



# *Natural Resources and Conservation*

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**W**ellesley residents value the green open space in town and want to preserve it. In principle, they want to preserve natural open space and its environmental value, and would like to see expansion of natural open space. However, because of Wellesley's very high real estate values, acquisition is very costly, and there are competing interests and values for open space. The Natural Resources Commission (NRC) is the steward of Wellesley's open space, setting policy and overseeing the use, preservation and protection of the Town's parks and conservation areas (including Town athletic fields not located on school sites) and watershed areas. It also serves as tree warden and sets policies for insect control and pesticide use by Town agencies.

This chapter of the Unified Plan focuses on natural resource management, natural open space, and conservation, and it is closely allied to sustainability and resilience issues discussed in Chapter 12. Like many nearly built-out communities, Wellesley faces the challenge of providing desired recreational facilities while protecting its natural resources. (Parks and Recreation are discussed more fully in Chapter 6.) Attention to both interests and values are highlighted in both chapters of the plan.

### ***Supporting town government concepts***

*The Unified Plan's emphasis on making town government more customer-centric, data-driven and strategic, and transparent is reflected in several of this chapter's strategies: strengthening the open space data inventory; measuring the tree canopy and its environmental benefits; and preserving access through reducing encroachment.*

## **A. Natural Resources and Conservation in the Vision and Values**



### **VISION**

In 2040, Wellesley is a town recognized for its.... respect for the environment and support for sustainability, conservation, and protection of physical and historical assets



### **VALUES**

**Conservation and Sustainability:** Make resource-efficient choices to conserve energy, water, and materials; improve water and air quality and reduce carbon emissions; develop and implement sustainable practices to adjust to changing environmental conditions.

## **B. Goals And Policies**

GOALS	POLICIES FOR DECISION MAKERS
<b><i>Sensitive natural resources are restored, well-managed, preserved and expanded to protect and enhance water resources, wildlife habitat, biodiversity, public health, and enrichment of community character.</i></b>	<ul style="list-style-type: none"> <li>• Give priority and provide resources for initiatives to improve and maintain water quality in streams, ponds, wetlands, and aquifers and minimize nonpoint source pollution.</li> <li>• Promote protection and enhancement of the tree canopy.</li> <li>• Manage properties to promote habitat and biodiversity.</li> <li>• Raise public awareness about landscape best management practices by public and private property owners</li> </ul>
<b><i>The Town maintains an up to date inventory of open space.</i></b>	<ul style="list-style-type: none"> <li>• Support town decision making and priority-setting by maintaining good data.</li> </ul>
<b><i>Public open space is protected and well-managed.</i></b>	<ul style="list-style-type: none"> <li>• Protect existing town-owned open space with conservation restrictions or zoning.</li> <li>• Ensure public access to public open space and deter encroachments.</li> <li>• Manage and maintain open space to protect the public interest in natural resources and public access.</li> </ul>
<b><i>The Town maintains open space character through multiple strategies.</i></b>	<ul style="list-style-type: none"> <li>• Collaborate with non-municipal owners of open space.</li> </ul>
<b><i>The Town maintains a state-approved Open Space and Recreation Plan.</i></b>	<ul style="list-style-type: none"> <li>• Provide resources to update the OSRP to retain eligibility for grants.</li> </ul>

## C. Findings And Challenges

### FINDINGS

#### Overview

- **Natural Resources Commission (NRC).**

Established by Wellesley Town Meeting in 1978, the Natural Resources Commission is a five-member, elected board. The NRC has the statutory authority and responsibility of a Park Commission, Conservation Commission, Tree Warden, Town Forest Committee, and Forestry and Pest Control Officer under Massachusetts law. The NRC appoints the Wetlands Protection Committee and the Trails Committee. The NRC's land management policies are carried out by the Department of Public Works with town budget allocated to the NRC.

- **Wellesley Open Space and Recreation Plan (OSRP).**

The Wellesley Open Space and Recreation Plan, completed in 2015 and approved by the State, is the guiding document for the NRC. The Plan contains an inventory of natural resources and open spaces, and their uses, identifies needs and areas for improvement, sets out goals, and includes action plans for those goals. The goals and actions were informed by public engagement, including a survey. The approved Plan also allows the Town to apply for State grants as long as it is updated every five years.

- **Surface water.** Wellesley's surface water and ground water are critical resources for drinking water and wildlife habitat. Six stream systems flow into the Charles River on the eastern and southwestern border of town forming six watersheds: Cold Stream Brook, Rosemary Brook, Hurd Brook, Fuller Brook, Waban Brook, and Pollock Brook (see Exhibit 4.1). Surface waters include two large ponds and 10 small ponds and the town has 14 wetland systems. Surface water in ponds and streams (including the Charles River) and groundwater in aquifers are vulnerable to nonpoint source pollution from stormwater runoff containing oil, grease, pesticides, herbicides, and other pollutants. The state Wetlands Protection Act, the Rivers Protection Act, and the Wellesley Wetlands Protection Bylaw regulate development to protect wetlands resources. Wellesley's water resources and adjacent lands function as wildlife corridors, provide

valuable plant and wildlife habitat, protect aquifers, mitigate climate change impacts, and help prevent flooding by capturing storm water.

- **Groundwater resources.** Two major aquifers supply drinking water. There are ten public wells, which provide the majority of drinking water (with the remainder purchased from the Massachusetts Water Resources Authority), two private wells on the land of the Wellesley Country Club that are used for golf course irrigation, and two wells on Wellesley College land. (See Figure 4.x) On the east side of town, the aquifer is protected by conservation areas around Rosemary Brook, Longfellow Pond and Bezanson Pond, the Town Forest, as well as the Wellesley Country Club lands. Moses's Pond and Lake Waban and town-owned wellhead protection lands, along with Fuller Brook lands, Wellesley College lands, and North 40 lands help protect the aquifer in the western part of town.
- **Landscape character and wildlife habitat.** Wellesley's open space lands contain a variety of natural conditions including woodlands, open fields, and hillside areas with vegetation and wildlife populations that are typical of suburban fragmented and edge habitat conditions. The Wellesley Town Forest, Carisbrooke Reservation, and the Hemlock Gorge Reservation (state owned) are managed as wildlife habitat. Streams, wetlands, and ponds provide critical wildlife habitat connections in suburban environments like Wellesley. The Rosemary Brook corridor, which is conservation land, functions as the biggest wildlife corridor in the town. There are 13 certified vernal pools and an estimated 70-80 potential vernal pools. Vernal pools provide seasonal, temporary water habitat for amphibian and invertebrate species.
- **Urban forest.** Street trees and trees on public and private land play an important role in moderating temperature, precipitation, and air pollution, as well as providing habitat. Wellesley has an inventory of a total of 6,047 publicly -owned trees, of which 2,256 are street trees and the remainder are in public parks and other public landscaped areas. The trees in public conservation areas or the town forest are not included in this inventory. There is no current estimate of trees on private property or the town's overall tree canopy. Wellesley has been a Tree City USA for more than 30 years, meeting the standards of the Arbor Day Foundation for urban forestry.

- **Water quality as a top priority.** The top priority of the Natural Resources Commission for many years has been the reduction of nonpoint source pollution to improve and maintain water quality in town water resources. These efforts include:

- › Working with other town boards and departments to implement the National Pollution Discharge Elimination System Phase II Stormwater Regulations
- › Continued use of Best Management Practices to mitigate the impacts of local and regional development through zoning, stormwater, and wetlands regulations
- › Continued implementation of the Pond Restoration Program
- › Implementation of the Morses Pond Management Study and erosion study
- › Monitoring and management of restored ponds
- › Continued use of organic Integrated Pest Management on Town properties
- › Continued public awareness campaigns on the harmful effects of nonpoint source pollution, such as the promotion of eco-landscaping (Grow Green Wellesley program) on private property to reduce pesticide and herbicide use and encourage organic turf management

#### ARTICLE 97 PROTECTED LANDS

Article 97 of the Amendments to the Massachusetts constitution provides that “the people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment....Lands and easements taken or acquired for such purposes shall not be used for other purposes or otherwise disposed of except by laws enacted by a two-thirds vote” by the legislature. In practice, this means that land protected under Chapter 97 must be acquired explicitly [in the deed] for conservation, park, or recreation purposes. Sometimes town lands used for these purposes do not have these stipulations in the deed—for example school recreation lands are often not protected park land.

- › Construction of a boardwalk around the certified vernal pool on the North 40 to promote public awareness and education about vernal pools.

#### Public and Private Open Space

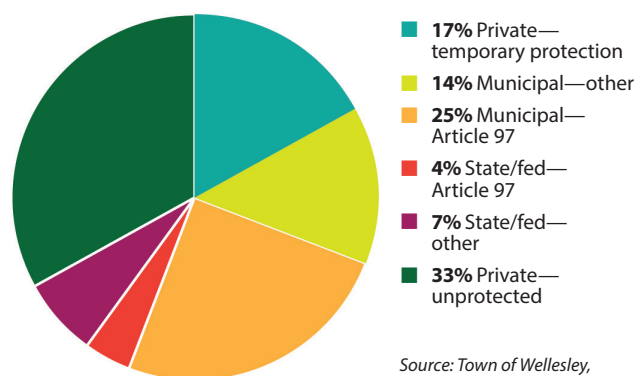
- **Undeveloped land.** About a third, 33%, of Wellesley’s total 6,720 acres of land are not developed (2,213 acres), including a mix of local, state, federal and privately owned land. The Town owns 850 acres (38%) of this undeveloped land (including lands under control of the NRC, School Committee, Library, Public Works, and Board of Selectmen.
- **Protected open space.** Approximately 29% percent of undeveloped land (642 acres) is permanently protected under Article 97 of the Massachusetts Constitution. Of these 642 acres, the Town owns 545.45 acres (25% of all undeveloped land) and the remainder of these protected acres, 96.15 (4% of all undeveloped land), are State-owned. Another 255 acres are temporarily protected by the Chapter 61 program of tax abatements for forestry, agricultural, and recreational open space. Chapter 61 provides temporary protection because owners can choose to take the land out of the open space use. In that case, the property owner is required to pay some or all of

#### OPEN SPACE BY SIZE, 2014

CONTROL	PROECTION	ACRES		
Town-owned	Municipal—other	845	300	38%
	Municipal—Article 97		545	
Other owners	State/fed—Article 97	1,368	96	62%
	State/fed—other		153	
	Private—temporary		388	
	Private—unprotected		730	
<b>Total</b>		<b>5,215</b>		<b>100%</b>

Source: Town of Wellesley, Natural Resources Commission

#### OPEN SPACE ACRES BY OWNERSHIP, 2014





the previous property tax abatement and the town has the right of first refusal to acquire land.

- **Private conservation land.** The Wellesley Conservation Council, a private non-profit organization established in 1958, maintains ten sanctuaries totaling 44 acres. Eight of the ten sanctuaries are located entirely within Wellesley, one includes land in both Wellesley and Needham, and one is located within Weston adjacent to Wellesley's Carisbrooke Reservation.
- **Public trails.** The Town has a total of 43 miles of trails. Twenty-six miles are marked with directional medallions and managed by over 10 different entities. Wellesley trails are part of the Charles River Link, a 16-mile, six-town regional trail extending from Newton to Medfield.

### ***2015 Open Space and Recreation Plan Goals***

The goals of the 2015-2022 OSRP appear below. A few of these focus on recreation, which is treated in Chapter 6 of this Unified Plan.

1. Preserve open space for habitat protection and enhancement of community character.
2. Protect Wellesley's sensitive land, water, and wetlands resources, and restore those resources that have been degraded or impaired.
3. Prevent damage to natural resources and human health from hazardous materials and elements.
4. Encourage sustainable policy and practice within Town government and throughout the community.
5. Maintain up-to-date information about Wellesley's natural resources, to assist in resource management.
6. Continue and expand existing environmental education and awareness programs.
7. Protect open space and environmental resources.
8. Maintain, enhance, and expand Wellesley's public open space areas and recreation facilities.
9. Promote the awareness and use of Wellesley's parks, recreation facilities and open space resources.
10. Ensure that recreation facilities and programs continue to meet the needs of the Town.
11. Provide opportunities for safe and enjoyable walking and bicycle access throughout the Town.
12. Restore, preserve, and enhance open space and sensitive natural resources for protection of water resources, wildlife habitat, biodiversity, and enrichment of community character.

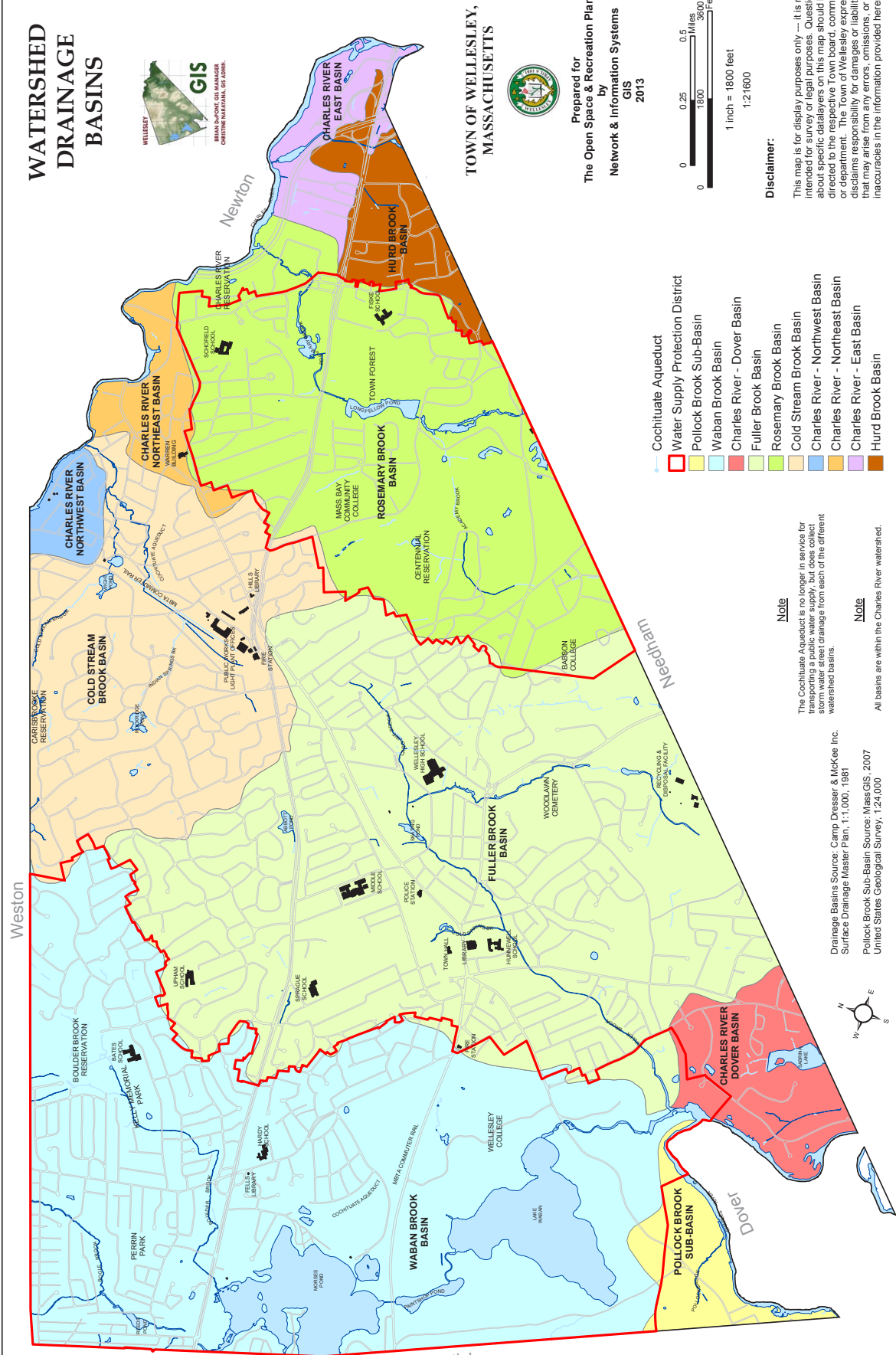
## **CHALLENGES**

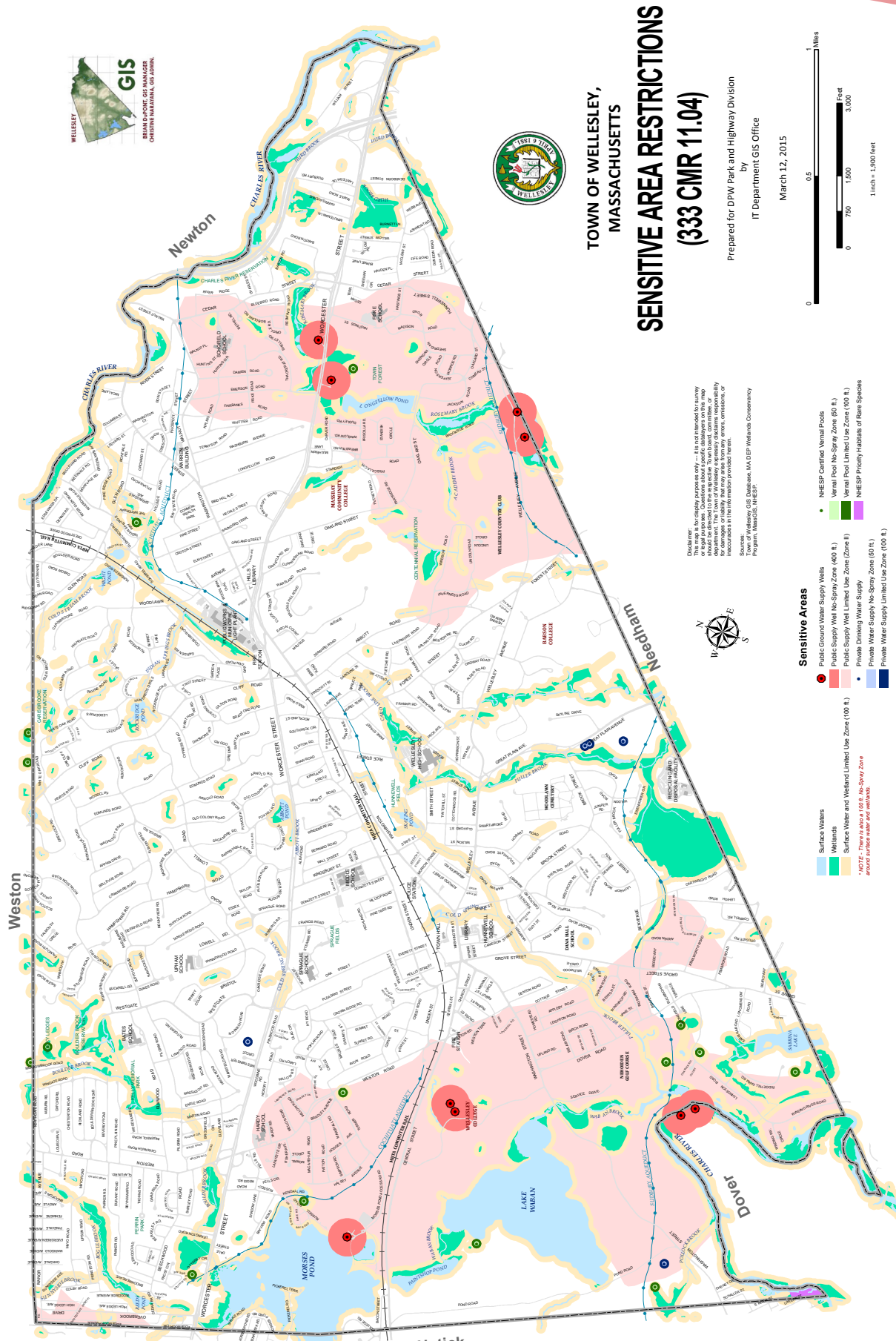
- The Open Space and Recreation Plan identified several natural resource challenges:
  - › The increased use of Wellesley's active recreation space exerts significant pressure on the Town to convert some passive recreation space to active use.
  - › Wellesley's built-out condition and high property values make it challenging to acquire significant amounts of open space.
  - › Significant open space areas are either held by institutions or are in tax-abatement programs that provide limited protection against development.
- Balancing the need and value of open space with other town initiatives and priorities.
- Balancing passive and active use of open space
- Balancing private property rights with regulation.
- Providing sufficient outdoor and indoor recreation facilities for current and future use.
- Improving safety at trail road crossings and along roads without sidewalks
- Providing recreational and social activities for teenagers in ways that will attract them to participate
- Improving Morse's Pond bathhouse and programming
- Systematically surveying recreation program users, evaluating programs, and responding to user demand

## **D. What The Community Said**

The Open Space and Recreation Plan includes results of a March 2015 survey with over 600 respondents and reports the highlights of the survey as follows:

- 91% feel it's important to acquire and preserve open space for active and passive recreation.
- 94% are concerned about water pollution from pesticides and stormwater runoff.
- 87% think it's important to acquire and preserve open space for natural resource protection.
- 82% are concerned about Wellesley trees.
- 89% feel areas specific to passive recreation are important.





- 67% feel areas specific to active sports are important.
- 76% would like our trail system to be expanded and improved.
- 71% would like to acquire more land for conservation purposes.
- 66% would like to acquire more land for recreational facilities.
- 80% would like better places to run and bike

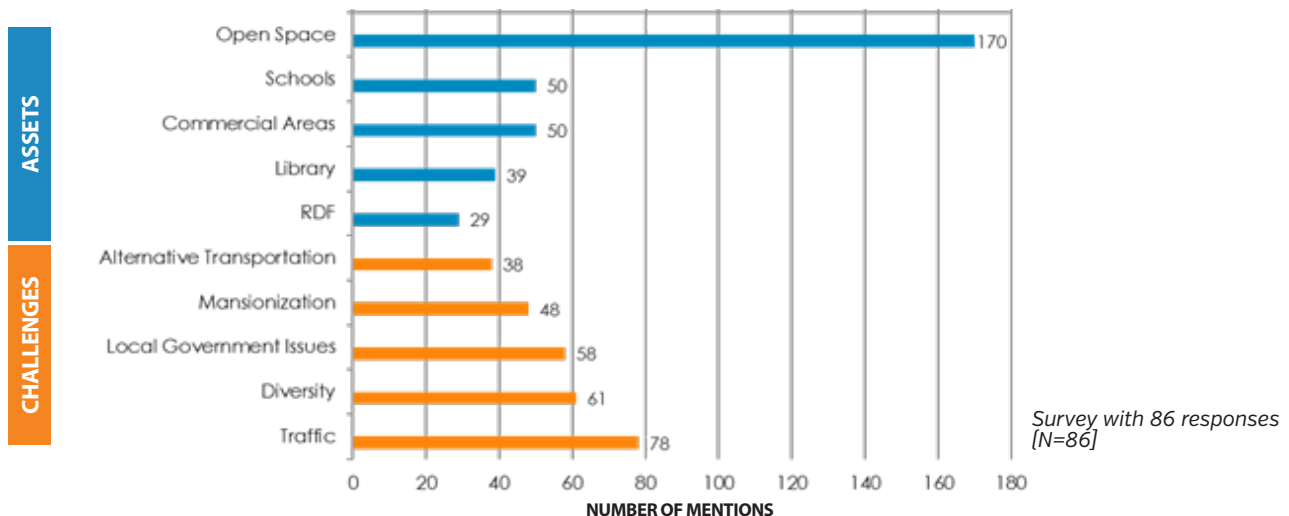
Relevant themes that emerged during the Wellesley Unified Plan process in public meetings and surveys include:

- A very high level of public appreciation of open space in general

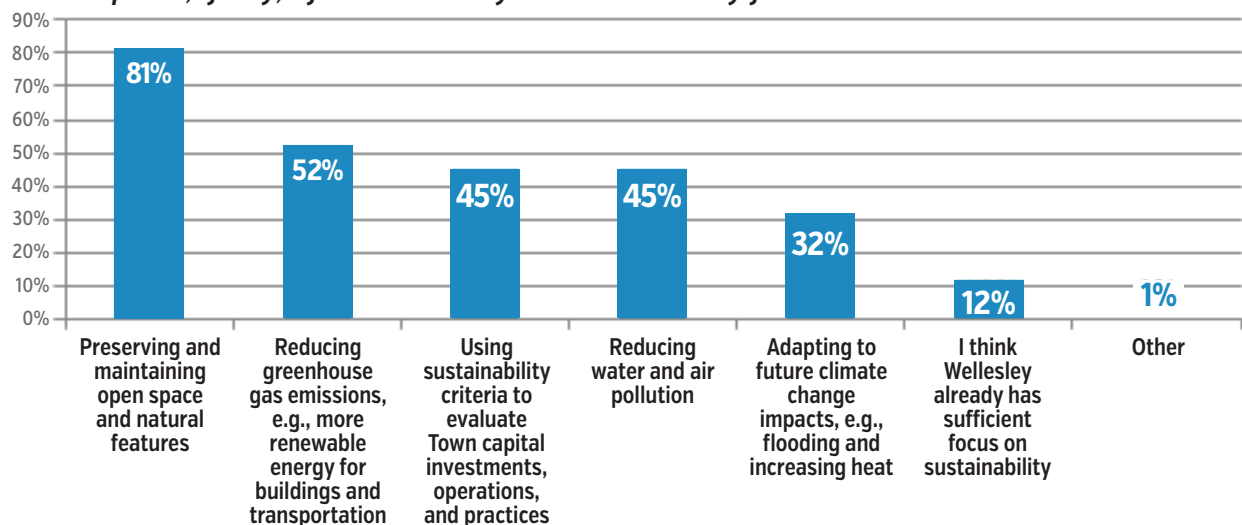
- Support for preservation and enhancement of trails, parks, conservation land, waterways, and community gardens
- Preservation of green space
- Protection of the environment and natural resources
- Desire for more choice in after-school programs
- Difficulty balancing demand for athletic fields with desire for open space.

Support for natural resources, open space, and parks was also evident in the responses to various digital surveys.

### Top Assets and Challenges



### Q: What aspects, if any, of sustainability should Wellesley focus on?



Vision and Values Survey (N=1,058)



IMPORTANT TO ME	IMPORTANT TO THE TOWN
1. School system excellence	1. School system excellence
2. Sense of community	2. Sense of community
3. Sustainability and preserving resources	4. Infrastructure and physical assets
4. Infrastructure and physical assets	3. Sustainability and preserving resources
5. Enhancing diversity	6. Improving transportation and connectivity
6. Improving transportation and connectivity	5. Enhancing diversity
7. Support for businesses	7. Support for businesses
8. Regional partnerships	8. Regional partnerships

### Workshop

On May 31, 2017, a workshop on natural and cultural heritage, including open space, parks, and recreation drew a group of approximately 30 participants. There were relatively few people at this workshop who were highly involved with recreation, historic preservation, or arts and culture. An online survey focusing on recreation sites and sources was made available on the project website during the month of July 2017.

Participants, working in small groups around tables with maps showing relevant town resources, were asked to take part in a series of exercises:

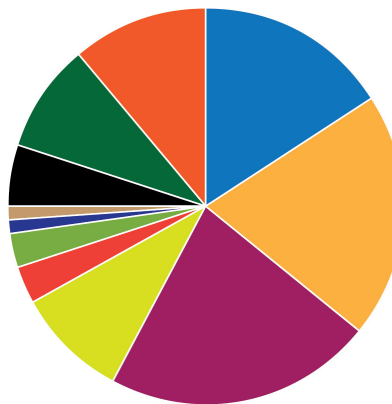
- Indication of individual preferences for allocation of resources to a range of open space strategies and activities
- Group discussion of these individual preferences
  - › Identification on the map of resources of existing protected or park areas that need enhanced maintenance—marked by “M”
  - › Identification on the map of natural resource areas that are not currently protected but need protection—marked by “C”
  - › Identification of neighborhood areas that do not have sufficient access to a park
- Group identification of top three priorities for conservation, parks, and trails
- Group identification of top priorities in passive and active recreation

- Group identification of next steps to support historic preservation, now that the town has a demolition delay bylaw
- Discussion of whether the town should have performing and visual arts space and, if so, how the Town could support this.

### Workshop: Allocating Funding For Open Space, Parks, And Recreation

The workshop participants focused on expansion of open space resources, proposing to spend 42% of resources on park and open space expansion, while assigning 25% of resources to maintenance and improvement of existing resources and trails. There was greater support for passive parks than for active recreation facilities.

### HOW WOULD YOU ALLOCATE \$100 IN SPENDING FOR OPEN SPACE, PARKS, AND RECREATION?



- **16%** Focus on the open space and parks that we already have. Maintain, improve, reduce encroachment.
- **20%** Expand existing parks and open space with adjacent land, when available.
- **22%** New parks: acquire land or conservation easements for new parks or natural open space.
- **9%** Focus on existing trails: maintain, improve, reduce encroachment.
- **3%** Expand the trail network with new trails.
- **3%** New athletic fields or facilities for **youth team** sports
- **1%** New athletic fields or facilities for **adult team** sports
- **1%** New facilities for **adult individual** sports (e.g., tennis)
- **5%** Improve pond swimming facilities
- **9%** Parks for walking, individual exercise, enjoying nature (passive parks)
- **11%** All other comments (most frequently cited: Protect water and water quality; invest in historic, cultural recreation; artist space/arts)

DRAFT

# EXHIBIT 4.3

## WORKSHOP MAP EXERCISE

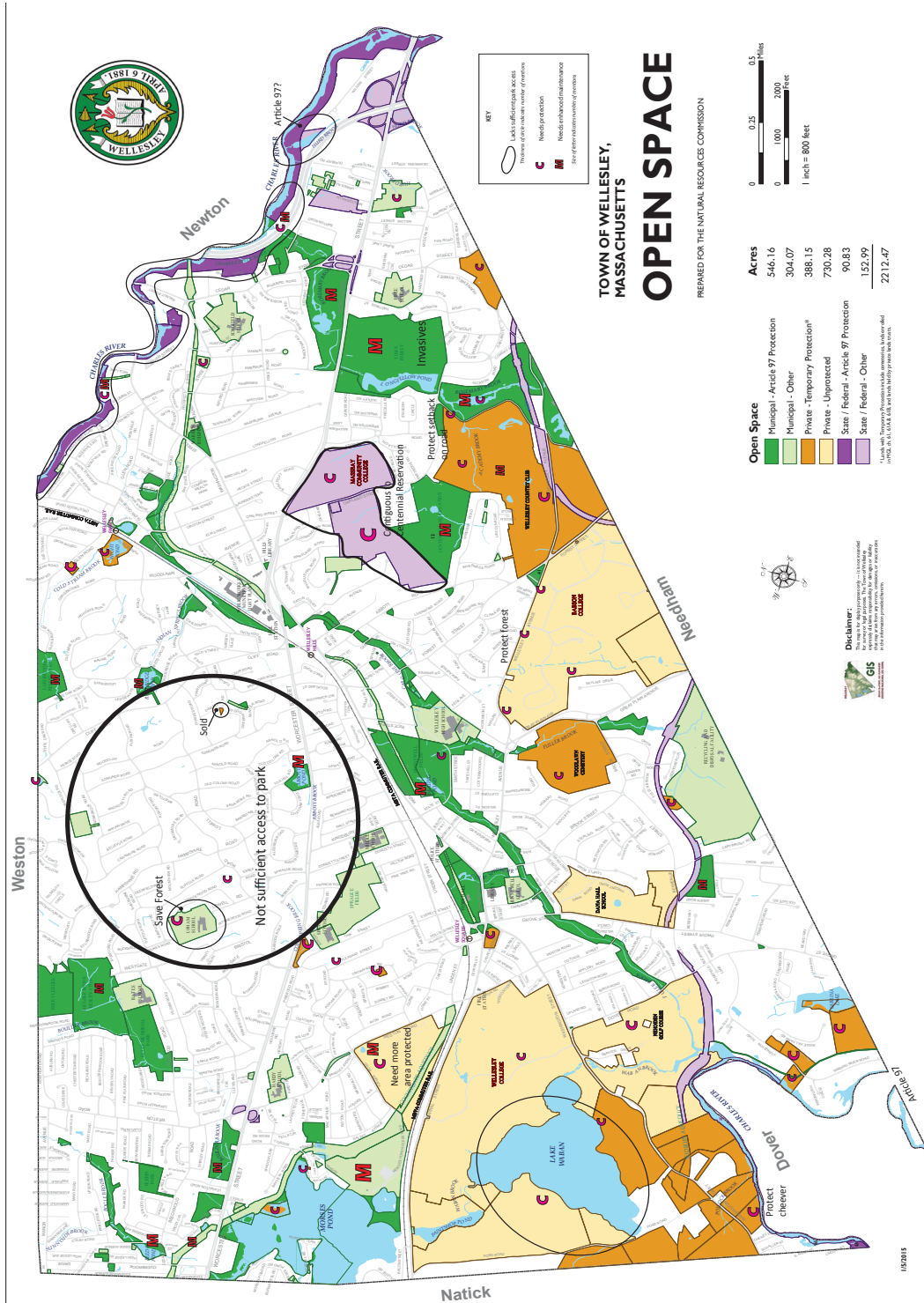
Participants were asked to identify areas on the map that need:

M = enhanced maintenance

C = protection

○ = more parks

The size of the letter marking indicates more or fewer mentions on the map.



The map results indicate that almost every protected or open space property was seen by some participant as needing enhanced maintenance. The areas that attracted more mentions are: municipal property adjacent to Morses Pond; the Town Forest and Rosemary Brook area, where invasives were called out as a problem; the area near the skating pond at Hunnewell Fields; the North Forty; and Reeds Pond.

Similarly, almost every unprotected area of open space was called out as needing conservation. The areas with more mentions include Mass Bay Community College; North 40; property around Lake Waban; Wellesley Country Club.

### ***Workshop: Priority Setting***

The six groups at the workshop identified their top three priorities. All but one of the groups included acquisition of new land as among its top three priorities.

#### **GROUP 1**

1. Focus on existing assets; trails, open space, parks
2. Acquire new land for parks or conservation
3. Improve pond facilities

#### **GROUP 2**

1. Water quality/quantity = sustainability/life. Establish a wellhead-protection plan identifying risks and opportunities. Identify cross-border activities in our high-yield aquifer areas as well. Subregional participation in protection.
2. Acquisition, expansion, and protection of new and contiguous/adjacent lands. Especially contiguous corridors that create more natural pocket parks in the neighborhoods.
3. Protect biodiversity, decrease artificial night light, and strengthen the tree bylaw to protect keystone species.

#### **GROUP 3**

1. Open space [current]
2. Athletic facilities
3. Expansion/acquisition

#### **GROUP 4**

1. Maintenance of open spaces
2. Trail maintained and expansion
3. Expand open space land

#### **GROUP 5**

1. Preserve/focus on existing space.
2. Acquire adjacent space.
3. Better communicate, collaborate, coordinate.

#### **GROUP 6**

1. Resolve tension between recreation drive for revenue with NRC preservation of green spaces and passive recreation space.
2. Reduce or eliminate drive for lights and sounds on space that abuts residents.
3. Preserve wooded areas/trails.

## **E. Strategies And Actions To Achieve The Goals**

### **GOAL 1: SENSITIVE NATURAL RESOURCES ARE RESTORED, WELL-MANAGED, AND PRESERVED TO PROTECT AND ENHANCE WATER RESOURCES, WILDLIFE HABITAT, BIODIVERSITY, PUBLIC HEALTH, AND ENRICHMENT OF COMMUNITY CHARACTER.**

#### ***Policies***

- Give priority to initiatives to improve and maintain water quality in streams, ponds, wetlands, and aquifers and minimize nonpoint source pollution.
- Promote protection and enhancement of the tree canopy.
- Manage properties to promote habitat and biodiversity.
- Raise public awareness about landscape best management practices by public and private property owners.

**A. Continue a management program for Wellesley ponds, streams, and wetlands to improve and maintain water quality and habitat and avoid erosion.**

In Wellesley, what is called “nonpoint source pollution” is the primary threat to water quality. Nonpoint source pollution comes not from a specific source (for example, a business dumping pollutants into a stream) but from general landscape practices and stormwater management. Stormwater runoff from lawns and impervious surfaces (such

as driveways, roofs, and roads), contains pesticides, herbicides, fertilizers, oil, grease, and chemicals. Wetland vegetation and garden vegetation buffers filter and clean stormwater that otherwise would go directly into the water resource. However, lawns are not as effective in slowing stormwater and cleaning pollution, allowing fertilizers and herbicides to reach streams and ponds.

The Center for Watershed Protection offers many resources on stormwater protection strategies: <http://www.cwp.org/stormwater-management/>

ACTIONS	WHEN	WHO
i. <i>Manage Morse’s Pond to avoid eutrophication and to maintain its use as an environmental and recreational resource and implement the Morse’s Pond Erosion Report recommendations.</i> Management of the pond’s water quality includes attention to fertilizer runoff, as excessive nutrients in the water promote the growth of milfoil and other vegetation, affecting the pond’s recreational value.	Ongoing	NRC; DPW
i. <i>Implement the Comprehensive Pond Management Report recommendations and continue small-pond management based on the Pond Restoration Master Plan.</i>	Ongoing	NRC; DPW
iii. <i>Provide nonpoint source pollution education to residential and nonresidential private property owners.</i> NRC’s initiatives to promote organic integrated pest management on Town properties has been successful, and it is renewing programs to raise public awareness about best landscape-management practices (Grow Green Wellesley eco-landscaping program) .	2018-2022 and ongoing	NRC; Seek grant funding and nonprofit partners as well as town funding.
iv. <i>Promote the use of green infrastructure best management practices (BMPs) on public and private properties to manage stormwater.</i> BMPS include bioswales, sidewalk planters, pervious pavement, rain gardens, rain barrels, and green roofs. DPW has started to implement bioswales, and there is pervious pavement on parts of the high school parking lot and basketball courts. The Fuller Brook project is also designed to improve stormwater biofiltration.	2018-2022 and ongoing	NRC and DPW; Seek grant funding and nonprofit partners as well as town funding.
v. <i>Continue to implement the organic integrated pest management program.</i>	Ongoing	NRC; Board of Selection; DPW

**B. Continue to maintain and increase the urban forest and shade-tree canopy on public and private property in Wellesley.**

Wellesley has a strong proactive program for managing the public urban forest. However, trees on private property make up a substantial component of the overall public forest in Wellesley. Communities have increasingly focused some of their urban forestry efforts and initiatives on protecting and enhancing the urban forest on private property as well as the

public urban forest—to enhance climate change resilience as well as promote the traditional benefits of planting trees. The USDA Forest Service has developed a number of free tools to assist communities in establishing urban forestry best practices. The 2016 *Sustainable Urban Forest Guide* ([iTreetools.org](http://iTreetools.org)) provides a step-by-step approach to planning, implementing and monitoring the urban forest for long-term sustainability. Free, state-of-the-art, peer-reviewed software developed by



the Forest Service and used by many volunteer groups, nonprofits, and communities (at the same iTree website) offers tools to enhance knowledge and management of the urban forest. Examples include:

- **i-Tree Canopy** offers a quick and easy way to produce a statistically valid estimate of land cover types (e.g., tree cover) using aerial images available in Google Maps. The latest version also estimates values for air pollution reduction and capturing atmospheric carbon. Canopy can be used by urban forest managers to estimate tree canopy cover, set canopy goals and monitor canopy change over time. Canopy can also be used to estimate inputs for use in i-Tree Hydro and elsewhere where land cover data are needed.
- **i-Tree Streets** focuses on the benefits provided by a municipality's street trees. It makes use of a sample or complete inventory to quantify and put a dollar value on street trees' annual environmental and aesthetic benefits. This tool also describes urban forest structure and management needs to help managers plan for the future.
- **i-Tree Vue** allows you to make use of the freely available National Land Cover Database (NLCD) satellite imagery to assess a community's land cover, including tree canopy, and some of the ecosystem services provided by current urban forest. It can also model the effects of planting scenarios on future benefits.

ACTIONS	WHEN	WHO
i. <i>Continue and expand Wellesley's Public Shade Tree Program.</i> Maintain the current NRC/DPW program of routine inspection, pruning, and removal [when needed] on a four-year cycle.	Ongoing	NRC; DPW
ii. <i>Review the effectiveness of the current tree-protection bylaw and adjust as needed.</i>	2018-2022 and ongoing	Planning; Building, NRC; DPW
iii. <i>Continue public outreach on the benefits of trees and the tree planting program.</i>	2018 and ongoing	NRC; DPW
iv. <i>Investigate and implement forestry-stewardship plans to care for trees on conservation lands</i>	2018-2022	NRC; DPW
v. <i>Create a baseline estimate of total tree cover (public and private) in Wellesley, and the clean air, stormwater and habitat benefits to the town.</i> Understanding of the town's overall tree canopy and the contribution of trees on private property can help create a powerful data-driven public campaign on the importance of Wellesley's trees.	2018-2022	NRC; DPW; Planning; volunteers
vi. <i>Set a tree cover/canopy goal for Wellesley.</i> A tree canopy goal can be broken down into neighborhoods or districts in order to identify priority areas for attention. Urban/suburban forestry experts have stopped recommending an across-the-board tree cover percentage. Instead, they emphasize tailoring the goal to the needs of specific communities. [See <a href="http://www.americanforests.org/blog/no-longer-recommend-40-percent-urban-tree-canopy-goal/">http://www.americanforests.org/blog/no-longer-recommend-40-percent-urban-tree-canopy-goal/</a> ]	2018-2022	NRC; DPW; Planning; volunteers

**C. Update the town's wellhead-protection planning and collaborate with communities that share its aquifers.**

ACTIONS	WHEN	WHO
i. <i>Cooperate with communities and private entities that share Wellesley's aquifers to establish common policies.</i>	2018-2022 and ongoing	Board of Selectmen; Planning Dept.; DPW
ii. <i>Establish a wellhead- and aquifer-protection plan.</i>	2022-2028	Planning Dept.; DPW

## GOAL 2: THE TOWN MAINTAINS AN UP TO DATE INVENTORY OF OPEN SPACE.

### Policy

- Support town decision making and priority-setting by maintaining good data.

### STRATEGIES

- A. Create a thorough database of open space under all protection and ownership types.**

ACTIONS	WHEN	WHO
i. <i>Improve, update, and maintain a database of open space, organized by protection level that is easily understandable for the public.</i> The primary organizational principle of the inventory in the OSRP is ownership, rather than protection, without a summary that makes it clear what is protected, what is not, and what resources need priority protection. For example, the existing database includes several government-owned traffic island properties that provide some green space function but are not high-priority protection targets.	2018-2022	NRC staff
ii. <i>Verify and improve data cataloging easements, deed restrictions, and other similar private protection mechanisms for properties west and south of Lake Waban.</i> Commission members and staff indicate that the nature of private protections on these properties is poorly understood, but their proximity to Lake Waban gives them very high priority. After the protection status of these properties has been documented, the initiative should continue on any properties in similar circumstances located elsewhere in the town for integration into the database.	2018-2022	NRC Staff; Seek grants and assistance by students.
iii. <i>Identify open space protection options that strengthen the connectivity of green space.</i>	2018-2022	NRC

## GOAL 3: PUBLIC OPEN SPACE IS PROTECTED AND WELL-MANAGED.

### Policies

- Protect existing town-owned open space with conservation restrictions or zoning.
- Ensure public access to public open space and deter encroachments.

- Manage and maintain open space to protect the public interest in natural resources and public access.

### Strategies

- A. Permanently protect existing town-owned open space with appropriate zoning and conservation restrictions.**

ACTIONS	WHEN	WHO
i. <i>Continue rezoning of NRC properties used as parks or conservation land from Single Residence to Conservation and Parks.</i> The Town has been implementing in phases a recommendation of the 2007 Comprehensive Plan to ensure protection of open space resources through appropriate zoning. Remaining rezoning is expected at 2018 Annual Town Meeting.	2018-2022	Planning; Town meeting

**B. Manage and maintain public open space to protect resources and provide public access, as appropriate.**

ACTIONS	WHEN	WHO
i. <i>Develop management plans for all conservation areas.</i>	2018–2028	NRC
ii. <i>Identify areas of private encroachment on public open spaces and work with property owners on compliance.</i> Although the Town has an encroachment policy and the NRC acts to resolve encroachments when possible, more can be done to protect the integrity of public land. Begin with a public awareness campaign, emphasizing compliance, not punishment. Work with the Trails Committee and other volunteers to identify priority areas (such as those adjacent to water and wetlands) for research through review of aerial photographs and parcel maps as well as site visits.	2022–2028	NRC—create a work program and recruit volunteers to assist.
iii. <i>Develop signage and, when appropriate, public access, after correction of encroachment.</i>	2022–2028	NRC
iv. <i>Develop a common policy framework for open space resources used for common purposes but managed by different town entities.</i> For example, document how the town trails are managed, monitored, maintained and enhanced.	2022–2028	Trails committee working with NRC and other entities.
v. <i>In addition to water-quality measures, continue to apply appropriate best management practices, such as invasive species removal, to ensure preservation of natural resources and habitat.</i>	2018–2022	NRC; DPW
vi. <i>Ask users to identify management or maintenance issues that need attention.</i> Options include periodic surveys or a system or smartphone app (which could also be used for reporting on other town issues), with signage at parking areas by which users can email a photo of conditions that need attention—and including a response from the Town.	2022–2028	NRC: Trails Committee; Recreation Commission
vii. <i>Include natural open space and trails in the plans for the North 40.</i>	2018–2022	NRC and other policymakers

**GOAL 4: THE TOWN PURSUES THE PUBLIC INTEREST IN OPEN SPACE PRESERVATION THROUGH MULTIPLE STRATEGIES.**

**Policy**

- Collaborate with non-municipal owners of open space.

**STRATEGIES**

- A. Continue to use zoning, easements, management agreements and other tools to promote protection of open space character and natural resources for large private open space tracts, such as institutional open space or Chapter 41 tax-abatement properties.**

The Town implemented a recommendation of the 2007 Comprehensive Plan to establish zoning requirements for large tracts of privately owned open space with residential zoning, such as the Wellesley Country Club, in order to preserve some of the open space character of these areas, should the owners sell them for development. Section XVIF—Natural Resources Protection (NRP) Development provides for by-right development of large subdivisions designed to protect natural resources in at least 50% of the site. The bylaw includes requirements for the site design process and design standards.

ACTIONS	WHEN	WHO
i. <i>Identify and evaluate tax-title properties for incorporation into the open space system.</i> Several tax-title properties are listed in the OSRP. They should be evaluated for potential conservation and recreational value and, if found suitable, they should be incorporated into the open space system.	2022-2028	NRC
ii. <i>Identify priority areas for protection that strengthen the green space network by adding adjacent lands or bridging network gaps.</i> Protection does not have to mean purchase by the Town—land is very expensive in Wellesley. Protection can take the form of acquisition (by donation or purchase) by the Town or a conservation organization such as the land trust, permanent conservation easement, Chapter 41 tax abatements, and zoning that would guarantee significant open space preservation in case of sale for development.	2018-2022	NRC
iii. <i>Review the Natural Resources Zoning Development bylaw and revise it if needed.</i> Review the law to make sure that there are no barriers to use.	2022-2028	Planning Board; NRC
iv. <i>Develop agreements with institutions such as easements or other protections where they affect town-wide networks, adjacent protected open space, and open space character seen from public streets.</i>	2022-2028	NRC; Board of Selectmen

## GOAL 5: THE TOWN MAINTAINS A STATE-APPROVED OPEN SPACE AND RECREATION PLAN.

### Policy

- Provide resources to update the OSRP to retain eligibility for grants.

*[This section also appears in Chapter 6—Recreation and Parks.]*

## STRATEGIES

### A. *Update the Open Space and Recreation Plan in a timely manner to inform NRC, Recreation Commission, and Town strategic planning and to obtain state approval for eligibility for state funding.*

The current OSRP was adopted in 2015 and will expire in April 2021. The previous plan was adopted in 1994, twenty-one years earlier. Timely updates will inform NRC, Recreation Commission and Town understanding of open space and recreation needs.

ACTIONS	WHEN	WHO
i. <i>Review the OSRP plan at least once a year to measure progress and identify any changes needed in the inventory and action plan. Annual consultation between the NRC and Recreation will enhance communication about balancing natural resources and passive recreation issues with active recreation issues.</i>	2018-2022	NRC and Recreation Commission
ii. <i>Program the full update of the document for FY 2021.</i>	2018-2022	NRC and Recreation Commission in consultation with other boards and the public