Town of Salem

I-93 Community Technical Assistance Program

Open Space Report

Report to the
Salem Planning Board
and Salem Board of Selectmen

Prepared for the Salem Open Space Task Force
by the Rockingham Planning Commission

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The Town of Salem wishes to thank the Conservation Commission for volunteering their time and expertise to complete this Open Space Plan.

The Salem Open Space Task Force included the following individuals:
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Cover Photo of Hawkins Farm courtesy of Town of Salem

This document is for informational and planning purposes only. The Town of Salem does not intend this document to be used for regulatory purposes and does not constitute any commitment on the part of the town or landowners to implement the recommendations contained herein.

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This project was funded by a grant from the New Hampshire Department of Transportation, I-93 Community Technical Assistance Program (CTAP)

EXECUTIVE SUMMARY: SALEM OPEN SPACE PLAN

I-93 Community Technical Assistance Program

The Salem Open Space Plan was developed as part of Phase II of the I-93 Community Technical Assistance Program (CTAP). CTAP was developed in cooperation with the State of New Hampshire's Department of Transportation, Office of Energy and Planning, Department of Environmental Services, and the Regional Planning Commissions to provide planning assistance to the 26 I-93 corridor communities expected to experience additional growth that may result from the I-93 expansion project.

This multi-year initiative – Phase I and Phase II - provides assistance to these corridor communities to help them meet the wide range of planning and community development challenges in the region. CTAP provides access to technical information, tools and funding to implement innovative land-use planning and resource conservation practices that address the impacts of growth and development.

Salem Open Space Plan Development

Due to their expertise and broad knowledge of land use, conservation activities and land acquisition in the community, the Salem Conservation Commission agreed to serve as the Open Space Task Force.

The basis of the Open Space Plan was identification of high value resources and their occurrence relative to one another throughout the town. These co-occurrence areas comprise the "Green Infrastructure" or those areas where the high value resources occur in the greatest concentration. The Green Infrastructure was developed based on the relative weight (or numeric scoring) placed on the four highest scoring resources.

> ***Green Infrastructure*** - the contiguous resource network and natural areas across town. The green infrastructure is the area that, if protected from development or degradation, should ensure that the services provided by the natural environment to Salem's residents could be sustained.

The four high scoring natural resources selected by the Open Space Task Force were:

- ✓ Wetlands/Streams/Rivers/Lakes/Ponds plus the 100 foot buffer (30%)
- ✓ Forested Areas (25%)
- ✓ Agricultural Soils (25%)
- ✓ Unfragmented Lands of 25 acres or greater (15%)

Within the Green Infrastructure, the Task Force identified 116 parcels that if protected would provide significant benefits to the community by preserving open space and valuable ecosystem and natural resource functions (refer to the summary table below).

Protection Priority Ranking	Acres
High Priority Parcels (14)	565.0
Medium Priority Parcels (102)	1,347.9
Totals (116 parcels)	***1,912.9***

***** *Priority parcels represent 11.5 percent of the total area of Salem (16,576 acres)*

The Salem Open Space Plan can serve as a guidance document for the community in implementing planning and resource protection initiatives, and making capital improvement and budgetary decisions relating to land and resource preservation. The plan can also help guide voluntary efforts to implement land conservation easements and promote stewardship of both private and public lands.

SECTION 1 INTRODUCTION

A. Purpose Statement

The purpose of the Salem Open Space Task Force was to identify critical resources, and agricultural, open and undeveloped land in Salem, and to select and prioritize those lands that should be excluded from residential, commercial and industrial growth. In doing so, the Town will sustain the ecosystem services provided by its resource base and maintain the rural character envisioned in Chapter V. Natural Resources and Conservation of Salem's Master Plan.

Resulting from the planning process completed by the Salem Open Space Task Force, this report will serve as a guide for future open space planning and land protection in the town. The products developed during the planning process identify where protection is deemed most appropriate, and identify where and how to implement various modes of protection.

B. CTAP Open Space Task Force

The Salem Open Space Task Force ('Task Force') convened four meetings from February through August 2010 during regularly scheduled meetings of the Salem Conservation Commission. Conservation Commission/Open Space Task Force members included: William Carter, Joan Blondin, Anthony Drago, William Dumont, Linda Harvey, Julie Vondrak, Thomas Campbell, Patrick McDougall, Selectman Michael J. Lyons, and town staff representative, Planning Director Ross Moldoff.

The Open Space Planning Process consisted of four work sessions, and several meetings with town staff and conservation commission members, during which the Task Force prioritized and evaluated natural resource information to ultimately identify open space lands most suitable for preservation. The first exercise of the Task Force was to identify the features of the town's natural resources and to assign relative values to rank the various resources. A map showing the distribution of these resources throughout the Town enabled the Task Force to identify the natural network or green infrastructure that links them together. Once key parcels were identified within the network – parcels that linked important resources, habitats and corridors, and were adjacent to or nearby existing conservation lands - the Task Force recommended preservation strategies to guide Salem's open space protection efforts. The estimated cost associated with achieving preservation of the identified parcels was then determined using local assessment data.

C. CTAP Open Space Report

This report is organized to provide a summary of the Task Force work and recommendations, including the criteria used to evaluate and identify open space resources and lands, analysis of spatial and statistical data, and maps products developed during the open space planning process. Detailed information on the technical methods, meeting minutes and presentation materials considered by the Task Force are contained in the appendices to this report.

Appendix B contains the list of parcels for potential acquisition or that the town should consider protecting due to their high resource value, benefits or other significant attributes. There are a number of additional parcels that are not appropriate for town purchase or for easements, but are more appropriately protected through formal or informal voluntary agreements with landowners and as part of development review and approval process.

SECTION 2 OPEN SPACE BENEFITS AND SUPPORT

A. What is Open Space?

For the purpose of this report, open space is defined as any lands that remain in a natural and undeveloped condition that contribute ecological, scenic or recreational value. The definition of open space may be expanded to include working lands (forests, agriculture, field corners, fence rows and abandoned pastures) and managed green space such as golf ranges, parks, and recreation areas. The terms 'natural environment' and 'natural resources' are used to broadly describe Salem's air, water, and land resources including, but not limited to, the town's scenery, air quality, aquifers, streams, soils, plants and animals. These features form an integrated natural network or "green infrastructure" in which the town's built environment and its key cultural and historic resources are embedded. The green infrastructure provides the ecosystem services required to sustain a vibrant and healthy community.

Open space preservation serves multiple goals within a community and provides the following benefits:

- *Attracts investment by residents and businesses seeking high quality of life*
- *Revitalizes town and village centers*
- *Supports resource based tourism economy*
- *Helps prevent flooding and flood related damage*
- *Protects farms and agricultural lands*
- *Promotes sustainable development patterns*
- *Protects environmental resources (water, aquifers, air, forests)*
- *Provides recreational and educational opportunities*

B. Benefits of Preserving Open Space

Studies from across the nation have demonstrated that farmland open space preservation can provide more revenue to a community than is incurred in expenditures, resulting in a net fiscal benefit. In many instances, the costs associated with support of residential and commercial development often exceed the costs to support farmland and open space. Tax benefits are maximized when a conservation easement is placed on land already enrolled in current use.

A study conducted by the Trust for Public Land (see below *Managing Growth: The Impact of Conservation and Development on Property Taxes in New Hampshire, 2005*) concluded that towns that have the most permanently protected land have slightly lower tax bills on average. It

is unlikely that land conservation alone is responsible for these tax benefits. However, land conservation is a tool that shapes the landscape of a community by:

- ✓ helping maintain the rural character of a community,
- ✓ creating more centralized, dense development patterns,
- ✓ creating more efficient municipal service areas, and
- ✓ providing multiple environmental and aesthetic benefits.

Thus, the resulting landscape is a direct result and reflection of the community's support of open space preservation.

Managing Growth :
The Impact of Conservation and Development on Property Taxes in New Hampshire *(Trust for Public Land, 2005)*

The Trust for Public Land found that in the short term, land protection, by fully or partially exempting land from taxation, often reduces the tax base and results in a tax increase for a finite period. In the long term, contrary to the common perception that development will bring lower taxes, property tax bills are generally higher in more developed towns than in rural, less developed towns. Further, findings also indicate that tax bills are not higher in the towns that have the most permanently protected land regardless of the method and ownership used to conserve the land.

The study suggests that patterns of growth have an effect on both the livability and affordability of a town. Land conservation can be used as a tool in both protecting resources that contribute to quality of life (from drinking water protection to scenic beauty and recreation), as well as to help guide the path and location of municipal growth to those areas that are most appropriate and that are most cost-effective for towns to service.

In general, it is true that land increases in value when it is developed —thereby adding taxable value to the town's tax base. However, development usually requires town services—thereby increasing the budget. The tax bill on the typical house is, on average, higher in towns where:

- There are more residents, and/or
- There are more buildings.

In the long term, contrary to the common perception that development will bring lower taxes, property tax bills are generally higher in more developed towns than in rural towns, and towns with more development have higher tax bills.

C. Support for Open Space Preservation

Town and Citizen Support

The citizens of Salem have continuously voiced a strong vision to maintain Salem's rural character, maintain the open space and forested areas for public enjoyment, protect historic resources, and preserve natural resources. The Town currently has approximately 1,438.8 acres of open space permanently protected by private conservation easement or protected by deed

restriction by the town (reported as of July 2010). The town owns an additional 111.2 acres used for recreation and 813.9 acres are owned by the town for municipal uses and owned by the housing authority and the state. From 1979 to 2002, the town expended $181,050 of its Conservation Fund to acquire using various funding sources including the Conservation Fund, approximately 200 acres as part of the Town Forest. From 1979 to 1997, the town expended $181,050 using various funding sources including the Conservation Fund, to acquire approximately 200 acres for the Town Forest. From 1983 to 2010, the town expended $1,335,000 from the Conservation Fund to acquire approximately 47 acres of conservation lands. Approximately 152 acres have been donated to the Town for open space preservation.

The Conservation Fund (used to purchase open space land and secure easements on private property) was originally financed at Town Meeting from the General Fund, and some early land purchases (mostly for the Town Forest) used a combination of sources. Several of the town's recent land protection activities have been completely financed at Town Meeting from town warrants and the General Fund plus some other sources such as timber harvests and interest income.

Since 1992, the Conservation Commission has been authorized on behalf of the Town to use a portion of funds collected from the Land Use Change Tax (LUCT) toward land acquisition and conservation for the protection of open space. Since 2004, one hundred percent (100%) of the LUCT has been authorized for this purpose. From 1992 through July 2010, the town deposited $888,625 of LUCT funds in the General Fund.

Master Plan

Salem's Master Plan - Goals, Objectives and Strategies for Natural Resources and Open Space (2005) vigorously supports the Town's vision described above. The Master Plan includes the following recommendations:

- Implement the natural resource and conservation-related recommendations of the town's Flood Hazard Mitigation Plan.
- Adopt more restrictive floodplain zoning to prohibit uses that can be damaged by flooding, and to restrict the placement of debris and hazardous materials in the floodplain.
- Acquire land, easements, or development rights in the floodplain to prevent flood damage and preserve flood storage capacity.
- Acquire and relocate or demolish existing structures in flood-prone areas.
- Review and update the priority open space acquisition list prepared for the REPP (part of the *Local Inventory of Important Natural and Cultural Resources*, 1998) with a focus on environmentally sensitive and visually important areas.
- Initiate an acquisition program for the open space parcels identified in the updated REPP list, using the conservation fund from the change of use tax, as well as funding available through LCHIP, augmented as necessary by annual appropriations.
- Increase the allocation of the change of use tax to the conservation fund.
- Amend the Town's land use regulations to recognize the provisions of RSA 483-B, the NH Comprehensive Shoreland Protection Act, and require applicants for developments that are subject to the provisions of the act to present evidence of review and approval from the NHDES.

- Continue the Spicket River Clean-up Program.
- Revise the Open Space Preservation Ordinance to create better incentives and create higher standards for private protection of open space and natural resources.
- Make use of the Open Space Preservation Ordinance mandatory on high-priority sites.
- Continue to encourage the donation of land and easements in fragile areas such as wetlands and floodplains and adjacent existing protected parcels.
- Develop a program to monitor existing conservation easements.

Conservation Commission

Protection of open space lands that define Salem's rural character has long been a priority of the Salem Conservation Commission. The Commission has worked diligently to identify and protect open space lands through a variety of protection mechanisms including acquisition using funds from the town's land use change tax, negotiating private conservation easements, and purchasing development rights. The Commission also promotes the use and enjoyment of public open space lands and supports this effort by conducting seasonal walks on conservation lands, including annual nature walks in the Town Forest for Earth Day, managing wildlife and forest resources and maintaining trails in the Town Forest. The Conservation Commission has been heavily involved with the following projects: coordination with the NHDOT on wetlands mitigation for the I-93 expansion; planning of the Salem Bicycle Pedestrian Corridor project (see description below); providing assistance to the Flood Management Action Committee; the Spicket River Clean-up; and the Hawkins Farm project (includes 13 acres leased to a local farmer, community gardens, perimeter trail, and leased farm house to the Salem Housing Authority for affordable housing). The Commission maintains the inventory of all town owned conservation lands and conservation easements.

Table 1. Highlights of Conservation Commission activities

2004	Prime wetland designation (4) and 100 percent allocation of land use change tax fund for open space preservation approved at town meeting
2005	Prime wetland designation (3) approved at town meeting
2006	Sponsored a bond article to allow purchase of a significant portion of the Duston Farm on Duston Road (bond defeated); Prime wetland designation (3) approved at town meeting
2007	Prime wetland designation (2) approved at town meeting
2008	Purchase of a 0.75 acre parcel at 114 Lawrence road in the Spicket River floodplain; Purchase of the 15 acre Hawkins Farm property at 38 Town Farm Road

Local Land Conservation and Protection Projects

Hawkins Farm Property

In 2008, the Town purchased the Hawkins Farm property which was placed in permanent conservation. The Hawkins Farm property has evolved into a multi-faceted project for the Conservation Commission. Purchasing Hawkins Farm using money from the Conservation Fund enabled the Commission to preserve 15 acres of open space upland adjacent to the Spicket River.

Projects for the farm include leasing valuable land to a local farmer, providing acreage for Community Gardens, providing a trail system for residents to enjoy, and entering into an agreement with the Salem Housing Authority to lease the farm house to eligible families.

Salem Bicycle-Pedestrian Corridor

The Salem Bicycle-Pedestrian Corridor, encapsulating Route 28, along the abandoned Boston and Maine Railroad Manchester to Lawrence Branch will form the primary non-motorized transportation path from the Methuen town line at Hampshire Road to the existing Windham Rail Trail at the Town line. Connections to businesses, residential areas, schools, recreation areas, and Park/Ride locations will provide economic growth, more convenience, less traffic congestion, higher property values, and promote active lifestyles. This project serves to protect this important transportation and scenic corridor from future development.

The Community Development Department completed an online survey of over 2,500 households adjacent to the Bicycle-Pedestrian Corridor. With over 240 surveys returned, the surveys provided positive ideas, comments, and support. The Community Development Office expanded outreach for the project by coordinating the establishment of the Southern New Hampshire Rail Trail Alliance (SNHRTA). The SNHRTA represents the combined interests of Derry, Salem and Windham, with the Town of Salem serving as the primary grants management entity through its Community Development Office. A website www.snhrta.org and www.bwanh/sbpc developed by volunteers to provide information about this project.

Acquisition of Nine Properties on Haigh Avenue

A FEMA grant award for $1,889,802 in Flood Mitigation Assistance program funds will implement the acquisition of nine properties in flood-prone areas adjacent to the Spickett River off Haigh Avenue. The funds are authorized through the Flood Mitigation Assistance Program (FMA-PJ-01-NH-2009-003) with the U.S. Department of Homeland Security, Federal Emergency Management Agency, as administered and allocated by the New Hampshire Department of Homeland Security and Emergency Management. Acquisition of these properties will ensure protection, preventing further development within these areas that have experienced severe flooding for decades.

After discussions with the State DOT it became apparent that removal of homes on Haigh Avenue will provide mutual benefits for the Town and the I-93 expansion project. Portions of the Haigh Avenue area are designated for wetlands mitigation for impacts associated the I-93 project.

D. Land Use Change Tax (LUCT)

Prior to 2004, Salem designated 50 percent (up to $100,000 annually) of its Land Use Change Tax collected each year toward land conservation. After 2004, the town approved contribution of 100 percent of the LUCT with no cap to the Conservation Fund. The LUCT has been a consistently significant funding source for land conservation efforts in the town. Annual LUCT collections are summarized in Table 2 below.

TABLE 2. Summary of funds deposited in the Conservation Fund from the Land Use Change Tax

Year	*LUCT Collected*	*LUCT Deposited to Conservation Fund*	*Conservation Fund Balance*	*Notes of Activities*
1992	$3,100	$15,000	$207,767	LUCT at 50% with $50,000 cap
1993	$50,000	$0	$263,926	
1994	$50,000	$7,810	$321,104	
1995	$50,000	$83,644	$296,223	
1996	$20,875	$186,244	$144,649	LUCT at 50% with $100,000 cap
1997	$5,000	$59,301	$97,519	
1998	$52,947	$94,811	$58,146	
1999	$13,750	$6,379	$67,470	
2000	$172,445	$21,496	$222,611	
2001	$49,505	$493	$279,850	
2002	$94,275	$3,610	$378,754	
2003	$30,600	$9,733	$403,862	
2004	$53,000	$7,029	$455,004	LUCT at 100% with no cap
2005	$142,800	$7,298	$602,875	
2006	$267,500	$8,011	$895,785	
2007	$88,500	$6,375	$1,020,873	
2008	$42,850	$913,712	$174,482	Purchase of Lawrence Road and Hawkins Farms properties
2009	$102,500	$14,877	$262,380	
2010	$	$9,443	$265,523	Balance as of July 2010
Total	***1,289,647$***	***1,438,525***	***----***	

Average balance of the Conservation Fund from 1992 through July1, 2010 = $337,832

SECTION 3 OPEN SPACE PLANNING PROCESS

Note: It is extremely important to recognize that landowners whose property falls within the green infrastructure or identified as an open space protection area are free to dispose of their land as they choose, consistent with applicable federal, state and local laws and regulations. Inclusion of land within the green infrastructure or identified as an open space protection area is NOT an indication that the Town of Salem has any legal interest in the land or has any intention of taking the land for a public purpose.

Refer to Appendix C for a detailed description of each step in the Open Space Planning Process.

Step 1: Identification of High Value Natural Resources

Process. Step 1 in the open space planning process was the identification of high value natural resources that will be used to define open space lands within the town. The Open Space Task Force selected the following high value resources from the list shown in Table 3 below:

- ✓ Wetlands/Streams/Rivers/Lakes/Ponds plus the 100 foot buffer (30%)
- ✓ Forested Areas (25%)
- ✓ Agricultural Soils (25%)
- ✓ Unfragmented Lands of 25 acres or greater (15%)

The natural resources were grouped into four broad categories (shown in green highlight) based on their resource function or type. Note: Data for each natural resource will be displayed on maps in Steps 2-4 using Geographic Information Systems (GIS) data from NH GRANIT database and/or other local data sources.

TABLE 3. Description of Natural Resources Evaluated for Open Space Protection

Natural Resources	***Description***
Soil Types	
Important Forest Soils	*Groups 1A and 1B that support diverse high-quality hardwood species*
Agricultural Soils	*Includes prime soils, and soils of statewide and local importance*
Open Space Continuity	
Unfragmented Areas 50 acres or greater	*Lands of any type including forest, agricultural land, wetlands and surface waters*
Unfragmented Areas 100 acres or greater	
Unfragmented Areas 500 acres or greater	
NH Wildlife Action Plan - highest ranked habitats	*Habitat types of exemplary quality and rare habits in the region or statewide*
Water Quality	
Stratified Drift Aquifer	*Drinking water source areas*
Special Flood Hazard Zones	*As identified on FEMA maps; areas subject to inundation and erosion*
Wetlands, streams, lakes, ponds plus 250'	*Surface water resources important for*

buffer	*maintaining water quality*
Prime wetlands plus 100' buffer	*High value wetlands and habitats*
Views/Quality of Life	
Scenic Views/Ridgelines & Hilltops	*Quality of life, aesthetics and land value*
Forest (general)	*All forested areas; timber resource and unfragmented lands*
Forest (Hemlock/Pine)	*Two specific forest types prevalent in certain parts of the state*
Forest (Appalachian Oak/Pine)	

Step 2: Assign Relative Weights to Natural Resources to Establish Importance for Protection

Process. Step 2 in the open space planning process was to assign weights to the high value natural resources selected in Step 1 to establish their relative importance for protection. Weights were assigned through a "Delphi" process during which individual Task Force members: 1) assigned numeric values to each resource type (a total of 100 points per task force member), 2) compared their scores to the group average, 3) discussed differences in scoring, and 4) revised their scores as deemed appropriate. Note: The Task Force decided to discuss the resource scoring as a group and quickly reached consensus on the four most highly valued resources.

Table 4 on the following page lists the relative weight, based on numeric scoring, placed on each of the four highest scoring resources selected by the Open Space Task Force. The four high scoring natural resources were:

- ✓ Wetlands/Streams/Rivers/Lakes/Ponds plus the 100 foot buffer (30%)
- ✓ Forested Areas (25%)
- ✓ Agricultural Soils (25%)
- ✓ Unfragmented Lands of 25 acres or greater (15%)

RPC staff then computed natural resource co-occurrence values across the entire town based on the numeric weighting of these resources shown in *Table 4* above. *Map 1 Highest Scoring Natural Resource Co-occurrence Areas* shows results of combining both the physical co-occurrence of natural resources, where multiple resources occur together, and the numeric weighting for each resource. The inset maps on *Map 1 Highest Scoring Natural Resource Co-occurrence Areas* show, respectively, the distribution of the individual resources. Each map is graduated by standard deviation to highlight areas of exceptional resource co-occurrence and value.

Map 1 Highest Scoring Natural Resource Co-occurrence Areas will provide the basis for all subsequent Task Force work by locating, in a spatial context, the highest value natural resource areas, and therefore those lands most in need of protection. Other features displayed on this map include: wetlands, surface water bodies, state roads, and local public roads. ***Parcels were not displayed on this map*** because the focus was to display the resource co-occurrence areas and to use the value of these co-occurring resources as the basis for selecting open space protection areas.

TABLE 4. Natural Resource Data and Weighting Scheme

List of Natural Resources Considered	Round 1 Resource Score	Relative Percent
Important Forest Soils	**0.0**	
Agricultural Soils	**25.0**	**25%**
Soil Condition Total Score	*25.0*	*25%*
Unfragmented Areas 50 acres or greater	**15.0**	**15%**
Unfragmented Areas 100 acres or greater	**0.0**	
Unfragmented Areas 500 acres or greater	**0.0**	
NH Wildlife Action Plan- highest ranked habitats	**0.0**	
Open Space Continuity Total Score	*15.0*	*41.5*
Stratified Drift Aquifer	**0.0**	
Special Flood hazard Zones	**8.0**	
Wetlands, streams, rivers, lakes, ponds plus 250' buffer	**30.0**	**30%**
Prime wetlands plus 100' buffer	**0.0**	
Water Quality Total Score	*30.0*	*30%*
Scenic Views/Ridgelines & Hilltops	**0.0**	
Forest (general)	**25.0**	**25%**
Forest (Hemlock/Pine)	**0.0**	
Forest (Appalachian Oak/Pine)	**0.0**	
Views/Quality of Life Total Score	*25.0*	*25%*
Total	***100.0***	**---**

Step 3: Define the "Green Infrastructure"

Step 3 in the open space planning process was to define the "green infrastructure" meaning the contiguous resource network and natural areas across town. The green infrastructure is the area that, if protected from development or degradation, should ensure that the services provided by the natural environment to Salem's residents could be sustained. These natural services include:

- Maintaining the quality of groundwater and surface water;
- Protecting the health of rivers and streams;
- Improving air quality;
- Providing sufficient habitat for plants and animals;
- Providing an opportunity for outdoor recreation for residents at a reasonable distance from their homes;
- Creating a pleasant and scenic environment in which to live; and
- Preserving interconnected green spaces that allow for trails connecting the various parts of town and allowing for the movement of wildlife.

Parcel boundaries were not displayed on Map 3 Green Infrastructure as the focus of this exercise was to use specific criteria to select area for open space protection.

Process. To develop *Map 3 Green Infrastructure* the Task Force followed general guidelines and constraints to select priority areas using *Map 1 Highest Scoring Natural Resource Co-occurrence Areas*:

- Include areas of exceptionally high resource value for a particular category
- Include areas where multiple resource values occur in the same place
- Give added consideration to lands near existing conservation lands
- Give added consideration to lands that allow residents reasonable access to open space
- Avoid areas slated for industrial or commercial development, unless they contain exceptionally high quality resources
- Include at least 25 percent of the Town's land area to ensure the sustainability of natural processes
- Exclude 50 percent or more of the Town's land area, to allow for future development

In addition to the individual natural resource maps, the Task Force consulted *Map 2 Gravity Model*, which assigns special weight to areas located near existing conservation land. As identified on *Map 3 Green Infrastructure*, 116 parcels and approximately 1,912.9 acres or 11.5 percent of the town is located within the Green Infrastructure. This includes a wide diversity of land uses, including vacant properties and already developed or protected lands.

Step 4: Parcel Based Refinement of Priority Protection Areas

Step 4 in the open space planning process, information from *Map 3 Green Infrastructure* was ***superimposed over the town's tax maps (showing parcel boundaries) to determine which parcels or portions of parcels were included in the green infrastructure.*** GIS staff computed the natural resource value of each parcel or partial parcel lying within the green infrastructure. Although a number of parcels within the green infrastructure had some development on them, the developed areas were essentially excluded from the parcel value by assigning a natural resource score of 0 to the developed portion.

Process. From the parcels located in the green infrastructure (approximately 116 parcels), the Open Space Task Force limited detailed consideration to those parcels over 5 acres in size and in private ownership. Parcels of lesser size were presumed likely to remain in their current condition or, if developed, were considered as not critical to the integrity of the green infrastructure. Roughly 104 parcels greater than 10 acres in size fell within the green infrastructure. The Task Force examined these parcels to identify which parcels would be selected for open space protection and to evaluate whether to assign a protection strategy for each parcel.

The result of Step 4 was the development of *Map 4 Parcels Identified for Potential Acquisition or Protection as Open Space*. The parcels were further evaluated and assigned a ranking of high or medium priority for protection.

Protection Priority Ranking

Each parcel selected for potential acquisition or protection was assigned a protection priority ranking of "high" or "medium". The Task Force evaluated the following factors to determine this ranking:

- proximity to or connectivity with existing conservation or town and state owned lands;
- proximity to the Spicket River and other flood plain areas;
- occurrence of priority resources (agricultural soils, unfragmented and forested lands, surface waters, scenic views); and
- occurrence of riparian areas and shorelands.

These parcels selection for potential acquisition or protection were ranked as follows: 14 high priority parcels, and 102 medium priority parcels.

Land Protection Strategies

Because the Task Force concluded that acquisition was the preferred method of protection, each parcel was not assigned a specific protection strategy. In addition to acquisition, the Task Force supports implementation of purchase of easements or development rights, creation of open space through conservation subdivision, protection through existing regulatory measures (i.e. wetlands, shorelands), and voluntary protection measures.

Refer to Table 8 on page 15 of Section 4, Part D for a list of protection strategies and mechanisms.

SECTION 4 LAND PROTECTION PRIORITIES

A. Lands Identified for Potential Acquisition or Protection as Open Space

The Task Force developed a list of lands that they recommend should be protected in some manner. This list is provided in ***Table 7*** on the following page and ***Appendix C***. The properties are reported relative to their ranking from the weighted co-occurrence mapping exercise and the priority ranking assigned by the Task Force (high or medium priority). Ultimately, the list elevates these 116 parcels in priority over the other roughly 10,239 parcels in Salem. The many additional properties within the green infrastructure, but not appearing in the priority list of lands identified for conservation due to their smaller size, are still vital to the success of open space preservation efforts. However, due to their smaller size, the most appropriate protection strategy is likely to be cooperation with landowners to ensure the sensitive parts of the properties are properly managed.

B. Results of Open Space Planning Process

Below is a summary of acreage and priority ranking for acquisition for lands prioritized for conservation as part of the Open Space Planning process (refer to complete parcel list in *Table 7*).

TABLE 5. Parcels identified for potential acquisition or protection

Protection Priority Ranking	Acres
High Priority Parcels (14)	565.0
Medium Priority Parcels (102)	1,347.9
Totals (116 parcels)	***1,912.9***

******* *Priority parcels represent 11.5 percent of the total area of Salem (16,576 acres)*

Table 6. List of Lands Identified for Potential Acquisition or Protection as Open Space

Map ID #	LOT ID	MAP	LOCATION	Acres	Priority Status	Description
1	8499	121	PELHAM RD	0.3	Medium	
2	12340	132	8 RACHAEL WAY	0.6	Medium	
3	12336	133	3 RACHAEL WAY	0.7	Medium	
4	12349	132	18 RACHAEL WAY	0.7	Medium	
5	12344	132	12 RACHAEL WAY	0.7	Medium	
6	12346	132	14 RACHAEL WAY	0.8	Medium	
7	8704	133	87 BRADY AVE	0.9	Medium	
8	12337	133	5 RACHAEL WAY	0.9	Medium	
9	12350	133	20 RACHAEL WAY	1.0	Medium	
10	12343	132	11 RACHAEL WAY	1.1	Medium	
11	12335	133	1 RACHAEL WAY	1.1	Medium	
12	12342	132	10 RACHAEL WAY	1.1	Medium	
13	10785	22	41 NORWOOD RD	1.1	Medium	
14	12348	132	16 RACHAEL WAY	1.2	Medium	
15	10790	22	44 NORWOOD RD	1.2	Medium	
16	10738	145	STILLWATER CIR	1.2	Medium	
17	12341	132	9 RACHAEL WAY	1.3	Medium	
18	10791	22	42 NORWOOD RD	1.4	Medium	
19	12345	132	13 RACHAEL WAY	1.4	Medium	
20	142	151	287 LAWRENCE RD	1.4	Medium	
21	12339	132	6 RACHAEL WAY	1.4	Medium	
22	10787	22	3 OVERLOOK CIR	1.5	Medium	
23	10786	22	45 NORWOOD RD	1.5	Medium	
24	10565	11	101 HAVERHILL RD	1.6	Medium	
25	10788	22	2 OVERLOOK CIR	1.7	Medium	
26	12338	133	7 RACHAEL WAY	1.7	Medium	
27	11663	14	1 ZACHARYS CROSSING RD	1.7	Medium	

Map ID #	LOT ID	MAP	LOCATION	Acres	Priority Status	Description
28	10789	22	46 NORWOOD RD	1.7	Medium	
29	9498	145	20 STILLWATER CIR	1.9	Medium	
30	8870	126	BRADY AVE	2.4	Medium	
31	10524	145	24 STILLWATER CIR	2.4	Medium	
32	12347	133	15 RACHAEL WAY	2.5	Medium	
33	11871	132	93 BRADY AVE	2.6	Medium	
34	7179	60	LIBERTY ST	2.6	Medium	
35	11860	122	12 ABBEY RD	2.7	Medium	
36	10526	145	72 POND ST	3.3	Medium	
37	7698	113	BRADY AVE	3.4	Medium	
38	8634	113	LANCASTER FARM RD	3.6	Medium	
39	148	151	11-34 EAGLE DR	4.2	Medium	
40	6390	28	288 N MAIN ST	4.3	Medium	
41	9267	138	BUTLER ST	4.3	Medium	
42	6496	46	ZION HILL RD	4.8	Medium	
43	8868	134	CROSS ST	5.0	Medium	
44	8498	122	PELHAM RD	5.1	Medium	
45	9499	145	12 STILLWATER CIR	5.1	Medium	
46	403	129	4 NANCY AVE	5.9	Medium	
47	7015	49	N MAIN ST	6.1	Medium	
48	7710	103	PELHAM RD	6.1	High	
49	8871	126	BRADY AVE	6.2	Medium	
50	6388	32	ZION HILL RD	6.5	High	Shoreland areas, adjacent to existing cons. land
51	3948	97	29 S POLICY ST	6.6	Medium	
52	6327	23	DUSTON RD	7.0	Medium	
53	6367	17	46 HAVERHILL RD	7.3	Medium	
54	10475	32	46 SYLVAN DR EXT	7.5	High	Shoreland areas, adjacent to existing cons. land
55	8514	113	PELHAM RD	7.6	Medium	

Map ID #	LOT ID	MAP	LOCATION	Acres	Priority Status	Description
56	7003	48	32 BLUFF ST	7.7	Medium	
57	11756	14	15 AUTUMN WOODS RD	7.8	Medium	
58	6611	59	35 COLLEEN DR	9.2	Medium	
59	6439	23	57 DUSTON RD	9.7	Medium	
60	409	129	199 LAWRENCE RD	9.8	Medium	
61	7912	109	80 LAWRENCE RD	10.2	Medium	
62	11834	112	151 PELHAM RD	10.3	Medium	
63	6568	33	98 ZION HILL RD	10.8	Medium	
64	11983	134	26 BRADY AVE	12.1	Medium	
65	7178	60	59 LIBERTY ST	12.4	Medium	
66	9272	147	SILVER BROOK RD	12.4	Medium	
67	9484	145	77 POND ST	12.4	Medium	
68	9483	145	67 POND ST	13.1	Medium	
69	7515	100	70 VETERAN MEMORIAL PKY	13.6	High	Wetlands, adjacent to existing conservation land
70	6740	64	25 LAKE ST	13.9	Medium	
71	8853	133	58 BRADY AVE	14.4	Medium	
72	7030	59	53 TOWN FARM RD	14.5	Medium	
73	7014	58	BLUFF ST	14.6	Medium	
74	6062	20	289 ROUTE 111	14.8	Medium	
75	5924	4	21 LADY LN	14.9	Medium	
76	6659	49	121 N MAIN ST	15.1	Medium	
77	11984	26	164 ZION HILL RD	15.1	Medium	
78	6328	23	35 ATKINSON RD	15.7	Medium	
79	9511	145	60 POND ST	16.6	Medium	
80	6569	33	ZION HILL RD	16.7	Medium	
81	6462	24	199 SHANNON RD	16.9	Medium	
82	5902	4	28 LADY LN	17.0	Medium	
83	10627	130	8 FLORENCE AVE	17.0	Medium	

Map ID #	LOT ID	MAP	LOCATION	Acres	Priority Status	Description
84	8520	122	171 PELHAM RD	17.4	Medium	
85	9481	151	23 POND ST	18.2	High	
86	7410	95	130 BROOKDALE RD	18.8	High	
87	6557	39	70 ZION HILL RD	19.5	Medium	
88	11635	132	103 BRADY AVE	19.9	Medium	
89	7695	112	141 PELHAM RD	20.2	Medium	
90	6363	12	34 HAVERHILL RD	23.1	Medium	
91	9265	137	203 LAWRENCE RD	23.1	High	
92	4090	97	39 S POLICY ST	23.4	Medium	
93	5901	3	LADY LN	23.4	Medium	
94	8518	123	165A PELHAM RD	24.0	Medium	
95	8851	133	62 BRADY AVE	24.3	Medium	
96	9268	120	70 BUTLER ST	25.0	Medium	
97	6459	30	163 SHANNON RD	25.2	Medium	
98	12419	12	75 HAVERHILL RD	25.7	Medium	
99	7913	100	74 A LAWRENCE RD	26.1	High	
100	8512	113	PELHAM RD	26.5	Medium	
101	9275	147	SALEM ST	26.5	Medium	
102	5992	11	87 HAVERHILL RD	35.0	Medium	
103	6570	48	BLUFF ST	35.1	Medium	
104	6387	33	116 ZION HILL RD	41.5	Medium	
105	7521	99	33 PARK AVE	42.3	High	Farm wetlands, adjacent to town lands
106	6383	26	157 ZION HILL RD	44.1	High	Farm, wetlands, woodland, near Town Forest
107	6381	26	152 ZION HILL RD	45.6	Medium	
108	10935	125	DELAWARE DR	50.8	Medium	
109	7711	104	92 PELHAM RD	56.6	High	Wetlands, woodland, abuts conservation land in Windham
110	9479	144	225 LAWRENCE RD	62.2	High	Shoreland areas, adjacent to existing cons. land
111	6068	14	ROUTE 111	64.1	Medium	

Map ID #	LOT ID	MAP	LOCATION	Acres	Priority Status	Description
112	8848	125	72 BRADY AVE	67.3	Medium	
113	6437	29	1 DUSTON RD	75.5	High	Farm, historic home, wetlands, forest, community garden
114	8702	133	77-81 BRADY AVE	85.7	Medium	
115	5993	6	103 HAVERHILL RD	104.1	Medium	
116	6874	47	11 ZION HILL RD	164.4	High	Wetlands, woodland, adjacent to Town Forest
Total Acreage				***1912.9***		

C. Land Selection and Protection Criteria

The Task Force believes that every parcel in ***Appendix B*** is worthy of acquisition or protection as each is an important link in the green infrastructure that should be protected using appropriate, site specific strategies.

Protection Criteria

Further, the Task Force believes protection priorities should be based on three broad criteria:

1. The "threshold" criterion of being within the green infrastructure or a designated growth area.
2. The "competitive" criterion of cost per resource value, computed at the time a purchase is considered.
3. The "qualitative" set of criteria that includes: geography (key links, abutting land); threat of development; ability to get outside money; sales price; possible bargain sale; cost avoidance if no development (self-paying).

The *threshold criterion* acts as a broad filter that identifies both parcels of interest to the Town and parcels that are best dedicated to further development.

The *competitive criterion* is strictly a computation of resource value that assumes that all other factors are equal. This criterion promotes the greatest amount of conservation value for the least amount of dollars, but can only be applied to a specific parcel at a specific sale price at a given point in time.

The *qualitative criteria* provide for the intervention of best professional judgment on a case-by-case basis. This judgment must be exercised by the Conservation Commission as they recommend parcels for protection, the Board of Selectmen as they consider the Conservation Commissions recommendations, and by residents who will vote to approve acquisition at Town Meeting.

The Task Force recommends using the qualitative criterion, recognizing that land availability and financial resources are most often the limiting constraint in executing open space preservation. It is these qualitative criteria that will play the most important role, for the simple reason that Salem can only acquire interests in open space from willing sellers, whose numbers will likely vary over time. However, it is important to note that the threshold criterion may apply in cases where lands available for acquisition have exemplary natural resource, recreational, historical or cultural assets that the town considers of high value to the community.

D. Land Conservation and Protection Strategies

Land conservation and protection strategies include land ownership, voluntary and regulatory and management actions that serve to preserve the green infrastructure by protecting open space and natural resources. In Table 8 below, the various protection strategies are identified as "high cost" and "low/no cost" protection strategies as well as a listing of their associated benefits.

TABLE 7. Land protection strategies and their associated benefits

Protection Strategy	*Implementation*	*Benefit*	*Cost*
Land Acquisition	Town or Land Trust	Purchase of land at fair market value or as a bargain sale where the difference between fair market value and sale price becomes a tax-deductible donation; Public access, leverage for securing funding	High
Purchase of Easements/ Development Rights	Town or Land Trust	Growth management tool; retain development density and tax base if rights transferred to growth areas	High
Protection of Public Resources	Federal, State, Town	Protection of public resources and their functions and values to the community, region and state	Low/No
Zoning for Land and Resource Protection	Town	Resource protection ordinances for buffers from streams and wetlands, impervious surface limits, setbacks, stormwater management water supplies, aquifers, and forests	Low/No
Zoning and Land Use Regulations	Town	Incentive based Conservation Subdivision ordinance can protect large tracts of open space lands as part of development approval	Low/No
Transfer of Development Rights	Town	Voluntary transfer of development rights from designated open space areas to designated growth areas that allow greater development density	Low/No
Voluntary Protection/Easements	Land Owners, Town, Land Trust	Voluntary conservation easements involving donation of development rights; Private stewardship and management; public access permitted in some cases	Low/No
Land and Resource Management	Community and citizen groups, Town	Fosters public participation and stewardship	Low/No

SECTION 5 FINANCIAL PLANNING

A. Funding and Protection Strategies

For the purposes of budgeting and assigning land protection strategies, the time horizon of this plan is indefinite: it looks forward to the day when opportunities for both "land preservation" and "build out" in Salem have been maximized. This indefinite timeframe has limited use in computing the total cost of implementing open space preservation for two reasons:

- the predicted range for build out may occur differs depending on the buildout scenario applied; and
- predicting the rate of inflation, much less fluctuations in real estate values even 10 years or more into the future would be highly speculative.

Therefore, two scenarios were used to project timeframes for acquisition or preservation of the lands identified for potential acquisition or protection based on their current assessed value (refer to Table 8 below):

1. historic funding levels (based on various combined funding sources including town bonds, grants and LUCT); and
2. historic funding levels using a more conservative annual average of LUCT collection (which excluding outlying years of 2003 and 2005).

Table 9 below summarizes historic and current funding sources, land values and projected timeframes for completion of land protection.

TABLE 8. Summary of Funding for Land Acquisition and Protection

Summary of Annual Funding Levels	
	Funding Sources and Levels
Land Use Change Tax to Conservation Fund[1]	$1,300,000 (approx. total)
Current Conservation Fund balance[2]	***$265,523***

[1] Total LUCT contributions to the Conservation fund from 1992 to current 2010

[2] Balance currently available from Land Use Change Tax and other sources

This report includes the following recommendations relating to funding for land protection (refer to page 19):

- The Town should make recommendations for land acquisition as part of the Capital Improvement Plan and municipal budget process.
- The Town should consider proposing a bond for a warrant article to fund future land acquisition efforts.
- Salem's Capital Improvement Plan should include an annual open space investment placeholder reflective of the protection priorities identified in this open space plan and any land acquisition opportunities that may arise in a given year.

B. Previous Funding

For the period of fiscal years 1992 through 2010 the town deposited a total of $1,438,525 in the Conservation Fund from Land Use Change Tax collected. During this same time period the Conservation Fund annual average balance was $337,832.

Historically Salem has succeeded in leveraging its own resources with federal, state and private money. In addition, the Town properties could be used as leverage to match other federal and state grants in the future. The Task Force assumes that this rate can be sustained, at least in the near term. The Town should continue to apply for matching grant funds to support land acquisition and protection, including the NH wetlands mitigation fund, water and watershed grants, habitat protection grants, and federal transportation funding.

It is important to recognize that open space preservation can serve multiple community objectives, and funding is often specific to certain needs, from planning and community process, to land acquisition and development, to maintenance of infrastructure. For example, purchasing an open space corridor could serve to provide stormwater retention, improve water quality, provide aquifer recharge, provide recreational opportunities, and establish bicycle and pedestrian connections within the community. Furthermore, funds for purchasing the open space corridor could be shared among several departments and other sources within the capital budget.

C. Adaptive Approach

Alternatively, the Task Force believes the town should take an adaptive approach to financial planning, recognizing that the recommendations of this plan represent a "best guess" as to what the financial needs are in the near term and will be in the future to execute open space preservation as recommended in this report.

However, since the ability to predict land values beyond the near term is very limited, the Task Force recommends reviewing the open space financial plan on an annual basis, in conjunction with the annual budget and Capital Improvement Plan process, as well as the availability of outside funding sources.

In the foreseeable future, the Task Force assumed an equal level of funding for open space protection, and since, as discussed above, it is not possible to predict how much time is left before the town is essentially built out, the question of how much funding to dedicate on an annual basis is largely a question of risk. The risk is that the point of build out will be reached before the open space protection acquisitions are complete. At too low a level of annual funding, Salem may not be able to preserve the parcels recommended for protection in this report, because they will be developed before the Town has raised sufficient funds to protect them. At too high a level of annual funding, taxpayers may feel they simply cannot afford to support open space acquisition, even though they support the concept of open space protection.

D. Funding Strategy

The challenge when evaluating options is to strike a balance between what improves the community in the long term, what taxpayers can afford, and what other interests need to be

served. An option to address the funding dilemma is to follow the adaptive financial management approach discussed above.

Appendix D lists grant programs and other funding sources that can help the town achieve their land protection and open space preservation goals.

The Task Force recommends that the Town consider annual funding levels that voters have supported in the past, but that the town commit to annual reviews of this level of funding to ensure the risk of not completing the planned open space acquisitions does not become too high.

The Task Force believes the choice of implementing specific funding levels in the future will be a policy decision that must be balanced by Salem's leadership with all the other competing demands on town resources. The Task Force notes that, unlike many capital projects, the acquisition of open space adds an appreciating rather than a depreciating asset to the Town. In addition, most studies conclude that open space has a net positive effect on taxes, because it reduces the future cost of Town services.

SECTION 6 TASK FORCE RECOMMENDATIONS

The Salem Open Space Task Force recommends the following to implement long term open space preservation in the town:

1. The parcels selected for priority protection as identified in this report should be viewed as the Salem's "green infrastructure" for open space preservation to guide growth and development, and inform future land use planning and zoning changes.

2. The parcels identified in ***Table 6*** (pages 15-19) of this report should be pursued for priority protection.

3. The Conservation Commission should work expeditiously and cooperatively with owners of developed parcels and those parcels proposed for development within the recommended green infrastructure to ensure that open space is preserved or managed to the extent possible.

5. The Conservation Commission should review the recommendations of this report every two to three years.

6. The Town should make recommendations for land acquisition as part of the Capital Improvement Plan and municipal budget process.

7. Salem's Capital Improvement Plan should include an annual open space investment placeholder reflective of the protection priorities identified in this open space plan and any land acquisition opportunities that may arise in a given year.

8. The Town should consider hiring a land acquisition specialist to help implement protection of the parcels identified for priority protection in this report.

9. The Town should consider proposing a bond for a warrant article to fund future land acquisition efforts.

10. The Town should continue to implement the Open Space Subdivision ordinance to preserve land and could consider mandatory implementation of this ordinance for the parcels identified for priority protection in the report. As of July 2010, implementation of the Open Space Subdivision ordinance has protected a total of 602.8 acres with conservation easements.

APPENDICES

Appendix A Map Products

Appendix B Grant Resources

Appendix C Task Force Open Space Planning Instructions

Appendix D Glossary

APPENDIX A MAP PRODUCTS

Map 1 - Highest Scoring Natural Resource Co-occurrence Areas

Map 3 - Identified Green Infrastructure

Map 4 - Parcels Identified for Open Space Protection

CTAP Theme B: *Environmental Protection, Land Use and Open Space*

LIST OF GRANT FOR LAND CONSERVATION and OPEN SPACE PROGRAMS

Tip: *If you are uncertain of the funding program to fit your need, contact the Center for Land Conservation at the Society of NH Forests at(603) 224-9945or www.forestsociety.org or www.clca.forestsociety.org or.*

Grant Program: NH Land and Community Heritage Investment Program (LCHIP)

Brief explanation: Funds to acquire conservation land, historic buildings, sites

- Name of grantor agency: NH Land and Community Heritage Investment Program (LCHIP)
- Key contact person(s): Deborah Turcott, Executive Director
- Amount of funding available: $0 for FY 2009; Varies
- Key criteria for applications: Significant natural resource area; significant historic buildings and sites
- Funding cycle and deadlines: Hopefully in FY 2010
- Website address: www.lchip.org

Grant Program: Land and Water Conservation Fund

Brief explanation: Municipalities can apply for assistance for local parks and recreation programs.

- Name of grantor agency: Division of Parks and Recreation, NH DRED
- Key contact person(s): Shari Colby, Community Outreach Specialist
- Amount of funding available: $20,000 per project; 50/50 match
- Key criteria for applications: Outdoor recreation proposals; see Project Evaluation criteria
- Funding cycle and deadlines: Late January
- Website address: http://www.nhparks.state.nh.us/community-programs/land-and-water-conservation-fund/

Grant Program: Farm and Ranchland Protection Program

Brief explanation: Farm and Ranch Land Protection Program (FRPP) provides matching funds to help purchase development rights to keep productive farm and ranchland in agricultural uses. USDA provides up to 50 percent of the fair market easement value of the conservation easement.

- Name of grantor agency: US Natural Resources Conservation Service
- Key contact person(s): Jody Walker, Assistant State Conservationist
- Amount of funding available: Varies based on Congressional appropriation
- Key criteria for applications: See website below
- Funding cycle and deadlines: Open; on-going acceptance
- Website address: http://www.nrcs.usda.gov/programs/frpp/

Grant Program: National Fish and Wildlife Foundation

Brief explanation: The National Fish and Wildlife Foundation provides funding on a competitive basis to projects that sustain, restore and enhance the Nation's fish, wildlife, plants and their habitats through our *Keystone Initiative Grants* and other *Special Grant Programs*.

- Name of grantor agency: National Fish and Wildlife Foundation
- Key contact person(s): Mike Slattery
- Amount of funding available: Keystone $50 to $300k; special – varies
- Key criteria for applications: Specific to program
- Funding cycle and deadlines: June and November; Pre-proposal-April 1st; Full June 1st
- Website address: http://www.nfwf.org/AM/Template.cfm?Section=Grants

Grant Program: Forest Legacy Program

Brief explanation: The Forest Legacy Program is a partnership between states and the USDA Forest Service to identify and help conserve environmentally important forests from conversion to nonforest uses. The main tool used for protecting these important forests is conservation easements. The Federal government may fund up to 75% of program costs, with at least 25% coming from private, state or local sources

- Name of grantor agency: Division of Forest and Lands, NH DRED
- Key contact person(s): Susan Francher, Forester
- Amount of funding available: Varies annually; based on national competition
- Key criteria for applications: Project identified in a Forest Legacy Area (FLA) and meet continuation of traditional forest uses including forest
- Funding cycle and deadlines: July 15th annually
- Website address: http://na.fs.fed.us/legacy/index.shtm

Grant Program: Transportation Enhancement (TE)

Brief explanation: The intent of the TE program is to afford an opportunity to develop "livable communities" by selecting projects that preserve the historic culture of the transportation system and/or enhance the operation of the system for its users. Projects with a water quality component associated with transportation facilities are eligible. 80/20 funding.

- Name of grantor agency: Bureau of Planning and Community Assistance, NH DOT
- Key contact person(s): Thomas Jameson, PM, (603) 271-3462
- Amount of funding available: $3.8 M for TE
- Key criteria for applications: TE: encourage non-motorized transportation, pedestrian
- Funding cycle and deadlines: Summer of odd years and submit to the RPC; TE Advisory Committee recommends projects
- Website address: http://www.nh.gov/dot/municipalhighways/tecmaq/details.htm

Grant Program: Grassland Reserve Program

Brief explanation: The Grassland Reserve Program (GRP) is a voluntary program offering landowners the opportunity to protect, restore, and enhance grasslands on their property. The program helps landowners restore and protect grassland, rangeland, pastureland, shrubland and certain other lands.

- Name of grantor agency: US Natural Resources Conservation Service
- Key contact person(s): Jody Walker, Assistant State Conservationist
- Amount of funding available: Varies based on Congressional appropriation
- Key criteria for applications: See website below
- Funding cycle and deadlines: Open; on-going acceptance
- Website address: http://www.nrcs.usda.gov/programs/GRP/

Grant Program: Water Supply Land Protection Grant Program

Brief explanation: Also known as the Source Water Protection Program, NH DES can make 25 percent matching grants to municipal water suppliers for the purchase of land or conservation easements critical to their water quality. These water supply lands must be currently unprotected and within the wellhead protection area for a groundwater source or within the source water protection area and within five miles of the intake of a surface water source. These match sources can include donated land or easements that are also within the source water protection area, public funds, transaction expenses, or private funds. Also, there is a low interest loan fund available from DES that may be used to finance the match.

- Name of grantor agency: NH DES
- Key contact person(s): Holly Green
- Amount of funding available: Uncertain, but DES is soliciting applications; 25/75
- Key criteria for applications: Unprotected water supply land
- Funding cycle and deadlines: November
- Website address: http://des.nh.gov/organization/divisions/water/dwgb/dwspp/land_acqui/ws_landgrant.htm

Grant Program: Chloride Reduction in the I-93 Watershed Municipal Program

Brief explanation: Also known as the Salt Reduction Program, NH DOT has funding for designated communities for planning and implementation

- Name of grantor agency: NH DOT
- Key contact person(s): Mark Hemmerlein (mhemmerlein@dot.state.nh.us 603-271-1550)
- Amount of funding availability: Approximately $2.5 million to aid communities in the TMDL watersheds (Salem, Salem, Derry, Londonderry and Chester)
- Key criteria for applications: Location in the TMDL watershed
- Funding cycle and deadlines: Open
- Website address: http://www.rebuildingi93.com/documents/Municipal%20Program%20-%20TMDL.pdf

For special purpose land conservation projects, the following may be of interest:

Ecologically Important Land

- Sweet Water Trust http://www.sweetwatertrust.org/
- Wildlife Heritage Foundation of New Hampshire provides funds for NH Fish and Game projects. Contact: Chuck Miner at (603) 271-3511 http://www.wildlife.state.nh.us/foundation.
- Endangered Species Fund is a federal fund available to states for the conservation of T & E species. http://www.fws.gov/endangered/ESA/sec6.html

- The Neo-tropical Migratory Bird Conservation Fund establishes a matching grants program to fund projects that promote the conservation of these birds.
  http://www.fws.gov/birdhabitat/Grants/index.shtm

Wetlands, Waterfowl, Fisheries Habitat

- The North American Wetlands Conservation Act provides matching grants to organizations and individuals who have developed partnerships to carry out wetlands conservation projects for the benefit of wetlands-associated migratory birds and other wildlife. Administered through the federal Fish and Wildlife Service. Contact Atlantic Coast Joint Venture Coordinator Andrew Milliken at andrew_milliken@fws.gov. http://www.fws.gov/birdhabitat/Grants/index.shtm and http://birdhabitat.fws.gov/NAWCA/USstandgrants.html
- NH Fish and Game Department has a Small Grants Program to help landowners with a minimum of 25 acres restore or enhance habitat for wildlife. For more information, contact the Wildlife Division at (603) 271-2461, http://www.wildlife.state.nh.us/Wildlife/wildlife.htm
  For the Fisheries Habitat Conservation Program contact John Magee
  Fish Habitat Biologist john.a.magee@wildlife.nh.gov
- The Moose Plate program: http://www.mooseplate.com/overview.html
- Wetlands mitigation funds. Funds which permitting authorities (NH Dept. of Environmental Services, US Army Corps of Engineers) may require developers to provide for land conservation as mitigation for loss of wetland values resulting from proposed development. Contact municipal planning officials or the developer for details about specific projects.
- NH Department of Environmental Services established the Aquatic Resource Mitigation Fund to compensate for loss of wetlands. Contact: Lori Summer at (603) 271-4059 or lori.sommer@des.nh.gov
  http://des.nh.gov/organization/commissioner/pip/factsheets/wet/documents/wb-17.pdf
- Ducks Unlimited. http://www.ducks.org/ State contact: Ed Robinson, NH Fish & Game Department, (603) 271-2462.
- Trout Unlimited Contact: Elizabeth Maclin, Vice President for Eastern Conservation Programs: emaclin@tu.org. For local projects involving a component of stream habitat restoration or improvement, there is the Embrace-A-Stream grant program that is available through state councils and local chapters of TU. The TU council or chapter must be the applicant for the funds. For more information about the EAS program go to:
  http://www.tu.org/site/c.kkLRJ7MSKtH/b.3198137/k.9DD6/EmbraceAStream.htm
- Watershed Action Grants. The Conservation Fund, Contact: Nancy Bell, Vermont Representative
  http://www.conservationfund.org/

PARKS

Grant Program: Recreational Trail Program (RTP)

Brief explanation: RTP funds may be used for maintenance and restoration of existing trails, purchase and lease of trail construction and maintenance equipment, construction of new trails, development and rehabilitation of trailside and trailhead facilities, trail linkages, and acquisition of easements or property for trails.

Name of grantor agency: Bureau of Trails, NH DRED

Key contact person(s): Chris Gamache, Program Coordinator

Amount of funding available: $25,000 maximum;

Key criteria for applications: 80/20 match

Funding cycle and deadlines: January

Website address: http://www.nhtrails.org/grants-and-programs/recreational-trails-program/ http://www.fhwa.dot.gov/environment/rectrails

Grant Program: Land and Water Conservation Fund (LWCF)

Brief explanation: LWCF funds may be used for acquisition, development and restoration of existing or proposed parks.

Name of grantor agency: Division of Parks, NH DRED

Key contact person(s): Shari Colby, Outreach Coordinator

Amount of funding available: $20,000 cap per project

Key criteria for applications: Applications must be submitted by a municipality, school district, county or state agency / department for government owned property. 50/50 match required.

Funding cycle and deadlines: January

Website address: http://www.nhstateparks.org/community-programs/land-and-water-conservation-fund/grant-round-information-and-application-packet/

Other Grant Sources

Farm Bill

For information on the 2008 Farm Bill, visit http://www.ers.usda.gov/FarmBill/2008/

Piscataqua Regional Estuaries Program (Coastal CTAP)

This program is of interest to the I-93 CTAP Towns of Candia, Chester, Danville, Deerfield, Fremont and Raymond as they are located in the Coastal Zone watershed area. See: http://www.nhep.unh.edu/programs/community-assistance.htm

Moose Plate Grants

The state's Moose Plate program provides funding for cultural heritage, conservation and environmental programs. For details, see: http:/www.mooseplate.com/grants.html.

Source: Grant Resources Guide: Grant Opportunities for CTAP Communities (prepared for the Rockingham Planning Commission by TF Moran, Inc. 2010)

CTAP OPEN SPACE PLANNING PROTOCOL

Meeting 1: Identification of High Value Natural Resources

Tools and Data Provided

The CTAP facilitator will explain how Geographic Information Systems (GIS) data and NH GRANIT (New Hampshire Geographically Referenced Analysis and Information Transfer System) natural and cultural resource data layers can be used to assist in open space planning.

The CTAP facilitator will describe the various data layers in the CTAP master ARCGIS project. Due to the variable distribution of resources within the region, some resources will be more or less prevalent in one municipality versus another. Note: The scarcity of resource does not necessarily reflect its importance locally.

Task Force Activities

1. Following the Delphi process, the Task Force will use a master spreadsheet listing the GIS data layers to arrive at consensus of a set of resource features. During the process, each individual will assign a numerical weighting for each of the individual data layers, making sure to assign a total of exactly 100 points to the data set.
2. The group will then discuss the results of the weighting exercise, evaluating the group average results against differences of individual weighting. The Task Force will then repeat the weighting exercise having considered the views of other members.
3. The Task Force will continue to refine the weighting process through discussion until a consensus emerges within the weighting results. Finally, the Task Force will identify and agree on a list of highest ranking resources. This list may include as many resources as the Task Force deems of highest importance.

The resulting matrix of weighted resources will provide the basis for development of the resource maps which will be used for the activities in Meeting 2.

Meeting 2: Define the Green Infrastructure

Tools and Data Provided

Meeting 2 activities will utilize a map set derived from the weighting exercise results developed through the Delphi process during Meeting 1. The map set will include:

Map 1. Resource Generalist Map - areas of co-occurring resource values (grades by 1, 2, and 3 standard deviations above the average acre in the municipality)

Map 2. Resource Specialist Map – areas at least two standard deviations above average in one, and only one, of the related resource groups identified in Meeting 1

Map 3. Resource Gravity Model Map – areas given special weight when near existing conservation land

These maps provide the basis for all subsequent work of the Task Force by locating the highest value natural resource areas and therefore those areas of town most in need of protection.

Task Force Activities

1. The Task Force will identify the areas that, if protected from development, should ensure that the functions, values and services provided by these resources to the town's residents will continue indefinitely. These services include:
    - Maintaining the quality of ground and surface water
    - Improving air quality
    - Providing sufficient habitat for plant and animal species to thrive
    - Providing an opportunity for outdoor recreation for all residents at a reasonable distance from their homes
    - Creating a pleasant and scenic environment in which to live
    - Creating interconnected green spaces that allow for trails connecting the various parts of town and allow for the movement of wildlife
2. The Task Force will use the following guidelines to define the green infrastructure (new Map 4):
    - Include areas of exceptionally high resource value for a particular category
    - Include areas where multiple resource values occur in the same place
    - Give added consideration to lands near existing conservation lands
    - Give added consideration to lands that allow each resident reasonable access to open space
    - Avoid areas slated for industrial or commercial development, unless they contain exceptionally high quality resources
    - Include at least 25% of the town's land area to ensure the sustainability of natural processes
    - Do not include over 50% of the town's land area, to allow for future development
    - Try to combine high value polygons into a single polygon, by including "linking lands" that are feasible to protect
3. The Task Force will draw the boundaries of the green infrastructure area(s), attempting to follow the above guidelines and/or others proposed by the members. These areas will be drawn on an acetate overlay on the resource maps.

Meeting 3: Developing Protection Strategies

Tools and Data Provided

Map 4. The green infrastructure areas identified during Meeting 2 will be displayed on a map including the acreage of each area (drawn as a polygon on the map). The tax parcels will be displayed over the green infrastructure.

The total resource value of each tax parcel falling within the green infrastructure will be calculated. The resource based value of each parcel will be exported to two spreadsheets: one reported as highest to lowest total resource value per parcel; the other reported by the highest to lowest resource value per acre. [Note: Many parcels may contain some type of development, however the developed portion is usually located outside the green infrastructure, which yields a natural resource score of 0 for that portion of the parcel.]

Task Force Activities

1. The Task Force will review thoroughly the green infrastructure identified on the map and confirm that it captures the key resources, is sustainably linked together, and is of adequate size.
2. The Task Force will use the parcel and per acre valuation spreadsheets to examine the top scoring parcels and to develop a protection strategy for them. The general protection categories may include:
    - Ownership interest (fee or conservation easement) by a conservation entity
    - Regulatory protections (i.e. wetlands, steep slopes, aquifers, surface water)
    - Management agreement (i.e. powerline corridors, rod and gun club, public park)
    - Voluntary agreements (i.e. homeowner back-lots pledge to follow BMPs)
3. The Task Force evaluates each of the most valuable parcels until it reaches a point where further work does not justify the added effort.

Meeting 4: Assigning Resources

Tools and Data Provided

The RPC GIS Specialist will complete a buildout analysis for parcels in the green infrastructure areas and use these results to generate an estimate of the fair market value of the parcels that have an assigned protection strategy, requiring an ownership interest by the town, and an estimate of when projected buildout will occur.

The CTAP facilitator will use this data to define an annual funding estimate for five buildout scenarios:

1. Fast buildout/high land prices (worst case)
2. Fast buildout/low land prices (intermediate case)
3. Slow buildout/high land prices (intermediate case)
4. Slow buildout/low land prices (best case)
5. Moderately paced buildout/moderate land prices (most likely case)

These five buildout scenarios will demonstrate the sensitivity of the assumptions.

Task Force Activities

1. The Task Force will decide upon one scenario against which to estimate funding requirements based on the acceptable level of risk. Alternatively, the Task force can develop a funding plan for multiple scenarios.
2. The Task Force will also agree upon assumptions regarding:
    - What percentage of the required funding can be supplied by grants and/or bargain sales?
    - How many parcels can be conserved by other than the town, e.g NGO or agency?

Meeting 5: Review of Task Force Report

The Task Force may conduct one last meeting to review and comment on the final Task Force Report.

APPENDIX D GLOSSARY

I-93 Community Technical Assistance Program (CTAP) - developed in cooperation with the State of New Hampshire's Department of Transportation, Office of Energy and Planning, Department of Environmental Services, and the Regional Planning Commissions to provide planning assistance to the 26 I-93 corridor communities expected to experience additional growth that may result from the I-93 expansion project. CTAP is a multi-year initiative that provides assistance to I-93 corridor communities to address planning and community development challenges through access to technical information and tools to implement innovative land-use planning and resource conservation practices that address the impacts of growth and development. (Refer to page iv.)

Open Space - For the purpose of this report, is defined as any lands that remain in a natural and undeveloped condition that contribute ecological, scenic or recreational value. The definition of open space may be expanded to include working lands (forests, agriculture, field corners, fence rows and abandoned pastures) and managed green space such as golf ranges, parks, and recreation areas. (Refer to page 2.)

Natural Environment and Natural Resources – broadly used to describe air, water, and land resources including, but not limited to, the town's scenery, air quality, aquifers, streams, soils, plants and animals. (Refer to page 2.)

Co-Occurrence Areas – lands that combine both the physical co-occurrence of natural resources, where multiple resources occur together, and the numeric weighting for each resource as assigned during the resource prioritization process in Step 1. (Refer to page 7.)

Green Infrastructure - the contiguous resource network and natural areas across town. The green infrastructure is the area that, if protected from development or degradation, should ensure that the services provided by the natural environment to Salem's residents could be sustained. (Refer to page 8.)

Land Protection Strategy - implementation of a voluntary restriction, purchase of easements or development rights, creation of open space through conservation subdivision, protection through regulatory requirement (i.e. wetlands, shorelands), or voluntary protection measure that preserves the natural resources and features of land. (Refer to page 10.)

Build Out Analysis – using Geographic Information Systems (GIS), an estimation of the maximum number of units supported per parcel, excluding unbuildable lands (typically limited by soil conditions) and lands subject to state or local regulations, based on assumed land use and zoning scenarios (i.e. existing zoning, proposed zoning scenario, land use such as land conservation/open space preservation goals or transfer of development rights).