CHAPTER 3 TUFTONBORO'S RESOURCES: NATURAL, HISTORIC AND SCENIC

Tuftonboro's rural scenic beauty and quiet lifestyle appeal to both residents and visitors. According to results of the 2005 Community Attitude Survey, people are concerned about losing these features. More specifically, loss of rural character was deemed one of the three most important issues facing the town in the next decade. Rural character is the combination of many elements including the natural and cultural environment, economic opportunity and civic life. This chapter describes the town's natural setting, and the natural, historic and scenic resources.

3.1 NATURAL SETTING

Tuftonboro offers a diversity of landscape features from the Ossipee Mountain range to the rolling terrain near Lower Beech Pond to the wetlands of the Great Meadow to islands in Lake Winnipesaukee. Elevations range from 504 feet at Lake Winnipesaukee to 3,000 feet on Mount Shaw.

The town's topography – lay of the land – influences the location and potential environmental impact of development. Roads historically followed natural grades, avoiding the steepest and most poorly drained areas. Development, which once clustered in areas accessible by road and water, increasingly extends into more remote areas as expansive homes are developed.

New Hampshire's land is divided into three major natural regions: the White Mountains, the New England Upland and the Seaboard Lowland. All three are sections of the New England physiographic province, which in turn forms part of the Appalachian Region. The New England Upland occupies most of central and southern New Hampshire. Tuftonboro lies within the northern portion of New England Upland. The upland region is characteristically hilly and dotted with hundreds of lakes and streams, most of which were formed by glaciers.

Physiographic Region:
Ecoregion:
Major Drainage Basins:
Total Area of Tuftonboro:
Land Area:
Water Area:
Northern New England Upland
Upper New England-Northern Piedmont
Merrimack River and Saco River
49.43 square miles (31,639 acres)
40.62 square miles (25,999 acres)
8.81 square miles (5,640 acres)

Local Elevations Feet Mount Shaw 3,000 Canaan Mountain 2,160 Sentinel Mountain 1,760 Mount Pleasant 1,260 Tuftonboro Corner 998 Prospect Hill 860 Center Tuftonboro 618 Mirror Lake 527 Melvin Village 520 19 Mile Bay 504

Tuftonboro's topography also defines a major drainage divide – the northeast quarter of town is located in the Saco River watershed that drains into the Atlantic Ocean at Ferry Beach in Maine, while the rest of town drains southwest to Winnipesaukee. Lake Winnipesaukee, the largest lake in the state (72 square miles), empties into the Winnipesaukee River which feeds into the Merrimack River and then into the Atlantic in Newburyport, Massachusetts.

A watershed is the land area from which surface runoff and groundwater flows into a particular body of water.

3.2 NATURAL RESOURCES

Tuftonboro's rural character is defined in part by its natural environment including those natural resources that are identified below and depicted on accompanying maps.

3.2.1 **Water Resources**

Water is an important and dominant feature of Tuftonboro. Surface waters make up 19% of the town's total area or 6,083 acres (see Natural Resources Map 3-1). These waters were important to the town's early development – providing routes for settlement, fisheries, drinking water, and a power supply for the mills. Today, local waters continue to support a variety of uses – for drinking water, fishing, swimming, recreation, riparian habitat, and flood management. Where accessible, they may also be important for fire protection.

Surface Waters

Many of Tuftonboro's streams and brooks originate in town, providing a unique opportunity to maintain local water quality, as well as a responsibility to protect the quality of Lake Winnipesaukee and the Saco River watershed. Major waterways include Melvin River, Wingate Brook, Twentymile Brook, Whitten Brook, and Nineteenmile Brook. There are also a number of ponds including Dan Hole Pond (ancient volcanic crater), Melvin Pond, Copps Pond, Lower Beech Pond and constructed ponds scattered throughout town. Mirror Lake and Lake Winnipesaukee are the largest water bodies in town.

Tuftonboro is one of eight towns with frontage on Lake Winnipesaukee and makes up 10% of the Lake Winnipesaukee Watershed. As noted previously, a watershed is defined by topography. All water that

falls onto a watershed flows to the lowest point, which in this case is Lake Winnipesaukee. According to the University of New Hampshire's Lakes

Lake Winnipesaukee Facts

Native American for "The smile of the great spirit"

- 44,586 acres of water
- 625 billion gallons
- 240 miles of shoreline
- 43 feet average depth
- 213 feet maximum depth
- 365 islands
- 6 mapped shipwrecks
- freezes between December & January
- 236,225 acre Winnipesaukee Watershed
- 19 towns in the Watershed
- 8 towns with frontage on the lake
- 10 major tributaries that feed the lake

Source: www.winnipesaukee.org/watershed-facts.htm

Lay Monitoring Program, the overall water quality of the Lake is pristine (oligotrophic: the water clarity levels are high, phosphorus concentration, the chlorophyll and dissolved color are low and the dissolved oxygen concentration is high). There are local regions that show signs of impairment, but the water quality trend, as measured in Tuftonboro and adjoining regions of the Lake have been consistently in the pristine stage for the past twenty years.

Mirror Lake is located in the southwest corner of Tuftonboro. It is the second largest body of water in town. The Mirror Lake Protective Association monitors activities on the lake to maintain its cleanliness, water quality and quality of life. For example, several Association members met with the selectmen in April 2006 to get permission to station someone at the town launch area for a couple of days this summer to give boaters information about invasive plants and how to prevent them from being spread from lake to lake. The Association is a private, not-for-profit group of landowners with frontage on Mirror Lake.



Wetlands

Most wetlands are found in poorly drained, low-lying areas within stream valleys, but there are also scattered upland (palustrine) wetlands found at higher elevations. Wetlands are a valuable ecological, recreational and educational resource. Wetland areas reduce flooding, retain storm water runoff and sediment, recharge and filter surface and groundwater, support unique vegetation, provide valuable wildlife habitat and add to the scenic beauty of Tuftonboro.

There are a number of wetland areas in Tuftonboro shown on the *Resources Map 3-1*. They are identified by the presence of poorly and very poorly drained (hydric) soils. The total wetland area based on hydric soils was estimated to be around 2,975 acres (about 11%).

The largest wetland complex in town is the Great Meadow (513 acres). An ecological assessment of the Great Meadow conducted in 2003 ranked it highly for numerous functions including ecological integrity, flood control, wildlife habitat, and groundwater recharge potential. Other large wetland complexes may be found near the outlets of streams flowing into Lake Winnipesaukee, such as the ones around Nineteen and Twenty Mile Brooks and Copps Pond.

Wetlands can be contaminated easily by development within the watershed. Common sources of contamination in rural areas include storm water runoff, soil erosion and sedimentation from construction sites, road gravel and salt, bridge and culvert work, on-site septic systems, parking lot runoff and poorly managed farming and logging operations. Federal and state governments recognize the importance of wetlands and have numerous programs regulating their use and protection. Dredging or filling any wetland in New Hampshire requires a review process by the state Wetlands Board; and large-scale earth alterations must provide erosion and sedimentation control measures before they can be permitted.

Tuftonboro's Zoning Ordinance includes a wetlands conservation district to protect those areas which the NH Department of Environmental Services defines as wetlands. The district prevents the development of structures and other land uses which will diminish the functional values of the wetland. The Zoning Ordinance also includes a Lakefront Residential District that limits some land uses that could impact the health of surface waters.

Tuftonboro's Subdivision and Site Plan Regulations require wetlands delineation and certification as required by the zoning ordinance. Both sets of regulations also provide for site-specific erosion and sedimentation control measures which can aid in protecting the integrity of wetlands. The Planning Board, through Subdivision Regulations, may also require buffer strips of up to 150 feet in width around surface waters or wetlands which may be adversely affected by erosion or storm water runoff.

Floodplains

Floodplains are the areas periodically inundated with flood waters from adjacent waterways. About 70 acres of floodplain have been identified in Tuftonboro (see *Resources Map 3-1*). There are not many areas that constitute floodplains, primarily due to the lack of major rivers.

The town may wish to explore other measures to protect the quality of surface waters and wetlands and floodplains including:

- Locally designated setbacks and vegetated buffer zones to limit disturbance, and to provide filtration;
- Expanded shore land protection provisions:
- Designated wetlands of extraordinary value as "Prime Wetlands" in accordance to NH RSA 482 – A:15;
- Adherence to state-accepted management practices for storm water runoff and erosion control, agricultural and logging operations;
- Good local road maintenance policies and practices; and
- Landowner education, technical and financial assistance (e.g., stream bank restoration projects).

Groundwater

Groundwater is the body of water contained in the soil, subsoil and underlying rocks above an impermeable layer. It serves as a sink for storing water, and recharges aquifers. Most, if not all Tuftonboro residents and businesses get their drinking water from groundwater sources. Groundwater levels town-wide are generally sufficient to supply individual wells. Between 2000 and 2005, 211 wells were dug in Tuftonboro to serve private and public water supplies. Wells range in depth from 100 to 857 feet with an average yield of eight gallons per minute. A minimum of two GPM is recommended for domestic uses. For perspective, water flows from a garden hose about one GPM. Table 3.1 provides a summary of the well log data.

Table 3.1 Sampling of Tuftonboro Domestic Well Data 2000 – 2005					
Well Data	Total Depth (ft.)	Depth to Bedrock (ft.)	Total Discharge (gals. /min.)		
Minimum	100	3	0		
Maximum	857	170	65		
Average	452	39	8		
Median	423	25	5		

Source: NH Department of Environmental Services 2005 (40% sample of 211 domestic well logs)

In Tuftonboro there are currently twenty-two active public water supplies (PWSs) listed by the state, each of which is served by a bedrock well (see Table 3.2). A public water supply is defined as "a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections, or designed to serve an average of at least 25 people for at least 60 days each year." These are further categorized as: community water systems (e.g., municipal systems), non-transient/non-community systems (e.g., schools, factories), and transient/non-community systems (e.g., restaurants, camps, campgrounds).

New Hampshire Department of Environmental Services has established Drinking Water Protection Areas (DWPAs) around all active community and non-transient/non-community public water systems to protect them from possible contamination. For surface water supplies, a drainage area is defined around the source, while for wells a radius is defined forming a Wellhead Protection Area (WHPA). The radius is determined, in general, by the type, capacity and depth of the well. Lakes Region Water Company, owner of Hidden Valley's water supply has designated WHPA to protect water supplies from potential sources of contamination. Common sources of contamination include septic systems, waste disposal sites, junkyards, leaking underground storage tanks, cemeteries, road salt, pesticides, fertilizers and alpha radiation from naturally occurring sources (e.g., radioactive bedrock or radon gas).

Table 3.2					
Public Water Supplies in Tuftonboro					
System	System Name	Number	Service		
Туре	•	Served	Connections		
Transient	Barvel Whang (seasonal residence)	63	25		
Transient	Camp Belknap/NH YMCA kitchen (youth camp)	350	4		
Transient	Camp Belknap/NH YMCA staff quarters (youth camp)	350	4		
Transient	Camp Merrowvista Danforth Lodge (youth camp)	50	1		
Transient	Camp Merrowvista/Dining Hall (youth camp)	220	14		
Transient	Camp Merrowvista/Farmhouse (youth camp)	220	2		
Transient	Camp Northwoods - Boston YMCA (youth camp)	400	25		
Transient	Sandy Island Camp - Boston YMCA (youth camp)	225	16		
Transient	Sentinel Baptist Camp - American Churches of VT/ NH	150	7		
Transient	Edge O Lake Village (seasonal residence)	105	42		
Community	Hidden Valley/Mason (single family residences)	188	75		
Community	Hidden Valley Shores (single family residences)	65	26		
Transient	Lakeside Colony (seasonal residence)	37	15		
Transient	Lanes End (seasonal residence)	88	35		
Community	North Country Village (single family residences)	143	57		
Non-Transient	PAK 2000 Office (industrial facility)	42	3		
Transient	Pier 19 Grocer (snack bar, take out foods)	25	1		
Transient	Pine View Lodge (motel/hotel/cabins)	38	15		
Transient	Red Gate Colony Club (recreation facility)	35	14		
Non-Transient	Tuftonboro Central School	200	1		
Transient	William Lawrence Camp/Dining (youth camp)	170	14		
Community	Win Miir Condos Association (condominiums)	45	18		

Source: NH Department of Environmental Services 2006.

In addition to the threat of contamination, withdrawals of large quantities of groundwater for commercial use have become an issue of concern throughout New Hampshire. Intensive pumping from an aquifer may

cause water well problems, reduce surface water flows, land subsidence and deterioration of water quality. The state regulates major groundwater withdrawals to prevent adverse impacts to surrounding water resources, including rivers, streams, wetlands, and neighboring wells, and also groundwater withdrawals that supply community water systems. It also regulates discharges to groundwater to prevent contamination.

The town could consider applying for Local Water Protection Grants – to delineate WHPAs, inventory potential contamination sources, develop local ordinances, and conduct land surveys prior to acquisition – are available through NHDES. Municipal land use regulations and health ordinances also may be adopted to further protect aquifer areas and groundwater supplies.

3.2.2 Geology, Sand and Gravel

The composition of the bedrock beneath Tuftonboro is considered to be of the White Mountain igneous province (about 100 million years old). The White Mountain igneous province is a classic example of A-type magmatism, meaning that there has been little to no contamination from continental crust. The Ossipee ring-dike complex - an ancient volcano – is one of the dominate features of Tuftonboro's landscape. The complex is circular in plan and has a diameter of 8.7 miles (14 km). It consists of quartz with components of pink granite and rhyolite.

Much of the town's surface geology is deposits composed of unconsolidated, loose assortments of rock left behind by the advance and retreat of glaciers from 10,000 to 14,000 years ago. The withdrawing ice shields left behind two types of materials - tills and outwash deposits. These serve as groundwater aquifers, sand and gravel source, and parent material for most local soils.

Sand and gravel deposits are an important town resource. They indicate existing and potential aquifers, and are also valuable materials for construction and road maintenance. Sand and gravel extraction, if not properly managed, can adversely affect ground and surface water quality and supplies, local vegetative cover and wildlife habitat, local roads and neighboring properties. At one time there was a specific statutory requirement that municipalities identify known sources of construction materials (e.g., sand and gravel deposits) in the master plan. Although this law no longer exists, such deposits are still important.

Based on historic records, seismic activity statewide is common, but there have been few earthquakes strong enough to cause real damage. It is recommended by the state, however, that public buildings, infrastructure and utilities be sited, designed and constructed to minimize the possibility of earthquake damage.

3.2.3 Soils

Tuftonboro's soils are generally comprised of glacial till and outwash deposits. Details regarding the distribution of soil types, their characteristics and suitability for a variety of land uses, were originally provided in the 1966 Carroll County Soil Survey. According to the United States Natural Resource Conservation Service (NRCS, formerly the Soil Conservation Service), this survey is out-of-date and an update is in progress. Carroll County is one of two counties in New Hampshire not to have a modern soil survey. Preliminary data is available through the GRANIT system. Hydric soils and farmlands are shown on the *Resources Map 3-1*.

All development in Tuftonboro relies upon on-site septic systems for waste disposal. Thus, soil conditions are a critical factor in determining the location and intensity of development. Affordable on-site septic systems rely primarily on favorable soil characteristics to absorb and

purify liquid waste to prevent health hazards and water pollution. Current Subdivision and Site Plan Review Regulations, but not zoning regulations, include limited provisions for storm water management, sediment and erosion control to contain flooding and soil erosion.

Tuftonboro has several active farms (including full-time and part-time farms). As noted on the *Resources Map 3-1*, a relatively small percentage of the town contains agricultural soils suitable for growing crops. Most of these agricultural soils are located in the center of Tuftonboro, with smaller parcels located near Melvin Village and Tuftonboro Corner and smaller pockets scattered throughout town. Approximately 1,100 acres (or 3.9%) of Tuftonboro's land has been classified as agricultural.

The town may want to expand the existing regulations to include more detailed standards to help prevent the loss of soil and water pollution. In addition, development or actions that put quality farmland in irreversible uses should be allowed only if those actions are clearly in the public interest of current and future generations. Updating land use regulations and policies to reflect the desire to preserve agricultural land may be necessary.

3.2.4 Steep Slopes

Tuftonboro's mixed terrain contains a number of areas of steep slopes and exposed ridgelines. Steep slopes are most prominent in the Ossipee Mountain range with a few areas near Lower Beach Pond and southwest and west of Copps Pond. About 30% of the town is characterized by land with an average slope of 15% or greater, and 4,600 acres exceed a gradient of 25% (see *Resources Map 3-1*).

Steep slopes pose several land use and development challenges. They are susceptible to erosion and high rates of runoff, particularly when cleared for construction, agriculture or forestry, and pose a risk to water quality when used for on-site septic disposal. The NRCS recommends that slopes in excess of 25% not be developed, and clearing for forestry and recreation activities should be conducted with attention to erosion control and storm water management. Limited development may take place on slopes of 15–25% providing measures are taken to stabilize the slope, control erosion, and protect down-slope areas from storm water runoff. Development on steep slopes and exposed ridges and knolls can adversely impact the town's scenic beauty. The Zoning Ordinance does not allow land with slopes over 25% to be used to satisfy the minimum lot size.

Additionally, Subdivision Regulations provide for the preservation of "aesthetic value" as it relates to natural/existing features including steep slopes.

The town may want to explore options to further protect and manage steep slopes.

3.2.6 Climate and Air Quality

Climate represents the average weather conditions of an area over time. Weather patterns are an important planning consideration because of their effect on such things as water supplies, the local growing season, soil erosion, storm water runoff, energy demand (for heating and air conditioning), renewable energy supplies (e.g., solar, wind, and hydro power), building and road construction and maintenance and air quality. Winters in central New Hampshire are cold and dry, while summers are generally warm and moist. Weather patterns vary locally with topography. Tuftonboro experiences average NH winter temperatures of 21 degrees and summer temperatures of 63 degrees Fahrenheit. Annual precipitation, measured as rainfall, is about 45 inches a year. This includes approximately 90 inches of snowfall.

Weather patterns, especially wind, impact air quality. Like most of New Hampshire, Tuftonboro's air quality is good. However, the state experiences an average of ten days per year when the air quality is officially categorized as unhealthy. This is enough to classify the southeast portions of the state as non-attainment for ozone (i.e., dirty air regions), prompting certain federally required actions to reduce air pollution from in-state sources. Although New Hampshire has taken steps to reduce pollution emissions in-state, approximately 92 percent to nearly 100 percent of this pollution originates from sources located outside of New Hampshire. These pollutants are transported into the state with the wind over great distances.

Given the lack of industrial development,
Tuftonboro air quality concerns are limited to
emissions from traffic, and heating systems
(e.g., woodstoves). While no existing problems
have been identified, the cumulative effect of
these sources may increase with additional
growth and may have a greater impact on air
quality in the future. Of more immediate
concern are impacts on air quality from out-ofstate activities which pose a threat to fragile,
higher elevation ecosystems such as the Ossipee
Mountain range and local water bodies.



3.2.7 Forests

About 85% or 22,000 acres of Tuftonboro is forested. This contrasts with the mid-1800s, when it is estimated that 50% of the town was cleared for farming. Local forests are important for sustainable logging operations, but also contribute to air and water quality and the town's scenic beauty, provide critical wildlife habitat, and opportunities for outdoor recreation. Tuftonboro's forests are predominantly privately owned. Almost 10,000 acres (37%) of Tuftonboro property is in the current use program.

Forests that have not been fragmented provide habitat for many wildlife species. In general, large range animals such as black bears avoid small isolated fragments of forest and prefer larger forested parcels.

3.2.8 Wildlife and Fisheries

Tuftonboro's relatively undeveloped, varied landscape provides a mix of habitat types that supports diverse animal, plant and fish populations. A variety of game and non-game wildlife species reside in town, including white-tail deer, black bear, moose, coyote, mink, otter, fox, beaver, fisher, bobcat, turkey, ruffed grouse and a variety of song birds. In addition to the state endangered piedbilled grebe, Tuftonboro has numerous known nesting and breeding areas of the common loon. Lake Winnipesaukee bays in Tuftonboro are home to the state endangered lake whitefish and round whitefish.



"In 20 years I would like to see Tuftonboro stay small. Because I would like to see more wildlife." By Bryce at Tuftonboro Central School 2005

Other native fish found in Lake Winnipesaukee include lake trout, cusk, smelt, perch, pickerel, sunfish and bullheads. There are also several introduced species, sought after game fish, including rainbow trout, smallmouth bass, largemouth bass and landlocked salmon. The healthy supply of landlocked salmon, in part, may be attributed to the past three decades of salmon stripping in Melvin Village at Pope Dam. Salmon stripping is the process of relieving female salmon of their eggs and male salmon of their milt to directly fertilize the stripped eggs. Every November since 1978, NH Fish and Game has conducted the public demonstration of salmon stripping. Once the eggs have been fertilized at Pope Dam, they are transported to the Warren Fish Hatchery where they hatch. The fry are gently laid in the tributaries of the Cocheco and Lamprey Rivers where they live in fresh water for two years before returning to the ocean. They remain at sea for two to three years before they return to their natal fresh water streams to spawn.

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¹ Hackl, Ann. "Salmon Stripping" *Tuftonboro Times*. Spring 1999.

In addition to the intrinsic value of wildlife and fisheries, both are of great economic benefit to New Hampshire. According to a study by the US Fish and Wildlife Service, residents and visitors spent \$282 million on wildlife watching activities in 1996 around New Hampshire. Hunting and fishing are traditional recreational activities that also contribute to the local economy.

To date, no comprehensive inventory of local habitat, plant or animal communities has been undertaken. Several natural features, however, are recognized as being critical to the protection of a wide range of species and worth addressing specifically in land use policies and regulations. These include: large tracts of undeveloped forest; wetlands; riparian corridors, especially those connecting large tracts of forest; travel corridors, including road crossings; vernal pools; and open meadows.

3.3 CULTURAL RESOURCES

Tuftonboro's history is written on the land and also defined by its cultural landscape that has evolved since its founding. The town is home to a number of cultural resources, including many undocumented historic sites and structures. Some of these include:

- churches, old school houses, foundations of mills and homesteads;
- Abenaki Tower, The Grave by the Lake, Hunter's Sap House, among others;
- Tuftonboro's cemeteries which are documented in a local book;
- stone walls, hedgerows and tree lines that mark historical property and field boundaries and old road rights-of-way;
- Town House (ca 1819), Grange Hall built in mid-19th century, Historical Society Museum (early 19th century); and
- many structures that are more than 50 years old and retain historical integrity including the carriage shed and the country store (Center Tuftonboro General Store) and the Willing Workers Hall.

To date, however, there has been no extensive survey of the town's historic sites and structures, and as a result, very few have received formal recognition. The New Hampshire Division of Historic Resources maintains a list of sites and structures by town. Currently, the Tuftonboro United Methodist Church is listed. It was added to the National Register of Historic Places in 1997. This listing affords recognition, but no specific protection except as it may be affected by state or federally-funded building projects. Tax credits for the restoration of listed properties may also be available.



Tuftonboro is fortunate to have an active historical society. The Tuftonboro Historical Society, a private, non-profit organization was founded in 1965 by Margaret Hunter, Marion Horner Robie and Iva Durgin Willard. It is housed in Tuftonboro Historical Society Museum which was a one-room schoolhouse in the early 1800s and remained a schoolhouse until 1937. The Historical Society collects and archives artifacts, papers, and photographs; operates the small museum during the summer months; and sponsors monthly May through October meetings. It is currently trying to raise funds for an addition and improvements to address temperature, moisture and fire.

Less obvious, but also providing an important link to the past are archeological resources found in Tuftonboro. The State Archaeologist has identified archaeologically sensitive areas. Most areas along the shoreline are sensitive along with the small brooks that feed into the big lake. Places where there are falls or rapids on the streams are highly sensitive, as are the places where the ponds empty into the feeder brooks. Of particular interest are the ponds and shallow coves. This is where one might reasonably find sunken dugout canoes. Several have been found around the lake and in the ponds (Sandwich Historical Society has a couple as does the Libby Museum). Tuftonboro Historical Society Museum has a dugout canoe that was built by early settlers rather than by Native Americans.

There has been no systematic survey of Tuftonboro, so sensitive areas have been identified based on patterns observed in the Lakes Region in general, but there is no doubt that the town has important archaeological sites within it. There were Native American trails, encampments and burial grounds along the shores of Lake Winnipesaukee. Two skeletons have been found near the lake shore in Melvin Village; one of those is buried in the "Grave by the Lake" behind the Melvin Village Community Church.



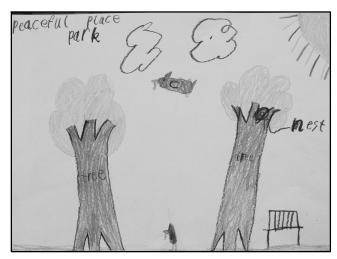
3.4 SCENIC RESOURCES

It is clear from a drive around town that Tuftonboro's natural and cultural landscape is very beautiful. A detailed inventory of the town's scenic resources has not been completed. However, a number of features have been identified through the 2005 Town questionnaire and public forums. They include:

- prominent, undeveloped, forested ridgelines and hilltops, many of which are highly visible from public vantage points;
- natural features, including surface waters and wetlands;
- historic hamlets and homesteads:
- rural countryside, including farms and working farmlands; and
- scenic roads.

All but three major traveled town roads in Tuftonboro have been designated "scenic" in accordance with NH RSA 231:157. "Scenic" designation means any construction or repair of said road shall not involve the cutting, damage or removal of trees (>15" diameter at 4' from the ground) or the destruction of stonewalls except with the prior written consent of the planning board or an official designee and after a public hearing. The three roads not designated are Sodom Road, Ledge Hill Road and Union Wharf Road.

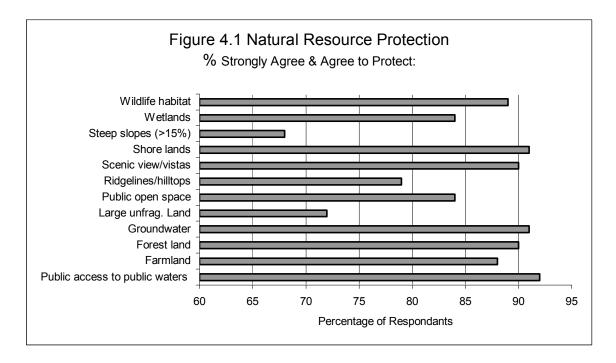
The town, as time and resources permit, may want to conduct more detailed inventories of its scenic resources. GIS mapping, supplemented by windshield surveys, is especially useful for this type of work.



By Jacob at Tuftonboro Central School 2005

3.5 RESOURCE PROTECTION

Based on the 2005 Community Attitude Survey results, there appears to be strong support for the protection of Tuftonboro's most significant natural and scenic resources – including those resources that contribute to the town's scenic beauty, rural character and natural environment.



The 2006 Town Meeting voted to raise and spend funds to acquire an easement on the Cheney Farm to preserve the aesthetics of the rambling Civil War era farm buildings and open fields.

Some level of protection may be afforded through public ownership, or through local, state or federal regulations. *In many cases, however, local resource protection will depend on the efforts of interested property owners who could benefit from available technical or financial assistance programs.* For example, these could include:

- technical assistance for inventories and the preparation of natural or cultural resource management plans;
- purchase of development rights (e.g., LCHIP);
- tax abatement (current use) programs; and
- tax credits, grants or other forms of financial assistance for specific conservation or historic restoration projects.