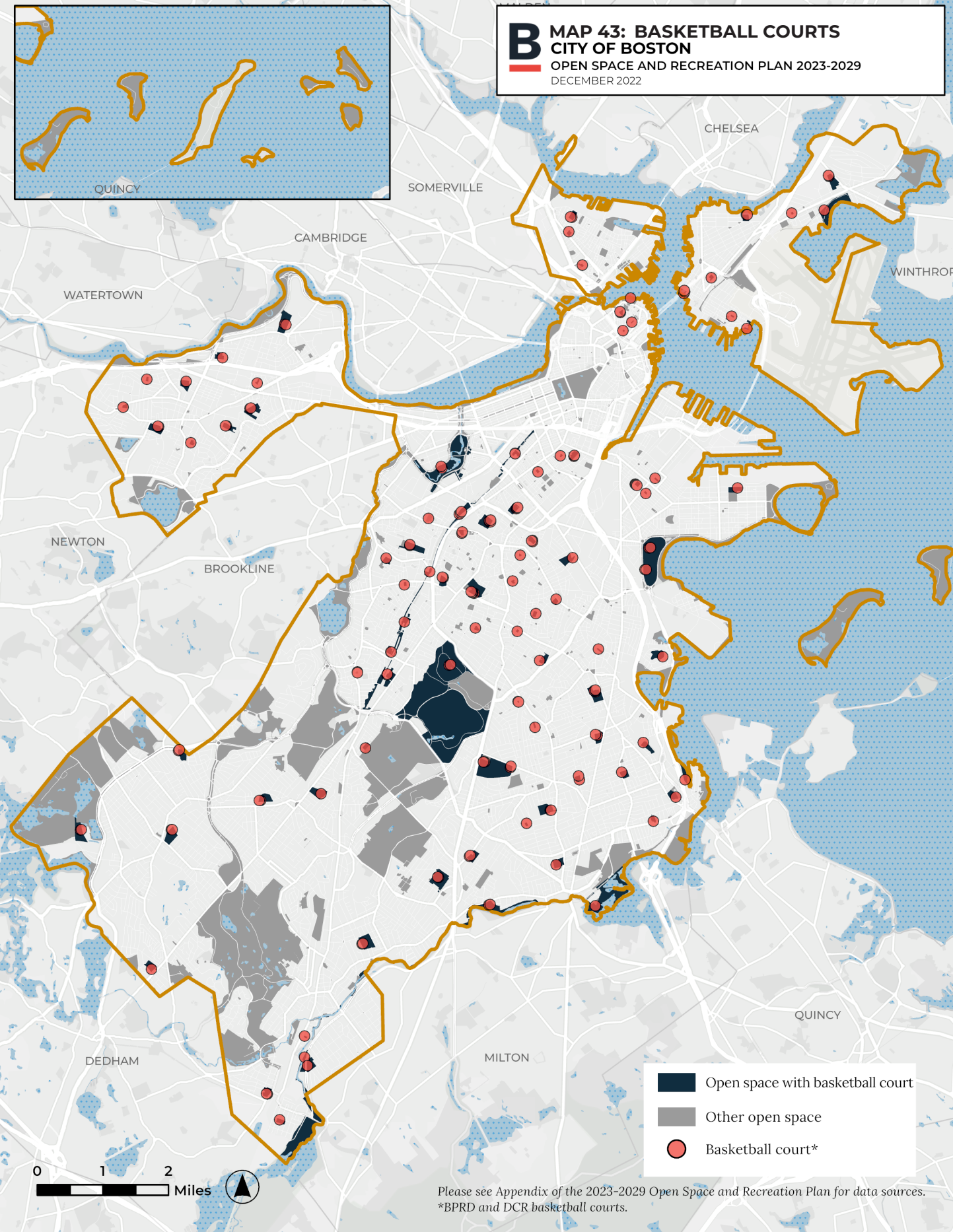


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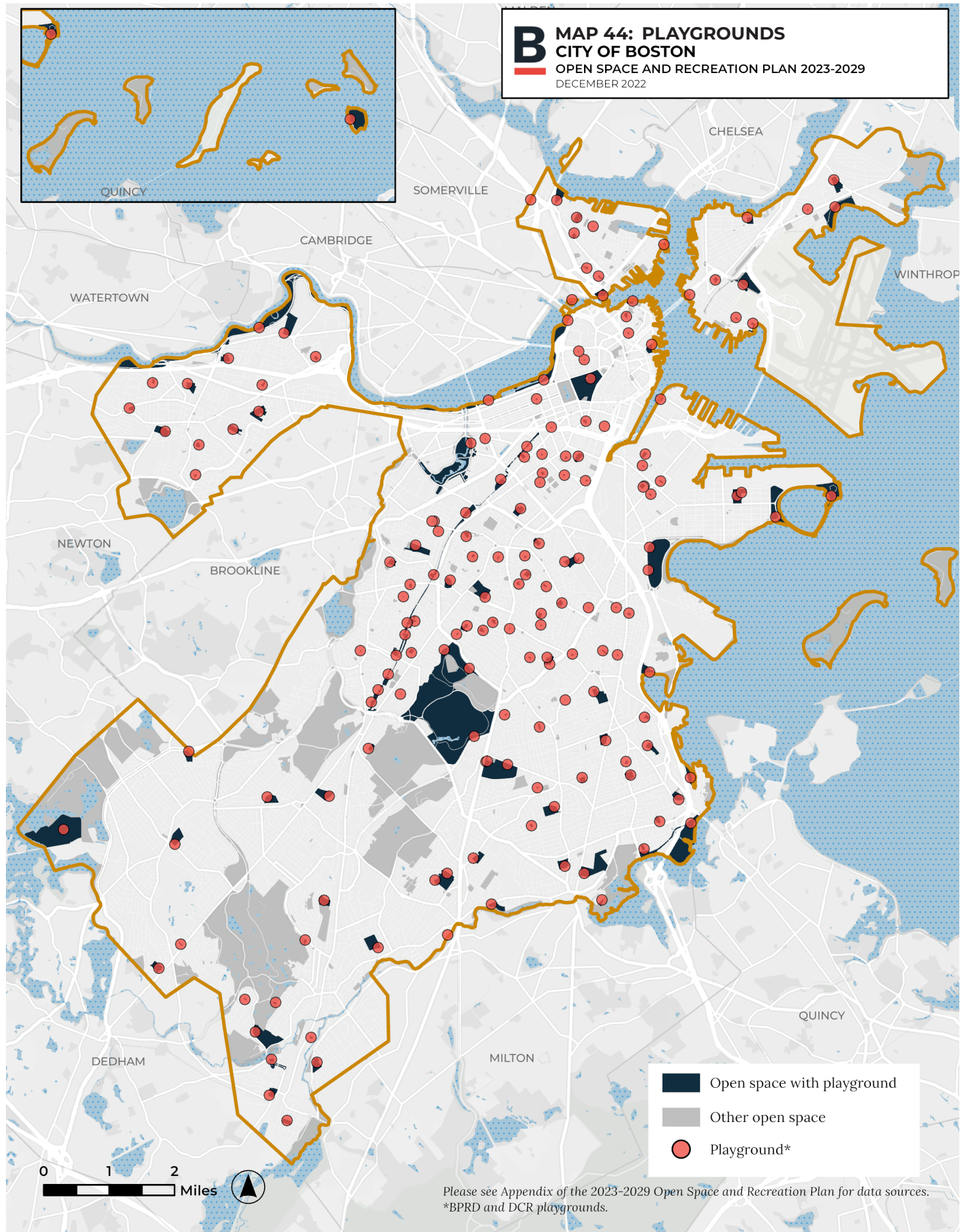
B MAP 42: TENNIS AND PICKLEBALL COURTS
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



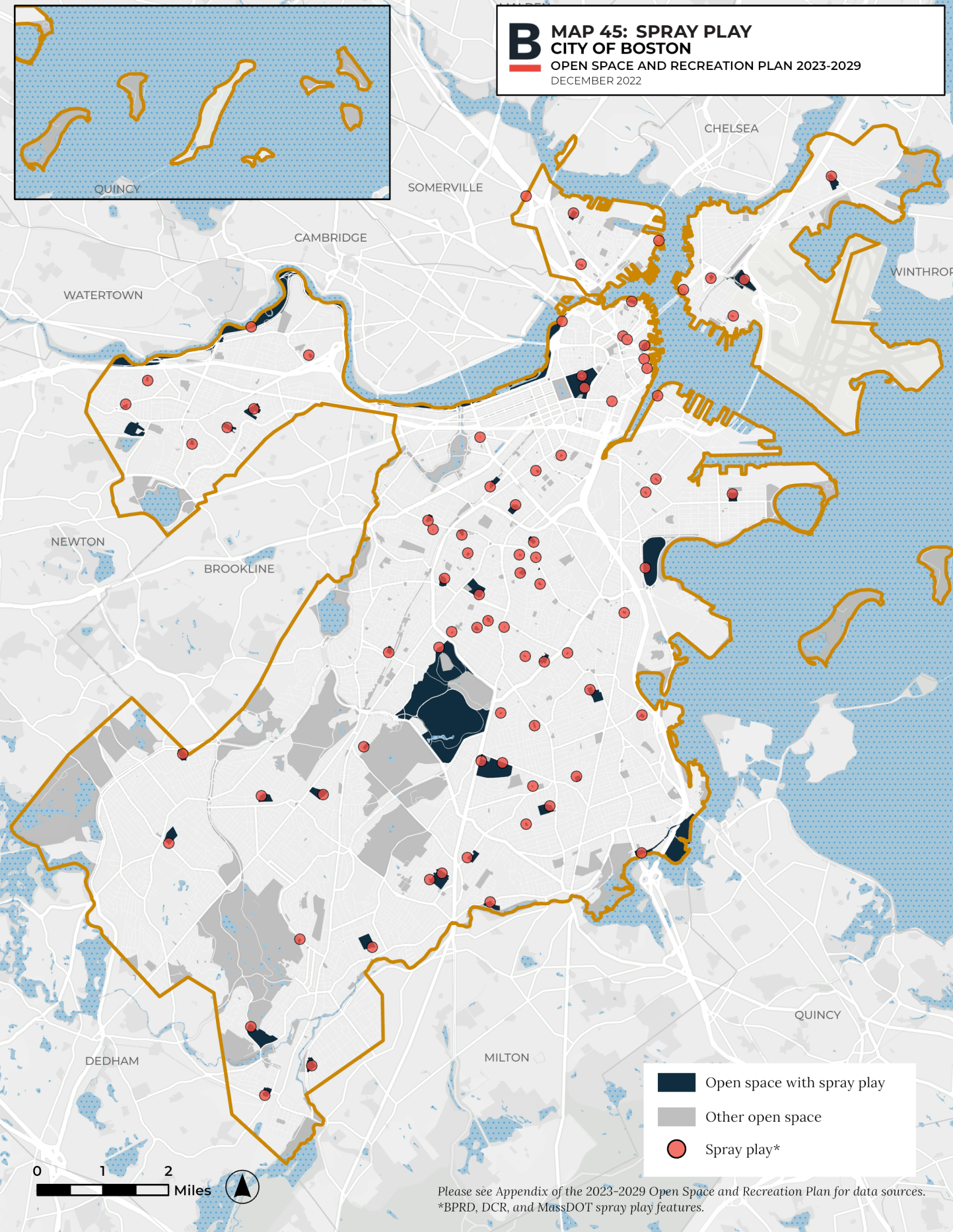
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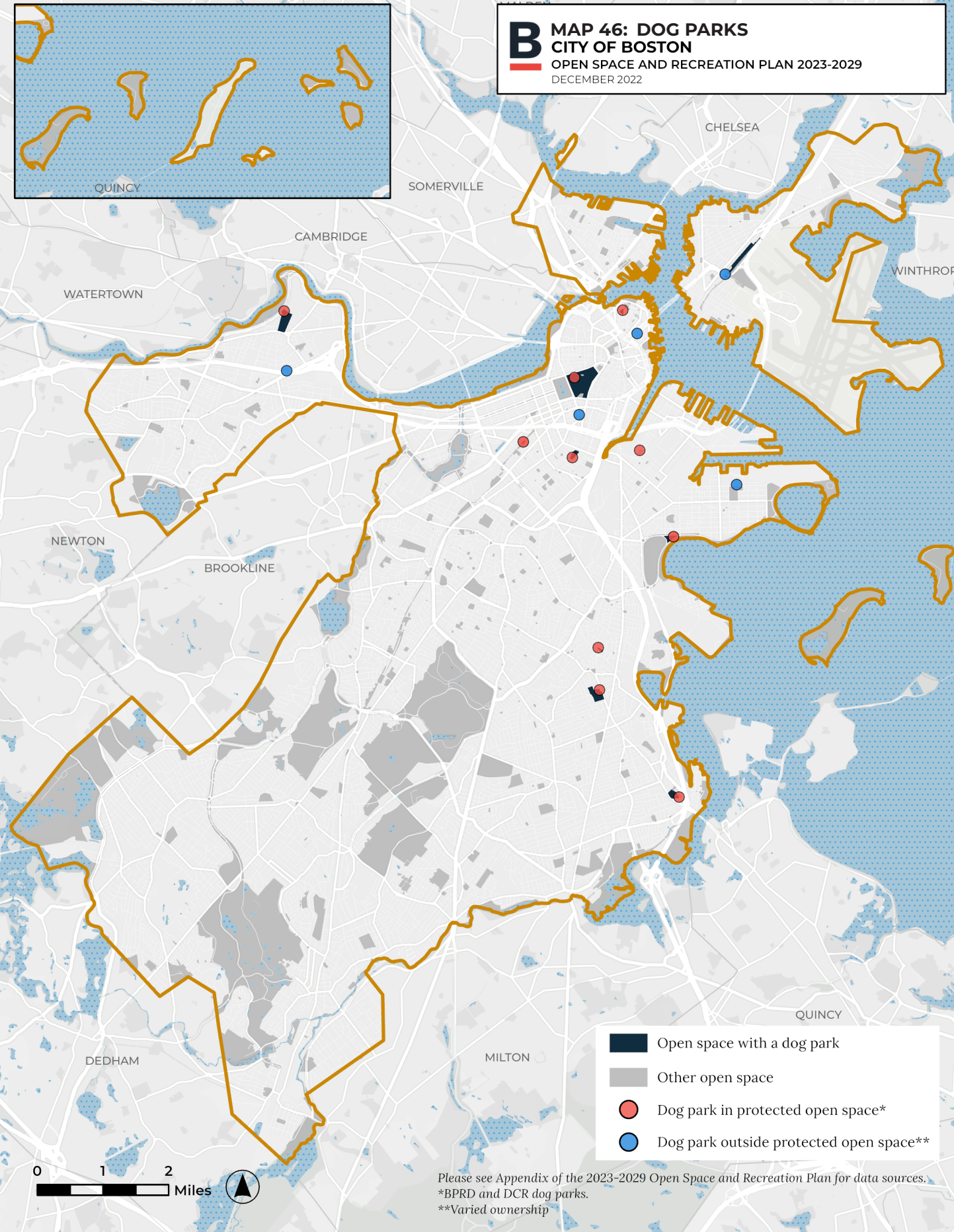


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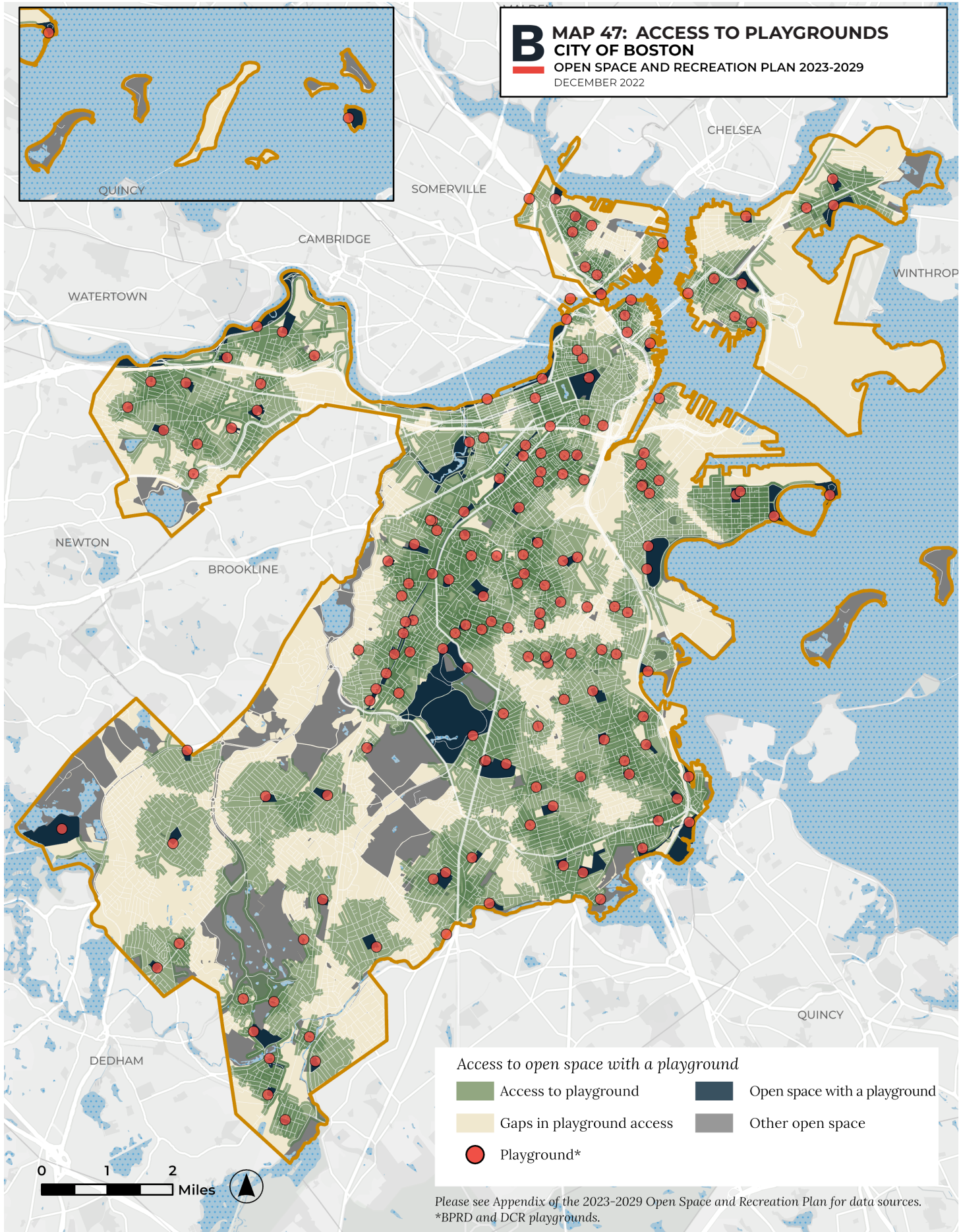


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B MAP 46: DOG PARKS
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022

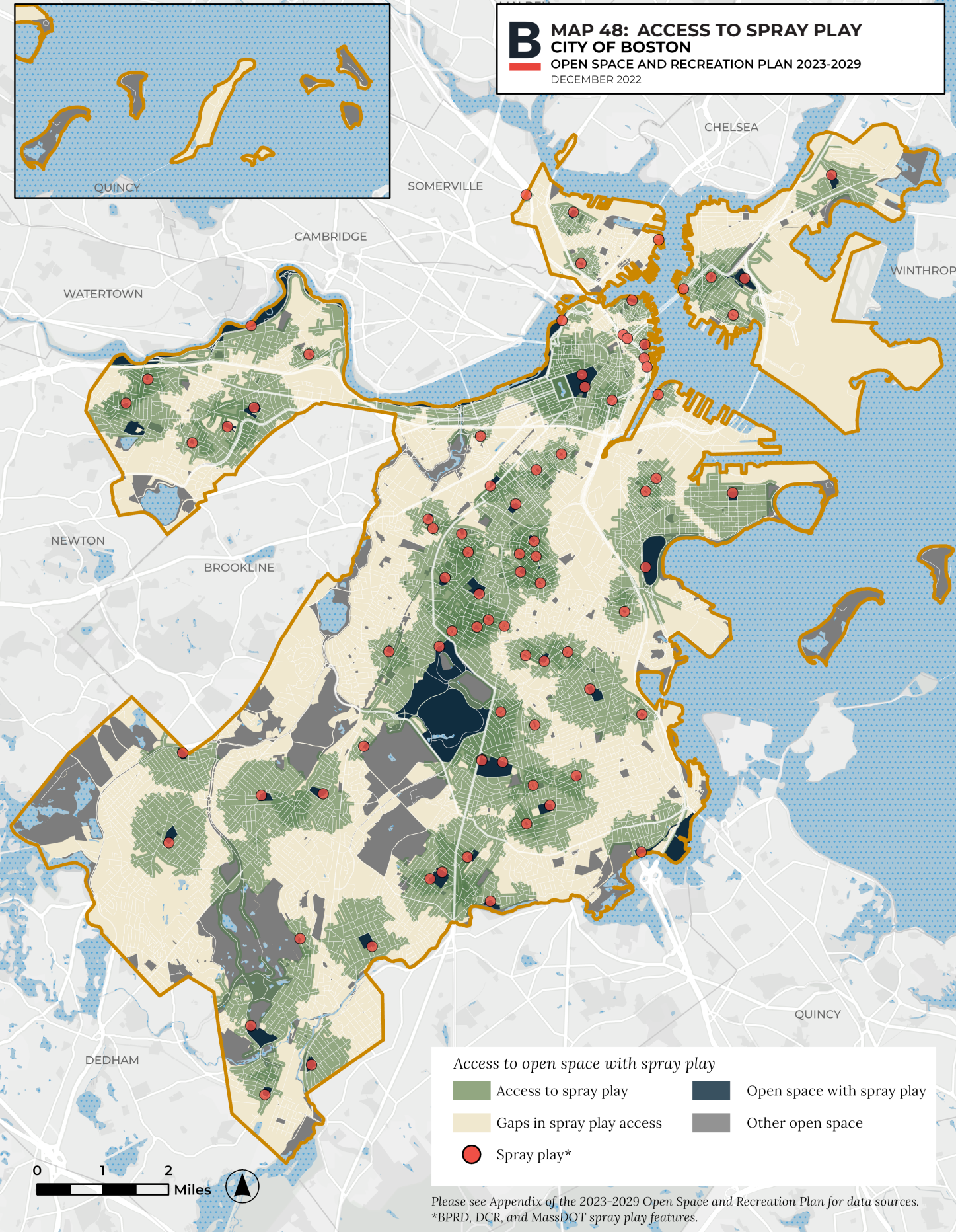


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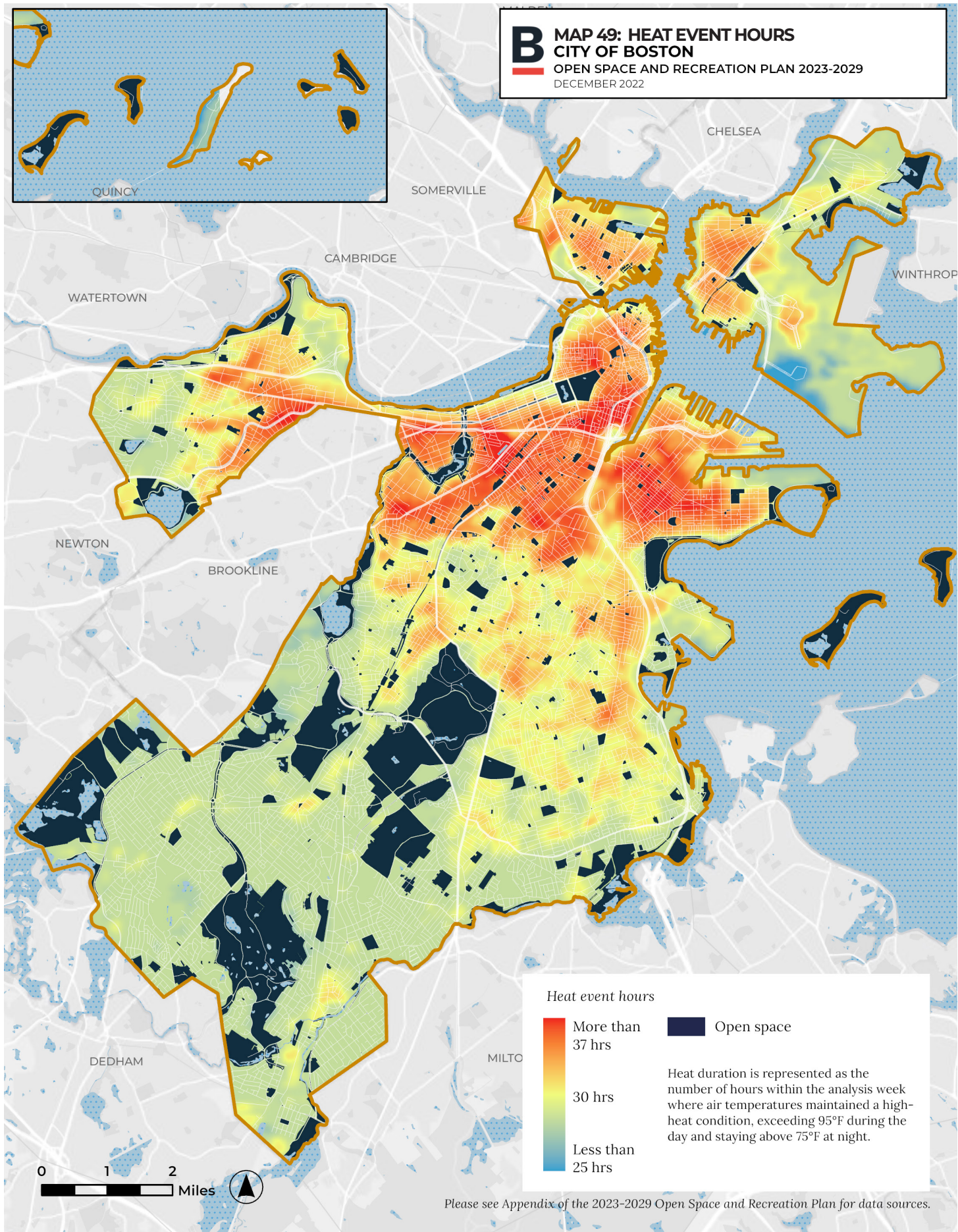


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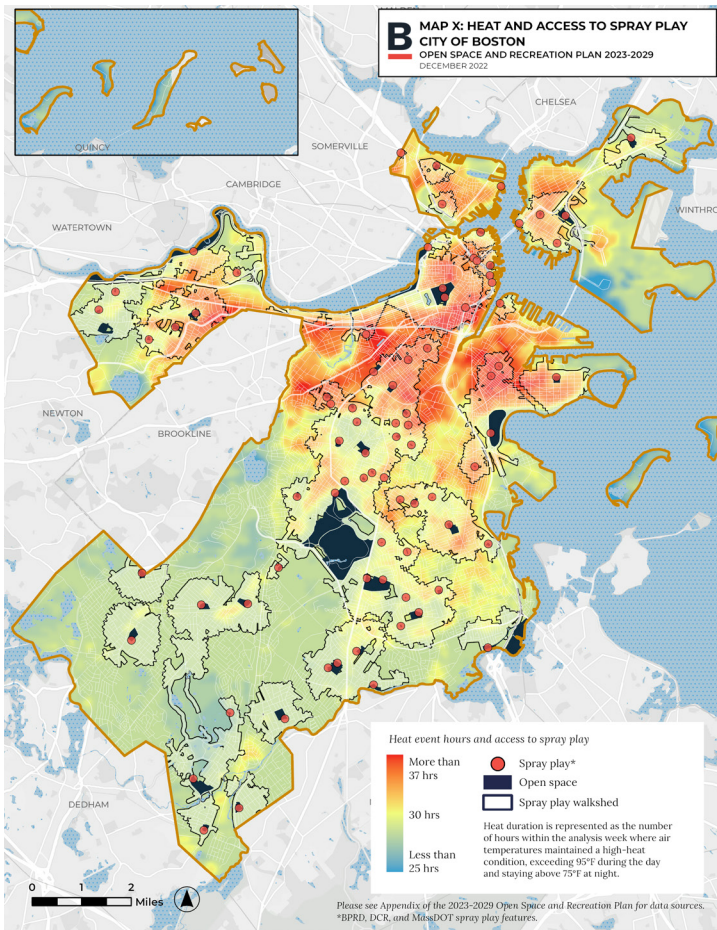
B MAP 48: ACCESS TO SPRAY PLAY
CITY OF BOSTON
OPEN SPACE AND RECREATION PLAN 2023-2029
DECEMBER 2022



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ABOVE: Walkshed and park feature data can be combined with other information such as heat risk or flooding to more comprehensively plan for a climate resilient park system.

NEEDS ANALYSIS: PUBLIC INPUT

BPRD pursued outreach for the Open Space and Recreation Plan through multiple strategies as outlined in Sections 2.2 and 2.3. Input from surveys and conversations with park users informs several elements of the plan including Resource Protection Needs, Community Needs, and Management Needs. Results from the surveys will be an important guide to how City funding should be spent in the next seven years. The survey input focused on the following:

- Understand how well the park system is serving residents.
- Identify barriers and challenges to greater use of open space resources.

- Understand awareness and satisfaction of the park services provided to residents.
- Understand desired improvements to better meet needs and improve the quality of parks.
- Understand priorities for potential park system expansion opportunities.

The public survey that was focused on protection and expansion of open space resources through the Parcel Priority Plan asked the question: *What should the City of Boston prioritize in identifying lands for protection or acquisition?* The 1,218 respondents could select multiple answers which led to the following sense of prioritization:

- 948 respondents selected: Increasing open space in neighborhoods that have limited park access currently or are experiencing significant increases in population.
- 708 respondents selected: Protecting areas of conservation or ecological value.
- 704 respondents selected: Increasing areas that help address climate-related issues such as excessive flooding or heat.
- 617 respondents selected: Providing areas that connect existing open spaces to each other
- 578 respondents selected: Increasing open spaces that provide opportunities for recreational activities and community events.

The second survey focused on existing parks and services offered by BPRD, and specifically asked about community needs related to improving the quality of parks, reducing barriers to enjoyment of parks, and improving park features and facilities.

Responses to these questions highlight the following needs:

- Park infrastructure that allows users to spend more time outdoors, notably restrooms.
- A diversity of park experiences.
- Access to natural areas.
- Accommodation of a variety of park facilities, including new programs like dog parks.

The barriers that respondents identified that impact their use or enjoyment of parks were:

- Lack of information about events or activities happening in parks.
- Limited access- parking, bike and walking.
- Feeling unsafe at the park.
- Lack of restrooms in parks.

Survey respondents were given an opportunity to write in what they thought would improve the quality of the parks in Boston, and similar themes of needs and priorities emerged from 675 individual write-in responses:

- Improve park maintenance by providing more frequent maintenance visits and better trash management.
- More restrooms.
- Improve overall access to parks (esp. for adults, seniors, those with disabilities, bikes, pedestrians).
- Enhance programming in parks.
- Expand recreational assets.
- Support community-run programming and artists, more art in parks.
- Ensure equitable investment and maintenance.
- Improve overall safety through maintenance and enforcement of park rules and regulations.
- Enhance areas with plantings, protect and preserve tree canopy and natural spaces.
- Provide more dog-friendly spaces like dedicated off-leash areas; also better regulate and enforce rules around dogs in parks.
- Increase budget for maintenance and staffing.

Each of the current (2017) **Statewide Comprehensive Outdoor Recreation Plan (SCORP)** Goals and Objectives is represented locally from the input gathered in BPRD's outreach efforts.

1. *Access for Underserved Populations.*

- Support the acquisition of land and development of new open spaces in areas that lack existing or usable open spaces, such as Environmental Justice neighborhoods.
- Develop parks and open spaces that offer amenities that go above and beyond ADA requirements for people with disabilities.

- Consider the needs of underserved demographic groups (i.e. senior citizens and teenagers) in park and open space designs.
- Encourage establishment of programming endowments.

BPRD's analysis of park access, gaps in access, and open space per capita all inform our understanding of where the service gaps are in Boston's open space system. The critical nature of addressing these gaps is underscored in the survey responses that favor prioritizing investments in neighborhoods that have limited park access or neighborhoods that are experiencing significant increases in population.

Demographics analysis, accessibility assessments, and outreach to environmental justice populations all inform our work to meet the needs of underserved populations in Boston.

2. *Support the Statewide Trails Initiative.*

- Support the acquisition of land and development of new open spaces that can provide a trail network.
- Fill in the gaps of existing trail networks.
- Ensure that any existing or new trails are fully accessible to people with disabilities.

While trail networks are more prevalent and extensive in less urbanized parts of the Commonwealth, Boston does support several trail systems for recreational opportunities and multi-modal transportation. Key existing trail networks include the Harborwalk, the Emerald Necklace park system, the Charles River, Neponset River and Stonybrook Reservation systems, the Mary Ellen Welch Greenway, as well as the Southwest Corridor Park. Work by the Active Transportation group within the Boston Transportation Department focuses on expanding multi-modal transportation networks throughout the city and collaborates with BPRD to provide meaningful open space links.

3. Increase the availability of water-based recreation.

- Support the acquisition of land that will provide for water-based recreation.
- Support the acquisition of land that will increase drinking water supply protection.
- Develop water-based recreational facilities, including swimming areas, spray parks, boating facilities, fishing areas, etc.

As a waterfront city, Boston's open space system is already oriented towards water-based recreation through its extensive network of protected beaches and water access points. Ongoing improvements throughout the park system introduce water-based recreation in interior neighborhoods via spray features in parks. This effort aligns with climate resiliency goals to address the impacts of extreme heat by providing Boston residents with recreational spaces for cooling.

4. Support the creation and renovation of neighborhood parks.

- Promote the acquisition and development of neighborhood parks where none currently exist.
- Develop amenities supported by neighborhood parks, such as playgrounds, off leash dog parks, and community gardens.
- Work with community development organizations to improve walking access to local parks.

Neighborhood parks provide the widespread access to open space resources that Boston residents benefit from. Increasing access to these spaces in underserved areas was identified as the most supported priority for future investments in land protection and acquisition from survey responses. The annual capital investments by BPRD assess, renovate and replace park features according to facility life cycles, and work with community members to understand what new amenities should be added to best serve their needs.

MEETING OPEN SPACE DEMAND

The benefits of a well distributed, high quality park system are known by all who use and enjoy these spaces. During the Covid-19 pandemic, park access and use was essential for our physical and mental well-being, and reinforced our collective understanding of the value of public open space. As Boston's population grows, the need for access to high quality open space offering a range of uses also increases. Meeting this need is the focus of the work in the BPRD Design & Construction unit and is addressed through three different strands of work.

- Investing in park improvements to ensure that our existing open space system is high quality and aligned with the needs of the communities it serves. BPRD's capital plan identifies upcoming park improvement work and is evaluated and refined annually through the capital budgeting process.
- Engaging in City planning and development review to identify open space impacts of proposed development at the site, district and neighborhood scales, and evaluate mitigation as well as the value of proposed open space dedication.
- Advancing our work in Planning for Future Parks which includes assessing open space expansion opportunities and progressing acquisitions as funding allows.

PARK CAPITAL IMPROVEMENTS

Making the most of the park system we have is the predominant focus of both capital and operational investments by BPRD. Parks are renovated, with public input, on a cyclical basis with most parks with active features seeing significant investment every 15-20 years. As part of the park improvement process, many park properties are evaluated comprehensively rather than isolating specific features for upgrades. This holistic approach allows for public input on whether the existing park features are meeting current community needs.

Many parks can be reconfigured for more efficient use of space, which allows for the introduction of new features and reclamation of underutilized areas for public benefit. In addition to expanding features, there are opportunities to make the facilities within parks better able to accommodate expanded use, oftentimes by modifying single-use facilities into multi-purpose spaces. This can help address some of the increasing demand on open spaces as park users increase. Strategies for expanded use include making courts multi-purpose and adding sports lighting around fields and courts for evening use.

PROJECTED GROWTH AND THE NEED FOR PARKS

Efficient use of existing open space and expanded programming are only able to go so far in accommodating the growing open space demands in Boston. These efforts need to be complemented by equivalent efforts and resources towards expanding the park system.

Boston currently has 4,867 acres of permanently protected open space. With a city population of 689,326 people that means we have 7.1 acres per 1,000 people. This is equivalent to 309 square feet per person.

It is projected that the city will continue to grow in population over the coming decades. The 2030 population for the city is projected to be 740,286 and that number is anticipated to rise to 800,000 by 2050. As we plan for open space for the next seven years, we need to address this projected 8.7% population growth and strategically develop comparable permanently protected public open space so that future Bostonians can expect a comparable level of service from the open space system as we enjoy today. Additionally, the expansion of open space resources in the city should be particularly focused on areas that are already faced with gaps so that these conditions are not further exacerbated.

PARK SYSTEM EXPANSION

Park system expansion is an essential complement to the work BPRD does to make the most of the City's existing open spaces. Without the creation of meaningful new open spaces responsive to the level of growth and development in the city, as well as to areas that are historically lacking in high quality park access, quality of life for all city residents is adversely impacted. Park system expansion can be achieved through a number of different paths as outlined below.

City-led park projects

City-led park creation efforts are those that are not associated with private development or initiated by development mitigation or density bonuses. These park projects can come about for any number of reasons, and have the opportunity to meet specific open space needs. City-led projects can be funded through public and philanthropic dollars and are executed by the public agency responsible for the land. Examples of City-led park projects are Martin's Park in the Seaport and Menino Park in Charlestown both of which involved the creation of Article 97 protected, public open space on City, State or BPDA-owned lands.

Publicly-led land acquisition (or donation) projects

These park development projects utilize public funds to acquire private land for parks and open space. Properties can be used for conservation, recreation, or other open space purposes. Examples of recent publicly led acquisition projects include Norwell Street Park in Dorchester and the Walter Street acquisition at Roslindale Wetlands. Funding sources include the Community Preservation Act funds, State grants, and Capital funding. The greatest challenge with this approach to open space expansion is the high cost of land in Boston coupled with the limited availability of funding for such acquisitions.

Public land with privately-funded improvements

These projects tap private funding sources (developers) to build out improvements on publicly-owned land for permanent park dedication and use. A recent example of such a project is Mahoney Memorial Park in South Boston. The parcel was converted from a Boston Public Works storage facility to a small neighborhood passive park and community garden. Funding for the preliminary design came from the City; final design and construction was funded by a private developer as a community benefit associated with a nearby development project. The park is owned and operated by BPRD, and protected under Article 97. Park operations are supported through community partnership agreements to help with management of the community garden and maintenance of specialty park features.

Private land converted to public parks

These projects can create meaningful new public parks in the city by contributing privately-owned land to the public parks agency for public use and permanent protection under Article 97. In addition, these projects are funded from design, through construction, and with ongoing maintenance by the private partner. Recent examples of this include A Street Park in the Fort Point neighborhood of South Boston, Ray Mellone Park in Allston, and Frieda Garcia Park in the Back Bay.

Private land that is publicly accessible

This model of parkland development produces a different classification of open space. Instead of protected public parkland, these projects offer public access to outdoor spaces on private property. Such spaces generally serve those who live or work in the adjacent development but are not typically of sufficient scale to meet larger city open space needs or fill existing gaps in service. These spaces are fully privately funded and maintained, and the public access, public input, rules and regulations, and uses are all determined by the private landowner. Private land that is publicly accessible is not protected

under Article 97. For this reason, the OSRP inventory does not classify these properties as public park lands.

Recent projects that have followed this model include: the green at 401 Park Drive in the Fenway; open space approved as part of the Seaport Square project; Rena Park and The Grove in Allston.

Some private open space projects propose the use of easements or conservation restrictions to legally enact public access or land protection.

Open space easements, or conservation easements under Massachusetts General Law, have a 30-year timespan. Conservation restrictions are in perpetuity but require a third part to hold and administer the restriction. Both open space easements and conservation restrictions can offer Article 97 protection to a parcel if it is written into the agreement.

These models, with all of their varied processes, protections and funding mechanisms, convey the range of efforts that are being pursued to expand the park system in Boston. Each of these models requires navigation of complex negotiations and agreements across public and private entities, and results in a system of park spaces that are not all equally accessible, protected, or managed. Progress is slow, and efforts are a patchwork, due to the lack of a predictable, consistently-funded system for creating or expanding new public parks.

Since 2015 this array of models for creating publicly-owned open space has resulted in 16.20 new acres of permanently protected open space added to the City's inventory.

PARKLAND DEDICATION

During this same period (2015-2022), Boston has seen sustained development and growth. The BPDA approved over 89 million square feet of development worth more than \$45 billion between January 2015 and December 2022. This includes a net of 43,828 residential units.

With expanding housing, and particularly affordable housing, as top City priorities, BPRD knows there is a complementary need to provide sufficient, diverse parks and open spaces in all growing and currently underserved areas. A meaningful provision of open space of every type, including medium and large parks, as well as access to natural areas, is essential for the quality of life for urban dwellers.

Future efforts should establish an open space program that codifies parkland dedication as part of city development to correlate the rate and scale of building development with an appropriate quantity of public open space dedication (as land or as fee in lieu of land).

BPRD is working to propose metrics for determining how much park land should be established through or as a complement to development projects to ensure that current and future residents benefit from the quality of life that access to public parks affords. A standard for open space creation that can be applied to all projects (i.e. residential, commercial, lab/industrial) will help ensure that future Bostonians can count on having access to an open space system that is responsive to city growth. This standard could become the foundation of a Parkland Dedication program similar to those in other major U.S. cities like Minneapolis, St. Paul, Portland (OR), and San Jose.

Implementing such a program would establish a predictable and consistent approach to supporting parkland acquisition and/or improvements. It would allow the City to more actively pursue and support the models for park land expansion outlined above rather than rely on open space expansion coming only through public access to private land. The City is well-positioned to ramp up its park land dedication efforts to address open space gaps in service by bolstering the Open Space Acquisition Program and augmenting what can be accomplished through the Community Preservation Program and City Capital funding. Ongoing open space planning work ties park needs to level of service, population density,

walksheds and other analysis so that opportunities for expansion of the park system and its amenities can be approached thoughtfully and equitably. A Parkland Dedication program will help meet the demand created for park and recreational facilities driven by development so that current park resources are not oversubscribed.

Acres Protected Open Space (POS) Per 1,000 People by Neighborhood*			
	2020 Population	Acres protected open space	Acres POS per 1,000 people
Allston-Brighton	74,620	347.5	4.7
Back Bay/Beacon Hill	27,158	118.6	4.4
Central Boston	35,983	65.5	1.8
Charlestown	20,504	51.8	2.5
Dorchester	127,680	642.1	5.0
East Boston	47,804	223.4	4.7
Fenway/Longwood	39,126	137.9	3.5
Hyde Park	39,359	793.9	20.2
Jamaica Plain	43,309	586.3	13.5
Mattapan	26,854	149.4	5.6
Mission Hill	16,380	28.8	1.8
Roslindale	32,707	266.5	8.1
Roxbury	52,856	197.3	3.7
South Boston	41,217	196.2	4.8
South End	29,298	20.1	0.7
West Roxbury	34,037	629.0	18.5

*Using BPRD neighborhood boundaries (see MAP 1: REGIONAL CONTEXT).

**Total protected open space in Boston is 4,874 acres. Difference in acres arises from open space along waterways that are not entirely captured by neighborhood spatial file.

***Acreage of a park may have been divided between multiple neighborhoods.

Acres Protected Open Space (POS) Per 1,000 People by Zip Code*

	2020 Population	Acres protected open space	Acres POS per 1,000 people
02108	4,520	50.5	11.2
02109	3,639	11.9	3.3
02110	2,340	16.1	6.9
02111	7,949	1.1	0.1
02113	7,339	6.2	0.8
02114	13,260	33.7	2.5
02115	29,134	24.5	0.8
02116	23,007	53.3	2.3
02118	28,892	32.0	1.1
02119	27,426	53.6	2.0
02120	15,210	29.4	1.9
02121	29,570	400.2	13.5
02122	24,874	125.6	5.1
02124	5,7128	199.7	3.5
02125	3,4725	80.0	2.3
02126	29,807	118.0	4.0
02127	36,941	194.7	5.3
02128	47,804	225.3	4.7
02129	20,504	51.9	2.5
02130	42,021	528.9	12.6
02131	34,048	306.7	9.0
02132	28,263	403.1	14.3
02134	19,552	36.1	1.8
02135	45,496	306.4	6.7
02136	36,417	946.1	26.0
02163	2,343	6.7	2.9
02199	1,435	0.0	0.0
02203	24	6.0	250.6
02210	4,538	3.3	0.7
02215	26,243	126.0	4.8

*Using zip code boundaries (see MAP 40: ACRES OPEN SPACE PER 1,000 PEOPLE).

*Total protected open space in Boston is 4,867 acres. Difference in acres arises from open space that's not entirely captured by zip code spatial file.

*Zip codes 02151 and 02467 not included in table because the portion living in which municipality could not be identified from census tract data and so zip codes where most of the population was living elsewhere. were omitted This results in approximately 4,800 fewer people being counted in zip code calculations.

New and Added Protected Open Space 2015-2022

	Square feet	Neighborhood	Year
A Street Park*	59,356	South Boston	2015
Amory Street Park	5,630	Mission Hill	2015
Bowdoin Street Tot Lot	3,069	Dorchester	2015
Brian R. Mahoney Memorial Park at Nook Hill*	10,450	South Boston	2021
Ceylon Park	21,191	Dorchester	2020
Children's Park	6,300	Dorchester	2015
Draper Playground	5,142	West Roxbury	2015
Egleston Square (Robert G. Lawson Park)	5,028	Jamaica Plain	2015
Fairview Cemetery Woods	65,000	Hyde Park	2015
Grove Hall Plaza	4,105	Dorchester	2015
Holborn Street Tot Lot (Glenburne Street)	790	Roxbury	2015
Hunt Playground	20,190	Mattapan	2015
Joseph Porzio Park	5,833	East Boston	2021
Martin's Park*	47,102	South Boston	2017
McConnell Park (Springdale Street)	2,710	Dorchester	2015
Mt. Hope Park*	4,802	Roslindale	2017
Nonquit Street Green	12,508	Dorchester	2022
Paula Titus Park*	8,269	Roxbury	2017
Puddingstone (Garden) Park	24,000	Dorchester	2015
Reservation Road Park parcel 1	382,290	Hyde Park	2018
Roberts Playground	1,826	Dorchester	2015
Watson Park	4,542	South End	2015
West Concord Street Park (Newland Street)	5,343	South End	2015
TOTAL SQUARE FEET	705,476		
TOTAL ACRES	16.20		

Unless otherwise noted, entries represent added acreage to existing parks or the transfer of existing parks to Boston Parks and Recreation Department care and custody.

*newly established park

SECTION 7.3

MANAGEMENT NEEDS**INTRODUCTION**

BPRD oversees a range of properties with different management needs. Park management responsibilities extend across multiple units and address both internal and external needs.

Key management considerations include:

- Funding levels for operating needs.
- Expanding urban forestry work.
- Park safety.
- Managing Increasing permitting demand for active recreation facilities.
- Expanding external partnerships for park activation and stewardship.

PROGRAMMING

The External Affairs division of BPRD oversees park partnerships, public relations, ParkARTS and other programming, and special events. Summer programming run through this division includes summer concert series, movie nights throughout the city, watercolor and arts and crafts workshops, and children's festivals- all of which are free for all participants. In the winter season BPRD organizes holiday festivities including the televised Boston Common Tree Lighting event and performances.

The public survey showed that respondents were somewhat more aware than not of the programming offered by BPRD (54% aware/46% not aware). Those who were aware of the programs and events provided by Boston Parks and Recreation reported an average Satisfaction score of 3.5 out of 5.

The survey also asked respondents to identify which barriers prevent them from enjoying the programming offered by BPRD.

The following barriers were most commonly identified:

- Lack of information.
- Limited parking, bike or walking access.
- Feeling unsafe at the park.
- Lack of programs of interest.

KEY NEEDS FOR THIS DIVISION INCLUDE:

- Better collaboration with recreation and permitting divisions to facilitate better public services and communication.
- Establish systems for feedback and information gathering to ensure that park programming and events support community interests.
- Expanded ability, through technology and staffing, to make community outreach and engagement as broad and deep as possible.
- Access to equipment to support programming and events and ensure efficient delivery of these services.

RECREATION

The Recreation Division provides high quality, free sports activities to Boston's youth along with fitness programs for all ages. Youth and adult recreation leagues and clinics include street hockey, baseball, softball, ice hockey, golf, soccer, football and other sports. Free summer programming throughout the city serves over 6,000 youth.

Only 40% of survey respondents were aware of the programming offered by the Recreation Division, but those who were aware reported an average Satisfaction score of 3.5 out of 5.

KEY NEEDS FOR THIS DIVISION INCLUDE:

- Ensuring that park designs incorporate features that allow for high-school level competitions.
- Providing facilities that meet constituents expectations for high-quality recreation spaces including restrooms, scoreboards, and electrical hook-ups.
- Support the needs of camps and programs that are based in BPRD properties by providing site infrastructure that makes the programs more successful and easier to execute.

PERMITTING

The Permitting Unit serves a wide variety of park users by issuing permits for sports teams and leagues, special events, film productions, charity runs and walks, wedding photos and more. Hallmark city events that are permitted through the parks department include the Boston Marathon, First Night, Shakespeare on the Common and the cross-country races held at Franklin Park.

The public survey showed that only 37% of survey respondents were aware of BPRD's online permitting system. This system is used for issuing permits for youth and adult athletics as well as special events. Those who are aware of the online permitting system reported an average Satisfaction score of 3.3 out of 5.

KEY NEEDS FOR THIS DIVISION INCLUDE:

- Providing more open access to active recreation spaces rather than having them be secured for dedicated use all of the time via the permitting system.
- Better signage systems (complemented with online information) to communicate active recreation rules, policies, programs, and events.
- An expanded online permitting software system to meet the ever-growing demand for permits and respond to public expectations around information access and transparency, and improve public awareness of the online systems.
- Look for opportunities to expand capacity in active recreation facilities through permitting policies.

MAINTENANCE

The operations staff in BPRD's Maintenance Division is responsible for the care and maintenance of park properties of all types including squares and plazas, athletic facilities, playgrounds, and passive areas. Property types with specialty maintenance needs including the cemeteries and golf courses have their own dedicated crews. Urban wilds are maintained through a mix of in-house staff, contracted services, and volunteers.

The public survey showed that over 80% of respondents are aware of the City's 311 system for logging and tracking maintenance requests. In 2021, the Boston Parks Department responded to almost 8,000 park property and street tree maintenance requests via the 311 system. When survey-takers were asked about their satisfaction with the maintenance of the parks they use, they reported an average Satisfaction score of 3.2 out of 5. This was one of the lower Satisfaction scores reported through the survey, but still shows a neutral to positive response to park maintenance efforts.

KEY NEEDS FOR THIS DIVISION INCLUDE:

- A fully staffed maintenance division that will allow us to keep our parks clean and safe and improve our response times to maintenance requests and needs.
- New maintenance staff positions that allow us to meet the identified operational goals and strategies in the Boston Common Master Plan, the Franklin Park Action Plan, and the Urban Forest Plan.
- Expand workforce development to offer professional growth opportunities for maintenance staff and incentives to pursue those opportunities.
- Identify and procure the equipment necessary to properly maintain the high-performing, multi-functional park spaces we are creating.
- Expand programs to maintain green infrastructure working with City staff, in-house trained professionals, outside contractors and aligned agencies (like BWSC) to ensure success with these investments.

SECTION 8

GOALS AND OBJECTIVES

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1. PROTECT, MAINTAIN, MANAGE AND IMPROVE THE CITY OF BOSTON'S OPEN SPACE SYSTEM TO MAXIMIZE THE BENEFITS THAT THIS INFRASTRUCTURE PROVIDES.

- 1.1 Renovate and improve parks according to equitable investment strategies and changing community needs.
- 1.2 Improve park infrastructure that supports expanded park use including restrooms, utilities, signage and information.
- 1.3 Maintain parks at the highest level.
- 1.4 Actively manage natural areas to provide ecologically healthy, welcoming places for the public to explore nature.
- 1.5 Manage the challenges and opportunities unique to historic parks, burying grounds and other sites of significance.
- 1.6 Develop and maintain sustainable funding sources for maintenance, operations and programming.
- 1.7 Provide programming and recreation opportunities that build community for people of all ages, promote wellness and park stewardship.
- 1.8 Permit the use of parks in an efficient, effective and accessible manner that lowers barriers.

2. SUSTAIN AND EXPAND AN OPEN SPACE SYSTEM THAT IS EQUITABLE, PUBLICLY-OWNED, PERMANENTLY PROTECTED, AND AVAILABLE TO ALL.

- 2.1 Improve open space access in an equitable manner.
- 2.2 Acquire new property to expand the park system.
- 2.3 Work within the regulatory framework to balance development and density with the provision of open space during the planning and review process.
- 2.4 Actively engage and build relationships with Boston's diverse population.

3. PROMOTE RESILIENCE BY SUPPORTING THE CRITICAL RELATIONSHIP BETWEEN THE URBAN NATURAL ENVIRONMENT AND QUALITY OF LIFE IN THE CITY.

- 3.1 Proactively care for, enhance and restore the landscape systems and ecological functions within park properties.
- 3.2 Connect resource protection and climate action needs to magnify the impacts of related projects.
- 3.3 Implement and evaluate strategies for park design and maintenance to ensure that parks are resilient in the face of climate change.
- 3.4 Restore the ecological function of natural resource areas.

SECTION 9

SEVEN-YEAR ACTION PLAN

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GOAL 1 PROTECT, MAINTAIN, MANAGE AND IMPROVE THE CITY OF BOSTON'S OPEN SPACE SYSTEM TO MAXIMIZE THE BENEFITS THAT THIS INFRASTRUCTURE PROVIDES.

Objective 1.1: Renovate and improve parks according to equitable investment strategies and changing community needs.

Action	Responsibility/ Funding source	Timeline for completion
a. Strategically assess facility and programmatic needs across the city to inform capital improvement priorities using data and metrics, community input, and planning.	BPRD	Ongoing
b. Annually update the Capital Improvement Plan for the City of Boston's park system.	BPRD	Ongoing
c. Sustain annual improvement programs to keep all parks facilities in a state of good repair between capital renovation cycles.	BPRD	Ongoing
d. Expand access to shade and cooling features in parks undergoing capital renovations, especially in areas most impacted by extreme heat.	BPRD	Ongoing
e. Meet or exceed ADA and MAAB standards for accessibility in parks; design for inclusive use where possible.	BPRD	Ongoing

Objective 1.2: Improve park infrastructure that supports expanded park use including restrooms, utilities, signage and information.

Action	Responsibility/ Funding source	Timeline for completion
a. Assess needs through level of service analysis, programming goals, and community input.	BPRD	Ongoing
b. Incorporate infrastructure that supports positive recreational programming by leagues, schools, camps and others.	BPRD	Ongoing
c. Pilot improvements (like restrooms) and assess operational demands and impacts.	BPRD	2024-2026
d. Promote new features or improved infrastructure so that constituents are aware of expanded programmatic offerings.	BPRD	Ongoing

Objective 1.3: Maintain parks at the highest level.

Action	Responsibility/ Funding source	Timeline for completion
a. Expand maintenance and operations to better meet the expected level of service in the park system.	BPRD	Ongoing
b. Create maintenance plans as part of each capital improvement project in coordination with BPRD maintenance staff.	BPRD	Ongoing
c. Invest in parks maintenance and operations to meet the operational goals identified in BPRD planning initiatives.	BPRD	2024-2026
d. Invest in the City's infrastructure of staff, equipment, fleet and facilities in order to support productivity.	BPRD	Ongoing
e. Support workforce development through training and growth opportunities.	BPRD with PowerCorpsBOS	Ongoing

Objective 1.4: Actively manage natural areas to provide ecologically healthy, welcoming places for the public to explore nature.

Action	Responsibility/ Funding source	Timeline for completion
a. Develop a new urban wilds management plan for existing and new properties.	BPRD	2023-2024
b. Continue to implement landscape restoration plans for priority sites.	BPRD	Ongoing
c. Invest in basic site improvements which include the installation, repair and replacement of signage, fences, walls, and pathways, and vegetation management.	BPRD	Ongoing
d. Apply the restoration and stewardship knowledge of urban wilds properties to other natural areas with the park system to elevate the health and quality of these spaces.	BPRD	Ongoing

GOAL 1 (...CONTINUED) PROTECT, MAINTAIN, MANAGE AND IMPROVE THE CITY OF BOSTON'S OPEN SPACE

Objective 1.5: Manage the challenges and opportunities unique to historic parks, burying grounds and other sites of significance.

Action	Responsibility/ Funding source	Timeline for completion
a. Update management, maintenance, and interpretive plans for historic resources to protect their value to residents and visitors.	BPRD	Ongoing
b. Rehabilitate each park's historic character and features to sustain historic integrity while supporting contemporary uses, programs and facilities.	BPRD	Ongoing
c. Mitigate the impact of structures, buildings, furnishings or features that conflict with the visual character of historic parks or which compromise their protection and preservation.	BPRD	Ongoing

Objective 1.6: Develop and maintain sustainable funding sources for maintenance, operations and programming.

Action	Responsibility/ Funding source	Timeline for completion
a. Seek opportunities to increase the budget of BPRD through the City budget and external funding to better meet constituent expectations for programs and services.	BPRD / COB	Ongoing
b. Create a reasonable and predictable formula for community contributions for open space through the development review process, looking to other communities nationwide that have implemented such programs.	BPRD / BPDA	2023-2024
c. Develop a funding plan for philanthropic gifts, government and foundation grants, and private/public partnerships in order to sustain recreation programs, the Park Arts programs, tree lightings, concerts and other events.	BPRD	2024-2025

Objective 1.7: Provide programming and recreation opportunities that build community for people of all ages, promote wellness and park stewardship.

Action	Responsibility/ Funding source	Timeline for completion
a. Expand community outreach around programming and recreational priorities and establish systems for feedback to better align programs with public interests.	BPRD	Ongoing
b. Expand partnerships and Friends groups to help support park activation and connect with constituents.	BPRD / BPDA	Ongoing
c. Engage with partners to increase the visibility of the positive impacts of access to open space through programming in the parks and urban wilds.	BPRD	Ongoing
d. Promote creativity, arts and culture in the parks as key elements of vibrant urban environments.	BPRD with MOAC	Ongoing

Objective 1.8: Permit the use of parks in an efficient, effective and accessible manner that lowers barriers.

Action	Responsibility/ Funding source	Timeline for completion
a. Improve and promote an expanded online permitting system that is efficient, effective and accessible.	BPRD	2024-2025
b. Schedule open field time that allows for casual use of park facilities (i.e. pick-up games).	BPRD / BPDA	2023-2024
c. Engage with permit holders and others to encourage use of facilities during non-peak times to expand capacity.	BPRD	Ongoing
d. Develop a signage and information system for dynamic communication about events, facilities, and regulations.	BPRD	2025

GOAL 2 SUSTAIN AND EXPAND AN OPEN SPACE SYSTEM THAT IS EQUITABLE, PUBLICLY-OWNED, PERMANENTLY PROTECTED, AND AVAILABLE TO ALL.

Objective 2.1: Improve open space access in an equitable manner.

Action	Responsibility/ Funding source	Timeline for completion
a. Address gaps in walksheds, open space quantity, and recreational diversity in underserved areas of the city.	BPRD	Ongoing
b. Produce facilities assessments to understand demands on the existing system.	BPRD	2023-2025
c. Establish benchmarks for level of service for specific facilities, and strategic plans for meeting those benchmarks.	BPRD	2023-2025

Objective 2.2: Acquire new property to expand the park system.

Action	Responsibility/ Funding source	Timeline for completion
a. Prioritize the addition of publicly owned and permanently protected park land, in accordance with Article 97, to balance the open space impacts of private development citywide.	BPRD	Ongoing
b. Utilize the Parcel Prioritization Plan to identify critical acquisitions.	BPRD	Ongoing
c. Establish substantial and sustainable funding sources for acquisition through the Capital Budget, Community Preservation Act funding, etc.	BPRD / COB	Ongoing
d. Designate and dedicate surplus government-owned property for use as permanently protected park land such as that which is owned by the State, DCR, BPDA, MOH, etc.	BPRD / COB / DCR	Ongoing
e. Expand the Open Space Acquisition program and cultivate in-house expertise to streamline acquisition processes and make use of available tools to act quickly around acquisition opportunities.	BPRD	2023-2025

Objective 2.3: Work within the regulatory framework to balance development and density with the provision of open space during the planning and review process.

Action	Responsibility/ Funding source	Timeline for completion
a. Engage in the development review process to incorporate criteria, expectations and mitigation that is rooted in the OSRP to ensure that open space impacts and opportunities are considered in all planning and development decisions.	BPRD / BPDA	Ongoing
b. Address open space per capita disparities across the city - especially in areas of population growth.	BPRD / BPDA	Ongoing
c. Establish a program for parkland dedication that provides a predictable, consistent model for the provision of public open space as part of the development review process.	BPRD / BPDA	2023-2025
d. Engage with adjacent municipalities and federal and state agencies on the protection of shared natural resources, particularly waterfronts, greenways and large landscapes.	BPRD / DCR	Ongoing

Objective 2.4: Actively engage and build relationships with Boston's diverse population.

Action	Responsibility/ Funding source	Timeline for completion
a. Pilot new forums for the public to provide input on programming in parks like surveys, focus groups, or an advisory board.	BPRD	2023-2024
b. Continue to build organizational capacity for public engagement including the provision of technology and equipment for effective work.	BPRD	Ongoing
c. Continue to implement and evaluate new approaches to outreach and relationship building.	BPRD	Ongoing
d. Coordinate with the City's Commission on Persons with Disabilities to promote inclusive design and programming.	BPRD	Ongoing
e. Support park partner organizations, Friends groups, and volunteers so that they can be effective stewards and advocates for the open space system, expanding BPRD's reach and capacity.	BPRD	2023-2025
f. Expand communications strategies to increase awareness of BPRD's services and programming.	BPRD	2023-2025

GOAL 3 PROMOTE RESILIENCE BY SUPPORTING THE CRITICAL RELATIONSHIP BETWEEN THE URBAN NATURAL ENVIRONMENT AND QUALITY OF LIFE IN THE CITY.

Objective 3.1: Proactively care for, enhance and restore the landscape systems and ecological functions within park properties

Action	Responsibility/ Funding source	Timeline for completion
a. Expand the use of green stormwater infrastructure where maintenance needs can be met. Use the Green Stormwater Infrastructure Design and Implementation Guide, and other resources, to inform projects.	BPRD / Streets / BWSC	2023-2025
b. Implement the strategies and actions outlined in the citywide Urban Forest Plan to protect and expand tree canopy throughout the city, including in parks.	BPRD	Ongoing
c. Increase diversity of plantings within park properties to consider plant communities, habitat enhancement, ecological function, and adaptive species	BPRD	Ongoing

Objective 3.2: Connect resource protection and climate action needs to magnify the impacts of related projects

Action	Responsibility/ Funding source	Timeline for completion
a. Contribute BPRD's planning, design, construction and engagement expertise to the City's resiliency efforts to advance landscape solutions to address Boston's climate challenges and expand open space resources.	BPRD / BPDA / Environment	Ongoing
b. Expand open space in coastal areas and flood zones that can also serve as protective infrastructure as the climate changes.	BPRD / BPDA / Environment / DCR	Ongoing

Objective 3.3: Implement and evaluate strategies for park design and maintenance to ensure that parks are resilient in the face of climate change.

Action	Responsibility/ Funding source	Timeline for completion
a. Apply assessment tools to parks to inform design, construction and maintenance decisions- evaluate shade/heat risk/resilience; energy consumption and waste production.	BPRD / Environment	Ongoing
b. Develop performance measures and evaluate park improvements to determine if they are performing as intended.	BPRD	2023-2025
c. Protect and maintain trees to support a healthy urban forest.	BPRD	Ongoing
d. Expand the season when drinking fountains and spray features are activated in parks.	BPRD	2023
e. Expand smart energy use in park improvements and improve access to the City's recycling system in public spaces.	BPRD	Ongoing

Objective 3.4: Restore the ecological function of natural resource areas.

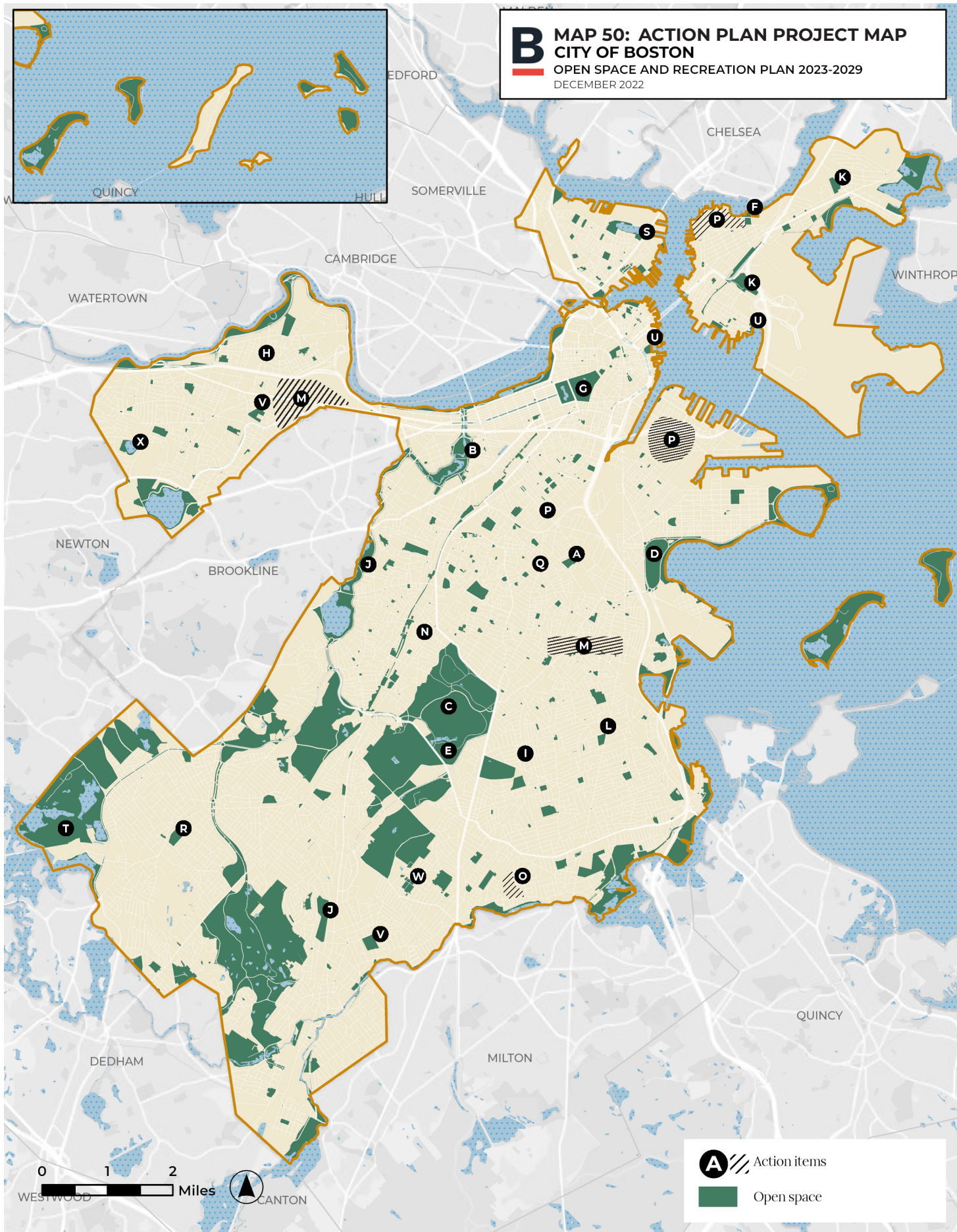
Action	Responsibility/ Funding source	Timeline for completion
a. Prioritize the acquisition of open space that rates high for climate vulnerability in the Parcel Priority Plan.	BPRD	Ongoing
b. Develop priorities for acquisitions and restoration where opportunities arise to add to existing natural resource areas.	BPRD	Ongoing
c. Improve the quality of urban ecosystems by understanding how they function and establishing benchmarks related to climate resilience, habitat and biodiversity and human access.	BPRD	Ongoing
d. Engage with adjacent municipalities on climate change, invasive species, pest control and other issues that cross boundaries.	BPRD	Ongoing
e. Mitigate invasive species in capital improvement projects.	BPRD	Ongoing

PROJECT MAP KEY

Map ID	Objective			Map Location
A	1.1	d	Expand access to shade and cooling features in parks undergoing capital renovations, especially in areas most impacted by extreme heat.	Clifford Playground
B	1.1	e	Meet or exceed ADA and MAAB standards for accessibility in parks; design for inclusive use where possible.	Back Bay Fens
C	1.2	c	Pilot improvements (like restrooms) and assess operational demands and impacts.	Franklin Park
D	1.3	d	Invest in the City's infrastructure of staff, equipment, fleet and facilities in order to support productivity.	Moakley Park
E	1.3	e	Support workforce development through training and growth opportunities.	Franklin Park
F	1.4	c	Invest in basic site improvements which include the installation, repair and replacement of signage, fences, walls, and pathways, and vegetation management.	Condor Urban Wild
G	1.5	b	Rehabilitate each park's historic character and features to sustain historic integrity while supporting contemporary uses, programs and facilities.	Boston Common
H	1.6	b	Create a reasonable and predictable formula for community contributions for open space through the development review process, looking to other communities nationwide that have implemented such programs.	Selected key areas
I	1.7	c	Expand partnerships and Friends groups to help support park activation and connect with constituents.	Norwell Street
J	1.7	d	Engage with partners to increase the visibility of the positive impacts of access to open space through programming in the parks and urban wilds.	Olmsted Park and Sherrin Woods
K	1.8	b	Schedule open field time that allows for casual use of park facilities (i.e. pick-up games).	Noyes Playground and East Boston Memorial Park
L	1.8	d	Develop a signage and information system for dynamic communication about events, facilities, and regulations.	Doherty-Gibson Playground
M	2.1	a	Address gaps in walksheds, open space quantity, and recreational diversity in underserved areas of the city.	Selected key areas
N	2.2	a	Prioritize the addition of publicly owned and permanently protected park land, in accordance with Article 97, to balance the open space impacts of private development citywide.	Egleston Peace Garden
O	2.2	d	Designate and dedicate surplus government-owned property for use as permanently protected park land such as that which is owned by the State, DCR, BPDA, MOH, etc.	Selected key areas
P	2.3	b	Address open space per capita disparities across the city - especially in areas of population growth.	Selected key areas
Q	2.4	c	Continue to implement and evaluate new approaches to outreach and relationship building.	Dudley Town Common
R	3.1	a	Expand the use of green stormwater infrastructure where maintenance needs can be met. Use the Green Stormwater Infrastructure Design and Implementation Guide, and other resources, to inform projects.	Billings Field
S	3.1	b	Implement the strategies and actions outlined in the citywide Urban Forest Plan to protect and expand tree canopy throughout the city, including in parks.	Barry Playground
T	3.1	c	Increase diversity of plantings within park properties to consider plant communities, habitat enhancement, ecological function, and adaptive species.	Millennium Park
U	3.2	a	Contribute BPRD's planning, design, construction and engagement expertise to the City's resiliency efforts to advance landscape solutions to address Boston's climate challenges and expand open space resources.	Christopher Columbus Park and Porzio Park
V	3.3	a	Apply assessment tools to parks to inform design, construction and maintenance decisions-evaluate shade/heat risk/resilience; energy consumption and waste production.	Ross Playground and Ringer Playground
W	3.4	b	Develop priorities for acquisitions and restoration where opportunities arise to add to existing natural resource areas.	Mattahunt Woods Urban Wild
X	3.4	e	Mitigate invasive species in capital improvement projects.	Chandler Pond

Note: The Action Plan Map portrays representative projects and areas of the city that could be affected by Action Plan items. Therefore, not all areas that could be affected by an action are shown on this map.

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APPENDICES

A. WORKS CITED

B. MAP DATA SOURCES

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APPENDIX A:

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“Planning for a Green New Deal and Just Recovery.” Office of Boston City Councilor Michelle Wu, August 2020. assets.ctfassets.net/1hf11j69ure4/6NLxlOVxTVMNbHEv-FaQE/700f4762bae92990f91327a7e01e2f09/Boston-Green-New-Deal-August-2020-FINAL.pdf. PDF file.

“Quantifying the Contribution of Public Parks to Physical Activity and Health.” RAND Corporation, 2014. www.rand.org/pubs/research_reports/RR774.html. PDF file.

“Shape of the City: Making Boston America’s Upwardle Mobile City, A Summary of the Boston Indicators Report 2015.” *The Boston Foundation: Boston Indicators Project*, 2015. www.boston-indicators.org/-/media/indicators/boston-indicators-reports/report-files/shape-of-the-city-2015.pdf?la=en. PDF file.

“Which Are the Largest City Economies in the World and How Might This Change by 2025?” PricewaterhouseCooper, 2009. pwc.blogs.com/files/global-city-gdp-rankings-2007-2025.pdf. PDF file.

in progress

APPENDIX B

MAP DATA SOURCES

Protected open spaces are those which are held by public agencies for park, recreation, and conservation purposes, either in fee or by a deed restriction, or by some other legal means that would make conversion to a non-open space use extremely difficult.

MAP 1: REGIONAL CONTEXT

MAPC inner core communities map derived from information on www.mapc.org/get-involved/subregions/icc/.

City of Boston. "Open Space Planning Neighborhoods." (24 February 2023). City of Boston, 01 November 2022. gis.boston.gov/arcgis/rest/services/EnvironmentEnergy/OpenData/MapServer/8.

MAP 2: WATERSHEDS AND WETLANDS

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

Commonwealth of Massachusetts, MassGIS. "Major Watersheds." (June 2000). MassGIS, 01 November 2022. www.mass.gov/info-details/massgis-data-major-watersheds.

- File name: watshdp1.shp

Commonwealth of Massachusetts, MassGIS. "MassDEP Wetlands (2005)." (December 2017). MassGIS, 01 November 2022. www.mass.gov/info-details/massgis-data-massdep-wetlands-2005.

- File name: WETLANDSDEP_POLY.shp

MAP 3: ENVIRONMENTAL JUSTICE POPULATIONS

U.S. Census block groups that represent areas with high minority ($\geq 25\%$ of block group total population), non-English speaking ($\geq 25\%$ of block group total households have no member over age 14 who speak English very well), and/or low-income populations (block groups where median household income was $\leq \$40,673$

[65.49% of the 2010 Massachusetts median household income]). Data in this map was compiled from the American Community Survey (ACS) 2006-2010 5 year estimates tables by MassGIS (2012). Shading variation shows number of EJ population criteria met by a particular block group. Letters shown within block groups indicate which criteria that block group meets; M = Minority criterion; I = Income criterion; E = English Linguistic Isolation.

Commonwealth of Massachusetts, MassGIS. "2020 Environmental Justice Populations." (November 2022). MassGIS, 01 November 2022. www.mass.gov/info-details/massgis-data-2020-environmental-justice-populations.

- File name: EJ_POLY.shp

MAP 4: ENVIRONMENTAL JUSTICE POPULATIONS (AGGREGATED)

Aggregated indicators of 2020 Environmental Justice Populations data layer described for Map 3.

Commonwealth of Massachusetts, MassGIS. "Environmental Justice Populations." (November 2022). MassGIS Data, 01 December 2022. www.mass.gov/info-details/massgis-data-2020-environmental-justice-populations.

MAP 5: ZONING OF OPEN SPACE

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

MAP 6: SURFICIAL GEOLOGY AND SOILS

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

Commonwealth of Massachusetts, MassGIS. "1:24,000 Surficial Geology." MassGIS Data, July 2022. www.mass.gov/info-details/

DRAFT

massgis-data-usgs-124000-surficial-geology.

- File name: SURFGEO24K_OVERLAY_POLY.shp

2018USGS_1984SurficialSediments

MAP 7: BEDROCK GEOLOGY

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

Horton, J.D. "The State Geologic Map Compilation (SGMC) geodatabase of the conterminous United States." (ver. 1.1, August 2017). U.S. Geological Survey data release, <https://doi.org/10.5066/F7WH2N65>.

- File names:
 - SGMC_Geology
 - SGMC_Structure

Commonwealth of Massachusetts, MassGIS. "Lidar DEM and Shaded Relief." (January 2022). MassGIS Data, 14 January 2022. www.mass.gov/info-details/massgis-data-lidar-dem-and-shaded-relief

- File name: Lidar_Shaded_Relief.lyr

MAP 8: FEMA FLOOD ZONES

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

United States, Federal Emergency Management Agency (FEMA). "National Flood Hazard Layer." (July 2017). FEMA, 01 November 2022. www.mass.gov/info-details/massgis-data-fema-national-flood-hazard-layer

- File name: FEMA_NFHL_POLY

MAP 9: BOSTON LANDMARKS COMMISSION

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

MAP 10: CRITICAL ENVIRONMENTAL AREAS

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

Commonwealth of Massachusetts, MassGIS. "Areas of Critical Environmental Concern." (April 2009). MassGIS Data, 01 November 2022. www.mass.gov/info-details/massgis-data-areas-of-critical-environmental-concern.

- File name: Aces_poly

Commonwealth of Massachusetts, MassGIS. "BioMap: The Future of Conservation." (November 2022). MassGIS Data, 01 November 2022. www.mass.gov/info-details/massgis-data-biomap-the-future-of-conservation.

- File names (in geodatabase):
 - BM3_CORE_HABITAT
 - BM3_CRITICAL_NATURAL_LANDSCAPE

MAP 11: SEA LEVEL RISE

City of Boston. "Sea Level Rise Inundation." (2020 July 08). Analyze Boston, 01 November 2022. data.boston.gov/dataset/climate-ready-boston-sea-level-rise-inundation.

- File names:
 - 36inch Sea Level Rise High Tide
 - 36inch Sea Level Rise 1pct Annual Flood
 - 36inch Sea Level Rise 10pct Annual Flood

MAP 12: OPEN SPACE OWNERSHIP

Displays open spaces by general classes of ownership. For example, a Boston Office of Housing open space is classed as owned by the City of Boston, as are open spaces under the jurisdiction of the Parks and Recreation Department, the Boston Conservation Commission, the Boston Planning and Development Agency Authority, and so on, except where noted in the map legend.

City of Boston. "Open Space." Analyze Boston. Boston, MA: City of Boston, 01 November 2022. data.boston.gov/dataset/open-space.

- File name: Open_Space

MAP 13: OPEN SPACE PROTECTION

Displays permanent protection status of open space regardless of ownership, where POS = X in the attribute table.

City of Boston. "Open Space." Analyze Boston. Boston, MA: City of Boston, 01 November 2022. data.boston.gov/dataset/open-space.

- File name: Open_Space

MAP 14: OPEN SPACE TYPES

Displays open spaces regardless of ownership by land use-oriented types, using the TYPE_LONG field in the attribute table.

City of Boston. "Open Space." Analyze Boston. Boston, MA: City of Boston, 01 November 2022. data.boston.gov/dataset/open-space.

- File name: Open_Space

MAP 15: ZONING OF OPEN SPACE

Open space mapped according to zoning subdistrict.

City of Boston. "Boston Zoning Subdistricts." Analyze Boston. (2023 February 16). Boston, MA: City of Boston, 18 February 2023. data.boston.gov/dataset/open-space.

- File name: Boston_Zoning_Subdistricts

City of Boston. "Open Space." Analyze Boston. Boston, MA: City of Boston, 01 November 2022. data.boston.gov/dataset/open-space.

- File name: Open_Space

MAPS 16-20: LANDS OF INTEREST SERIES

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

MAP 21: BOSTON ZIP CODES

Map displaying Boston's zip code boundaries.

City of Boston. "Zip Codes." Analyze Boston. (24 February 2023). Boston, MA: City of Boston, 01 November 2022. data.boston.gov/dataset/zip-codes.

- File name: ZIP_CODES/2023-02-24

MAPS 22-23: PPP SURVEY RESPONSES

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

City of Boston, Parks and Recreation Department (BPRD). "Planning for Future Parks." BPRD, 2020 November 30. www.boston.gov/departments/parks-and-recreation/planning-for-future-parks.

- File name: 20_11_30_PPP_SUMMARY OF ROUND 1. PDF file.

MAP 24: OSRP SURVEY (RESPONSE RATES)

Generated by the Boston Parks and Recreation Department.

MAPS 25-29: PARCEL PRIORITY PLAN MODELING SERIES

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

City of Boston, Parks and Recreation Department (BPRD). "Planning for Future Parks." BPRD, 2020 November 30. www.boston.gov/departments/parks-and-recreation/planning-for-future-parks.

boston.gov/departments/parks-and-recreation/planning-for-future-parks.

Generated by the Boston Parks and Recreation Department. Geospatial layer not available for download at the time of this writing.

MAP 30: URBAN WILDS

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

Open space designated as an urban wild (TYPE_LONG = Urban Wilds in attribute table)

City of Boston. "Open Space." Analyze Boston. Boston, MA: City of Boston. Web. 01 November 2022. data.boston.gov/dataset/open-space.

- File name: Open_Space

MAPS 31-33: CANOPY COVERAGE SERIES

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

City of Boston. "Canopy Change Assessment: 2019 Tree Canopy Polygons." (2021 May 12). Analyze Boston, 01 November 2022. data.boston.gov/dataset/canopy-change-assessment-2019-tree-canopy-polygons.

- File name: Canopy_Change_Assessment%3A_2019_Tree_Canopy_Polygons.shp
- City of Boston. "HEX % Tree Canopy Metrics." (2021 May 14). Analyze Boston, 01 November 2022. data.boston.gov/dataset/hex-tree-canopy-metrics.
- File name: Canopy_Change_Assessment%3A_Tree_Canopy_Metrics.shp

MAP 34: CANOPY PRIORITY ZONES

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

City of Boston, Parks and Recreation Department (BPRD). "Urban Forest Plan: Neighborhood Strategies". BPRD, September 2022 www.boston.gov/sites/default/files/file/2022/09/NeighborhoodStrategies_2022.pdf. PDF file.

Generated by the Boston Parks and Recreation Department. Geospatial layer unpublished at the time of this writing.

MAP 35: WALKSHED SERVICE AREAS

Displays the park service areas of parks and open spaces denoted in the legend "Publicly Accessible Open Space." Areas served by one or more such parks are denoted by a shade of green shown in the legend. The size of the service area based on the size of the park or open space, as described in the introduction to Section 7.2, Community Open Space and Recreation. The distance is developed using a "network" mapping program that imitates pedestrian movements, rather than the simple linear ("as the crow flies") distances around each property that ignores obstacles such as railroad corridors, interstate highways, non-gridded street networks, etc. that pose barriers to pedestrian movement.

Generated by the Boston Parks and Recreation Department. Geospatial layer unpublished at the time of this writing.

MAP 36: GAPS IN SERVICE AREAS

The inverse of the Walkshed Service Areas map - all the areas not captured by a walkshed.

Generated by the Boston Parks and Recreation Department. Geospatial layer unpublished at the time of this writing.

MAPS 37+39: POPULATION DENSITY

Persons per acre within specified geography, based on the 2016-2020 American Community Survey 5-Year Estimates. Population count calculated with assistance from the Research Division of the Boston Planning and Development Agency.

2016-2020 American Community Survey 5-Year Estimates, United States Census Bureau.

- xxxx

MAP 38+40: ACRES OPEN SPACE PER 1,000 PEOPLE

Acres protected open space per 1,000 people within specified geography, based on the 2016-2020 American Community Survey 5-Year Estimates. Population count calculated with assistance from the Research Division of the Boston Planning and Development Agency.

2016-2020 American Community Survey 5-Year Estimates, United States Census Bureau.

- xxxx

City of Boston. "Open Space." Analyze Boston. Boston, MA: City of Boston, 01 November 2022. data.boston.gov/dataset/open-space.

- File name: Open_Space

MAP 41: SPORTS FIELDS

City of Boston, Parks and Recreation Department (BPRD) [draft data unpublished]

MAP 42: TENNIS AND PICKLEBALL COURTS

Locations of DCR pickleball courts were identified by Boston Parks and Recreation Department and are not an official record of DCR pickleball courts.

City of Boston. "Boston Park Assets." (2021 November 30). Analyze Boston, 01 November 2022. data.boston.gov/dataset/boston-park-assets.

- File name: tmphcawy614.csv

Commonwealth of Massachusetts, Department of Conservation and Recreation (DCR). "DCR Hard Courts." (05 January 2023). DCR, 10 January 2023. services1.arcgis.com/7iJyYTjCtKsZS1LR/arcgis/rest/services/DCR_Hard_Courts_1/FeatureServer

- File name: DCR_IndivCourt_DataB

MAP 43: BASKETBALL COURTS

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

City of Boston. "Boston Park Assets." (2021 November 30). Analyze Boston, 01 November 2022. data.boston.gov/dataset/boston-park-assets.

- File name: tmphcawy614.csv

Commonwealth of Massachusetts, Department of Conservation and Recreation (DCR). "DCR Hard Courts." (05 January 2023). DCR, 10 January 2023. https://services1.arcgis.com/7iJyYTjCtKsZS1LR/arcgis/rest/services/DCR_Hard_Courts_1/FeatureServer.

- File name: DCR_IndivCourt_DataB

MAP 44: PLAYGROUNDS

Eped molupta sequam fugiam inullut empelendit doloreped quo quassinus error re essim ererio blam lias ium solum corem volorer sperunt parum impossit facitas de lam sitam invenis maionsent.

City of Boston. "Boston Park Assets." (2021 November 30). Analyze Boston, 01 November 2022. data.boston.gov/dataset/boston-park-assets.

- File name: tmphcawy614.csv

Commonwealth of Massachusetts, Department of Conservation and Recreation (DCR). "DCR Playgrounds." (12 August 2020). DCR, 01 November 2022. services1.arcgis.com/7iJyYTjCtKsZS1LR/arcgis/rest/services/DCR_Playgrounds_1/FeatureServer.

com/7iJyYTjCtKsZS1LR/arcgis/rest/services/DCR_Playgrounds_1/FeatureServer

- File name: DataA_Playground

Resilience%20Plan_highres-with%20Appendix%20%281%29.pdf. PDF file.

MAP 45: SPRAY PLAY

Locations of DCR spray play features were identified by Boston Parks and Recreation Department and are not an official record of DCR spray play features.

City of Boston. “Boston Park Assets.” (2021 November 30). Analyze Boston, 01 November 2022. data.boston.gov/dataset/boston-park-assets.

- File name: tmphcawy614.csv

MAP 46: DOG PARKS

Locations of dog parks owned by other entities were identified by Boston Parks and Recreation Department and are not an official record maintained by those entities.

City of Boston. “Boston Park Assets.” (2021 November 30). Analyze Boston, 01 November 2022. data.boston.gov/dataset/boston-park-assets.

- File name: tmphcawy614.csv

MAP 47: ACCESS TO PLAYGROUNDS

Derived by Boston Parks and Recreation Department from Walkshed Service Area map and Boston Park Assets data layers.

MAP 48: ACCESS TO SPRAY PLAY

Derived by Boston Parks and Recreation Department from Walkshed Service Area map and Boston Park Assets data layers.

MAP 49: HEAT EVENT HOURS

Derived from the Heat Resilience Solutions for Boston plan.

City of Boston, Environment Department. “Heat Resilience Solutions for Boston.” Environment Department, April 2022. www.boston.gov/sites/default/files/file/2022/04/04212022_Boston%20Heat%20