

# **Town of Danville CTAP Open Space Report**

**to the  
Danville Planning Board  
and Board of Selectmen**



*Prepared for the Danville Open Space Task Force  
by the Rockingham Planning Commission*

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***This document is for informational and planning purposes only. The Town of Danville 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: DANVILLE OPEN SPACE REPORT

### *I-93 Community Technical Assistance Program*

The Danville Open Space Report 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.

### *Danville Open Space Report Development*

To develop the Danville Open Space Report, a Task Force was appointed with representation from the following community interests: Board of Selectman, Planning Board, and Forestry Committee.

The Danville Open Space Report was based primarily on the identification of high value resources and their co-occurrence 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 four highest scoring natural resources selected by the Open Space Task Force were:

- ✓ Wetlands/Streams/Rivers/Lakes/Ponds including a 100 foot mapped buffer (115 points)
- ✓ Unfragmented Lands of 50 acres or greater (80 points)
- ✓ Stratified Drift Aquifers (60 points)
- ✓ Forested Areas and Important Forest Soils (70 points)

The task force elected to display the NH Wildlife Action Plan Highest Ranked Habitats on the resource co-occurrence map but did not include them as part of the weighted criteria. Within the Green Infrastructure, the Task Force identified 161 parcels (*35.1% of total town land area or 2,656 acres*) that if protected would provide significant benefits to the community by preserving open space, valuable ecosystems and natural resource functions.

<b>Priority Ranking</b>	<b>Acres</b>
High Priority Parcels (58)	1,315.7
Medium Priority Parcels (103)	1,340.3
<b><i>Total (161 parcels)</i></b>	<b><i>2,656</i></b>

The Danville Open Space Report can serve as a guidance document for the community to implement planning and resource protection initiatives, and capital improvement and budgetary decisions relating to land and resource preservation. The plan can 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 Danville Open Space Task Force was to identify critical resources, and agricultural, open and undeveloped land in Danville, and to select and prioritize those lands. If excluded from residential, commercial and industrial growth, these lands can help sustain the ecosystem services provided by its resource base and maintain the rural character envisioned in the Danville's Natural Resources Inventory and Master Plan.

Resulting from the planning process completed by the Danville 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 Danville'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. Although it is likely that land conservation alone is not solely responsible for these tax benefits, land conservation is a tool to provide the following benefits to the community: help maintain the rural character of a community; create more centralized, dense development patterns; create more efficient municipal service areas; and provide 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 Danville have continuously voiced a strong vision to maintain Danville’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 Danville have voted consistently at various Town meetings to protect these lands and resources.

The Town currently has a total of 650.6 acres of conservation lands that have varying types of protections. The 420+ acre Danville Town Forest is protected by conservation easement.

*Land Use Change Tax (LUCT)*

In 1997, Danville adopted a Land Use Change Tax, to be applied to land conversions from current use to development. Current Use assessment is a property tax program that encourages preservation of open space by allowing owners of qualified parcels to pay a reduced tax rate based on the parcel’s ability to generate income in its current, undeveloped use, rather than in a developed use. In place in New Hampshire since 1973, this program is a voluntary program, which requires landowners to apply for the reduced tax rate. Tax rates for these properties are set each year by the Current Use Board.

When a parcel enrolled in the current use program is converted to a developed use or subdivided below the 10-acre minimum size, a tax, called the land use change tax, is paid by the landowner to the town. This tax equals ten percent of the full market value of the land when it no longer qualifies for the current use program. Under this program, when land is converted from current use to development, a land use change tax is assessed against the owner, based on the increased value of the land.

Danville dedicates one hundred percent (100%) of the Land Use Change Tax collected each year to the Conservation Fund which is used for land conservation activities. Annual funding held in the conservation fund from 1999 to 2010 is summarized below:

**TABLE 1. Revenue Received for the Conservation Fund including LUCT, 1999 to 2010**

<i>Year</i>	<i>Revenue Received</i>	<i>Year</i>	<i>Revenue Received</i>
1999	\$17,220	2006	\$14,550
2000	\$0	2007	\$13,032
2001	No Data	2008	\$5,100
2002	\$232,570	2009	\$12,000
2003	\$230,877	2010	\$82,665
2004	\$152,712	<b>Total</b>	<b>\$782,720</b>
2005	\$21,994		
<b>Annual average revenue received (excluding 2001) = \$71,156</b>			

**Ending Balance in Conservation Fund**

**\$534, 320**

**(Total from revenue received, interest earned and yearly expenditures, from 1999-July, 2010)**

\* This table depicts revenue received and does not include expenditures or interest earned for a given year.

The purpose of the reporting the LUCT data is to document its importance – and substantial financial contribution – to land conservation efforts in Danville. The total amount report in Table 1 does not include detailed expenditures from the Conservation Fund for land purchases, assessments and other financial outputs necessary to support land conservation.

*Master Plan*

Danville’s Master Plan (updated in 2009) supports the town’s vision by encouraging the establishment of conservation areas and 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.

*Conservation Commission*

The Danville Conservation Commission (DCC) has taken an active role in land conservation, wetland protection, and reviewing site plans and subdivision plans for compliance with wetlands rules and ordinances. Educating the public on wetlands and groundwater issues has been a high priority for the Conservation Commission. Following are highlights of recent accomplishments by the Conservation Commission to protect the land and resources of Danville.

**TABLE 2. Accomplishments of the Danville Conservation Commission**

<b>2002</b>	In 2002, another warrant article was proposed and passed in 2003 to authorize the Selectmen to grant and convey to an appropriate conservation organization a conservation easement on approximately 469 acres of Town Forest located on several parcels of land within the town. The purpose of this easement is to ensure the permanent protection of the Danville Town Forest as open space so that it may be managed for multiple conservation benefits, including wildlife habitat, watershed protection, recreation, timber production, scenery, and natural area preservation.
<b>2004</b>	Conservation Commission narrows list down to three firms for holding the conservation easement for the Town Forest. Conservation Commission worked with the OHRV Club to form a trail system that can be used by the club and the public. By specifying these trails the goal is to help protect the Town Forest and private property.
<b>2006</b>	Conservation Commission updates the conservation section of the Master Plan and announces a hearing on a parcel of land the Commission would like to purchase.
<b>2008</b>	The conservation easement that the conservation commission and Audubon Society have been working on for the Town Forest is finalized. A grant is received from the Estuary project for the Town to develop a Stewardship plan for the Town Forest.
<b>2009</b>	The town with help from the Conservation Commission signs off on easement and stewardship plan with NH Audubon Society for management of the Town Forest. A grant of \$4,000 was rewarded to the Town from the Coastal Watershed and Protection Transaction Grant/Piscataqua Regions Estuaries Partnership for offsetting costs to the Towns Conservation Fund for providing a boundary survey of the Town Forest.
<b>2010</b>	A Conservation Easement is being negotiated for the 476 +/- acres Town Forest through the Audubon Society. This easement will ensure proper care and maintenance of the forest.

### ***E. CTAP Open Space Task Force***

The Danville Open Space Task Force ('Task Force') is comprised of members of the Danville Board of Selectmen and the CTAP Representative. The Danville Open Space Task Force met four times from December through May. Open Space Task Force members included: Shawn O'Neil, Joseph Luna, J Russell Pouliot, and Chris Giordano.

The open space planning process consisted of a series of four meetings from April through November 2010 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 Danville's open space protection efforts. The estimated cost associated with achieving preservation of the identified parcels was then discussed. On January 24, 2011 the Danville Open Space Task Force voted to accept the Draft Open Space Report and forwarded the report to the Towns Conservation Commission and Planning Board for review, comment and consideration.

### ***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 map products developed during the open space planning process. Detailed information on the technical methods considered by the Task Force are contained in Section 2 of this report. Appendix A includes the list of 182 top-scoring parcels that the town should consider protecting in some manner.

## Section 2 Open Space Planning Process

*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 Danville 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. Note: The resource list in Table 3 was developed by the CTAP Advisory Committee as part of the standardized methodology for developing CTAP Open Space Reports. This resource list is derived from the NH GRANIT Natural Services Network GIS layer. Step 1 in the open space planning process was for the Task Force to select what they considered the highest 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**

<i>Natural Resources</i>	<i>Description</i>
<i>Soil Types</i>	
Important Forest Soils	<i>Soil Groups 1A and 1B that support diverse high-quality hardwood species</i>
Agricultural Soils	<i>Includes prime soils, and soils of statewide and local importance</i>
<i>Open Space Continuity</i>	
Unfragmented Areas 50 acres or greater	<i>Lands of any type including forest, agricultural land, wetlands and surface waters</i>
Unfragmented Areas 100 acres or greater	
Unfragmented Areas 500 acres or greater	
NH Wildlife Action Plan highest ranked habitats	<i>Habitat types of exemplary quality and rare habitats in the region or statewide</i>
<i>Water Quality</i>	
Stratified Drift Aquifer	<i>Drinking water source areas</i>
Special Flood Hazard Zones	<i>As identified on FEMA maps; areas subject to inundation and erosion</i>
Wetlands, perennial streams, lakes, ponds (including a 250' mapped buffer)	<i>Surface water resources important for maintaining water quality</i>
Prime wetlands (including 100' mapped buffer)	<i>High value wetlands and habitats</i>
<i>Views/Quality of Life</i>	
Scenic Views/Ridgelines & Hilltops	<i>Quality of life, aesthetics and land value</i>
Forested (general)	<i>All forested areas; timber resource and unfragmented lands</i>
Forested (Hemlock/Pine)	<i>Two specific forest types prevalent in certain parts of the state</i>
Forested (Appalachian Oak/Pine)	

**Note: Mapped buffers serve as supporting components of the landscape and are not regulatory.**

## **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 second round of the scoring

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

- ✓ Named wetlands, perennial streams, lakes, ponds and the 250’ buffer from them
- ✓ Unfragmented Areas > 50 acres
- ✓ NH Wildlife Action Plan highest ranked habitats
- ✓ Stratified drift Aquifers
- ✓ Forested (general)

**TABLE 4. Resource Data and Weighting Scheme**

	<b>Round 1 Score</b>	<b>% of Total Score</b>	<b>Round 2 Score</b>	<b>% of Total Score</b>
<b>Soil Conditions</b>				
Important Forest Soil Group I & II	<b>60</b>	<b>10.5</b>	<b>30</b>	<b>4.5</b>
Important Agricultural Soils	<b>10</b>	<b>1.7</b>	<b>20</b>	<b>3</b>
<i>Soil Condition Total Score</i>	<b>70</b>	<b>12.3</b>	<b>50</b>	<b>7.5</b>
<b>Open Space Continuity</b>				
Unfragmented Areas > 50 acres	<b>60</b>	<b>10.5</b>	<b>80</b>	<b>11.9</b>
Unfragmented Areas > 100 acres	<b>25</b>	<b>4.4</b>	<b>35</b>	<b>5.2</b>
Unfragmented Areas > 500 acres	<b>80</b>	<b>14</b>	<b>60</b>	<b>8.9</b>
Coastal Conservation Plan focus areas	<b>0</b>	<b>0</b>	<b>10</b>	<b>1.5</b>
NH Wildlife Action Plan highest ranked habitats	<b>20</b>	<b>3.5</b>	<b>70</b>	<b>10.4</b>
<i>Open Space Continuity Total Score</i>	<b>185</b>	<b>32.5</b>	<b>255</b>	<b>38</b>
Stratified Drift Aquifer	<b>50</b>	<b>8.8</b>	<b>70</b>	<b>10.4</b>
Special Flood hazard Zones	<b>25</b>	<b>4.4</b>	<b>25</b>	<b>3.7</b>
Named wetlands, perennial streams, lakes, ponds (including a 250’ mapped buffer)	<b>105</b>	<b>18.4</b>	<b>115</b>	<b>17.2</b>
Prime wetlands (including a 100’ mapped buffer)	<b>30</b>	<b>5.3</b>	<b>30</b>	<b>4.5</b>
<i>Water Quality Total Score</i>	<b>210</b>	<b>36.8</b>	<b>240</b>	<b>35.8</b>
Scenic Views/Ridgelines & Hilltops	<b>35</b>	<b>6.1</b>	<b>45</b>	<b>6.7</b>
Forested (general)	<b>50</b>	<b>8.8</b>	<b>60</b>	<b>8.9</b>
Forested (hemlock/pine)	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Forested (appalachian oak/pine)	<b>20</b>	<b>3.5</b>	<b>20</b>	<b>3</b>
<i>Views/Quality of Life Total Score</i>	<b>105</b>	<b>18.4</b>	<b>125</b>	<b>18.7</b>
<b>Total Score</b>	<b>570</b>	<b>100</b>	<b>670</b>	<b>100</b>

**Note:** *Mapped buffers serve as supporting components of the landscape and are not regulatory.*

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:

- ✓ Named wetlands, perennial streams, lakes, ponds and the 250' buffer from them (17.2%)
- ✓ Unfragmented Areas > 50 acres (11.9%)
- ✓ NH Wildlife Action Plan highest ranked habitats (10.4%)
- ✓ Stratified drift Aquifers (10.4%)

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.

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.

*The green infrastructure comprises the land and resources that, if protected from development or degradation, should ensure that the services provided by the natural environment to Danville’s residents could be sustained.*

***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 weighted areas located near existing conservation land. As identified on *Map 3 Green Infrastructure*, approximately 3,356 acres or 44.3 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 included taking information from *Map 3 "Green Infrastructure"* that was then *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 - containing approximately 3,356 acres and 682 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. 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 Open Space Task Force selected priority parcels by refinement of the guidelines and constraints in the process box above (top of page 9) with particular emphasis on parcels immediately adjacent to or creating connections between existing conservation lands and corridors potentially used by wildlife along tributaries and adjacent to wetlands. In addition, parcel boundaries, current zoning restrictions and existing development were used to further select priority protection areas.

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, 161 priority protection parcels were identified, with 4 parcels greater than 100 acres, 7 parcels greater than 50 acres, and 150 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**

<b>Ranking</b>	<b># of Parcels</b>	<b>Acreage</b>
High Priority	58	1,315.7
Medium Priority	103	1,340.3
<b>Total</b>	<b>161</b>	<b>2,655.3</b>
<b>Priority parcels = 35.8% of total town land area (7,569 acres)</b>		
Existing Conservation Land	20	650.6

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 161 parcels in priority over the other roughly 1,620 parcels in Danville. 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***

<b>Priority Ranking</b>	<b>Acres</b>
High Priority Parcels (58)	1,315
Medium Priority Parcels (103)	1,340.3
<b><i>Total (161 parcels)</i></b>	<b><i>2,655.3</i></b>

#### *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. 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.

**TABLE 7. Description of Land Conservation and Protection Strategies**

<i>Protection Strategy</i>	<i>Benefit</i>	<i>Funds Expended*</i>
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 or Conservation Overlay District 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
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\* ***Funds Expended*** refers to the use of municipal and/or public funds to implement a specific land protection strategy (i.e. use of Land Use Change Tax contributions, Conservation Fund, municipal bonds, and other municipal funding sources).

## Section 4 Planning for Land Conservation

### A. Existing Conditions

Currently, Danville has 1,609 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, Danville is likely to experience more growth than previously anticipated. Land consumption will likely increase proportionately in response to population growth.

**TABLE 8. Danville Population Statistics, 1990 to 2030**

1990 Census	2000 Census	2010	(NHOEP projection) 2030
2,534	4,023	4,387	5,420

### B. CTAP Buildout Analysis

A Buildout Analysis was developed for Danville in 2010, a product provided at no-charge as part of Danville’s participation in the I-93 Community Technical Assistance Program (CTAP). The CTAP Buildout Analysis project was designed as a community empowerment tool to help local decision makers and land use boards make the best long-term planning decisions for their community. The detailed Danville CTAP Buildout Analysis and report is available at the Danville Planning Board Office.

The CTAP buildout analysis methodology was designed with the capability for conducting future alternative scenario testing based on existing and alternative community regulations and policies. Based on the individual needs or goals of a community, the analysis can be programmed to test alternative scenarios for land use regulations and zoning, open space and resource planning, and several hypothetical alternative growth scenarios.

Questions that can be addressed by the results of buildout scenario testing include:

- ✓ What will my community look like at full buildout potential?
- ✓ How much open space will there be?
- ✓ What will the traffic patterns look like?
- ✓ What will the quality of our environmental resources be like?

**Buildout Analysis.** A Buildout Analysis is a tool that allows planners and decision makers in a community to estimate the potential benefits and consequences of future development based on different zoning, land use and resource protection scenarios. With such a tool decision makers can evaluate the potential effectiveness and viability of changes to zoning, regulations and resource policies and how they may impact potential growth and development scenarios in the town.

- ✓ Where will people live and what will the development patterns look like?

The 2010 CTAP buildout analysis contained three such scenarios:

- Base Scenario – This scenario depicts buildout conditions using the current zoning requirements and land use regulations (i.e. density, building setbacks, lot coverage) and environmental constraints such as wetlands, overlay districts and conservation lands.
- Standard Alternative Scenario – This scenario it applies the Natural Services Network (NSN) layer as additional development constraint to the Base Scenario but maintaining the same density (i.e. an equal number of new housing units and non-residential square feet). The goal of this scenario is to adjust allowable development densities so that an approximately equal amount of growth occurs as the Base Buildout despite the fact that more land has been set aside as un-buildable. Given greater development constraints, density is maintained by shifting density to one or more community centers, creating densely developed downtown areas while preserving important ecological areas identified in the NSN.
- Community Alternative Scenario – This scenario was provided to incorporate factors or issues unique to the municipality as a way to develop and test their own future growth alternatives. For example, certain properties can be removed or added to the developable areas list, or particular development regulations and requirements can be adjusted. This scenario allows community decision makes to test how growth patterns may differ by implementing new or adjusted development and land/natural resource constraints. The Danville Planning Board chose to create a Highway Commercial (HC) district located approximately 100 feet from Route 111A through town (with minor adjustments to match parcel lines). The allowed density for this new zone was adjusted to a minimum lot size of 3.0 acres per building unit.

Comparing the three different growth scenarios allows decision makers and land use boards to test the effects and consequences of new zoning ordinances, development impacts, conservation of land, development setbacks, densities, and building restrictions that can significantly alter growth patterns (and the results of a buildout analysis).

#### *Benefits of a Potential Fourth Buildout Scenario*

With respect to open space and land preservation and planning for future growth and development, Danville may want to consider performing a fourth buildout scenario that evaluates conservation and preservation of the ‘priority preservation areas’ identified in this report (or the larger Green Infrastructure areas defined on Map #3). This could be a helpful way to visualize the community’s future buildout potential when these ‘priority preservation areas’ are protected through a combination of ongoing land preservation efforts and implementation of land use policy tools such as, but not limited to those described in Table 7 on page 12. More detailed information about these and other tools can be found in the guidebook, “Innovative Land Use Planning Techniques: A Handbook for Sustainable Development” developed by the NH Department of Environmental Services and its partners in 2008.

### ***C. Previous Funding for Land Protection***

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 Danville have been maximized.

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.

Historically the town has succeeded in utilizing money (either from the Land Use Change Tax, charitable donations, or other various entities) for open space acquisition. For future open space acquisition, the Town should examine the possibility for matching grant funds to support land acquisition and protection through such programs 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***

The Task Force believes the town should take an adaptive approach to financial planning, recognizing that this Open Space Report represents a “best guess” as to what needs to be done in the near term to execute open space preservation as recommended in this report. Since the ability to predict land values is beyond the near term is very limited, the Task Force recommends reviewing open space acquisition goals, priorities, and processes 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 there will be an equal level of funding for open space protection, comparable to the annual average LUCT contributions collected over the last ten years. As discussed above, it is not possible to predict how much time is left before the town is essentially built out, or how much funding to dedicate on an annual basis is largely a question of risk and opportunity. If too low a level of municipal funding is requested (i.e. through the use of bonds or other capital reserves) 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**

	<i>Existing and Projected Funding</i>
Municipal Bond Funding	\$0
Total Land Use Change Tax and Revenue Received from 1999 to 2010	\$782,720
<b>Total Available Funds after payments (2010)</b> <sup>1</sup>	<b>\$534,320</b>
<i>Annual Revenue Received/LUCT Funding Average (1999-20010)</i> <sup>2</sup>	<i>\$71,156</i>

<sup>1</sup> Balance currently available from Land Use Change Tax and other sources

<sup>2</sup> Excludes 2001 due to lack of information regarding revenue received that year

*Note: The assessed value of the priority parcels is not reported in Table 9 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 (i.e. percent Land Use Change Tax contribution to the Conservation Fund) and perhaps in the future consider 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.

Ultimately, the Task Force believes the choice to use municipal financial resources for land conservation, is a policy decision that must be balanced by the town’s leadership with all the other competing demands on town resources and a matter for citizens to decide at town meeting. 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 5 Task Force Recommendations

The Danville 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 with the existing Conservation Proposal Process.
2. The parcels identified in Appendix A of this report should be considered priority areas for acquisition.
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.
6. Consider the following revisions to the Cluster/Open Space Development 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 25 percent required, of the total upland portion of the site is reserved in perpetuity as open space.
7. 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.
8. Performing a fourth Buildout Scenario that utilizes preservation/conservation scenarios such as but not limited to the implementation of a Conservation Overlay District, a Transfer of Development Rights sending zone coupled with a Village District Center, mandatory open space/cluster subdivision areas, or parcels within the Green Infrastructure purchased for conservation purposes.
9. Consider implementing a Conservation Overlay District (COD) that incorporates the green infrastructure parcels located on the Open Space Map.

*Note: A Conservation Overlay District is a zoning requirement that is superimposed over the existing zoning district and serves to protect and/or preserve the integrity of a specific resource or set of resources the town believes to be critical to its future prosperity and well-being (i.e. drinking water sources, aquifers, exemplary/rare wildlife habitat, forests, etc.).*

**APPENDIX A LIST OF LANDS PRIORITIZED FOR PROTECTION**

<b>Rank</b>	<b>Parcel ID</b>	<b>Acres</b>	<b>Cooccurrence Value</b>	<b>Abuts Conservation</b>	<b>Abuts River</b>	<b>Public Access</b>	<b>Protection</b>	<b>Priority Rank</b>
1	1-50	138.6	1.45	Y	Y		Abuts Town Forest Tributary to Powwow R.	High
2	4-19	113.8	1.34	Y	Y		Shoreland on Long Pond	High
3	3-22	101.7	1.19	Y	Y		Shoreland on Little Cub Pond	High
4	1-43	81.3	1.99	Y	N		Abuts town forest	High
5	4-46	68.3	2.12	N	Y		tributary to Powwow R.	High
6	2-58-3	56.4	1.32	Y	Y		Abuts conservation land, tributary to Powwow R.	High
7	1-46	48.0	2.43	Y	N		Abuts Town forest	High
8	2-48-1	47.5	1.11	N	Y		On Little R. or tributary	High
9	2-50	46.3	1.38					High
10	4-94	44.3	1.34	Y	Y		Tributary to Long Pond	High
11	1-44	44.0	1.72	Y	N		Abuts Town forest	High
12	4-45	43.4	2.12	N	Y		tributary to Powwow R.	High
13	3-6	42.0	1.08					High
14	4-29	37.7	2.26	N	Y		tributary to Powwow R.	High
15	1-47	36.6	2.30	Y	N		Abuts Town forest	High
16	4-28	33.7	2.12	N	Y		tributary to Powwow R.	High
17	3-143	28.5	1.86	N	Y		Main stem or tributary to Bartlett Brooke	High
18	1-45-15	24.9	2.56	Y	N		Abuts Town forest	High
19	2-75	23.3	2.06					High
20	3-17	23.3	1.84	Y	N			High
21	3-143-A	19.4	1.57	N	Y		Main stem or tributary to Bartlett Brooke	High
22	4-125	19.1	1.21	Y	N			High
23	3-15	17.5	1.09	Y	N			High
24	1-5	16.8	3.04					High
25	3-3	15.2	1.50	Y	N			High
26	4-122	13.7	1.58	Y	Y		Tributary to Long Pond	High

Rank	Parcel ID	Acres	Cooccurrence Value	Abuts Conservation	Abuts River	Public Access	Protection	Priority Rank
27	1-68	12.3	2.36	Y	Y		Abuts conservation land, tributary to Powwow R.	High
28	1-2	9.1	3.54	Y	Y		On Rockingham Recreational Trail	High
29	3-105	8.4	1.64	Y	Y		Main Stem of Colby Brooke	High
30	2-77	8.3	2.34					High
31	1-66-145	7.6	2.29	Y	Y		Abuts conservation land.	High
32	1-74	7.1	1.88	Y	Y		Abuts conservation land.	High
33	1-66-147A	5.5	2.23	Y	Y		Abuts conservation land, tributary to Pow Wow R.	High
34	2-55	5.4	0.78					High
35	3-21-15	5.4	0.99	Y	N			High
36	4-92-21A	5.3	0.38	Y	N			High
37	3-21-16	5.3	1.10					High
38	4-119	4.9	2.54	Y	N			High
39	4-117-9	4.6	0.70	Y	N			High
40	1-66-2A	3.6	2.07					High
41	1-45-9	3.6	2.87					High
42	1-45-8	3.1	2.68					High
43	4-117-7	2.8	1.21	Y	N			High
44	4-117-5	2.7	1.63	Y	N			High
45	1-45-12	2.7	2.82					High
46	2-47-4	2.5	1.00	Y	N			High
47	4-117-8	2.3	1.33	Y	N			High
48	2-47-3	2.1	0.76	Y	N			High
49	1-45-11	2.1	2.96					High
50	1-45-10	2.1	2.89					High
51	1-45-14	2.1	2.45					High
52	1-45-13	2.0	2.67					High
53	1-1	1.9	2.91	Y	N		On Rockingham Recreational Trail	High
54	4-118	1.5	2.00	Y	N			High

Rank	Parcel ID	Acres	Cooccurrence Value	Abuts Conservation	Abuts River	Public Access	Protection	Priority Rank
55	2-82	1.4	0.36	Y	N			High
56	2-81	1.1	0.08	Y	N			High
57	2-80	1.0	0.00	Y	N			High
58	2-56	0.7	1.00					High
59	3-109	146.2	0.91	N	Y		Main stem or tributary to Bartlett Brooke	Medium
60	4-17	94.0	0.86	N	Y		Shoreland on Long pond	Medium
61	1-23	81.9	2.98					Medium
62	2-11	54.8	1.06					Medium
63	4-14	54.0	1.95	N	Y		On Powwow main stem	Medium
64	1-42	48.4	1.39					Medium
65	1-41	33.5	2.84					Medium
66	4-50	33.4	1.81	N	Y		tributary to Powwow R.	Medium
67	1-4	32.3	2.09					Medium
68	2-69	31.1	1.93	N	Y		On Little R. or tributary	Medium
69	1-6	30.9	1.45					Medium
70	2-70-1	29.5	1.26	N	Y		On Little R. or tributary	Medium
71	1-26	25.4	1.57					Medium
72	3-67	25.1	1.31	N	Y		Main Stem of Colby Brooke	Medium
73	3-26	24.4	1.55	N	Y		tributary to Powwow R.	Medium
74	3-2	23.0	1.09					Medium
75	4-206	22.8	1.56	N	Y		Main Stem of Colby Brooke	Medium
76	3-53	21.5	0.91	N	Y		Main Stem of Colby Brooke	Medium
77	1-25-1	21.3	2.40					Medium
78	4-16-1	18.7	0.58	N	Y		Shoreland on Long pond	Medium
79	1-12	17.9	1.06					Medium
80	4-16	17.7	1.79	N	Y		On Powwow main stem	Medium
81	4-94-11	17.6	1.14					Medium
82	1-10	17.3	0.77					Medium

Rank	Parcel ID	Acres	Cooccurrence Value	Abuts Conservation	Abuts River	Public Access	Protection	Priority Rank
83	1-66-147	17.3	1.93					Medium
84	4-30	16.9	2.08	N	Y		tributary to Powwow R.	Medium
85	2-84-9	16.6	1.34	N	Y		On Little R. or tributary	Medium
86	4-147	16.0	1.54	N	Y		Main Stem of Colby Brooke	Medium
87	1-66-146	15.6	1.81					Medium
88	2-71	14.2	2.26	N	Y		On Little R. or tributary	Medium
89	3-38-2	14.0	1.56	N	Y		tributary to Powwow R.	Medium
90	3-14	13.6	1.08	N	Y		Main Stem of Colby Brooke	Medium
91	2-49	12.6	1.44	N	Y		On Little R. or tributary	Medium
92	3-73-B	12.4	1.54					Medium
93	3-141	11.9	1.73	N	Y		Main stem or tributary to Bartlett Brooke	Medium
94	Water	11.6	1.57					Medium
95	3-58	10.1	0.45					Medium
96	2-52-1	10.0	1.45	N	Y		On Little R. or tributary	Medium
97	Water	9.1	1.60					Medium
98	4-162	8.9	2.00	N	Y		Main Stem of Colby Brooke	Medium
99	3-122-14	8.7	1.50	N	Y		Main stem or tributary to Bartlett Brooke	Medium
100	3-31	8.5	0.79					Medium
101	4-161	8.2	1.56					Medium
102	3-25-6	8.0	1.01	N	Y		tributary to Powwow R.	Medium
103	1-25-2	7.9	2.26					Medium
104	3-1	7.5	0.82					Medium
105	2-78-4	7.0	1.00	Y	N			Medium
106	3-122	6.6	1.73					Medium
107	2-52-2-6	6.5	1.22					Medium
108	3-138-1	6.2	1.49	N	Y		Main stem or tributary to Bartlett Brooke	Medium
109	2-51	5.9	1.03	N	Y		On Little R. or tributary	Medium
110	4-23	5.8	2.26	N	Y		On Powwow main stem	Medium

Rank	Parcel ID	Acres	Cooccurrence Value	Abuts Conservation	Abuts River	Public Access	Protection	Priority Rank
111	3-122-25	5.2	1.52					Medium
112	3-25-5	5.2	0.18					Medium
113	4-24	4.7	1.70	N	Y		Shoreland on Long pond	Medium
114	3-30	4.4	0.52	N	N		Shoreland on Cub Pond	Medium
115	4-18	4.3	1.21	N	Y		Shoreland on Long pond	Medium
116	3-52	4.1	0.35	N	N		Shoreland on Little Cub Pond	Medium
117	4-148	4.0	1.79	N	Y		Main Stem of Colby Brooke	Medium
118	3-73-C	4.0	1.99	N	Y		Main Stem of Colby Brooke	Medium
119	4-157	3.9	1.64					Medium
120	4-156	3.6	1.53					Medium
121	4-159	3.5	1.74					Medium
122	3-21-5	3.4	0.55	N	Y		tributary to Powwow R.	Medium
123	4-18	3.4	1.58	N	Y		Shoreland on Long pond	Medium
124	2-52-2-5	3.3	1.14					Medium
125	1-26-1	3.0	0.49					Medium
126	3-33-2	3.0	1.06					Medium
127	2-52-2-4	2.9	1.17					Medium
128	2-47-5	2.6	1.00					Medium
129	4-155	2.5	1.76					Medium
130	1-6-1	2.4	1.24					Medium
131	1-45-7	2.2	2.26					Medium
132	3-33-4	2.2	1.31					Medium
133	2-52-2-7	2.2	0.47					Medium
134	3-33-3	2.2	1.39					Medium
135	1-6-2	2.2	0.97					Medium
136	2-52-2-3	2.2	0.86					Medium
137	3-33-6	2.1	0.76					Medium
138	4-15-1	2.1	1.19	N	Y		On Powwow main stem	Medium

Rank	Parcel ID	Acres	Cooccurrence Value	Abuts Conservation	Abuts River	Public Access	Protection	Priority Rank
139	3-33-5	2.1	1.30					Medium
140	1-70	2.0	2.22					Medium
141	2-52-2-2	2.0	0.04					Medium
142	2-70	2.0	0.64					Medium
143	1-45-6	2.0	1.95					Medium
144	1-45-5	2.0	1.66					Medium
145	2-52-2-1	1.9	0.77	N	Y		On Little R. or tributary	Medium
146	4-15	1.9	0.94	N	Y		On Powwow main stem	Medium
147	1-23-1	1.9	3.16					Medium
148	1-1A	1.6	3.86					Medium
150	2-53	1.4	0.12					Medium
151	1-8	1.3	3.53					Medium
152	3-19	1.2	1.53	N	N		Shoreland on Cub Pond	Medium
153	4-158	1.0	1.01					Medium
154	1-1A	0.8	3.88					Medium
155	3-18	0.7	2.00	N	N		Shoreland on Cub Pond	Medium
156	CEM	0.7	1.86					Medium
157	4-82	0.5	0.90					Medium
158	4-22	0.5	0.95	N	Y		Shoreland on Long pond	Medium
159	3-16	0.4	2.00					Medium
160	4-85	0.4	0.70					Medium
161	4-84	0.3	0.70					Medium
162	4-83	0.3	0.79					Medium
163	1-52	163.6	2.30					Cons
164	1-54	53.4	1.33					Cons
165	1-62	48.6	3.04					Cons
166	2-47	48.1	1.15					Cons
167	1-63	42.9	1.93					Cons

Rank	Parcel ID	Acres	Cooccurrence Value	<i>Abuts Conservation</i>	<i>Abuts River</i>	<i>Public Access</i>	<i>Protection</i>	Priority Rank
168	1-49B	42.7	2.30					Cons
169	1-60	40.4	2.71					Cons
170	1-53	37.1	1.11					Cons
171	1-55	36.0	0.94					Cons
172	3-20	33.1	1.02					Cons
173	2-57	19.3	1.05					Cons
174	3-4	18.6	1.18					Cons
175	4-117	14.4	3.63					Cons
176	4-117	14.4	3.63					Cons
177	2-78-22	14.0	0.77					Cons
178	4-92-21	7.8	1.97					Cons
179	4-117-6	4.7	1.86					Cons
180	1-61	4.0	2.63					Cons
181	1-7	2.9	2.86					Cons
182	4-21	2.9	0.19					Cons
183	3-142	1.8	1.04					Cons

Note: Parcel ID# 149 was deleted from this table.

## **APPENDIX B MAP PRODUCTS**

Map 1 - Highest Scoring Natural Resource Co-occurrence Areas

Map 2 - Gravity Model (Not included- working copy only)

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) 224-9945 or [www.forestsociety.org](http://www.forestsociety.org) or [www.clca.forestsociety.org](http://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](http://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 1<sup>st</sup>; Full June 1<sup>st</sup>
- 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 15<sup>th</sup> 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](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](mailto: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](mailto: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](mailto: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 Sommer at (603) 271-4059 or [lori.sommer@des.nh.gov](mailto: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](mailto: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, Danville 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)*

## APPENDIX D GLOSSARY OF TERMS

***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).