# Town of Derry Open Space Plan Prepared For the Town of Derry Planning Board and Town Council



# Prepared by the Derry Open Space Task Force

Funding and Technical Assistance provided through CTAP and the Southern New Hampshire Planning Commission

**July 2009** 

#### Acknowledgements

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#### **Cover Photo:**

Cole Marsh, the Fran Cormier Trail off Damren Road Special thanks to Marianne Page for providing the photo.

Derry Open Space Plan
This Report has been prepared for the Town of Derry Planning Board and
Town Council

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#### **Section 1, Introduction**

This Open Space Plan has been prepared by the Town of Derry's Open Space Task Force (OSTF) with funding and technical assistance provided through the I-93 Community Technical Assistance Program (CTAP)<sup>1</sup> and the Southern New Hampshire Planning Commission (SNHPC).

This report should be considered and accepted by the Planning Board and Town Council as the Town of Derry's official Open Space Plan. This plan can be adopted as a stand alone document or as part of the Town's Master Plan.

An Open Space Plan contains policies and actions that will assist the town with future development, while also encouraging town leaders to promote open space protection. The plan is also an inventory of the environmental features in the community, including water, soil, habitat, forests, and a number of other elements. When these elements are layered over each other, the areas with the highest potential for open space protection become apparent. The plan helps identify and prioritize the town's natural resources and provides options in protecting these key properties.

The following quote from the 2002 Derry Master Plan, ("Vision of the Future Derry") best introduces this report:

"The preservation of open land, including open fields, woods, wetlands, farms, and undisturbed wild areas for creatures, is critical to assure that Derry will remain a "livable community" for the next decade and for the generations of Derry residents to come. Open Space preservation is inextricably linked to a positive future for the other aspect of life in Derry such as a thriving local economy and attractive residential development."

The Town of Derry, Town officials, along with the Planning Board and Conservation Commission and other Boards and Committees, should look to this Open Space Plan to guide the future open space planning and protection actions of the Town, particularly as various modes of protection, (voluntary, regulatory or land acquisition) are implemented. By carrying out and implementing this plan, the Town of Derry will create and sustain the "livable Derry" envisioned in the Town's Master Plan.

In the development of this Open Space Plan, the Town Council charge to the Task Force was:

"The Derry Open Space Task Force shall identify and develop a prioritized list of agricultural, open, and undeveloped land that should be protected from residential, commercial and industrial growth to preserve the Town's natural and cultural resources and, agricultural character and quality of life. In subsequent efforts, the Task Force shall, in collaboration with other Town Boards, Commissions and staff, undertake other tasks

<sup>1</sup> CTAP – The Community Technical Assistance Program (CTAP) is a New Hampshire Department of Transportation (NHDOT) 5 year initiative to assist 26 communities that will be affected by rebuilding and expansion of Interstate 93 by providing technical assistance and access to tools for innovative land-use planning. These 26 communities include Allenstown, Atkinson, Auburn, Bedford, Bow, Candia, Chester, Concord, Danville, Deerfield, Derry, Dunbarton, Fremont, Goffstown, Hampstead, Hooksett, Hudson, Litchfield, Londonderry, Manchester, Pelham, Raymond, Salem, and Sandown. For more details, go to the CTAP website at www.nhctap.com.

identified in the Derry Master Plan aimed at implementing the protection of the lands identified."

#### **Does Open Space Pay?**

Philip A. Auger, from the UNH Cooperative Extension conducted the study "Does Open Space Pay?" This study used the cost of community services (COCS) process to compare Deerfield, Fremont, Stratham and Dover. The COCS process was developed by the American Farmland Trust and assesses land use categories such as industrial, residential, commercial, and in this case, open space. Revenues and expenditures are broken down for each town and its open space land. The study found that open space was a net asset to New Hampshire towns, showing overall that open space can be an economic asset which aids in the stability of community tax rates. Open space land also helps towns avoid high-cost land uses from encroaching into the town. If open space is developed with houses it will cost the town much more than what is generated in taxes than with the open space. So while open space does not necessarily make a community money or serve as an income, it can save it money in the long run, and be less of a cost and tax burden to the town. Below is an analysis of the four towns in Auger's study. It breaks down the revenue and expenditures for each type of land use.

Results of Cost Of Community Services Studies in Four New Hampshire Towns

Community	unity Land Use Categories		Expenditures	\$ Ratio	
Fremont, NH 1994			THAT IS A STATE OF THE STATE OF		
	Residential	\$3,317,928	<b>\$</b> 3,457,376	1:1.04	
	Commercial/Industrial	\$69,798	\$65,325	1: .94	
	Open Space	\$19,188	\$6,835	1: .36	
Deerfield, NH 1994					
	Residential	\$4,878,823	\$5,630,510	1:1.15	
	Commercial/Industrial	\$531,547	\$119,209	1: .22	
	Open Space	\$57,679	\$20,155	1: .35	
Dover, NH 1992					
	Residential	\$19,317.362	\$22,124,828	1:1.15	
	Commercial/Industrial	\$6,178,059	\$3,905,609	1: .63	
	Open Space	\$488,628	\$457,661	1: .94	
Stratham, NH 1994					
	Residential	\$6,939,002	\$7,957,296	1:1.15	
	Commercial/Industrial	\$1,339,275	\$256,696	1: .19	
	Open Space	\$20,498	\$8,132	1: .40	

Source: "Does Open Space Pay", Philip A. Auger, UNH Cooperative Extensions. http://extension.unh.edu/resources/representation/Resource000400\_Rep422.pdf

While each town in New Hampshire has a unique blend of land uses, revenues and expenditures, these studies point out some of the fiscal consistencies that are likely to apply as a factor in determining the amount of open space protection in Derry. One of these is that *residential land use very often costs communities more than they generate in revenues*. Traditional residential housing brings with it a tremendous cost load for community services, roads, landfills and schools. Open space lands contribute to the stability of community tax rates. This has been

supported by other well-documented fiscal impact studies in New Hampshire communities, including Milford and Londonderry.

The publication, *Managing Growth in NH*<sup>2</sup>, notes that, on average, taxes on the median value home in New Hampshire communities are:

- Higher in more developed towns,
- Higher in towns with more year-round residents, and
- Higher in towns with more buildings (more value of buildings)
- Higher in towns with a large school population (such as Derry)

#### **Background**

This open space plan can be viewed as a guide for the community to recognize the need for preservation of open lands. Open space planning in New Hampshire is an ongoing activity that is conducted mainly through the work of the Conservation Commission and Planning Board. The Derry Open Space Task Force is an integral part of this open space planning effort.

In preparing this plan, the Derry Open Space Task Force met five times during 2009 on the following dates: January 26<sup>th</sup>, February 25<sup>th</sup>, March 23<sup>rd</sup>, April 13<sup>th</sup>, and June 11<sup>th</sup>.

The first effort of the Derry Open Space Task Force was to identify the natural resources and important natural and cultural features of the town's landscape and to assign relative values to these various resources through the Delphi Process as explained further in Section 2. Mapping these resources throughout the community provides a delineation of the town's natural resource network or "green infrastructure". As key parcels are identified from this network, the Task Force has suggested strategies and priorities to guide Derry's future open space protection efforts. The estimated cost associated with protecting these lands is also determined.

This report is organized into the following five sections including this Introduction, Plan Development, Priorities, Financial Planning, and Recommendations. The entire list of parcels that contribute to Derry's open space is available in electronic form from the Derry Planning Department.

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Available on The Trust for Public Land website at <a href="http://www.tpl.org/tier3\_cd.cfm?content\_item\_id=19458&folder\_id=258">http://www.tpl.org/tier3\_cd.cfm?content\_item\_id=19458&folder\_id=258</a>

#### Section 2, Plan Development

#### Step 1

The first step in the development of this Open Space Plan is the identification of "high value" natural resources within the town.<sup>3</sup> The SNHPC suggested and presented a series of Geographic Information Systems (GIS) maps of various natural and scenic resource data, including hydric soils and wetlands, aquifers, floodplains, prime agricultural soils, steep slopes, forested lands, wildlife habitats, scenic views, ridgelines and hilltops, and unfragmented lands. The Derry Open Space Task Force then reviewed these maps and selected as shown in Table 1 below the most important natural resources and features within Derry. These natural resources and features are grouped into the five broad categories as shown in yellow highlight in Table 1 on the following page.

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<sup>&</sup>lt;sup>3</sup> High value natural resources are defined by the town as the most important natural features to conserve.

<sup>&</sup>lt;sup>5</sup> The New Hampshire Geographically Referenced Analysis and Information Transfer System (NH GRANIT) is a cooperative project to create, maintain, and make available a statewide geographic data base serving the information needs of state, regional, and local decision-makers. (<a href="http://www.granit.unh.edu/">http://www.granit.unh.edu/</a>)

#### Step 2

The second step was to assign relative weights to the various natural resources to establish their suitability for protection. Weights were assigned through a "Delphi" process during which each individual OSTF member suggested a weighting scheme by dividing 100 points up between each natural resource. The members then compared each of their individual results to the group average, discussed differences and revised their weighting schemes. After the second iteration of this process the OSTF members reached a consensus. Table 1 on this page shows the relative weight, on a percentage basis, placed on each of the resources.

SNHPC staff then computed resource values across the entire town based on the weighting scheme shown in Table 1. Map 1 is a co-occurrence map that shows where multiple resources occur in the same area. The inset maps on Map 1 show, respectively, where areas of productive soils, open space continuity, water quality, views/quality of life and slopes occur. Each map is graduated by standard deviation to highlight areas of exceptional resource value. These maps provide the basis for all subsequent work by locating, in a spatial context, the highest value natural resource areas and therefore those areas of town most in need of protection.

#### **ROUND 2 TALLY SHEET**

	Round 1	Round 2
Enter # of Participants:	8	
Soil Conditions		-
Important Forest Soil Group I & II	3.6	6.9
Local Agricultural Soils	3.5	0.9
Prime Agricultural Soils	12.5	11.9
State Agricultural Soils	4.5	4.1
Soil Condition Total Score	24.1	23.8
Open Space Continuity		
Unfragmented Areas > 50 acres	3.8	2.5
Unfragmented Areas > 100 acres	5.8	6.4
Unfragmented Areas > 500 acres	11.9	13.8
NH WAP Highest Ranked Habitats	4.4	4.4
Open Space Continuity Total Score	25.8	27.0
Water Quality		
Aquifer Transmissivity 0 - 2,000 ft3/day	5.3	8.1
Aquifer Transmissivity > 2,000 ft3/day	12.1	9.5
Named wetlands and perennial streams	10.6	10.1
& 250' Resource Area		
Unnamed wetlands and intermittent	3.9	5.8
streams & 100' Resource Area		
Water Quality Total Score	31.9	33.5
Views / Quality of Life	0.0	
Scenic Views/Ridgelines & Hilltops	8.8	3.8
Historic	3.8	3.1
Habitat	5.8	8.9
Views / Quality of Life Total Score	18.3	15.8
Slopes		6161
Slopes > 25%	0.0	0.0
	100.0	100.0

#### Step 3

The third step is to define the "green infrastructure". The green infrastructure is the overall network of all the highest ranked natural resources within the community as determined by the open space task force. It is an open space corridor that if protected from development, should ensure that the services provided by nature to the town's residents will continue for future generations.

Derry OSTF members broke up into two teams and worked on maps with clear overlays. Each team drew out open space corridors that they felt were important for the town to concentrate on protecting. Once each group had created their own corridor, the two overlays were put together and one open space corridor was created by compromising between the two group's drawing and ideas. This is the area that, if protected from development, should ensure that the services provided by nature to the town's residents will continue for future generations. These services include:

- Maintaining the quality and quantity of ground and surface water.
- Improving air quality.
- Providing sufficient habitat for plant and animal species now in Derry to remain in Derry, even in the face of a significant disturbance such as fire or insect infestation.
- Providing an opportunity for outdoor recreation activities for all Derry residents at a reasonable distance from their homes.
- Creating a pleasant and scenic environment in which to live.
- Creating interconnected green spaces that allow for trails connecting the various parts of town and allow for the movement of wildlife.

In addition to the previous maps of natural resources, the Task Force consulted two other maps. Map 2, identified as the "gravity model", was used to provide special weight to land that was near existing conservation land. Map 3, identified as the "10 to 10" map was used to define those lands that, if protected, would allow every Derry resident to be within no more than a ten minute walk to at least a ten-acre open space. In defining the green infrastructure (Map 4), the Task Force followed these general guidelines and constraints:

- Include areas of exceptionally high resource value for a particular category.
- Include areas where multiple resource values occur in the same place.
- Give added consideration to lands near existing conservation lands.
- Give added consideration to lands that allow each Derry resident reasonable access to open space.
- Avoid areas slated for industrial or commercial development, unless they contain exceptionally high quality resources.
- The total land area of the infrastructure should include at least 25 percent of the town's land area to maintain sustainability, but not more than 50 percent, to allow for future development.

As defined by the work of the OSTF members under this step, the Green Infrastructure in Derry includes approximately 8847.20 acres within the Town or about 39 percent of the town. This includes a wide diversity of land uses, including vacant properties and already developed or protected lands. It is extremely important to note that landowners whose land falls within the green infrastructure are free to dispose of their land as they see fit, consistent with applicable laws and regulations. Inclusion of land within the green infrastructure is NOT an indication that the Town of Derry has any legal interest in the land or has any intention of acquiring or protecting the land for a public purpose.

#### Step 4

In this step the green infrastructure was superimposed over the town's tax maps to determine which ownerships or parts of ownerships were included in the green infrastructure. Staff computed the natural resource value of each parcel or partial parcel lying within the green infrastructure. The great majority of parcels had some development on them; however the developed portion was often located outside the green infrastructure which yielded a natural resource score of 0.

From the large set of parcels in the green infrastructure (approximately 3,400 parcels), the GIS Analyst, took out parcels that were already in conservation according GRANIT<sup>5</sup> data. From those remaining parcels, the top 52 parcels of the highest adjusted resource value score were selected for consideration. The task force worked their way through the list and determined parcels that should be included or excluded from consideration. Parcels that were dropped from the list included town or state property, conserved or developed land, or undevelopable land (i.e. steep slopes, wetlands, etc.). As the group moved from the top 52 parcels, parcels beyond the first 50 were considered. The task force also added parcels, while not weighed highly, that they felt should be considered. This included a couple larger parcels of unfragmented open space in the northwest section and a few key farm lands in town.

The strategies were further grouped into "high cost" and "low/no cost" protection strategies. These strategies included:

- Purchase by the town to be held as town-owned conservation land (high cost).
- Purchase of a conservation easement by the town over part or all of the property (high cost).
- Protection by regulation, such as state wetland regulations/mitigation (low/no cost).
- Establishment of a management agreement that would ensure the land was managed in a way compatible with maintaining the green infrastructure (low/no cost).
- Landowner education by partnering with organizations such as UNH Cooperative Extension, Society for the Protection of NH Forests, etc. (low/no cost).

#### **Section 3, Priorities**

As part of the development of this plan, the Town Council charged the Task Force to recommend a prioritized list of land to be protected. This list is provided in Appendix B. It features the 52 high priority parcels in Derry. The 52 highest priority parcels were chosen from a list of all the parcels that were included within the green infrastructure. The total number of parcels within the green infrastructure came to over 3,400. The top 100 parcels, which had the highest co-occurrence ranking (as determined from the Delphi process) were the final list that the top 52 were chosen from. The committee selected the top 52. These final 52 parcels were separated into two categories, high and low cost depending on the possibility and cost that would be required to preserve the parcel for open space.

The Task Force believes that every parcel in Appendix B is worthy of protection as each is an important link in the green infrastructure that should be protected using appropriate, site specific means. 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 a strictly computational criterion that assumes that all other factors are equal. The Task Force has recommended this competitive criterion over total parcel resource value, because financial resources are the limiting constraint in executing the open space plan. This criterion promotes the greatest amount of conservation value for the least amount of dollars. Unfortunately, the competitive criterion can only be applied to a specific parcel at a specific sale price. This means that the cost per resource value cannot be used to compare a large number of parcels, such as the top 52 parcels recommended for protection at Appendix B. Nonetheless, this criterion can be used to evaluate specific offers from willing sellers of land or conservation easements, and these offers can then be compared to the cost effectiveness of other open space purchases made in the past and adjusted for inflation.

The qualitative factors provide for the intervention of human judgment on a case-by-case basis. This judgment must be exercised by the Conservation Commission, as they recommend parcels for protection, and the Town Council, as they consider the Conservation Commissions recommendations, all subject to input from the public.

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*. At any given point in time the number of willing sellers is likely to be few in number.

#### **Section 4, Financial Planning**

In one sense the time horizon of this plan is indefinite: it looks forward to the day when Derry is both "conserved out" and "built out". In reality, given the pace of development in southern New Hampshire (exclusive of today's current economic conditions), it appears that "build out" is roughly years in the future. This very rough timeframe has limited use in computing the total cost of the Open Space program for two reasons: first the two extremes differ by a factor of four, and second, predicting the rate of inflation and the level of real estate values even 10 years into the future would be highly speculative. Instead, the Derry Open Space Task Force believes the town should take an adaptive approach to financial planning: the recommendations of this plan represent a "best guess" as to what the Town of Derry will need to do in the near term to execute the Open Space Plan. However, since our ability to predict costs 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 Capital Improvement Plan process.

The Town of Derry uses 100 percent of its Land Use Change Tax (LUCT) for open space conservation. The chart below features the LUCT totals from the past six fiscal years. 2009 shows evidence of the economic downturn.

Year	<b>Conservation Funding (from LUCT)</b>	
2004	140,130	
2005	236,170	High
2006	192,265	
2007	118,640	
2008	182,072	
2009	6,500	Low
Total	875,777	
Average	145,963	

For the period of fiscal years 1999 through 2009 Derry voters have authorized \$1,893,207 from town funds and \$1,115,371 from current use money in open space funding, for an annual average of \$1,504,289.

Since the Task Force has assumed an equal level of effort over the period of open space protection, and since, as discussed above, it is not possible to predict how much time is left before the town is essentially built out, the question of how much funding to dedicate on an annual basis is largely a question of risk. The risk is that the point of build out will be reached before the Open Space Plan acquisition effort is complete. At too low a level of annual funding, the town may not be able to protect 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.

The solution to this dilemma is to follow the adaptive financial management approach discussed above. The Task Force recommends that the town consider annual funding but also that the town commit to annual reviews of this level of funding to ensure the risk of not completing the planned open space acquisitions does not become too high.

#### **Current Build-Out Conditions**

According to 2002 Derry Master Plan Section II Land Use and Growth, more than two-thirds of Derry's total land area is in already developed parcels, mostly in residential use. Only about a quarter of the town's total land area remains in vacant and developable parcels. Under current zoning, Derry has the capacity for an additional 4,000 new housing units in addition to the 13,000 units now existing within the community. Over the past few years, Derry has been averaging about 75 new building permits per year. There is apparently land capacity available under current zoning for about four decade's worth of growth at that rate. That potential increase of about one-quarter in the number of dwelling units at build-out probably would mean an increase of less than a quarter in total population, given continuing reductions in the average household size. Under current regulations, growth will approach build-out condition at an increasingly moderate rate over the next few decades.

The SNHPC is currently in the process of creating a build-out analysis for the Town of Derry. The build-out is being done for the CTAP program which was developed in conjunction with the expansion of I-93. It is predicted that towns along the I-93 corridor will significantly grow and develop due to easier travel and frequent use of the newly expended highway. The build-outs are conducted by SNHPC along with other regional planning commissions in New Hampshire to estimate how long and the amount of development it would take until a town had reached its maximum capacity for structures and residents. As the build-out for Derry is complete it is recommended that the charts and data created be referenced or incorporated into this plan. The data used for current numbers and to complete the build-outs was taken from the town's zoning, land use, and current data.

#### **Possible Funding Sources**

The OSTF was given the opportunity to review a collection of funding sources provided by the Newsletter of Merrimack County Conservation District. The OSTF had the opportunity to review these funding sources and decide which ones were best suited for the Town of Derry and its specific needs. A complete list can be found in Appendix C but the programs chosen by the OSTF include:

☐ Conservation Stewardship Program (CStP)

"CStP is a voluntary conservation program that rewards good land stewards and encourages producers to address resource concerns in a comprehensive

manner by undertaking additional conservation activities and improving, maintaining, and managing existing conservation activities".

A CStP would work well with the Town of Derry because as new developments are being brought to the planning board they are seeing that land is being protected by conservation easements and put into a stewardship, third party, or land trust equity. A program such as the CStP would assist the local officials, landowners, and developers involved.

- ☐ Wetlands Reserve Programs (WRP)
  - WRP is a voluntary program that provides technical and financial assistance for private landowners and Tribes to restore, protect, and enhance wetlands."

This program would assist land owners, who have wetlands on their properties, with maintaining the integrity of the wetlands. This is especially relevant to Derry since many private properties in Derry have wetlands on them.

- □ Wildlife Habitat Incentives Program (WHIP)
  - o "WHIP is a voluntary program that provides technical and financial assistance for private landowners to develop and improve high quality habitat that supports wildlife populations of National, State, Tribal, and local significance".

Since 1998 the Town of Derry has acquired open space though Current Use Funds. The money can be used to acquire and protect land and to conduct reports and surveys on land. Currently there is about \$667,000 in the fund and 100% of that money is reserved for purchasing open space. To determine which properties are best for purchase, the Derry Conservation Commission creates a list of desired properties, and then ranks the properties by a priority criteria list developed by the Conservation Commission. In addition to Current Use, funding comes from grants and special donations. For example recently two land owners in Derry set aside abutting easements as a gift to the town. These easements had been discussed for over ten years. Land is also given to the town in lieu of tax payments. Recently in town, a developer preserved over ten acres next to a new development which was already abutting ten acres of protected land. Two easements were purchased through the Farm Bill and current use money as prime agricultural lands.

#### Case Study: Corneliusen Farm and the Trust for Public Land

In 2002 the Town of Derry worked with the Trust for Public Land to conserve 130 acres of farmland. Eighty-six of these acres were part of the Corneliusen Farm, while the remaining 30 acres were adjacent to the farm and owned by the Ferdinando Family. In phase one of this creative project; the Town purchased the majority of the Corneliusen farm, approximately 76 acres, for just under \$784,000. Sources of funding for this purchase included \$125,000 from New Hampshire's Land and Community Heritage Investment Program, \$100,000 from the federal Land and Water Conservation Fund, \$95,000 from the USDA Natural Resource Conservation Service's Farmland Protection Program, \$150,000 from the Town of Derry, just under \$189,000 from the Derry Conservation Commission's Land Fund, and \$125,000 from close to 50 private contributors. Adjoining landowners purchased the remainder of the Corneliusen farm, just over 10 acres, for roughly \$111,000. This land is permanently protected from development by easements held by the Derry Conservation Commission. In phase two, the town acquired an agricultural preservation easement over 30 acres of land that lie adjacent to the Corneliusen farm, owned by Philip Ferdinando, whose family operates J&F Farm. In exchange for this easement, the Town deeded a 38-acre portion of the former Corneliusen farm to the Ferdinando family. Before transferring ownership of this land to the Ferdinando family, the Town placed an agricultural preservation easement over the property. The easement guarantees that the property will never be developed and will continue to be managed as active farmland.

#### **Section 5, Recommendations**

#### **Summary of Recommendations**

The Derry Open Space Task Force recommends:

- 1. The green infrastructure identified in this plan should be adopted as the town's goal for open space preservation.
- 2. The parcels identified in Appendix B should be pursued for protection using the strategies indicated.
- 3. The town work expeditiously and cooperatively with owners of developed parcels within the recommended green infrastructure to ensure their appropriate management.
- 4. The Town re-examine the recommendations of this Task Force 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 Capital Improvement Plan includes an annual open space investment of one to two million dollars, consistent with other capital needs.

#### **Implementation**

There are several approaches to protect open space. Both regulatory controls and voluntary options need to be examined to find what would be best way for Derry to protect its most highly valued natural resources. By using a variety of these protection methods, Derry will be able to achieve their conservation goals.

#### **Regulatory Land Protection**

One approach to land protection involves the use of zoning or municipal regulations to prohibit unnatural disturbance or total development of each parcel. Regulatory measures are perhaps the most cost-efficient means of land preservation, and if implemented according to the open space priorities of the town, can be extremely effective in curbing sprawl and protecting land. The two primary methods of regulatory land preservation are Conservation Subdivisions and growth management ordinances. Additionally other subdivision ordinances may be added to zoning regulations in order to reflect priorities on smaller scales.

#### Conservation Subdivision

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

#### **Growth Management Ordinances**

Growth Management Ordinances are often used by municipalities experiencing population growth at a rapid pace whose public facilities and services cannot keep up. They function by placing short or long-term caps on new residences or population numbers. Under certain circumstances, a town can adopt regulations to control the rate of development. In New Hampshire, a town must have both a Master Plan and a Capital Improvement Plan before it can adopt any ordinances controlling the timing of

development. In certain rapid growth situations, slowing the rate of development can give a community time to update its Master Plan, develop infrastructure, and consider ways to conserve open space. Methods include limiting the number of building permits, or an interim growth moratorium allowing the planning board to halt or severely limit development for up to one year.

#### **Non Regulatory Strategies**

There are other approaches to land protection that does not involve regulation. This includes landowner education, Transfer of Development Rights (TDR) and voluntary land protection.

#### Landowner Education

By educating landowners about the benefits of open space and the economic and tax implications, they are more likely to want to conserve their open space. Therefore, offering this information and making it readily available can be one of the most effective ways to conserve open space. Establishing a good working relationship between the landowner and the Conservation Commission is an essential step in protecting open space.

#### Transfer of Development Rights

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

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

#### Voluntary Land Conservation

A voluntary conservation easement involves the donation or sale of the development rights over the land. The landowner makes the decision that they wish to prohibit development on their land and preserve the natural state. They donate or sell the development rights to the town or a land trust as the easement holder; this group is then responsible for easement stewardship. The owners continue to use their land and pay

property taxes on it. However, some or all of the value of any donation can be deducted from federal income taxes.

## Appendix A: Maps

### **Appendix B: High Priority Parcels List**

Top Scoring Parcels by Adjusted Natrual Resouce Score

		Unadjusted		Adjusted		High Cost
Parcel ID	Zone	Parcel Score	Acres	Parcel Score	Address	/Low Cost
131	LDR	14021.27	409.46	16825.52	HALL VILLAGE RD OFF	High
133	LDR	6272.52	181.31	7527.02	WALNUT HILL RD OFF	High
0544	MHDR	3614.14	139.50	5059.79	121 EAST BROADWAY	Low
1313	LDR	3360.28	211.38	5040.41	64 DAMREN RD	High
0640	LDR	3454.54	69.53	4145.45	125 ISLAND POND RD	High
12119	LDR	2285.61	42.95	2742.74	105 OLD CHESTER RD	High
03159	LDR	2225.96	62.86	2671.15	78 KILREA RD	High
0546	MFR	1982.58	58.21	2379.09	43 SOUTH MAIN ST	Low
12119	LDR	2285.61	20.59	2285.61	105 OLD CHESTER RD	High
109	LDR	1859.29	60.00	2231.14	WALNUT HILL RD OFF	High
0784	LDR	1747.27	58.18	2096.72	54 DREW RD	High
0758	LDR	1690.19	59.86	2028.23	6 DREW RD	High
1050	LDR	1472.23	39.33	1766.67	RICHARDSON DR	High
10102	LDR	1342.34	64.23	1745.04	296 HAMPSTEAD RD ALSO 298	High
0723	LDR	1317.81	33.44	1581.37	WARNER HILL RD OFF	High
1323	LDR	1070.33	43.40	1391.44	RTE 121 OFF	High
0945	LDR	1066.99	39.29	1387.09	2 BEAVER LAKE RD	High
03157	LDR	1129.48	24.67	1355.38	11 MARY JO LN	High
0740	LDR	993.71	29.27	1192.45	166 WARNER HILL RD	High
0713	LDR	1185.47	29.64	1185.47	175 WARNER HILL RD	High
138	LDR	967.62	30.44	1161.14	WALNUT HILL RD OFF	High
1159	LMDR	963.75	53.17	1156.50	FOREST ST OFF	Low
1192-1	LDR	1128.46	48.62	1128.46	63 ENGLISH RANGE RD	High
1158	LMDR	867.54	55.44	1041.05	LONDONDERRY TURNPIKE OFF	Low
1066	LDR	846.79	25.47	1016.15	24 DAMREN RD	High
0637	LDR	943.14	22.91	943.14	194 ISLAND POND RD	High
1321	LDR	722.50	34.65	939.25	674 RT 121	High
331	MHDR	770.73	21.74	924.88	27 SOUTH MAIN ST	Low
03130	LMDR	762.97	25.16	915.56	3 STARK RD	Low
10112	LDR	758.33	26.16	910.00	RTE 121 OFF	Low
12116	LDR	724.88	17.09	869.86	25 BACK CHESTER RD	Low
1167	MDR	722.62	21.90	867.14	ENGLISH RANGE RD OFF	Low
1218	LDR	716.02	50.86	859.22	116 ENGLISH RANGE RD	High
09138	LMDR	691.39	28.77	829.67	33 OLD CHESTER RD	High
03144	LDR	688.43	13.78	826.12	ISLAND POND RD OR MILL R	High
099	LMDR	818.41	28.65	818.41	5 WARNER HILL RD	High
1199	LDR	670.22	26.83	804.26	81 ENGLISH RANGE RD ALSO 85	Low
0842-3	LDR	667.14	33.84	800.56	88 TSIENNETO RD	Low
1311	LDR	665.26	21.44	798.31	93.5 WEYMOUTH RD OFF	High
134	LDR	640.95	20.56	769.14	5 HALLS VILLAGE RD	Low
136	LDR	636.79	22.01	764.14	76 WATERMAN RD	Low
0463	LDR	631.91	21.26	758.29	108 KILREA RD	High
0843	LDR	603.03	25.81	723.64	90 TSIENNETO RD	Low
0780	LDR	588.68	16.01	706.42	OLD RR BED & JACKMAN RD	Low
1219	LDR	578.61	15.40	694.33	106 CHESTER RD	High
0657	LMDR	575.84	23.85	691.01	24 LANE RD	High
06107	LDR	573.34	32.11	688.00	ISLAND POND RD OFF RRBED	High
0642	LDR	566.29	14.17	679.55	105 ISLAND POND RD	High
0282	ORD	478.01	36.67	573.62	BERRY RD OFF	High
0270	ORD	253.74	63.55	304.48	BERRY RD OFF	High
02149-3	ORD	0.00	1.77	0.00	47 FROST RD	High
03152	LDR	0.00	47.38	0.00	19 KILREA RD	High



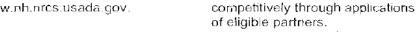
# Conservation News

Newsletter of Merrimack County (NH) Conservation District

Winter 2009

#### Helping People Help the Land: The Newest Farm Bill Released

t's finally here! The much anticipated Farm Bill was passed in Congress in 2008. While the rule-making process in still going on, below are descriptions of this Farm Bill's programs. If interested in any of the programs, please contact the appropriate County office. In Merrimack County, please contact the District at 223-6023. For the latest updates, please visit the NH NRCS website at www.nh.nrcs.usada.gov.



#### New Programs:

#### Agricultural Water Enhancement Program (AWEP)

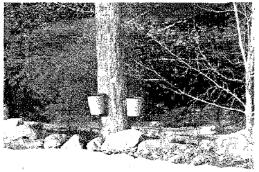
AWEP is a voluntary conservation program that provides financial and technical assistance to farmers for applying agricultural water enhancement activities that conserve ground and surface water and improve water quality on agricultural lands.

#### Conservation Stewardship Program (CStP)

CStP is a voluntary conservation program that rewards good land stewards and encourages producers to address resource concerns in a comprehensive manner by undertaking additional. conservation activities and improving, maintaining, and managing existing conservation activities.

#### Cooperative Conservation Partnership Initiative (CCPI)

CCPI provides targeted assistance to producers for enhancing conservation outcomes on agricultural and nonindustrial private forest land. Areas of CCPI



assistance are selected

#### Renewed Programs

#### Agricultural Management Assistance (AMA)

AMA provides cost share assistance to agricultural producers to voluntarily address issues such as water management, water quality, and erosion control by incorporating conservation into their farming operations.

#### Farm and Ranch Lands Protection Program (FRPP)

FRPP is a voluntary program that helps farmers and ranchers keep their land in agriculture. The program provides matching funds to purchase conservation easements.

#### Environmental Quality Incentives Program (EQIP)

EQIP is a voluntary conservation. program for farmers and ranchers. that promotes agricultural production and environmental quality

as compatible national goals, EQIP offers financial and technical heip to assist eligible participants install or implement

structural and management practices on eligible agricultural. land.

# Conservation Innovation Grants

CIG is a voluntary program that enables public and private entities to accelerate technology transfer and adoption of promising... technologies

and approaches to address some of the Nation's most pressing natural resource concerns.

#### Grassland Reserve Program (GRP)

GRP is a voluntary program for fandowners and operators to protect, restore, and enhance grassland, including rangeland, pastureland, and shrubland.

#### Healthy Forest Reserve Program (HFRP)

HFRP is a voluntary program. established for the purpose of restoring and enhancing forest ecosystems to promote the recovery of threatened and endangered species and improve biodiversity.

#### Wetlands Reserve Program (WRP)

WRP is a voluntary program that provides technical and financial. assistance to private landowners and Tribes to restore, protect. and enhance wetlands.

#### Wildlife Habitat Incentives Program (WHIP)

WHIP is a voluntary program that provides technical and financial assistance for private landowners to develop and improve high quality habitat that supports wildlife populations of National, State, Tribal, and local significance