

REPORT OF THE NATURAL RESOURCES COMMISSION
July 1, 2010 – June 30, 2011

It is the mission of the Natural Resources Commission to provide stewardship, education and advocacy of the Town of Wellesley's park, conservation, outdoor recreation and open space resources so that the full value of the Town's natural assets can be passed on to future generations.

The Natural Resources Commission provides the Town with the highest quality of environmental leadership, planning and management, establishes sound environmental policy and protects and improves the Town's natural and outdoor recreational resources. To achieve these goals, the NRC is charged with the statutory responsibilities of *Park Commissions, Conservation Commissions, Tree Wardens, Shade Tree and Pest Control Officers, and Town Forest Committees* under Massachusetts General Laws Chapters 40, 45, 87, 131 and 132. The Commission appoints the Wetlands Protection Committee, the Trails Committee, the Public Shade Tree Committee and oversees special committees such as the Morses Pond Management Committee, Pesticide Awareness Committee, the Charles River Lower Falls Bridge Park Committee and the Integrated Pest Management Advisory Committee. Representatives from the Commission serve on the Community Preservation Committee ("CPC"), the Fuller Brook Park Coordinating Committee, the Town-wide Encroachments Committee, the St. James Church Property Acquisition Committee, the Playing Fields Task Force, the High School Building Committee Parking Subcommittee, the 27 Washington Street Town Development Review Team and the Wellesley Green Schools Council. In addition, the NRC works closely with the Wellesley Cancer Prevention Project and the Wellesley Conservation Council.

The NRC continues to implement a very ambitious and well-planned agenda. In FY11, the NRC held 41 public meetings, 4 Public Shade Tree Removal Hearings and attended 22 additional public meetings with the School Committee, Community Preservation Committee, School Building Committee, Advisory Committee, Board of Selectman and other Town boards to discuss the NRC's environmental protection and improvement efforts and related Town business. In FY11, the NRC issued 21 Permits for Use of Park or Conservation Land.

The NRC's website contains the agendas, meeting minutes, goals, priorities and projects of the NRC, the Wetlands Protection Committee, and the Trails Committee. The NRC web site also contains extensive information about the Town's parks, playgrounds, recreational resources and natural resources including the Town-wide trail system, as well as pesticide use reduction information, climate change protection information and provides links to related fields. For more information about the NRC, Trails Committee and the Wetlands Protection Committee please visit our website at www.wellesleyma.gov/nrc.

In FY11, the NRC was successful in securing funding from Town Meeting for its initiatives that included continued funding for the Fuller Brook Park Preservation Project, implementation of the Morses Pond Comprehensive Management Plan, the NRC's Public Tree Replacement Program, Town-wide trail network improvements and playground and parkland improvements. The NRC successfully secured several conservation restrictions protecting extensive open space and wildlife habitat. In partnership with the Department of Public Works (DPW), the NRC continued to implement its Pond Restoration Master Plan, and this year the NRC focused on the fourth year of implementing the Morses Pond Comprehensive Management Plan. The NRC's program to reduce the use of pesticides continues to be recognized by the State as the leading local pesticide use reduction and education effort in Massachusetts. In addition, the NRC and DPW were awarded the first in the state 28th Year Tree City USA designation in recognition of the Town's tree

management and replacement program.

NRC'S OPEN SPACE AND NATURAL RESOURCES PROTECTION EFFORTS

Implementation of the Town's Open Space and Recreation Plan

As part of the NRC's efforts to ensure that Wellesley's natural resources and recreational areas are preserved and protected, the NRC continued its efforts to implement and update the NRC's *Comprehensive Open Space and Recreation Plan*. An Open Space and Recreation Plan is required for a town to apply for state funds for open space acquisition. This plan makes an inventory of existing resources; evaluates the interests of the community; and attempts to prioritize open space and recreational needs. In turn, the plan assists town officials in making land acquisition decisions. In a developed suburban community such as Wellesley, issues concerning the acquisition and management of our remaining open space have become important and controversial. This year, the NRC has focused on supporting the following Open Space and Recreation Plan goals and projects: Fuller Brook Park Preservation Project, pond restoration with emphasis on Morses Pond; open space acquisition; trail network improvements; playgrounds and playing fields improvements; enforcement of the State and Town Wetlands Protection Bylaw; protection of the Town's trees; pesticide education and reduction efforts; and the NRC's "Green Wellesley" sustainability education efforts.

Educating the Public Regarding the Need to Preserve and Acquire Open Space

The Commission continues to focus on educating the public regarding the advantages of open space preservation and acquisition. For Wellesley, there are many advantages to open space preservation and acquisition, all of which culminate in making our community more livable. The trend towards larger and newer housing has resulted in more conversion of open spaces into development. Consequently, the Town is faced with both a challenge and an opportunity; indeed, the challenge is to preserve existing open spaces and avidly look for opportunities to acquire much-needed open space. Justification for preserving open space at a time of high-profile development fall into three interdependent benefits -- social, environmental and economic.

Social: From a societal point of view, open space affords passive recreation, density control, environmental education, and the ability to enjoy healthful walks, beautiful views, and opportunities for quiet relaxation and closeness to nature. Most importantly, balanced open spaces become part of a community's character and identity.

Environmental: The environmental richness of conserved open space, i.e., the wetlands and floodplains, insures the continued operation of vital natural functions that prevent altering or damaging Wellesley's water supply, aquifer zones and watershed districts. Open space preserves and protects the wide diversity of plant and wildlife species and the continued operation of those natural processes necessary for survival, i.e., air and water purification, flood control, water storage and climate control.

Economic: Open space preservation is most often a less expensive alternative to development. The case for open space protection, based on a cost vs. revenue concept, indicates that development of land does not usually pay its own way and property tax revenues levied do not cover the costs a community incurs in providing essential services -- schools, water, sewer, utilities (i.e., annual property tax revenues for the median priced home in Wellesley are \$4,660 , whereas the annual school expenditure per student is \$9,241. In addition, open space increases the value of all property while saving public funds by preventing development of areas

of critical concern.

Although Wellesley is generally considered a “built-out” town, a Community preservation Build-Out Analysis of the Town by the Metropolitan Area Planning Council concluded that an additional **851 acres (out of a total land acreage of 6,338) of privately owned open space could be developed under existing zoning regulations, which could result in an additional 2,229 dwelling units with 8,094 additional residents.** This increased development would irreparably alter the Town’s open space and would dramatically increase demands on the town’s infrastructure, including its school system, water supply, and solid waste capacity (see “Metropolitan Area Planning Council Build-Out Analysis of the Town of Wellesley,” Nov. 2000).

Many residents continue to be concerned about the “mansionization” of Wellesley. Wellesley is currently faced with an increasing loss of open space, and the Commission will continue to make the preservation and acquisition of open space a priority for the benefit of all residents.

NRC Participates in Metrowest Regional Cooperative Open Space Connectivity Plan

In FY11, the NRC participated in the Metrowest Regional Cooperative Open Space Connectivity Program and public hearing process aimed at improving regional opportunities for open space connections in the Metrowest area. The Metrowest Plan included references to the NRC’s Open Space and Recreation Plan’s goals as they relate to specific open space acquisition and protection efforts.

NRC Advocates for Open Space Protection at 27 Washington Street Development

National Development, Inc. purchased 27 Washington Street, the former Grossman’s site, and is constructing a senior residential redevelopment that includes a two-story office and retail building adjacent to Washington Street and 2 four-story residential apartment buildings, which will provide 150-units of senior housing, 30 of which will be affordable units under Wellesley’s Inclusionary Zoning Bylaw. The existing site is almost entirely developed, and currently 83 percent of the site is covered with impervious surface, including 75,000 sq. ft. of impervious surface within the Wetlands Protection Act riverfront area. The site comprises 5.3 acres and the proposed redevelopment of the site will result in a significant reduction in the amount of the impervious area on the site, which will create a total increase in open space on the site from 16.8 percent to 37.5 percent.

The NRC continues to work with National Development to place a conservation restriction on the land fronting the Charles River that will permanently protect this open space from development and will allow public access and a pedestrian pathway, as well as provide landscape and natural vegetation improvements.

Creation of New Linear Park Near Charles River in Wellesley Lower Falls

NRC Member Neal Seaborn continues to lead the NRC’s work with National Development, the Town of Newton, the Charles River Watershed Association, the Town’s State Legislators and the Mass. Department of Conservation and Recreation (“DCR”) to improve the Charles River Greenway in this area and convert the old rail road bridge abutting 27 Washington Street on DCR land into a pedestrian pathway and park that provides a connection over the Charles River into Newton. The bridge renovation and park on DCR land in Newton was completed in FY11, and the greenway on Wellesley Town land will be completed once the new National Development project is completed in April 2012.

NRC Evaluates State-Owned Cochituate Aqueduct for Town Acquisition

In FY11, the NRC continued its effort to evaluate the remaining 5 acres of the Cochituate Aqueduct that is owned by the State. At the 2002 Annual Town Meeting, the Town voted to pursue the acquisition of this open space land bordering Natick for municipal purposes. In FY07 the State completed its appraisal of the land and has offered to sell the land to the Town. The NRC continues to work with the Board of Selectmen, Housing Development Corporation and the State to evaluate this property for possible acquisition by the Town for open space and other potential municipal purposes.

NRC Approves Remedial Actions Related to High School Oil Spill into Fuller Brook

Throughout FY11, the NRC approved and monitored the response actions related to a high school oil spill into Fuller Brook that occurred on February 6, 2011. Approximately 400 gallons of #2 heating oil were released into Fuller Brook. NRC Director Janet Bowser worked closely with the Town's licensed site professional (LSP) and the Mass. Department of Environmental Protection to oversee and assess the damage to the natural resources and impact on the water quality along the Fuller Brook. As required by State environmental regulations, extensive surface water sampling was conducted downstream of the oil release and all of the way down Fuller Brook to the point of confluence with the Charles River. Very low levels of hydro carbons were detected and did not exceed the Mass. DEP surface quality standards for drinking water. On-going remediation and water sampling through the Fuller Brook Park occurred throughout FY11 and Ms. Bowser continues to monitor all environmental impact assessment information from the Town's LSP. The NRC's Wetlands Protection Committee reviewed and approved an emergency certification form at their March 10, 2011 meeting to permit the on-going response actions required under the Massachusetts 21E Contingency Plan. Additional wetlands permitting may be required if a final remediation plan is required. The NRC will continue to monitor, review and approve all oil response actions and remediation efforts in Fuller Brook Park.

NRC's Eleventh Annual Earth Day Clean-Up, April 16, 2011

The NRC's eleventh annual Earth Day clean-up along the Charles River was held on Saturday, April 16, 2011, and was co-sponsored by the Charles River Watershed Association. This annual event is a rite of spring for many volunteers from Town Boards, community organizations and the Town's colleges and scout troops. This year, over 40 volunteers helped clean-up along the banks of the Charles River, which is one of our most precious water resources. This year marked the 41st anniversary of Earth Day and the NRC thanks all those who participated.

NRC Initiative to Place the Fuller Brook Park on the National Registry of Historic Places

In FY11, the NRC continued its efforts with Ms. Shary Berg, the NRC's Landscape Historian on the Fuller Brook Park, to apply for listing the Park on the National Historic Registry. The Massachusetts Historical Commission has confirmed that the Fuller Brook Park is eligible for listing on the National Historic Registry, including almost the entire park, running from Maugus Avenue in the east to Dover Road in the west. This project was funded by the Community Preservation Commission and is being spearheaded by the NRC in cooperation with the Wellesley Historical Commission. The application received approval and support by the Massachusetts Historical Commission and it has been submitted to the National Park Service of the U.S. Department of the Interior for a final approval and placement on the National Historic Registry.

Fuller Brook Park Preservation and Improvement Project

Fuller Brook Park is a 23-acre park that encompasses Wellesley's most popular open space and runs from Dover Road, across from Wellesley College's Nehoiden Golf Course, and follows the Fuller Brook about two miles to Hunnewell Field near the Wellesley High School. A second nearby portion of the Park, called the Caroline Brook Path, runs from the middle of the southern end of Hunnewell Field to Maugus Avenue. Heavy use and minimal maintenance has left Fuller Brook Park in a deteriorated and vulnerable state. This park preservation project will address the competing uses for its trail, which often sees walkers and families guiding baby strollers, making way for runners and bicyclist of all ages, and will also develop a plan to maintain trees, develop a cohesive planting system that includes eradication of invasive plants that have taken over areas along the Fuller Brook. Much of the Park's streamcourse and path system have also suffered from years of erosion and needs repair now. Fuller Brook serves as the stormwater drainage system for more than half of Wellesley before flowing into the Charles River. In the early 1900's, Wellesley began acquiring land around the brook, seeking a pedestrian and horse path that avoided the then heavy traffic of horse drawn vehicles on Washington Street. The formal 23-acre Fuller Brook Park, with its footbridges, stone bridges for vehicles and the linear path system, was completed during the Great Depression.

In FY11, the NRC continued its efforts to preserve and improve the park. The park's Preservation Master Plan was completed in November 2009 by the NRC's consultant, Halvorson Design Partnership, and it has assisted the NRC in planning ways to preserve and improve this valuable resource, and, most significantly, ensure its historical integrity. A public hearing on the Master Plan was held in December 2009 and based on input from residents and the Community Preservation Committee, it was determined that additional design alternatives needed to be evaluated. At the Annual Town Meeting in April 2010, \$250,000 in Community Preservation Funds were approved for hiring consultants for: development of conceptual design plans and alternatives to build upon the Master Plan; an arborist treatment plan; a boundary, topographical and utility survey; and selection and cost estimates for a preferred alternative design. This phase of the project was completed by the landscape architect firm of Pressley Associates in January 2011 and included extensive public meetings and public input on proposed improvements to the park's path system, streamcourse and vegetation. At the April 2011 Annual Town Meeting, \$21,500 in CPA funding was approved to construct a demonstration path in the park in order for the Town to evaluate different surface materials and widths. In 2010, a Fuller Brook Park Coordinating Committee with representatives from several town boards was created to assist the NRC with the conceptual design phase. In 2011, a reconstituted Fuller Brook Park Coordinating Committee was approved by Town Meeting to manage the final design and permitting phase of the Preservation Project, and additional funds will be requested in a special Town Meeting in November 2011 for the cost of this final design and permitting phase, which should help determine eventual construction costs.

NRC Efforts to Preserve Open Space at MassBay Community College

In FY11, the NRC continued its efforts to preserve and explore the possibility of acquiring open space that is State-owned and under the control of MassBay Community College. The College owns approximately 43-acres of environmentally significant open space, which encompasses extensive wetlands, forest land, and is located in the Town's Water Supply Protection District. This state-owned land includes extensive wildlife habitat and a public trail system that is maintained by the Town of Wellesley. Based on the Town's past partnership with MassBay Community College as stewards of this important conservation land, the NRC has made a concerted effort to protect this land as open space in perpetuity. The NRC has held several

meetings with MassBay leaders in an effort to unite the college community and the Town in protecting this open space for future generations and allowing Town residents to continue to take walks through this important natural resource to discover the beauty of this land.

The NRC was granted funding by the Community Preservation Committee to develop an acquisition feasibility study that is the first step towards protecting this open space. The potential for the Town to acquire this land as open space was identified in the “Wellesley Community Preservation 2008 Plan.”

Collaboration with the School Committee and the School Building Committee to Approve Interim Off-Site Parking During the High School Construction Project

Throughout FY11, the NRC continued to work with a subcommittee of the School Building Committee to evaluate options for temporary and permanent interim off-site parking on parkland during the construction of the new Wellesley High School Project. It was a particular concern of the NRC to ensure that any temporary or permanent offsite parking on parkland would not have a significant impact on the natural resources of the area, park user groups or the neighborhood. The NRC granted final approval for three off-site High School parking sites and the NRC required substantial natural resource protection measures and Low Impact Development elements including the use of porous pavement and biofiltration swales, to clean and control stormwater runoff.

NRC Director Testifies at State House on Environmental Protection Legislation

In FY11, NRC Director Janet Bowser testified at the State House and/or provided written testimony on the following legislation that is critical to helping protect and preserve the Town’s open space and natural resources:

- Natural Heritage and Endangered Species Program: the mission of this important state program is to protect the rare species of Massachusetts, their habitats, and the full range of natural community species to conserve the biodiversity of the Commonwealth;
- An Act to Protect Natural and Historic Resources of the Commonwealth: this legislation will provide a statutory framework to ensure no net loss of conservation land through disposition or land exchanges under Article 97 of Amendments to the Massachusetts Constitution;
- An Act to Sustain Community Preservation: this legislation will amend MGL Chapter 44 B in order to, among other provisions, allow for capital improvements for existing open space, housing, parks and recreational facilities not purchased with Community Preservation Act (CPA) funds;
- Sustainable Water Resources Act;
- Public Lands Preservation Act; and
- Safer Alternatives to Toxic Chemicals Act.

NRC Climate Protection Actions

Rapid climate change is a serious long-term threat to Wellesley’s natural resources and our planet. Climate change primarily results from tropical deforestation, animal agriculture, and the burning of fossil fuels to generate electricity and power our vehicles, planes and trains. The burning of fossil fuels and its effect on climate change also raise public health and safety

concerns. To reduce these impacts, our use of fossil fuels must be dramatically reduced. At the same time, we must increase energy derived from more efficient technologies and renewable, energy sources.

The NRC's "Green Wellesley" Campaign focuses on educating residents about the actions they can take in their daily lives to address climate change. Towards this end, the NRC has actively supported the following state legislation:

- Global Warming Solutions Act: the NRC strongly supported the State Global Warming Solutions Act, making Massachusetts a leader in the fight against climate change. The NRC supported passage of this law which requires a reduction of greenhouse gas emissions by 80 percent by 2050 with an interim reduction of 10-15 percent below 1990 levels by 2020.
- Climate Change Adaptation Committee: the NRC has been active in advocating to ensure that this new law included a provision for development of measures to help people and nature adapt to climate change impacts that are inevitable, even if emissions are stopped immediately.

NRC Participates in "Sustainable Wellesley" Climate Protection Event on Oct. 9, 2010

NRC Director Janet Bowser and NRC Chairman Neal Seaborn worked with the Sustainable Wellesley Organization and the Municipal Light Plant to organize this event that focused on educating residents about climate protection and simple energy conservation measures that they can make at home. At the event, the NRC encouraged residents to join the NRC's Green Wellesley Campaign by pledging to live a more sustainable lifestyle and distributed information on sustainability. A network of organizations interested in climate protection evolved from this event and it is the NRC's goal to further develop its Green Wellesley Campaign by collaborating with these other organizations. This event was one of thousands held across the world as a part of the international climate campaign 350.org founded by Bill McKibben in recognition of the 350 parts-per-million carbon dioxide limit that is being recommended for the health of the planet.

NRC Supports Town-Wide Sustainable Energy Plan

The NRC continues to support the Green Ribbon Study Committee's Sustainable Energy Plan through implementation of the NRC's Green Wellesley Campaign. Recognizing the importance of developing and adopting local sustainable practices to reduce energy use and the impacts of greenhouse gas emissions, the 2008 Annual Town Meeting commissioned the Green Ribbon Study Committee to develop a sustainable energy plan for the Town that identifies policies and actions that will increase energy conservation and efficiency, reduce reliance on fossil fuels, and reduce greenhouse gas emissions at both the public and private levels. Based on the Committee's preliminary work, the 2009 Town Meeting set a goal to reduce emissions to 10% below 2007 levels by 2013. In order to reach this target at least 440,500 tons of CO₂ must be eliminated from the Town's emissions over the next four years. Ms. Gibson stated that while this goal may appear to be relatively modest, in the context of increasing energy usage and emissions, it will require the concerted efforts of the Town's residents, businesses, institutions and municipal government to attain. The Town's Sustainable Energy Plan outlines measures that the Town has already undertaken and outlines actions that the Town is encouraged to take in order to reach the Greenhouse Gas Reduction Target by 2013. While the overall goal is 10%, the Plan established a target reduction in overall municipal energy use of 20% by 2010. The recommended actions in the plan include increasing energy efficiency and conservation in

buildings and in infrastructure, reducing vehicle miles traveled and increasing vehicle fuel efficiency, improving management of solid waste, and purchasing electricity from renewable resources. The next step, as approved by Town Meeting in April 2010, included prioritization and evaluation of the measures proposed in the plan and the creation of a Town Sustainable Energy Committee to work together with Town Departments and Boards, such as the NRC. One of the key components of the plan is an education and outreach campaign that will strive to build general awareness and sustain program support, as well as using traditional media tools and creating a committee to promote awareness. The NRC looks forward to continuing to work with this Committee to promote educational awareness on natural resource protection and sustainable programs and practices, such as sustainable ecological practices and land management practices to adapt to and reduce CO2 emissions, to protect bio-diversity, to adopt green practices and operations that will reduce the Town's carbon footprint and to look at water consumption and water quality issues as they impact sustainable practices.

The NRC's "Green Wellesley Campaign" Promotes Town-Wide Sustainable Practices and Green Building Design and LEED Standards

The NRC is committed to working with all Town Officials, departments and residents to create a sustainable community. In FY11, the NRC continued to educate residents about what they can do to make their homes and lifestyles more environmentally friendly and advocated for the construction of "Green" municipal buildings in collaboration with the "SMART" environmental citizen's organization. NRC Members and the NRC Director were active in advocating for maximizing green building design elements in the new High School Project.

The NRC adopted the following statement urging the Town to support Green Building and "Leadership in Energy and Environmental Design" (LEED) Standards for the design and construction of the new High School:

"The Natural Resources Commission strongly recommends that the Town of Wellesley take action to seriously address the very real threats posed to our Town and our world by global warming. Towards this end, the NRC urges Town officials to take all steps available to improve our energy efficiency and reduce our carbon emissions including the adoption of Green Building LEED Standards in the design of the renovation and expansion of the High School. Taking action now will improve our quality of life, save money, and make our Town a healthier, cleaner place to live and set a good example for future generations."

NRC Endorses Mass. Climate Change Policy Position Statement

The NRC has endorsed the Position Statement on the Massachusetts Climate Change Policy encouraging the State to reduce green house gas emissions through conservation, increased efficiencies, and renewable energy sources. The NRC, along with other major Massachusetts environmental organizations, have endorsed the position statement in order to urge Massachusetts State policy makers to support a goal of 80 percent mandatory emission reductions from current levels by 2050.

NRC Participation on the Community Preservation Committee

In FY11, NRC member Joan Gaughan continued to serve as the Commission's representative on the Community Preservation Committee (CPC). The Committee is charged with making recommendations for the use of CPA funds. The NRC worked with the CPC in writing and

updating the open space section of the CPC's 2008 "Community Preservation Plan," which outlines the need for open space acquisition to help the Town protect its drinking water supply, wetlands, floodplains, wildlife habitat and scenic vistas, as well as expand recreational resources. This Plan also identifies goals and current and projected capital projects that may be eligible for CPA funding, including restoration of Morses Pond, Longfellow Pond, State Street Pond, and Abbots Pond, the restoration of the historic Fuller Brook Park and the Town Hall Park, as well as park, playground and recreational improvements. To read the full text of the CPC's Community Preservation Plan, visit the CPC website: www.wellesleyma.gov/cpc.

NRC Encroachment Correction Policy

Correction of encroachments onto public land is a Commission responsibility. Because the NRC has jurisdiction over the Town's natural resources, including its park and conservation land, the NRC has encountered an increasing number of encroachments on NRC land by private parties. In most cases, a tactful reminder to the homeowner corrects the problem, but often the boundary line has become obscured and it is necessary to call upon the Public Works Engineering Division to survey the line and to place permanent bound markers. In order to have a uniform policy regarding the correction of encroachments, the NRC adopted a formal Encroachment Correction Policy in February 2006, which is based on the Massachusetts Executive Office of Environmental Affairs Land Disposition Policy dated 1998. In general, the policy states that the NRC will seek to correct all encroachments on land under its jurisdiction and require that the encroaching party restore the land to its original condition at their cost. The policy states that in exceptional circumstances, the NRC will consider encroachment corrections that involve a land exchange, but only if such an exchange results in a net gain of public open space and provides a substantial benefit to the Town as determined by the NRC. Occasionally, residents offer to pay for landscaping Town land next to their yards. These offers have to be considered carefully. While the Town welcomes help in cleaning up and enhancing our parks, some of these offers are denied if they discourage public use of public land.

Town-Wide Encroachment Correction Policy Committee

In FY11, a Town-Wide Encroachment Correction Policy Committee was formed in order to ensure that there is one policy on encroachments governing all Town land. This Committee, which is chaired by NRC Member Ursula King, is comprised of representatives of all boards with jurisdiction over Town land. The Committee has studied the issues relating to encroachments and has relied heavily on the work undertaken by the Natural Resources Commission with its adoption in 2006 of a NRC Encroachment Correction Policy and detailed correction procedures. The Committee will continue its work in FY12 and will recommend that each board with land under its jurisdiction adopt the final Policy Statement along with a set of correction procedures.

NRC'S RECREATIONAL LAND USE, PLANNING AND MANAGEMENT

NRC Park and Playground Master Plan Improvements

Over the past several years, the NRC has worked with the DPW to implement an ambitious and successful Park and Playground Master Plan for improvements at the parks, playgrounds and playing fields under NRC jurisdiction. In FY11, the NRC worked with the DPW to improve park amenities throughout Town including replacement of trash receptacles, benches, picnic tables, and trees and shrubs at Longfellow Pond, Rockridge Pond, Reeds Pond, Town Hall Duck Pond, and Morses Pond. Recently, new playgrounds and playing fields were installed at Ouellet Park, Warren Park, Phillips Park, Hunnewell Field Tot Lot.

Playing Fields Task Force and Improvements to Athletic Fields

The Task Force, comprised of representatives from the NRC, DPW, Rec. Department, School Department, Wellesley Little League, Wellesley Lacrosse, and the Wellesley Soccer Club, continues to focus on identifying the most urgently needed improvements and developing a long-term plan for improvements to the Town's athletic playing fields. The NRC continues to work with the Playing Fields Task Force to improve the Town's playing fields and to obtain the maximum space with minimum wear.

NRC Adopts Regulations Regarding Off-leash Dog Hours at Perrin Park

Pursuant to the NRC's authority as Town Park Commissions under MGL Chapter 40, the NRC issued its third year of off-leash dog control regulations at Perrin Park in response to dog owners and residents concerns about the use of Perrin Park by large numbers of dogs off-leash. The NRC continues to make a concerted effort to hear from all interested parties to set limited off-leash hours and regulations in order to ensure that the park will be used by a wide range of residents and users, as well as protecting the existing playing fields at Perrin Park and ensure protection to park users from off-leash dogs. While the Town does not have a leash law, per say, the current Bylaw requires that off-leash dogs be under the immediate control of their owners. The NRC continues to monitor the situation at Perrin Park in order to ensure that all park users are able to use the park without interference.

NRC Serves on St. James Proposed Recreational Complex Task Force

The St. James Alternative Land Use Study was completed by the Town in May 2010 and proposed, among three options, the potential use of the land for a Town recreational facility that included a hockey rink, swimming pool and synthetic playing field. In FY11, the NRC was invited to join a Task Force to evaluate options for the site and the NRC's interest was in the protection and enhancement of the area's natural resources including wildlife habitat, wetland resources, floodplain and Moses Pond and its watershed. In FY11, the Committee hired a recreation facility consultant to evaluate the site and a land appraiser to determine the market value of the land in order to further consider acquisition feasibility. Currently, the land remains under the ownership of the Catholic Church and no action has been taken to pursue the acquisition of this property.

NRC's Trails Committee

During FY11, the NRC's Trails Committee maintained, improved and expanded Wellesley's trail network, and continued our community outreach programs with the support of many organizations within Wellesley and the surrounding area.

Trail Maintenance

Throughout the year, the Committee repaired or replaced posts, directional arrows, medallions and map houses. Members regularly monitor and maintain assigned sections of the trails network. The Department of Public Works provides assistance for larger projects such as removing major blowdowns. The DPW also keeps paths mowed in the summer. The Trails Committee sponsored a major cleanup in the Town Forest with help from the Kiwanis Club) and two High School students' cleanups of the Eastern section of the Crosstown Trail and the area behind the former Star Market. The Committee also supported the Earth Day cleanup along the Charles River.

Trail Improvements

The following projects were completed improving trail access:

- a) The Committee participates in the Fuller Brook Park Preservation Committee. The Town has completed Phase 1 and 2 of the project which provides designs for improving the Fuller Brook Path which includes an improved path between State St and Paine St.
- b) Safety road markings were painted at the Crosstown Trail and Fairbanks Ave with the assistance of the Engineering Dept. and DPW.
- c) Four trail car parking spots were set up on the Weston Rd. /Linden St. MLP land and a Map House was added at that location.
- d) A Town Encroachment Policy, initiated at the initiative of our Committee, is close to completion. It is expected to facilitate addressing abutters' actions on Town land on which trails exist.
- e) Graffiti painting has seen increased activity. Work with the School Committee and the Wellesley Police is ongoing to address this difficult problem to resolve. "No Spray Painting" signs have been put up.
- f) Four dog refuse bag stations are in use after adding one this year. The Committee funds and maintains these.
- g) A footbridge behind Boston Sports Club on the Sudbury Path realigned and anchored.
- h) Footbridges off Chesterton Rd at the Boulder Brook Reservation were replaced by an Eagle Scout project.
- i) An eroded trail along the Abbott Rd section of the Centennial Reservation Trail was rerouted and a bridge built over a wet section as part of an Eagle Scout project.
- j) Funds were committed to the DPW for the repair of the driveway to the Centennial Reservation parking area.

Trail Network Expansion

The Committee worked with the NRC and the DCR as the DCR rebuilt the Lower Falls Railroad Bridge. The Committee monitors the 27 Washington St property development in anticipation of extending the Charles River Path through their property. A trail extension on DCR land to and along Boulevard Rd. was completed. There are 25 miles of marked trails throughout the Town.

Community Outreach

The Committee led three walks in the fall and four walks in the spring. There were 68 participants in the fall and 41 walkers in the spring. Our fourth Kids' Trails Day in Centennial Reservation took place in the fall, with 70 kids and adults looking for treasure boxes using written clues (similar to Letterboxing). Over 1000 have attended our walks and events since the program inception in FY03.

The Web site continues to provide on-line access to information about the trails network and Trail Committee sponsored events. The web site is updated on a regular basis and improvements are made to keep the site relevant and user friendly. A Facebook page was initiated and has attracted 37 "friends" so far.

Trail Mapping

The Town's Network and Information Systems Department has been very cooperative in providing trail maps.

TrailsSupport

The Trails Committee appreciates the cooperation it receives from MassBay Community College, Babson College, Wellesley College, Olin College, the Town of Needham and the MWRA for allowing the trails network to cross their properties.

As always the Committee is grateful for the help received from the Selectmen, the Police Department, Department of Public Works, Municipal Light Plant, Natural Resource Commission, Wetlands Protection Committee, Planning Board, Water Department, the Boy and Girl Scout Troops in Wellesley, Haynes Management Inc, Nelson Properties, and the Beard Way Homeowners Association.

NRC'S TREE PROTECTION AND ENHANCEMENT PROGRAMS

Public Shade Tree Replacement Program

The NRC, which acts as the Town's Tree Wardens, in conjunction with the Department of Public Works, manages a proactive and ambitious public shade tree management program that preserves and protects over 3,000 Town-owned trees for the enjoyment of the public and the enhancement of Wellesley's environment. Routine maintenance is conducted on a four-year cycle to provide adequate safety pruning to all of these trees. The care includes: vandalism repairs as needed; storm damage repairs; shade and park tree planting; management of new trees for one or two years; tree and stump removals as necessary; and other tree care according to need.

Trees are essential to Wellesley's character as a green, shady, residential town. Tree planting maintains Wellesley's property values and quality of life, reduces sound and glare, improves air quality, helps prevent climate change through carbon absorption, replenishes groundwater, reduces erosion, buffers weather changes, adds beauty, inspires tranquility, screens unsightly areas, and separates incompatible uses. This year, 124 new trees were planted by the NRC and DPW, primarily on public land. At Town Meeting this year, \$30,000 was appropriated for new tree plantings throughout Town and for shade tree replacement of trees lost due to age, disease, storms and road reconstruction projects.

Public Shade Tree Removal Hearings and Appeals

Only when a public shade tree is severely diseased, is in substantial decline, or threatens public safety does the NRC and the DPW propose to remove a tree, and then only after a Public Hearing that gives residents an opportunity to voice their concerns and opinions about the proposed tree removal. In FY11, the NRC held four Public Shade Tree Removal Hearings. There was one appeal of an NRC decision to remove a public shade tree and the Board of Selectmen upheld the NRC's decision.

2011 Annual Town Meeting Approves NRC Use of Funds from Boulder Brook Reservation Tree Removal Insurance Settlement

In FY11, the NRC accepted a responsible parties' insurance settlement totaling \$140,000 for the unauthorized removal of approximately 100 trees in the NRC Boulder Brook Reservation. At the 2011 Annual Town Meeting the NRC's proposal to use these funds was approved as follows: \$21,600 for Boulder Brook Reservation site restoration and mitigation work related to tree removals; \$5,400 for independent arborist assessment of Boulder Brook Reservation tree removals and restoration work; \$4,400 for DPW assessment work related to tree removals; and \$108,600 for priority tree stabilization and removal work in Fuller Brook Park as identified in the *Fuller Brook Park Vegetation Assessment and Treatment Recommendations Report*, January 2011, prepared by Tree Specialists, Inc. for the NRC.

NRC Works With DPW and the State To Develop A Tree Inventory Program

In FY11, the NRC continued to work with the Massachusetts Urban and Community Forestry Division and the Parks Division of the Dept. of Public Works in the development of a State Tree Inventory Program tailored for the Town of Wellesley. The State has developed a database computer system entitled "Tree Keeper" that will assist towns in developing an effective database system to track the health, location, and other information about trees. The State is initially providing the software free to towns in order to help it develop an inventory listing of urban and community trees. The NRC is working with the Town GIS Department and the DPW to capture important features of this system.

Massachusetts Honors Wellesley with 28th-Year Tree City USA Award

In May 2011, Wellesley was awarded the Tree City USA "Annual Award" for excellence in the management and nurturing of public shade trees for the 28th consecutive year. Only 80 of the 351 towns and cities in Massachusetts have ever received this award, and Wellesley has received it longer than any other. The NRC serves as the Town's Park Commission and Tree Warden and, together with the Department of Public Works, the NRC promotes a "Shade Trees Make the Difference" campaign to encourage support for shade trees throughout the Town. To be eligible for the Tree City Award, Wellesley had to spend at least \$2 per capita on urban forestry, enforce laws that protect public trees and hold an Arbor Day celebration and meet other standards.

This award is a testament to the Town's long tradition of valuing trees and open spaces. Wellesley founded a Park Commission in 1888 to landscape avenues and parks, and it was one of the first boards established in the Town.

Urban and community forests are visible signs that our community has a sense of pride and that it has been highly valued by residents for a long time. The environmental benefits of urban and community forests are many but they can be summarized as follows:

- Our forested streets and parks help define the character of our community and offer the functional human benefits of noise reduction, cooling shade, visual screening, enhanced property values, economic growth, community pride, reduction of crime and more rapid recovery from illnesses;
- Our forests reduce levels of pollutants such as solid particles, ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide and others that seriously impact human physical, mental and emotional health negatively;
- Trees are the Town's most important natural infrastructure; and
- Our forests reduce heating and cooling needs for residential buildings thereby reducing costs, reduce the "urban heat island effect" (localized heating due to the preponderance of black topped surfaces) to provide a more human friendly living environment, reduce rainfall runoff and erosion thereby improving water quality and quicker re-charge of local aquifers, function as habitat for wildlife to enrich human enjoyment and reduce global warming for the long term security of the Earth.

Winter Moth Caterpillar Control Town Tree Protection Program

In FY11, in response to a significant increase in damage to Town trees by the invasive insect known as the "winter moth caterpillar," the NRC worked with the DPW to implement its fourth year

of a proactive program to address this problem and protect the Town's trees. Last year, the DPW proposed, and the NRC approved, a program to spray approx. 800 public trees with an environmentally safe spinosad product called "Conserve" to control damage from the winter moth caterpillar.

Winter Moth State Biological Control Project at Centennial Reservation

Over the past two years, a team of scientists from the State Department of Conservation and Recreation released approximately 1,000 parasitic flies in Centennial Reservation in an effort to test whether they can be used to control the invasion of the winter moth, which is stripping trees of their foliage throughout the State, especially in Eastern Massachusetts. In FY11 the NRC approved the continuation of this project with additional fly releases in Centennial Reservation, which is the largest release of the flies in the State. Other releases were also made in Hingham, Falmouth and Wenham. Professor Joseph Elkinton, a professor of entomology at UMASS Amherst, organized this joint project between UMASS, the Federal government, and the State Department of Conservation and Recreation. The specie of fly released, which is the "cyzenis albicans," is a natural enemy of the winter moth and has been released in other areas to help eradicate the winter moth invasions. The scientists believe that the fly will only attack the winter moth and not other species, and that it will likely take years for the flies to have a significant impact on the large number of winter moths.

Scenic Roads Tree Protection Enforcement

Pursuant to its authority as Town Tree Warden and under M.G.L. Chapter 40, sec. 15c, the NRC protects all public shade trees along the six scenic roads in Wellesley that have been designated by vote of Town Meeting as scenic roads: Benvenue Street, Cartwright Road, Cheney Drive, Pond Road, Squirrel Road, and the Waterway/Brookway. Under the statutory requirements of this law, the NRC is required to hold a public hearing to review proposed removal of trees along any designated scenic road. No public shade tree removal hearings on a scenic road were held in FY11. The NRC supported the Friends of Brookside's proposal to have Brookside Road designated a Scenic Road, which was approved at the 2011 Annual Town Meeting.

NRC's EFFORTS TO PROTECT TOWN LAND AND WATER RESOURCES

Lawns, Buffers and Water Quality

Maintenance of the Town's half-dozen major and minor ponds is essential to Wellesley's quality of life. Under modern circumstances that means periodic dredging. Wellesley's ponds were largely weed-free up to the end of World War II. That was when retooling wartime industries and suburban developers sold the parents of the baby boomers on evergreen lawns. Sweeping green lawns symbolized English estates, where cool, damp weather and grazing sheep made them easy to maintain. But in America, grass is supposed to go to seed and become hay in July. Currently, Americans pour priceless water, fertilizer and herbicides onto their lawns, and the nutrients from these unnatural lawns pour into our streams, lakes and ponds. That is why ponds need dredging. In the words of the Town's Moses Pond consultant Dr. Ken Wagner, "Green lawns mean green lakes."

The quality of Wellesley's water supply and the cost of maintaining our ponds are directly related to the amount of pesticides and fertilizers used by Town residents. Perfectly manicured lawns need to be made socially unacceptable. Buffers as wide as possible need to be planted between overfed

lawns and golf courses and storm drains and ponds.

NRC Pond Restoration Master Plan Implementation

The Commission continues to implement its *Pond Restoration Master Plan*, which sets priorities for restoring the Town's beautiful ponds. The NRC's Master Plan was developed in conjunction with the DPW and was endorsed in a resolution approved unanimously by Town Meeting in March 1998. As a capital budget priority, the NRC supports an alternating schedule of dredging feasibility studies and actual dredging for the next several years. Dredging studies are required because the method of dredging must be determined, the quality of the dredged material must be tested, and suitable disposal sites must be found. There are contracts to be written and issues of truck access, hours of operation, and the like to be resolved before work starts. To date, Reeds Pond, Bezanson Pond, Rockridge Pond and the Town Hall Duck Pond have all been successfully restored. A long-term, \$2 million comprehensive management plan has been developed for Morses Pond and is currently being implemented (see below). Next up are feasibility studies for State Street Pond (aka Skating Pond), and Abbotts Pond.

The NRC asks every resident to take personal action to prevent pesticides, fertilizer and herbicides from contaminating Wellesley's natural resources including the Town's drinking water supply.

Development of the Morses Pond Comprehensive Management Plan

Morses Pond is Wellesley's preeminent natural, recreational and scenic resource. Approximately 40% of the Town's water supply is pumped from municipal wells located at the Pond, and the public beach and the open space bordering the pond have been used by many generations of Town residents. But Morse's Pond is facing a wide range of problems due to the fact that it provides drainage for an 8.8 square mile watershed, including commercial industry and several miles of heavily traveled Route 9. These problems, which include eutrophication and the increasing and dramatic spread of aquatic invasive plants and algae, support the immediate need for a comprehensive management plan to examine the options available to address these problems. Over 300 residents from throughout the Town signed a Citizens Petition in support of the development of this plan, which documents the community's broad-based support and concern for the health of the Pond.

In recognition of the need to address the health of Morses Pond, the CPC, Advisory Committee and Town Meeting supported funding for the development of a Comprehensive Management Plan for the pond at a cost of \$150,000, with CPC and Advisory sharing the costs evenly. The Board of Public Works, NRC and Recreation Commission formed the Morses Pond Ad Hoc Committee (MPAHC) to work with the Town's Pond Consultant, Dr. Ken Wagner, of ENSR, for a year and a half in evaluating options for the pond's preservation and restoration. As part of this evaluation process, the NRC voted to affirm its adherence to its Integrated Pest Management Policy that prohibits the use of all pesticides, including fluridone, in Morses Pond. As a result of this vote, fluridone was not considered as a management technique to be used in Morses Pond and other safer and non-toxic management alternatives form the Comprehensive Management Plan for the Pond. The plan, completed and approved by the three boards in Nov. 2005, outlines the options evaluated, makes recommendations for implementation, identifies a 5-year timeline for implementation, and costs for the implementation of the identified options. The three boards, spearheaded by the NRC, work collaboratively in managing the pond and implementing the Plan.

Implementation of the Morses Pond Comprehensive Management Plan

Over the past several years, the NRC has been successful in requesting and securing over \$1,000,000 in funding from the Advisory Committee, the Community Preservation Committee, Town Meeting and Town Voters for the implementation of the Morses Pond Comprehensive Management Plan. NRC Commissioner Neal Seaborn and the Town's Morses Pond Consultant, Dr. Ken Wagner, made a presentation to the 2007 Annual Town Meeting, which approved funding that included \$153,000 in capital funds from the Community Preservation Act Fund for a phosphorus and sediment inactivation station that will reduce the amount of phosphorus and sedimentation coming into the pond. In addition, \$650,000 was approved by Town Meeting and the Town's Voters in a debt exclusion vote for funding the design, permitting, construction and monitoring for the dredging of the northern portion of Morses Pond, which currently acts as a sediment and nutrient detention basin, but which has become too shallow over the years. The Town hired an environmental consultant, Apex Companies, to secure all required permits and oversee the construction bidding efforts for this project. The submitted bids exceeded the project's budget and the Town is currently evaluating additional funding options to support the implementation of this dredging project.

In FY11, Town meeting appropriated to the NRC \$166,500 in operating costs related to the Morses Pond Plan, including funds for operating a new weed harvester whose procurement funding was approved in FY06 and which was purchased in FY07. The weed harvester is operated through a program using DPW personnel. Additional operating expenses for FY11 included: operation of the phosphorus inactivation station that was installed in the spring of 2008; funding to hire a professional pond manager; organizing volunteer manual harvesting throughout the pond to complement the Town's weed harvesting efforts; and the design of a Low Impact Development demonstration sites.

The NRC is the lead board for the implementation of this project and works collaboratively with the Board of Public Works and the Recreation Commission to implement the Morses Pond Comprehensive Management Plan. These three boards have formed the Morses Pond Management Committee, which oversees the implementation and management of the Plan.

Development of a Morses Pond Watershed Education Website Prototype

In FY11, NRC member Neal Seaborn and the NRC Director Janet Bowser continued to work with Dr. Wagner and his staff to develop a Morses Pond Watershed Education Website Prototype that will help educate residents regarding action steps that they can take to help protect the watershed and improve the pond's water quality.

NRC Town-Wide Residential Lawn Care Questionnaire and Education Effort

Recently, a Town-wide Residential Lawn Care Questionnaire was developed to evaluate the present state of lawn care practices as reported by homeowners in Wellesley, and portions of Natick and Weston in the Morses Pond Watershed. The survey responses indicated that a majority of Wellesley residents are interested in "going green" and using environmentally friendly lawn care practices. It is also clear that a majority of Wellesley residents have a lack of knowledge about the type and quantities of pesticides and fertilizers applied to their lawns, due to the fact that a significant number of residents outsource their lawn care management. The questionnaire, which residents could respond to on-line or by mail, had a tremendous response rate and is helping the NRC better understand the Town's watershed management needs and how to develop an educational program to protect the Town's land and water resources.

NRC's EDUCATIONAL EFFORTS TO PROTECT WELLESLEY'S NATURAL RESOURCES

NRC's Pesticide Awareness and Organic Land Care Educational Campaign

The mission of the NRC's Wellesley Pesticide Awareness Campaign (WPAC) is to reduce the exposure of children and adults to pesticides and pesticide breakdown products which are known or probable health hazards, to protect Wellesley's water supply, and to restore Wellesley's land use style to healthier and less toxic land care practices.

Ten years ago, the NRC was instrumental in hiring Dr. Sarah Little as Wellesley's first Pesticide Awareness Coordinator, the first such local position in the state. Dr. Little resigned from her position with the Town in order to pursue her work on a more regional level, and the NRC thanks Dr. Little for her continuing efforts to help residents reduce pesticide use and educate residents about the harmful effects of toxics.

This year, the NRC continued to implement grants from both the Mass. Department of Environmental Protection and from the Mass. Toxics Use Reduction Network, to develop a local and regional Pesticide Use Reduction and Education Program. The NRC's Pesticide Awareness Campaign continued to focus on educating Town residents about reducing pesticide use in and out of the home, growing and caring for an environmentally safe lawn and garden, and on learning about the health risks posed by pesticides. For more information on alternatives to pesticides, and for a listing of organic lawn care companies, please visit the NRC's pesticide use reduction website at www.wellesleyma.gov/nrc/pesticide.

There is an increasing body of scientific evidence that synthetic pesticides in extremely small amounts can disrupt hormones, particularly in the fetus and in young children. Around the world deformed or absent amphibians—frogs, salamanders, toads—are signaling that something pervasive is terribly wrong. Please contact the NRC office for more information, and we encourage residents to take the NRC "Pledge to Learn About Alternatives to Pesticides" and receive a "Safe and Pesticide-Free Lawn" sign for your yard. Poison is bad for people as well as pets. Talk with your veterinarian if you want to know what lawn chemicals are doing to dogs and cats. Under no circumstances allow your children to play on recently treated lawns. If you are thinking about lightening your workload by reducing the size of your lawn, your family and all of us will be healthier.

This year, the Pesticide Awareness Campaign included extensive public education efforts including producing numerous fact sheets and brochures. Eight years ago, the NRC and the School Committee approved an Integrated Pest Management (IPM) Policy for land under their respective control, and the NRC continues to work with the DPW, the Board of Health and the School Committee to implement the policy. The NRC continues to work with the Department of Public Works, the Health Department and the School Department to track the Town's annual pesticide purchases and work towards reducing and eventually eliminating the use of pesticides on Town property.

The NRC continues to be concerned with the amount of pesticides and fertilizers used within the Town on private residences, and one of its top priorities is to continue its education program aimed at reducing the amount of pesticides and fertilizers used in Town in order to protect our natural resources and drinking water supply.

NRC's Healthy Lawns and Sustainability Program, April 26, 2011

The NRC worked with local environmentalist Jackson Maddnick and the Town's Sustainable Energy Committee to organize a Healthy Lawns and Landscape and Sustainability Educational Program on April 26, 2011. The event was covered by the local cable station and a reporter from National Public Radio also attended and they aired a portion of the program nationally. The event was very well attended and the NRC's Wellesley Green Campaign material was distributed.

NRC Works With the Wellesley Country Club Regarding Pesticide Use and Development of an Integrated Pest Management Plan

In FY11, the NRC continued to work with representatives of the Wellesley Country Club regarding their pesticide use and the continued evolution of an Integrated Pest Management (IPM) Plan. In May 2007, the Country Club and its consultant developed a "Turfgrass Management Plan Using an Integrated Pest Management Approach" in order to formalize its current turf and pest management practices with an effort to reduce the amount of pesticides it uses on the golf course, which is located in a Water Supply Protection District. The NRC continues to work with the Country Club to reduce the amount of pesticides and fertilizer they use on their property.

NRC's Vernal Pool Education Project

In FY11, the NRC Director organized this annual effort to protect Wellesley's vernal pools that includes a vernal pool program to educate the public about vernal pools and the many species that inhabit them. Although Wellesley's Wetlands Protection Bylaw protects all State "certifiable" vernal pools, including their associated upland habitats (areas within 100 feet of the pools), finding vernal pools is the first step in protecting them. Approximately 50 children and their parents attended this year's program, held on May 7, 2011.

NRC Supports Organic Lawn Care Services in Wellesley

As part of the NRC's Pesticide Awareness and Organic Land Care Educational Campaign, the NRC has reached out to lawn care and landscape service companies doing business in Wellesley to support and educate them regarding the need to reduce and eliminate the use of herbicides, pesticides and synthetic fertilizers in order to protect public health, our natural resources and the Town's drinking water supply.

NRC Collaboration with the Board of Health on Healthy Living Grant

In FY11, the NRC Director continued to work with the Health Department on a Wellesley Healthy Living Grant that is being funded through the West Suburban Community Health Network. The NRC continues to work with the Board of Health on this project to encourage residents to use of the Town's Trail Systems and natural resources, as well as integrating a range of healthy living approaches in the home and encouraging the use of non-toxic alternatives.

NRC's Pesticide-Free Gardening Education Effort

The NRC continues to educate and encourage residents to garden with perennials and foliage grasses that require no fertilizer or pesticides and only rainwater to flourish. The NRC has created three brochures towards this goal: *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. The three brochures are available in the NRC office in Town Hall.

NRC Administrative Oversight of the Brookside Community Garden

The Brookside Community Garden at Oakland Street and Brookside Road had another successful year. The NRC provides administrative oversight of the community garden for the DPW, which owns the land. The Town requires that all gardeners at Brookside Garden manage their gardens organically with no use of pesticides. This year, the DPW completed garden landscape improvements including tree pruning to improve the area and accessibility. There were many new gardeners who created beautiful gardens and added to the sense of community at Brookside. In addition, the NRC and the gardeners have initiated the establishment of a Gardener Management Committee to manage the garden with NRC oversight.

NRC Collaboration with Wellesley Cancer Prevention Project

The NRC continues to support the work of the Wellesley Cancer Prevention Project (WCPP), which focuses on assessing the relationship between environmental issues and the incidence of cancer. The NRC looks forward to continuing to work with and support the WCPP's educational efforts aimed at cancer reduction and awareness.

NRC'S WETLANDS PROTECTION COMMITTEE

The NRC serves as the Town's Conservation Commission and appoints the five volunteer members, and two associates, of its Wetlands Protection Committee (WPC). The NRC delegates to the WPC the power and authority to administer and enforce the Wetlands Protection Act (G.L. Chapter 131, Section 40) and Wellesley's Wetlands Protection Bylaw (Article 44).

Wetlands Permits

In FY11, the WPC held 23 public meetings, reviewing 85 filings made under the State Wetlands Protection Act and the Wellesley Wetlands Protection Bylaw. Hearings included the review of 25 new Notices of Intent (NOI), 32 Requests for Determination of Applicability, 1 Abbreviated Notice of Resource Area Delineation, 3 Requests to amend existing Orders of Conditions and 32 Requests for Certificates of Compliance. In FY11, the Committee issued 23 Orders of Conditions (wetland permits); 22 Certificates of Compliance (for completed projects), 31 Determinations, 3 Amended Orders of Conditions, 1 Order of Resource Area Delineation and 4 Enforcement Orders. None of the WPC's decisions were appealed. Wetland fees received in FY11 totaled \$9,792.50

Wetlands Protection Bylaw

The Wellesley Wetlands Protection Bylaw (Article 44) was approved by Town Meeting on April 2, 2002 and became effective on September 12, 2002. The WPC adopted application Filing Fees on October 9, 2003; Regulations, including Performance Standards in October 2003 (revised on June 24, 2004 and August 28, 2008); and Rules for Hiring Outside Consultants on April 22, 2004.

Bylaw Resource Areas. The following areas (referred to as "resource areas") are protected by Wellesley's Wetlands Protection Bylaw:

Wetlands *marshes, wet meadows, bogs, swamps, banks, reservoirs,
Lakes, ponds, rivers, streams, creeks*

<u>Isolated wetlands</u>	containing at least 2,500 square feet of surface area;
<u>Upland areas</u>	land within 100 feet of the above resource areas;
<u>Vernal pool habitats</u>	that include the upland areas within 100 feet of vernal pools;
<u>200 foot Riverfront</u>	land within 200 feet of perennial streams/ivers; and
<u>Lands that flood</u>	bordering land subject to flooding (i.e., abutting wetlands) and; isolated land subject to flooding (i.e., upland area depressions)

(the above floodplains do not have buffer zones)

The Wetlands Permitting Process

Anyone proposing to alter any areas that are located within 100 feet of a wetland or within 200 feet of a perennial stream must file a NOI under State and Town wetland protection laws prior to commencing any activities. If the applicant is in any doubt as to whether an activity is subject to wetland regulation (i.e. whether a wetland permit would be required), they should file a Request for a Determination of Applicability (an informal process to ask the WPC to determine whether a NOI needs to be filed for the proposed project).

The WPC regularly processes several kinds of applications under the State Act and Town Bylaw. The following applications are the most commonly filed with the Committee:

1. Request for Determination of Applicability (RFD) – to determine whether the law applies to a particular area and project.
2. Notice of Intent (NOI) – for projects that propose to alter a State or town resource area.
3. Abbreviated Notice of Resource Area Delineation (ANRAD) – for the review of wetland and/or upland resource area boundary lines, or for “simplified review” certification.

The response to an RFD is a Determination of Applicability (DOA). The DOA establishes which portions of a property are subject to the law and which are not. A positive DOA would be issued for proposed work that requires the filing of a NOI. The WPC’s response to an NOI is an Order of Conditions (OOC) to do the work. This can include either a denial of the project, or an approval that can spell out in detail the terms under which the proposed work can be performed. An ANRAD can be filed prior to a NOI, as it allows an applicant to receive certification for the exact boundaries and status of their property’s resource areas before designing a project and filing a NOI. An Order of Resource Area Delineation (ORAD) is the response to an ANRAD, and addresses resource area and boundary delineations, as well as “simplified reviews.” The above Orders and Determinations are valid for three years. The wetlands administrator is available to help guide residents or their representatives through the wetland permitting process.

Significant Wetlands Protection Projects and Concerns:

Protecting Wellesley’s rivers, streams and ponds: Most of the permit applications that are received by the WPC involve proposed projects that are located in riverfront areas or near streams or ponds. Filings often propose the expansion of an existing building, the replacement of an existing building with a larger building, or the removal of natural vegetation (often mature trees) for the creation of grassed lawns. Protecting our streams and their receiving water bodies from the cumulative adverse effects of resource area alterations, while accommodating reasonable expectations of property owners, is an on-going concern.

Buffer Zone Landscaping Protection. The WPC endeavors to protect our lakes and streams by requiring natural buffer zones between manicured lawns and wetland areas. This, unfortunately, only provides minimal protection to Wellesley’s natural assets, since runoff from manicured lawns will still end up running into streets, street drains, and eventually into our lakes, ponds and streams. Therefore, the WPC encourages homeowners and developers to use native plants in their landscaping plans. Native plants are beautiful, have excellent wildlife habitat

value, are drought resistant, and are low/no-maintenance. Realizing that modern civilization requires certain tradeoffs, the WPC, in collaboration with the NRC's Pesticide Awareness Campaign, seeks to educate residents about the adverse effects of their modern ways, such as:

- Purchasing fertilizers and chemicals for the sole purpose of creating greener lawns. These chemicals will eventually end up in our lakes and ponds, playing a major role in their accelerated rate of eutrophication.
- Applying herbicides and chemicals for the sole purpose of killing non-grass species. Herbicides and chemicals can have serious side effects to wildlife, to neighboring and downstream vegetation, and to human health.
- Misuse/Overuse of precious water resources. Installing irrigation systems and freely using limited water resources for the perfect lawn threatens our water supply. New England was blessed with an abundant supply of pure groundwater, but over the years, that supply has been threatened by overuse and misuse. The Committee works to protect the Town's water resources.

Summary of Significant FY11 Wetlands Permitting

Sixteen of the twenty three Orders of Conditions issued by the Wetlands Protection Committee were for residential projects ranging in scope and scale from new homes, drainage and landscape renovations and wetlands enhancement work. In addition to the residential projects, the Wetlands Protection Committee reviewed and permitted several municipal, commercial and institutional projects including parking and landscape improvements at Babson College, renovations to the Walnut Street Bridge, expansion and improvement of sidewalks in the Wellesley High School neighborhood, drainage improvements on Cliff Road, the commercial redevelopment of 442 Washington Street (the new Whole Foods store) and a large scale wetlands restoration project at the Town's Recycling and Disposal Facility as required by the Mass. Department of Environmental Protection. In addition to the Orders of Conditions, the Committee issued an Order of Resource Area Delineation for the Fuller Brook Park. The Committee is also continuing to review a Notice of Intent filed by the Wellesley Country Club proposing to construct a maintenance facility within the Riverfront Area of Rosemary Brook. The review of the Country Club's proposed project has attracted a high degree of public concern and participation in the permitting process.

In permitting these projects under the state and town wetlands protection laws, the Committee set conditions on work and on the long term management of project sites to ensure wetland areas are not harmed and continue to function during and after construction. In several cases, the Committee worked with applicants to incorporate features into their projects that will greatly improve the health of function of wetlands associated with project sites. As part of the commercial redevelopment project at 442 Washington Street (Whole Foods), an extensive new storm water management system will be installed that will collect, treat and infiltrate storm water runoff from the site. The installation and operation of the storm water system will greatly improve the quality of water flowing off the site and into the adjacent stream and Fuller Brook. At the Town's Recycling and Disposal Facility, the Committee worked with the Department of Public Works to permit the restoration of over 4,000 square feet of Bordering Vegetated Wetlands as required by the Mass. Department of Environmental Protection. As part of the Town's Fuller Brook Park Preservation Plan, the Committee reviewed and approved of the delineation of approximately 3 miles of Bank and large areas of Bordering Land Subject to Flooding and Bordering Vegetated Wetlands. The approved delineation of these wetlands areas will help guide the design of future improvements to Fuller Brook Park.

Summary of Significant On-going Permitted Projects

In FY11, the WPC continued to support contractors, property owners, other municipal departments and development professionals working on on-going projects with active wetlands permits. Examples of such work included conducting on-site meetings and inspections with property owners, contractors and engineers at construction project sites to resolve permit compliance issues, and provide site specific wetlands education.

As a condition in all permits for work issued by the Wetlands Protection Committee, the Committee and/or Conservation Administrator are obligated to conduct inspections of project sites before, during and after construction to ensure wetlands are protected and projects are completed in compliance with their permits. In FY11, the NRC and the WPC hired a Wetlands Field Inspector to assistance with inspections at project sites with active wetlands permits.

Summary of Wetlands Enforcement Actions

The Wetlands Protection Committee issued four Enforcement Orders in FY11 for work occurring in violation of permits and/or in violation of state and local wetlands protection laws. These Enforcement Orders were issued for violations at Wellesley College, the Wellesley Country Club, Guernsey Sanctuary and 990 Worcester Street. Enforcement Orders issued in FY10 for 978 Worcester Street, 7 Cedarbrook Road and 934 Worcester Street remained open during FY11 as work to correct violations remained ongoing.

The Enforcement Order for Wellesley College was issued for the unpermitted removal of approximately 30 mature hemlock trees from the buffer zone of Lake Waban. The Enforcement Order required the College to stabilize the steep slope where tree removals occurred and to develop and implement a large scale buffer zone restoration/replanting plan. Since the issuance of the Enforcement Order, the College has stabilized the slope and continues to implement the replanting plan. The Enforcement Order for the Wellesley Country Club was issued for violations of Order of Conditions MA DEP #324-565 and violations of the state and town wetlands protection laws for the unpermitted operation of a landscape maintenance area and associated unpermitted alteration of Riverfront Area of Rosemary Brook. The Country Club has complied with the Enforcement Order having removed unpermitted fill and debris and stabilized the disturbed areas. The Guernsey Sanctuary Enforcement Order was issued to the Wellesley Conservation Council, a residential abutter and abutter's private landscape service requiring that vegetation removal from Bordering Vegetated Wetlands and buffer zone of Sabrina Lake cease. The Enforcement Order also required the parties to file a Notice of Intent and receive an Order of Conditions for vegetation removal and management prior to mowing or otherwise removing vegetation from areas subject to the wetlands protection laws. The 990 Worcester Street Enforcement Order was issued for the illegal dumping and disposal of approximately 1,250 cubic yards of snow and debris within the Riverfront Area of Bogle Brook, Bordering Land Subject to Flooding and wetlands buffer zone. Upon receipt of the Enforcement Order, the violator immediately complied and removed the material from the site and disposed of it at a licensed snow dump.

Summary of Wetlands Permit Appeals

None of the decisions issued by the Wetlands Protection Committee were appealed in FY11.

Wetlands Committee Membership

In FY11 Robert Collins was appointed by the NRC to serve as a member of the Wetlands Protection Committee. Dr. Carlos Gimeno and Laurel Landers resigned from the Committee and their efforts to help protect the Town's natural resources are greatly appreciated. At the end of FY11, the membership of the Wetlands Protection Committee consisted of Eric Seaborn, chair; Jay Hamnerness; J. Stanley Waugh; Robert Collins and Derek Redgate, Associate member.

Natural Resources Department Staff

The NRC staff consists of a full-time director, a full-time conservation administrator, a full-time secretary position that is shared by two employees, and a part-time environmental education coordinator.

NRC Director Janet Bowser was reappointed this year to serve on the Massachusetts Municipal Association's Environmental Policy Committee. Ms. Bowser continues to serve as an elected member of the Executive Board of the Massachusetts Society of Municipal Conservation Professionals, which focuses on state-wide and local issues affecting municipal conservation and natural resource protection. In addition, throughout FY11 Ms. Bowser provided extensive professional advice, oversight and management assistance to other Town Departments, elected officials, and the NRC's subcommittee's including the Morses Pond Management Committee, Pesticide Awareness Committee, Trails Committee, Wetlands Protection Committee, Playing Fields Task Force, the Integrated Pest Management Advisory Committee and the Fuller Brook Park Coordinating Committee.

NRC and Committee Membership and Elections

Neal Seaborn, who served as NRC Chairman this past year, and Joan Gaughan were re-elected to the NRC for three-year terms. Bob White was reelected Chairman of the Trails Committee at the beginning of FY11 and later resigned as chairman and Miguel Lessing was elected chairman of that committee towards the end of FY11. In FY11 Eric Seaborn continued to serve as Chair of the Wetlands Protection Committee.

The NRC thanks all its volunteers for their time and considerable effort towards protecting our natural resources.

Citizen Inquiries and Educational Outreach

The NRC is committed to providing the highest level of service to the Town's citizens. The Department averages over 120 citizen inquiries per week, and many of these inquiries involve walk-in office visits after citizens are referred to the NRC by other Town Departments. The NRC Director, staff and volunteers assist citizens with a wide range of questions concerning the use and improvement of park, playground, forest, conservation and recreational land, acquisition and protection of open space, public shade tree regulations, wetlands protection requirements, vernal pool protection, toxics and pesticide reduction, encroachment corrections, and the process of project approval and scheduling of meetings with the NRC and its committees.

Wildlife Notes

Wellesley is fortunate to have a wide diversity of wildlife throughout its open space, and wildlife habitat protection is one of the NRC's top land protection priorities in order to preserve and protect this diversity. Several red-tailed and broad-winged hawks were seen in Centennial Reservation, the Town Forest, and near the Town Hall Duck Pond and wild turkeys were once again sighted throughout Town. Many residents enjoy fishing for bass, pike, pickerel and the occasional trout in

the Town's ponds and streams. Deer, coyotes, foxes, possums, opossums, rabbits, porcupines, weasels, fishers, woodchucks, skunks and turtles were among the wildlife spotted throughout the NRC's conservation reservations. Great blue herons, ducks including several wood ducks and hooded mergansers, ring-necked pheasants, northern bobwhites, great horned owls, woodpeckers, eastern bluebirds, warblers, finches, sparrows and many other species of birds continued to be in abundance throughout the Town's open space this year.

Volunteers and Donors

Volunteers make Wellesley. The NRC needs and uses volunteers for its committees. We need Friends groups for every park and pond in Town. We need trail monitors. We need wildlife inventory compilers. We need people willing to take the initiative. Waiting for you is work, friendship and the old-fashioned sense of a job well done. Please call the NRC, the Selectmen's office or the department that interests you.

Many thanks to all the volunteers, especially the NRC's Wetlands Protection Committee, Trails Committee and the Girl Scouts and Boy Scouts, who help protect Wellesley's open space and keep it clean on a continuing basis! Generous gifts were received this year from the Wellesley House and Garden Club and the Wellesley Garden Study Group. *Thank you!*

Many of the benches, trees and landscape in Wellesley are gifts to the Town in memory of someone dear. The Commission needs gifts to make additional improvements throughout Town and especially along the Fuller Brook Park. Will you help? Please contact the NRC office if you would like more information and to volunteer.

Respectfully submitted,

NATURAL RESOURCES COMMISSION

Neal Seaborn, Chairman
Heidi K. Gross, Vice Chairman
Ursula G. King, Secretary
Paul A. Cramer
Joan Gaughan

Janet Hartke Bowser, Esq.
NRC Director

