

NATURAL AND CULTURAL RESOURCES

GOALS	OBJECTIVES	POLICY RECOMMENDATIONS FOR DECISION MAKERS
Restore, preserve, and enhance open space and sensitive natural resources for habitat protection and enrichment of community character.	<p>Identify natural resources for protection and preservation.</p> <p>Protect the quantity and quality of surface water and groundwater.</p>	<p>Manage Morses Pond to avoid eutrophication and to maintain its use as a swimming destination.</p> <p>Continue small pond management based on the Pond Restoration Master Plan.</p> <p>Apply appropriate Best Management Practices to ensure preservation of natural resources.</p>
Preserve cultural resources to maintain and enrich community character.	<p>Identify cultural resources for preservation.</p> <p>Enhance community understanding of Wellesley's historic resources.</p>	<p>Create public information programs on historic resources.</p> <p>Support efforts that encourage the preservation of historic properties.</p>

Natural Resources

Findings

- Wellesley's 2,267 acres of undeveloped land (protected and unprotected) provide significant environmental resources for plant and animal habitats and help the town maintain its water quality.
- Non-point source pollution from stormwater runoff is the greatest threat to water quality in Wellesley.
- Wellesley ponds need management to avoid eutrophication (conversion to wetlands through filling in).
- The town's protected stream corridors and trail system provide significant linked habitat for wildlife.
- Citizen groups, such as the Friends of Morses Pond Association, support town efforts to protect natural resources.

Key Challenges

- Reducing non-point source pollution resulting from private landscape management practices.
- Managing the impact of non-point source pollution from regional activities in upstream communities.
- Expanding conservation land through private easements and other methods in a very expensive land market.

Cultural Resources

Findings

- Wellesley has three National Register historic districts, five individual National Register properties, and one local historic district.
- Potential National Register listings for residential neighborhoods have not been pursued.

- Historic preservation activities have been relatively limited 1990, when an inventory of historically-significant properties built between 1882 and 1940 was completed.
- Identification of pre-1882 properties is limited to a voluntary plaque program.
- An increasing number of additions and “teardowns” affects Wellesley’s historic and aesthetic character.
- Historic preservation activities receive limited support from town government and Town Meeting has twice declined to approve a demolition-delay bylaw.

Key Challenges

- Promoting more public awareness of the value of cultural resources in order to combat the loss of historic properties.
- Promoting public understanding of the range of historic preservation activities and designations at differing levels of regulation.
- Promoting more understanding of the economic benefits of historic preservation.

WELLESLEY FACTS

Natural and Cultural Resources

Natural Resources

Water Resources

- 6 streams
- 14 wetlands systems that cover 15% of Wellesley's land area
- 1 Great Pond and Morses Pond
- Over 10 small ponds
- 2 major aquifers
- 13 certified vernal pools
- 70-80 potential vernal pools

Water Quantity and Quality

- Ponds have excessive vegetation and plant growth due to stormwater runoff and require regular management
- Pond Restoration Master Plan and Morses Pond Management Program underway to restore ponds
- 7 local wells provide 84% of Wellesley's drinking water, with the remainder purchased from MWRA
- Excessive lawn irrigation in the summer may eventually result in constrained water supply
- Non-point source pollution from stormwater runoff containing oil, grease, pesticides, herbicides, and other chemicals is the major threat to water quality in ponds and streams

Habitat and Wildlife

- Streams, wetlands and ponds provide substantial wildlife habitat
- The Rosemary Brook corridor of conservation land is the biggest wildlife corridor within Wellesley

Cultural Resources

- Listed on the National Register of Historic Places
 - Cochituate Linear Aqueduct District
 - Sudbury Linear Aqueduct District
 - Hunnewell Estates Historic District
 - Eaton-Moulton Mill
 - Wellesley Farms Railroad Station
 - Wellesley Town Hall
 - Intermediate Building
 - Elm Bank
- Fuller Brook Park and Wellesley Hills Library National Register nominations funded in 2005
- 8 residential neighborhoods suggested for listing in 1990 but not pursued; 8 others identified for investigation
- One local historic district: Cottage Street Historic District (61 properties)
- 564 historically-significant structures dating from 1882 to 1940 have been inventoried
- 1,191 structures of potential historical significance have been identified in the Massachusetts Historical Commission database
- Demolition delay bylaw to seek adaptive reuse before demolition proceeds has been twice rejected by Town Meeting

WHAT DOES IT MEAN?

- Pollution from stormwater runoff is the greatest threat to water quality in Wellesley.
- Wellesley's ponds need regular dredging and management to avoid filling in and becoming wetlands over time as a result of stormwater runoff.
- Except for buildings in the Cottage Street Local Historic District, Wellesley's historic properties are not protected in any way from alterations or demolition.
- Town Meeting has been reluctant to support additional regulation to preserve historic properties or districts.

Sources: Town of Wellesley Open Space and Recreation Plan; Community Preservation Plan

A. Natural Resources Current Conditions

This chapter and its recommendations are informed by Wellesley's 1994 *Open Space and Recreation Plan*, prepared by the Natural Resources Commission (NRC), and the 2003 *Town of Wellesley Community Preservation Plan*, prepared by the Community Preservation Committee. Other sources include interviews with Janet Bowser, Natural Resources Commission (NRC) Department Head; Meghan Conlon, Town Planner; and Linda Buffum, member of the Wellesley Historical Commission. In addition, a public meeting held on 29 September 2005 provided input from community members on natural and cultural resource issues.

In 1978, the Town established the Natural Resources Commission (NRC) to consolidate the functions of the Conservation Commission, Park Commission, Tree Warden, Town Forest Committee and Pest Control Officer. It plans for and manages town conservation land, parks, and recreational areas; sponsors awareness campaigns designed to educate Wellesley residents about environmental issues, such as the impacts of household and lawn care chemicals on the town's natural resources; and oversees the actions of two subcommittees, the Wetlands Protection Committee and the Trails Committee. The Wetlands Protection Committee provides local enforcement of the state Wetlands Protection Act and the local Wetlands Bylaw and the Trails Committee manages and improves town trails.

Topography and Landscape Character

Wellesley's landscape is marked by rolling hills, drumlins, and stream corridors. To the north of the MBTA commuter rail line, rolling hills vary in elevation between 150 and 300 feet. The highest point in this portion of Wellesley is Peirce Hill (337 feet), which lies near the Weston line. To the south, however, the landscape is defined by a series of landscape features created by glaciation. The southern portion of Wellesley contains six drumlins, or tapered hills of gravel created by the grinding process of moving ice. Elevations of the drumlins range from 50 to 338 feet, and the largest drumlin is Maugus Hill, which is located to the northwest of Centennial Park and Massachusetts Bay Community College. In addition, long sand banks called eskers wind around many of Wellesley's southern bodies of water, such as Longfellow Pond and Lake Waban. This southern landscape presents a contrast of steep hills and valleys around Wellesley's ponds and the Charles River. Rock outcroppings, such as Rocky Ledges in the Boulder Brook Reservation and "Problem Rock" at Dover and Grove Streets, are known as "glacial erratics" and result from the same movement of retreating glaciers as the drumlins and eskers.

Steep slopes (slopes that are greater than 15%) create significant constraints for building. Wellesley has three major clusters of slopes that range from 15% to 25%:

- The Waban Brook corridor from the Natick town boundary to the Charles River;
- Hills between Temple Hill, behind the Dana Hall School and Tenacre Country Day School, and Babson College; and
- The area between Forest Street, the railroad, the Needham town boundary, and the Charles River.

Many of the slopes in these areas are protected from development by conservation easements and Town ownership, providing passive recreation opportunities and wildlife habitats, and contributing to the aesthetic quality of Wellesley. (See Map X: Contours)

Water Bodies, Waterways and Wetlands

Streams, Lakes, and Ponds

Wellesley's surface water consists of six stream systems that flow into the Charles River on the eastern and southwestern borders of town and approximately 13 large and small ponds.

Wellesley's watersheds are shown in Map X: Watershed Drainage Basins. The three eastern stream systems are:

- The Cold Stream Brook watershed, which includes most of the land east of Peirce Hill and north of Maugus Hill and contains Cold Stream Brook, Rockridge Pond, Indian Springs Brook, and the Brookway/Waterway;
- The Rosemary Brook watershed, which runs from east of the Wellesley Country Club northeasterly to the Charles River and includes Rosemary Brook and Academy Brook; and
- The Hurd Brook watershed, which covers less than one square mile in the southeastern corner of Wellesley but includes significant wetlands around Dearborn Street and the Charles River.

The three southwestern stream systems are:

- The Fuller Brook watershed, which begins west of Great Plain Avenue and continues north to Wellesley High School and southwest to Waban Brook and the Charles River. This watershed covers most of the central portion of the town and includes Fuller Brook, Waban Brook, Abbott Brook, Caroline Brook, and part of Cold Spring Brook;
- The Waban Brook watershed, which runs between Peirce Hill and Elm Bank and includes Morses Pond, Lake Waban, Boulder Brook, Jennings Brook, and Bogle Brook;
- The Pollock Brook watershed, which runs north of Washington Street and connects with the Charles River.

Wellesley's ponds and lakes range from the 103-acre Morses Pond and Lake Waban to small ponds scattered throughout town. Lake Waban is a "Great Pond" because it is over 10 acres in its natural state. This designation makes it subject to state environmental regulations. Morses Pond is not a Great Pond because it was originally the much smaller Broad Pond and the present extent was created by dams. Among the medium-sized ponds are Longfellow Pond, Rockridge Pond, and Abbott Pond.

Many of Wellesley's ponds have algal blooms caused by fertilizer pollutants and high amounts of sedimentation. In 1998, Wellesley began implementing the Pond Restoration Master Plan, which set priorities for improving and restoring the town's smaller ponds. The plan has resulted in the dredging and restoration of Rockridge Pond through removal of 6,000 yards of sediment and replacement of the pond outlet structure and drain; restoration of Bezanson Pond and Reeds Pond; and a feasibility study of the Town Hall Duck Pond. Additional ponds scheduled to be restored under the plan include State Street Pond, Abbotts Pond, and Longfellow Pond.

The Morses Pond Comprehensive Management Program will improve the condition of Wellesley's largest pond and the adjacent area that contains three wells for drinking water. Like many ponds with former summer cottages along the shore, Morses Pond has experienced a host of problems, including eutrophication, excessive weed growth, and water pollution caused by the runoff of pesticides, road salt, gasoline, and fertilizers from both Wellesley and neighboring towns. Under the new management program, the Town will help reduce pollution at Morses Pond by dredging, use of herbicides and algaecides to kill invasive plants and algae, limits on development in the Morses Pond watershed, and encouraging the construction of detention ponds and the reduction of residential pollution in the watershed area. The plan should enter the implementation phase in early 2006. The NRC and other town

bodies were assisted in securing funding for the management study by a citizen group, the Friends of Morses Pond Association.

Aquifers

Aquifers are subsurface geological formations that contain significant amounts of groundwater. Water drawn out of an aquifer through wells can be replaced by surface water that filters downward through permeable surface soils and “recharges” the aquifer. Aquifers are vital natural resources for drinking water supply, and their “recharge areas” must be protected from contamination or actions that would prevent the downward movement of water into the aquifer.

Wellesley has two major aquifers:

- Waban Brook aquifer underlies the 7,069-acre Waban Brook Basin that includes Wellesley, Weston, Natick, and Wayland. Wellesley, Natick, and Wellesley College all have water supply wells in this aquifer. One-third of this aquifer falls in Wellesley. Because Wellesley shares this aquifer with other municipalities, land uses and environmental actions in other towns can affect the water quality in the aquifer.
- Rosemary Brook aquifer, which stretches from Needham into Wellesley. Forty percent (982 acres) of this aquifer is in Wellesley.

(See Map X: Groundwater Resources)

Wetlands and Vernal Pools

Wetlands comprise 15% of Wellesley’s land area. Wetlands are river and stream banks, wet meadows, marshes, bogs, and swamps that serve as important areas for water retention and filtration and wildlife and plant habitat. Wellesley’s wetlands include properties along the Charles River, Rosemary Brook, Fuller Brook, Cold Stream Brook, Boulder Brook, Caroline Brook, Bogle Brook, Morses Pond, Lake Waban, Longfellow Pond, and Sabrina Lake. In addition, smaller wetlands are scattered throughout Wellesley, mostly south of Route 9.

Wellesley also has 13 certified vernal pools. Vernal pools are wet depressions in the land that, by definition, are flooded only part of the year. Many rare and valuable species depend on vernal pools. Lacking fish populations and common wetlands vegetation, the pools support unique wildlife communities that have adapted to wet and dry cycles. Like wetlands in general, protection of vernal pools must extend beyond the boundary of the pool itself because the amphibians that breed in the pools may move well away from the pond during the course of their life cycle. The Massachusetts Natural Heritage and Endangered Species Program (NHESP) will certify vernal pools after submission of documentation. (The forms are available on the NHESP web site.¹) By analyzing aerial photographs, state environmental scientists have identified 32 additional potential vernal pools in Wellesley. Although found throughout Wellesley, these potential pools are mostly located near bodies of water, such as the Charles River, Lake Waban, Morses Pond, Rosemary Brook, and Boulder Brook.

(See Map X: Wetlands Protection)

Regulation to Protect Water Resources

Wellesley’s zoning bylaw protects the town’s water supply through Water Supply Protection Districts and Watershed Protection Districts. A Water Supply Protection District is an overlay which prohibits or limits certain land uses in watershed areas that contribute to the Town’s drinking water supply. This zoning overlay applies to the recharge areas for the Waban Brook Aquifer and the Rosemary Brook Aquifer. The overlay prohibits solid waste facilities; the storage of road salt, petroleum, and hazardous

¹ www.mass.gov/dfwele/nhesp

wastes; the production of hazardous wastes; and the disposal of hazardous wastes within the districts. Special use permits may be obtained for commercial mining, businesses that produce small amounts of chemical wastes, parking lots, major construction projects, or any alterations that result in impervious surfaces over 10,000 square feet.

Watershed Protection Districts, also a zoning overlay, protect Wellesley's surface water from pollution. These districts are found adjacent to Wellesley's brooks and streams and the Charles River. Dumping, filling, and excavating are prohibited in a Watershed Protection District, and new construction is not allowed without a special use permit. Permits may be granted for dam and bridge operation and maintenance, parks, non-commercial recreational uses, and driveways and walkways associated with permitted uses. (See Map X: Zoning.)

Wetlands and vernal pools are protected from development and other alterations under the state Wetlands Protection Act and the Inland Restricted Wetlands Act, which establish requirements for permits for any alterations within a buffer zone. River and stream banks are protected by the state Rivers Protection Act, which provides that no development can occur within a zone of 25 feet along riverbanks in urban areas and 200 feet in non-urban areas without a permit from a local conservation commission (the NRC Wetlands Protection Committee in the case of Wellesley). Development existing in 1996 is exempted from this act.

The Town in September 2002 enacted the Wellesley Wetlands Protection Bylaw to provide additional protection for wetland resources, such as uncertified vernal pools, and establish the Wetlands Protection Committee. The first full year of enforcement of the local bylaw was 2004. The Committee's regulations establish a 25-foot no-disturbance zone from the border of all wetland resources and a presumption of no disturbance within the 100-foot vernal pool buffer unless no detrimental impact on the habitat can be demonstrated. Most projects that come before the Committee for an Order of Conditions involve expansion or replacement of houses.

Habitats and Biodiversity

Wellesley has a range of habitats for fish and wildlife: wetlands, forests, protected open spaces, and developed lots. Many animals typical of suburban environments have been observed in town, such as red and grey squirrels, raccoons, foxes, woodchucks, weasels, turtles, non-poisonous snakes, frogs, toads, salamanders, butterflies, moths, crickets, grasshoppers, mosquitoes, woodpeckers, bluebirds, eels, bass, carp, and perch.

Water resources are rich habitat areas and waterways and their adjacent areas function as wildlife corridors. Wellesley's conservation lands along Rosemary Brook constitute the most significant wildlife corridor in Town because they are connected to the Charles River in the north, to Academy Brook in Wellesley Country Club lands to the west (and through them to Centennial Park) and link to conservation lands in Needham to the south. The Town's linked trail system, particularly Brook Path and the Cochituate and Sudbury River Aqueducts, though providing much narrower corridors, are also valuable connections for local wildlife. Road crossings that exist in these corridors are dangerous to wildlife, but they are still significant in a suburban context.

Rare Species

The NHESP keeps lists of documented sightings of rare species. These lists are based on documentation submitted to the state by citizens. Although the most recent documented observation of some species may be many years ago, this does not mean that the species no longer exists in Wellesley. However, only

those rare species records that are less than 25 years old – in Wellesley’s case, the plant *claytonia virginica* -- are used in Natural Heritage project review associated with the state Wetlands Protection Act and the state Endangered Species Act.

Taxonomic Group	Scientific Name	Common Name	State Rank*	Most Recent Observation
Amphibian	<i>Hemidactylium scutatum</i>	Four-Toed Salamander	SC	1907
Amphibian	<i>Scaphiopus holbrookii</i>	Eastern Spadefoot	T	1924
Bird	<i>Circus cyaneus</i>	Northern Harrier	T	1878
Bird	<i>Vermivora chrysoptera</i>	Golden-Winged Warbler	E	1897
Dragonfly/Damselfly	<i>Enallagma laterale</i>	New England Bluet	SC	1895
Dragonfly/Damselfly	<i>Ophiogomphus aspersus</i>	Brook Snaketail	SC	1894
Beetle	<i>Cicindela purpurea</i>	Purple Tiger Beetle	SC	1906
Beetle	<i>Cicindela rufiventris hentzii</i>	Hentz's Redbelly Tiger Beetle	T	1971
Butterfly/Moth	<i>Erynnis persius persius</i>	Persius Duskywing	E	1942
Vascular Plant	<i>Aristida purpurascens</i>	Purple Needlegrass	T	1908
Vascular Plant	<i>Asclepias purpurascens</i>	Purple Milkweed	E	1896
Vascular Plant	<i>Asclepias verticillata</i>	Linear-Leaved Milkweed	T	1909
Vascular Plant	<i>Claytonia virginica</i>	Narrow-Leaved Spring Beauty	E	1981
Vascular Plant	<i>Eupatorium aromaticum</i>	Lesser Snakeroot	E	1891
Vascular Plant	<i>Liatriis borealis</i>	New England Blazing Star	SC	1915
Vascular Plant	<i>Prenanthes serpentaria</i>	Lion's Foot	E	1915
Vascular Plant	<i>Rotala ramosior</i>	Toothcup	E	1908
Vascular Plant	<i>Sphenopholis nitida</i>	Shining Wedgegrass	T	1908
Vascular Plant	<i>Verbena simplex</i>	Narrow-Leaved Vervain	E	1890
* Categories: SC = species of Special Concern T = Threatened E = Endangered				

Priority Habitat

Wellesley has two small areas designated on state GIS maps as Priority Habitat: along the northern shore of the Charles River at Elm Bank and a small area north of Caroline Brook east of Forest Street. (The location of the Caroline Brook area may be an error due to the inexact nature of some GIS data, because it is shown where there are houses.) Priority Habitat Areas indicate where the NHESP estimates the existence of habitat for state-listed rare species. These estimates are made on the basis of species population records, habitat requirements and landscape information. Priority habitats are not protected by law, but the rare species that may use these habitats are protected.

BioMap Core Habitat and Supporting Natural Landscape

The NHESP developed the state BioMap to identify areas in Massachusetts where the biodiversity of the state is most in need of protection. The map focuses especially on state-listed rare species and on natural

communities of plants and animals that exemplify the biodiversity of the state. The BioMap is divided into two categories: Core Habitat and Supporting Natural Landscape. Core Habitat is made up of areas where rare species habitat and natural communities are most viable and likely to persist. These are the largest areas with a minimum of human intrusion and impact. Supporting Natural Landscape consists of buffers for Core Habitat, corridors and connections between Core Habitat areas, and undeveloped areas that provide habitat for common Massachusetts species.

The BioMap shows areas of Core Habitat and Supporting Natural Landscape. The one Core Habitat area in Wellesley is in the same questionable location as the Priority Habitat area near Caroline Brook. Since this area does not meet the criteria for Core Habitat, it is likely that this is an error. The Supporting Natural Landscape area in Wellesley is the large wetlands area surrounding the Recycling Center. This area is connected to wetlands and Ridge Hill Reservation in Needham, making it part of a significant habitat area.

(See Map X: Habitat Resources)

Environmental Issues

Hazardous Waste Sites

According to data from the Massachusetts Department of Environmental Protection, Wellesley has two significant hazardous waste sites: the old paint shop site adjacent to Paint Shop Pond (identified in 1986) and Alumnae Valley west of College Road (identified in 2001). The Paint Shop site was remediated by Wellesley College in 2002 and athletic fields now occupy the site.

Landfills

Wellesley currently sends its solid waste to western Massachusetts and Canada. Sites formerly used as solid waste dumps include:

- An area east of the Morses Pond pumping station, which was used briefly as a dumping ground by the railroad and was closed by order of the Massachusetts Department of Environmental Protection;
- A portion of the Wellesley College “North 40” site, which was used as a landfill for household waste;
- Wellesley College athletic fields located on the old paint shop site next to Paint Shop Pond, which contained hazardous wastes such as arsenic, chromium, lead, nickel, and zinc prior to remediation by the College;
- The Nehoiden Golf Course, a former ash dump;
- The playing fields between the middle school on Linden Street and the Sprague Recreation Building, which are on top of a closed landfill; and
- The Department of Public Works facility on Woodlawn Avenue, which is also a closed landfill.

Little testing for pollutants has been performed at sites other than the Morses Pond and old paint shop sites.

Chronic Flooding

Wellesley has few flooding problems due to its rolling hills, which limit the area of floodplains along rivers and streams. There are, however, five places which experience chronic flooding due to water backup at bridge crossings and dams: water crossings along Lexington Road, Cedar Brook Road, River Street, Washington Street, and Windsor Road.

Stormwater and Water Quality

In communities like Wellesley, the greatest threat to water quality is non-point source pollution. This type of pollution does not come from a specific “point” like a factory; instead, it enters the water system at many locations through stormwater runoff. This runoff contains oil, grease, fertilizers, pesticides, and other pollutants.

As houses become larger, with bigger footprints and more paved surfaces, these impervious surfaces result in more non-point source runoff and correspondingly less infiltration of rainwater. Because more impervious surfaces and more lawn, rather than shrubs and trees, result in increased runoff during storms, there is greater danger of flooding, erosion, and sedimentation. Fertilizers and other chemicals increase the nutrients in water bodies that result in excessive plant growth. Wellesley is affected not only by the non-point source pollution originating in the town, but also that from upstream communities. As noted earlier, the increasing eutrophication of Morses Pond is partially attributable to the Pond’s location at the end of a regional watershed that has experienced increasing urbanization in the past two decades.

Wellesley Pesticide Awareness Campaign.

The Wellesley Pesticide Awareness Campaign, in operation since 2000, educates residents on reducing pesticide use. Funding for this effort has come through grants from the state Department of Environmental Protection and the Toxics Use Reduction Network. In 2002, the Town adopted a policy of non-toxic management of town and school lands through an Integrated Pest Management program. The NRC has created a demonstration garden at State Street Pond and three educational brochures for residents: *A Guide to the Demo Garden; Buffers are Beautiful – Protecting Water and Wildlife; and Plants for Landscaping Ponds, Banks, Buffer Areas and Wet Areas While Encouraging Wildlife.*

Stormwater Regulations

The Town has begun to address the need to control discharges into stormwater drains by passing the Municipal Stormwater Drainage System Rules and Regulations in 2005, which regulate the type and amount of discharges entering the stormwater system. Through these rules Wellesley complies with the Environmental Protection Agency’s Phase II Stormwater Regulations.

Urban Forestry

Wellesley’s “urban forest” includes both the Town Forest and the canopy of trees along town streets and on public land. Town Forest lies along Rosemary Brook and Longfellow Pond near Centennial Reservation and Massachusetts Bay State College. This 200-acre preserve is comprised of woodlands, marshes, and fields and serves as a passive recreation area and wildlife habitat. There is no formal forest management plan. Wellesley’s Public Shade Tree Replacement Program ensures the maintenance of the town’s 3,150 shade trees by an annual appropriation of approximately \$25,000 a year from Town Meeting. Trees can be lost to disease, age, storms, and road construction. Each year, 60 to 100 new or replacement trees are planted on public land. The town is the first Massachusetts community to receive a 21-year Tree City USA Award from the National Arbor Day Foundation.

B. Natural Resources Recommendations

Continue to promote awareness of the environmental damage caused by stormwater runoff and increased impervious surfaces and regulate development in order to minimize pollution impacts.

Wellesley’s experiences with redevelopment and its location in regional watersheds make it important for the Town to regulate stormwater issues. As new residential properties increase impervious surface areas

on lots, the Town will see an increase in runoff and pollutants. The Town must provide regulations that place adequate restrictions on non-point source pollution. For example, in some communities, the local wetlands bylaw promotes the use of native vegetation and elimination of lawns on the shores of water bodies and near wetlands. In addition, Wellesley must also consider how regional development creates greater water quality issues. Current laws must be re-evaluated frequently to ensure that their provisions promote acceptable levels for both local and regional water quality levels.

ACTIONS

- **As residential and commercial redevelopment occurs in Wellesley, revisit the 2005 stormwater bylaw** to ensure that acceptable runoff levels conform with conditions created by this development.
- **Ensure that controls are provided in the Town's zoning bylaws and subdivision regulations that will minimize erosion and pollution created from development.**
Although Wellesley has a group of bylaws that protect watershed and wetland areas, these regulations may need to be updated as regional growth continues. In addition, bylaws can be amended to more finely regulate vegetation removal, drainage, and grading of development lots.
- **Examine the Watershed Protection District zoning overlay, the Water Supply District zoning overlay, and the Wetlands Protection Bylaw to reduce overlapping jurisdiction.**
As Wellesley's bylaws have grown over time, overlap has developed between its three major water protection laws. These laws should be reviewed to eliminate needless intersections between permitting processes.
- **Encourage the use of Best Management Practices to mitigate the impacts of local and regional development.**
Best Management Practices (BMPs) are methods used to reduce the amount of non-point source pollution that enters surface or ground waters. As new development goes through the permitting process, the Town should encourage developers to incorporate pollution-reducing devices such as detention ponds, filtration strips, and porous pavement in their site plans.
- **Continue public awareness campaigns to alert Wellesley residents to the harmful effects of non-point source pollution.**
The Natural Resources Commission should continue to produce educational materials and sponsor campaigns that provide facts about the local and regional impacts of overuse of pesticides, herbicides, and fertilizers.

Continue to restore and manage ponds to avoid eutrophication.

Wellesley has already embarked on a program of pond restoration and management. Several smaller ponds have already been restored, but they will require ongoing monitoring and management. Morses Pond is the most important pond because of the multiple functions it performs for the town as a source of recreation, wildlife habitat, and drinking water (through adjacent wells). Despite removal of contaminated soil and sediment in 2002 and phosphorus inactivation treatment in 1997, it continues to experience eutrophication.

ACTIONS

- **Implement the 2005 management plan prepared for Morses Pond** in order to halt the pond's eutrophication and increase its water quality.

- **Continue to implement the pond restoration program**
- **Monitor and manage restored ponds**

C. Cultural Resources Current Conditions

Scenic Landscapes

Wellesley has a number of scenic landscapes. These areas include open spaces and views that help define the aesthetic character of Wellesley. Key open space vistas include views across Lake Waban and Morses Pond, views from Pond Street to Wellesley College, the view southward from Rocky Ledges in Boulder Brook Reservation, southeast views from the top of Maugus Hill, and views along the Charles River from the Mary Hunnewell Fyffe Footbridge at Cordingly Falls.

Scenic Roads

Under M.G.L. Chapter 40 Section 15C, Wellesley has designated six scenic roads that represent the rural side of Town life:

- Benvenue Street
- The Brookway
- Cartwright Road
- Cheney Drive
- Pond Road
- Squirrel Road

Any repair or maintenance within the right-of-way of a scenic road that would damage existing trees or stone walls requires a public hearing before the Planning Board and written permission of the board.

Historic Resources

The town that became Wellesley in 1881 began as part of Dedham and then Needham. It was a modest farming town and, as a result, lacks the imposing colonial and Federal-era buildings found in the colonial town centers of other communities. With the arrival of the railroad in the mid-19th century, the town began to attract notice as a summer community for Boston residents. A few wealthy businessmen began building estates in town, Wellesley College was founded in 1875, and within a few decades, the town was on its way to becoming an attractive and affluent commuter suburb of Boston. Because of this history, Wellesley residents have tended to think of only the pre-1881 properties in town as “historic.” However, structures and designed landscapes more than 50 years old are eligible for listing on the State and National Historic Registers and the criteria developed for listing on these registers provides a suitably rigorous method to identify and evaluate properties for historic significance.

Historic Preservation Organizations

Wellesley has three major organizations devoted to historic preservation: the Historic District Commission, the Historical Commission, and the Wellesley Historical Society. The Historic District Commission is the municipal board authorized to review external changes to properties located within the Cottage Street Historic District for historical appropriateness. It also has the power to recommend a group of properties for historic district designation. The Wellesley Historical Commission, also a municipal board authorized under M.G.L. c. 40, has the power to conduct historic research, prepare educational material, and recommend designation of local landmarks. This group advocates for historic properties, identifies properties eligible for listing on the National Register, and provides educational

materials on local historic preservation. Commission members write regular columns in the *Wellesley Townsman* to inform the public about current preservation issues. The Wellesley Historical Society, a private organization founded in 1925, has a mission of serving as a historic resource center, conducting educational programs, inspiring public appreciation of Wellesley's heritage, and advocating for the preservation of Wellesley's cultural resources.

Limited Resources for Preservation Activities

Although the Community Preservation Act mandates that preservation activities receive at least 10% of funds received under this act, Wellesley has not been able to leverage these funds to conduct significant preservation projects. The Town provides very limited funding to the Historical Commission, which must sponsor these nominations. In 2005, the Town allocated only \$250 to the Historical Commission, and there is no staff support for the Commission. This minimal funding hampers the Historical Commission's ability to provide advocacy and preservation education. In addition, the limitation of the state historic tax credit to income-producing properties provides no incentives for residential rehabilitation.

Historic Designations

A historic property may be recognized through two programs: listing on the National Register of Historic Places, a registry of significant cultural buildings and landscapes maintained by the National Park Service, and/or local designation by town government. On the national level, a property may receive historic designation as an individual landmark or as a property within a historic district. This is also true on the local level if the municipality has local legislation authorizing the designation of landmarks and historic districts.

National Register listing confers historical status on a property, as properties on the National Register are deemed to be of greater-than-local importance. The National Register listing requires sophisticated documentation, usually prepared by a trained consultant, but the listing itself provides little protection for the historic property unless it may be affected by a federally-funded project, in which case a review is required. National Register designation does not prevent an owner from altering or tearing down his or her property. In the event of an alteration that removes significant historic features, the only thing that the National Park Service is empowered to do is to remove the National Register designation. No design review or penalties are associated with National Register listing.

Designation as a local historic district, however, does provide protection for a property against historically-inappropriate alterations. Properties deemed of local importance may be designated by Town Meeting and thus brought under the purview of the Wellesley Historic District Commission. This group performs design review of exterior alterations, such as additions and replacement of historic materials, and issues permits called Certificates of Appropriateness (COAs) that allow work to proceed. Without a COA, an owner will not be allowed to make changes to the exterior of his or her locally-designated property. This kind of regulation typically does not include temporary changes such as paint colors and the Historic District Commission has no authority over the interiors of local historic properties.

Communities can also designate individual properties as historic landmarks, which is the equivalent of a local historic district with one property. The Town of Barnstable has a model that might be appropriate for Wellesley. The bylaw requires permission of the property owner before designation as a historic landmark and the Historical Commission must approve specified types of exterior changes that would permanently alter its historic character.

Listing on the National Register of Historic Places or a local designation will place a property on the State Register of Historic Places. Like the National Register listing, a State Register listing only requires that a review for impacts be conducted if a state-funded project will affect the property. It does not otherwise affect an owner's ability to change or demolish the property. Listing on the State Register, however, makes the property eligible for some historic preservation grants administered by the Massachusetts Historical Commission.

Historic preservation easements are another preservation option. They are voluntary agreements between property owners and a historic preservation organization recognized by the IRS. The easement restricts specified kinds of changes to the property and the donor conveys certain rights over the property to the easement-holding organization, which then has the legal authority to enforce the terms of the easement. The easement can cover changes to the exterior or interior of a building, the façade, additional building(s), and so on, and is tailored to each situation. In return for the donating the easement, the donor gets a tax deduction.

Demolition Delay

Many Massachusetts communities have established “demolition delay” for structures of historic significance. This means that when a property owner files for a demolition permit on a structure deemed historically significant as defined in the bylaw, there is a delay period of six months or a year while an effort is made to find a use for the property that will not require demolition of the structure. In some bylaws, anything over 50 years old is deemed historically significant, while in others significance is limited to older structures, or those listed on the State or National Registers, or those deemed significant by the Historical Commission. Demolition delay does not keep a property from being demolished if there is no adaptive use that can be found for the structure. The impact of the law on property owners is to alert them to the historic significance of the property, encourage them to find a use or a buyer willing to use the property, and make them wait a few months for a demolition permit. Town Meeting has twice declined to enact a demolition delay bylaw in Wellesley.

Historic Sites in Wellesley

In past years, Wellesley’s Historical Commission conducted a historic survey that documented the significance of many historic residential, religious, municipal, and commercial properties that were constructed after Wellesley’s incorporation in 1881. Over many years, the survey grew to 564 listings of structures built between 1882 and 1940, but no new updates have been conducted since 1990. Wellesley’s historic properties built prior to 1881 are recognized through a program sponsored by the Historical Commission that provides date plaques for each structure. Participation in the plaque program is voluntary.

National and State Register of Historic Places Sites

Wellesley has seven historic sites that have been listed on the National Register of Historic Places. These include three historic districts:

- Cochituate Aqueduct Linear District
- Sudbury Aqueduct Linear District
- Hunnewell Estates Historic District

The aqueduct districts are significant for their late nineteenth-century waterworks engineering, and the Hunnewell Estates district is significant for the quality of its residential buildings and associated landscapes.

In addition, there are five individual properties on the National Register:

- Eaton-Moulton Mill
- Wellesley Farms Railroad Station
- Wellesley Town Hall
- Intermediate Building
- Elm Bank

Each of the above properties is significant as a public or commercial building from the late nineteenth

century, with the exception of Elm Bank, which is a large estate with a formal garden designed by the Olmsted firm in the early twentieth century.

The Wellesley Historical Commission is supporting the nomination of Fuller Brook Park and the Wellesley Hills Branch Library to the National Register in 2005. The Historical Commission has received funds from the Community Preservation Committee to hire consultants to prepare National Register nominations for each of these properties. Built in 1899, the 23-acre Fuller Brook Park is scheduled to be restored starting in 2006. Lack of maintenance over the years has caused the park's infrastructure to deteriorate significantly. The restoration plan, funded in 2003 by Town Meeting, will repair the stone bridges, brook channels, culverts, and the stormwater drainage system. The restoration plan anticipates that National Register listing will make the park eligible for federal and state funds for landscape restoration and improvements.

The 1990 historic buildings survey conducted by the Wellesley Historical Commission also recommended National Register nominations for eight residential areas:

- Belvedere Estates
- Albion Clapp's Cliff Road/The Old Cliff Estates
- College Heights/Curve Street area
- Dana Hall area/Elmdale Park
- Glen Road area/Riverdale
- Cedar Street and River Ridge
- Cliff Estates
- Wellesley Gardens and Sunny Acres

These properties are seen to have historical significance as residential districts from the late nineteenth and early twentieth century, but no formal action has been taken to pursue National Register designation. Files with the Massachusetts Historical Commission (the State Historic Preservation Office) suggest additional National Register nominations for the Weston Road Bridge, the Kingsbury Street Bridge, and the Wellesley College campus. In addition, the Massachusetts Historical Commission database identifies 1,191 properties of potential historical significance in Wellesley.

Local Historic Districts

Wellesley has one locally-designated historic district, the Cottage Street Historic District. This district contains 61 properties. Wellesley does not have a landmark bylaw and thus does not have any individual properties designated as local landmarks. Wellesley's history as an early suburb along a commuter rail line with a series of planned subdivisions suggests that there may be neighborhoods that meet criteria for historic significance. Eight neighborhoods were identified as potentially eligible for listing on the National Register during the last period of substantial historic preservation activity in the 1990s and an additional eight were identified for further investigation.

Potential Neighborhood Conservation Districts

The trend towards larger houses and replacement houses since that time may have reduced the number of neighborhoods whose ensemble of residential buildings could meet the criteria for historic listing. Town Meeting has been reluctant to accept a demolition delay bylaw and no new historic districts have been proposed. At the same time, many residents have become much more concerned about the impact of this trend on the character of Wellesley. In the extended discussion on this issue in the housing chapter of the Phase I Comprehensive Plan Update, it was recommended that one approach to these concerns could be the establishment of Neighborhood Conservation Districts. Town Meeting could pass a bylaw that enables creation of such districts, but neighborhood residents would have to petition for a study and negotiate the level of advisory and mandatory regulation that they would be willing to accept. A resource for potential Neighborhood Conservation District studies is the recent publication from the National Park Service, *Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National*

*Register of Historic Places.*²

(See Map X - Cultural Resources)

Legal Protections for Historic Properties and Incentives for Rehabilitation

Massachusetts law (M.G.L. c. 40C) provides that a municipality may designate a local historic district and apply design review to most exterior alterations to a district property. Wellesley's historic district bylaw follows these state provisions. As noted earlier, the town does not have a demolition delay bylaw.

State and federal law provide incentives for rehabilitation of historically-significant properties through preservation easements and historic tax credits. State and federal tax credits (20% of qualified rehabilitation expenditures on each level) may be obtained for rehabilitation of income-producing properties that are listed or eligible for listing on the National Register of Historic Places. Thus, owners of historic income-producing properties in Wellesley, such as commercial structures or residential rental units, may obtain state and federal tax credits for rehabilitation projects that meet the criteria defined by the IRS and the Massachusetts legislature. Unlike many states, Massachusetts does not have state tax credits for non-income producing properties that encourage the rehabilitation of owner-occupied residential properties.

Other Cultural Resources

The institutions in Wellesley provide residents with many opportunities for concerts, plays, and cultural programs on their campuses. Wellesley College's Davis Museum and Cultural Center offers a permanent art collection, along with exhibits, films, and academic discussions. In addition, the college has a theatre program that offers year-round productions, along with a summer theatre camp for local youth. Massachusetts Bay Community College serves as home to an adult theatre group, a children's theatre group, an art gallery, the MetroWest Youth Symphony Orchestra, and the Wellesley Symphony Orchestra. Babson College's Sorenson Center for the Arts also provides cultural opportunities in theatre, dance, film, music, and visual art for Wellesley residents.

D. Cultural Resources Recommendations

Consider combining the existing Historical Commission and Historic District Commission into one Historical Commission with the powers of both existing boards.

In a town of Wellesley's size, where there is only one local historic district, it is unusual to have two town boards focused on historic preservation. Under M.G.L. Chapter 40C, Section 14, a Town may enable its historic district commission to have the powers and title of a historical commission. It may be more efficient to consolidate the Historic District Commission and the Historical Commission into one group that will provide design review, advocacy, and preservation education. If the town establishes an option for Neighborhood Conservation Districts, the single Historical Commission would oversee the process for establishment of these districts. This reorganization should be combined with staff support and funding for activities that will raise preservation awareness in Wellesley. Money could also be used for preservation education for commission members or programs that would allow them to forge ties with other local preservation groups and the Massachusetts Historical Commission. In addition, the Town should ensure that the new commission gives advisory opinions on major redevelopment projects..

² See <http://www.cr.nps.gov/nr/publications/bulletins/suburbs/suburbs-start.htm>

Promote public awareness of Wellesley's history and the benefits of historic preservation.

The loss of older buildings appears to have stimulated interest in the preservation of community character. The Planning Board's February 2004 survey found that 79% of resident and government respondents believed that "neighborhood character" was an "essential/very important" characteristic of Wellesley and 67% of resident respondents agreed with the statement "I would love to see more historic buildings preserved in Wellesley." These responses suggest that Wellesley residents are growing increasingly concerned about the destruction of cultural resources that define the town's character and enhance its quality of life. However, historic preservation advocates in Wellesley face the challenge of lack of public awareness about what makes a property historic and the impact of historic designations. Preservation activities have also been hindered by owner resistance to creation of new historic districts or designation of individual properties.

ACTIONS

- **Encourage preservation through education and publicity about historic properties and preservation easements.**

The Historical Commission, Historic District Commission, and the Wellesley Historical Society should work together to promote a greater awareness of the benefits of historic preservation. The community needs a higher level of understanding of the historic character of many local properties and a better grasp of the potential forms of designation and tax benefits. This could come in the form of newsletters and brochures, newspaper articles, and historic walks or historic tours that allow the public to experience private historic properties. In addition, these local preservation groups should encourage the donation of preservation easements to the Town or a non-profit entity. This educational process needs to be ongoing, as approximately 40% of Wellesley's population changes each year.

- **Revive and complete the existing historic property inventory from the 1990s.**

The property inventory that has lain dormant for the past decade should be revisited and updated to include documentation of properties that are at least 50 years old and any properties dating from before the town's incorporation in 1881. This inventory should be used as an active document that guides the education and advocacy efforts of the Historical Commission.

- **Expand the plaque program to include properties that are at least 50 years old.**

The Historical Commission or the Historical Society should offer plaques and brief histories for a fee to any local properties that are at least fifty years old and have not had their historical integrity seriously compromised by unsympathetic alterations. Publication of the names of plaque recipients and individual property histories can generate greater public awareness about Wellesley's history and the value of historic preservation. This kind of program has been very successful in other communities as a way of raising community consciousness about historic values.

Maintain the historic integrity of Wellesley's neighborhoods by initiatives, such as Neighborhood Conservation Districts, that will help protect historic properties.

The growing trend of "teardowns" and "mansionization" has caused the loss of some of Wellesley's historic residential properties. In addition to the loss of some individually-significant buildings, the historic integrity of some neighborhoods has been diminished by the construction of additions and new homes that prove incongruous in scale and design. Residents and non-residents alike value the Town's aesthetic character, which draws heavily on well-designed late nineteenth- and twentieth-century neighborhoods. Currently, Wellesley has no historic preservation regulation beyond one historic district. Few standards exist to shape design and redevelopment in Wellesley's other neighborhoods.

ACTIONS

- **Protect individual properties by adopting a Historic Landmark Bylaw** that would allow the Town to designate a specific property as having local historic significance. Once historic designation has occurred, owners would be prevented from making exterior changes that would alter the historic character of a particular property. Under a Historic Landmark Bylaw, the Town would have to obtain the permission of the property owner before designation and the owner would have to get a Certificate of Appropriateness (COA) from the Historic District Commission prior to any major exterior work on the property. Although many owners might object to the restrictions imposed by the landmark designation, others could find that the designation increases their property values. The bylaw would also provide a flexible preservation tool, as only single properties could be designated. Thus, owners of an individual property in a historic area could have protections placed on their property without the entire historic area having to be designated as a historic district.

- **Protect historic properties by passing a Demolition-Delay Bylaw.** As Wellesley loses more of its historic properties to “teardowns” and “mansions,” the Town could pass a bylaw that would provide temporary protection from demolition. Under this bylaw, a property owner would be prevented from destroying his or her historic property for six months or a year. During this time, the Town and the Historical Commission could search for a sympathetic buyer for this property. Although a demolition-delay bylaw has failed to pass Town Meeting on two previous occasions, the increasing number of teardowns may create support for this as a neighborhood-preserving measure. Local preservation advocacy groups can aid in this effort by preparing educational materials on the efficacy of demolition delay in other communities in the Greater Boston area.

- **Protect groups of related historic properties by designating more local historic districts or by passing a Neighborhood Conservation District Bylaw.** Historically-significant groups of properties related to each other by context should be designated as local districts. The creation of a new historic district would mean that all contributing properties within the district would be subject to the Certificate of Appropriateness process before any major alterations could be performed on exteriors. The Historical Commission and the Historic District Commission should work together to determine how past surveys can be used to provide information for new designations.

Wellesley property owners have proved reluctant to establish any more local historic districts, with their accompanying regulations. As discussed in the Phase I Plan and earlier in this chapter, Neighborhood Conservation Districts could be a solution because designation provides the benefit of owner and public education on historic appropriateness with much greater flexibility about regulation. Properties included in a conservation district do not have to carry historical significance, and review of proposed alterations may be strictly advisory. Establishing a neighborhood conservation district involves performing a design study that identifies a particular design type that controls the neighborhood and determining what changes will be subject to design review. The Historical Commission, Planning Board, Historic District Commission, or a Neighborhood Conservation District Commission may administer either advisory or mandatory design review. These districts may be preferable to historic districts, since the level of review generally is lower and the reviewing commission can be made a purely advisory body.

Expand the scope of potential preservation projects by seeking non-local funding and partnerships and private donations.

ACTIONS

- **Apply for different sources of funding for preservation projects.**
Although the Community Preservation Act provides a guaranteed source of funding for historic preservation projects, the Historical Commission should seek out other sources of funding. The Massachusetts Preservation Projects Fund could be a funding source, along with small survey and planning grants partially funded by the Massachusetts Historical Commission (MHC). The Massachusetts Preservation Projects Fund awards money to three types of projects: pre-development, development, and acquisition projects. Each project must involve a property that is listed on the State Register of Historic Places. Applicants can ask for up to \$30,000 for pre-development activities such as surveys and \$100,000 for projects that will involve stabilization, rehabilitation, restoration, or historic land acquisition. The smaller survey and planning grant program awards funds for survey, preservation plans, National Register nominations, and educational programs. Each type of funding through the MHC requires a 50% match from local sources.

- **Look for new sources of support from state government and non-profit organizations.**
The Historical Commission should cultivate relationships with the Massachusetts Historical Commission, Preservation MASS, and the Northeast Office of the National Trust for Historic Preservation. Each of these entities can provide valuable opportunities for preservation education and assistance on technical issues.

- **Pursue private support for historic preservation activities as part of public education efforts.**
Wellesley citizens have shown their willingness to contribute private funds to town projects that they consider important, such as the library and improvements to parks, ponds and conservation lands. The Historical Society and the Historical Commission should seek private donations for high-priority historic preservation projects.