

I. INTRODUCTION & VISION

Groton's Master Plan (the "Plan") is the cornerstone of the community's growth and land management strategy. An underlying assumption of this Plan is that residential¹ growth will continue to occur in Groton and that business uses² will require Special Variance and Site Plan review before any activity is undertaken. The over-arching goal of this Plan is that all development, whether residential or business, only occur in the locations and patterns that support the Vision and Principals of this Plan while avoiding the negative impacts that can be associated with unwanted and unmanaged growth.

This Plan, then, is a policy document for planning, now and for the future. It sets the framework for the implementation of specific policies, regulations and zoning, along with the granting or denial of applications under consideration by the Planning and Zoning Boards and the Selectman. As town officials execute their respective duties, they should address if their decisions are in keeping with the letter and spirit of the Visioning Statement, the Principals, the Goals and Objectives, and the body of the Plan.

The Plan is also a reference document. It contains charts (based on resident survey responses), documents and maps (please refer to **Appendices A – ___**). With the supporting text in the body of the plan addressing such topics as: future development, environmental, cultural, and historical preservation, community tax base and roads, it is intended to help our community meet change responsibly, guiding its growth in an orderly, constructive manner.

The body of the Plan is comprised of these components:

- Sections that consider the Profile of the town, existing physical, economic, and historical/social conditions as well as questions/predictions and implications or trends,
- Underpinned by the Vision Statement and the Principals, each plan section has a Goal and a set of Objectives addressing the Towns highest priorities,
- Implementation, creating an Action Plan. This section of the master plan is dynamic and should be reviewed and modified as needed to re-align goals, set priorities and to measure the progress made on the implementation actions.

In terms of laying out Groton's plan, the Vision Statement and Principals precede all supporting components.

VISION STATEMENT and PRINCIPALS

The state statute that enables communities to prepare master plans, RSA 674:2, directs the inclusion of a vision section that serves to instruct the other sections of the plan. While the local planning board determines the contents of the Vision Statement, state statute notes "...it shall include such topics as the

¹ Residential is defined to mean single-family housing

² Business usage is defined to mean non-residential activity in nature, including commercial, industrial or professional services. A **business** is an organization or enterprising entity engaged in commercial, industrial or professional activities. The core differences among each form of business is the first deals with retailing already manufactured products, the second focuses on production of goods, and the third offers a service.

objectives, principles, assumptions, policies and standards upon which the constituent proposals for the physical and socio-economic development of the municipality are based.”

The Vision Statement and the Principals that follow reflect the desires of the entire community and what the residents have identified as important to their identity and future well-being. They were fashioned by the Planning Board after several engagement formats, including a resident workshop held on August 15, 2012, input from townspeople during public meetings and responses to surveys sent by the Planning Board in 2013 and 2015. They also reflect analysis by the Planning Board, in consultation with planning consultants, of the charts, documents and maps included in or attached and incorporated as **Appendices A**

Vision Statement

To shape Groton’s future by guiding growth and development in a manner which ensures the preservation and protection of the town’s:

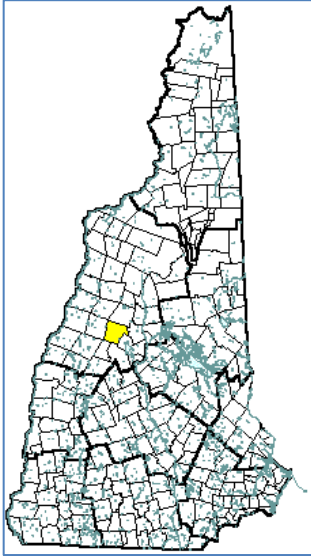
- ❖ *Quite small town rural character,*
- ❖ *the environment, our natural resources,*
- ❖ *the forested expanses of undeveloped space,*
- ❖ *the water resources,*
- ❖ *the diversity of plant and wildlife and,*
- ❖ *the beautiful mountain ridgelines.*

In implementing this Vision, the following Principals will serve all Town Officials, both elected and appointed, as guidance when making their decisions.

Principals

- 1) Land and Groton’s natural resources are finite and are our community’s most basic resource. The use of land determines to a large extent the character and quality of life in Groton.**
- 2) The rate, location and type of growth and development affect not only the community’s physical appearance but also drives expansion of public services and infrastructure.**
- 3) Each parcel has distinct carrying capacity. Some are more suitable for development while other parcels are unsuitable, development leading to negative environmental or aesthetic impacts. The variables that determine the suitability of a parcel for development include slope, soil characteristics, topography, water resources, wildlife and plant habitat and productivity of soils, as well as neighborhood character along with consideration for noise, fire and public safety and health.**

II. COMMUNITY PROFILE



The Town of Groton is located in Grafton County. Rumney borders it on the north, Plymouth on the east, Alexandria and Hebron on the southeast, Orange on the south and Dorchester on the west.

Groton is one of 48 New Hampshire communities with a population under 1000. According to the 2010 Census, the median age is 48.5, with 19.2% of the population over 65. As of 2010, there were 436 total housing units, a significant increase since 1987 when total housing units were 316.8 Based on New Hampshire standards, Groton is sparsely populated (593 in 2010) but has a rather large land area (40.7 square miles). Forests dominate Groton’s landscape.

NH Route 118 serves Groton on the west along with two state maintained paved routes that include Hall’s Brook Road and part of North Groton Road. North Groton Road from Hall’s Brook Road to Route 118, River Road and Sculptured Rocks Road are the other paved town roads. Numerous dirt roads connect

to these primary roads and are maintained by the Town. Two areas of Groton are not connected to the main area of the Town by roads. One area is served by River Road, which is accessed from NH Route 118. The other is Groton Hollow Road, which is accessed from NH Route 25 in Rumney.

The Town House, located on North Groton Road houses the Town Offices, the Police Station and the Town Library. The town offices and library were moved to the Town House after the previous buildings were severely flooded in 2005.



See the Table immediately following for more detailed town statistics

MUNICIPAL SERVICES

Type of Government	Selectmen
Floodplain Development Regulation	Adopted 3/14/2000, revised 2007
Zoning Ordinance	2007- zoned: Rural Residential
Zoning Ordinance Amendment	2015 Large Wind Energy Regulations
Subdivision	Adopted 12/17/1987, revised 2003, 2012, July 9, 2014
Site plan Review	Adopted February 29, 2012
Excavation Regulations	Adopted September 15 2010
Master Plan	1987, revised 2007, 2016
Capital Improvement Plan	No
Hazard Mitigation Plan	2007 Plan Update, Adopted May 15, 2014
Boards and Commissions	
Elected:	Selectmen; Planning; Zoning, Library, Cemetery
Appointed:	Conservation

ROADS

The existing road network and associated rights of way comprise approximately ----- acres in Groton, with -----miles of public and ---- miles of private roads.

For further information on roads see Chapter III

TRANSPORTATION

No public transportation is available in Groton.

EMERGENCY SERVICES

Police Department	Full-Time Chief, Part-time Officers
Fire Department	Hebron/Rumney - Volunteer
Emergency Medical Service	Hebron/Rumney - Volunteer
Nearest Hospital(s)	Distance
Speare Memorial, Plymouth	13 miles
Dartmouth-Hitchcock-Lebanon	37 miles

(US Census Bureau) DEMOGRAPHICS

Total Population	Community	County
2012	591	89,181
2010	593	89,118
2000	458	81,826
1990	318	74,998
1980	255	65,806
1970	120	54,914

Population by Gender

Male: 286

Female: 236

Population by Age Group

Under age 5	6
Age 5 to 19	86
Age 20 to 34	41
Age 35 to 54	197
Age 55 to 64	74
Age 65 and over	118

Comparison of Population Change Against Surrounding Towns										
County	Town	1960	1970	1980	1990	2000	2010		Numeric chg 00-10	Percent chg 00-10
Grafton		48,857	54,914	65,806	74,929	81,740	89,118		7,378	9.00%
	Alexandria	370	466	706	1,190	1,329	1,613		284	21.40%
	Dorchester	91	141	244	392	353	355		2	0.60%
	Groton	99	120	255	318	456	593		137	30.00%
	Hebron	153	234	349	386	459	602		143	31.20%
	Orange	83	103	197	237	299	331		32	10.70%
	Rumney	820	870	1,212	1,446	1,480	1,480		0	0.00%
	Plymouth	3,210	4,225	5,094	5,811	5,892	6,990		1,098	18.60%
Prepared by N.H. Office of Energy and Planning, Mar. 22, 2011										

Demographics, American Community Survey (ACS) 2008-2012

(ACS 2008-2012) HOUSING

Total Housing Units	473
Single-Family Units, Detached or Attached	353
Units in Multiple-Family Structures:	
Two to Four Units in Structure	0
Five or More Units in Structure	0
Mobile Homes and Other Housing Units	120

(ACS 2008-2012) ANNUAL INCOME, 2012 (Inflation Adjusted Dollars)

Per capita income	\$23,614
Median family income	\$63,500
Median household income	\$37,361
Median Earnings, full-time, year-round workers	
Male	\$38,125
Female	\$32,125
Individuals below the poverty level	9.6%

EDUCATIONAL ATTAINMENT, population 25 years and older

High school graduate or higher	75.1%
Bachelor's degree or higher	14.0%

(NH Dept. of Education) EDUCATION/CHILD CARE FACILITIES

Schools students attend:	Grades K-12 are part of Newfound Area (Alexandria, Bridgewater, Bristol, Danbury, Groton, Hebron, New Hampton)	SAU 4
Career Technology Center(s):	Plymouth Applied Technology Center	Region: 5
Nearest Community/Technical College: Lakes Region		
Nearest Colleges/Universities: Plymouth State University & Dartmouth College		

Source Information & Notes

Information found in this Table, unless otherwise noted, was derived from the Economic & Labor Market Information Bureau, NH Employment Security, 2013. Community Response Received 6/15/2012; <http://www.nh.gov/nhes/elmi/htmlprofiles/pdfs/Groton.pdf> and from the Town of Groton. US Census - 2010

Implications

An understanding of demographic characteristics and trends is vital to effective planning and management in any community. The total population of a community, as well as the unique characteristics of particular segments of the population, and the rate of growth, can have significant implications relative to the demand for municipal services, housing and transportation needs.

The Planning Board has considered the information in Groton's Community Profile along with the results of Groton's 2012 Community Planning Workshop and 2014/2015 survey responses before recommending the following Goals and Objectives:

Housing Goal

To encourage housing consistent with the small town, rural character of Groton while considering a range of residential living opportunities

Housing Objectives

1. Review, and consider revising the regulations concerning accessory units in owner-occupied single-family homes to:
 - accommodate aging parents who wish to live with their children
 - accommodate the elderly who prefer to remain in their homes but may need live-in caregivers
2. Study the advisability of writing a Capital Improvement Plan along with planning tools such as impact fees to generate adequate funds to cover the costs of the new infrastructure that new residential growth necessitates
3. Monitor the conversion of Groton's many seasonal houses into year-round homes to ensure compliance with building, health and safety requirements
4. Consider cluster style housing units, particularly where conservation land is set aside to create permanent open space and recreational opportunity

Transportation Goal

To seek to serve the special transportation needs of the senior population, youth, the economically disadvantaged and the disabled, including both everyday needs and emergency disaster transit requirements.

Transportation Objectives

To improve transportation opportunities in a manner consistent with population and demographic changes of the Town by:

- encouraging ridesharing
- supporting efforts to secure services and funding for paratransit and elderly transportation
- Working with nearby jurisdictions and non-profits forming partnerships that provide for the special transportation needs of the senior population, youth, the economically disadvantaged and the disabled.

DRAFT

III. LAND USE

NATURAL FEATURES/RESOURCES

Groton has a total area of 40.8 square miles (26,111.89 acres) of which approximately 40.7 square miles is land and 0.1 square miles is water, comprising 0.12% of the town. Large blocks of contiguous forestland, owned publicly and privately, several high peaks and water resources characterize the Town. These features are important to the Town's economy, recreational opportunities, rural character and beauty. They are even more significant for the role they play in long-term viability of the wood-products industry, for wildlife habitat and for clean source waters flowing into the Newfound and Baker River Watersheds, as well as the State's fifth largest lake, Newfound.

MANAGED FORESTS – Preserved vs. Permanently Protected

Far too often communities assume that forestland once held for timber, pulpwood and other forest products will continue in that status indefinitely, failing to recognize that development is a real possibility. While it is true that most forestland is preserved under current use, that status provides only temporary conservation of open space.

To have a complete understanding of whether the Town can expect to benefit from the vast forestry holdings into the future, it is important to recognize the difference between lands preserved through current use versus lands permanently protected. Often used interchangeably, preserved open space does not mean the land is permanently protected by legal means. "Permanently protected" is understood to mean that the parcel is conserved by easement which prohibits development, yet allows various uses of the land, including timber harvest and agricultural uses except on tracts that are ecologically significant.

WHAT IS CURRENT USE? NH RSA 79-A states: "It is hereby declared to be in the public interest to encourage the preservation of open space, thus providing a healthful and attractive outdoor environment for work and recreation of the state's citizens, maintaining the character of the state's landscape, and conserving the land, water, forest, agricultural and wildlife resources. It is further declared to be in the public interest to prevent the loss of open space due to property taxation at values incompatible with open space usage. Open space land imposes few if any costs on local government and is therefore an economic benefit to its citizens".

However, open space preserved under NH RSA 79-A performs a wide range of community and ecological services. Open space, as a general term, includes natural areas such as wilderness, parks, greenways, river corridors, waterways, wetlands, woodlands, working forestlands and other undeveloped spaces that may have conservation values which support native species, maintain natural ecological processes, sustain air and water resources, and contribute to the health and quality of life of people and wildlife. Open spaces in Groton provide opportunities for recreational, aesthetic and other quality of life benefits, as well as, contributing significantly to the identified values and priorities voiced by Town residents.

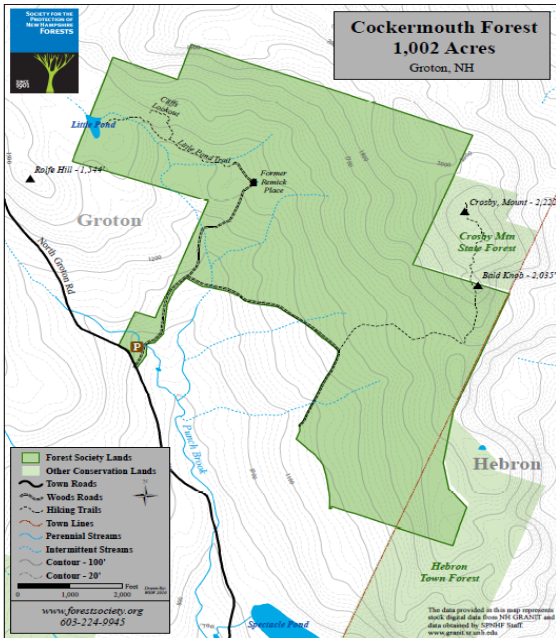
According to the real estate assessments for the Town of Groton,, acres or% of the land in the Town is now being taxed under the provisions of New Hampshire RSA 79-A "Current Use Taxation." Some of this acreage are land blocks represented by the tracts of forestland discussed more fully below, some are smaller areas individually owned by Town residents and out of state investors. Because so much of Groton's land is now preserved under current use, but not permanently protected, it is important for Town officials to set objectives that will help secure Groton's open space for generations to come.

Privately Owned, Permanently Protected

Cockermouth Forest

The name “Cockermouth Forest” has historical significance, bearing the Town’s name of origin from 1760 to 1790, and reflecting the river that flows west to east through it. William B. Wadsworth, who donated the land in 1992 to the non-profit, Society for the Protection of New Hampshire Forests (SPNHF), first came to the area to attend Cockermouth Boys Camp. Of the 1002 acres, 29 are within neighboring Hebron, establishing a significant wildlife corridor to Spectacle Pond, Hebron’s Town Forest, Flint Memorial Forest (in Hebron, owned by SPNHF) and the Cockermouth River.

While SPNHF retains timber-harvesting rights, the lands are permanently protected and open to the public for skiing, snowshoeing, fishing, hunting and hiking. Supporting critical wildlife habitat, the property is a favorite for many in the region, offering modest to strenuous hikes, incredible views and numerous opportunities for observing wildlife year-round. Visitors

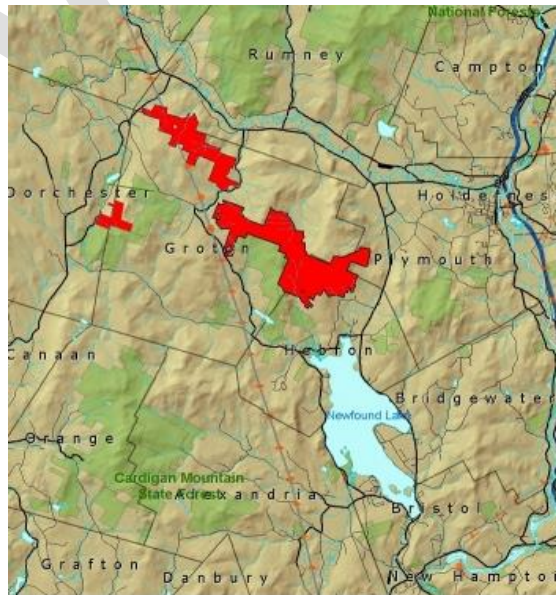


can choose to explore Little Pond and the views from the nearby cliffs or trek up to Mount Crosby and Bald Knob with views of the White Mountains, Squam Lake, Lake Winnepesaukee and Newfound Lake. Access to the Forest is from Groton Road.

The Cardigan Highlands and Forest Legacy Lands

The 3,200 acres of the Cardigan Highlands and Forest Legacy tract was secured by a grant from the Forest Legacy Program, a federal program implemented by the U.S. Forest Service to help protect environmentally important private forestlands. The easement, held by the NH Division of Forests and Lands, protects land in Hebron, Groton, Plymouth, Rumney and Dorchester from development while allowing the property owner, Green Acre Woodlands, to continue to own and manage the forests for sustainable timber production. Located within one of the State’s largest relatively unfragmented blocks of forestland south of the White Mountain National Forest this project protects important habitat for wildlife species that require large interior forest areas. Moreover, thousands of feet of stream frontage and important riparian habitat in the Newfound and Baker River Watersheds are protected.

These lands remain open to the public to enjoy recreational opportunities; including hiking, Snow shoeing, hunting, fishing and snowmobiling.



Cardigan Highlands & Forest Legacy Lands-shown in red

Cross Reservation

A drive up Province Road toward the headwaters of the Cockermouth River in Groton brings you to the Cross Reservation, protected into perpetuity, thanks to a generous donation of a conservation easement. Jim Cross has been working with foresters and the Natural Resources Conservation Service over the past 35 years to manage his 72-acre property primarily for wildlife habitat. The results of that collaboration complement the already rich biodiversity of the headwaters area.

The old pastures are each bounded by stone walls or free flowing streams, buffered by brushy, uncut borders. Apple trees grow in three of the four pastures, offering fruit for the wildlife.

Since the early 1980s, a series of small patch cuts have been carried out in the forested part of the property. These canopy openings encourage diversity in the plant community, providing the saplings and shrubby thickets of a regenerating forest required by species like ruffed grouse and woodcock.

A large beaver dam across the main stem of the Cockermouth River has created a forest of standing dead trees providing nesting sites for birds. Blue herons are regular visitors, perhaps attracted by the growing population of native brook trout behind the dam. Below the dam, two unnamed streams join the Cockermouth on the property as it flows down toward the Sculptured Rocks Natural Area and into Newfound Lake.

The obvious value this land has for wildlife is the reason Cross decided to protect it by donating a conservation easement to the Society for the Protection of New Hampshire Forests (SPNHF).

Publicly Owned, Preserved Lands

The ownership and management of state-owned lands in New Hampshire have a long history of tradition with clear direction provided by state law (RSA 227-G and 227-H). It is within this framework, subject to any future legislative change, that the use and management of state land is defined and carried out.

State Owned Reservations

State lands under the jurisdiction of the Department of Resources and Economic Development (D.R.E.D.) are referred to as "reservations" by state law. RSA 227-G:2 defines "reservation" as public land under D.R.E.D. including, but not limited to: state forest, state park, natural area, historic site, geologic site, recreation trail, memorial area, fire tower, wayside area, heritage park, resource center, agricultural area, state forest nursery, fish pier, administrative facility, information center, demonstration forest, certain islands, and lands under lease to the department. Every parcel of DRED lands is placed into one of four major categories based on general land use: agricultural lands, conservation easements, forestry lands, and recreation lands. These categories are used for tax purposes under RSA 216-A:3a, 227-H:12 and 227-H:17

1. **Agricultural Lands** - are lands leased for agricultural purposes and which are eligible for taxation by local assessing officials as provided by RSA 72:23-I(b), as amended.
2. **Conservation Easement Lands** - are privately owned lands where partial interest is deeded to the state for protecting the land from development. These lands are often subject to public access rights.
3. **Recreation Lands** - are lands that have or plan to have developed recreation and/or administrative facilities or provide moderate to high tourist attraction or user interest.
4. **Forestry Lands** - are lands not a part of a developed recreation or administrative area that support multiple uses not associated with developed recreation.

In the DRED, the Division of Forests and Lands are usually the named stewards of New Hampshire's reservations. Groton is fortunate to have the following State reservations partially or wholly within our Town:

- **Sculptured Rocks Natural area**

This 264 acre state recreation area offers hiking, fishing and cooling off in the many pools along the narrow, twisting “canyons” carved into the bedrock, a unique example of nature's powerful yet delicate artistry.

- **Province Road State Forest**

This 1,040 acre forest lies within Dorchester and Groton. It is open to the public for traditional outdoor activities.

- **The Cardigan Highlands and Forest Legacy Lands**

The owner, Green Acre Woodlands, will continue to manage the forests for sustainable timber production, while the NH Division of Forests and Lands holds a conservation easement permanently protecting the shared 3,200 acres in Hebron, Groton, Plymouth, Rumney and Dorchester. See above

- **Crosby Mountain**

While Groton Wind has dramatically affected the unique White Mountain views to the north, this State Reserve features strong directional views, from its 2,230 summit, encompassing an impressive lineup of high peaks to the east, south and west.

REACHING FOR THE SKY – Mountain Peaks

The northern part of Groton is set within sight of the White Mountain National Forest's southern mountains, while the mountain peaks of the southern part overlook Newfound Lake and Mount Cardigan.

The highest point in Groton is 2,350 feet (720 m) above sea level. The area consists of two distinct ridgeline features known as Fletcher and Tenney Mountain, which are separated by a valley known as Groton Hollow. Both ridges are northeast/southwest oriented and range in peak elevation from 1,850 (Fletcher Mountain) to 2,350 (Tenney Mountain) feet.

Located southwest of Tenny Mountain and northwest of Newfound Lake, from its ledgy summit of 2,230 ft., Mt. Crosby, a State owned reserve, features strong directional views encompassing an impressive lineup of high peaks on the distant horizon that begin with Mt. Moosilauke to mountains in the Sandwich Range.

Just south is a subpeak referred to as Bald Knob at 2,050 feet. From open ledges there are views in all directions, Newfound Lake to the south, the Belnap range to the SE and Mt. Cardigan and its many spurs to the SW. Around the corner other vistas look north to the southern White Mountains beyond the slopes of nearby Tenney Mountain.

Other ridge features in Groton include Kimball Hill (at 1,682 feet), Powers Hill (at 1,965 feet), Jewel Hill (2,060 feet) and Bailey Hill (1,820 feet).

Kimball Hill is located at latitude 43.7151 and longitude 71.9006. It is in the southwestern portion of Groton and lies generally in the watershed of the Cockermouth River. This 2,622-acre region has topography moderate to steep, containing several high ridges. A primary ridge divides the area along a north/south line. Its namesake, the 1,682 ft. Kimbal Hill, along with several unnamed peaks with elevations over 2,000 ft. make up part of the northern view shed of Newfound Lake, encompassing miles

of riparian habitat, including frontage along the south Branch of the Baker River, Atwell Brook, the Cockermouth River, and dozens of other smaller seasonal streams or brooks.

The Kimball Hill property is a NH priority focus area that contains Tier 1 habitats and ranks among the highest priorities for conservation identified in the New Hampshire Wildlife Action Plan (NHWAP). The 30 +/- acre open shrub–scrub wetland complex along the South Branch of the Baker River adds greatly to habitat diversity of the property.

The property, long a working forest, is dominated (in terms of sawtimber volume) by sugar maple, yellow birch, spruce/fir, and white ash. Various northern hardwoods, red oak, and softwood species (including white pine and hemlock) are present as associates.

The Jewel Hill area consists of 1,139 acres and derives its name from the prominent Jewel Hill peak. Three mountain ridges occupy the boundaries, ranging in elevation from 2,060 feet above sea level in the northeast to 1,100 feet in the south. A long central valley runs north to south and topography varies, but is mostly moderate at the mid slopes and mountaintops with some steep sections on the upper slopes leading to the peak. Soil composition is of a glacial till origin, predominantly well-drained, and supporting a northern hardwood forest type.

Note to reader – the following section (Water Resources) is not completed

WATER RESOURCES

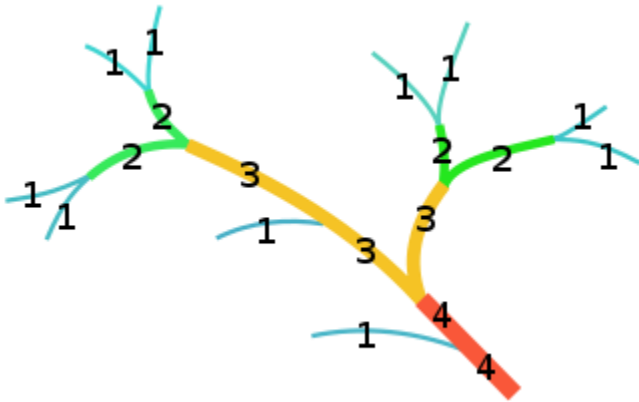
The New Hampshire Watershed Boundary Dataset (NHWBD) is a geographic information systems (GIS) dataset comprised of a nested hierarchy of drainage divides interpreted from 1:24,000-scale topographic contours as presented on 7.5-minute USGS quadrangle maps. These features are delineated and digitized by NRCS.

The Town of Groton lies completely within the Merrimack River Watershed (HUC 6 - 01070001) and is split between the Newfound and Baker River subwatersheds (HUC 10).

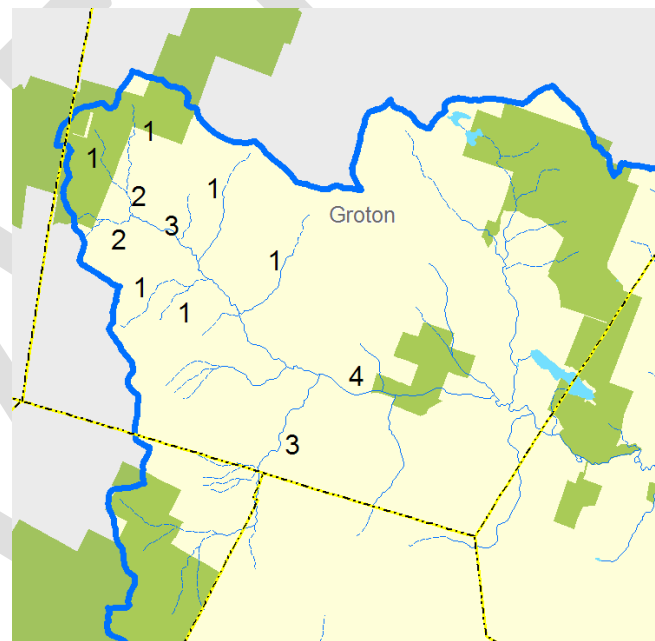
Groton’s principal surface waters are the Cockermouth River and Spectacle Pond.

A WATERSHED IS the land that water flows across or through on its way to a common stream, river, or lake. The United States is divided and sub-divided into successively smaller watersheds, or “hydrologic units.” Each hydrologic unit is identified by a unique hydrologic unit code (HUC) based on the level of classification. A HUC 2 watershed covers the largest area and a HUC 12 covers the smallest:

- HUC 2 = region;
- HUC 4 = subregion;
- HUC 6 = accounting unit;
- HUC 8 = cataloging unit;
- HUC 10 = watershed;
- And HUC 12 = subwatershed.



STRAHLER'S STREAM ORDERING SYSTEM (Strahler, 1952) is the most commonly used classification system of stream/tributary relationships and what the GRANIT hydrography stream order is based on. The uppermost tributaries in any Diagram showing the Strahler stream order drainage network are designated as first-order streams down to their first confluence. Where two first-order streams meet, a second-order stream is formed and so on. The intersection of a stream with another tributary of lower order does not raise the order of the stream below the intersection (e.g., a fourth-order stream intersecting with a second-order stream is still a fourth-order stream below the intersection).



The image to the right shows that part of Groton in the Newfound Lake Watershed and the stream order of the Cockermouth River and its tributaries.

A Finite Resource

Land is a finite natural resource. Each parcel is the sum of a mix of natural resource characteristics making any given parcel or region valuable as buildable land, as habitat, as a source of food or timber, as an element in local and regional hydrology, as a scenic resource, etc. How land is used can determine to a large extent the character and quality of life in Groton. The rate, location and type of growth and development will affect Groton's physical appearance, quality of life and also drive expansion of public services and infrastructure. Depending upon the many characteristics that may come into play, poorly situated or improperly controlled development can:

- Adversely affect land resources both in the short term (soil erosion, unsuitable water table) and long term (groundwater pollution, septic system failure, increased runoff pollution);
- Generate increased costs for public services;
- Prevent the optimum utilization of land, especially critical in terms of prime agricultural and productive forest lands, commercial development and affordable housing;
- Dictate future land use patterns that are unmanageable both financially and environmentally;
- Contribute to flooding and flood hazards through encroachment on flood plains and wetlands;
- Isolate large tracts of land, precluding their use in the future;
- Fragment or destroy wildlife habitat and movement corridors
- Alter or even destroy Town-wide character and neighbor quality
- Adversely affect resident health, safety and property values

Properly planned and directed development, on the other hand, can accommodate the range of necessary uses in locations and on suitable parcels, which will avoid the negative impacts mentioned above.

Development Suitability Explained

Development suitability refers to a lands capacity as appropriate or least suitable for various uses, including residential build-out or business development. While almost all land can be developed or otherwise used if enough money and effort is applied, the suitability concept seeks to identify those areas most appropriate to accommodate future growth with minimum impact on the parcel's mix of intrinsic characteristics.

How than should suitability be determined? A strictly economic approach would look at development suitability from a "highest and best" use (determined by the market) evaluating a parcels ability to support build-out efficiently, i.e., at the lowest economic cost with the highest economic return. Location may be a key consideration, and a suitability analysis would focus on parcel size, accessibility and the availability of utilities.

Typically not considered with a purely economic approach are the environmental, social and cultural attributes of the land. A Town-wide GIS-based land analysis, however, can consider a broad range of attributes assisting land planning officials to identify important resource values.

GIS (Geographic Information Systems) refers to a system where geographic characteristics are stored as a data-set of spatial information which can be analyzed and visualized (mapped). Co-occurrence mapping is created when more than one of the geographic characteristics comprising the data-set are overlaid, one on another, and are "co-located." This process helps land planning officials to identify resources that should be protected or undergo only low density or restricted future development. Land with less environmentally and culturally sensitive values, where development would not have a serious impact, can

be identified as more suitable for higher density future development. When performing the suitability analysis using co-occurrence mapping as a decision-support tool, the landscape becomes the sum of the co-located data-set. Moreover, the interrelationships between the lands attributes are stressed, rather than each feature being treated as a separate characteristic of the landscape.

The Planning Board hired Dan Sundquist, principal of GreenFire GIS, to update mapping and analysis previously compiled. The updated maps represent a Geographic data-set from digital versions of mapped data available from the state's geographic information library at GRANIT, a program of the University of New Hampshire. Additional data was provided by federal agencies, including the USGS and NRCS, as well as state agencies such as the N.H. Fish and Game Department and the N.H. Department of Environmental Services. Other data, such as tax parcel information, was obtained from Groton's Tax Assessors.

The maps inserted below show the results of Groton's mapping application. Each resource feature has a numerical value of 1; the scoring in the legend and the presence of lighter or darker colors in the map reflect where resource features co-occur. Areas with darker colors typically represent more natural resource features, higher sensitivity to development and higher conservation value.

The second data-set (social, cultural, and resident identified values) is represented by the analysis of the Community Planning Workshop of 2012, survey responses received by the Planning Board in 2013 and 2015, public hearings, external documentation along with counsel from state and local officials who know the legal requirements that form the basis for community planning. Arguably, some of the issues in the second data-set are subjective, yet fully capture the viewpoints of Groton's residents. This grouping includes characteristics such as rural and neighborhood character, dark skies, noise limitations, recreational opportunities, special places, and historical/culturally significant areas and characteristics. These are not reflected on mapping but are included in **appendix ...**

Geographic Data-Set

Natural Resource Features

The natural resource features in Groton's analysis are grouped as follows, and are presented below with brief descriptions and accompanying maps:

Surface Water Resources

- Riparian Buffers

- Wetlands

- Floodplains

Drinking Water Resources

- Sand & Gravel Aquifers

Steep Slopes & Highly Erodible Soils

- Steep Slopes

- Highly Erodible Soils

Wildlife Habitat

- Wildlife Habitat Quality

Most Productive Farming & Forest Soils

- Prime Agricultural Soils

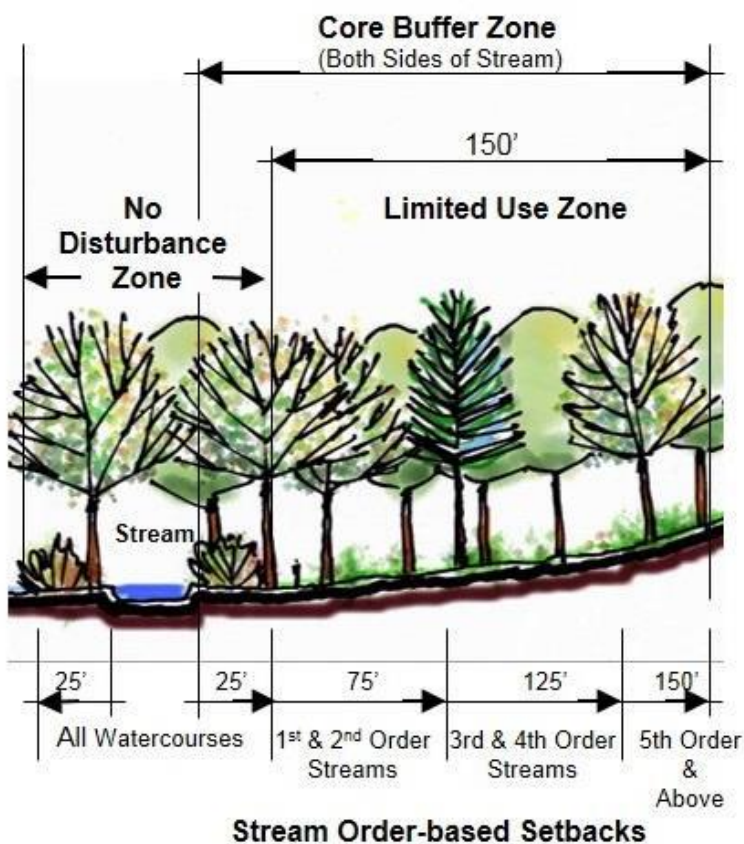
- Most Productive Forest Soil

Surface Water Resources

Riparian Buffers are vegetated corridors along streams and rivers that play a critical role in filtering sediment and nutrients before they enter the water ecosystem. These buffers also act as wildlife movement corridors along water features, which are often home to unique natural communities.

It should be noted that the NH Wildlife Action Plan (NHWAP) uses a 300' buffer in its habitat modeling while the Center for Watershed Protection (CWP - <http://cwp.org/>) employs a tiered buffer model based on stream order. The CWP Model requires a buffer of 75' for order 1 and 2, 125' for order 3 and 4, and 150' for stream order 5 and above (typically larger rivers). The 150' buffer is also applied to all lakes and ponds. These distances are more than adequate for maintaining water quality if kept in a natural land cover condition. However, wildlife corridors along riparian buffers need to be wider, on the order of 300'.

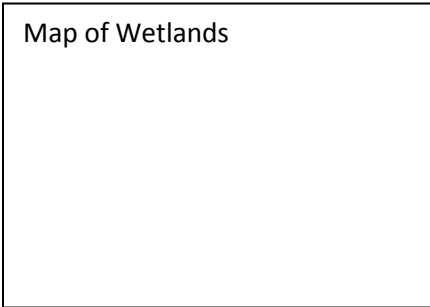
The graphic below shows how the CWP tiered buffer concept works. Note that the intent is to maintain a 25' no disturbance zone on either side of a watercourse. The limited use zone extending out to 150' in the case of higher order watercourses is also intended as a natural storm water "filter strip", but may be devoted to light human uses such as non-motorized trails.



Map of Groton rivers/streams showing riparian Buffers

Headwater streams highest in the watershed are Order 1; where two Order 1 streams combine, the watercourse becomes Order 2. Two Order 2 streams combine to make Order 3, and so forth down gradient.

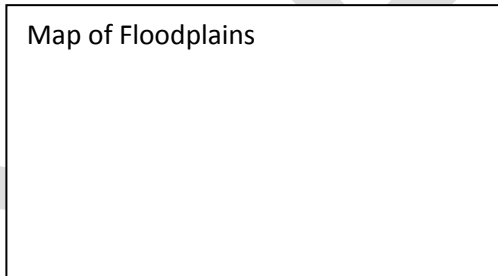
Wetlands offer multiple benefits including floodwater storage, biological purification, and important wildlife habitat for a number of species of plants and animals. Wetlands are delineated for Groton’s mapping using hydric soils – poorly-drained and very poorly drained soils – based on mapping from the NRCS. Both soils types are strong indicators of jurisdictional wetlands per state and federal regulations.



The term jurisdictional indicates that State and Federal laws regulating wetland uses and impacts exist, providing some level of protection from development.

The map to the left displays hydric soils in Groton. Note how the pattern of wetlands across the study area is somewhat concentrated in certain areas, especially associated with watercourses such as the Cockermouth River.

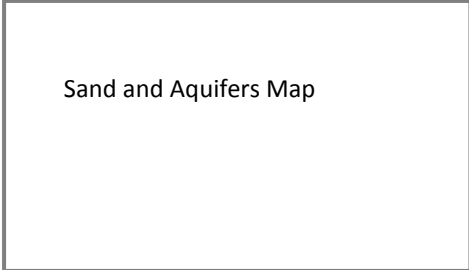
Floodplains provide floodwater storage and transit, and are home to unique natural communities. The map below displays the location of all 100-year floodplain areas in Groton as determined by floodplain insurance mapping originally developed by USGS. Typically 100-year floodplains are found in close association with larger streams and rivers such as the Cockermouth River.



Drinking Water Resources

Sand & Gravel Aquifers exist in Groton, as a result of sediment deposition in major the river valleys following the last glacial age. As opposed to bedrock aquifers, these surficial deposits represent one of the most important groundwater resources in the state, and have been developed for high-yield municipal water wells in many communities. The entire land surface overlying the aquifers represents a *primary recharge zone* with obvious implications for groundwater quality and quantities depending upon land cover and land uses occurring on this recharge zone.

Due to the nature of materials and the thickness of an aquifer, some areas indicate greater potential flow (transmissivity) of groundwater water to a well, and therefore a greater water supply productivity. These zones are also most prone to the rapid movement of contaminants that find their way into the groundwater, and therefore retaining natural land cover and non-commercial/industrial land uses is important.

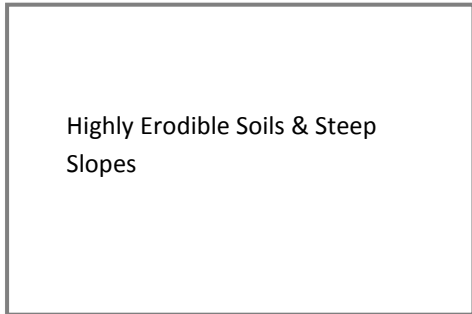


The map to the right shows the aquifer zones in Groton. Note the large formations in the Cockermouth River valley.

Steep Slopes & Highly Erodible Soils

Steep Slopes in excess of 25% gradient are not buildable due to limitations and elevated risks of severe land disturbance from siting roads and buildings. Slopes in the range of 15% to 25% are considered a cautionary zone, and require careful engineering design to mitigate impacts, especially storm water runoff and erosion.

Steep slope areas are also home to unique natural communities in certain places where nutrients have accumulated in pockets, or where cliffs and talus slopes have formed. Such formations also offer den sites for a number of wildlife species, and are important winter sunning sites for bobcats.



Slopes in excess of 25% gradient are shown in red in the map to the left. Note that much of the terrain within the Groton is classified as steep slopes and is also associated with highly erodible soils (see below).

Highly Erodible Soils have been charted for erosion potential as part of a State program to identify land areas requiring special management and lot sizing (see Appendixfor a chart)

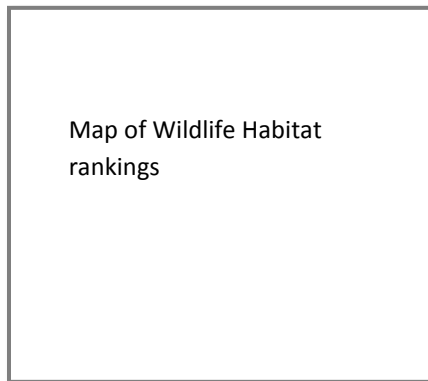
These soils are known to erode rapidly and extensively if disturbed, due to their physical properties and slope conditions. Highly erodible soils are of great importance to water quality as they may cause adverse impacts from sediment and nutrient loading in lakes, ponds, and streams.

Of special concern are lands where steep slopes and highly erodible soils are both present. The map above and to the right shows slopes greater than 25% overlaid on the highly erodible soils. These areas should be of high priority for land planning officials, limiting or prohibiting development. Preservation of the natural land cover to ensure that headwater streams and other surface waters are not impacted by erosion can be secured by land conservation and zoning, subdivision and Site Plan regulations, and road design standards, etc.

Wildlife Habitat

Wildlife Habitat Quality is a component of the N.H. Wildlife Action Plan (NHWAP), which has mapped areas statewide for intrinsic habitat quality and condition. Tier 1 areas are considered the best in the state; Tier 2 areas are best in the bio-region; and Tier 3 is designated as supporting landscapes that act as a buffer to protect the integrity of the first two tiers.

The Town of Groton has a significant amount of highest-ranking to high wildlife habitat with rich biological diversity, high-value landscape, and low human influence. Loss of habitat is one of the biggest threats to species. Preventing and/or carefully planning and regulating the following uses can significantly protect habitat: motorized recreation use and future build-out, including residential and business; infrastructure build-out and the installation of renewable and non-renewable energy sources and communication infrastructure. Averting habitat destruction must be a priority for Groton decision makers.

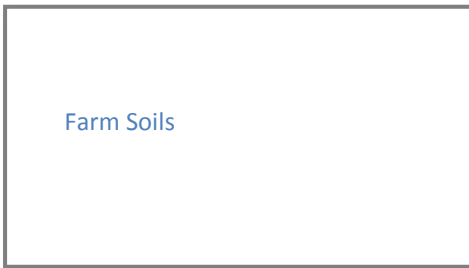


Habitats in Groton include a large amount of mixed pine/hardwood, northern hardwood-conifer, lowland spruce-fir.

and floodplain forests, grasslands, cliffs, rocky ridge or talus slope, wet meadow/shrub wetlands and peat lands. Many common species use these habitats including white tailed deer, moose, black bear, gray fox, and American crow, to name a few. The lowland spruce-fir habitat and dense hemlock forests provide prime deer wintering areas, which are critical for this common species to survive harsh winters.

Most Productive Farming & Forest Soils

Prime Agricultural Soils are scarce statewide, comprising only about 6.5% of the state's land area, and typically occurring in small and scattered pockets of soil. The 6.5% figure relates to two NRCS classes of agricultural soils: prime agricultural soils (the best soils), and soils of statewide significance (second tier but also productive), at 3.5% and 3%, respectively.



Prime farm soils are shown in maroon on the Groton map to the left. Most of these areas in Groton are already developed for non-farm land uses. Where productive farming soils still exist, it is important to consider the potential for future local food production as one of several conservation priorities in our Town.

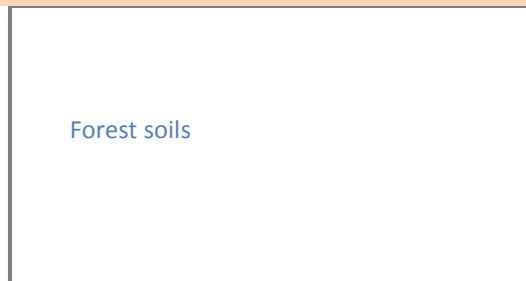
Most Productive Forest Soils provides economic income for the Town, while also providing timber harvests and sustainable income for both landowners and those working in the forest products industry. The productivity of forest soils is an additional consideration for ecological significance since productive soils tend to exhibit more diverse natural communities and for recreational benefit, because most of these lands in Groton are open for hunting, hiking, fishing, and snowmobile use.

Annual Taxable Timber Harvest

A good measure of the economic benefit to Groton that commercial forestry provides is the stumpage value generated through the state Timber Tax Program (RSA 79: 10-12). Through this program the town is eligible to receive 10% of the stumpage value cut in the town. Between 2000 and 2016 the value of the timber tax for Groton was \$.....

The map to the left ranks soil groups in Groton as follows:

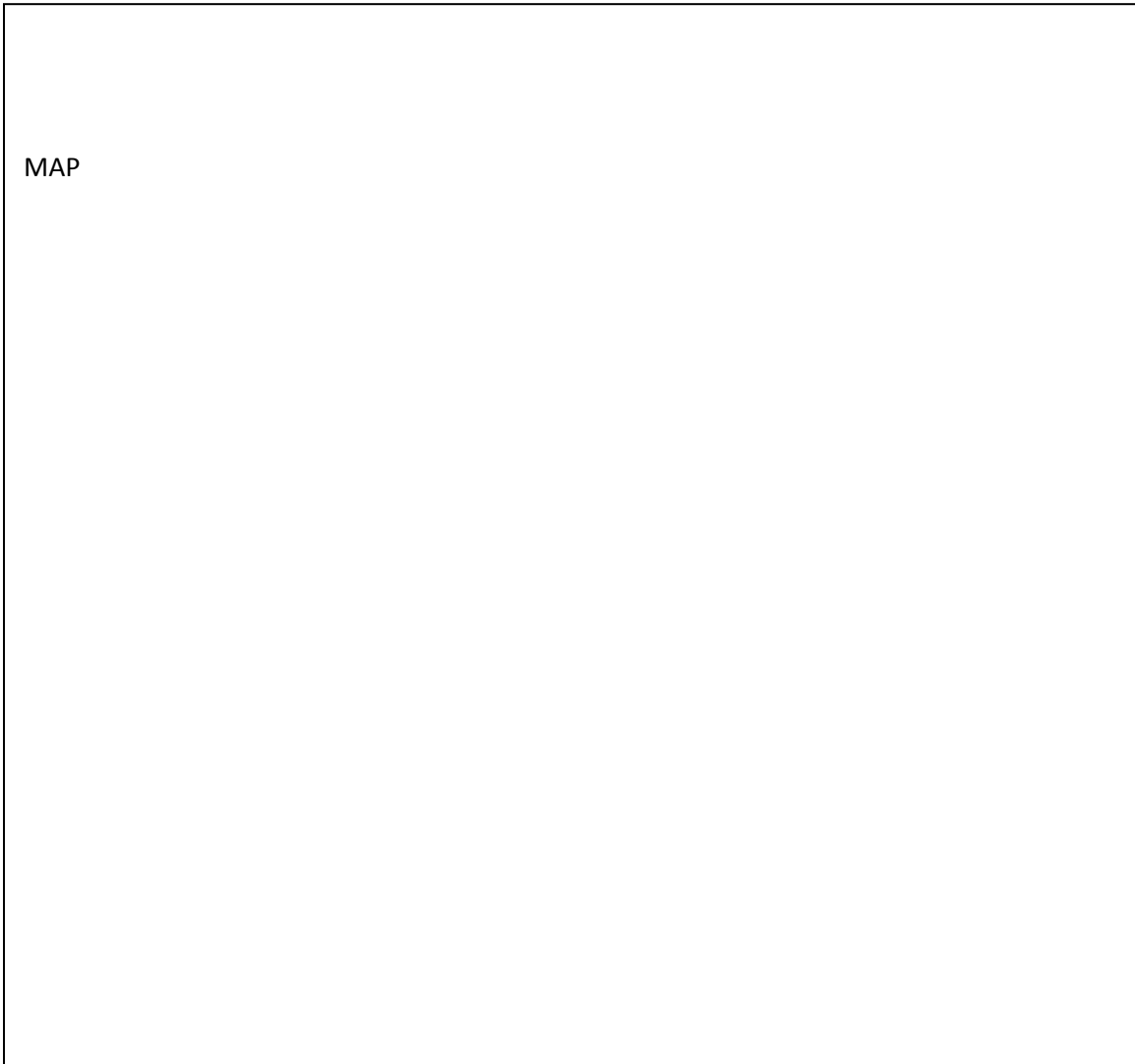
- 1A – Loamy, more fertile (in pink)
- 1B – Sandy, Less fertile (in dark green)
- 1C – Sandy/Gravelly, pine soils



Interpretation

A review of the various natural resources highlighted in the previous section gives an idea of which factors are aggregating to co-locate. To assess how well the natural resource features considered in the analysis are currently protected, the map on the next page shows the co-occurrence values overlaid with conservation and public lands in green. The green color is somewhat transparent, so the darker colors of the co-occurrence map can be seen, giving an idea of where high-value resources are conserved. The

high-elevation areas along the border of Groton and Hebron are well protected. Resources in the Cockermouth River valley or along Halls Brook are not well protected, nor is the high ground in the western (Kimball Hill) or central area (Jewel Hill) of Groton.



Summary of Natural Resources

In making decisions important to community planning and/or conservation planning in Groton, considering the existing level of resource protection is critical. **Table 1** (below) summarizes the area of each resource feature, as well as its permanent protection. All known conservation transactions, up to year ending 2016, have been included in the analysis that the table represents. The statistics, of course, will change as more land comes under permanent protection.

Summary of Natural Resources Extent and Protection Status -- 2016

Description	Total Acres	Percent Land Area	Acres Protected	Percent Protected
Slopes > 25%	6,693	25.7%	1,671	25.0%
Slopes 15% - 25%	9,077	34.9%	2,148	23.7%
Highly Erodible Soils	20,290	77.9%	4,830	23.8%
Aquifer	605	2.3%	25	4.1%
Floodplain	175	0.7%	1	0.3%
Wetlands (Hydric Soils)	634	2.4%	120	18.9%
Riparian Buffers	2,981	11.4%	563	18.9%
High Quality Wildlife Habitat				
<i>Tier 1: Best in State</i>	11,622	44.6%	3,249	28.0%
<i>Tier 2: Best in Bio-region</i>	4,510	17.3%	1,212	26.9%
<i>Tier 3: Supporting Landscapes</i>	7,061	27.1%	1,183	16.8%
<i>Total</i>	23,193	89.1%	5,645	24.3%
Productive Forest Soils	16,713	64.2%	2,738	16.4%
Prime Agricultural Soils	232	0.9%	5	2.2%

FUTURE LAND USE

Preserving rural character and the Towns natural resources is the highest priority for the residents of Groton, as is controlling rising taxes. Contrary to general belief, planning for development, balancing growth and preserving land does not automatically equate to a revenue loss for the Town or a failure to use land in its “highest and best” use. Development is a double-edged sword. It broadens the tax base, yet at the same time, it puts an increased burden on the tax base with the inevitable need for infrastructure and other community services. That same pattern emerged from Groton’s 1997 Cost of Community Services study, [see Appendix _____](#), concluding that the tax revenue from residential property was insufficient to pay for the services residents demand or need. In other community services studies during the same period, the findings confirmed that undeveloped open space and some business uses provided more direct income to the towns than they required in services, thus underwriting the costs of residences.

In addition, a 1999 study by the Society for Protection of New Hampshire Forests showed that open space could be a positive economic factor, generating 16% of New Hampshire’s jobs, 35% of state and local taxes, and 25% of New Hampshire’s gross state product through activities such as forestry, tourism, hunting, fishing, recreation, vacation homes, and agriculture. The forestry study compared the costs of open space land, business development, and residential development for 11 New Hampshire towns. For every tax dollar those towns earned, they spent \$1.08 on residential areas, \$.39 on business areas, and \$.52 on open space areas. In other words, trees don’t call ambulances, send children to school, or demand other town services.

PLANNED DEVELOPMENT

Land Suitability Goal

Land planning decisions and Groton's growth should be based on land development suitability, which designates areas of the Town as appropriate or least suitable for residential build-out, business development and conservation/recreation.

Land Suitability Objectives

1. GIS co-occurrence maps should be used as key decision-support tools when approving and /or rejecting subdivision and other land use applications, appeals and other applications to the ZBA, and permitting and building applications
2. Town Boards and commissions should require applicants and appellants to identify a parcel's mix of natural resource characteristics in order to determine if the parcel, or parts thereof, should be developed, excluded from development, permanently protected or undergo only low density or restricted development
3. Land with less environmentally and culturally sensitive values, can be designated as more suitable for higher density development and/or low impacting business use (as long as the business is consistent with the aesthetics of the surrounding area)
4. All Town officials should support the Conservation Commission to conduct a Natural Resource Inventory (NRI) to establish conservation focus areas for future conservation efforts
5. As part of the NRI, Town officials should encourage and support surveying wetlands or other special areas to identify rare or threatened plant and animal species and exemplary natural communities
6. Town officials should encourage land owners to conduct detailed property inventories for exemplary natural communities, rare, threatened or endangered species and other wildlife habitat features

Town Growth Goal

To promote a pattern and arrangement of land use consistent with

To use traditional zoning, architectural standards and innovative land use controls under RSA 674:21 to promote planned, orderly development consistent with land suitability, and the highest priorities expressed by Groton's residents.

Town Growth Objectives

1. Protect and enhance the natural benefits that open space/forests provide: clean water and air, natural ecological processes and habitat, flood and erosion control, and carbon sequestration to combat climate change
2. Promote holding land in current use, however, since that status doesn't permanently protect the land or prohibit future development, the Town should direct all Land Use Change Taxes (LUCT) into a reserve fund for purchasing and permanently protecting land identified to have high conservation value

3. Maintain access to continuous landscapes for nature-based enjoyment and other recreation
4. Provide extensive connected forest habitats for plants and animals pressured by development,
5. Provide rare habitats for a diverse array of plants, animals, and micro-organisms
6. Safeguard lands of natural, cultural/historical, and spiritual significance
7. Safeguard Groton's ridgelines
8. Zone rural districts suitable for forestry and large lot (50 plus acres) residential development.

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IV. ROADS

Groton's roads are a mixture of paved and gravel ways, identified according to the state administrative classification system as the chart below indicates:

Class	Description	Centerline Miles	Lane Miles
0	Private Roads	14.956	14.968
II	Secondary Roads	8.289	16.578
V	Local Roads	12.585	22.968
VI	Local Not Maintained	6.528	6.554
	TOTAL	42.358	61.068

The administrative classification system, presented in RSA 229:5 of the New Hampshire State Statutes, defines governmental responsibilities for construction and maintenance purposes, authorizing towns/municipalities to spend money to repair Class IV and V highways, not Class VI or private roads.

Appendix sets out a listing of all Groton roads, their classification and an approximation of the miles by length, as of year ending 2015.

A town's roads and highways are a means of access to work, shopping, leisure activities and home. They must also support access for first responders and fire/other emergency apparatus. They should allow the safe, convenient, and efficient movement of pedestrian, bicycle and vehicle traffic within and through the community, while discouraging through traffic on residential roads. Lastly, in planning for weather related and other natural occurrences, road construction should enhance storm water management, while the layout of roads should provide ingress and egress by connecting secondary roads wherever possible and practical. Roads that do dead-end, should not be longer than one thousand (1000) feet and must provide turn-around points and a cul-de-sac having an outside roadway diameter of at least one hundred thirty (130) feet, except where geographic constraints require an alternative design.

Implications

Existing and future road characteristics and conditions have important implications for the future.

- Access to a particular area via the roadway network creates the potential for development.
- Roadway maintenance and reconstruction expenditures usually represent a substantial item in the municipal budget.
- Significant bio-diversity and environmental damage, along with wildlife habitat can be destroyed/disturbed by a road network that results in fragmentation of land, disturbance of natural resources, and/or damage from erosion resulting from construction effecting steep slopes.
- Significant public safety issues and access for first responders, fire and emergency apparatus may occur if Groton's network of roads (private and public) is poorly planned, constructed and maintained.

The objectives below recognize the need to develop a transportation infrastructure for motorized and non-motorized users alike, which is safe, convenient, and accessible, while maintaining Groton's rural character.

Road Goal

To provide an adequate, scenic and well-maintained road system that will facilitate the safe movement of pedestrians and both motorized and non-motorized traffic, and that will continue to provide access to existing land use as well as support future land use without causing bio-diversity destruction of plant, wildlife habitat or other environmental damage.

Road Objectives

1. To better manage road drainage and runoff issues and wherever possible and practical eliminate erosion by minimizing and controlling the number and location of future points of road entry/driveways (curb cuts) to said roadways.
2. To encourage and facilitate safe pedestrian and bicycle movement throughout the town.
3. To promote compatibility between future growth, land use and road expansion by:
 - encouraging housing and commercial development in areas which can be supported by the existing roadways, and
 - regulating Groton's road network to maintain and enhance the scenic and rural character of the Town by preserving existing stone walls, requiring vegetative buffers and development set-backs, and perpetuating gravel surfaced roads and scenic/country lanes where appropriate.
4. To maintain and support, where practicable, Groton's plan and schedule of repairs, maintenance and improvements for the Town's roads and bridges, which includes adequate funding for personnel, materials, and equipment.
5. To seek to meet the current subdivision plan specifications regarding road construction while always prioritizing, where practical, the maintenance of Groton's rural character.
6. To seek to meet (D.O.T.) Department of Transportation standard specifications for road and bridge construction, according to the latest edition of the policy and procedures for driveways and other accesses to the state highway system, while always prioritizing, where practical, the maintenance of Groton's rural character.
7. To incorporate best management practices (BMP) for road construction, repairs, maintenance and improvements for the Town's roads and bridges.
8. To plan for weather related and other natural occurrences, road construction should enhance storm water management, while the layout of roads should provide ingress and egress by connecting secondary roads wherever possible and practical.
9. To ensure the safety of residents, roads that do dead-end, should not be longer than one thousand (1000) feet and must provide turn-around points and a cul-de-sac having an outside roadway diameter of at least one hundred thirty (130) feet, except where geographic constraints require an alternative design.

V. HISTORICAL AND CULTURAL RESOURCES

Introduction

A master plan tends to emphasize those factors that influence the physical growth and economic status of the town. Woven into the fabric of the community, however, are the historical and cultural resources that work to make the community a better and more enjoyable place to live and help to define a sense of place. This section was prepared in recognition that historical and cultural resources play a critical role in our town's identity and quality of life. Knowledge and preservation of these assets will make us more richly human in our private lives, wiser in our public choices, and inform future planning.

Groton's historical and cultural resources are but one part of the Town's total resources. Like many other nonrenewable assets, they are capable of being preserved or vanishing with a single action. The progression of time has already overshadowed many of Groton's historical and cultural resources. The buildings that have been preserved (Schoolhouse No. 4 and Groton's Town House), along with mining sites, cemeteries, artifacts, photos and documents embody the sacrifice and privation through which earlier generations created and bequeathed a valuable legacy to the present generation, they are all worthy of preservation. For the Town's benefit, the Groton Historical Society (GHS) has spearheaded all of the efforts, 'preserving Groton's past for the future,' helping to save our beloved Town House and restoring Schoolhouse No. 4 for use as a museum for the many donated artifacts, genealogical files and photos that enrich the Societies collections. The GHS also conducts programs promoting a wider knowledge of town and state history. Without this group, our historical knowledge, which is no more and no less than carefully and critically constructed collective memory, along with preserved physical structures and objects, would forever be lost to Groton residents.

Historical Overview

Settlement of the Town

Groton originated from the Cockermonth Grant given in 1761 by King George III to Governor Benning Wentworth. Charters for the settlement and improvement of the territory were granted to several proprietors: George Abbott followed by John Hale. However, the settlement of the Town did not comply with the charter requirements until 1770, under Phineas Bennett, James Gould, Ebenezer Melvin, Jonas Hobart, Samuel Farley and others.

The territory grew rapidly and by 1773 the population was 107, climbing to 178 by 1775. In 1776, the year of independence from Great Britain and the founding of the United States, Cockermonth was already moving toward a time of prosperity. The first sawmill was built in 1771, followed by one in North Groton

and the first gristmill on Cockermouth brook. An iron foundry and a distillery were also in operation in the late eighteenth century. Groton was also an agricultural town with land used primarily for select crops, grazing sheep and forestry. The principal crops were corn, oats, potatoes, and buckwheat. A larger portion of the territory was managed as woodlots, mainly beech, birch, maple, ash, spruce, and hemlock, making lumber production an important industry through the nineteenth century (Child 1886:288-289).

Many of the earliest settlers came from Hollis, NH, a territory created by lands subdivided from Groton and Dunstable MA. That heritage led to renaming Cockermouth to Groton in December 31, 1796 with the act of Town incorporation.

By mid-19th century, Groton had a population of 776 with eight school districts and seven common schools. There were two villages. Groton was located in the southeastern part of the town on Cockermouth Brook, with three saw- and shingle-mills, a blacksmith shop, a doctor's office, and about 20 dwellings. North Groton, was on Hall's Brook, where a white clap boarded church (North Groton's Union Meeting House) shared by the Congregationalists and Baptists stood, along with a store, a machine shop, a saw- and shingle-mill, a blacksmith shop, and numerous dwellings. During this period, two mills opened along Clark Brook in Groton Hollow. B.P. Hard's mill, built in 1865, was manufacturing ice hooks, hoe handles, and framing pins, while Charles Spaulding operated a lumber mill that produced one million square feet of lumber per year.

As a thriving and productive Town in the nineteenth century, Groton's system of roads made commerce possible. Groton was a major mica-producing district in the county (Child 1886:289-290) and as one of the oldest pegmatite locations in New Hampshire, the Town's history as a mica and feldspar region for over 120 years was the flower of New Hampshire's mineral wealth.

By 1900 however, as with many hill towns, the population had dropped to around 500 (U.S. Census 1900a). By 1930 the population had declined to just over 200 people living in 41 dwellings, but farming and mica mining continued (U.S. Census 1930a).

Public Buildings

Many Groton residents view the rehabilitation and continuing use of local landmarks as essential to the identity of the community. Architecture is a direct and substantial representation of history and place. By preserving historic structures, we are able to share the very spaces and environments in which the generations before us lived. Historic preservation is the visual and tangible conservation of cultural identity.

In addition to solidifying a community's past, preservation can help strengthen a community's present and future. Historic buildings help create vibrant, cultural settings that can be the centerpiece of

Palermo Mine

Significant work for locals was provided after the first mine was opened by the Hartford Mining company from 1878 to 1888. Later, the Palermo Mining Company of New York bought it, operating "Palermo Mine." until General Electric bought the mine in 1898, working it during the two World Wars. Known as the GE Mine, it produced muscovite, microcline and beryl. The name reverted to Palermo Mine when the Ashley Mining Corp. leased it from GE from 1945 to 1958

community life: a place to gather, discuss and decide relevant policy and Town direction or a place to be entertained, learn and generally strengthen community ties.

Groton Town House

The Groton Town House has served the town as a location for town meetings and other gatherings, with the exception of a 5-year period between 1997 and 2002, since its completion as a meetinghouse in 1797. Prior to the construction of the meetinghouse, both town meetings and public worship were held at private houses, barns, or the tavern of Abraham Buell; the locations for these gatherings voted upon at town meetings.

The Town House as it exists today is a portion of the upper or gallery level which would have extended around three sides of the building to provide good views of the pulpit. In eighteenth-century meeting houses, the gallery pews were box-like enclosures that were privately owned, auctioned off to raise the funds necessary to erect the building.

Today, no collective memory or photos of the appearance of the original building exists, nor are there historical records to explain why the meeting house dimensions were twice changed. The conversion was achieved by removing the bottom of the meetinghouse frame and lowering the upper half to rest on the foundation. The second alteration of the building occurred in 1906-07 when one end was removed, shortening the town house by about twenty-one feet. Before the reduction, it had a floor plan measuring forty-two by fifty-three feet, as stipulated by vote of the assembled on December 22, 1794.

Yet during a record and structural examination in 1998 by James Garvin of the NH Division of Historical Resources, (see resource listing citing Garvin's Report) documentation and physical evidence left no doubt that Groton's meetinghouse was a once stately two-story structure, typical of meetinghouses built in thriving eighteenth century communities.

The reduced building remained in use until 1997 in essentially the condition in which it was left in 1906-7, and although "modernized" with privies in 1921 and electricity in 1940, the building continued to be heated by wood-stove. The meetinghouse ceased to be used for town meetings in 1997 because of noncompliance with present day fire code provisions, but these deficiencies were remedied. Because of its rarity as a building type and its symbolic association with over two hundred years of community life and government, the Groton Town House underwent a three-phase restoration/construction process and was returned to public service as a Town Meeting House. It now serves as Town and Police offices and continues as the site of debate, decision-making, and community gatherings for the people of Groton.

Schoolhouse No. 4

In June of 1995, the GHS bought the North Groton 1839 Schoolhouse No.4 to restore it. Architectural historians and preservation consultants advised the GHS how best to proceed, and for two decades, the cycle of fundraising and restoration continued.

During this time, the GHS collections of artifacts, genealogical files and photos grew. One of the most notable treasures is the church bell, weighing 1,000 pounds. Cast by Henry N. Hooper in 1858 in the iron foundry acquired from Joseph Revere, son of Paul Revere, the bell originally hung in the tower of North Groton's Union Church.

This modest, one-room schoolhouse served only a one- to three-mile radius when first constructed since that was all that a youngster could be expected to walk. While fulfilling its intended roll in education was important, the school schedule was fashioned around harvest time and spring planting time. When in session, a single teacher taught academic basics to several grade levels of boys and girls, and managed duties of teaching and running the class-day by relying on the older children to fetch wood and stoke the stove that warmed the students. The very last class to graduate from School No. 4 in 1940 must have done so with bittersweet feelings, excited for their own futures, yet knowing their beloved school that had existed for 101 years was closing. Little did they know that School No. 4 would also have a future.

Historical and Cultural Preservation Goal

To preserve and protect the Town's historical buildings, sites, features and cultural heritage.

Preservation Objectives

1. Encourage historic preservation so that Groton's heritage is carried forward.
2. Continue to fund the Groton Historical Society. The Groton Historical Society's (GHS), mission to preserve Groton's past for the future, makes this non-profit organization a valuable Town resource and partner to affect our historical and cultural preservation goal.
3. Encourage the erection of markers, under the State Historic Marker Program, as a good way to inform residents and visitors about significant people, places and events in Groton's past.
4. Designate select Groton roads as scenic per RSA 231:157. New Hampshire State law enables a community to designate any road as scenic unless it is a Class I or II highway.
5. Consider adopting innovative land use controls. RSA 674:21 gives communities authority to adopt a variety of innovative land use controls that may support the preservation of community character and consequently historic resources. The transfer of development rights is another strategy that may be used to help a community retain its historic character.
6. Consider the acquisition of important historical sites, such as many of the mine sites, cellar holes, ETC. for conservation and preservation purposes in limited but critical cases. Funds to assist with land and building acquisition could come from the State grant programs such as the Land and Community Heritage Investment Program (LCHIP) as well as from other sources.
7. Investigate protection measures for Groton's Class VI and other abandoned roads, which were often the location of historic development, and which today can serve as recreational trails for Groton's citizens. The stonewalls, cellar holes, and large trees that are often located along these Class VI roads should be safeguarded from destruction or removal.
8. Preserve and maintain the Town cemeteries.

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10. Preserve and maintain the Town cemeteries.

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VI. TAX BASE

The tax base of a town is the measure upon which the assessment or determination of tax liability is based. It refers to that pool of assets -- houses and /or real estate, businesses and utilities, ETC. -- that is the collective value of all taxable interests in a community. The economic health of a town rests upon its tax base and is essential to both its overall well-being and its future. If planning officials fail to understand the value of a diversified tax base, residents alone will carry the full liability. With population growth and rising costs of community services, the town may become vulnerable, subjecting residents to ever-increasing property taxes.

Planning officials, however, need to be realistic in efforts to promote a diversified tax base and alert to other metrics that can play a significant part in the town's well-being. The suitability for business development relates directly to Groton's location, population, topography and natural resources, proximity to major transportation corridors and the region's vitality as a whole. In addition, what a business pays in taxes indicates only at what level that business is tax bearing. Planning officials must also compare the tax generated to the expenses (cost of community services) required by that particular land use when analyzing if it is tax positive and will help to keep taxes low.

Lastly, officials should only permit future development after considering parcel suitability and balancing land uses to ensure the development is appropriate and complimentary to one another. A significant driver that should inform every decision to provide special exception, issue building permits and allow future development is the Vision and Principals of this masterplan and the stated preferences of its residents. They are grounded in the mapping and analysis tools incorporated and attached to the Plan, which identify areas in Groton that are more or less suitable for development based on natural resource features that act as constraints to development. Every region of Groton, each parcel of land has its own suitability for development, while other parcels are unsuitable, development leading to negative environmental or aesthetic impacts. The variables that determine the suitability of a parcel for development include, among others; soil characteristics, topography, water resources, wildlife and vegetation, as well as consideration for noise, fire and public safety. Retention of the quite small town rural character of Groton, preservation of the environment, the forested expanses, water resources, diversity of plant and wildlife and the beautiful mountain ridgelines must always be a central controlling factor with every decision.

Historical Prospective - 1997 Cost of Community Services Study

To consider how to diversify its tax base and better understand the relationship between economic base and land use decisions, Town officials conducted a Cost of Community Services study in 1997, [see Appendix _____](#). The study compared the costs of providing infrastructure and other public services (cost of services) to different types of land uses, such as commercial/industrial, residential, and open space. It also characterized the land use as tax positive or tax negative; asking if the tax revenues the land use provides were more or less than the costs of services it requires.

The general pattern of this study, as well as similar studies conducted elsewhere in NH, is that the income from residential property is insufficient to pay for the services that residents demand or need. Undeveloped open space and commercial/industrial land use provide more direct income to their communities than they require in services, thus underwriting the costs of residences. A study focusing on the impact of open space, conducted in 1994, that analyzed statewide data, concluded on average, that property taxes are higher in communities with larger tax bases and more taxable property, more residents and more commercial/industrial development. Conversely, property taxes are lower in towns with more undeveloped land per year round resident. The study also documents that vacation housing has a measurable economic benefit. (Ad Hoc Associates (1994) Building a Healthy Squam Lakes Economy, Salisbury VT 05769).

However, other community studies indicate that short and long-term negative economic impacts of commercial/industrial land use were missed in the simplification of this type of study. Further detailed research of the many impacts of land uses in Groton is needed, particularly a consideration of our largest businesses (see table 1) as well as other changed land use in Groton (increased current use/conservation). The potential cost of exigent (among others, police and fire emergencies) and decommission factors that are associated with now having two high-risk industries (Dynamite/explosives storage and Industrial wind turbines) as part of Groton’s tax base could change the ratios and result in different outcomes. Several other factors crucial to consider include the cost to the community of reclaiming damaged/contaminated lands, reduced assessments on residential property, as well as negative aesthetics that might affect community character. Adding these to a calculation of the costs of services these land uses require could eliminate or at the very least decrease, the advantage of what appears to be high tax bearing/tax positive land use.

Tax Base as of Year-End 2015

Since our town, and most of our neighboring communities have low populations, are rural, forested and hilly; we can expect that business development will definitely not take the form of big-box retail strip mall development, or restaurant choices, professional offices, medical or smaller retail establishments.

Table 1 displays Groton’s business tax base as of year-end 2015.

Table 1

Large National/Multi-National Businesses	Product/Service	Employees	Established
Numerous Forestry businesses	Logging		
Maxam	Dynamite/explosives	6	2008
Groton Wind LLC (AvanGrid Renewables a subsidiary of Iberdrola)	Wind Energy Facility 48 Megawatts	6	2012
Electric Utilities	Power Transmission Infrastructure & Lines		
Local Businesses	Product/Service	Employees	Established
Madden Auto Service LLC	Auto Repair	1	2015
Buck-N-Horse Campground	RV & tent sites with trails on 55 acres of woodland	1 or more	2005
Gordon Coursey & Sons LLC	Logging, Land Clearing Log Home Building	6	2005
Ethier Excavating and Blasting	Excavation, land and site development	1-2	1984
TLC Tree & Crane Service	Tree care & removal Land clearing	5	1980
Numerous home-based businesses	Lawn Care & other Service Related		

Profile for Groton's Two Largest Businesses

Iberdrola Renewables, a leader in wind generation constructed twenty-four (24), 2-megawatt wind turbines, installed along the north/south border of the east side of the town. Each turbine is on a 256 foot tower with each blade measuring 139 feet long, “for a total turbine height from foundation to blade tip of approximately 398 feet” (depending on the foundation size). During the construction phase, the project created roughly 150 jobs. Groton Wind now employs 5-6 permanent employees and continues to provide “local contracts for supplies, maintenance and plowing.”

The turbines and connecting maintenance roadways are located on leased land, which when removed from its original current use status gave the Town a Land Use Change Tax (LUCT) of \$230,897. The new designation on the land has meant a net increase in tax revenue for the Town of----- ?? In addition, rather than being taxed on the infrastructure (turbines) or assessed as a utility, the facility makes a Payment In Lieu of Taxation (PILOT). Beginning when the energy project went online, Iberdrola's contracted obligation to Groton of quarterly payments, billed at the rate of \$11,000 per megawatt (MW) or \$22,000 per turbine, totaled \$528,000.?? Iberdrola is also subject to a 2.5 percent annual increase?? in the PILOT. While the county tax burden for Groton residents will likely increase?? because of the wind project, that cost should be offset by the PILOT payments – leaving Groton with an annual net gain of more than \$428,000??

Maxam Explosives, is a manufacturer and distributor of commercial explosives. They received a special exception in 2008 ?? by the Groton ZBA on their application to site a storage facility on 3,600 acres covering several communities. This occurred prior to the adoption of Site Plan Regulations, a significant factor since the Planning Board was unable to consider siting guidelines for this project.

A portion of the 3,600 acres that Maxam owns is within Groton's borders including the access road, maintenance and office buildings and a portion of the explosive storage bunkers. As with Iberdrola, the placement of improvements on the property resulted in a land use change and a LUCT payment of \$---- ? with annual tax payments from Maxam equaling \$-----?? Maxam is expected to maintain a year-round workforce of 5-10 employees.

Both of the above land uses are highly tax bearing and appear to be tax positive as well, since the revenues these uses provide are more than the costs of services they require. Yet as we have seen in the previous section, more could be learned by repeating a cost of community services study.

Conclusions

Groton's 2012 community focus session and survey conclusions indicate respondents place little to no importance on encouraging new business opportunities in town although they do want to keep property taxes to a minimum. Two of the most important issues to the residents of Groton are the preservation of the small town rural character of the community, including the traditional look and feel of the town, as it currently exists and the natural resources, including preservation of the environment.

For planning officials to accommodate resident preferences while increasing opportunities for growth and diversification of Groton's tax base the following concepts and zoning changes should be considered:

Performance Zoning. This approach to zoning is an alternative to conventional zoning approaches. As opposed to developing a prescriptive zoning scheme, which dictates permitted uses and uses by special exception, performance zoning allows a wide range of uses, if such uses meet environmental, aesthetic, and other performance standards. In addition to providing specific performance standards, such ordinances also include incentives for developers to build better projects. Common examples include increased density and other dimensional bonuses in exchange for architectural design features, renewable

energy features, and greater landscaping and vegetative buffers, donation of on-site or off-site property for conservation open space and/or public purpose.

Architectural and Design Performance Standards. Architectural design ordinances or guidelines help to ensure projects are more compatible with the community's character. These typically include height and other dimensional scale, landscaping, building façade, color and construction aesthetics including cladding, signage, lighting, as well as location and buffering of the building and parking.

Goals and Objectives

Business Development Goal

To consider limited business development consistent with the Town's needs and the residents stated preferences and in keeping with the Town's ability to provide services.

Business Development Objectives

1. To continue to refine the Town's ordinances and regulations so they are proactive regarding site and architectural design aesthetics.
2. To evaluate sites for business uses which have safe transportation access.
3. To evaluate and consider business uses which have a development potential rating that will not adversely affect soil characteristics, topography, water resources, wildlife and vegetation. The business must meet decibel, light, and signage standards set during Site Plan Review, as well as having suitable access for police, rescue and fire.

VII. GROTON HAZARD MITIGATION PLAN UPDATE 2014

The Groton Hazard Mitigation Plan Update (the “Plan”) was compiled to assist the Town of Groton in reducing and mitigating future losses from natural or human-caused hazardous events. The Plan was developed by participants of the Town of Groton Hazard Mitigation Planning Team, interested stakeholders, the public and Mapping and Planning Solutions (MAPS). The Plan contains the tools necessary to identify specific hazards and aspects of existing and future mitigation efforts.

HAZARD MITIGATION PLAN DEFINITIONS

“A natural hazard is a source of harm or difficulty created by a meteorological, environmental, or geological event.”

“Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards (44CFR 201.2). Hazard mitigation activities may be implemented prior to, during, or after an event. However, it has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

(Source: Local Mitigation Plan Review Guide, FEMA, October 1, 2011

The Plan is an **update** to the 2007 Groton Hazard Mitigation Plan. In an effort to produce an accurate and current planning document, the Planning Team used the 2007 Plan as a foundation, building upon that Plan to provide more timely information.

Groton’s plan addresses the following natural hazards and human-caused hazards.

Natural Hazards

- 1) High Wind (Windstorms)
- 2) Flooding (Heavy Rain & 100-Year Events)
- 3) Severe Thunderstorms & Lightning
- 4) Tornado or Microburst
- 5) Flooding (Beaver Dams)
- 6) Flooding (Local Roads/Erosion)
- 7) Wildfire
- 8) Expansive Soils (Potholes)
- 9) Hurricane
- 10) Hailstorm
- 11) Flooding (Dam Failure)
- 12) Extreme Temperatures
- 13) Severe Winter Weather
- 14) Snow/Ice Slide
- 15) Earthquake
- 16) Drought

Human-Caused Hazards

- 1) Extended Power Failure
- 2) Hazardous Material-Transport

- 3) Epidemic & Pandemic
- 4) Hazardous Material-Fixed Location
- 5) Terrorism

Implications. The Plan is an important document; the drafting participants considered many factors before prioritizing mitigation and emergency strategies. They analyzed Groton’s geographic location,

topography and forested lands, to arrive at future natural disaster occurrence projections in Groton. Additionally, the planning participants reviewed the frequency and type of disasters the Town has been impacted by, including but not limited to flooding, lightning strikes, extreme temperatures, severe winter storms, severe wind and hurricanes.

They also recognized that potential exists for tornado, wildfire, and earthquake damage. Finally, the planning participants identified **Hazard Material-Transport** as the primary future human-caused hazard, due to materials being carried through town to the Maxam Explosives storage depot on Groton's steep, narrow and dark roadways.

The Plan of 2014 is a preparedness/planning tool to use to reduce future losses from natural and human-caused hazards as required by the national Disaster Mitigation Act of 2000. The Plan does **not** constitute a section of the Town's Master Plan, however, mitigation and emergency strategies from the Plan should inform Master Plan updates, and as such, the Planning Board will consider specific concerns during its planning process and decision-making.

HAZARD MITIGATION GOALS AND OBJECTIVES

Goal

To reduce Groton's exposure to natural and human-caused hazards.

Objectives

To introduce and implement effective hazard mitigation measures identified in Groton's Hazard Mitigation Plan of 2014 to accomplish the Town's Goals.

To remain informed of the mitigation and emergency strategies from the Plan and as necessary, planning decisions will incorporate mitigation elements.

Of the Plan's identified priorities for the Planning Board to address, the following (taken directly from the Plan) are ranked highest:

- *Problem Statement: No ordinances currently exist that restrict or prohibit development in steep slope areas and other areas of town that are difficult to reach. Action Item - Establish a steep slopes ordinance to restrict and/or prohibit development in difficult to reach areas in order to maintain safe access for fire apparatus to wildland-urban interface neighborhoods and properties and to mitigate storm-water run-off, flooding and erosion.*
- *Problem Statement: Emergency response to residential homes in remote and difficult access areas is often hampered by design of driveways. Action Item - In order to maintain safe access for fire apparatus to wildland-urban interface neighborhoods and properties, establish driveway standards that address slope, width and access.*
- *Problem Statement: Subdivision regulations do not address any requirements for onsite water storage, minimum fire flow, or fire breaks in wildland-urban areas. Action Item - Develop new subdivision regulations to require onsite water storage, minimum fire flow and/or fire breaks in the Wildland Urban Interface.*
- *Problem Statement: The Water Resource Plan has not been referred to as a guiding document when reviewing subdivision regulations. Action Item - Obtain a copy of the Water Resource Plan from NCRC&D and encourage referral to Water Resource Plan and maps when reviewing subdivision proposals.*

VIII. IMPLEMENTATION

According to RSA 674:2, III, the master plan may include the following section:

“(m) An implementation section, which is a long range action program of specific actions, time frames, allocation of responsibility for actions, description of land development regulations to be adopted, and procedures which the municipality may use to monitor and measure the effectiveness of each section of the plan.”

This section will assist the planning board and the selectboard, as well as other town officials to oversee the completion of the suggested implementation actions. Each of these actions has been assigned a timeline and a responsible party to assist with future evaluation of the progress on these tasks. A chapter reference has also been included to tie these actions back to their corresponding chapters.

This section of the master plan is dynamic and should be reviewed and modified as needed to re-align goals, set priorities and to measure the progress made on the implementation actions.

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Consider offering incentives to individuals, land holding and forestry companies to engage in forest based business activities. Those activities go a long way toward preserving rural character and open space and are the hallmark of New Hampshire's quality of life.	1-2 years	Planning Board, Zoning Board of Adjustment	Chapter Natural and Historical/Cultural Resources and Conservation
Implement a Steep Slope Ordinance	1-2 years	Planning Board	Chapter Natural and Historical/Cultural Resources and Conservation
Actively work with the state and other organizations involved in the Quabbin to Cardigan initiative to preserve large, undeveloped areas of Groton	Ongoing	Select Board, Planning Board, Conservation Commission	Chapter Natural and Historical/Cultural Resources and Conservation
Consider engaging a consultant to complete a Natural and Historical/Cultural Inventory, identifying wetlands, other natural features and historical/cultural resources	1-4 years	Select Board, Planning Board, Conservation Commission, Historical Society	Chapter Natural and Historical/Cultural Resources and Conservation
<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>

Establish a storm water zoning ordinance to control storm water runoff to our rivers, lakes, ponds, streams and subsurface waters.	1-2 years	Planning Board	Chapter Natural and Historical/Cultural Resources and Conservation
Observe the spirit and regulations of the State of New Hampshire's Rivers Management and Protection Program and Shoreland Protection Act as they pertain to the Cockermouth River, other waterways and Spectacle Pond.	Ongoing	Select Board, Planning Board, Conservation Commission	Chapter Natural and Historical/Cultural Resources and Conservation
Only allow development that complies with the State of New Hampshire Shoreland Protection Act and best management practices.	1-2 years	Select Board, Planning Board, Zoning Board of Adjustment	Chapter Natural and Historical/Cultural Resources and Conservation
Prevent vernal pools from being filled in or drained.	Ongoing	Select Board, Planning Board, Conservation Commission	Chapter Natural and Historical/Cultural Resources and Conservation
Require vegetative buffers between developments and surface water bodies.	1-2 years	Planning Board, Conservation Commission	Chapter Natural and Historical/Cultural Resources and Conservation
Consider an energy audit to set goals for energy reduction	1-2 years	Select Board	Chapter Natural and Historical/Cultural Resources and Conservation
Consider establishing point standards similar to those set up by the U.S. Green Building Council LEED certification to promote energy efficiency in future town construction.	1-2 years	Select Board, Planning Board	Chapter Natural and Historical/Cultural Resources and Conservation
Plan for pedestrian and bicycle connections.	Ongoing	Planning Board	Chapter Natural and Historical/Cultural Resources and Conservation
Implementation Action	Time Period	Agencies	Chapter
Consider implementing an Earth Excavation and Reclamation Regulations ordinance to add	1-2 years	Planning Board	Chapter, Earth Excavation

specific language and restrictive regulations governing the operation of earth excavation sites in areas overlying an aquifer			
Consider Earth Excavation and Reclamation Inspection Checklists to become part of Groton's Site Plan Regulations, to ensure inspections of active earth excavation site.	1-2 years	Planning Board	Chapter Earth Excavation
Consider conducting inspections of earth excavation sites to determine if they are inactive, reclaimed, and/or abandoned in such a manner that nature will reclaim them.	1-2 years	Planning Board, Select Board	Chapter Earth Excavation
Consider implementing preferred development zones: a Rural and Rural Conservation zone, a Residential District, Business and Commercial Zones	1-2 years	Planning Board	Chapter Future Land Use
Consider townhouse and/or cluster development that has a minimum of a 50% set aside of common open space placed in conservation easement	Ongoing	Planning Board	Chapter Future Land Use
Encourage the use of conservation easements to preserve undeveloped land.	Ongoing	Planning Board, Conservation Commission	Chapter Future Land Use
Periodically review the required minimum lot size, to ensure the preservation of the town's rural character.	Ongoing	Planning Board	Chapter Future Land Use
Develop reasonable restrictions that allow for home based businesses while protecting the property rights of other residential owners. To include: set-backs, frontage, parking, landscape and other vegetation buffers, signage, noise, lighting.	Ongoing	Planning Board	Chapter Future Land Use
<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter</i>
Consider implementing zoning in the form of set-backs and frontage requirements in the Residential District	1-2	Planning Board	Chapter Future Land Use

Consider implementing zoning in the form of requiring only a single housing unit per lot	1-2	Planning Board	Chapter Future Land Use
Review the regulations concerning accessory units in owner-occupied single-family homes.	1-2 years	Planning Board	Chapter Population and Housing
Consider encouraging a community farmer's market to enable town citizens to earn remuneration while helping residents to buy local, home grown vegetables and other products	1-5 years		Chapter Historic and Cultural Resources
Pursue infrastructure improvements, particularly for bridges, roads and communications.	Ongoing	Select Board, Town Departments	Chapter Economic Development
Consider encouraging the development of beautification programs for the town that tie the downtown elements together.	1-5 years	Select Board Volunteers and Recreation Committee	Chapter Economic Development
Reexamine the Special Exception process to determine its adequacy as the approach to proper land use management.	1-2 years	Zoning Board of Adjustment, Planning Board	Chapter Economic Development
Set development boundaries along a corridor. Ensure that any adjacent sensitive natural resources along a corridor will not be threatened by development.	1-2 years	Planning Board, Conservation Commission	Chapter Roads and Transportation
Interconnect developments. Discourage single point of entry developments.	Ongoing	Planning Board	Chapter Roads and Transportation
Consider shared driveways or interior streets in the review of lot layouts in a multi-lot subdivision.	Ongoing	Planning Board	Chapter Roads and Transportation
<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter</i>
Monitor existing land uses and review applications for new land uses to ensure that development is compatible with the road system.	Ongoing	Planning Board, Select Board, Highway Department	Chapter Roads and Transportation
Consider implementing a capital improvements program.	Ongoing	Planning Board, Town Departments, Select Board	Chapter Roads and Transportation

Consider the adoption of an impact fee programs to offset the costs of expanding services and facilities that the town must absorb when new homes, subdivisions or commercial units are constructed in town.	1-5 years	Planning Board, Highway Department, Select Board	Chapter Roads and Transportation
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