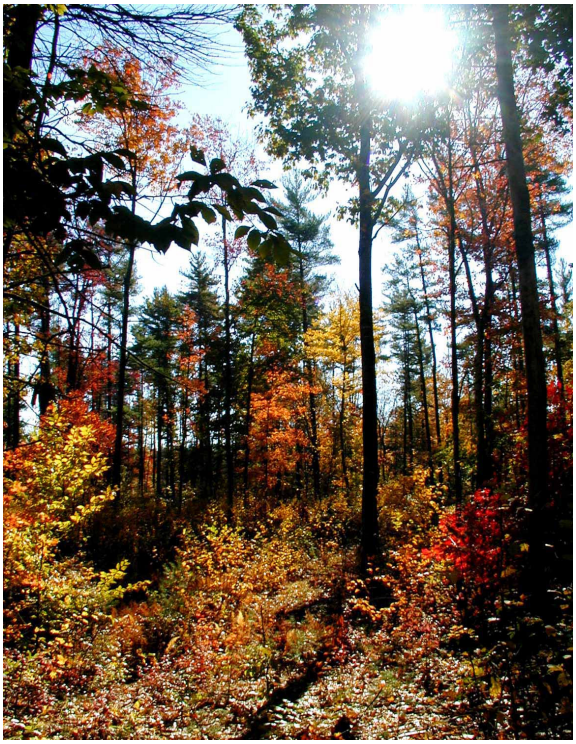
Town of Fremont
CTAP Open Space Report

to the
Fremont Planning Board
and Board of Selectmen



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

July 2010

ACKNOWLEGEMENTS

The Conservation Commission and Planning Board of the Town of Fremont wish to thank the members of the Fremont Open Space Task Force for volunteering their time and expertise to complete this Open Space Plan:

Jack Downing
Dennis Howland
Brett Hunter
Kenn Jones
Jack Karcz
Aja Malone
Janice OBrien
Jean Ragonese
Tina Sturdivant
Matthew Thomas

The Rockingham Planning Commission (RPC) facilitated the task force planning process and provided technical support including mapping, data collection and analyses for this report. Participating RPC staff include:
Julie LaBranche (Senior Planner)
Robert Pruyne (GIS Analyst/IT)
Tom Falk (Transportation Analyst/GIS Coordinator)

Cover Photo: Glen Oakes Conservation Area courtesy of Robert O'Brien

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

TABLE OF CONTENTS

Executive Summary ***iv***

Section 1 Introduction **1**

A. Purpose Statement 1

B. What is Open Space? 1

C. Benefits of Preserving Open Space 1

D. Local Support for Open Space Preservation 3

E. CTAP Open Space Task Force 5

F. CTAP Open Space Report 5

Section 2 Open Space Planning **6**

Step 1: Identification of High Value Natural Resources 6

Step 2: Assignment of Natural Resources Weighting 7

Step 3: Definition of the Green Infrastructure 8

Step 4: Parcel Based Refinement of Priority Protection Areas 9

Section 3 Land Protection Priorities **11**

A. List of Lands Identified for Priority Protection 11

B. Results of Open Space Planning Process 11

C. Fremont Open Space Committee – Natural Area Conservation Proposal Process 12

D. Land Conservation and Protection Strategies 14

Section 4 Financial Planning for Land Protection **15**

A. Existing Conditions 15

B. Buildout and Growth Projections 15

C. Previous Funding for Land Protection 15

D. Adaptive Approach to Land Protection 16

E. Future Funding Strategy for Land Protection 16

F. Future Growth Projections 17

Section 5 Task Force Recommendations **20**

APPENDICES

Appendix A	List of Lands Prioritized for Protection	21
Appendix B	Map Products	25
Map 1a	Highest Scoring Natural Resource Co-Occurrence Areas	
Map 2	Gravity Model of lands weighted by proximity to Conservation Areas	
Map 3	Identified Green Infrastructure	
Map 4	Priority Parcels for Protection by Type	
Appendix C	Grant Sources	26

LIST OF TABLES

TABLE 1. Annual funding from the Land Use Change Tax, 1999 to 2009 3

TABLE 2. Accomplishments of the Fremont Open Space Committee 4

TABLE 3. Description of Natural Resources Evaluated for Open Space Protection 6

TABLE 4. Resource Data and Weighting Scheme 7

TABLE 5. Priority parcels by rank and acreage 10

TABLE 6. Priority Ranking of Lands Prioritized for Conservation 11

TABLE 7. Fremont Natural Area Conservation Proposal Process 13

TABLE 8. Fremont Population Statistics, 1990 to 2030 15

TABLE 9. Funding Summary and Future Funding Projections 16

TABLE 10. Summary of statistics from Buildout Scenario #3 17

This document is for informational and planning purposes only. The Town of Fremont 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.

EXECUTIVE SUMMARY: FREMONT OPEN SPACE PLAN

I-93 Community Technical Assistance Program

The Fremont Open Space Plan was developed as part of Phase 2 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 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 and tools to implement innovative land-use planning and resource conservation practices that address the impacts of growth and development including Phase 1 2008-2009 activities: community planning assessments, conservation commission forums, projects funded by technical assistance grants, detailed land use mapping, and buildout analyses.

Fremont Open Space Plan Development

To develop the Fremont Open Space Plan, a Task Force was appointed with representation from the following community interests: Board of Selectman, Planning Board, Conservation Commission, Rail Trail Committee, Heritage Committee, Recreation Commission, and residents.

The basis of the Fremont 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. The four high scoring natural resources selected by the Open Space Task Force were:

- ✓ Unfragmented Lands of 500 acres or greater (38%)
- ✓ Agricultural Soils (33%)
- ✓ Scenic Views/Ridgelines/Hilltops (13.5%)
- ✓ Wetlands/Streams/Rivers/Lakes/Ponds plus the 250 foot buffer (12%)

Within the Green Infrastructure, the Task Force identified 88 parcels (*24.4% of total Town land area of 11,136 acres)* that if protected would provide significant benefits to the community by preserving open space, valuable ecosystems and natural resource functions.

Priority Ranking	Acres
High Priority Parcels (49)	1,810.5
Medium Priority Parcels (5)	133.4
Low Priority Parcels (34)	775.5
Total (88 parcels)	***2,719.4***

The Fremont 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 Fremont Open Space Task Force was to identify critical resources, and agricultural, open and undeveloped land in Fremont, 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 the Fremont's Natural Resources Inventory and Master Plan.

Resulting from the planning process completed by the Fremont 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.

This report can be used by the Town and various boards and commissions for the following purposes:

- Amendments to zoning districts and ordinances, and other land use regulations
- Long range planning activities (natural resource protection, growth and development, transportation)
- Capital Improvement Plan and municipal budget development
- Review of Open Space Preservation subdivision applications
- Supplemental information to grant applications
- Outreach and education of property owners and the public

B. 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 Fremont'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. This matrix provides the ecosystem services required to sustain a vibrant and healthy community.

C. Benefits of Preserving Open Space

Open space preservation serves multiple goals within a community. The benefits of preserving open space include:

- Attract investment by residents and businesses seeking high quality of life
- Revitalize Town and village centers
- Support of resource based tourism economy
- Prevent flooding and flood related damage
- Protect farms and agricultural lands
- Promote sustainable development patterns

- Protect environmental resources (water, aquifers, air, forests)
- Provide recreational and educational opportunities

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 (*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 likely that land conservation alone is responsible for these tax benefits. However, land conservation is a tool that: helps maintain the rural character of a community; creates more centralized, dense development patterns; creates more efficient municipal service areas; and provides multiple environmental and aesthetic benefits. 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)

TPL 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.

D. *Local Support for Open Space Preservation*

Funding and Regulatory

The citizens of Fremont have continuously voiced a strong vision to maintain Fremont's rural character, maintain the open space and forested areas for public use and enjoyment, protect historic resources, and preserve natural resources. In addition, the citizens of Fremont have voted consistently at various Town meetings to protect these lands and resources.

The Town currently has a total of 749 acres of conservation lands that have varying types of protections. The 336 acre Glen Oakes Conservation Area is permanently protected by conservation easement. Oak Ridge, a 174 acre parcel owned by the Town, is protected by deed restriction but does not yet have a conservation easement. The remaining 239 acres are part of open space subdivisions and Town owned properties that are not protected by conservation easement.

Glen Oakes -
A Fremont Open Space Success Story

Since 2005, the Town secured a $1.9 million bond authorized for land acquisition. To date, $900,000 has been expended for acquisition of several parcels that, combined, comprise the 336 acre Glen Oakes Conservation Area. In addition, the Town was awarded a $40,000 Moose Plate Grant and a $15,000 DRED grant which were used for acquisition of the Glen Oakes property.

Land Use Change Tax

Fremont dedicates fifty percent (50%) of the remainder of the total Land Use Change Tax collected each year, after the first $10,000, toward land conservation efforts. Annual funding from the Land Use Change Tax is summarized below:

TABLE 1. Annual funding from the Land Use Change Tax, 1999 to 2009

Year	*LUCT Collected*	*LUCT Contribution*	*Year*	*LUCT Collected*	*LUCT Contribution*
1999	$48,280	$19,140	2005	$48,500	$19,250
2000	$30,629	$10,314.5	2006	$31,500	$10,750
2001	$11,068	$534	2007	$12,620	$1,310
2002	$101,843	$45,921.5	2008	$2,620	$0
2003	$43,829	$16,914.5	2009	$9,445	$0
2004	$44,365	$17,182.5	***Total***	***$384,699***	***$141,318***
Annual average funding (excluding 2008 and 2009) = $15,702					

Total Balance of Land Conservation Funding ***$192,860***
(from LUCT and all sources through 2009)

Master Plan

Fremont's Natural Resource Inventory (2008) and Master Plan (updated in 2009) specifically support the Town's vision described above by encouraging: the establishment of conservation areas; the protection of open space and natural resources (ponds, wetlands, woodlands, prime

agricultural land and unique and fragile areas); protection of rural residential character; and protection of historic resources.

Fremont Open Space Committee
The Fremont Open Space Committee was formed in 2003 to advise the Fremont Conservation Commission on the best and most prudent ways to preserve natural spaces in Fremont. The Committee's mission is to initiate, support and maintain the rural character of the Town while balancing the financial and environmental wishes of the Townspeople. The reasons for this goal are to preserve the character of our community, protect our water supply, and maintain our existing wildlife habitat.

The primary purpose of the Fremont Open Space Committee is to provide information to the residents of Fremont about the benefits of preserving natural spaces. The Committee identifies and prioritizes land in Fremont for possible protection, it acts as an advisor to landowners who are considering maintaining their land as open space and works with landowners who wish to transfer their development rights as part of a conservation easement or sell their land in order to permanently protect it. Most importantly, the Fremont Open Space Committee works to raise funds by both proposing bond initiatives for the Town budget and by writing grant proposals in an effort to receive funds from public or private third parties.

TABLE 2. Accomplishments of the Fremont Open Space Committee

2003	Fall 2003 the Fremont Open Space Committee was formed.
2004	Brought forward a Citizens Petition to the 2004 Warrant containing 60 signatures of registered voters which allows the addition of a proposed $4 million bond for the purpose of permanently protecting 25% of the Town. The petition failed by six votes. Initiated the collection of $15,000.00 from private citizens for the purpose of retaining an option to purchase the Glen Oakes property from the Lawrence family. OS hold two guided public tours of the Glen Oakes property. Distributed Town wide survey asking residents to identify their "special places" in Fremont.
2005	Hosted CLCA presentation of The Dollars and Sense of Open Space. Brought forward and Town voted to approved a $900,000.00 bond initiative for the purpose of purchasing Glen Oakes. Brought forward $1 million general bond initiative for the purpose of protecting open space. The Town voted down the proposed bond. December 205-purchase of Glen Oakes is completed.
2006	Final purchase of the Glen Oakes property which was opened to the public in August 2006; Received a grant from the UNH Cooperative Extension - Natural Resource Outreach Coalition (NROC) to identify lands of high natural resource value and contract with the Rockingham Planning Commission complete a Natural Resources Inventory Brought forward and Town voted to approve a $1 million general bond initiative for the purpose of protecting open space.
2007	Received service grant from NROC (Natural Outreach Coalition) which helped to plan and conduct Landowner Workshop and resulted in obtaining a monetary grant for

	the purpose of creating a Natural Resources Inventory (NRI) narrative report to accompany the Conservation Commission's NRI maps. In 2008 the NRI report was incorporated into the Master Plan. With assistance from NROC, conducted a landowner workshop focused on the benefits and options available for private land conservation; established a monthly monitoring schedule and checklist for inspections of the Glen Oakes property.
2008	Sponsored two public events – the Turtle Walk and the Owl Prowl; Installed signs and markers and conducted monthly inspections at the Glen Oakes Conservation Area

E. CTAP Open Space Task Force

The Fremont Open Space Task Force ('Task Force') is comprised of members of the Fremont Open Space Committee, Conservation Commission, Planning Board, residents and the CTAP Representative. The Fremont Open Space Task Force met five times from April through August 2009. Open Space Task Force members included: Ken Jones (Chair), Jack Downing, Dennis Howland, Brett Hunter, Jack Karcz, Aja Mahone, Janice O'Brien, Jean Ragonese and Tina Sturdivant.

The open space planning process consisted of a series of four meetings from April through November 2009 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 Fremont's open space protection efforts. The estimated cost associated with achieving preservation of the identified parcels was then determined.

F. 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 A includes the list of 88 top-scoring parcels that the Town should consider protecting.

Section 2 Open Space Planning

Note: It is extremely important to recognize that landowners whose land 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 Fremont has any legal interest in the land or has any intention of taking the land for a public purpose.

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 natural resources were grouped into four broad categories (shown in green highlight) based on their resource function or type.

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, perennisal streams, lakes, ponds (including a 250' buffer from them)	*Surface water resources important for 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*
Forested (general)	*All forested areas; timber resource and unfragmented lands*
Forested (Hemlock/Pine)	*Two specific forest types prevalent in certain parts of the state*
Forested (Appalachian Oak/Pine)	

Step 2: Assignment of Natural Resources Weighting

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. This was done using 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. Consensus was reached following the fourth round of the scoring

The Open Space Task Force selected the following high value resources from the list shown in Table 4 below:

- ✓ Local Agricultural Soils
- ✓ Unfragmented Areas > 500 acres
- ✓ NH Wildlife Action Plan highest ranked habitats
- ✓ Named wetlands, perennial streams, lakes, ponds (including a 250 foot buffer from them)
- ✓ Forested (general)

TABLE 4. Resource Data and Weighting Scheme

	Round 1 Score	Round 2 Score	Round 3 Score	Round 4 Score
Soil Conditions				
Important Forest Soil Group I & II	**4.4**	**2.2**	**4.4**	**2.8**
Local Agricultural Soils	**9.4**	**11.1**	**11.7**	**10.6**
State Agricultural Soils	**0.0**	**0.0**	**0.0**	**0.0**
Prime Agricultural Soils	**0.0**	**0.0**	**0.0**	**0.0**
Soil Condition Total Score	***13.9***	***13.3***	***16.1***	***13.3***
Open Space Continuity				
Unfragmented Areas > 50 acres	**4.1**	**1.1**	**1.7**	**2.2**
Unfragmented Areas > 100 acres	**6.9**	**5.6**	**6.1**	**4.4**
Unfragmented Areas > 500 acres	**8.6**	**11.1**	**12.2**	**13.9**
Coastal Conservation Plan focus areas	**6.1**	**5.0**	**2.8**	**4.4**
NH Wildlife Action Plan highest ranked habitats	**8.9**	**12.8**	**16.1**	**13.9**
Open Space Continuity Total Score	***34.6***	***35.6***	***38.9***	***38.9***
Water Quality				
Stratified Drift Aquifer	**8.4**	**7.8**	**5.6**	**6.7**
Special Flood hazard Zones	**1.9**	**1.7**	**1.1**	**1.1**
Named wetlands, perennial streams, lakes, ponds and the 250' buffer from them	**11.1**	**11.7**	**8.3**	**10.6**
Prime wetlands, 100' buffer	**11.1**	**12.2**	**10.0**	**9.4**
Water Quality Total Score	***32.6***	***33.3***	***25.0***	***27.8***
View/Quality of Life				
Scenic Views/Ridgelines & Hilltops	**2.9**	**3.3**	**2.8**	**2.8**
Forested (general)	**9.4**	**10.6**	**7.8**	**10.6**
Forested (hemlock/pine	**2.8**	**1.7**	**6.1**	**3.3**
Forested (appalachian oak/pine)	**3.9**	**2.2**	**3.3**	**3.3**
Views/Quality of Life Total Score	***19.0***	***17.8***	***20.0***	***20.0***
Total Score	***100.0***	***100.0***		***100.0***

Table 4 above 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:

- ✓ Local Agricultural Soils (10.6%)
- ✓ Unfragmented Areas > 500 acres (13.9)
- ✓ NH Wildlife Action Plan highest ranked habitats (13.9%)
- ✓ Named wetlands, perennial streams, lakes, ponds (including a 250 foot buffer from them) (10.6%)
- ✓ Forests (general) (10.6%)

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.

Step 3: Definition of 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 Fremont'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*, approximately 7,712 acres or 69 percent of the Town is located within the Green Infrastructure. This includes a wide diversity of land uses, including undeveloped 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 913 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 751 parcels 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 Task Force examined these parcels, shown on Map 4, to identify parcels for priority protection and assign a protection strategy for each of them. Within the green infrastructure, 88 priority protection parcels were identified, with 4 parcel greater than 100 acres, 14 parcels greater than 50 acres, and 70 parcels less than 50 acres. Each priority parcel was assigned a protection priority ranking. The parcels with their rank and acreage are summarized in the table below.

TABLE 5. Priority parcels by rank and acreage

Ranking	***# of Parcels***	***Acreage***
High Priority	49	1,810.5
Medium Priority	5	133.4
Low Priority	34	775.5
Total	***88***	***2,719.4***
Priority parcels = 24.4% of total Town land area (11,136 acres)		
Existing Conservation Land	34	742

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 3 Land Protection Priorities

A. List of Lands Identified for Priority Protection

The Task Force developed a prioritized list of lands that they recommend should be protected in some manner. This list is provided in Appendix A. 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 88 parcels in priority over the other roughly 1,941 parcels in Fremont. The many additional properties within the green infrastructure, but not appearing in Appendix A 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, number of parcels and ranking for lands prioritized for protection and conservation (list from Appendix A).

TABLE 6. Priority Ranking of Lands Prioritized for Conservation

Priority Ranking	Acres
High Priority Parcels (49)	1,810.5
Medium Priority Parcels (5)	133.4
Low Priority Parcels (34)	775.5
Total (88 parcels)	***2,719.4***

Protection Criteria

The Task Force believes that every parcel in Appendix A is worthy of protection as each is an important link in the green infrastructure that should be protected using appropriate, site specific strategies. Further, the Task Force believes protection priorities should be based on three broad criteria:

1. The "threshold" criterion of being within the green infrastructure.
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.

In reality, it is these qualitative criteria that will play the most important role, for the simple reason that the Town can only acquire interests in open space from willing sellers, whose numbers will likely vary over time. The Task Force has recommended using the qualitative criterion, recognizing that land availability and financial resources are most often the limiting constraint in executing open space preservation.

C. Fremont Open Space Committee – Natural Area Conservation Proposal Process

The Fremont Open Space Committee has developed a transparent and repeatable process that clearly delineates how properties are researched, valued, and funded for protection. This process has been put into place in order to assure the residents of Fremont that the Town's interests as well as the interests of Fremont's citizens are protected. Following is a description of the Fremont Open Space Committee's 5-Step Natural Area Conservation Proposal Process.

<u>Step 1 – Proposal Initiation</u>

Proposals for land conservation can be initiated by land owners or other conservation-minded groups. Proposals are typically introduced via the Open Space Committee, or other official Town group such as the Board of Selectmen or Planning Board.

<u>Step 2 – Evaluation Using Predefined Criteria (see table in the following section)</u>

The Fremont Open Space Committee and Conservation Commission have developed standardized criteria that are used to rate the importance of lands proposed for conservation.

<u>Step 3 – The Conservation Commission</u>

The Conservation Commission is responsible for reviewing proposals, and if they feel that the proposal is viable, will arrange for a formal appraisal of the proposed property to determine its value.

<u>Step 4 – The Board of Selectmen</u>

If expenditure of bond funds are involved, the proposal, evaluation and appraisal, and any costs associated with the proposal, are presented to the Board of Selectmen. The Board of Selectmen conducts a formal public hearing to provide Town residents with a venue for voicing opinions and gathering information about the proposal. Following this process, the Board of Selectmen makes a determination whether final approval for the land conservation project will be granted.

<u>Step 5 – Land Trust Funding Options</u>

The Fremont Open Space Committee and Conservation Commission work continuously to identify funding sources from various public and private groups, typically in the form of "matching fund" grants.

Fremont Natural Area Conservation Proposal Process - Predefined Selection Criteria

The Fremont Open Space Committee and Conservation Commission have developed a draft scoring protocol to evaluate parcels that may be candidates for land protection. The protocol uses a list of criteria which are assigned a range of points. The score of individual parcels or a group of parcels is considered in determining eligibility for acquisition or purchase of a conservation easement (i.e. a protection method that uses Land use Change Tax funds, conservation funds or other Town approved funds such as a bond).

TABLE 7. Fremont Natural Area Conservation Proposal Process

Predefined Selection Criteria	
I.	**Drinking Water Source Protection (total 24 points)**
12 points	*A.* *Aquifer Protection* 1. Property contains or buffers high yield groundwater resources as identified by USGS groundwater mapping or other recognized sources *AND/OR* 2. Property buffers or is within an existing public water supply well-head protection zone or drinking water protection area designated by NHDES
12 points	*B.* *Surface Water Protection* 1. Property contains frontage on the Exeter River or other interconnected stream(s) and/or buffers such waterways *AND/OR* 2. Property contains frontage on or buffers great ponds or Prime Wetlands
II.	**Parcel Size and Linkages (total 16 points)**
8 points	1. Property meets one of the following size classes: 10-25 acres (2 points), 25-50 acres (4 points), greater than 50 acres (8 points)
8 points	2. Property abuts or links existing open space, especially large, undeveloped, unfragmented blocks not bisected by roadways
III.	**Rural Character and Historical Preservation (total 16 points)**
2 points	1. Property helps to preserve the rural quality of the Town
2 points	2. Property contains views valued by the community
2 points	3. Property is visible from a public road or public area
2 points	4. Property is situated such that development would obstruct or diminish scenic views
8 points	5. Property contains significant historical or cultural sites or structures
IV.	**Recreational Value (total 15 points)**
5 points	1. Property provides good sites for fishing, hunting, hiking, animal tracking, bird watching, and outdoor education
5 points	2. Property provides a critical link in, or adds to, a low impact trail system
5 points	3. Property provides public access to water for viewing and/or swimming
V.	**Agricultural and Forest Lands Preservation (total 16 points)**
4 points	1. Property contains a high percentage of prime agricultural soils or soils of statewide importance
4 points	2. Property currently has farmland features (open tillable fields, etc.)
4 points	3. Property contains certified tree farm or other important sources of forest products
4 points	4. Property contains outstanding or rare forest communities
VI.	**Wildlife and Habitat Protection (total 15 points)**
7 points	1. Property contains or buffers known locations of endangered plant or animal species; or plant or animal species of special concern; or property contains habitat for endangered species or species of special concern
4 points	2. Property contains ecosystems of special interest (vernal pools, rookeries, etc.)
4 points	3. Property is component of important wildlife corridors
Total Maximum Points = 102	

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. These strategies and their associated benefits are listed below.

Protection Strategy	***Benefit***	***Cost***
Land Acquisition	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	Growth management tool; retain development density and tax base if rights transferred to growth areas	High
Regulatory Protection	Preservation of public resources and their functions and values to the community; federal, state and local implementation	Low/No
Land Use Regulations	Adoption of an incentive based Conservation Subdivision ordinance can provide large tracts of open space lands as part of development approval	Low/No
Voluntary Protection/Easements	Voluntary conservation easements involving donation of development rights; Private stewardship and management; public access permitted in some cases	Low/No
Land and Resource Management	Fosters public participation and stewardship	Low/No
Transfer of Development Rights	Voluntary transfer of development rights from designated open space areas to designated growth areas that allow greater development density	Low/No

Section 4 Financial Planning for Land Conservation

A. *Existing Conditions*

Currently, Fremont has 1,489 housing units (from RPC 2008 Housing Needs Assessment) and 4,592 acres of buildable land (from 2005 Regional Land Use Cover data). Given the population growth trends from 1990 to 2009 and population projections through 2030, Fremont is likely to experience more growth than previously anticipated. Land consumption will likely increase proportionately in response to population growth.

TABLE 8. Fremont Population Statistics, 1990 to 2030

1990 Census	2000 Census	(Town estimate) 2009	(NHOEP projection) 2030
2,576	3,510	4,400	4,950

B. *Buildout and Growth Projections*

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 Fremont have been maximized. In reality, given the pace of development in southern New Hampshire, it appears that "build out" is roughly 10 to 40 years in the future. This indefinite timeframe has limited use in computing the total cost of implementing open space preservation for two reasons:

1) there is wide variability within the estimated range for when build out may occur; and
2) the predicted rate of inflation, much less fluctuations in real estate values even 10 years into the future, is highly speculative.

C. *Previous Funding for Land Protection*

Historically the Town has succeeded in leveraging its own resources with federal, state and private dollars, so that approximately 6 percent of Fremont open space acquisition has been funded with non-Town dollars. In addition, the Town's 174 acre Oak Ridge property could be used as leverage to match other federal and state grants in the future. The Task Force assumes that funding rates can be sustained, at least in the near term. Since 2005, Fremont voters have authorized $1,900,000 in bonds to be applied to land acquisition and conservation. 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.

D. Adaptive Approach to Land Protection

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 needs to be done in the near term to execute open space preservation as recommended in this report. However, since the ability to predict land values is 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 (annual average) for open space protection. 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, the Town 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.

E. Future Funding Strategy for Land Protection

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.

The following table summarizes available funding for land conservation and a projection of two levels of annual funding based on an increase in the Land Use Change Tax contribution.

TABLE 9. Funding Summary and Future Funding Projections

	Existing and Projected Funding
Available Bond Funding (previously approved by Town)	$1,000,000
Total Land Use Change Tax collected from 1999 to 2009	$141,318
Balance Land Conservation Fund[1]	$192,860
Total Available Funds (2009)	***$1,192,860***
Annual LUCT Funding Average (1999-2007)[2]	*$15,702*
Projected LUCT Average Contribution (moderate)[3]	*$18,842*
Projected LUCT Average Contribution (high)[4]	*$21,983*

[1] Balance currently available from Land Use Change Tax and other sources
[2] Excludes 2008 and 2009 when the LUCT contribution was zero
[3] Assumes funding based on increase to 60 percent contribution of average LUCT collected
[4] Assumes funding based on increase to 70 percent contribution of average LUCT collected

Note: The assessed value of the priority parcels is not reported in the table below because the Towns GIS based parcel data is not linked to the assessment database; therefore, values of individual parcels could not be identified.

The Task Force recommends that the Town consider maintaining funding levels that voters have supported in the past for the use of bonds to purchase conservation lands. The Task Force also recommends that the Town commit to annual reviews of this level of funding to evaluate whether these funds are adequate to implement the proposed open space acquisitions as they become available for purchase. This review can also include evaluation of the level of funding provided by the annual Land Use Change Tax contribution.

The projected moderate and high funding scenarios provide an estimate of the increased funding levels that would result from an increase in the contribution from the Land Use Change Tax collected each year (projected based on the previous annual average from 1999 to 2007).

The Task Force believes the choice of a specific funding level, within the range provided below, is a policy decision that must be balanced by the Town'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.

F. Future Growth Projections

The I-93 CTAP program includes completion of a build out analysis for corridor communities. The build out analysis incorporates three scenarios: 1) build out based on existing zoning, 2) buildout based on the standard alternative scenario or Smart Growth scenario, and 3) buildout based on a scenario that depicts a hypothetical alternative scenario for accommodating future growth.

Scenario #3 Build Out Analysis – Use of Open Space Planning Results

The Fremont Planning Board chose to utilize the results of the Open Space Planning Process as the basis for Scenario #3 of the build out analysis (refer to Scenario #3 buildout map on page 17). This analysis essentially transferred the development density from the 88 parcels selected for priority open space protection to other areas of the Town based on the assumption of adjusting lot size and density while maintaining the same density of the base scenario. The results of the Scenario 3 buildout analysis showed a minimal increase in the concentration of density in the Village District. Refer to map on the following page for the results of the Scenario #3 analysis.

Planning Board Evaluation of Buildout Scenario #3 Results

In their evaluation of the results of Scenario #3, the Fremont Planning Board offered the following comments and observations.

1. The Board recognized that conserving all of the targeted land in the Open Space Plan may not be feasible. The open space priority lands represent 31 percent of Town's total land area. Thus, preservation of all open space priority lands under Scenario #3 would exceed the Conservation Commission's goal of conserving 20 percent of Fremont's land. However, generally the Board agreed that achieving the Conservation Commission's goal seemed to be realistic. As indicated by the figures reported below, mandatory implementation of the Open Space Preservation ordinance within the Open Space Priority Preservation Lands would accomplish the goal to conserve 20 percent of Fremont's land.

TABLE 10. Summary of statistics from Buildout Scenario #3

Total Town Land Area	***11,136 acres***
20% Land Preservation Goal	2,227 acres
Open Space Priority Preservation Lands	***2,719.4 acres***
Preservation of total acreage of Open Space Priority Preservation Lands	25% of total Town land area
Preservation of Open Space Priority Preservation Lands through subdivision using the Open Space Preservation ordinance (50% open space preservation required)	1,359 acres
Acres of existing conservation lands	749 acres

2. The Board discussed the possibility of making minor modifications to their Open Space Preservation ordinance to allow for the open space conservation requirement to be met outside the open space development but on another parcel within a designated open space conservation target area.

3. The Board observed that the increase in density in other areas of Town seemed surprisingly low. The total number of dwelling units transferred from the open space areas to other areas of Town was 189 under Scenario #3. The transfer of 189 dwelling units from the open space parcels to other areas of Town resulted in the following changes in density in those areas:
   Zoning Density in Aquifer Protection Area from 3 acres/du to 2.17 acres per du
   Zoning Outside Aquifer Protection Area from 2 acres/du to 1.5 acres/du

4. The Board also noted that the re-allocation of housing units in Scenarion#3 was limited to some degree due to the fact that development density on much of the open space areas in Fremont is naturally constrained by the presence of wetlands and poor soil conditions.

5. The Board requested assistance from the Rockingham Planning Commission to investigate the success of implementing Transfer of Development Right (TDR) programs in New England.

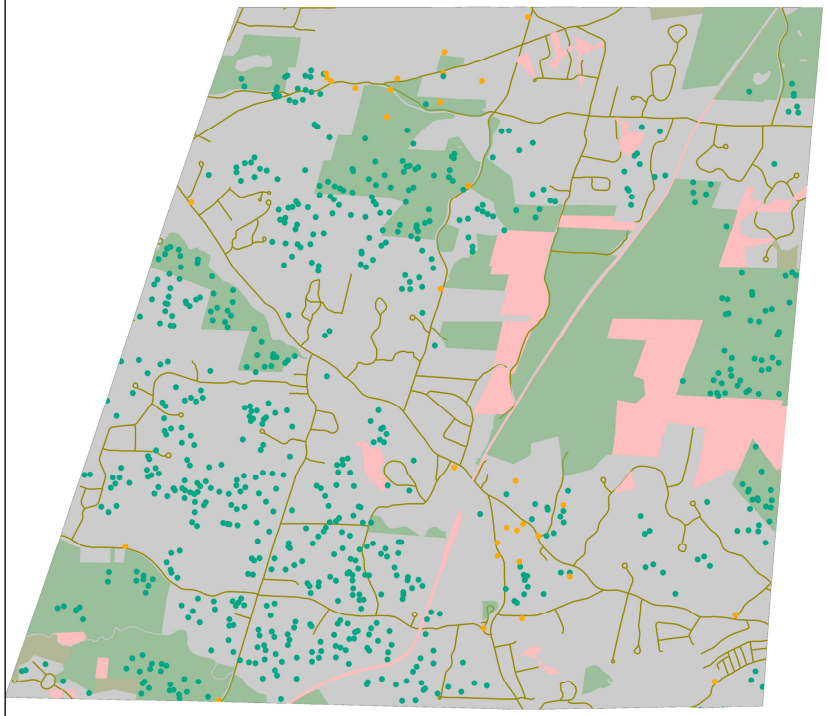
Recommendations to Increase Land Preservation

1. Consider the following revisions to the Open Space Preservation ordinance:
   a. Open Space Priority Preservation Areas – a density bonus of 5 percent for a development located within the open space priority conservation areas.
   b. Required Open Space – within Open Space Priority Preservation Areas, a density bonus of 5 percent if an additional 10 percent or more, beyond the minimum 50 percent required, of the total upland portion of the site is reserved in perpetuity as common open space.
2. Open Space Protection Standards – utilize the open space planning map to help guide consideration of parcels for land protection strategies, including dedication of funds for acquisition.

Buildout Analysis – Scenario #3 Results

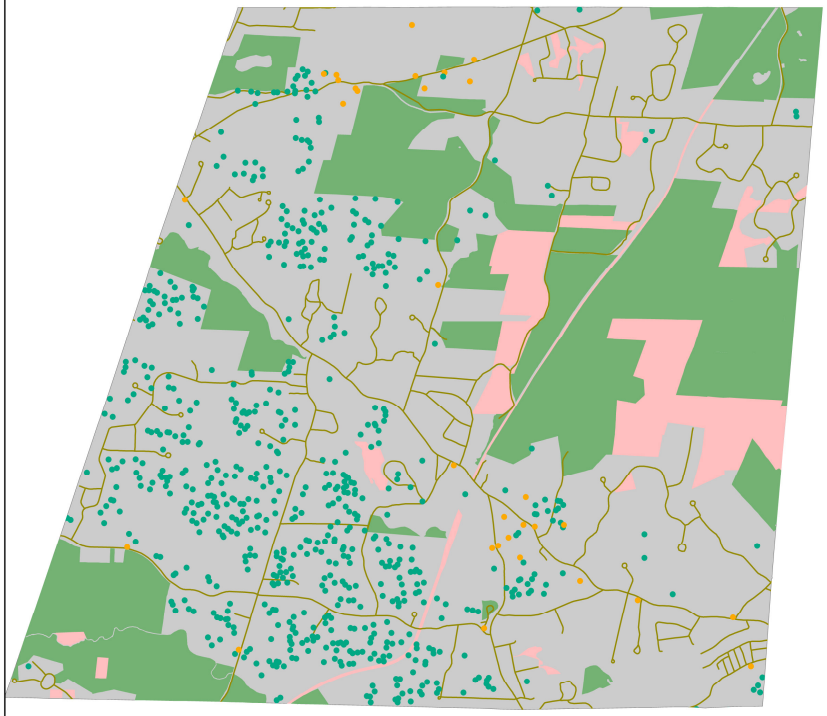
Note: Lands identified for priority Open Space conservation are shown on the map as dark green.

Base Scenario



New Units at Buildout - 730
Open Space Preserved - 749.2 Acres
Zoning Density in Aquifer - 3 Arce/Unit
Zoning outside Aquifer - 2 Acre/Unit

Community Scenario



New Units at Buildout - 730
Open Space Preserved - 3453 Acres
Zoning Density in Aquifer - 2.17 Acre/Unit
Zoning outside Aquifer - 1.5 Acre/Unit

Section 5 Task Force Recommendations

The Fremont Open Space Task Force recommends the following to implement open space preservation in the Town:

1. The green infrastructure identified in this report should be adopted as part of the Town's "blueprint" for open space preservation by integrating it into the existing Conservation Proposal Process.

2. The parcels identified in Appendix A of this report should be pursued for protection using the strategies recommended for each parcel.

3. The Town 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.

4. The Town should re-examine the recommendations of this report at no more than three year intervals, and review the open space financing plan annually as part of the Capital Improvement Plan process.

5. The Town's Capital Improvement Plan should include an annual open space investment consistent with land conservation priorities and other capital needs.

Appendix A List of Lands Prioritized for Protection

Map ID	*Acreage*	*Co- Occurrence Score*	*Map/Lot*	*Abuts Conservation*	*Abuts River*	*Public Access*	*Protection*	*Priority*
1	10.4	62.2	1-23	n	y	n	Purchase development rights	High
2	11.1	61.2	4-5	y	n	class 6	Purchase development rights	High
3	26.9	60.4	1-35	n	y	y	Purchase development rights (part of #55)	High
4	3.0	60.1	1-31	n	n	n	Purchase development rights (part of #55)	High
5	7.0	56.8	1-39	n	y	y	Brown field (used car dealer)	High
6	16.7	54.9	1-52	n	y	y	Riverfront	High
7	16.1	54.7	5-28	n	n	y	Contains a pond	High
8	24.0	54.7	4-6	y	n	class 6	Purchase easement	High
9	17.3	54.2	4-87	y	n	n		High
10	90.8	53.4	1-29	n	y	y	Conservation subdivision potential	High
11	77.3	53.2	4-67	y	n	class 6	Conservation subdivision potential	High
12	191.2	53.1	1-15	y	y	y	Conservation subdivision potential	High
13	14.3	52.9	1-38	y	n	n	Part of #55	High
14	36.9	51.1	6-47-1-1	y	n	class 6	Developed with a single-family home	High
15	5.1	50.8	5-29	n	n	y	Near pond, attempted previous purchase	High
16	75.8	50.2	4-91	n?	n	n	High development potential	High
17	5.2	49.1	2-29	n	y	y	Old camp ground; park potential (riverfront)	High
18	13.4	48.6	2-80	n	y	n	Riverfront	High
19	10.0	48.1	4-76	n	n	n		High
20	26.8	46.5	5-34					High
21	18.2	46.3	4-88					High
22	65.0	46.1	4-93	n	n			High
23	114.4	46.0	5-61					High
24	9.4	45.8	5-39-1	n	n			High

Map ID	Acreage	Co- Occurrence Score	Map/Lot	Abuts Conservation	Abuts River	Public Access	Protection	Priority
25	106.0	45.7	5-55-1					High
27	54.8	45.3	4-13					High
28	10.1	44.6	4-94-48				Tuck Woods Conservation Area with easement	High
29	57.5	44.1	2-175					High
30	31.8	43.4	4-98					High
31	35.9	43.0	5-17	n	n			High
32	7.6	42.3	4-92					High
33	17.4	41.9	4-86					High
34	11.4	40.5	5-30	n	n			High
35	35.2	39.4	5-72-2-2					High
36	11.3	38.9	2-16					High
37	12.1	38.8	5-31	n	n			High
38	60.4	37.2	5-50	n	y	y		High
39	75.9	36.9	6-34	n	y			High
40	37.7	35.8	6-21	n	y			High
41	66.4	35.6	6-35	n	y			High
42	54.8	35.5	3-168	n	y			High
43	54.8	31.3	5-71					High
44	26.9	29.9	6-31	n	n			High
45	88.4	29.4	3-170	n	y			High
46	36.4	28.3	6-25	n	n			High
47	12.1	28.1	6-20-1	n	y		Soccer field owned by Seacoast Soccer Association	High
48	7.6	26.9	6-33	n	y			High
50	0.5	20.5						High
51	11.2	13.6	5-72	n	n			High
52	25.6	58.3	4-74	n	n	n	Near new commercial zone	Medium

Map ID	Acreage	Co- Occurrence Score	Map/Lot	Abuts Conservation	Abuts River	Public Access	Protection	Priority
53	9.3	55.1	4-75	n	n	n		Medium
54	52.4	52.1	2-151-4	y	n	n	Near new commercial zone	Medium
55	39.0	47.7	4-15	Y	N	y	Merrill pit near rail trail, restoration potential	Medium
56	7.1	47.2	5-11	n	n	class 6	Heron rookery?	Medium
57	25.1	70.6	1-28	n	y	n	Wet, CSPA, prime wetlands	Low
58	10.2	70.1	1-33	n	y	n	Wet	Low
59	4.8	70.0	1-20	y	y	n	Wet	Low
60	5.0	69.6	1-17	n	n	n	Wet	Low
61	0.9	69.6	1-21	n	y	n	Town conservation land without easement; wet	Low
62	3.0	69.1	1-22	n	y	n	Wet	Low
63	6.8	68.4	1-37	y	n	n	Wet	Low
64	16.4	68.2	1-16	n	n	n	Wet	Low
65	7.7	67.5	1-18-1	n	n	n	Wet	Low
66	23.5	66.7	4-65	y	n	class 6	Wet	Low
67	6.6	66.7	1-34	y	y	n	Wet	Low
68	10.0	65.6	4-66	y	n	n	Wet	Low
69	13.2	65.2	4-73	n	n	n	Wet	Low
70	6.7	64.3	4-72	n	n	n	Wet	Low
71	7.5	64.1	4-71	n	n	n	Wet	Low
72	20.9	64.0	4-70	y	n	n	Wet	Low
73	1.8	63.0	4-65-1	y	n	n	Wet	Low
74	3.8	62.7	1-18	n	n	n	Wet	Low
75	28.4	62.6	4-69	y	n	n	Wet	Low
76	270.5	61.0	4-68	y	n	n	Owned by PEA, very wet	Low
77	10	61.0	4-17	y	n	n		Low
78	20.0	60.8	4-66-1	y	n	n	Wet	Low
79	7.1	60.3	1-32	y	n	n	Wet	Low
80	29.4	60.3	4-78	y	n	n	Wet	Low

Map ID	Acreage	Co- Occurrence Score	Map/Lot	Abuts Conservation	Abuts River	Public Access	Protection	Priority
81	24.7	60.1	1-35-14	y	n	y	Wet	Low
82	49.7	58.1	4-67-1	y	n	n	Wet	Low
83	3.5	57.9	2-151-1	y	n	n	Owned by School District	Low
84	36.2	57.8	4-90	Y	N	N	Wet	Low
85	4.0	57.4	4-79	y	n	n	Wet	Low
86	2.2	51.3	4-7	n	n	class 6	Small parcel	Low
87	12	50.5	4-18	y	n	n	Wet, on rail trail	Low
88	83.5	49.8	2-151	y	n	n	Owned by School District	Low
89	12.9	49.4	4-2	y	n	y	Wet	Low
90	7.5	48.9	1-62-1	y	n	n	Wet	Low

Note: Map ID #26 was deleted from this table.

Appendix B Map Products

Map 1A - Highest Scoring Natural Resource Co-occurrence Areas

Map 1B - Combined Co-occurrence values and highest ranking specialist features

Map 2 – Gravity Model of lands weighted by proximity to Conservation Areas

Map 3 - Identified Green Infrastructure

Map 4 - Priority Parcels for Protection by Type

Appendix C Grant Sources

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, Windham, 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)