

TOWN OF NEW BOSTON, NEW HAMPSHIRE



Open Space Plan

Adopted:
May 11, 2010
New Boston Planning Board

Town of New Boston, New Hampshire

Open Space Plan

Prepared by the
Southern New Hampshire Planning Commission
and the New Boston Open Space Committee
For the Town of New Boston

This project was funded in part by a grant from the New
Hampshire Department of Environmental Services
under the Regional Environmental Planning Program.

Acknowledgements

The Planning Board and Conservation Commission of the Town of New Boston
wish to thank the following individuals for volunteering their time and energy
to complete the New Boston Open Space Plan:

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New Boston Open Space Plan

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Overview

Open space planning in New Hampshire is an ongoing activity led mainly by conservation commissions and planning boards. This Open Space plan will become part of the New Boston Master Plan. Volunteers from the Town of New Boston Open Space Committee (NBOSC) have created this Open Space Plan to:

- Outline the benefits of open space,
- Explain the need for both land protection and changes in land use practices,
- Prioritize its criteria for land preservation,
- Identify voluntary and regulatory strategies to maintain healthy and functional open space as the town continues to grow,
- Identify resources for land protection strategies, and
- Recommend actions to improve protection of open space in New Boston.

Between 2000 and 2005, New Boston has grown from a population of 4,138 to 4,970, an increase of 17.9%. The town's population is projected to increase to 5,450 by 2015, an increase of 9.6% (New Hampshire Office of Energy and Planning, NHOEP).

Development associated with this growth threatens the rural character and the existing open space of the town. Open space has economic, social, health, and environmental benefits; and this plan will help to realize those benefits while helping to preserve existing open lands as well as shape growth.

Open space provides many benefits for New Boston citizens, including:

- **Health:** Open space lands, particularly in the form of forested areas and aquatic buffers, filter pollutants out of the air, help prevent contaminated runoff, and protect the water supply.
- **Economic:** Cost of community service studies show that towns that maintain open land and manage growth save hundreds of dollars per family in infrastructure costs for roads, safety services, and other municipal expenses.
- **Rural character:** New Boston takes pride in its rural qualities, which add many aesthetic and lifestyle values, such as improved visibility of the night sky and the town's quiet, scenic and uncongested roads.
- **Recreation:** New Boston residents can benefit from a host of recreational opportunities afforded through open space.
- **Ecology:** Open space lands support and preserve the unique biodiversity and wildlife habitats contained in New Boston.

A series of Geographic Information Systems (GIS) maps, based upon data prepared through the Southern New Hampshire Planning Commission (SNHPC) have been developed to provide an inventory of current land resources within the Town. These maps are provided in Appendix A. These maps are tools to be used by the public, Open Space Committee, Planning Board, and the SNHPC to promote dialog and develop recommendations for land protection and for maintenance of land that is currently protected as town-owned lands. Areas having a concentration of open space values represent resource lands that should remain in their natural condition to preserve water quality, wildlife habitat, recreation opportunities, sustainable forest resources, historic settings, potential greenways, and the

scenic quality of the Town. Protecting these resource areas from development contributes to the quality of life in New Boston.

The Open Space Committee has developed criteria to help prioritize suitability of lands for protection. In most cases, these criteria are represented in the maps that inventory land resources within the town. By overlaying maps representing different conservation criteria, areas containing overlapping values can be identified, which increases the overall conservation value of these areas. A point system is used to help determine the level of protection that a given area deserves. By assigning points for meeting certain criteria, the presence of various desirable features adds to the “co-occurrence rating” or conservation value of the area. Points are awarded based on criteria including presence of certain wildlife, whether or not the parcel is part of an unfragmented region, contains wetlands, has agricultural value, or rates highly under the Forestland Evaluation and Site Assessment (FLESA) and Regional Environmental Planning Program (REPP) criteria.

FLESA is part of the United States Department of Agriculture Natural Resources Conservation Service and provides communities with a tool to assess their forest lands and natural resources. The FLESA assessment also helps to identify local goals, values, and economic strategies (<http://www.nh.nrcs.usda.gov/technical/FLESA.html>).

REPP was created by the Department of Environmental Services and is used to address environmental issues throughout New Hampshire through regional planning agencies. Natural resource planning is one of REPP’s highest priorities. (<https://www.airquality.nh.gov/REPP>)

The intent of this Open Space Plan is to help to identify, prioritize, and protect remaining open spaces that help define the character of New Boston. The plan documents the need to protect open space and suggests strategies to promote the creation and maintenance of a functioning network of open lands, such as conservation easements, incentives for conservation subdivisions, and education about open space.

Town of New Boston, New Hampshire

Goals and Key Actions for New Boston's Open Space

The New Boston Open Space Committee has identified the following goals and actions in creating this open space plan. These goals will serve as a guide for open space planning and conservation to benefit the Town of New Boston. Goals and objectives should be reviewed on a regular basis to be updated accordingly as the town develops and changes. These goals can only be met with the help of town residents in conjunction with town organizations and local boards and officials.

Conservation and Natural Resources Goal:

"To preserve, protect, and enhance the Town's scenic, recreational, open space and natural resources, as well as its environmentally sensitive areas, and where appropriate, to encourage the enjoyment thereof." (New Boston Master Plan)

Goals and Key Actions from the New Boston Master Plan

One of the four overall objectives of the New Boston Master Plan, approved by the town in 2007, is *"to protect and conserve the Town's natural, historical, cultural, and environmental resources."* This Open Space Plan responds in part to the following specific goals excerpted directly from the New Boston Master Plan:

Land Use Objectives

- To continue to refine the Town's open space/cluster development regulations and other innovative land use techniques.
- To encourage, develop and maintain wildlife corridors.
- To investigate means of protecting land on both sides of River Road and along the Piscataquog River and its branches.
- To create and adopt a growth management ordinance.
- To create and adopt an open space ordinance including a requirement for open space in all major subdivisions.
- To encourage preservation and maintenance of fields, forests, wetlands, mountain tops, hillsides, river views, river front, river beds, and stone walls through such strategies as transfer of development rights and density credits.
- To conduct a Cost of Community Services Study.
- To consider implementing new zoning districts based on performance zoning.
- To investigate and implement where appropriate a transfer of development rights program and the use of density credits.

Agricultural Protection Objectives

- To develop regulations that ensure the town continues to support farming and agriculture.

Smart Growth Objectives

- To foster the traditional character of New Hampshire downtowns, villages, and neighborhoods by encouraging a human scale of development that is comfortable for pedestrians and conducive to community life.

- To preserve New Boston's working landscape by sustaining farm and forest land and other rural resource lands to maintain contiguous tracts of open land and to minimize land use conflicts.
- To protect environmental quality by minimizing impacts from human activities and planning for and maintaining natural areas that contribute to the health and quality of life of New Boston by promoting low impact development and best management practices.

Conservation and Natural Resource Objectives

- To continue to develop and improve ordinances and regulations that protect New Boston's environmentally sensitive areas. These areas include, but are not limited to: steep slopes, wetlands, woodlands, floodplains, wildlife habitats and corridors, watersheds, drumlins, wetland buffers, and aquifer recharge areas.
- To determine development densities based on maintaining open space, rural character, future water needs, soil capability, Smart Growth Principles and other environmental criteria.
- To create regulations to promote environmentally responsible construction practices including habitat-sensitive site design, low impact development, landscape design criteria, prevention of soil erosion and stormwater treatment.
- To encourage preservation of existing farmland and prime agricultural soils using environmentally responsible agricultural practices.
- To promote the awareness of public open spaces and natural resources including the awareness and preservation of existing Class A or B recreational trails established under RSA 231-A.
- To regulate development along scenic roads in order to preserve the natural and scenic character, including stonewalls and a forest buffer, and investigate participation in the Scenic Byways Program.
- To identify and preserve aquifers of such quality and quantity that may provide the Town of New Boston with future water supply sources.
- To identify, preserve, maintain and protect large areas of land which have been identified as having unique functions and values contributing to the economy and environmental well being of the community. Use of the information that has been developed under the Regional Environmental Planning Program may assist in this effort.
- To update the New Boston Water Resources Management Plan and the Town's Groundwater Conservation District zoning ordinance utilizing new maps and data.
- To implement shoreland protection regulations for the Middle Branch and remaining South Branch of the Piscataquog River and implement a riparian buffer study to protect undisturbed stream and river shorelines within New Boston.
- To utilize New Hampshire Fish & Game Wildlife Habitat Maps to delineate and map significant wildlife corridors.
- To conduct a Prime Wetlands study in accordance with RSA 482-A:15, as revised, and the Administrative Rules of the New Hampshire Department of Environmental Services (see Wt 700 Prime Wetlands laws), and implement the recommendations.
- To conduct and implement a Natural Resources Inventory (NRI) of New Boston's natural resources.

Forest Resource Objectives

- To encourage the maintenance of large contiguous parcels of forest lands in public and private ownership.
- To build coalitions between forest landowners and people/groups who desire to use forestland for recreation.
- To ensure that local land use decision making authority is based upon adequate natural resource information.
- To improve landowner understanding of the range of forest management choices and the economic and ecological implications of those decisions.
- To educate our community about the functions and values of forests and forestry.

Additional Objectives of this Open Space Plan

The New Boston Open Space Committee and Southern New Hampshire Planning Commission have established the following additional goals for this Open Space Plan:

1. Implement COST-EFFECTIVE means to preserve land to have the greatest overall tax and revenue benefits for New Boston citizens.
 - 1.1 Identify means of land protection to best utilize available funding and minimize tax burden to the Town.
 - 1.2 Identify resources and alternative funding sources offered by state, federal, and non-profit organizations.
 - 1.3 Explain the relationship between open space lands and tax revenues for the Town of New Boston.
2. Establish development, subdivision and zoning REGULATIONS AND ORDINANCES for New Boston to encourage smart growth, preserve open space, and make the Town economically sustainable.
 - 2.1 Adopt the Open Space Plan as an official part of the Town's Master Plan.
 - 2.2 Add new practices and techniques to the Town's Development Regulations that can help preserve the community's rural character and protect sensitive environmental features.
3. Prioritize the CRITERIA the Conservation Committee, Planning Board, and Board of Selectmen will use when considering potential lands for open space preservation.
 - 3.1 Identify land protection priorities that guide appropriate levels of resource allocation for specific parcels.
 - 3.2 Protect New Boston's most sensitive natural areas, including wetlands, wildlife habitats (including wildlife corridors), forest stands, and agricultural areas to protect the environment and to balance growth and development with quality of life.
 - 3.3 Connect un-fragmented areas with guidance from local knowledge and preserve New Boston's scenic views, Class VI Road system, trails, and culturally and historically significant lands.
4. EDUCATE the residents of New Boston of the multiple economic, health, ecological, and recreational benefits of Open Space.
 - 4.1 Define "rural character" and establish open space as a significant component of rural character.
 - 4.2 Identify the economic benefits of open space to the town's tax base and land values.
 - 4.3 Identify the role of open space in clean water and good air quality.

- 4.4 Outline the recreational potential of open space lands through Class VI roads, trails, and parks.
 - 4.5 Demonstrate the importance of open space for wildlife habitat.
 - 4.6 Serve as a resource for landowners, Town officials, and residents interested in learning how they can help preserve open space and New Boston's rural character.
- 5 Preserve and protect at least 25% of New Boston's open land
- 5.1 Using the Town's available resources, and partnering with conservation groups whenever possible, protect at least 25% of the Town's open land from development.
 - 5.2 Develop a trained group of volunteers to oversee the stewardship of the land the town is responsible for protecting.

Section 1:

Background and Introduction

The Town of New Boston has a history of appreciation for the protection of open space within its community. According to the 2006 Master Plan, the Town of New Boston has 27,648 acres, 16% of which is protected land. Formed in 2003, the New Boston Open Space Committee has collaborated with the Planning Board, the Board of Selectmen, the Conservation Commission, the Forestry Committee, the Russell Foundation and the Piscataquog Land Conservancy (PLC) to work towards open space protection - representing varied interests with a common goal. Below are the New Boston Regional Setting description and a history of the town. Information for both were taken from the New Boston Master Plan and the official town website, <http://www2.new-boston.nh.us/Pages/index>.

New Boston's Regional Setting

The Town of New Boston is located in the South-Central portion of New Hampshire in Hillsborough County, approximately 24 miles southwest of Concord, 17 miles west of Manchester, and 21 miles northwest of Nashua. Adjacent communities consist of the towns of Weare, Goffstown, Bedford, Amherst, Mont Vernon, Lyndeborough, and Fracestown.

The Town of New Boston encompasses a total of 27,648 acres, or approximately 43 square miles. Primary highway access is provided by New Hampshire Routes 13, 136 and 77, which connect with Goffstown and Mont Vernon, Fracestown, and Weare respectively.

New Boston is part of the Greater Manchester Chamber of Commerce Initiative, known as "the Metro Center," which is a conglomerate of 14 communities including the City of Manchester and its neighbors. Although New Boston is experiencing significant growth, it remains one of the more rural towns within the Southern New Hampshire Planning Commission region.

A Brief History of New Boston

The land that is today known as New Boston was granted to John Simpson and 52 others by the Great and General Court or Assembly on January 14, 1736. Simpson and the other 52 settlers, who were originally from Boston, suggested naming the new township "New Boston." The name was later applied for the first time by the proprietors on April 16, 1751.

By 1740, on what was called Pine Plain, 60 buildings had been erected including houses, a sawmill, and a meeting house which was later destroyed by fire.

By September 25, 1756 a first census recorded 59 persons within the New Boston Township, 215 cleared acres, 32 dwellings, 2 camp houses, 1 barn, 1 sawmill, 1 grain mill, a dam, and 6 frames not enclosed.

A second census was conducted in 1820. At this time New Boston had a population of 1,686 and the town had grown substantially to 16 school districts, 14 schoolhouses, 1 tavern, 3 stores, 25 sawmills, 6 grain mills, 2 clothing mills, 2 carding mills, 1 bark mill, and 2 tanneries.

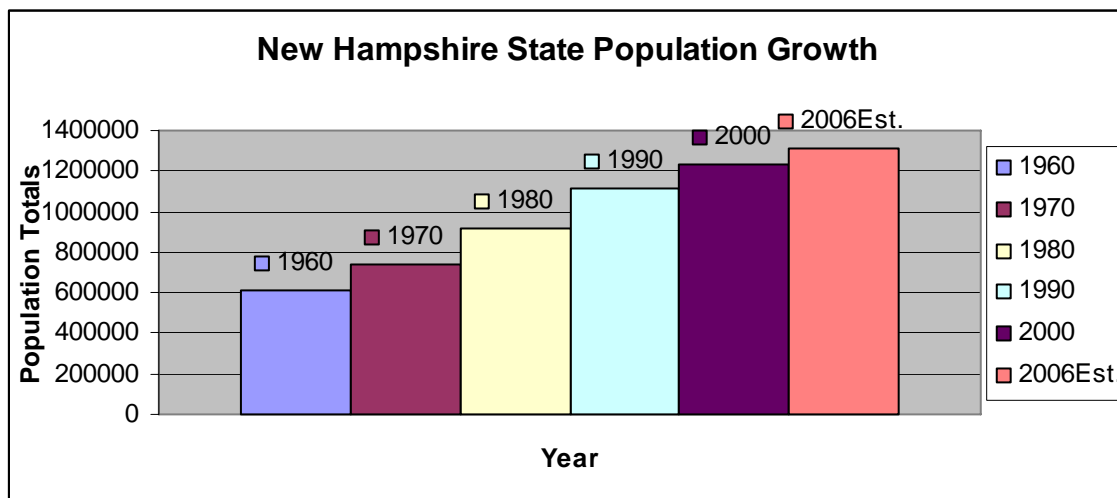
On May 12, 1887 the “Great Village Fire” started at noon from a spark from Abram Wason’s cooper shop. As a result of the fire almost 40 buildings were destroyed as well as many permanent records kept for the town. The destroyed papers have resulted in gaps in New Boston’s town history.

In 1893, the Boston and Maine Railroad came to New Boston, stopping at Parker’s Station, the Depot, and Gregg’s Mill. J. Reed Whipple was the man responsible for bringing the railroad to New Boston to supply his hotels in Boston with fresh produce. The railroad operated through the mid 1970’s before it was abandoned. Today, the old railroad bed belongs to the town and serves as a walking path from the village area of New Boston to Goffstown.

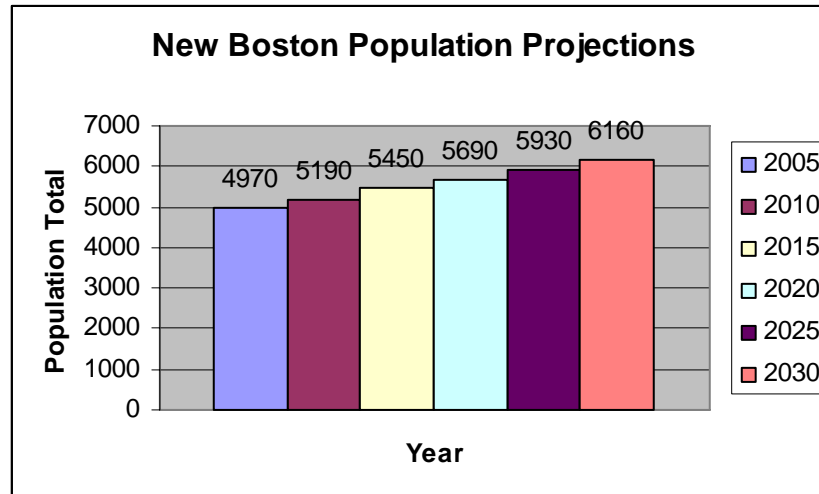
Today New Boston is the quintessential New England town with a rich history and an abundance of natural beauty, including three branches of the Piscataquog River and the striking Joe English Hill among many other hills and valleys.

Population Growth in New Hampshire and New Boston

Since 1960, the population of New Hampshire has grown from 606,921 persons to an estimated 1,315,000 in 2006, an increase of *over 100 percent*. The NH Office of Energy and Planning has projected additional population increases for New Boston of approximately 9% percent from 2005 to 2015, and another of 13% from 2015 to 2030. (US Census)



NH OEP, January 2007 Data



NH OEP, January 2007 Data

The housing stock in New Boston is predominantly single-family homes on large lots. Planning for projected future growth is not easy, but needs to balance open space conservation with inevitable population increases. Changes in allowable population densities, and zoning and subdivision regulations may be needed to find the right balance. The State of New Hampshire now requires towns to address Work force and Multi-family housing. As New Boston adopts new regulations, we can expect the housing stock description to change.

History of New Boston land protection and the New Boston Open Space Committee

In many areas of southern New Hampshire, land prices have more than doubled in the seven years from 1997-2004, making land protection increasingly expensive. New Boston community members have worked collectively towards local land protection for several decades, at least since Reverend Louis Swanson's efforts to protect groves along River Road in the 1930's. In 1990, working with the statewide Land Conservation Investment Program (LCIP), the town was able to permanently protect three riverside parcels totaling approximately 60 acres and a mile of riverfront.

In 2001, the New Boston Conservation Commission proposed the creation of a Joint Open Space Committee to identify ways to most effectively apply revenues from the Current Use Change Tax for land protection. Since then, the New Boston Open Space Committee (NBOSC), has worked to educate the public about land preservation, developing conservation priorities, identifying projects, and finding funding for open space protection. The committee developed this Open Space Plan to document their work and outline implementation strategies.

Defining Rural Character

Generally, residents of the Town of New Boston see open space as a significant component of rural character. Rural character can be defined quantitatively or qualitatively as briefly summarized below.

Quantitative: Based on the U.S. Census definition of “urban,” a quantitative definition of “rural” could be described as follows:

A municipality is considered rural when the population density within the municipality is less than 145 persons per square mile (US Census 2004) or the municipality’s total population is less than 2,500, unless more than 50 percent of the population lives in an urbanized area, as defined by the U.S. Census Bureau. All other municipalities are considered urban.

In 2003, a collaborative study by The Jordan Institute and Audubon Society of New Hampshire analyzed all 259 municipalities and unincorporated places in New Hampshire, categorizing them by number of housing units and whether there was municipal water service. New Boston was among the 41 percent (or 106) communities defined as “rural”.

In 2005, the Society for the Protection of New Hampshire Forests updated their 1999 *New Hampshire’s Changing Landscape* report. In that report, they chose the following densities to define a community’s density:

Rural = less than 36 persons/sq mile
Exurban = 36-144 persons/sq mile
Suburban = 145-1,000 persons/sq mile
Urban = more than 1,000 persons/sq mile

By these definitions, New Boston, with an estimated 5,055 persons in 2007 and 43.2 square miles, has about 117 persons per square mile, falls within the “exurban” range.

Qualitative: According to the Center for Rural America, “A relationship to nature is a key determinant of what is rural. When development destroys or seriously degrades the natural environment, it destroys the core basis for ruralness.”¹

Rockingham Planning Commission land use planner, Jill Robinson, defines rural as involving working landscapes including forestry and agriculture where ways of life and livelihood are connected to stewardship of the land.

The NBOSC believes that rural areas include a mix of different settlement densities interspersed with unmanaged areas and economic uses such as tree farms, managed forests, and active agriculture. As opposed to suburbs, rural towns include mixed land uses, mixed incomes, and mixed ages. The NBOSC also discussed what rural is *not*; rural communities do not have traffic congestion, traffic lights, ambient light that detracts from the night sky, or wide, straight, paved roads abutting posted land. Above all, the

¹ Karl N. Stauber, PhD. *Economic Review*, 2nd Quarter, 2001, p 36-37

natural landscape and areas of open space predominate over the built environment and the town maintains a sense of community facilitated through many places, events, and opportunities for citizens to meet and interact.

Determining Future Character

As evident by these comments, open space is an important component of rural character. Many new residents move to New Boston because of the open landscape, privacy, and New England small town charm. Large tracts of open space and open spaces between developed places are important characteristics of rural communities that set them apart from other types of communities. New Boston today is rural. But, what will the character of New Boston be in the future? It could remain rural, or the town's character could change to become a village, small town, or suburb. According to the Town's Master Plan, maintaining open spaces and a variety of land uses is a priority for the Town of New Boston as it grows.

Misconceptions About Open Space

Although open space is often misconceived as a burdensome expense to a community, residents in many towns with open space preservation usually pay fewer taxes than towns with greater development. Open space lands cost towns very little in the way of services compared to residential developments. In the long term, open space is a financial positive for a town.

New Hampshire has a 100+ year history of land protection initiatives, starting with the White Mountain National Forest in 1901. The answers to the questions below come from a century of experience and data.

Does the cost of land protection eventually come back to the taxpayers?

The costs of open space land are rarely attributable to a single source, and property tax increases due to open space protection are typically negligible. Three costs are associated with open space land: purchase/acquisition, taxes, and maintenance; each varies depending on the open space arrangement.

Town purchase or easement: The Town of New Boston has committed 50% of its land use change tax to land protection, at the discretion of the Conservation Commission. Land Use Change Tax is issued when a parcel's use is changed from that for which it is currently assessed to certain other uses, such as a house lot. These funds can be used towards conservation easements or direct purchase of land. In the case of conservation easements, the land owner continues to pay current use taxes on the land, resulting in no loss of taxes. If the town purchases the land, that parcel is removed from the tax rolls. Several state programs may help defer the tax losses of these purchases. In some cases, very small, short-term tax increases resulting from the purchase of open space are passed on to residents.

Private Land Trust: The U.S. Fish and Wildlife Service states: "A land trust is a nonprofit organization established for the purpose of protecting land resources, such as agricultural

land, open space, and wildlife habitat.” Land trusts typically accomplish these goals by accepting donated conservation easements and enforcing the development restrictions contained in the easements. (Source: U.S. Fish and Wildlife Service Website, <http://www.fws.gov>) The Town often works with the Piscataquog Land Conservancy to acquire easements on conservation lands. The Piscataquog Land Conservancy maintains stewardship over the land, and the land owner continues to pay taxes. Easements may be donated or purchased with funds from a land trust or grants secured by the trust, and may or may not also involve funds from the Town of New Boston.

Conservation Subdivision: Implemented through regulatory measures, this method costs the least to implement. The developer purchases the land, retains at least 40 percent as open space, and sells the remaining land as house lots. In most cases, the open space land is placed under a conservation easement with covenants to conserve the land. The land may be owned by a Homeowner’s Association consisting of all residents of the subdivision, the members are required to pay dues, which go towards taxes on the land, monitoring, and maintenance costs.

What are the tax benefits associated with land protection?

Landowners who donate development rights or offer a bargain sale of their land to a municipality or land trust may enjoy federal tax benefits that can replace some of the financial benefits of selling the land. Additionally, open space land does not increase (and in many cases may decrease) residents’ taxes based on infrastructure savings and improved property values.²

Is the two-acre minimum lot size currently required in New Boston an important measure for maintaining rural character and open space?

Hypothetically, a 3,000-acre town with a two-acre lot minimum could have over 1,000 homes distributed evenly throughout the town, forcing the need for roads, police, fire, rescue, and school bus services to all reaches of the community. In some municipalities, the cost of providing services to a large-lot residence located at the fringe of the community can be \$10,000 more than one located in a more urban core.³ Furthermore, such a town has no lots larger than 2 acres, essentially wiping out the health, recreational, social, and economic benefits that accompany larger tracts of open space. In an alternate hypothetical situation, the same town has 1,500 homes located on 1,500 or fewer acres, clustered into conservation subdivisions, each containing large tracts of open space land. The town provides concentrated services to these areas, which results in considerable savings, and 1/2 or more of the town remains as open space lands, many of which connect to form larger, unfragmented open space areas.

Do conservation or open space subdivisions cost more for the town?

Development and town design oriented around open space is actually a cost-saving mechanism on two levels. First, these developments are planned according to specific

² Trust for Public Land, *Managing Growth: The Impact of Conservation and Development on Property Taxes in New Hampshire*, 2005, http://www.tpl.org/content_documents/nh_managing_growth_report.pdf.

³ International City/County Management Association, *Why Smart Growth: A Primer*. (Washington, D.C.: Geoff Anderson, 1998).

regulations regarding lot location, land preservation, and construction of infrastructure. As no infrastructure is required on the open space land, it generally costs less to bring roads and services into these developments. Second, houses located near open space or in conservation subdivisions have higher property values and are more desirable than similar houses not located near open space.⁴ This could mean that the tax revenue that the town gains from conservation subdivisions will exceed that of a subdivision of equal population without conservation land, resulting in a higher tax base for New Boston.

Why should the rural town of New Boston be concerned about losing open space?

New Hampshire is the fastest growing state in New England, with annual population increases of 13,000 expected to continue throughout the next two decades. With the expansion of I-93, more of this growth will be directed to the towns surrounding the I-93 corridor, including New Boston. The New Hampshire Office of Energy and Planning predicts a 26 percent population increase for New Boston from 2000 to 2010, meaning that New Boston will see many new residential developments.

⁴ David J. O'Neill, *The Smart Growth Tool Kit* and PFK Consulting, *Analysis of Economic Impacts of the Northern Central Rail Trail* (Annapolis, Maryland: report prepared for Maryland Greenways Commission, Maryland Department of Natural Resources, 1994).

Section 2: Benefits of Open Space

Open space offers many economic, social, and environmental benefits. It provides a town with much more than scenic landscapes and open fields. Open space can promote environmental security in areas that, if otherwise built on, would have damaging runoff, flooding, and groundwater contamination. By alleviating the risk of flooding it prevents the town from paying for costly repairs due to flood damages. In addition to preventing naturally caused damages, open space provides the town's residents with basic human needs such as a sense of place, well being, and personal health through opportunities for outdoor recreation and physical activity. Open space throughout town also increases the desirability and value of surrounding homes and lands. Open space is a positive use for town land with benefits far outweighing negative outcomes.

Open Space and Recreation

Lands that offer personal or socially interactive recreation, whether active or passive recreation, are essential elements of the open space system. Access should be provided at a variety of appropriate places where development of such access will not compromise the character of the area.

The Town of New Boston recognizes the opportunity to provide responsible recreation for all - walkers, skiers, snowshoers, people with strollers or wheelchairs, horseback riders, mountain bikers, hunters and anglers. New Boston has a network of trails ranging from rustic paths to dirt roads existing on town lands, some with access granted on private conservation easements. Further study is needed to evaluate trail use and to suggest a recreational network to serve the spectrum of trail users in this town.

Class VI roads are a significant resource for New Boston. These currently provide recreational opportunities for New Boston citizens and are often functionally used as trails. The town currently has the opportunity to develop policies for open space in the future, of which Class VI roads can be an important contributor to the rural quality of life when preserved for recreational use.

Advancing recreational opportunities in New Boston may also expand the social network of the town. Residents can meet neighbors while hiking a trail, hold gatherings at town-owned recreational areas, and work together to improve public open spaces.

Aesthetics

A prime reason that people move to New Boston is to live amid the beautiful scenery of the rural, wooded town. With cleared agricultural lands, rivers and streams, and a rolling terrain, the Town of New Boston offers many scenic views that residents associate with the character of the town. Compared to nearby cities and towns whose sky is filled with lights from houses and businesses, constellations are still visible in New Boston's night sky.

Aesthetic landscapes lend appeal to the town and provide economic benefits as well. As delineated in Section 4, several studies indicate that land values bordering open space are higher than those in developed neighborhoods, suggesting that people are willing to pay for the aesthetic value derived from open space protection.

Air Quality

The trees in forested areas absorb pollutants such as ozone and sulfur dioxide, leaving the air noticeably cleaner. A single acre of trees takes in about 2.6 tons of carbon dioxide each year, removing some of the pollutants released by vehicles (American Forestry Association). As development progresses, construction and traffic will increase air pollution and formerly forested land may be cleared for buildings.

Open space preservation is integral to maintaining air quality in New Boston. The older, larger trees (ones with diameters greater than 30 inches) in New Boston's forests, can remove up to 70 times more pollution from the air than trees with diameters less than three inches, meaning that trees cleared for development and replaced by new trees would contribute less to air quality. Additionally, trees trap the particulate pollution that causes asthma and respiratory problems.

Water Quality and Quantity

New Boston residents receive their drinking water from underground aquifers through private wells. Wells can be subject to runoff pollution from salted roads and parking lots, pesticides, antifreeze, and other toxins of developed lands. Forested areas can retain up to 90 percent more of the rainfall, filtering the chemicals from entering the water system (Trust for Public Land 2005).

Vegetated buffers physically protect streams, rivers, vernal pools, or ponds by providing shade and removing debris and polluting nutrients. Buffers usually contain three zones: the innermost *streamside zone*, from the shoreline to 25 feet back of forested shade to enhance stream quality; the *middle zone*, 50-100 feet from the streamside zone, often a managed forest with some clearing for trails or open areas; and the *outer zone*, usually around 25 feet from the middle zone, but often expanded to protect adjacent wetlands and any floodplain.



Developed lands include impervious areas, such as structures with roofs, driveways, and parking lots that shed water and concentrate the runoff into surface waters. Trees, meadows, scrub areas, and agricultural lands allow water to recharge back into underground supplies and maintain base levels in rivers and streams, lakes and ponds, and wetlands. Without such recharge, droughts are more likely, as well as flooding during severe rainfall or snow melt. The risk of flooding is familiar to anyone who lived in New Boston during the springs of 2006 and 2007.

Sustained water quality and quantity are vitally important to support all ecological functions. Undeveloped land supports the health of water bodies as well as the network of rivers and streams that provide corridors vital for wildlife movement, food, and shelter. By protecting valuable water resources, open space lands not only contribute to the health and economic benefits of the town, but they protect wildlife habitats as well.

Biodiversity⁵

Biodiversity, which is the balance of interacting processes among the many plants, animals, fungi, algae, bacteria, and other microorganisms in our environment, is integral to human survival. The complex natural world provides elements that support human life, such as enriched soil to grow food, oxygen to breathe, and purified water to drink. The balance of maintaining these processes and protecting the habitats in which they occur is vital to supporting all life on Earth. However, as habitats are lost due to development of land or invasive and non-native species, this balance of biodiversity is threatened.

Biodiversity is important to maintain for economic as well as ecological reasons. Plants are sources of food, medicine, fuel, fibers, timber, and more. Furthermore, plants and animals pollinate fruit and vegetables, control pests, and add nutrients to the soil as part of their natural functioning.

New Hampshire's wildlife attracts visitors from around the country who come to the region to bird-watch, hunt, fish, and hike amidst the fall foliage. In New Hampshire, 88 percent of the population participates in wildlife-related activities and this brings millions of dollars to local communities.

Forest Economy

Forests contribute to the local economy in many ways, including employment, forest-based manufacturing, recreation, and tourism. Many New Boston residents earn an income from managing forests and harvesting forest products such as timber, maple products, Christmas trees, and firewood. Yield tax income from some of these activities contributes revenue to the town. Fishing, hunting, and other recreation activities contribute revenues to the State economy. The forest protects a living natural history museum for visitors, in addition to mill sites; there are Native American artifacts, early European settlement artifacts, cellar holes, ancient highways, and over 400 miles of stone walls in New Boston.

⁵ From Wildlife Habitats, Fall 1996, University of New Hampshire Cooperative Extension.

Section 3: Wildlife

Rare Species and Natural Communities

New Hampshire's *Natural Heritage Inventory* (NHI)⁶ has assessed the Rare Species and Exemplary Natural Communities of New Boston based on state and federal status as well as rarity of the species in the community. Table 2 lists those species that are endangered or threatened.

These inventories identify sites that contain habitats for rare, endangered and threatened natural species. The NHI was used to determine species that are currently on the endangered list that are located within New Boston.

Table 2: NHI Inventory		Locations in Town in the last 20 years
Species or Community Name	State Status	
Mammal		
Small Footed Bat	Endangered	1
Bird		
Pied-billed Grebe	Endangered	1
Mollusk		
Brook Floater	Endangered	4
Reptile		
Blandings Turtle	Endangered	2
Eastern Hognose Snake	Threatened	2
Spotted Turtle	Threatened	1
Wood Turtle	Special Concern	1
Plant		
Fern-leaved False Foxglove	Threatened	2

There are some rare black gum trees living in “basin swamps” in New Boston. The black gum tree (*Nyssa sylvatica*) is a hardwood in the tupelo family that may grow up to 75-80 feet tall and may live over 400 years. Spotted turtles and Blanding’s turtles are also found in New Boston.

Wildlife Crossings

The New Hampshire Fish & Game Department publishes Coarse Filter Wildlife Habitat maps, which combine features such as riparian corridors, wetlands, unfragmented lands of natural land cover, and disturbed lands to determine areas that are best suited towards animal habitats.

Wildlife crossings are a simple way to help connect wildlife habitat through consideration in zoning and planning. Wildlife crossings are small parcels of land, usually underneath or across roadways that connect fragmented wildlife habitats and allow wildlife to breed, find food, and migrate to find new habitats. The most important environmental features to consider in terms of wildlife habitat are unfragmented tracts of land with natural land cover. Small blocks of open space expose more borders to



⁶ New Hampshire Natural Heritage Bureau. *Rare Plants, Rare Animals, and Exemplary Natural Communities in New Hampshire Towns*. Concord, New Hampshire: Division of Forests and Lands

development, thereby threatening species habitat inside. Also important are undeveloped riparian zones, which have a rich array of species habitat. Wildlife crossings can be as simple as constructed passages through or under roadways that connect two wildlife habitats.

Wildlife sightings can be one of the most thrilling and satisfying experiences of living in a rural area. If New Boston is to protect its irreplaceable biological diversity and abundance of wildlife, the Town must reduce fragmentation and maintain the health and vitality of its forest communities.

New Hampshire Fish and Game Department has completed a statewide Wildlife Action Plan (WAP), adopted in the spring of 2006, for both game and important non-game species. Because of the importance of wildlife to rural economies, additional support is expected for a wide range of activities in local communities so that wildlife populations remain healthy as the state grows.

Section 4:

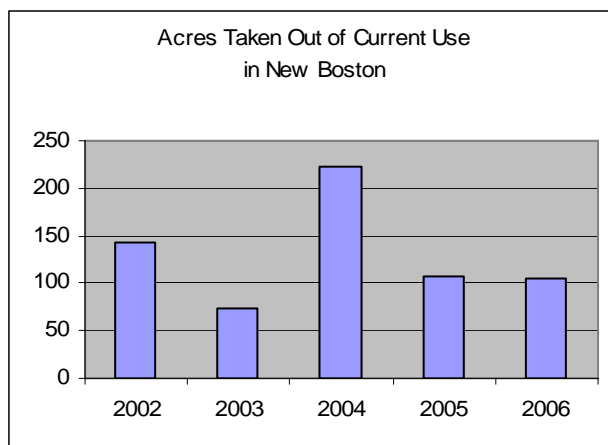
The Cost of Sprawl and the Economic Benefits of Open Space Protection

The Costs of Sprawl

In a document produced by the Southern New Hampshire Planning Commission titled *Sprawl and Smart Growth Choices for Southern New Hampshire Communities*, it is estimated that the consumption of residential land within the 13 communities in the SNHPC region exceeded what was needed for population growth (Please see the above document at the SNHPC website www.snhpc.org for more information on this topic). From 1986 to 2000, residential acreage was consumed at *twice* the population growth rate, and commercial acreage was consumed at *three times* the population growth rate. In 1982, New Hampshire had 0.41 developed acres per person, and by 1997, that figure had increased to 0.55 developed acres per person. These figures are higher than those for New England as well as those for the United States as a whole.⁷

During the past 20 years, many communities in New England have required larger lots in their zoning ordinances for single family homes than were really necessary. These communities have felt that, if larger lots were required, fewer homes would be built, and that would decrease sprawl and its accompanying traffic problems. However, large lot zoning has resulted in the subdivision of larger tracts of land which drastically depletes its value for open space or other common public areas. New Boston's zoning ordinance currently requires a minimum lot size of two acres in the R-A district. This requirement contributes to sprawl. The basic minimum yard dimensions require a 200 foot frontage with 50 foot setback from the front and 20 feet on all other sides. Lot dimensions and restrictions are further explained the New Boston zoning ordinance.

"Overall, the state is converting 13,000 acres of open space per year to roads, houses, businesses, and commercial development."⁸



The subdivision of land significantly reduces open space and often removes the potential even for current use of land. The graph illustrates the recent spike in approved subdivisions (with an approved subdivision containing one or more lots). Please see the above document at the SNHPC website www.snhpc.org for more information on this topic.

⁷ State of New Hampshire, Environment 2000.

⁸ *Conserving Your Land*, Center for Land Conservation Assistance 2004, 1.

Multiple studies have found sprawling development to be more expensive for municipal, county, and state governments than open space. Twenty-five years of studies cite millions of dollars saved through smart growth management as opposed to sprawl. A summary of some of these studies can be read on the following page as released by the Michigan Land Institute in January 2005. These studies confirm New Boston's fiscal experience where tax rates have grown faster than the population has increased. The per-person cost of town services, such as education, firefighting, policing, and road maintenance, increases as more land is developed. Subdivisions more frequently require new road construction, which further increases road maintenance expenses to the town.

Sprawl has been and will continue to be a problem for most communities. Many towns have developed both regulatory and non-regulatory answers to encourage more compact, less sprawling development. Potential regulatory measures for New Boston are addressed in Section 6.

Economic Consequences of Sprawl

Government and academic studies consistently find that sprawl is much more expensive than compact patterns of development

1974 – *The Costs of Sprawl*, a three-volume report by the Real Estate Corporation for the White House Council on Environmental Quality, concluded that compact development patterns were much less expensive and environmentally damaging than sprawling residential and commercial development. It is one of the most significant critiques of sprawl ever published.

1997 – *Fiscal Impacts of Alternative Land Development Patterns in Michigan: The Costs of Current Development Versus Compact Growth*, by Rutgers and Michigan State Universities, found that, in the 18 communities studied, land consumption and costs for infrastructure and municipal services were far less expensive when Smart Growth principles replaced sprawling patterns of development.

1997 – *The Cost of Sprawl*, published by the Maine State Planning Office, found that residents of fast growing "new suburbs" were paying many "hidden costs," including higher taxes, homeowners insurance, and school construction costs. Although its student population declined by 27,000 from 1975 to 1995, the state spent \$727 million to construct and maintain new suburban schools. Although Maine's population declined 10 percent in the 1980s, its residents drove 57 percent more miles, highway costs increased by a third, local governments added 100 miles of new roads annually, and police employment increased by 10 percent, even with a 20 percent fall in the crime rate. (<http://www.maine.gov/spo/landuse/docs/CostofSprawl.pdf>)

1998 – *The Costs of Sprawl – Revisited*, prepared for the National Research Council, analyzed nearly 500 studies of the fiscal, economic, and environmental effects of sprawl and concluded that while "most of the American public is not unhappy with the current patterns of development in metropolitan areas – it simply can no longer afford it." (<http://www.nas.edu/trb/index.htm>)

2000 – *The Costs of Sprawl – 2000* concludes that even modest new Smart Growth policies would save 4.4 million acres of farmland, \$12.6 billion in sewer and water expenses, \$109 billion in road construction costs, and \$420 billion in private sector development costs. (<http://www.national-academies.org/trb/bookstore>, or to download full report http://guliver.trb.org/publications/terp/terp_rpt_74-a.pdf)

2000 – *The Costs of Sprawl in Pennsylvania*, published by 10,000 Friends of Pennsylvania, reported that costs for infrastructure and housing are significantly higher in sprawling regions than in planned-growth areas. Compact development can save up to 25 percent of road and utility

construction and up to 20 percent of water and sewer costs. Applied to local road construction, "the savings would be \$52 million per year." (http://www.10000friends.org/Web_Pages/News/Costs_of_Sprawl_in_Pennsylvania.pdf)

2000 – *The Costs and Benefits of Alternative Growth Patterns: The Impact Assessment of the New Jersey State Plan*, published by Rutgers University, found a state plan that encourages settling in existing communities could save local governments \$161 million by 2020, conserve 100,000 acres of farmland, save \$870 million in road construction costs, and eliminate \$1.4 billion in water and sewer development.

2002 – *Growth in the Heartland: Challenges and Opportunities for Missouri*, a Brookings Institution report, found that Pettis County, located near Kansas City, will gain 3.6 percent in tax revenue thanks to population increases and development. But its costs will rise 6 percent, generating a \$2.4 million deficit unless the county raises taxes. (<http://www.brookings.edu/es/urban/missouri/abstract.htm>)

2003 – *The Fiscal Cost of Sprawl: How Sprawl Contributes to Local Governments' Budget Woes*, by Environment Colorado Research and Policy Center, concludes that "sprawling development does not generate enough tax revenue to cover the costs it incurs...If growth patterns do not change in the Denver area...sprawl will cost local governments \$4.3 billion more in infrastructure costs than Smart Growth." (http://www.environmentcolorado.org/reports/fiscalcostofsprawl12_03.pdf)

2003 – *The Jobs Are Back In Town: Urban Smart Growth and Construction Employment*, by the Washington-based research group Good Jobs First, found that metro areas with concentrated growth had 30 percent more construction activity than areas that encouraged sprawl, and concluded that Smart Growth generates more residential, commercial, and transportation construction jobs than sprawl does. (<http://www.goodjobsfirst.org/pdf/backintown.pdf>)

2004 – *Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns*, by the Brookings Institution, found that in Kentucky's Shelby County, which managed its growth, the cost of additional police, fire, highways, schools, and solid-waste services for every 1,000 new residents added \$88.27 to an average family's expenses. But in Pendleton County, which allows sprawling development patterns, those same services added \$1,222 per family — 13 times as much. (http://brookings.edu/metro/publications/200403_smartgrowth.htm)

The Economics of Open Space

Common misconceptions hold that open space programs are expensive for municipalities, but dozens of studies over the past few decades have shown that communities that curb sprawl and implement smart growth principles, *including land preservation*, spend considerably less money than towns with sprawl. Towns with widely-distributed residential development and continued construction of new residential areas have larger costs of infrastructure construction, including water, roads, and utilities.

In 2005, the Trust for Public Land (TPL) released a study entitled, *Managing Growth: The Impact of Conservation and Development on Property Taxes in New Hampshire*. The Trust for Public Land (TPL) is a non-profit national land conservation organization that works to preserve land for outdoor passive recreation, community gardens, historical sites, and other rural lands. Their goal is to maintain quality living areas for future generations. Looking at the unique relationship between property taxes and municipal revenue in New Hampshire, the study addressed the concern that land conservation increased property taxes. A description of the system of taxation in New Hampshire leads to a better understanding of the concerns over the expenses of conservations lands.

Who pays for land protection?

Acquiring conservation lands by direct purchase represents a known cost to the buyer, which in the case of a municipality is borne by the taxpayers. Municipalities purchasing conservation lands should clearly communicate the benefits of open space, and residents should understand the costs and benefits of the purchase. However, there is a hidden cost of land acquisition in the form of lost tax revenue. In New Hampshire, there are measures in place to help account for this tax base loss and avoid making residents pay the difference.

Open space land in New Boston is most likely to be obtained through purchase or conservation easement acquired by the Town or through a private conservation group. Open space land may also be protected through conservation subdivisions. In each situation, the cost is covered in a different manner:

- **Private conservation groups:** Private conservation groups tend to acquire conservation easements; the owner continues to pay current use taxes on the land.
- **Conservation subdivision:** Open space land in conservation subdivisions is often owned by a Homeowner's Association and protected with covenants or an easement. The taxation values are low but the cost in town services is lower compared to developing all of the land in the original tract.
- **Municipal lands:** When a municipality purchases land, they do not pay property taxes to themselves, so the property is removed from the tax roll. However, most open parcels receiving a Current Use tax assessment would have negligible impact on town revenues should the town acquire the land and maintain it as open space.

The state and federal governments also have measures in place to account for municipal tax revenue lost through state and federal open space land acquisition:

- **Federal lands:** If the federal government purchases land in New Hampshire, they do not pay taxes but rather pay two annual fees. One fee goes directly to the town's school district and the other to the town as a Payment In Lieu of Taxes (PILT). If the fees do not equal the amount of taxes the town would receive on that land under current use, the state will pay the difference. However, these fees often exceed the current use taxation values.
- **State lands:** The state pays the municipality annually the amount of taxes they would receive under current use value of the land.

Long-term Benefits

The TPL report shows that towns with more permanently protected lands either have long-term tax benefits or the residents pay lower property tax than towns with fewer permanently protected lands. The strongest indication of lower taxes comes in the form of commercial developments, which can offset the financial demands coming from residential development. In the long term, however, increased commercial and industrial development have not been demonstrated to reduce taxes greatly, presumably because commercial and industrial development typically create jobs, which attract additional residents. The residential growth that often accompanies commercial and industrial growth can reduce or eliminate the tax advantages that the commercial and industrial land use may appear to have if considered in isolation. All else being equal, the TPL study emphasizes that land protection does *not* result in higher taxes and generally results in lower taxes, dispelling the myth that land protection is costly over the long run.

The report notes that the conservation of a single parcel does not have a large effect on the amount of development that will occur in towns. However, the strategic placement of certain conserved parcels can influence the direction and location of development, with the possible effect of confining development to proximate areas, which would ease the construction and servicing of infrastructure to new development.⁹

Several academic studies have also examined the relationship between open space and property values, indicating that properties bordering open space increase in value due to the quality-of-life increases associated with open space. Jacqueline Geoghegan's 2002 study of Howard County, Maryland, determined that land values on land located next to "permanent" open space increase three times more than land located near "developable" open space.¹⁰

Does Open Space Pay?

A study conducted during the mid 1990s by Philip A. Auger, Extension Educator, Forest Resources, University of New Hampshire Cooperative Extension, looked at the cost of

⁹ Trust for Public Land, *Managing Growth: The Impact of Conservation and Development on Property Taxes in New Hampshire*, 2005, http://www.tpl.org/content_documents/nh_managing_growth_report.pdf.

¹⁰ Geoghegan, J., L.A. Wainger, and N.E. Bockstael. 1997. Spatial landscape indices in a hedonic framework: an ecological economics analysis using GIS. *Ecological Economics* 23(3): 251-264.
Geoghegan, Jacqueline. 2002. The value of open spaces in residential land use. *Land Use Policy* 19: 91-98.
Hobden, David W. G.E. Laughton, and K.E. Morgan. 2004. Green space borders—a tangible benefit? Evidence from four neighborhoods in Surrey, British Columbia, 1980–2001. *Land Use Policy* 21(2): 129-138.

community services for residential, commercial, industrial, and open space land uses within the communities of Stratham, Dover, Fremont, and Deerfield. In each community, residential land use expenditures *exceeded* revenues by an average of approximately 12 percent. Conversely, for open space land use, revenues *exceeded* expenditures. The results of this study, published in 1996, still ring true today as evidenced by a similar study for the Town of Brentwood, NH in 2002. This small town in southeastern New Hampshire had a population of 3,197 in 2000. Tax revenue generated from residential property in this town fell short of the cost of school and town services by 17 percent, while revenue from open space lands exceeded town service costs by 17 percent.¹¹

While each town in New Hampshire has a unique blend of land uses, revenues and expenditures, these studies point out some fiscal consistencies that are likely to apply in most circumstances. One of these is that *residential land use very often costs communities more than they generate in revenues*. Traditional residential housing brings with it a tremendous cost load for community services such as roads, landfills and schools. Open space lands contribute to the stability of community tax rates. This has been supported by other well-documented fiscal impact studies in New Hampshire communities, including Milford and Londonderry.

The publication, *Managing Growth in NH*, notes that, on average, taxes on the median value home in New Hampshire communities are:

- Higher in more developed towns,
- Higher in towns with more year-round residents, and
- Higher in towns with more buildings (more value of buildings)

Funding Land Conservation

New Boston has already taken a vital step in ensuring that some of its open lands remain permanently in their natural states. The Town has allocated 50 percent of the land use change tax income to the Conservation Commission for the purpose of preserving conservation lands. However, to maximize the economic, social, and environmental benefits of open space, the Town must find additional means of land preservation.

For funding-based land acquisition, the Town can continue to work cooperatively with land trusts and private non-profit conservation organizations to pool financial resources and expand conservation efforts. The Piscataquog Land Conservancy works specifically with New Boston and surrounding communities to conserve land in the Piscataquog watershed area. As a community-based organization composed of many townspeople, P.L.C. serves as an important mobilizing and organizing resource. The Russell Foundation, a private non-profit group, has provided guidance, monetary and personnel support for the Town's efforts.

¹¹ Brentwood Open Space Task Force. *Does Open Space Pay in Brentwood? Part 1: Housing Growth and Taxes*. May 2002.

The Trust for Public Land and the Nature Conservancy are both national land trust organizations active in New Hampshire, which can provide resources and assistance to preservation projects. Additional state resource organizations include the Society for the Protection of New Hampshire Forests and the Audubon Society. For more information on funding and strategies, see Section 6 on Implementation.

Section 5: Open Space Priorities for New Boston

There are a significant number of areas in New Boston that are desirable locations for open space preservation. The New Boston Open Space Committee has not specified any individual lots for protection; rather, they have focused on areas desirable as open space based on the land's attributes. These priorities and other significant considerations for assessing open space potential are described in the following section, with areas of high value to the town described at the end.

Primary Criteria for Acquisition and Protection of Open Space

The NBOSC considers the following criteria priorities in terms of land protection:

1. Protect New Boston's most sensitive natural areas, in particular; aquifers, vernal pools, streams, lakes, and associated wetlands and upland areas. Other considerations include wildlife habitats and corridors, old growth forest stands, and agricultural soils.
2. Connect areas unfragmented by roads or development.
3. Preserve the natural and cultural resources provided by New Boston's scenic views, Class VI road system, trails, and culturally and historically significant lands.
4. Continue to work with P.L.C. and other land trusts and state and federal agencies.

These priorities will be considered for individual parcels as they become available for open space protection, as the Town works to best allocate its limited financial resources. Additionally these priorities will guide the Conservation Commission's larger efforts to match its own conservation strategies with those of state and regional conservation groups.

Additional Criteria

While the NBOSC will use the above criteria first when considering land for open space protection, the following are additional criteria that may be considered by the committee:

- **Potential linkages to existing open space**, to recreation facilities, and to similar areas in adjacent communities.
- **Environmental sensitivity and importance of the parcel** such as the presence of unique habitat, endangered, threatened and rare species, and scenic qualities.
- **Location in areas that do not have enough public open space** or are threatened by continued development. Will the acquisition of the parcel help preserve enough forest cover to maintain water quality of a sub-watershed and undisturbed storm water runoff? Will it provide additional recreational opportunities in an area of the Town in need of such features?
- **Town-wide versus special group benefit**. Would the acquisition of this parcel benefit the Town as a whole or a select group of residents in need of additional opportunities?

- **Outdoor recreation potential.** This is related to providing additional athletic fields as well as providing areas for greenways and trails that provide opportunities for hiking, walking, running, skiing, and biking.
- **Cost and availability of the parcel.** This should account for the amount residents are willing to pay to purchase open space (in the form of increased taxes) and the availability of funding sources that would be available if a particular property were targeted for acquisition.
- **The financial impact** that removing the parcel from development will have on the Town. For example, a residential parcel may cost the Town in services while a commercial property may be a positive contribution to the tax base (see previous summary detailing cost of residential service versus open space costs and benefits).
- **Aesthetic benefits to the general public** and the preservation of the Town character.

Co-Occurrence

A natural resources Co-Occurrence Analysis is an important tool in identifying and prioritizing areas for protection. The Analysis identifies high-value natural resource areas and maps them, with multiple levels of unique resource data overlaid spatially using geographical information system (GIS) software to display on one comprehensive map. The Analysis applies numerical values to selected resource factors, with higher values and darker colors indicating land that should be prioritized for protection. The following are the twelve resource factors considered in the New Boston Co-Occurrence Analysis:

Co-occurrence Model Point System:

Priority	Points Awarded
Adjacent to already protected parcel,.....	2
or within one lot of already protected lands.....	1
Part of a larger unfragmented area or greenway corridor	2
(polygons over 25 acres within unfragmented land set of Wildlife Action Plan ¹²)	
Parcels greater than 25 acres in size	1
Contains or abuts significant water resources.....	1
(5+ acres lakes and 3 rd order rivers from GRANIT's NH Hydrology Dataset ¹³)	
Contains or abuts 4 th or 5 th order rivers	2
Contains NWI designated wetland ¹⁴	1
Contains dry soils with agricultural value	1
(by digital photo-analysis or at least Moderately Well Drained Soils from Hillsboro soil survey from NH GRANIT)	
Contains or is frequented by significant or rare animals or plants	1

¹² NH Fish and Game Department, "New Hampshire Wildlife Action Plan". Submitted October 1, 2005, approved Spring 2006.

¹³ New Hampshire GRANIT Hydrology Datasets. <http://www.granit.unh.edu/>

¹⁴ U.S. Fish and Wildlife Service, "National Wetlands Inventory". <http://www.fws.gov/nwi/>

(parcels with at least 25% Tier 1 or Tier 2 habitat according to Wildlife Action Plan)	
Contains or abuts Class VI road or public trails1	
(from 2007 DOT road data ¹⁵)	
FLESA identified priority parcel1	
REPP identified priority parcel1	

This weighting system places a highest priority on protecting areas as large as possible by targeting parcels in the Town's remaining unfragmented areas and encouraging expansion of areas already partially protected. Other priorities not available for Co-Occurrence Analysis are evaluated by site observation and other means. The completed Co-occurrence map is shown in Appendix A.

¹⁵ New Hampshire Department of Transportation. <http://www.nh.gov/dot/index.htm>

Section 6: Implementation Strategies

The New Boston Open Space Committee recognizes that the preservation of open space is closely tied to Smart Growth Principles and that the largest threat to open space may be New Boston's current growth patterns. The Committee recommends the adoption of smart growth principles appropriate for New Boston, which are outlined here. Specific recommendations on the most effective and cost-efficient tactics to preserve open space and rural character can be found later in this chapter.

Smart Growth Principles to Reduce Cost of Sprawl and Preserve Open Space

Many communities throughout New Hampshire have begun to embrace the concept of "smart growth" with promising results, although in reality it is a return to the distinctive practices of colonial New England. These practices reflect a time when land uses were mixed, homes were often clustered into villages, and good land was fenced for pasture and agriculture. Woodlands were accessed by a network of woods roads, and rough land was left open and unmanaged.

Since New Boston will continue to grow, the community can choose its future character and manage this growth by directing it to areas that can sustain more dense development. Since large open space areas provide many other ecological and economic services, a better place to direct growth may be into village areas and existing developed areas, or into more condensed new development.

Getting to Smart Growth: 100 Policies for Implementation presents a series of ten Smart Growth Principles along with ten policies for each principle. While some of these principles and policies may not yet work for New Boston, several can work and have been tried in other communities in the region with great success. The following could work in New Boston:

Principle 1: Foster distinctive, attractive communities with a strong sense of place.

New Boston has a strong history of preserving its community character. Smart growth seeks to foster the type of physical environment that creates a sense of civic pride, and supports a more cohesive community fabric. For example, planting trees is a simple yet fundamental way of adding to the beauty, distinctiveness, and material value of an area by incorporating the natural environment or historical features into the built environment.

Principle 2: Preserve open space, farmland, natural beauty, and critical environmental areas.

New Boston is already doing this through the development of this Open Space Plan and the work of the Conservation Commission. Open space supports smart growth goals that bolster local economies, preserve critical environmental areas, provide recreational opportunities, and guide new growth into existing villages. Networks of preserved open space and waterways can shape and direct urban form while preventing haphazard conservation (conservation that is



reactive and small-scale). Open space can increase local property values, provide tourism dollars, and reduce the need for local tax increases.

Principle 3: Make development decisions predictable, fair, and cost effective. Most conventional zoning codes offer relatively broad guidelines to define the size and use of lots. A point-based performance evaluation system helps communities to evaluate projects in terms of the smart growth benefits they provide. Projects that fail to meet a desired point level can be redesigned during negotiations with planning staff to achieve a higher score. Density bonuses may be used as incentives to encourage smart growth projects. Adding such growth incentives now can ensure compact, controlled development rather than the sprawling development that might come later without such regulations.

The above principles describe traditional New England land use. Current land use practices follow early 20th century zoning intended to separate land uses, important when heavy industry was prevalent, loud, and polluting. Today, with increasing population, economic activity, land conversion, traffic volume, and energy prices, such traditional land uses once again make economic and planning sense.

Summary of Recommendations

The primary actions recommended for New Boston by the New Boston Open Space Committee are as follows:

1. Research and propose development regulations and guidelines, open space incentives, and educational programs to encourage developers to implement smart growth principles, preserve open space, and make the Town economically sustainable.
 - Investigate Smart Growth Principles and propose measures to preserve open space.
 - Look for incentives encouraging developers to include open space in their projects and to build according to Smart Growth Principles.
 - Consider areas of the Town where increased density will be allowed in exchange for protecting specific rural features.
2. Implement cost-effective funding strategies to preserve land that have the greatest overall tax and revenue benefits to New Boston citizens.
 - Strengthen relationships with local, state, and federal agencies to obtain grants and technical assistance with conservation easements.
 - Educate landowners and town officials about funding sources that support conservation goals.
 - Increase available funds for open space projects.
 - Work with P.L.C. and other land trusts and state and federal agencies to develop a natural greenway and trail system connecting protected lands.
3. Use the priorities and criteria established in this Open Space Plan when considering potential lands for open space preservation.

- Protect New Boston’s sensitive natural areas (wetlands and the uplands that support them, wildlife habitats, forests, steep slopes, and agricultural soils).
 - Connect unfragmented areas.
 - Preserve natural and cultural resources (scenic views, Class VI Roads, trails, and culturally and historically significant lands).
4. Develop communications strategies to share knowledge concerning the benefits of open space and to gain informed support from the residents of New Boston for taking the necessary actions to preserve open space.
- Encourage the reading, discussion, adoption, and continuous improvement of the Open Space Plan.
 - Foster dialog between landowners, Town officials, land trusts, and government agencies about implications and techniques for open space preservation.
 - Create opportunities to learn about open space benefits and preservation techniques via literature, seminars, and other educational programs.

The remainder of this section delineates techniques and strategies for fulfilling these recommendations. To help meet New Boston’s Open Space Goals, the following is a variety of tools and techniques that communities throughout New Hampshire have used for land protection. Dorothy Tripp Taylor describes many of these tools and techniques in more detail in the handbook *“Open Space for New Hampshire, a Tool Book of Techniques for the New Millennium.”*¹⁶ The handbook also refers to associated state laws and regulations, sample communities that have used these methods, and where to acquire technical assistance and additional written documents on each method. If the Town of New Boston is interested in acquiring additional information on any of the following, this resource should be utilized. This section describes some of the key ways of implementing land protection programs, but more of the techniques described in the above Tool Book can be found in Appendix E.

Voluntary Land Protection

There are two primary types of voluntary land protection. The first is the gift or sale (or combination) of land or conservation easements. The second includes Open Space Subdivision or Village Plan options.

A voluntary conservation easement involves the donation or sale of the development rights over the land. The landowner makes the decision that they wish to prohibit development on their land and preserve the natural state. They donate or sell the development rights to the town or a land trust as the easement holder; this group is then responsible for easement stewardship. The owners continue to use their land and pay property taxes on it. However, some or all of the value of any donation can be deducted from federal income taxes.

¹⁶ Taylor, Dorothy Tripp. *Open Space for New Hampshire, a Tool Book of Techniques for the New Millennium*. Manchester, NH Wildlife Trust, 2000.

Conservation Easements

A conservation easement permanently restricts development rights on open space or agricultural land. Any landowner can donate or sell a conservation easement to the easement holder (usually a non-profit land trust or municipality). The easement holder does not hold development rights (the rights are extinguished), but rather they are responsible for stewardship and enforcement of the conditions of the easement. The easement becomes part of the deed defining the property and transfers to any new owners of the property in perpetuity.

An easement should be tailored to the specific parcel of land and the values of the landowner, meaning existing structures and activities remain in place. This could include archaeological excavations, agriculture, and public events.

An easement *does not necessarily* signify public use; rather, the landowner can determine the best use of the land, including granting permission for community recreation and use. The landowner continues to hold all legal rights and responsibilities of ownership of the land, except those explicitly excluded by the easement as agreed by the landowner.

An Open Space Subdivision is a residential or mixed-use development in which a large portion of the development site is set aside as unfragmented, permanently protected open space, with the buildings clustered on the remaining portion of the land. This approach could yield roughly the same number of building lots in the development, yet preserve much more open space. Specific criteria that developers must meet to have an Open Space Subdivision vary by town. Some of the main advantages of this arrangement include its efficiency and low cost relative to other protection methods, and its ability to maintain rural character while still allowing development. Drawbacks include resistance from residents concerned with increased density on the developed land and more complex governance of the resultant open space.

Another form of voluntary conservation subdivisions exists as the “Village Plan Alternative,”¹⁷ as described in RSA 674:21. If adopted by the Town, this allows a developer to locate all development on 20 percent of the development property to allow for maximum open space. The open space area will be under a recorded conservation easement. The Village Plan area is subject to all ordinances and regulations with the exception of density, lot size, and frontage and setbacks.

Regulatory Land Protection

Another approach to land protection involves the use of zoning or municipal regulations to prohibit unnatural disturbance or total development of each parcel. Regulatory measures are perhaps the most cost-efficient means of land preservation, and if implemented according to the open space priorities of the town, can be extremely

¹⁷ NH DES, Innovative Land Use planning Techniques: A Handbook for Sustainable Development, Village Plan Alternative Subdivision. 2007

Frequently Asked Questions about Regulatory Measures

Do conservation subdivisions involve a taking without compensation?

No, for two reasons. The first is that no density is taken away. Developers can still build at full permitted density for the municipality's current zoning, but houses are condensed onto smaller lots so that at least half of the land is left as open space. Second, no land is taken for public use, since the neighborhood or the developer owns and manages the open space land (except in rare cases that are negotiated with the town).

What are the ownership, maintenance, and tax issues?

In the case of a conservation subdivision, the land most commonly belongs either to the original landowner (who can pass the land to heirs and keep it under conservation easement) or the Homeowner's Association (which consists of all residents in the neighborhood and minimizes facilities to keep dues low). The landowner or Homeowner's Association is responsible for taxation, generally the same as a normal subdivision, and maintenance. In other cases the municipality or a private land trust maintains the land or an easement on the land.

How do conservation subdivisions differ from clustering?

Clustering uses the same principle of decreasing lot size in exchange for more open space. However, clustering requires less land be set aside for conservation and makes no specifications as to what land is to be conserved nor how. Conservation subdivisions are planned to preserve natural or historical features and create green space throughout the community.

effective in curbing sprawl and protecting land. The two primary methods of regulatory land preservation are Conservation Subdivisions and Growth Management Ordinances.

An Open space Subdivision *requirement* has the same result as an Open Space Subdivision option but the requirement regulates that qualified development *must* be in conservation subdivisions. This ordinance would lower the lot size of houses built in new subdivision developments. However, it would also significantly increase the amount of conserved open space.

Growth Management Ordinances are often used by municipalities experiencing population growth at a rapid pace whose public facilities and services cannot keep up. They function by placing short or long-term caps on new residences. Under certain circumstances, a town can adopt regulations to control the rate of development. In New Hampshire, a town must have both a master plan and a capital improvement plan before it can adopt any ordinances controlling the timing of development. In certain rapid growth situations, slowing the rate of development can give a community time to update its master plan, develop infrastructure, and consider ways to conserve open space. Methods include limiting the number of building permits, or an interim growth moratorium allowing the planning board to halt or limit development for up to one year.

Some rural towns require all developers to submit an alternative conservation plan along with plans for conventional patterns of development. These conservation plans take open

space, environmentally sensitive parcels, lot size, and profitability into consideration. Most regulations for alternative conservation plans require that certified landscape architects or similarly qualified experts help to craft the plan based on soil type, drainage, and environmental features. While the developer may choose either the traditional or conservation plan, if approved, these towns have found that once developers create an alternative plan, a great number carry through with the conservation design due to the advantages it may offer.

While a town could achieve the greatest degree of open space protection for the lowest cost by mandating Open Space Subdivisions, the Town may instead choose to offer incentives to encourage developers to build according to Smart Growth Principles. The following are some of the most effective incentives:

- **Density bonuses:** Subdivisions that use innovative protection can receive density bonuses allowing them to build more houses on the existing developable land than would otherwise have been allowed in the subdivision.
- **Reduction of minimum lot standards:** Reducing requirements for elements of the subdivision allows the builder to have more flexibility in design and ultimately save money. The incentives could allow for exceptions in frontage, yard area, height, setback, and landscaping.

Transfer of Development Rights

Transfer of Development Rights (TDR) is a market based technique that encourages the voluntary transfer of growth from places where a community would like to see less development (called sending areas) to places where a community would like to see more development (called receiving areas). The sending areas can be environmentally-sensitive properties, open space, agricultural land, wildlife habitat, historic landmarks or any other places that are important to a community. The receiving areas should be places that the general public has agreed are appropriate for extra development because they are close to jobs, shopping, schools, transportation and other urban services.

TDR is driven by the profit motive. Sending site owners permanently deed-restrict their properties because the TDR program makes it more profitable for them to sell their unused development rights than develop their land. Developers buy the development rights and use them to increase the density of receiving site projects; they do that because these larger projects are more profitable than the smaller projects allowed when development rights are not transferred. In addition to making property owners and developers happy, TDR solves a seemingly intractable dilemma for communities: it gives them a way to achieve critical land use goals using little or no public funding. (1999 "Transfer of Development Rights Update", APA National Planning Conference, <http://design.asu.edu/apa/proceedings99/PRUETZ/PRUETZ.HTM>)

Other ordinances can be effective at smaller scales. These reflect the ideal characteristics of the Conservation Subdivision but can be implemented piece by piece.

- **Reduced density for conventional developments:** House lots in New Boston currently require a minimum of two acres per lot. This may be used to determine the maximum number of houses that could be built on a subdivided parcel. The developer could use Smart Growth Principles that essentially increase density in a certain area (less than 2 acres per house lot) in exchange for more open space in another. Should the developer choose not to use this approach, and instead spread the houses across larger lots, the Town might require a reduction of the total number of houses allowed in the subdivision (more than 2 acres per house lot).
- **Maximum setbacks and street widths:** By regulating that houses be built within a certain distance from the road, the Town can maximize the amount of open space contained contiguously behind each lot rather than leaving disjointed green space between the road and the building.
- **Expanded buffer zones for wetlands, riparian corridors, and special wildlife habitat on all new developments:** By requiring developers to consider and protect particularly sensitive and valuable areas, the Town can preserve its resources at little or no cost.
- **Reduction or elimination of the Current Use Change Tax:** When converting open space under current use into house lots, developers can incur an expensive tax payment to the Town. However, the Town might decide that if certain conservation criteria are met in the development, the change tax might be reduced or eliminated. In many cases, the open space benefit would be more immediate and cost effective than collecting the tax and using it to fund other conservation projects.

Purchase

The final method of open space protection is through the purchase of the land or acquisition of development rights to that land. Depending on the needs of the landowner and sources of available funding, land and development rights can be purchased at varying cost to the town.

In the case of an **outright purchase**, the town buys the property at market value from the current landowner. There are no tax benefits or exceptions for either party, and the Town no longer receives taxes on the land. This is the most costly method of land protection but requires no special arrangements with the landowner and leaves future use of the land completely in control of the Town.

A **bargain sale** is an agreement of discounted sale of property to the Town. The landowner agrees to sell his/her land below market value, and the difference between fair market value and the sale price becomes a tax-deductible charitable donation. Bargain sales are also useful for the landowner in minimizing the liability of a long-term capital gains tax associated with selling a large estate. After the sale, the Town retains all rights and responsibilities over the land.

Finally, the Town can purchase or acquire **conservation easements** over the land, which means the owner still maintains ownership and tax responsibility but is prohibited from developing the land. The Town purchases development rights, the cost of which is

usually calculated to be the fair market value of the land for development purposes minus the value of the land for open space or agricultural purposes. The Town gains the responsibility of easement stewardship, which means monitoring the land to ensure that the agreements of the easement (generally a lack of development or disturbances) are being followed.

Combining Strategies

While these methods are described independent of other strategies, they can be creatively combined to protect more land for less money. For more information on combining strategies and more implementation ideas and details, see Appendix E.

Outreach and Landowner Contact

The Town of New Boston is working towards open space preservation for the public good, but the conservation interests and cooperation of landowners and developers are essential. The NBOSC is committed to identifying critical protection areas based on natural resource co-occurrence value, large parcels of land, and “hot spots” in town without identifying specific landowners or parcels. The Town faces the challenge of reaching out to residents to persuade them of the importance and the benefits, both social and economic, of open space. Public education campaigns are the first important step in outreach.

With community outreach and cooperation of the P.L.C., the Russell Foundation, the Conservation Commission, and other land conservation organizations, some landowners and developers will be more eager to conserve their land through easements, conservation subdivision options, and sale of property. Landowners with accurate information about the benefits of open space and the economic and tax implications to them are more likely to want to conserve their open space. Therefore, preparing information and making it readily available can be one of the most effective ways to conserve open space.

Potential Schedule and Costs for Implementation

It is recommended that the New Boston Open Space Committee oversee the implementation of the Open Space Plan. The following basic steps can guide the implementation process:

- Identify and prioritize key conservation resource areas of New Boston to pursue acquisition and protection.
- Consult with other Town Departments and Committees to coordinate efforts.
- Work with Town officials to organize and develop sources of funding, including the issuance of bonds.
- Assist the Conservation Commission in the development of an overall management plan for conservation land and existing Town-owned properties, including periodic monitoring to ensure the restrictions are being adhered to.
- Recruit and train volunteer land stewards to conduct monitoring of the Town-owned properties and conservation easements.

In addition, the Planning Board and Conservation Commission should continue to recommend changes to the Town’s zoning, subdivision and site plan regulations and

adopt other mechanisms that give the Town greater ability to create permanent, useable open space as part of new developments.

Action Plan for Implementation

Recommended Actions	Time Frame	Funding Source	Primary Responsibility
Adopt the Open Space Plan as an official part of the Town's Master Plan.	Short Term		Planning Board (PB)
Research and propose possible amendments to the Town's development regulations to align growth of the Town to goals presented in the Open Space Plan. In particular, start by further investigating the following: <ul style="list-style-type: none"> • Adoption of regulations supporting Smart Growth Principles. • Consider incentives to developers for preserving open space and Smart Growth development. 	2009-2011 Long-term		Open Space Committee (NBOSC) Conservation Commission (CC) PB
Establish conservation easements on existing forests owned by the Town.	Mid-term		CC Forestry Committee
Increase the portion of Current Use Change Tax used for conservation purposes to 100%.	Short-term		Selectmen
Research alternative funding methods, including possibility of a capital reserve fund or a bond issue for purchasing land or conservation easements.	Ongoing		NBOSC, CC, and Board of Selectmen
Pursue means of land protection offered by state, federal, and non-profit agencies. <ul style="list-style-type: none"> • Educate citizens about tax benefits of conservation easements, land donations, and bargain sales. • Forge partnerships with local, state, and national land trusts to connect with additional funding sources. • Identify and work to obtain grants for agricultural land protection, 	Ongoing	Grants, Conservation Fund	NBOSC

New Boston Open Space Plan

<p>forestry, water resource protection, wetlands, scenic roadways, cultural and historic resources, and wildlife habitats.</p> <ul style="list-style-type: none"> • Continue to improve knowledge and practices in creation and use of conservation easements. • Encourage communication among landowners. 			
Distribute criteria determined by the New Boston Open Space Committee as well as other relevant information to the parties influencing land acquisition decisions, including the Planning Board, the Conservation Commission, the Select Board, the Zoning Board, and developers.	Short-term		NBOSC
<p>Outreach to landowners with information and educational opportunities about preserving their open land:</p> <ul style="list-style-type: none"> • Develop information on conservation easements. • Encourage private forest owners to join the New Hampshire Tree Farm Program, which promotes sustainable forest management practices. • Work with New Hampshire Fish and Game on the implementation of the Wildlife Action Plan. 	Short term		NBOSC
<p>Outreach to townspeople on values of open space and recreational opportunities within New Boston:</p> <p>Prepare an inventory and map of significant recreational areas, trails, and historic sites in New Boston.</p>	Short term		NBOSC

New Boston Open Space Plan

Continue to work with P.L.C. and other land trusts and state and federal agencies to develop a natural greenway and trail system. <ul style="list-style-type: none">Expand partnerships with Conservation Commissions in surrounding towns.	Ongoing	CC and NBOSC
Recruit, train and maintain a group of land stewards to monitor town-owned land and conservation easements	Ongoing	NBOSC and CC

APPENDIX A: MAPS AND PLANS AND PROGRAMS

Existing Maps Related to Open Space in New Boston

A number of maps have been created to assist the Town of New Boston with the task of open space planning. The following is a list of these plans, strategies and maps, with a brief summary of each.

1. New Boston Base Map

- Identifies state, local, and class VI roads.
- Displays local hydrography and town boundaries.
- Map shows all basic town features including parcel boundaries.

2. Land Cover Map

- Map displays town's varying vegetation, waterways, tree species, wetlands, and agricultural land cover.

3. Protected New Boston Lands Map

- Map features conservation parcels.
- Features also include roadways, hydrography, and political boundaries.

4. Unfragmented Lands Map

- Shows all land parcels not divided by roadways.
- Map also shows major wetlands in town.

5. Wetlands Composite Map

- All town wetland areas and water bodies are shown in this map.

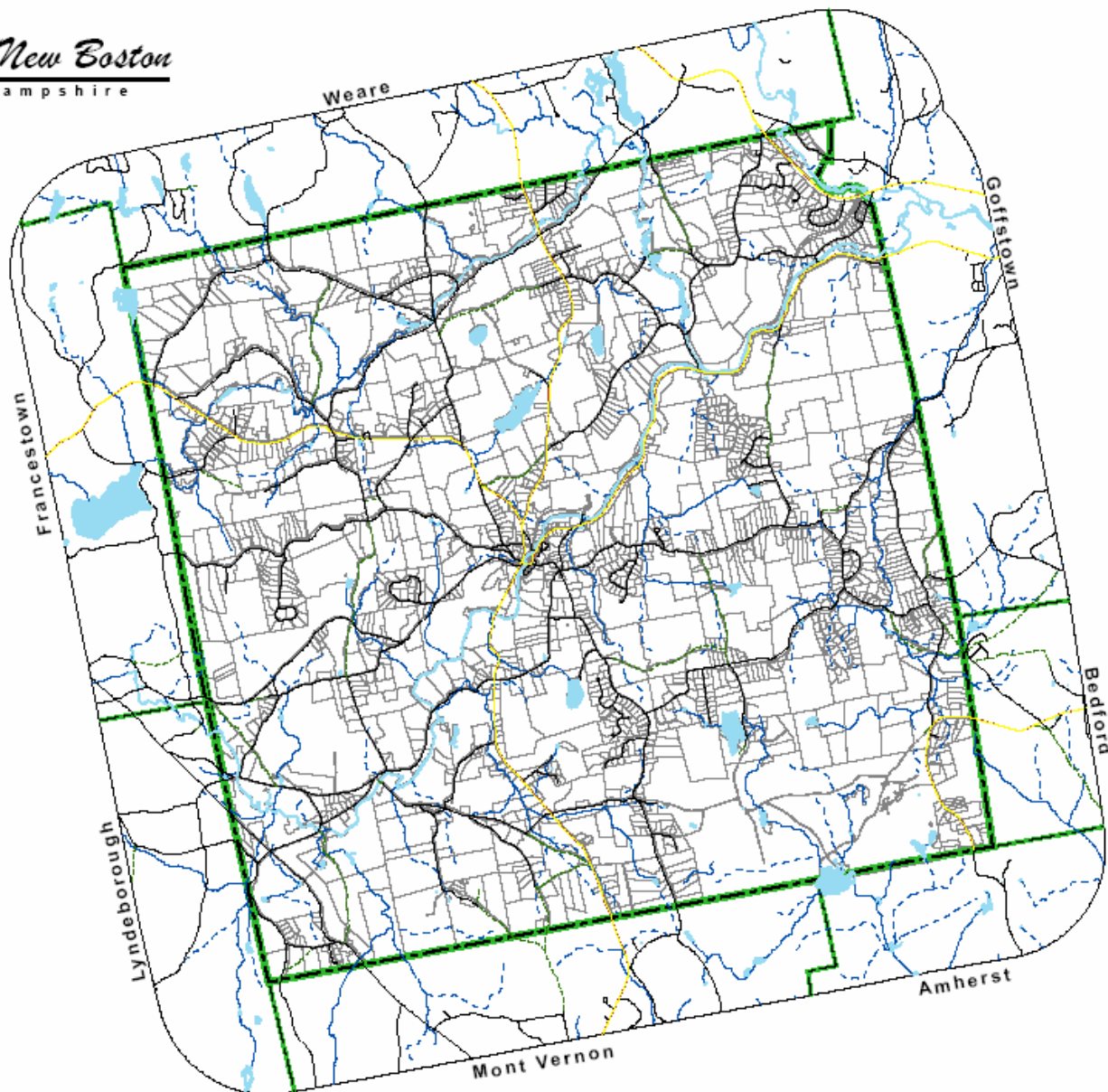
6. Development Constraints Map

- All town political boundaries, land use, hydrology, wetlands, and slope features that restrict or limit development and/or certain types of growth.

7. Co-Occurrence Map

- A natural resources Co-Occurrence Analysis is an important tool in identifying and prioritizing areas for protection.
- The Analysis identifies high-value natural resource areas and maps them, with multiple levels of unique resource data overlaid spatially using geographical information system software (GIS) to display on one comprehensive map.

Town of New Boston
New Hampshire



Map #1 Base Map

Legend

Road Network

- Interstate
- State Roads
- Local Roads
- Class VI Roads

Hydrography

- Streams
- - - Intermittent Streams
- Open Waterbodies

Political Boundaries

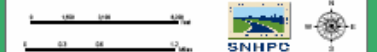
- Town Boundary
- Neighbor Town Boundary
- 1 Mile Buffer

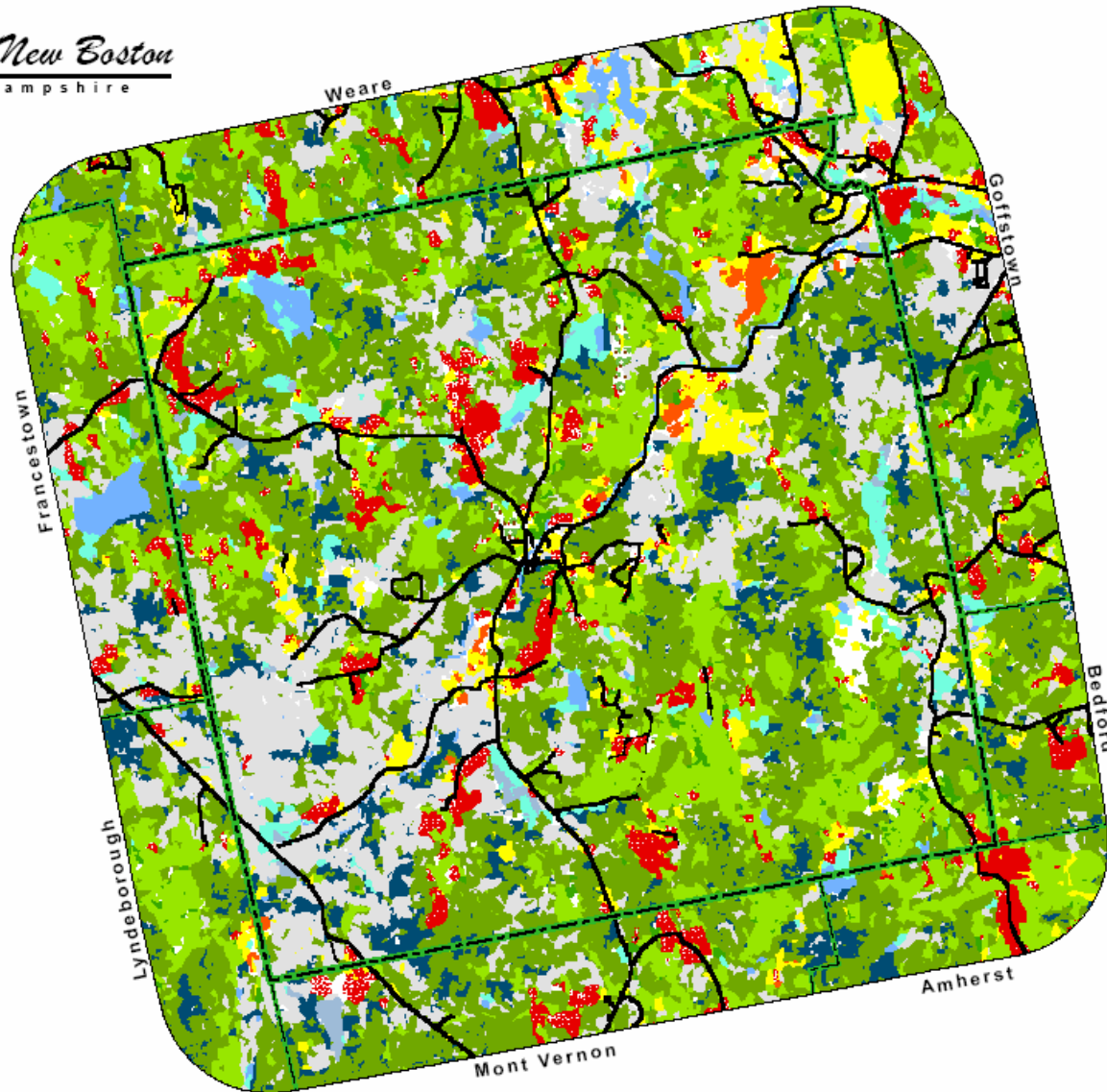
This map was produced by the Southern New Hampshire Planning Commission for the Town of New Boston, New Hampshire January 8, 2004. Revised March 10, 2008.

Data Sources:
SHEMANT Digital Data (© 2000), NH Department of Transportation, Town of New Boston Composite Tax Map, Zoning Coverage digitized by SHEMANT, NH GIS.

The Town of New Boston and the SHEMANT make no representation or guarantee to the accuracy of the location and description of this map. All zoning boundaries are approximate. This map is designed for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

This map does not, and is not intended to, indicate the official status (exceptance by the Town) of streets and roads.





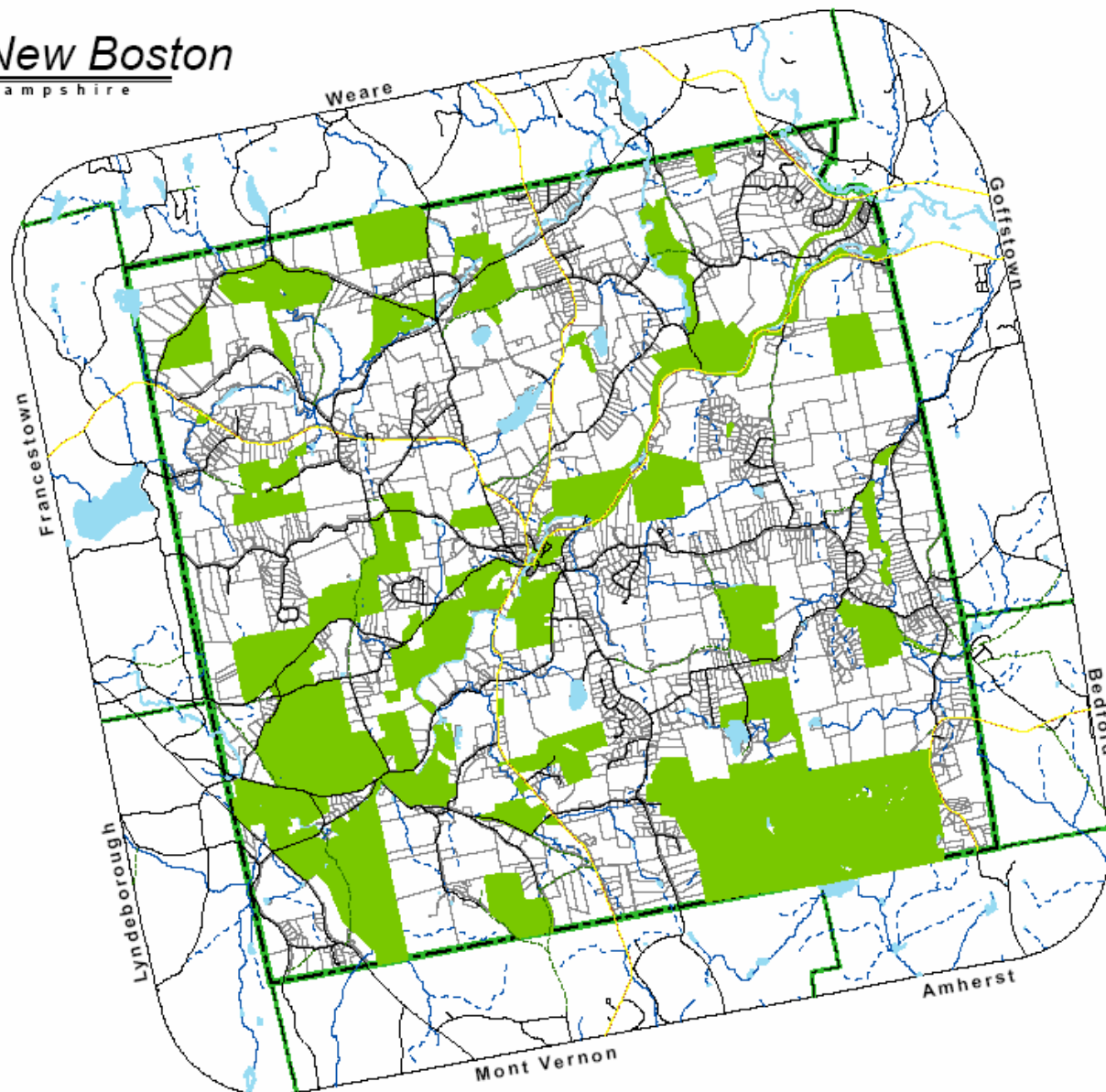
Legend

- Neighbor Town Boundary
- Political Boundaries**
- ▬ Town Boundary
- nhlc2001_buff
- Transportation
- ▨ Crops
- ▨ Orchards
- ▨ Hay Pasture
- ▨ Cleared/Other Open
- ▨ Disturbed
- ▨ Beech/Oak
- ▨ Other Hardwoods
- ▨ Mixed Forests
- ▨ White/Red Pine
- ▨ Hemlock
- ▨ Forested Wetland
- ▨ Open Wetland
- ▨ Open Water
- ▨ 1 mile buffer

This map was produced by the Southern New Hampshire Planning Commission for the Town of New Boston, New Hampshire January 8, 2004. Revised March 15, 2006.
Data Sources:
Aerial Digital Data (1:24,000), NH Department of Transportation, Town of New Boston Composite Tax Map, Zoning Coverage digitized by SNHPC, NH 2003.
The Town of New Boston and the SNHPC make no representation or guarantee to the accuracy of the features and descriptions of this map. All zoning boundaries are approximate. This map is designed for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.
This map does not, and is not intended to indicate the official status (as determined by the Town) of details and roads.



Town of New Boston New Hampshire



Map # 3

Protected Lands

Legend

Road Network

- Interstate
- State Roads
- Local Roads
- Class VI Roads

Conservation_Parcels

Hydrography

- Streams
- Intermittent Streams
- waterbodies

Political Boundaries

- Town Boundary
- Neighbor Town Boundary
- 1 Mile Buffer

This map was produced by the Southern New Hampshire Planning Council for the Town of New Boston, New Hampshire January 6, 2004. Revised March 12, 2009.

Date Sources:
USGS/USF Digital Data 11-24-2003, NH Department of Transportation, Town of New Boston Composite Top Map, Zoning Coverage updated by SNHPC, Nov 2008.

The Town of New Boston and the SNHPC make no representations or warranties to the accuracy of the data and designations on this map. All using boundaries are approximate. This map is designed for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

This map does not, and is not intended to indicate the official status (as approved by the Town) of roads and trails.



Town of New Boston
New Hampshire



Map #4 Unfragmented Lands

Legend

Political Boundaries

- Town Boundary
- Neighbor Town Boundary
- 1 Mile Buffer

Hydrography

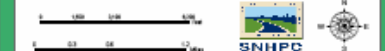
- Streams
- Intermittent Streams
- Wetlands
- waterbodies
- Unfragmented Lands

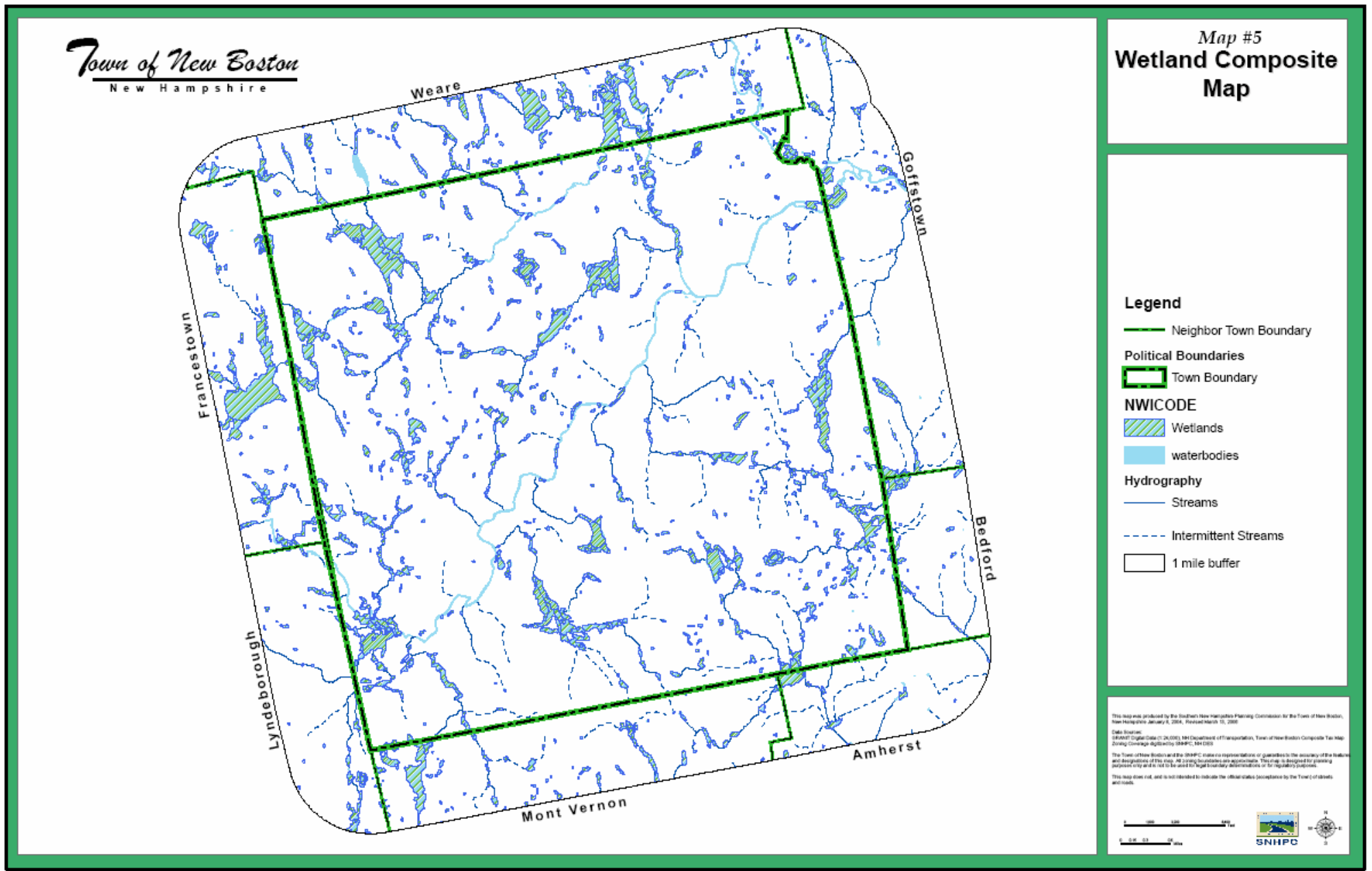
Road Network

- Interstate
- State Roads
- Local Roads
- Class VI Roads

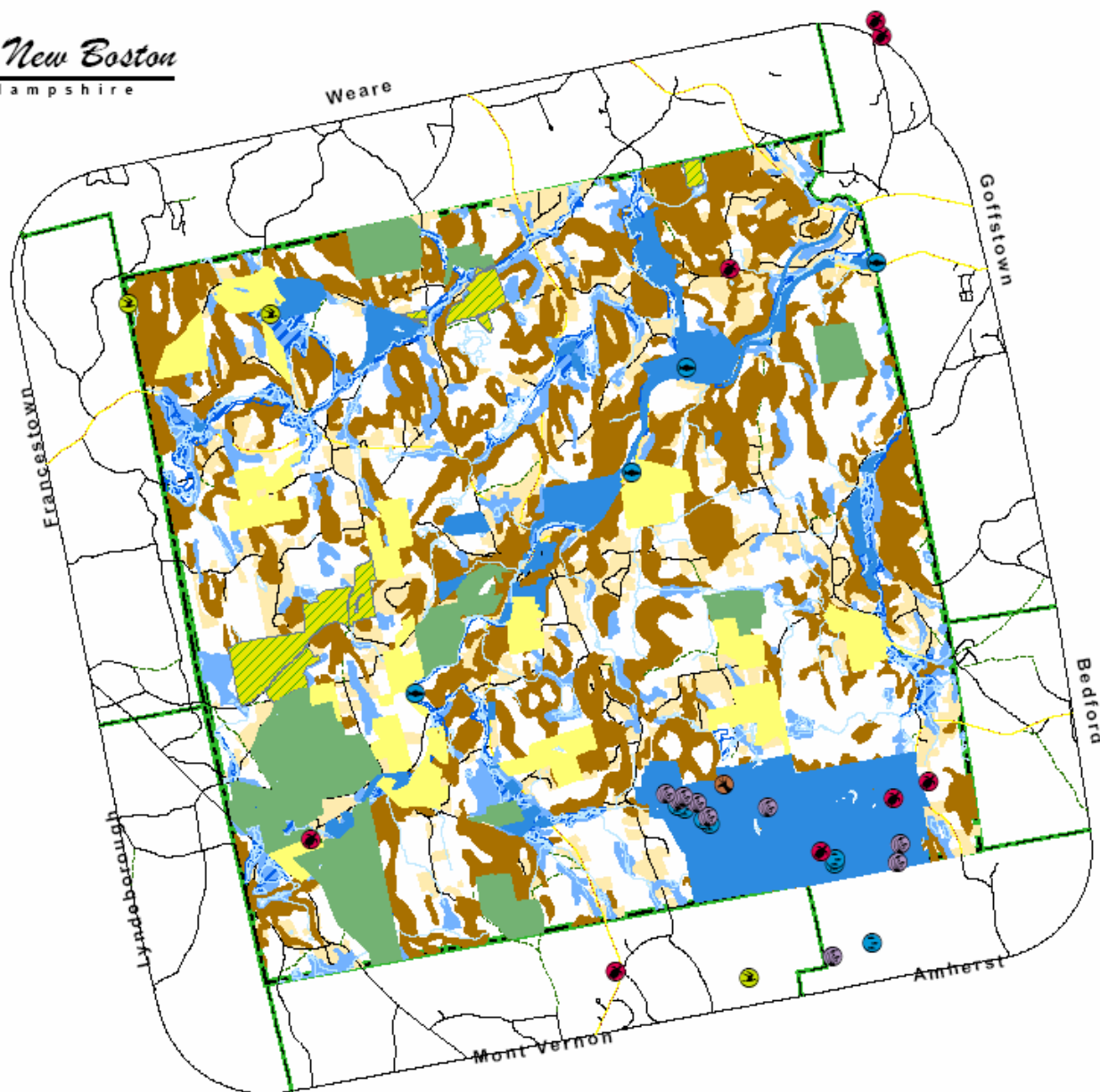
This map was produced by the Southern New Hampshire Planning Commission for the Town of New Boston, New Hampshire January 8, 2004, Revised March 10, 2005.
Data Sources:
NHSPC Digital Data (1:24,000), NH Department of Transportation, Town of New Boston Composite Top Map, County Coverage Digitized by NHSPC, NH 0303.

The Town of New Boston and the NHSPC make no representation or guarantee to the accuracy of the location and designations of the map. All designations are approximate. This map is designed for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.
This map does not, and is not intended to indicate the official status (acceptance by the Town) of streets and roads.





Town of New Boston
New Hampshire



Map #6
**Development
Constraints**

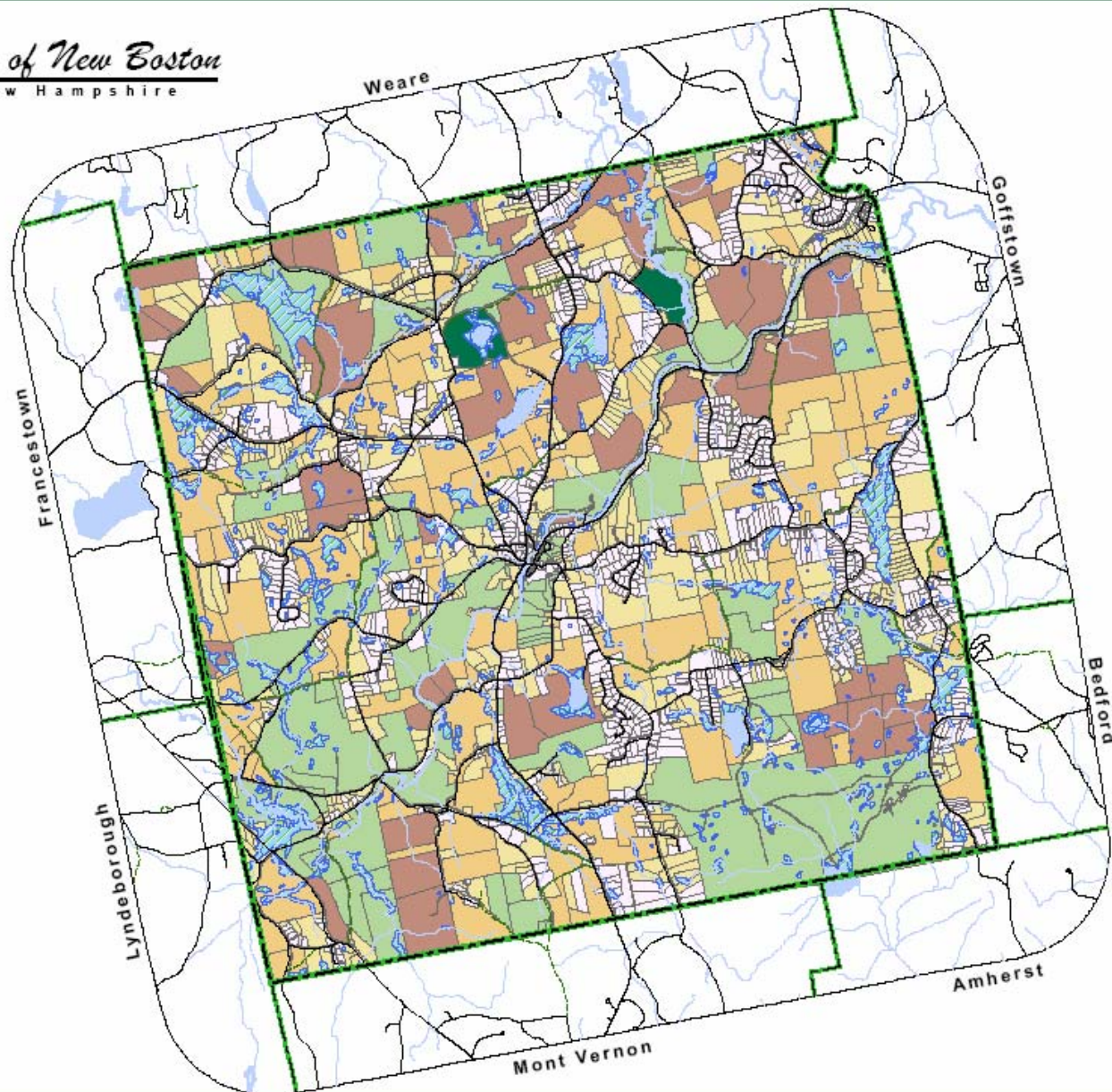
Legend

- Conservation Lands
- Conservation Easements
- Public/ Semi public
- Town Forest
- Political Boundaries**
- Town Boundary
- Neighbor Town Boundary
- 1 Mile Buffer
- Hydrography**
- Streams
- FEMA Floodplain - 100 YR
- Ground Water Hazard Area
- Wetlands (Hydric Soils A & B)**
- Hydric Soil
- Steep Slope**
- 60; 50; 35; 25
- Developed Lands

This map was produced by the Southern New Hampshire Planning Commission for the Town of New Boston, New Hampshire, January 8, 2004. Revised March 10, 2005.
Data Sources:
GRANT Digital Data (© 2000), NH Department of Transportation, Town of New Boston Composite Top Map, Zoning Coverage Rights by SNHPC, NH 03053.
The Town of New Boston and the SNHPC make no representations or warranties to the accuracy of the features and designations of this map. All zoning boundaries are approximate. This map is designed for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.
This map does not, and is not intended to indicate the official status (acceptance by the Town) of streets and roads.



Town of New Boston
New Hampshire



Map # 7
CONSERVATION
CO-OCCURRENCE

- Town Boundary
- Conservation lands
- Co-occurrence**
 - 0-2
 - 3-5
 - 6-8
 - 9-11
 - 12-14
- Water Bodies**
 - Major Stream
 - Intermittent Stream
 - Rivers
 - Lakes and Ponds
 - Wetlands
- Roads**
 - State Roads
 - Local Roads
 - Class VI Roads

This map was prepared by the Southern New Hampshire Planning Commission for the Town of New Boston, New Hampshire, January 9, 2004. Revised November, 2007.

Map Source:
NHSPD Open Data (1/1/2007)
NH Department of Transportation
NHSPD
Town of New Boston Composite Top Map
Zoning Coverage digitized by NHSPC

The Town of New Boston and the NHSPC make no representations or warranties to the accuracy of the features and designations of this map. All existing boundaries are approximate. This map is designed for planning purposes only and should be used for legal boundary determination or for regulatory purposes.

This map does not, and is not intended to, act as the official record (prepared by the Town) of survey and maps.

Scale: 1 inch = 1 mile



Appendix B: Hydrological Features

Sites that protect surface and subsurface water resources are an important aspect of any Open Space Plan. It is important to protect surface water for public access as well as ground water quality.

Watershed Boundaries

Watersheds are natural drainage basins that allow water to flow to the lowest point within the basin. The Town of New Boston lays within the Greater Merrimack River Water Basin, the South and Middle Branch watershed of the Piscataquog River, as well the Bog Brook and Baboosic Brook Watersheds. New Boston's major surface water resources are the Piscataquog River, Bailey Pond, and Beard Pond.

Streams and tributaries are generally at the lowest point of a watershed. A certain percentage of the precipitation that falls in the watershed will flow into the streams and then travel downstream to its major outlet, which in the case of the Piscataquog River is the Merrimack River. Characteristics of a watershed generally include soil, vegetation and habitat, and the man-made environment of roads, utilities, and structures.

Much of the information in this section related to the watershed boundaries within New Boston can be found in the Master Plan.

Floodplains

Floodplains or flood hazard areas are adjacent to rivers and tributaries, and can provide one of the best habitats for a number of species. They can also provide a continuous and unbroken habitat that allows species to travel throughout their range. Typically, floodplain areas will contain a significant amount of vegetative cover, including trees, brush, grasses and shrubs. These areas provide both food and water for the species that are found there.

New Boston contains significant floodplains surrounding its major bodies of water. The most extensive being along Buxton Brook in the northwest corner of New Boston and where the Cold Spring Brook joins with the South Branch which flows through the village center. Other significant floodplains exist around the North and Middle Branches of the Piscataquog as well as Bog, Lords, and Meadow Brooks. Additional smaller floodplains surround minor wetlands and tributaries.

Since these areas are frequently flooded, an attempt should be made to discourage persons from building in the floodplain. The floodplain should remain in its natural condition to accommodate runoff water during snowmelt and rainstorm periods, and to provide wildlife habitat. Any construction within these areas may result in higher water levels during flood events, as well as disrupting habitat features.

Wetlands

The New Boston Master Plan uses the U.S. Army Corps of Engineers and the State Wetlands Bureau's definition of wetlands, which state that wetlands are areas that are

“inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that, under normal conditions, do support, a prevalence of vegetation typically adapted for life in saturated soil conditions”.

This type of vegetation is termed “hydrophytic” vegetation. Due to their saturated state, wetland soils are often termed either “*very poorly drained*” or “*poorly drained*”. Many communities in New Hampshire base their wetland definitions on soil drainage classification alone, since in disturbed areas hydrophytic vegetation may have been removed or destroyed.

Consistent with this definition, the U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS) has identified two classes of wetland soils: Soils which are very poorly drained and soils which are poorly drained or somewhat poorly drained. Very poorly drained soils are rated by the NRCS as having severe limitations for virtually all forms of development, including septic systems. The ability of poorly drained soils to accommodate residential development is limited. Some of these soils have seasonally high water tables, which could be potentially damaging in terms of producing wet basements or creating frost heaves in roadways.

Regardless of their size and limitations, wetlands are known to be an extremely valuable resource. Wetlands act principally as flood control areas where water is stored during periods of high runoff. They slowly release excess water downstream, which subsequently prevents hazardous flooding. In addition, wetlands also may be:

- used for peak flood reductions;
- settling basins for sediment generated by erosion;
- pollution filters (wetland vegetation utilizes some pollutants as nutrients);
- areas of water supplies, by recharging groundwater and streams;
- wildlife habitats, providing food, cover, and nesting and breeding sites;
- educational and recreational resources; and
- groundwater recharge zones.

Wetlands are usually found in close proximity to rivers, streams, and ponds or in isolated upland depressions. Wetlands are generally ranked as having the lowest development potential of any land type. Their disturbance quite often disrupts the other valuable roles they serve. Instead, wetlands should be designated for use by compatible activities such as those that do not require the construction of buildings or structures, or those that will not necessitate alteration of the natural surface configuration by the addition of fill or by dredging.

The New Hampshire Wetlands Bureau administers regulations that require permits for wetland alterations. The Federal Emergency Management Agency (FEMA) requires local regulations that respect the flooding cycles of all water bodies. It is in the Town’s interest to consider these factors when planning future development and protection of open space preservation areas.

"America's wetlands provide something for everyone. Wetlands protect us all in many ways--they filter pollutants from our drinking water, protect our homes by storing floodwater, and provide homes for fish, shellfish, and wildlife. Wetlands are crucial for clean water, serving as a natural filter, absorbing water-borne pollutants and damaging contaminants before the water enters our rivers, lakes, and streams. Despite the fact that wetlands are of unique value to our society, a 1997 survey by the U.S. Fish and Wildlife Service reports that roughly 58,500 acres of wetlands are being destroyed annually.."

The Sierra Club

Wetlands are found in many areas throughout the Town of New Boston. In 1995, the USGS completed a study of wetlands in New Boston, ranking the Water Quality of Stratified Drift Aquifers value to the town. On a town-wide basis, the poorly drained or somewhat poorly drained soils comprise approximately 1,350 acres, and the very poorly drained soils, that include muck, peat and freshwater marsh areas, are estimated to comprise approximately 1,650 acres within the Town.

New Boston's wetlands are spread throughout the Town, with the largest area of wetlands located near the Cochran Hill drainage, which flows southwesterly into the South Branch of the Piscataquog River. The other significant concentrations are in the area near the 2nd NH Turnpike intersection with Lyndeborough Road, along Bog Brook, the Middle Branch of the Piscataquog River, as well as around surface waters such as Beaver Dam Pond and Bailey Bond. See the *Wetlands Composite Map* for details.

Regulations related to wetlands found within the Town's zoning, site plan and subdivision ordinances should be reviewed regularly in order to ensure that these areas are adequately protected, allowing only those uses that do not contribute to the degradation of a wetland area.

Aquifers

An aquifer consists of underground soil or rock that groundwater is easily able to move through. Aquifers typically consist of gravel, sand, sandstone or fractured rock. Water from fractured bedrock provides 25% of New Hampshire's drinking water and 85% of the water for private domestic wells. Most residents in the Town of New Boston depend upon aquifers to supply them with drinking water. During years of drought, some wells dry up and homeowners are forced to drill new wells for domestic water.

It is important to protect groundwater within existing or potential public drinking water supply aquifers. Aquifers, like wetlands, serve as a place of storage for water. Development of land that overlies aquifers can have negative, often irreversible impacts. Faulty septic systems or leaking underground storage tanks can contaminate groundwater. Activities such as sand and gravel excavation remove the overburden that can filter out many potential pollutants.

Because of the role aquifers play in contributing abundant clean water, as well as their interconnections with wetlands and rivers, land planning in and around these sites should favor low-impact, low-intensity uses that do not have a high degree of probability for groundwater contamination.

New Boston has a Ground Water Resource Conservation District ordinance which addresses many of these areas.

The Town has also recently been working on a Source Water Protection Plan whose purpose is to identify public water system vulnerabilities and offer recommendations to manage potentially contaminating land uses. This Plan inventories and assesses the threats to the active public water systems existing within the Town of New Boston and recommends changes to local protections (e.g. zoning ordinance and site plan regulations) as the preferred management strategy.

Appendix C: Town-Owned Open Space

Several of the Town's open space parcels are protected by conservation easements, town forest designations, or deed restrictions, including those from the LCIP (Land Conservation Investment Program, a precursor of the LCHIP). As such they are restricted to non-motorized recreational activity, allowing no building except in restoring existing structures. Other parcels have no such formal restrictions, but are still considered conservation land under the auspices of the Conservation Commission.

All of these conservation lands benefit the Town of New Boston in several ways. These undeveloped parcels of greenery help maintain the town's "rural character", a quality desired by current residents as well as others searching for a healthy place to live. Providing areas for low impact recreation also aids public health. Additionally, the forests help keep our air clean and add to the scenic beauty of the Town. Connecting protected parcels provides larger areas for wildlife corridors and habitat. Conserved parcels near the Piscataquog River help protect it from pollution and runoff which could easily occur under some forms of development.

New Boston Conservation Land

- The **Lyndeboro Road Conservation Area**, acquired through the LCIP in 1990, consists of two riverfront parcels totaling 41 acres. Only game trails provide access for anglers to the South Branch. Located on the south side of Lyndeboro Road, the eastern entrance is across from Cochran Hill Road via a small parking area, while the western parcel lies to the east of the intersection with Misty Meadow Road with only roadside parking available.
- The 82 acre **Middle Branch Conservation Area** is accessed from the eastern end of Middle Branch Road where parking is available. A foot trail loops around the beaver pond and onto the uplands.
- The **Mill Pond Conservation Area**, procured through the LCIP in 1990, and comprised of 13 acres at the end of Mill Street, extends along the river bank and up the hill to the cemetery. A riverfront foot trail extends from the entrance to a stone wall on the south boundary.
- The four mile long **Railroad Trail** stretches along the South Branch of the Piscataquog River from the 4H grounds to the Goffstown town line. Part of the abandoned B&M Railroad, this area was acquired by the Town from the PLC and through the LCIP. The fairly level trail is used for low impact recreation, and motorized vehicles are prohibited. Lang Station and a footbridge over the Middle Branch are points of interest along the trail which also connects with footpaths and horse trails in Lang Station State Forest. Parking is available at the 4H end of the trail and at Lang Station, both of which provide trail access.
- The 86 acre **Saunders Pasture**, although owned by the Town, is under a conservation easement held and monitored by the Piscataquog Land Conservancy. Located on Saunders Hill Road along Great Meadow, it has a parking lot at the

- trail entrance. This trail which traverses both field and forest provides views of the meadow.
- The **Skofield Conservation Area**, located on Briar Hill Road, is a 36 acre forest. Its loop trail is open for low impact, non-vehicular recreation and is easily accessible from a small parking lot on the roadside.
 - Several pull out areas along Route 13 allow parking and access to the South Branch for anglers and paddlers.

Town Forests

- The 11 acre **Follansbee Lot** abuts the Middle Branch Conservation Area.
- The **Lydia Dodge Lot** is accessed from Old Coach Road via the New Boston Trail. Jonathan Brooks designed this trail to meander through this forest.
- The 70 acre **Sherburne Lot** abuts the Lydia Dodge Lot and is accessed by a Class VI road off Old Coach Road.
- The 85 acre **Siemeze Lot** along the south side of Middle Branch Road abuts the river from PLC conservation land. A Class VI section of Lull Road connects this lot with the 10 acre town owned **Colby Lot**.

Appendix D: About Tax Benefits, Funding, Easements

The numerous income and estate tax benefits have helped to convince many landowners to sell or donate their land or development rights. Both Congress and the New Hampshire state legislature make frequent changes to tax laws that affect the donation or sale of land, and therefore landowners should consult with an attorney or tax advisor before taking action on their property.

Any land donated for charitable purposes (i.e. without requirement, stipulation, or payment of goods or services) may qualify for an income tax deduction from the IRS. These charitable gifts may be made during the donor's lifetime or at his or her death and must be made to an IRS-qualified entity, such as a government agency or a tax-exempt land trust organization. Land donated becomes removed from estate taxes, thus releasing the burden to heirs. Conservation easements also reduce the amount of estate taxes as they reduce the assessed value of the land. If the value of the donated property or property rights exceed \$5,000, the landowner must obtain a "qualified appraisal" by a "qualified appraiser," the details of which can be explained by an attorney or tax advisor.

Income Tax

Income tax deductions for gifts of appreciated property (including most gifts of land and easements) can qualify for up to 30% of one's Adjusted Gross Income (AGI). If the value of the gift is less than 30% of one's AGI, the value can be carried for up to five additional years, with a 30% deduction each year until the total value of the gift is depleted or six years have passed. If a landowner claims the property's basis—the original purchase price or value of the property at the time of inheritance—rather than fair market value, the landowner can claim up to 50% of his or her AGI each year for up to six years (in the same manner as with the 30% deduction). For a conservation easement, the easement value is adjusted in proportion to the property's basis. The 50% option is preferable for recently purchased or inherited property, property that has not significantly appreciated since time of acquisition, or the landowner's anticipation of not living long enough to take advantage of the five-year carry forward period.

Bargain sale of property also holds tax advantages, as the amount of discount below the full value can qualify for IRS income tax deductions. With the addition of real estate broker commissions, real estate transfer tax, and capital gains tax paid through the full value sale, the bargain sale can be nearly as financially valuable to the landowner while passing significant savings to the municipality.

Other costs relevant to conservation easements can also be tax deductible. For example, cash or securities used to endow stewardship of easements are considered charitable donations. Also, legal and appraisal fees can qualify as miscellaneous deductions if they can alone or in combination with other fees make up at least 2% of one's AGI.

Current Use

The Town of New Boston, to gain lands that are secured for open space, may attempt to purchase land development rights to prevent any future development to open lands. This can be a positive incentive for land owners who could also potentially sell land to developers. The Town owns development rights but the land owner still has control over the land.

Land under current use pays taxes at a lower rate than land not in current use. Rates for current use are set by the NH Department of Revenue Administration Current Use Board. While conservation easements can reduce the total property value and therefore reduce property taxes, most landowners already have the land under current use and are not paying full property taxes on it. For land not already in the current use program, or less than 10 acres in size, the landowner can apply to the municipality for a Conservation Restriction assessment. This would allow an easement on this land to be assessed at values similar to current use assessments.

The Town of New Boston currently has set tax rates for 2008:

Property Taxes - \$14.71 per \$1000 assessed

Timber Yield Taxes - 10%

Current Land Use Change Tax - 10%

Gravel Taxes - \$0.02 per cubic yard

Appendix E: Further Implementation Strategies, Programs, and funding Source Options

Implementation Strategies

The New Boston Open Space Committee highlights in Section 6 their priorities for land conservation and open space regulations. However, the most effective open space plan will take into account all available strategies and funding sources, compiling the optimal mix for a comprehensive land protection program. The following are existing implementation tools to assist in crafting land protection:

Agricultural District Laws: Agricultural district laws allow farmers to form special areas where commercial agriculture is encouraged and protected. Programs are authorized by state legislatures and implemented at the local level. Common benefits of enrollment in a district include automatic eligibility for differential assessment, protection from eminent domain and municipal annexation, enhanced right-to-farm protection, exemption from special local tax assessments and eligibility for state PACE (Purchase of Agricultural conservation Easement) programs.

Buffers: Planning Boards are advised to consider a buffering requirement on uses adjacent to a farm when reviewing plans for subdivisions.

Circuit Breaker Tax Relief Credits: Circuit breaker tax programs offer tax credits to offset farmers' property tax bills. Like differential assessment laws, circuit breaker tax relief credits reduce the amount farmers are required to pay in taxes.

Cooperative Purchases With Conservation Groups (e.g., New England Forestry Foundation, The Nature Conservancy, Corporate Conservation Council, and Trust for Public Land): Various local, regional, and national land trusts and conservation groups can provide a tremendous amount of assistance to landowners wishing to keep their property undeveloped. Once land is accepted by a trust, stewardship of the property tends to be excellent. The Trust for Public Land (TPL), a national land trust, is able to move quickly with willing landowners, and can provide the necessary legal assistance to complete the transaction. TPL is particularly helpful with larger more expensive pieces of property that are threatened with development.

Current Use Program: The Current Use Program is voluntary for landowners. Land tax value under New Hampshire's Current Use Program is based upon the value of the land as it is being used now (usually farmland, forest, and wetlands) as opposed to its potential use that would result in the property being taxed at a significantly higher rate.

Density Bonuses: Developers can be allowed approval for a limited number of additional units (higher densities) on a site with reduced road width or setback requirements, in exchange for providing something else that the community desires, such as open space.

Designating Forests: A town or the state, through the Department of Resources and Economic Development (DRED), can purchase, manage and improve forestlands. The forest designation can encourage landowners to donate their forestland because the donation can be accompanied by conditions restricting its use. The town also benefits from the forest designation. It can receive money from the state in lieu of taxes it would have gotten if the land were privately owned.

The Town can vote to designate a Town owned property as a Town Forest. The property must remain forest, managed by the Forestry Committee or the Conservation Commission until the Town votes to change its use.

Designating Scenic Roads: The Planning Board, Conservation Commission, Historical Commission, or individuals by petition can request that a particular road be designated as “scenic.” The entire road does not have to be designated as scenic; portions of the road are acceptable. Voters can decide at a town meeting whether to officially approve the road(s). Prior to acceptance of a road as “scenic,” abutters must be contacted and informed of the designation. Once the road is officially designated as “scenic” any repair, maintenance, reconstruction, or paving work done to that road cannot involve the removal of trees or any portion of a stone wall except with the written permission of the town Planning Board after a public hearing is held.

Impact Fees: Towns that have capital improvements programs are allowed to charge developers impact fees to help cover the costs of the development on specific municipal facilities and increased infrastructure to support new development areas.

Management Agreements: Management Agreements can be made with willing landowners through verbal or contract agreements to help protect natural resources.

On-Farm Retail Sales: Flexibility in site plan review regulations can be used to exempt farm stands from inappropriate commercial regulation, or to allow a community to develop a tiered approach to the regulating of farm stands. Communities are encouraged to exempt seasonal farm stands from municipal regulations other than proof of safe site access. Year-round operations warrant review by the local authorities to address the safe operation of the site. However, the review could be modified to provide for reduced standards from those applied to commercial and industrial uses.

Overlay Districts: Overlay districts can be used by communities to apply special regulations to a number of resources with definable site-specific characteristics that can be delineated on a map. There are several types of overlay districts, such as drinking water, wetlands, steep slopes, mountain, agricultural, village, historic, species of concern, and scenic overlay districts.

Performance and Design Standards: Performance and Design Standards can include aesthetic and natural characteristics based land use regulations, and flexible zoning.

Purchase of Development Rights or Transfer of Development Rights (PDR or TDR):

The purchase of development rights is essentially the purchase of a conservation easement. Instead of donating easements, farmers can sell them to the state, concurrently placing permanent agricultural preservation restrictions on their farms. Similarly, a community or local group may purchase development rights on farmland or other land. Instead of a tax deduction for the gift of an easement, the landowner receives cash for the value of the easement. Transfer of development rights operates under the same theory as a purchase program. This program transfers development from one area to another, and preserves open space in the sending area. Development rights are transferred from conservation land, such as farmland, to land slated for development. A developer purchases development rights from the owner of land in a conservation zone in order to accrue development “points”. He or she can apply points toward development of property in a zone where development is encouraged, and develop that land at a greater density than would otherwise be permitted.

Purchase of Land: A voluntary method that a town can use to preserve open space. Land can be acquired through donation or purchase with or without various restrictions including deed restrictions, conservation easements, or for tax benefit to the donor.

Although purchasing property is an obvious method that a town can use to preserve open space, this method can often times be cost prohibitive to a community. However, there are a variety of methods that a town can use to appropriate funds to purchase land for conservation purposes. A town can appropriate money through a Conservation Fund. These funds can be utilized after a vote of the town legislative body. The town can use Capital Reserve Funds as long as they are specified for a particular purpose such as purchasing land or an easement. Dollars have been raised through managing town property in some communities, usually through timber harvesting. Surplus Funds from previous years can be used after a town meeting vote. If a proposal passes town meeting by a two-thirds vote, the town can borrow money through a municipal bond. A property that the town acquires through a tax lien could be used for conservation purposes. If the town decides to sell the particular property, a conservation easement or deed restriction could be placed on the property. Finally, land use change tax revenue can be used for conservation purposes when a property is withdrawn from the Current Use Program.

Right-Of-First-Refusal: A right acquired or donated to the Town, where the Town would have the first option to purchase a piece of property when an owner decides to sell. The Town would not be obligated to purchase the property, but would have a limited amount of time to decide if there was interest in purchasing the land.

Tax Abatement: Tax abatement is the exemption or deferment of taxes under certain conditions, either for a specified period, or until the conditions are no longer met. Taxes can be abated in New Hampshire for providing shade trees adjacent to highways. Any person can apply to the Selectmen to have their taxes abated if they plant and protect shade trees along a highway adjoining their land. A person who owns and cuts woodlands as a business has to file a notice of intent to cut with the proper assessing officials in the town where such cutting is to take place. This notice includes, among other things, the

persons name, residence, and an estimate of the amount and species to be cut. This procedure enables tax officials to tax an owner for the wood that is cut.

Tax Deduction: The federal government provides some incentives to encourage people to donate land or a conservation restriction on their land to the public either during their lifetime or in their wills. A person can deduct, on their federal income tax return, the amount of the value of the property or conservation restriction donated, subject to a ceiling on the allowance for charitable gifts in any one-year period.

Urban Growth Districts: An urban growth district allows a community to define one or more areas where growth and development will be concentrated. Typically, this includes downtown areas and perhaps existing areas with higher concentrations of development. Open space can be conserved outside the urban growth district by concentrating desired growth inside the urban growth district.

STATE AND FEDERAL GRANT PROGRAMS

There are numerous State and Federal grant programs available that can be used to promote open space protection. The status of grant programs is subject to change. However, the following include some current programs that could be used by the Town to further the open space plan goals, objectives and recommendations.

STATE PROGRAMS:

Community Conservation Assistance Program. UNH Cooperative Extension. Assistance for project guidance and training for community projects through municipalities and non-profit conservation groups. Contact Amanda Stone at (603) 364-5324.

Community Foundation Grant Program. The Greater Piscataquog Community Foundation. Provides funding to non-profit and public agencies in the fields of environment, arts and humanities, education, and health and social and community services. Contact www.nhcf.org or (603)430-9182.

Conservation License Plate Grant Program. NH State Conservation Committee. To promote natural resource related programs throughout NH. Conservation districts, Cooperative Extension, conservation commissions, schools, groups, and other non-profits can apply for funding. Contact Joanna Pellerin, at (603) 679-2790 or www.mooseplate.com.

Fisheries Habitat Conservation Program. NH Fish and Game Department. To conserve fisheries habitat through a watershed approach. Landowners wishing to protect/enhance fisheries habitat can apply for funding. Contact Scott Decker, (603) 271-2744 or sdecker@wildlife.state.nh.us.

Forest Legacy Program. NH Division of Forests and Lands. Provides up to 75% of the purchase price for development rights to forestlands from willing sellers. Streamside land is among program priorities. Rights are held by the state in perpetuity, while the landowner retains all other rights, including the right to harvest timber. Contact NH DRED at (603) 271-2411.

Land and Community Heritage Investment Program. This is a grant program for conserving and preserving New Hampshire's most valuable natural, cultural, and historical resources. Grant applications for the purchase of land/buildings or restoration of structures are accepted from tax –exempt organizations, municipalities, or other political subdivisions of the State. Contact the SNHPC or visit www.lchip.org.

Land and Water Conservation Fund Program. Provides grants to state and municipal agencies for outdoor recreation and conservation projects. Contact Allison McLean at NH DRED Division of Parks and Recreation, at (603) 271-3556.

Local Water Protection Grants (Drinking Water Source Protection). To protect public drinking water sources. Water suppliers, municipalities, conservation districts, and non-profits can apply. For more information, call DES at (603) 271-7017.

New Hampshire Drinking Water Source Protection Program. This grant is available to public water suppliers for source water protection. The program, which began in 1997, has a total of \$200,000 available to disburse every year to eligible municipalities. Grant amounts vary from \$2,000 to \$50,000. Past grants have been used to fund a watershed assessment and protection plan; perimeter fencing to protect a wellhead area; and monitoring wells for groundwater evaluation. Past recipients include: Conway, Lebanon, Manchester, Rochester, Dover, Keene and Portsmouth. For further information contact: Sarah Pillsbury at (603) 271-1168 or e-mail swap@des.state.nh.us.

Nonpoint Source Local Initiatives Grants (Section 319 Grants). For watershed management efforts. Grants given to associations, organizations, agencies. This grant program helps to fund all aspects of watershed management including organization, building, planning and assessment. Each year, a total of approximately \$160,000 is made available to about 15 eligible local projects aimed at protecting water quality. Call (603)271-2358 or www.des.state.nh.us/wmb/was/grants.htm

Transportation Enhancement Program. New Hampshire Department of Transportation. Provides funding for scenic highway projects and mitigation of water pollution due to highway runoff. Contact (603) 271-3734.

Watershed Restoration Grants (Section 319 Restoration Grants). Grants can be given to farmers, watershed associations, conservation districts, non-profit organizations, regional planning agencies, and municipalities to implement practices that help restore impaired waters. Call (603) 271-2358 or www.des.state.nh.us/wmb/was/grants.htm

Wildlife habitat – Small Grants Program – NH Fish and Game Department. For restoring, sustaining, or enhancing wildlife habitat on privately owned land. Owners of private, municipal, corporate or other non-governmental lands can apply for funds to implement habitat-improving practices. For more information, contact your regional F&G office or Charlie Bridges at (603) 271-2461.

FEDERAL SOURCES:

Coastal America Corporate Wetlands Restoration Partnership. U.S. Army Corps of Engineers. Voluntary public-private partnership in which corporations join forces with federal and state agencies to restore wetlands and other aquatic habitats. Contact (978) 318- 8238.

Conservation Reserve Program (CRP) . USDA Farm Service Agency. For converting highly erodible land to vegetative cover. Annual rental or other incentive payments for certain activities are offered. Cropland owners and operators who have owned or leased the land for at least 1 year can apply for funds. Contact your local USDA Service Center or www.fsa.usda.gov for more information.

Environmental Quality Incentives Program (EQUIP). United States Department of Agriculture Natural Resources Conservation Service (NRCS). Cost sharing and technical assistance for planning and installation of environmentally beneficial and cost effective conservation practices that address locally identified natural resource concerns. Agricultural or forestry producers can apply. This program provides technical expertise and field experience on a voluntary basis to private landowners in developing conservation systems. The program assists rural and urban communities to reduce erosion, conserve and protect water and solve other resource problems. The EQUIP is a voluntary conservation program for farmers and ranchers who face serious threats to soil, water and related natural resources.

Eligibility is limited to persons engaged in livestock or agricultural production. Priority areas are identified through a locally led conservation process, which requires completion of natural resources needs assessment and develops proposals. Activities must be carried out according to site-specific conservation plans subject to NRCS technical standards. EQUIP provides technical, financial and educational assistance, primarily in designated priority areas, to install or implement structural, vegetative, and management practices. It offers 5-10 year contracts that provide incentive payments (up to 3 years) and cost sharing (up to 75%) for conservation practices. Total cost-share and incentive payments limited to \$10,000 per person per year and \$50,000 over length of contract. Contact: Michael J. Kaczor, National Cultural Resources Specialist, Federal Preservation Officer (FPO), Natural Resource Conservation Service, Ecological Sciences Division, PO Box 2890, Washington, DC 20013. Phone: 202-720-4912. Fax: 202-720-1814. Or visit www.nh.nrcs.usda.gov or call (603)868-7581 to find your local contact.

Farmland and Ranchland Protection Program (FRPP). Administered through the US Department of Agriculture Natural Resources Conservation Service. Provides matching

funds to help slow the conversion of farmland to non-agricultural uses. An entity holds the conservation easement deed, and land must contain important farmland soils, and a conservation plan. The easements are for 30 years, but priority is given to perpetual easements. The Farmland Protection Program is a voluntary program implemented by the United States Department of Agriculture (USDA) and the Natural Resources Conservation Service (NRCS), and provides funding to State or local governments with existing farmland protection programs to purchase conservation easements. To be eligible for the FPP, the land must be: part of a pending offer from a non-governmental organization, state tribe, or local farm protection program; on prime, unique, or other important farmland soil; covered by a conservation plan developed with/through the Natural Resources Conservation Service; privately owned; large enough to sustain agricultural production; accessible to markets for what the land produces and surrounded by parcels of land that can support long-term agricultural production. Visit www.nh.nrcs.usda.gov or contact the NRCS State Office in Durham NH at (603) 868-7581.

North American Wetlands Conservation Fund. This fund assists partnerships in acquisition, enhancement and/or restoration of wetlands and associated uplands for migratory birds and other wildlife. A 1:1 non-federal match is required. This program strives to conserve North American wetland ecosystems and waterfowl and the other migratory birds and fish and wildlife that depend upon such habitats. This program provides grants under the North American Wetlands Conservation Act (NAWCA). Projects are subjected to a scoring process and site visits, if needed. Projects rank higher if they contain long-term acquisition or restoration, high migratory bird values, a high match grant ratio and many diverse partners. Uses of grant and matching funds include (but are not restricted to) research, conservation education, and public use, (e.g., roads, viewing towers). Grant requests can range from \$50,000 to \$1,000,000.

A 1:1 match is required. Sources of funds include Congressional appropriations that are not possible to predict, but the program has averaged about \$30 million per year since the first year FY 1991. Grant instruction booklets and local contact information are available by contacting the Fish and Wildlife Service's North American Waterfowl and Wetlands Office at Room 110, 4401 North Fairfax Drive, Arlington, Virginia 22203. Phone: 703-358-1784. Email: R9ARW_NAWWO@MAIL.FWS.GOV
Website: <http://www.fws.gov/~r9nawwo/nawcahp.html>

Partners For Fish and Wildlife – US Fish and Wildlife Service. To restore, improve, and protect fish and wildlife habitat on private lands, private landowners, private organizations, towns and municipalities can apply for cost-sharing funds. Contact Robert Scheirer at (603) 223-2541 or Robert_scheirer@fws.gov.

Scenic and Cultural Byways Program. Roads designated under the New Hampshire Scenic and Cultural Byways Program may be eligible for federal grant money for purchase of conservation easements for scenic values along designated byways. Such funds may be used to ensure the long-term protection of open spaces along the byways. Contact www.state.nh.us/osp/scenicbyways/

Wetlands Reserve Program (WRP) – USDA Natural Resources Conservation Service. To protect/enhance wetlands through conservation easements or cost-share agreements. Technical assistance and cost-share funding (or a permanent easement) are available for landowners with eligible wetlands. The Wetland Reserve Program (WRP) is a voluntary program to restore and protect wetlands on private property. WRP offers three options: permanent easements; 30-year easements; and restoration cost-share agreements with minimum 10-year duration. Some easements may be eligible for tax credits. Land must be restorable and suitable for wildlife benefits. To offer a conservation easement, landowner must have owned the land for at least one year before program enrollment unless the land was inherited or not obtained for the purpose of enrolling it in the program. To participate in restoration cost-share agreement, landowner must show ownership evidence. Ineligible land includes wetlands converted after December 23, 1985; lands with timber stands established under CRP contract; federal lands; and lands where conditions make restoration impossible.

Contact: Michael J. Kaczor, National Cultural Resources Specialist, Federal Preservation Officer (FPO), Natural Resource Conservation Service, Ecological Sciences Division, PO Box 2890, Washington, DC 20013. Phone: 202-720-4912. Fax: 202-720-1814. Contact Alan Amman at (603) 868-9931 Ext. 103 or aammann@nh.usda.gov.

Wildlife Habitat Incentives Program – USDA Natural Resources Conservation Service. A voluntary cost-sharing conservation program to improve wildlife habitat on non-federal, private land. NRCS will help landowners or land managers develop a wildlife habitat plan based on their management objectives. The program offers three options: permanent easements; 30-year easements; and restoration cost-share agreements with minimum 10-year duration. Some easements may be eligible for tax credits. Individuals must own or have control of land under consideration. There is no minimum acreage requirement. WHIP may also be used to restore riparian habitat. Land is not eligible if it is currently enrolled in similar USDA programs, used for mitigation, owned by the federal government, or if the USDA determines that on-site or off-site conditions would reduce the benefits of habitat development.

This program provides technical and financial assistance for initial establishment of wildlife habitat development practices. If the landowner agrees, state and private organizations may provide expertise or additional funding to help complete a project. Cost-share assistance requires at least a 10-year agreement; up to 75% of cost of installing the practices is paid. Cost-share payments may be used to establish, maintain, or replace practices. Contact: Michael J. Kaczor, National Cultural Resources Specialist, Federal Preservation Officer (FPO), Natural Resource Conservation Service, Ecological Sciences Division, PO Box 2890, Washington, DC 20013. Phone: 202-720-4912. Fax: 202-720-1814. Or contact Alan Ammann at (603) 868-9931 Ext. 103 or aammann@nh.usda.gov.

LAND TRUST ALLIANCES

Land Trust Alliances are non-profit organizations that work towards land preservation through land acquisition, stewardship, and education. The following is an alphabetical list of agencies to contact regarding stewardship of conservation properties. Not all are members of LTA. All operate within the State of New Hampshire. Web sites and email addresses are included where available.

Society for the Protection of New Hampshire Forests

LTA Member Adopted S&P

54 Portsmouth St

Concord, NH 03301-5486

Phone: (603) 224-9945 Fax: (603) 228-0423

Area of Operation: New Hampshire

Founded: 1901

e-mail: pNBOSCher@spnhf.org

www.spnhf.org

Piscataquog Land Conservancy

5A Mill St.

New Boston, NH 03070

(603) 487-3331

e-mail: plc@plc-nh.org

Appendix F: GLOSSARY OF SOME COMMON OPEN SPACE TERMS

Assessed Valuation: The value of property as determined for property tax purposes. The assessed valuation is not necessarily the true market value of property, and is not usually accepted by the IRS for federal tax purposes.

Conservation Easement: A Conservation Easement consists of a deed conveying perpetual restrictions on real property. These restrictions include limitations on the future use or development of the property. Typically, no development or mining is allowed on the easement. Rights may include access to the easement grantee for monitoring.

Conservation Gift: A donation in an interest in land for conservation purposes, including easements, gifts, bargain sales, and other types of gifts.

Conservation Restriction Assessment: Land permanently subject to a conservation easement is assessed at the low current use assessment rates.

Current Use Assessment: When undeveloped land is taxed at a low rate rather than actual assessed value. A Land Use Change Tax will be assessed if the land is later developed.

Fragmentation: Land that is segmented mainly by roads or development.

Greenway: A natural or man made corridor or trail through one or more natural areas that links areas to form a recreational opportunity, usually supported and maintained by a local non-profit organization.

Habitat: An area that contains all the resources – food, water, cover and space – essential for the survival of a wildlife population.

Land Trusts: A private or public group formed for land conservation and protection, usually municipal subdivisions or private voluntary corporations.

Land Use Change Tax: A penalty tax imposed when land under the current use assessment program is developed, also known as change of use penalty tax.

Monitoring: Periodic inspection of property under a conservation easement to ensure the restrictions have not been violated.

Reserved Area: A portion of a tract of land not subject to the terms of the conservation easement.

Tax Lien Properties: Tax lien properties have been and may again be taken by the Town of New Boston to help with land conservation purposes.

Wildlife Corridors: These corridors have been developed to assist wildlife to roam freely within their range as well as to provide habitat and cover.

Appendix G: TRANSFER OF DEVELOPMENT RIGHTS: TDR

Transfer of development rights (TDR) is a market-based technique with little governmental intervention that encourages the voluntary transfer of growth from places where a community would like to see *less* development (called sending areas) to places where a community would like to see *more* development (called receiving areas). The sending areas can be environmentally sensitive properties, open space, agricultural land, wildlife habitat, historic landmarks or any other places that are important to a community. The receiving areas should be places that the general public has agreed are appropriate for extra development because they are close to jobs, shopping, schools, transportation and other urban services.

TDR is driven by the profit motive. Sending site owners permanently deed-restrict their properties because the TDR program makes it more profitable for them to sell their unused development rights than develop their land. Developers buy the development rights and use them to increase the density of receiving site projects. They do that because these larger projects are more profitable than the smaller projects allowed when development rights are not transferred. In addition to making property owners and developers happy, TDR solves a seemingly intractable dilemma for communities: it gives them a way to achieve critical land use goals *using little or no public funding*.

In the 436-page book *Saved By Development: Preserving Environmental Areas, Farmland and Historic Landmarks With Transfer Of Development Rights* the author provided case studies of 112 TDR programs. Since that book was published in November 1997, 12 additional TDR programs have been identified. None of the 12 TDR programs are as successful as those of Montgomery County, Maryland, The New Jersey Pinelands, the Tahoe Regional Planning Agency or many of the other 107 communities discussed in *Saved By Development*. Neither of the first two communities listed below have had a transaction for TDR. Nevertheless, all 12 case studies reconfirm the components needed to create a successful TDR program.

Lee, New Hampshire has a TDR ordinance to preserve farmland, open space, forests, watershed and other significant natural resources as well as the Town's rural character. The sending sites and receiving sites must be contiguous. The amount of density that can be transferred from a sending site is equal to the development rights allowed to that site under baseline zoning, a one-to-one transfer ratio. The amount of development allowed on the receiving site through TDR is the total density permitted on both the sending and receiving sites under the baseline zoning. The Planning Board has the right to decide transfer applications on a case-by-case basis taking into consideration the specific natural characteristics and resource values of the two sites.

Dover, New Hampshire includes in its zoning ordinance the ability to transfer development rights within overlay districts. The purpose of TDR in Dover is to allow receiving areas to be certain business and industrial zones since the amount of land within these areas is limited. Sending areas include all wetlands and wetland buffers. At the discretion of the Planning Board, an applicant for development approval within the

receiving area of the defined TDR district may apply the performance standards specified in the zoning ordinance in return for the acquisition of land or development rights from the sending area within the same TDR district.

Townsend Township, MA, population 1,200, borders New Hampshire, 40 miles northwest of Boston. Its TDR program, adopted in 1991, is designed to preserve the banks of the Squannacook River, an aquifer recharge area and open space in general. Transferable development credits (TDCs) are assigned to the sending sites at the rate of 1.2 credits for each buildable lot, or a transfer rate of 1.2 to 1. Receiving site projects incorporating TDCs must be approved in conjunction with a subdivision plan and a rezoning to a zoning district that allows exemptions from density, minimum lot frontage and minimum lot area as long as a substantial portion of the site is preserved as open space.

Windsor, Connecticut, population 28,000, was one of the 107 communities studied in *Saved By Development*. The Town has experienced its first transfer, a 4.5-acre parcel of land along the Connecticut River, which the Town will use for a future riverfront walking trail and other recreation. In return for this transfer, the owners of an existing industry were allowed to exceed the density limits normally allowed on this receiving site.

Montgomery County, Maryland has the most successful TDR program in the country. In 1997, *Saved By Development* stated that the County had permanently preserved 29,000 acres of farmland using TDR. The County has now preserved over 38,000 acres.

TDR has been used across the country for many years, but is still not in widespread use in New Hampshire. As communities gain additional experience with this open space-zoning tool, it may become an important way to preserve open space in this state.

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