

Town of Unity, New Hampshire

Natural Resources Inventory



December 2018

Unity Conservation Commission and
Upper Valley Lake Sunapee Regional Planning Commission

Natural Resources Inventory Unity, New Hampshire

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1. Introduction

Unity is a rural town with a population of 1,700 covering 37.2 square miles in western New Hampshire. Unity remains rather undeveloped, especially in comparison to the surrounding towns of Charlestown and Newport, and City of Claremont. The forested hills serve as the headwaters for the Little Sugar River and the combination of lakes, streams, wetlands, open fields, and forests within Unity provide a diverse array of natural resources for human and non-human inhabitants.

The Unity Conservation Commission is enabled by RSA 36-A to “conduct researches into its local land and water areas” and to “keep an index of all open space and natural, aesthetic or ecological areas.” To accomplish these duties, the Conservation Commission completed a Natural Resources Inventory in 2008. In 2018, the Conservation Commission updated the Natural Resources Inventory. The current Commission members include Stan Rastallis, (Chair), Jenny Wright, Nancy Walker, and Charles Sisson.

This Natural Resources Inventory contains a visual and written description of the natural resources within the Town of Unity, as well as an analysis of the current and potential future protections for these resources. The information contained in this report can and should be used to:

- Educate and promote awareness about Unity’s natural resources,
- Document current conditions in order to track changes over time,
- Develop land conservation priorities for Unity,
- Provide a basis for master planning and land use planning decisions.

Unity, just as in all towns, relies on its natural resources for drinking water, agricultural production, construction materials, wood-based heat, flood control, and other necessary supplies. The natural resources of the town also promote a high quality of life through the quiet rural setting abundant with wildlife, scenic vistas, and recreational opportunities. Although the population of the town is projected to remain relatively constant during the next twenty-five years (from 1,650 in 2015 to 1,669 in 2040 per the NH Office of Strategic Initiatives), the Conservation Commission encourages the Town of Unity to protect its natural resources while anticipating continued growth.

The status and significance of natural resources and their protections do change over time, and this inventory should not be construed as a “final product.” The inventory includes a summary of what exists at the current time and recommends actions for the future; this document should be revisited periodically to update the inventory with newly available data, protections, and priorities for natural resources conservation.

2. Methodology

The Unity Conservation Commission developed this Natural Resources Inventory, with technical assistance from the Upper Valley Lake Sunapee Regional Planning Commission, in autumn 2018. Emphasis was placed on updating a basic inventory, consisting of readily available data. The Conservation Commission acknowledges that more work can be done in documenting more site-specific natural and cultural resources.

Information on the natural resources in Unity was derived both from statewide data sources and local knowledge. Corrections to the statewide data were made by the Conservation Commission. Information for the following natural resources and base geographic features was compiled:

- Political boundaries
- Infrastructure – roads, railroads, and utility lines
- Surface water features – rivers, streams, lakes, and ponds
- Topography
- Wildlife habitat land cover
- Soils
- National Wetlands Inventory
- Aquifers
- Public water supplies
- Wellhead protection areas
- Potential sources of water contamination
- Watershed boundaries
- Natural Heritage Bureau rare and threatened species
- Highly ranked wildlife habitat from the Wildlife Action Plan
- Floodplains
- Public/conserved land
- Local Resource Protection Priorities

Digital maps were created by Upper Valley Lake Sunapee Regional Planning Commission. A description of each resource was written based on the contents of these maps and associated information.

A review of current land protection methods and regulatory controls that are designed to safeguard natural resources was completed. Local regulations and planning documents were reviewed, and various types of conserved and protected lands in Unity were documented.

The Conservation Commission determined a list of future actions that should be undertaken in order to better protect Unity's significant natural resources.

3. Natural Resources

3.1. Geographic Location and Topography

The Town of Unity, NH is located in the southwestern corner of the State in Sullivan County. Unity is bordered by Claremont and Newport to the north, Goshen to the east, Acworth and Lempster to the south and Charlestown to the west. There are three village centers within the town: East Unity, West Unity, and Quaker City, which is in the southwest corner of town (Map 1, 2008).

The terrain of Unity is hilly, with streams running through the valleys between the hills. There are a few lakes and ponds in town, covering 0.2 square miles, or 128 acres; the land area of town is 37.0 square miles, or 23,806 acres.

3.2. Land Cover and Land Use

Unity is heavily forested (90% of the town land cover), composed of two major forest habitat types:

- Hemlock-hardwood-pine,
- Northern hardwood-conifer,

Roughly half of Unity is covered with a hemlock-hardwood-pine mixed forest, although this habitat type is intermixed with other forest types. Through the center of Unity, there is a mosaic of northern hardwood-conifer forest; Appalachian oak-pine forest is a small component of forest cover in Unity, in the westernmost part of town.

Other important land cover types are grasslands and wetlands, including peatlands and northern or temperate swamp, (Map 2, 2015).

Table 1. Habitat Acreages in Unity

Habitat	Acres	Aquatic Habitat	Acres
Appalachian oak-pine	50.9	Warm/cool lake	105.3
Grassland	1,446.5	Warm/cool pond	99.3
Hemlock-hardwood-pine	14,464.5	Coldwater rivers and streams	32.6
NLCD* Developed Classes	802.5	Warm/cool rivers and streams	65.6
Northern hardwood-conifer	6,002.3		
Northern swamp	197.6		
Open water	106.2		
Peatland	129.5		
Rocky ridge	120.3		
Temperate swamp	70.8		
Wet meadow/ shrub wetland	415.5		
TOTAL Acres	23,806.5		

*NLCD – national land cover dataset

Only three percent of Unity's land area was classified as developed or as other natural land cover, in the Wildlife Action Plan's methodology. Because these land cover types were developed using satellite imagery as well as other sources, there are limitations to the accuracy of these estimates. For example, a single house on a lawn surrounded by forest would likely be classified as forest, rather than developed. Herein lies the distinction between land cover and land use – though the land may be used as residential, it remains generally under forest cover.

Rural residential development is characteristic of Unity, with exceptions of clustered development around Crescent Lake and the institutional populations of the Sullivan County Home and Prison. Unity is connected primarily by local roads, although a few state roads do run through town: the 2nd New Hampshire Turnpike, which runs from Claremont to Lempster, Unity Springs Road, from Lempster to Newport, and West Unity Road, from the 2nd New Hampshire Turnpike south to the village of West Unity, and also a short section of County Farm Rd to the Sullivan County Nursing Home. Many roads are unpaved and many are Class VI roads that are not maintained; these contribute directly to the rural character of the town.

3.3. Unfragmented Land

Due to the pattern of development in Unity, there remain many large blocks of land that are not fragmented by roads (Map 3, 2008). The Nature Conservancy completed a New Hampshire Forest Block Model in 2006, whereby the size and location of large unfragmented blocks of natural land cover were determined for the entire state. The largest forest block in Unity covers more than 10,000 acres and extends north from Unity Center into Claremont and Newport. A small area of Unity west and south of Quaker City is part of a 7,500-acre-plus forest block that covers much of northwestern Acworth and part of Charlestown. Four other forest blocks over 1,000 acres are located in Unity.

Landscape fragmentation is detrimental to many species of wildlife, in terms of loss of habitat area, loss of habitat connectivity, increased potential for incursions of invasive or damaging species, and increased potential for vehicle-wildlife collisions as well as other undesirable human-wildlife interactions. The maintenance of large forest blocks is beneficial to both wide-ranging species such as black bear and white-tailed deer, as well as habitat-specific species that live in interior forests, such as wood thrush.

3.4. Watersheds and Surface Waters

A watershed is the area of land over which water drains to a certain waterbody. Watersheds can be defined locally or regionally. All surface waters in Unity ultimately drain to the Atlantic Ocean via the Connecticut River. The US

Geological Survey divides the Connecticut River basin into many watersheds, and even more subwatersheds. Using this system, there are several watersheds and subwatersheds within Unity, as designated in the USGS hydrologic unit system:

- The Sugar River watershed in the northern and eastern part of Town,
- The Cold River watershed in the southeastern part of Town,
- The Little Sugar River subwatershed in the center and west of Town, and
- A subwatershed of small streams that drain directly to the Connecticut River in the northwest corner of Town (Map 1, 2008).

Table 2. Watersheds in Unity

Watershed Name	Total Watershed Area (square miles)	Watershed Area in Unity (square miles)
Sugar River	276	10.55
Cold River	102	5.6
Little Sugar River	30	20.9
Small streams to Connecticut River	87	0.1

The Sugar River is used as a secondary water supply for the City of Claremont, and so the protection of the watershed is vital to the cleanliness of the drinking water. Over ten square miles of Unity, in the northern and eastern part of town, lies within the Sugar River watershed.

The Little Sugar River is very important to Unity as it drains most of the town and is also the largest river. The watershed of the Little Sugar River covers 20.9 out of Unity's 37.2 square miles. changes made to the Comprehensive Shoreland Protection Act (effective July 1, 2008) will protect the shorelines of the Little Sugar River along part of its course through Unity.

Crescent Lake is the largest body of water in Unity, which lies on the southern border of town with Acworth. The lake covers 116.2 acres, with roughly 48 acres in Unity. This lake provides recreational and aesthetic value to the residents living on the shores of the lake.

Gilman Pond in East Unity is valued primarily for its use as a water supply. This 67-acre pond serves as the water supply for Newport. Marshall Pond, which covers 13 acres in the central part of Unity, has value for its undeveloped and protected status; 230 acres around Marshall Pond and including the pond are protected by conservation easement. Marshall Pond is also a back-up source of water for fire fighting. All three lakes have some protection under the Comprehensive Shoreland Protection Act.

3.5. Wetlands

The State of New Hampshire defines wetlands by three characteristics: hydrology, soils, and vegetation. All three must be met in order to define an area as a wetland, according to the following definition, “those areas that are inundated or saturated by surface water or groundwater at a frequency and duration of sufficient to support, and do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

Since the arrival of Europeans in North America, the most common use of wetlands was conversion to other land uses. The devaluation of wetlands as a land cover type led to the loss of roughly 50% of all wetlands in the United States, and roughly 9% in New Hampshire. Today, the values of intact wetlands are more recognized, and range from flood control to fish and wildlife habitat. The New Hampshire Method for Functional Wetlands Assessment lists the following 14 “functional values” of wetlands:

- Ecological Integrity
- Wetland Wildlife Habitat
- Finfish Habitat
- Education Potential
- Visual/Aesthetic Quality
- Water Based Recreation
- Flood Control Potential
- Ground Water Use Potential
- Sediment Trapping
- Nutrient Attenuation
- Shoreline Anchoring and Dissipation of Erosive Forces
- Urban Quality of Life
- Historic Site Potential
- Noteworthiness (such as habitat for endangered species).

The total area covered by wetlands and/or hydric soils in Unity is 2,926 acres, or 12.1% of the town’s land area. Wetlands were mapped as part of The National Wetland Inventory (NWI); however, not all wetlands were mapped, due to the limitations of a nationwide inventory. Map 4 (2008) includes both NWI wetlands and hydric soils from the Sullivan County Soil Survey to counteract some of the underrepresentation of wetlands of the NWI. Hydric soils are those soils that have developed under saturated conditions and are one indicator of wetlands; in order to fit the definition of wetland, wetland hydrology and vegetation are also needed at a site. By looking at both the NWI data and the hydric soils data, one can have a general appreciation for the extent and location of wetlands in Unity.

One noteworthy wetland in Unity is Gallop Marsh in the southeast part of town on the border with Lempster. Wood ducks nest in this marsh, and moose are a common sight in the summer. This marsh is a Wildlife Management Area and is protected and managed by the NH Fish and Game Department.

Another noteworthy wetland type is the vernal pool. This is an intermittently flooded small pond that is filled with water in the spring and early summer, but dries up completely during the rest of the year. Vernal pools provide critical breeding habitat for many amphibians, as the impermanent nature of these

ponds do not allow aquatic predators, like fish, to inhabit these pools. Amphibians breeding in vernal pools in New Hampshire include marbled salamanders, wood frogs, spotted salamanders, and Jefferson or blue-spotted salamanders.

3.6. Groundwater Resources

Unity has an abundance of surface waters, but somewhat limited groundwater resources. Stratified drift aquifers, sand and gravel deposits of glacial origin, cover only 694 acres, or 2.9 percent of the town's land area. The aquifers within Unity were found to have low transmissivity (less than 1000 square feet per day) or the transmissivity is unknown (Map 4, 2008).

The majority of Unity residents and businesses rely on private wells, most of which are drilled wells into fractured bedrock, rather than sand and gravel deposits. Six public water supplies are registered with the state Department of Environmental Services:

- Sullivan County Home (with three bedrock wells),
- Unity Elementary School,
- Newport Water Works, and
- Brick Farm Dairy Barn.

A public well is defined as a piped water system having its own sources of supply, serving 15 or more services or 25 or more people for 60 or more days per year. In addition to the public water supplies serving Unity, the Newport Water Department maintains Gilman Pond as the water supply for the Town of Newport, and the City of Claremont draws surface water from the Sugar River.

Wellhead protection areas have been established for the public water supplies at the Sullivan County Home and the Unity Elementary School. The Drinking Water Supply Bureau at NH DES developed the wellhead protection program in 1991 to help safeguard drinking water supplies.

3.7. Threats to Water Quality

Maintaining high water quality is of utmost importance to the health of Unity residents. In addition, wildlife species and many types of water-based recreation rely on clean water. Threats to water quality come in two forms: point sources and non-point sources. Point sources are pollution sources that can be identified to a single point, such as a leaking underground storage tank; non-point sources refer to pollution that is widespread over a geographic area and cannot be pinpointed to a single emitter. An example of non-point source pollution is fertilizer runoff from lawns into a lake. Another is oil pollution in a water body due to cars with oil leaks.

Because of Unity's rural character, there are few point sources of pollution, with the exception of the potential for leaking residential heating fuel tanks. NH DES maintains a statewide database of point sources of known and potential water contamination. This includes facilities that may have below or above ground fuel tanks or they generate hazardous waste such as auto body and engine repair shops, the Unity landfill (closed and unlined), the Sullivan County Complex (wastewater treatment lagoon as well as underground storage tanks), the Unity Highway Department, the Unity Elementary School, and the store although the fuel tanks have been removed.

Unity is also susceptible to non-point source pollution, from failing septic systems, pesticide and fertilizer runoff from lawns and agricultural fields, salt and sand runoff from roadways. Of special concern is Crescent Lake, as the many homes along the lake may have older septic systems. The Comprehensive Shoreland Protection Act includes provisions designed to minimize the amount of runoff and the use of phosphate fertilizer near lakes and rivers.

3.8. Agricultural Soils

New Hampshire is not known for its agricultural lands; glaciers scoured off the land down to the bedrock 10,000 years ago and soil has been slowly rebuilding since then. Soils tend to be nutrient-poor, shallow, and rocky, and the pockets of good soils for agriculture are few and far between. In the Sullivan County Soil Survey, there are three classes of agricultural soils, so chosen by their relative value for raising crops or livestock. These classes represent the capability of the soil for agricultural production, and not the current use of the land.

Prime farmland soils, or the best soils for the production of food, feed, fiber, forage, and oilseed crops, have been designated for the purpose of carrying out the provisions of The Farmland Protection Policy Act of 1981. This Act was established to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses. Less than 2% of New Hampshire soils are classified as prime farmland soils. In Unity, 7.9% of the land (1,882 acres) is considered prime farmland, making Unity a relatively good town to practice agriculture (Map 5, 2008).

Farmland of statewide importance is the second tier of agricultural soil classification. Criteria for defining and delineating farmland of statewide importance are determined by a state committee. The third tier of important agricultural soils is farmland of local importance. The County Conservation District Board determines which soil units are locally important. These two soil classifications include soils that are useful for agricultural production, but have some limitations, such as stoniness, nutrient limitations, or excessive drainage, that preclude their designation as "prime farmland." The extent of agricultural soils in the Town of Unity is summarized in Table 3.

Table 3. Agricultural Soils in Unity

Agricultural Soil Class	Acreage	% of Unity Land
Prime (federally designated)	1,882	7.9%
Of Statewide Importance	4,104	16.9%
Of Local Importance	1,498	6.3%
Total	3,794	31.1%

Agricultural soils are thinly scattered across Unity, with concentrations in and around East Lempster and Quaker City. The central portion of Unity has fewer areas of agricultural soils, with the exception of Unity Center.

The total area of important agricultural soils is much larger than the area that is currently farmed. A survey of active agricultural lands was not undertaken for this inventory, but an estimate of agricultural land has been derived from the New Hampshire Land Cover Dataset (NHLCD), a classification of land cover types based on satellite imagery collected in the 1990's. The NHLCD shows that agriculture covers just over 1,400 acres within Unity. Hay and pasture constitute 1,375 acres, and row crops cover 53 acres.

3.9. Wildlife Resources

The largely forested landscape of Unity provides habitat for many species of wildlife (Map 2, 2015). New Hampshire's four big-game species (moose, white-tailed deer, black bear, and turkey) all rely on forested habitats, and rare or threatened species such as bats also require forests for survival. A spreadsheet listing species associated with each habitat type has been produced by NH Fish and Game for the Wildlife Action Plan and is included in this report as Appendix A.

No rare, threatened, or endangered wildlife species has been documented in Unity, but the Natural Heritage Bureau has not exhaustively surveyed the state, so it is possible that rare species do occur within Unity. If town residents have information about rare species occurrences in Unity, they should contact the Natural Heritage Bureau.

Unfragmented forest blocks are important for wildlife. As Unity is relatively undeveloped and has few fragmenting features, there are many large forest blocks (Map 3, 2008). Black bear and bobcat are two species that rely on large areas of interior forest. In addition to the size of the forests, the structure and age of the forests is also important. Generally speaking, a heterogeneous forest, one with a variety of age classes of trees that are well distributed over the landscape,

provides the best habitat for the most species. Timber management practices can either enhance or degrade the wildlife value of a forest stand.

Other land cover types in Unity are not as widespread, but they provide specialized habitats to many species of wildlife. The most common types of these small-sized habitats are grasslands, wetlands, and aquatic habitats.

Grasslands are intermittent features in the landscape, as they become established after a disturbance and then are eventually taken over by forests. Several species of bird have adapted to take advantage of these communities, relying on the grasses for breeding grounds as well as a source of abundant food, in the form of seeds or insects. Grassland birds found in New Hampshire include grasshopper sparrow, eastern meadowlark, and vesper sparrow. In the Northeast, large grasslands have been disappearing, and the populations of grassland birds have declined more rapidly than any other group of birds.

Wetlands provide habitat for a great number of amphibians, reptiles, birds, and invertebrates; moose are a frequent visitor to marshes and shallow ponds during the summer months. Vernal pools provide breeding habitat to many amphibians in the spring. Lakes, streams, and rivers provide habitat for fish, insects, water birds, and semi-aquatic amphibians and mammals.

3.10. Highest Ranked Wildlife Habitat

The New Hampshire Fish and Game Department recently completed an analysis of habitat condition, which was published in 2015 in The Wildlife Action Plan. Habitat types were mapped and then ranked according to their condition and risk of degradation. Measuring habitat condition entailed a lengthy analysis of various factors that impact wildlife, related to the surrounding land cover, biodiversity, human recreation, development and land use, and air and water quality. For a thorough description of this analysis, please refer to the Wildlife Action Plan.

The analysis resulted in four classes:

- Tier 1 - Highest ranked habitat in the state (top 10-15%),
- Tier 2 - Highest ranked habitat in the biological region,
- Tier 3 - Supporting landscapes important to highest ranked habitats, and
- Habitat not highly ranked.

Tier 1, 2, and 3 habitats are wildlife conservation priorities either on a statewide or regional level.

In Unity, several areas especially along riparian zones following streams are ranked as Tier 1 wildlife habitat (Map 6, 2015).

Fields surrounding the Sullivan County Home, fields near Quaker City, and fields in East Lempster comprise grassland. These are some of the most important grassland areas in the region for wildlife. As mentioned in the previous section,

grasslands provide important nesting habitat to several bird species and provide a large amount of food for both plant-eaters and insect-eaters. These grassland areas in Unity are likely hay fields or croplands, and the way that these lands are farmed or managed greatly impacts whether birds can successfully nest in these areas. The NH Fish and Game Department recognizes a need for more research on grasslands, their utility for wildlife, and conservation strategies.

Peatlands are wetlands with low nutrient levels and acidic conditions, which results in slow decomposition and the accumulation of peat. Several plant species are typical of peatlands, including *Sphagnum* moss, black spruce, tamarack, sheep laurel, and leather-leaf. There are several small areas of peatlands in Unity. There are also marshes dominated by grasses or shrubs, and are often home to beavers, muskrats, and waterfowl. Large wetlands or wetland complexes are very important for wildlife; generally speaking, the larger the wetland, the more wildlife it can support.

3.11. Cultural and Historic Resources

Unity was incorporated as a town in 1764, and has enjoyed a long and varied history. Farming, sawmills, gristmills, mining, and summer spa-based tourism have served as important economic activities at various times throughout the history of the Town; this has left many different types of historic buildings and ruins. In 1998, the Town of Unity held a community meeting to develop a list of Local Resource Protection Priorities, or important natural and cultural sites, features, and buildings (Map 7, 2018).

Table 4. Local Resource Protection Priorities in Unity

- | | |
|-------------------------------|----------------------------------|
| • PERRY MOUNTAIN | • WRIGHT HOUSE |
| • QUAKER MEETING HOUSE | • GILLMAN POND |
| • QUAKER CITY SCHOOLHOUSE | • MILL PROPERTY |
| • BUTCHERKNIFE CORNERSTONE | • GRAVE SITE |
| • SLACKS FALLS | • EAST UNITY SCHOOLHOUSE #1 |
| • HISTORIC HOUSE – UNITY ROAD | • WALKER HOUSE |
| • TOMMY DAVIS HOUSE | • HATHAWAY HOUSE |
| • BREED FARM | • GRIST MILL (BETTY HALL'S LAND) |
| • SCHOOL IN WEST UNITY | • BRICK HOUSES - FOUR CORNERS |
| • METHODIST CHURCH | • NIBOIL HOUSE |
| • UNITY TOWN POUND | • BUTTERWORTH HOUSE |
| • MILL DAM | • UNITOGA SPRINGS |
| • CENTER SCHOOLHOUSE #2 | • OLD COUNTY SCHOOLHOUSE #6 |
| • UNITY CENTER TAVERN | |
| • FUSSCAS | |

4. Existing Protections for Natural Resources

4.1. Master Plan

The Unity Master Plan describes the current status and future goals for the Town; it is periodically updated to reflect changes in development and community attitudes. The most recent master plan was adopted in 1996 with a current update in progress in 2018, and includes a future land use plan, which is a “comprehensive policy statement of desired land use which can be used as a guide for future growth and development of the Town.” The Master Plan provides the legal basis for zoning and other land use regulations for the Town.

Community support for protection of the Town’s natural resources was evident in the results of a 1992 and 2013 community surveys used to inform the Master Plan. A majority of Unity property owners supported wildlife habitat, shorelines, prime agricultural land, wetlands, scenic views, floodplains, historic buildings and landmarks, and steep slopes.

These community attitudes were used to develop the following land use goals:

- Maintain the Town’s rural and village character and scenic beauty.
- Encourage continued use of the Town’s best farmlands.
- Recognize the developmental limits on wetlands, steep slopes, and floodplains.
- Protect the quantity and quality of the Town’s water resources.
- Encourage protection of historic sites, buildings, and settings.

4.2. Zoning

Unity protects steep slopes from being developed through a steep slopes zoning ordinance (Map 8, 2008). This prevents excessive erosion, which protects soil resources, water resources, and wildlife habitat.

At the March 2008 Town Meeting, Unity residents voted to join the National Flood Insurance Program. A floodplain zoning ordinance has been developed to protect water resources and to guard against flood losses.

4.3. Current Use

Current use assessment is a program designed to encourage preservation of open space by taxing undeveloped land at its “current use” rather than its “highest and best use.” RSA 79A authorizes this program, through which parcels of field, farm, forest, wetland, natural preserves, and recreation land receive reduced assessments.

A report on land in current use was compiled for 2016 by the Department of Revenue. 17,240 acres, or 73% of the Town, were under current use at that time. This percentage of land in current use is similar to that of the surrounding towns: Acworth (80%), Claremont (66%), Charlestown (63%), Newport (71%), Goshen (78%), and Lempster (71%).

A penalty exists for withdrawing land from current use for another purpose, but it is possible to withdraw land from current use and develop it. Therefore, current use is not considered a long-term conservation method.

4.4. Conservation Lands

Conservation lands are undeveloped lands that are protected from future development by governmental ownership or conservation easement. Depending on the type of protection, these lands may or may not be protected in perpetuity. Certain parcels of public land are designated as state or national forests, state parks, wildlife refuges or management areas, or receive other special designation whereby the land will be protected from development. Other public lands as well as private land may be protected by a conservation easement, a deed restriction where the development rights have been removed. Publicly owned land without a conservation easement or other deed restriction retains its development rights, which provides no permanent protection; these lands are sometimes referred to as unofficial conservation lands.

Roughly 14 percent, or 3,373 acres, of the Town of Unity is publicly owned or conservation land (Map 7, 2018). Sullivan County, the Town of Newport, the Town of Unity, the Upper Valley Land Trust, and NH Department of Fish and Game are the landholders or easement holders of 3,301 acres of public land. Only 1,246.7 acres of public land are permanently protected; the remaining 2,054.3 acres are unofficially protected. Two private landowners have conservation easements on their land, totaling 72 acres.

Table 4. Publicly Owned and Conserved Land in Unity

Parcel Name	Acreage in Unity	Owner/Agency	Protection Type
Newport Water Department Land	365.3	Town of Newport (Water Supply)	UNP
Sullivan County Farm (multiple parcels)	1,092.7 596.3	Sullivan County	UNP
Marshall Pond Easement	230.0	Sullivan Co./ Unity/SPNHF	CE
Judkins Easement	258.0	Sullivan Co./ Unity/SPNHF	CE
Unity Town Forest	27.7	Town of Unity	PCL
Unity Town Land	34.0	Town of Unity/NH DRED	CE
Thurber Town Forest	83.5	Town of Unity/Upper Valley Land Trust	CE
Gallop Marsh WMA	11.3	NH Fish and Game	PCL
High on Hill Forest	602.2	Upper Valley Land Trust	CE
Bridge Easement	18	Town of Unity	CE
Page Easement	54	Upper Valley Land Trust	CE

CE – Conservation Easement; PCL – Permanent Conservation Land; UNP – Unofficial, No legal protection

The City of Newport is the second largest public landowner in Unity; the Newport Water Department Land comprises 365.3 acres, including the area of Gilman Pond. This land is owned and controlled by the Town of Newport for its water

supply, but is not permanently protected with a conservation easement or deed restriction.

Sullivan County owns five geographically-distinct tracts of land in the western and central part of the Town of Unity, totaling 1,570.7 acres. The majority of this county-owned land is considered unofficial conservation land, as the owner agency intends to keep the land undeveloped, but it is not permanently protected. However, 488 acres in two land tracts have been further protected by conservation easement, which protects land from development permanently. These conserved lands are known as the Marshall Pond Easement and the Judkins Easement.

The Marshall Pond Easement, in the northern part of Unity, is comprised of Marshall Pond (16.1 acres in size) and 217.9 acres surrounding the waterbody. The conservation easement is held by the Town of Unity and the Society for the Protection of New Hampshire Forests. This parcel was protected in 1992. This parcel may be accessed by Mica Mine Road, and is open for public recreation.

The Judkins Easement is a 258-acre parcel in the western part of town has recently been placed under conservation easement (2008). This parcel may be accessed by Judkins Road and Bible Hill Road, and is open for public recreation. Both of these parcels have easements that protect the conversion of natural land cover to other uses and management plans to keep the land in a natural state.

The Town of Unity owns three parcels of undeveloped land, the Unity Town Land Lot on Old Stage Road in the southwestern corner near Quaker City, and the Town Forest Lot on Old Bible Hill Road in the northwestern corner. The Town Forest Lot is considered permanent conservation land because it is owned and managed as town forest. The Unity Town Land Lot was put under conservation easement in 1998, through the Land and Water Conservation Fund. The easement is held by the Town and the NH Department of Resources and Economic Development. Thurber Forest has a conservation easement by the Upper Valley Land Trust and is managed by the Unity Conservation Commission. There is a management plan for this property.

New Hampshire Department of Fish and Game (NHFG) manages the State-owned 19.3 acre Gallop Marsh Wildlife Management Area, which straddles the Unity-Lempster line along Unity Springs Road (11.3 acres is within the Town of Unity). A Wildlife Management Area is designated as an area for wildlife resource conservation, hunting and fishing.

The High on the Hill Forest is owned by the Upper Valley Land Trust. Several parcels were previously owned by the Harvey Hill family. Additional parcels from this tract are located in Charlestown and Claremont.

Two private landowners have placed conservation easements on their properties. Ernest and Beverly Bridge own conserved land along the eastern side of Coon Brook, north of Huntoon Brick Farm Road; the Town holds the easement on 18.0 acres. Lawrence and Evelyn Page own land along Black North Road on the Unity-Acworth town line, southwest of Quaker City; 63 acres (54 of which are in Unity) is under a conservation easement held by the Upper Valley Land Trust.

5. Summary

The Town of Unity is situated in a forested, rural landscape that provides wildlife habitat and protects drinking water. The large areas of land that are unfragmented by roads and other human infrastructure are an invaluable resource, one that is at great risk of degradation. Large forested blocks provide not only habitat for many species of wildlife, but also provide the economic base for the timber harvesting and management industry. These areas also provide protection for both the quantity and quality of the drinking water supply. Unity's forested lands provides water not only for its residents with groundwater wells, but also for the residents of Newport and Claremont who utilize surface waters of Gilman Pond and the Sugar River.

Unity also has a significant resource of agricultural soils, some of which are actively farmed, and these fields and pastures also provide habitat to grassland birds whose numbers are declining in the Northeast. This working landscape provides for both the environment and the economy, and is an integral part of the rural character of the community.

While all natural resources are important, the farm fields and large areas of forest are two natural resources that should be highlighted for their significant size in Unity and importance for protecting multiple facets of environmental quality and also quality of life for Town residents. Protection of forests and farms will go far to protect other natural resources.

6. A Plan for Future Action

This Natural Resources Inventory aims to educate the residents and town officials of Unity on the value of natural resources within Town and the current status of protection of these resources. From this Inventory, priorities can be developed and decisions can be made regarding appropriate land uses and land protection efforts. The Conservation Commission intends to utilize this information for its natural resources protection work and also intends to present the maps and report to Town boards and the public.

The completion of this report reflects one step in the process of developing a conservation plan for the Town of Unity. The public will be invited to comment on the current report and provide their input regarding future work to be done. Additional information that may be important to the Town includes active agricultural land, parcels in current use, scenic areas and views, and recreational resources. An important aspect of this public input will be a determination of the “societal value” of these natural resources and an assessment of the most important and most threatened areas; these will be useful to the Conservation Commission in developing conservation priorities for the Town.

The report will also be given to the Planning Board for their comments and input. The Conservation Commission encourages the Planning Board to incorporate the information in the Natural Resources Inventory into the upcoming Master Plan update.

Appendix A:
Species-Habitat Crosswalk

Appendix A

COMMON NAME	RANGE TYPE	TAXONOMY	STATUS*	Habitats
Blue-Spotted/Jefferson Salamander	Statewide	Amphibians and Reptiles	SC, SGCN	Appalachian Oak-Pine Forest, Floodplain Habitats, Hemlock Hardwood Pine Forest, Marsh and Shrub Wetlands, Northern Hardwood-Conifer Forest, Northern Swamps, Peatlands, Temperate Swamps, Vernal Pools
Eastern Ribbonsnake	Throughout	Amphibians and Reptiles	SGCN	Floodplain Habitats, Marsh and Shrub Wetlands, Peatlands, Vernal Pools
Fowler's Toad	Localized	Amphibians and Reptiles	SC, SGCN	Appalachian Oak-Pine Forest, Dunes, Large Warmwater Rivers, Marsh and Shrub Wetlands, Pine Barrens, Shrublands, Vernal Pools, Warmwater Lakes and Ponds, Warmwater Rivers and Streams
Northern Leopard Frog	Localized	Amphibians and Reptiles	SC, SGCN	Coldwater Rivers and Streams, Floodplain Habitats, Grasslands, Lakes and Ponds with Coldwater Habitats, Large Warmwater Rivers, Marsh and Shrub Wetlands, Shrublands, Warmwater Rivers and Streams
Smooth Greensnake	Throughout	Amphibians and Reptiles	SC, SGCN	Grasslands, Marsh and Shrub Wetlands, Peatlands, Rocky Ridge, Cliff, and Talus, Rocky Ridge, Cliff, and Talus, Shrublands
Spotted Turtle	Throughout	Amphibians and Reptiles	ST, SGCN	Floodplain Habitats, Marsh and Shrub Wetlands, Peatlands, Temperate Swamps, Vernal Pools
Wood Turtle	Statewide	Amphibians and Reptiles	SC, SGCN	Coldwater Rivers and Streams, Floodplain Habitats, Grasslands, Shrublands, Warmwater Rivers and Streams
American Black Duck	Statewide	Birds	SGCN	Lakes and Ponds, Rivers and Streams, Marsh and Shrub Wetlands, Northern Swamps, Peatlands, Temperate Swamps
American Kestrel	Localized	Birds	SC, SGCN	Developed Habitats, Grasslands, Shrublands
American Kestrel	Throughout	Birds	SC, SGCN	Developed Habitats, Grasslands, Shrublands

COMMON NAME	RANGE TYPE	TAXONOMY	STATUS*	Habitats
American Woodcock	Statewide	Birds	SGCN	Appalachian Oak-Pine Forest, Hemlock Hardwood Pine Forest, Marsh and Shrub Wetlands, Northern Swamps, Shrublands, Temperate Swamps
Bald Eagle	Town	Birds	ST, SGCN	Appalachian Oak-Pine Forest, Floodplain Habitats, Hemlock Hardwood Pine Forest, High Elevation Spruce-Fir Forest, Lakes and Ponds, Rivers and Streams, Lowland Spruce-Fir Forest, Marsh and Shrub Wetlands, Northern Hardwood-Conifer Forest
Bay-breasted Warbler	Statewide	Birds	SGCN	High Elevation Spruce-Fir Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest, Northern Swamps, Peatlands
Black-billed Cuckoo	Statewide	Birds	SGCN	Appalachian Oak-Pine Forest, Hemlock Hardwood Pine Forest, Pine Barrens, Shrublands
Bobolink	Statewide	Birds	SGCN	Grasslands
Brown Thrasher	Statewide	Birds	SGCN	Pine Barrens, Shrublands
Canada Warbler	Statewide	Birds	SGCN	Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest, Northern Swamps, Temperate Swamps
Chimney Swift	Statewide	Birds	SGCN	Appalachian Oak-Pine Forest, Developed Habitats, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest
Common Loon	Town	Birds	ST, SGCN	Lakes and Ponds with Coldwater Habitats, Large Warmwater Rivers, Warmwater Lakes and Ponds, Warmwater Rivers and Streams
Common Nighthawk	Town	Birds	SE, SGCN	Appalachian Oak-Pine Forest, Developed Habitats, Hemlock Hardwood Pine Forest, Pine Barrens, Rocky Ridge, Cliff, and Talus
Eastern Meadowlark	Throughout	Birds	SC, SGCN	Grasslands

COMMON NAME	RANGE TYPE	TAXONOMY	STATUS*	Habitats
Eastern Towhee	Statewide	Birds	SGCN	Appalachian Oak-Pine Forest, Peatlands, Pine Barrens, Rocky Ridge, Cliff, and Talus, Rocky Ridge, Cliff, and Talus, Shrublands
Field Sparrow	Statewide	Birds	SGCN	Pine Barrens, Shrublands
Golden Eagle	Statewide	Birds	SGCN	Appalachian Oak-Pine Forest, Hemlock Hardwood Pine Forest, High Elevation Spruce-Fir Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest, Rocky Ridge, Cliff, and Talus
Horned Lark	Town	Birds	SC, SGCN	Dunes, Grasslands
Marsh Wren	Localized	Birds	SGCN	Marsh and Shrub Wetlands, Salt Marsh
Marsh Wren	Throughout	Birds	SGCN	Marsh and Shrub Wetlands, Salt Marsh
Northern Goshawk	Throughout	Birds	SGCN	Appalachian Oak-Pine Forest, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest
Northern Goshawk	Town	Birds	SGCN	Appalachian Oak-Pine Forest, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest
Olive-sided Flycatcher	Throughout	Birds	SC, SGCN	Lowland Spruce-Fir Forest, Marsh and Shrub Wetlands, Northern Hardwood-Conifer Forest, Northern Swamps, Peatlands, Temperate Swamps
Purple Finch	Statewide	Birds	SGCN	Appalachian Oak-Pine Forest, Floodplain Habitats, Hemlock Hardwood Pine Forest, High Elevation Spruce-Fir Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest, Northern Swamps
Ruffed Grouse	Statewide	Birds	SGCN	Appalachian Oak-Pine Forest, Grasslands, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Marsh and Shrub Wetlands, Northern Hardwood-Conifer Forest, Shrublands

COMMON NAME	RANGE TYPE	TAXONOMY	STATUS*	Habitats
Scarlet Tanager	Statewide	Birds	SGCN	Appalachian Oak-Pine Forest, Hemlock Hardwood Pine Forest, Northern Hardwood-Conifer Forest
Veery	Statewide	Birds	SGCN	Appalachian Oak-Pine Forest, Floodplain Habitats, Hemlock Hardwood Pine Forest, Northern Hardwood-Conifer Forest, Northern Swamps, Temperate Swamps
Wood Thrush	Statewide	Birds	SGCN	Appalachian Oak-Pine Forest, Floodplain Habitats, Hemlock Hardwood Pine Forest, Northern Hardwood-Conifer Forest
American Bumble Bee	Statewide	Bumble Bees	SGCN	Developed Habitats, Grasslands, Shrublands
Rusty-patched Bumble Bee	Statewide	Bumble Bees	SGCN	Developed Habitats, Grasslands
Yellow Bumble Bee	Statewide	Bumble Bees	SGCN	Developed Habitats, Grasslands
Yellowbanded Bumble Bee	Statewide	Bumble Bees	SGCN	Developed Habitats, Grasslands, Shrublands
Monarch	Statewide	Butterflies and Moths	Review	Developed Habitats, Grasslands
Puritan Tiger Beetle	Historic only	Tiger beetles	FT, SE, SGCN	Large Warmwater Rivers
American Marten	Localized	Mammals	ST, SGCN	High Elevation Spruce-Fir Forest, Northern Hardwood-Conifer Forest
American Water Shrew	Statewide	Mammals	SGCN	Northern Swamps
Big Brown Bat	Statewide	Mammals	SGCN	Appalachian Oak-Pine Forest, Caves and Mines, Floodplain Habitats, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest, Northern Swamps, Temperate Swamps
Eastern Red Bat	Statewide	Mammals	SC, SCGN	Appalachian Oak-Pine Forest, Floodplain Habitats, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest, Northern Swamps, Temperate Swamps

COMMON NAME	RANGE TYPE	TAXONOMY	STATUS*	Habitats
Hoary Bat	Statewide	Mammals	SC, SGCN	Appalachian Oak-Pine Forest, Floodplain Habitats, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest, Northern Swamps, Temperate Swamps
Little Brown Bat	Statewide	Mammals	SGCN	Appalachian Oak-Pine Forest, Caves and Mines, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest, Northern Swamps, Pine Barrens, Temperate Swamps
Long-tailed Shrew	Statewide	Mammals	SGCN	High Elevation Spruce-Fir Forest, Northern Hardwood-Conifer Forest
Moose	Statewide	Mammals	SGCN	Appalachian Oak-Pine Forest, Floodplain Habitats, Hemlock Hardwood Pine Forest, High Elevation Spruce-Fir Forest, Lowland Spruce-Fir Forest, Marsh and Shrub Wetlands, Northern Hardwood-Conifer Forest, Swamps, Shrublands, Lakes and Ponds
Northern Long-eared Bat	Town	Mammals	FT, ST, SGCN	Appalachian Oak-Pine Forest, Caves and Mines, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest
Rock Vole	Statewide	Mammals	SGCN	High Elevation Spruce-Fir Forest, Northern Hardwood-Conifer Forest
Silver-Haired Bat	Statewide	Mammals	SC, SGCN	Appalachian Oak-Pine Forest, Floodplain Habitats, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest, Northern Swamps, Temperate Swamps
Southern Bog Lemming	Statewide	Mammals	SGCN	Northern Hardwood-Conifer Forest

COMMON NAME	RANGE TYPE	TAXONOMY	STATUS*	Habitats
Tricolored Bat	Statewide	Mammals	SC, SGCN	Appalachian Oak-Pine Forest, Caves and Mines, Floodplain Habitats, Hemlock Hardwood Pine Forest, Lowland Spruce-Fir Forest, Northern Hardwood-Conifer Forest, Northern Swamps, Temperate Swamps
American Eel	Localized	Fish	SC, SGCN	Coldwater Rivers and Streams, Lakes and Ponds with Coldwater Habitats, Large Warmwater Rivers, Warmwater Lakes and Ponds, Warmwater Rivers and Streams
Eastern Brook Trout	Localized	Fish	SGCN	Coldwater Rivers and Streams, Lakes and Ponds with Coldwater Habitats
Finescale Dace	Localized	Fish	SC, SGCN	Coldwater Rivers and Streams, Lakes and Ponds with Coldwater Habitats, Warmwater Lakes and Ponds
Longnose Sucker	Localized	Fish	SGCN	Coldwater Rivers and Streams, Lakes and Ponds with Coldwater Habitats
Northern Redbelly Dace	Localized	Fish	SC, SGCN	Coldwater Rivers and Streams, Lakes and Ponds with Coldwater Habitats
Sea Lamprey	Localized	Fish	SC, SGCN	Coldwater Rivers and Streams, Estuarine, Large Warmwater Rivers, Marine, Warmwater Rivers and Streams
Slimy Sculpin	Localized	Fish	SGCN	Coldwater Rivers and Streams, Lakes and Ponds with Coldwater Habitats
Alewife Floater	Localized	Freshwater Mussels	SGCN	Large Warmwater Rivers, Warmwater Lakes and Ponds, Warmwater Rivers and Streams
Brook Floater	Localized	Freshwater Mussels	SE, SGCN	Large Warmwater Rivers, Warmwater Rivers and Streams
Creeper	Statewide	Freshwater Mussels	SGCN	Coldwater Rivers and Streams, Lakes and Ponds with Coldwater Habitats, Large Warmwater Rivers, Warmwater Lakes and Ponds, Warmwater Rivers and Streams
Dwarf Wedgemussel	Town	Freshwater Mussels	FE, SE, SGCN	Large Warmwater Rivers, Warmwater Rivers and Streams

COMMON NAME	RANGE TYPE	TAXONOMY	STATUS*	Habitats
Eastern Pearlshell	Statewide	Freshwater Mussels	SGCN	Coldwater Rivers and Streams
Triangle Floater	Statewide	Freshwater Mussels	SGCN	Large Warmwater Rivers, Warmwater Lakes and Ponds, Warmwater Rivers and Streams

*** STATUS:**

ST - State Threatened

SE - State Endangered

FT - Federal Threatened

FE - Federal Endangered

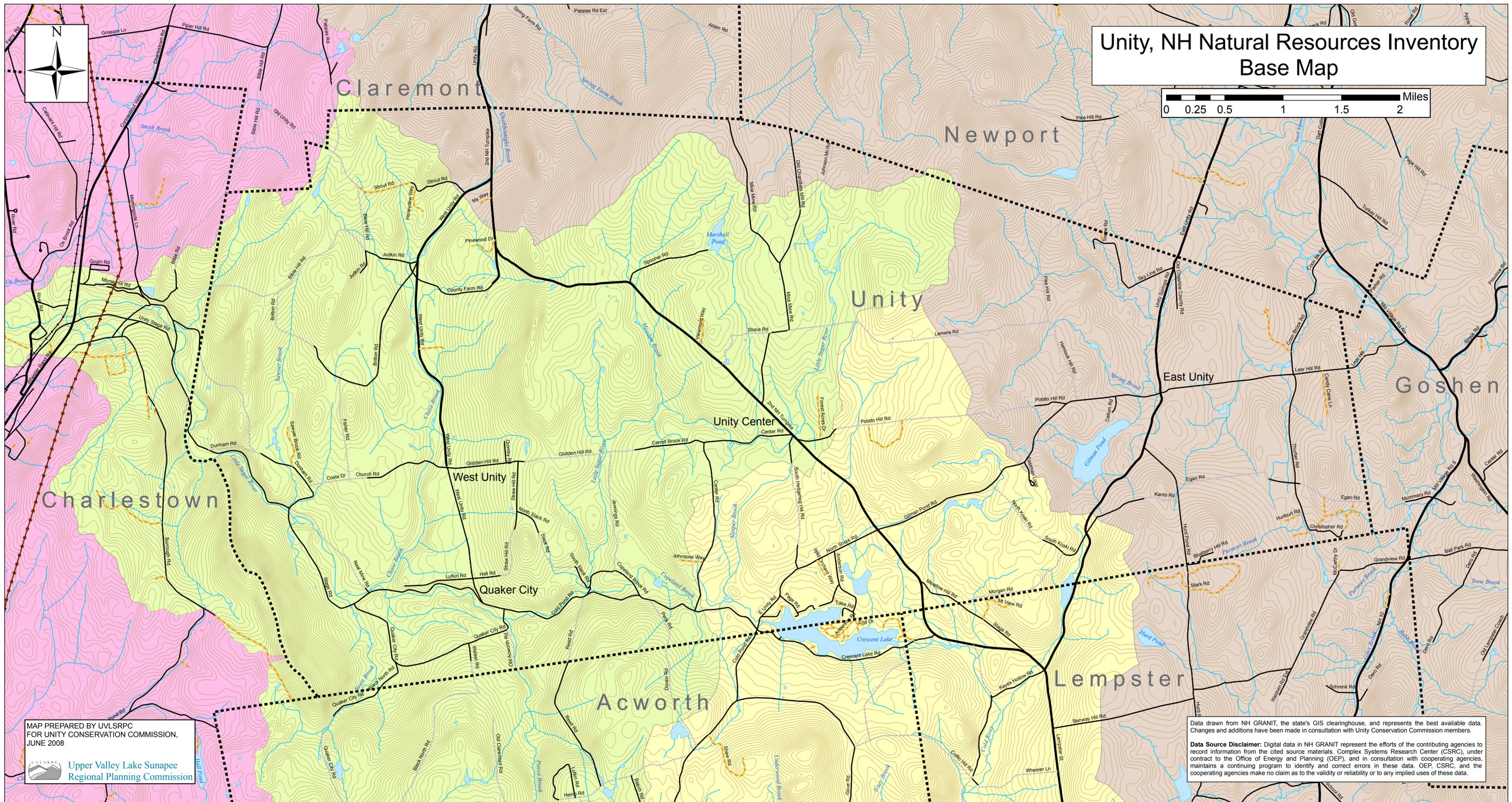
SC - Special Concern in NH

SGCN - Species of Greatest Conservation Need

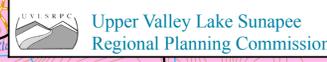
Appendix B:

Maps

Unity, NH Natural Resources Inventory Base Map



MAP PREPARED BY UVLSRPC
FOR UNITY CONSERVATION COMMISSION,
JUNE 2008



Data drawn from NH GRANIT, the state's GIS clearinghouse, and represents the best available data. Changes and additions have been made in consultation with Unity Conservation Commission members.

Data Source Disclaimer: Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy and Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.

- Legend**
- Town Boundaries
 - Electric Transmission Line
 - Railroad
 - Roads**
 - State
 - Local
 - Not Maintained
 - Private
 - Waterbodies**
 - Lake or Pond
 - Streams
 - Topographic Contours**
 - 20' Intervals
 - Watersheds**
 - Cold River
 - Little Sugar River
 - Sugar River
 - Connecticut River (direct tributaries)

2015 HIGHEST RANKED WILDLIFE HABITAT BY ECOLOGICAL CONDITION

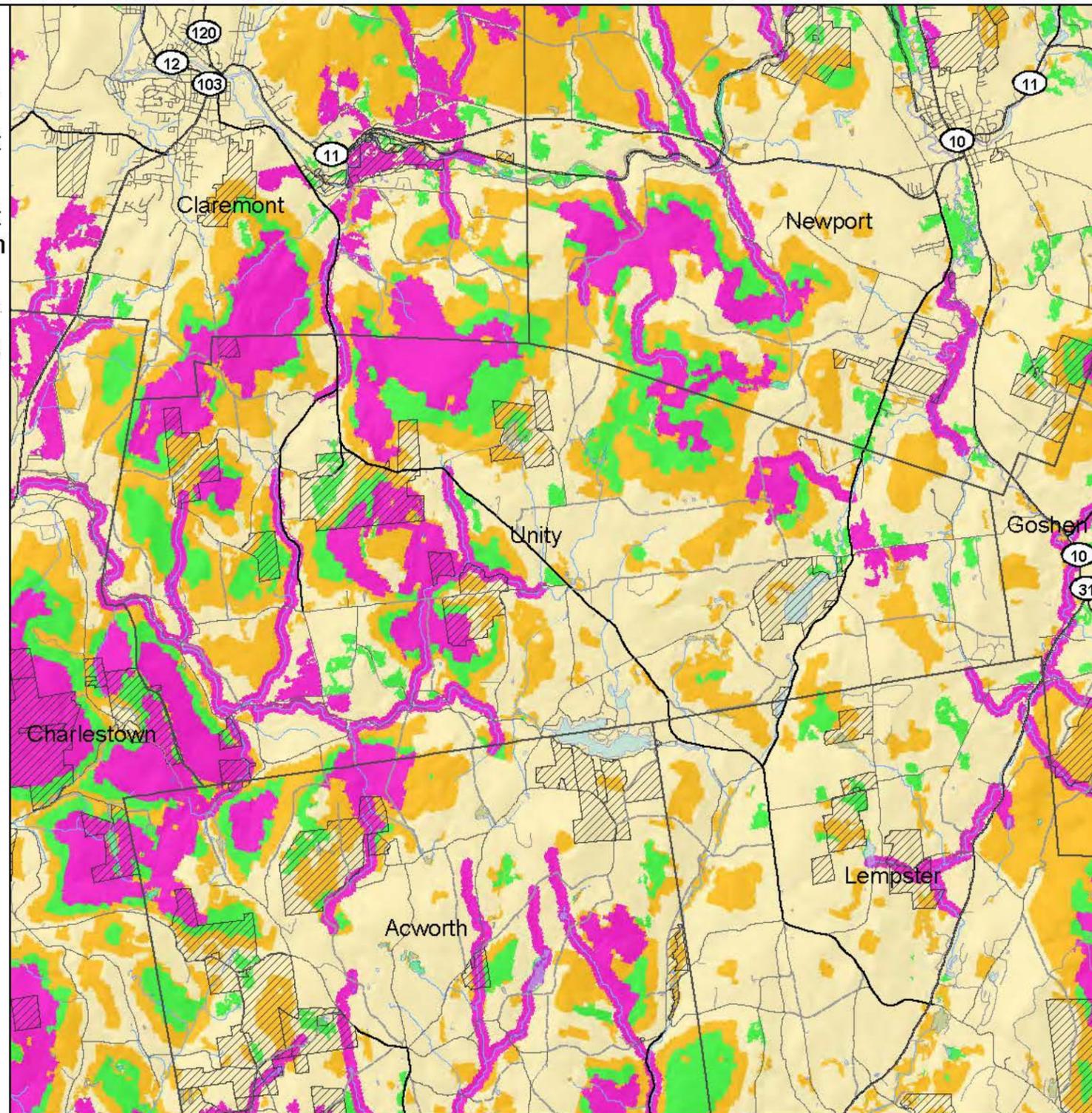
-  Highest Ranked Habitat in New Hampshire
-  Highest Ranked Habitat in the Biological Region
-  Supporting Landscapes
-  Conservation or public

Biological region = TNC ecoregional subsection for terrestrial habitats or Aquatic Resource Mitigation region for wetlands and floodplain forest.

Base map data provided by NH GRANIT (2015)
Not intended for legal use.

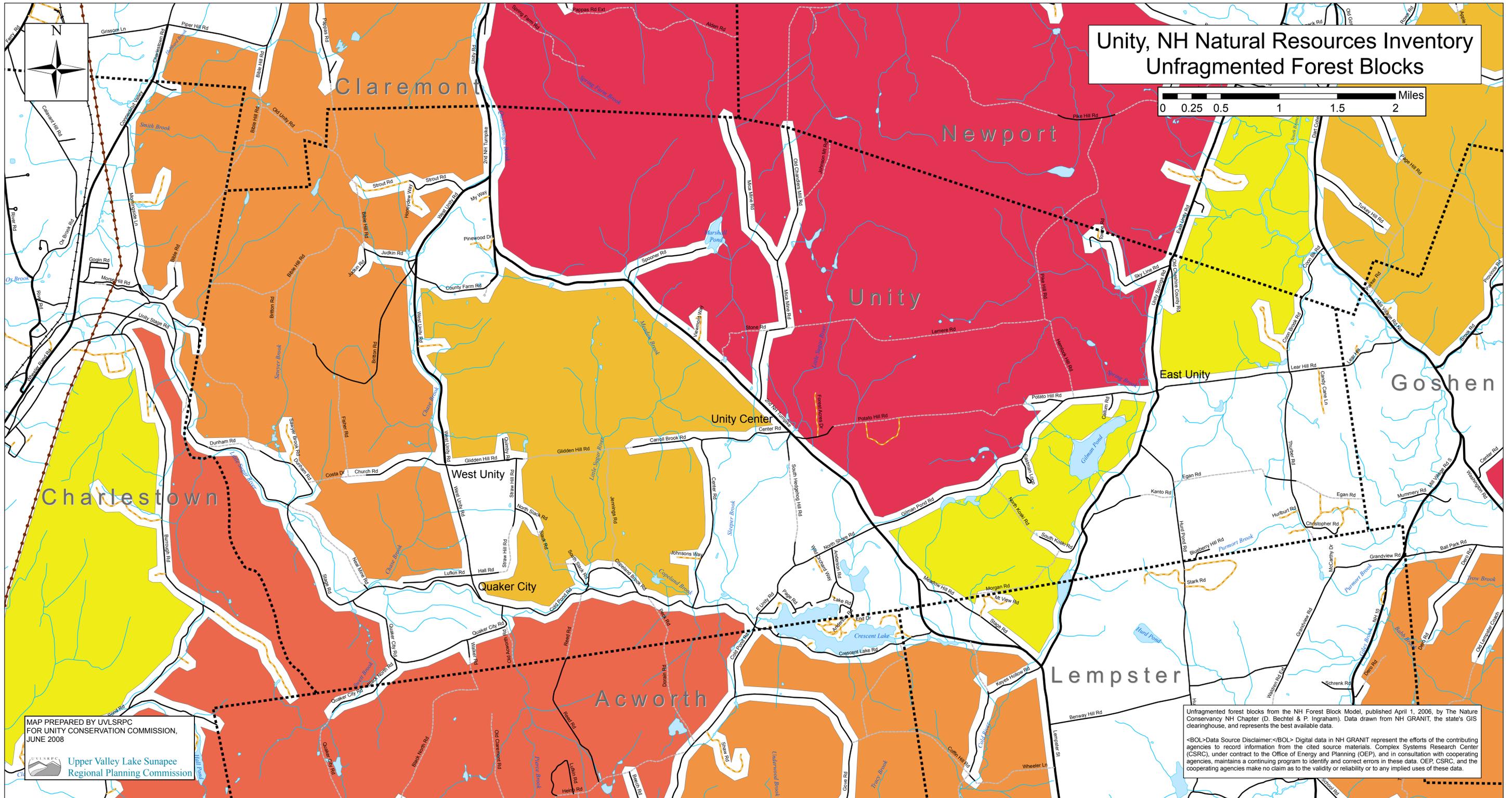


NEW HAMPSHIRE
Wildlife Action Plan
September 2015



Map 2

Unity, NH Natural Resources Inventory Unfragmented Forest Blocks



MAP PREPARED BY UVLSRPC
FOR UNITY CONSERVATION COMMISSION,
JUNE 2008

**Upper Valley Lake Sunapee
Regional Planning Commission**

Unfragmented forest blocks from the NH Forest Block Model, published April 1, 2006, by The Nature Conservancy NH Chapter (D. Bechtel & P. Ingraham). Data drawn from NH GRANIT, the state's GIS clearinghouse, and represents the best available data.

-BOL-Data Source Disclaimer- Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy and Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.

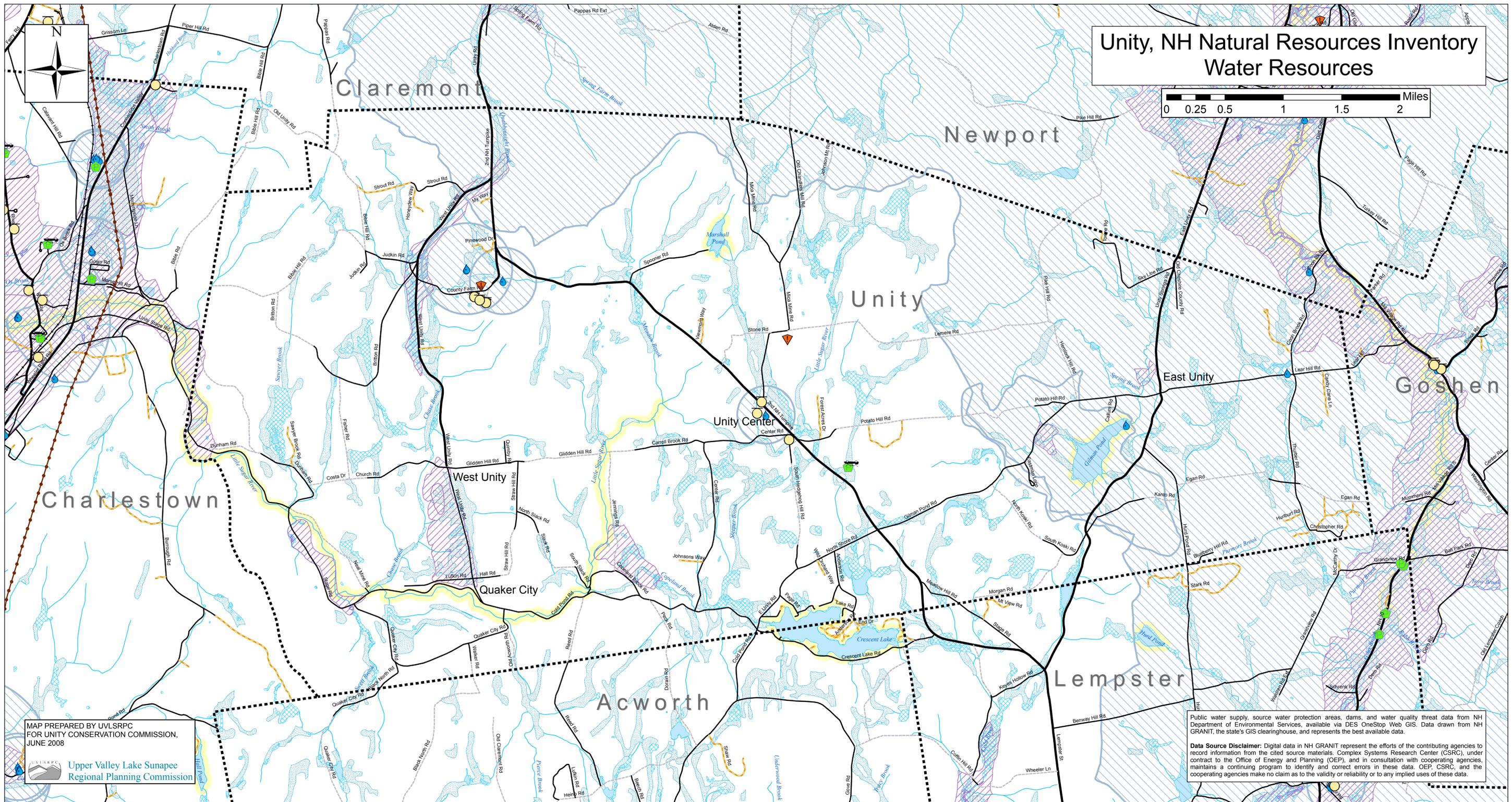
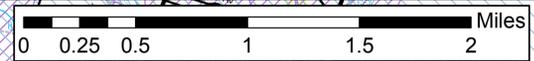
Legend

- Town Boundaries
- Electric Transmission Line
- Railroad
- Roads**
- State
- Local
- Not Maintained
- Private

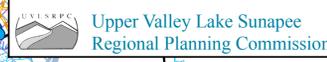
- Waterbodies**
- Lake or Pond
- Streams

- Large Forest Blocks**
- 1,000 - 2,500 Acres
- 2,500 - 5,000 Acres
- 5,000 - 7,500 Acres
- 7,500 - 10,000 Acres
- > 10,000 Acres

Unity, NH Natural Resources Inventory Water Resources



MAP PREPARED BY UVLSRPC
FOR UNITY CONSERVATION COMMISSION,
JUNE 2008

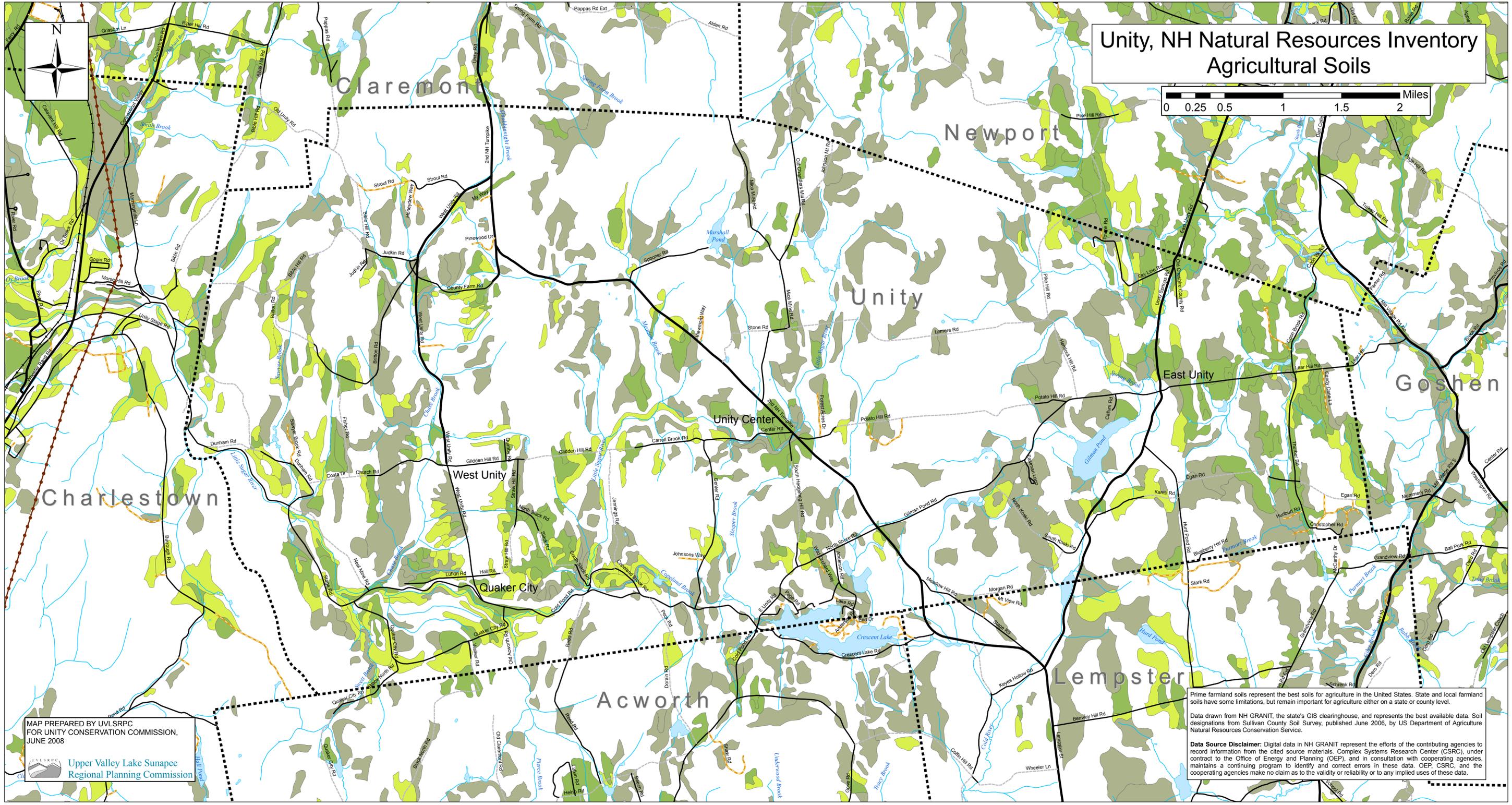
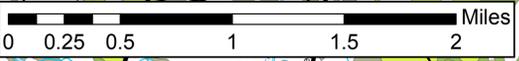


Public water supply, source water protection areas, dams, and water quality threat data from NH Department of Environmental Services, available via DES OneStop Web GIS. Data drawn from NH GRANIT, the state's GIS clearinghouse, and represents the best available data.

Data Source Disclaimer: Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy and Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.

- Legend**
- Town Boundaries
 - Electric Transmission Line
 - Railroad
 - Roads**
 - State
 - Local
 - Not Maintained
 - Private
 - Water Resources**
 - Public Water Supplies
 - Source Water Protection Areas
 - Stratified Drift Aquifers
 - Lakes and Ponds
 - Streams
 - Wetlands**
 - Hydric Soils
 - Wetlands
 - Water Quality Threats**
 - Underground Storage Tanks
 - Known Pollution Sources
 - Potential Pollution Sources
 - Comprehensive Shoreland Protection Act Areas
 - Junkyards

Unity, NH Natural Resources Inventory Agricultural Soils



MAP PREPARED BY UVLSRPC
FOR UNITY CONSERVATION COMMISSION,
JUNE 2008



Prime farmland soils represent the best soils for agriculture in the United States. State and local farmland soils have some limitations, but remain important for agriculture either on a state or county level.

Data drawn from NH GRANIT, the state's GIS clearinghouse, and represents the best available data. Soil designations from Sullivan County Soil Survey, published June 2006, by US Department of Agriculture Natural Resources Conservation Service.

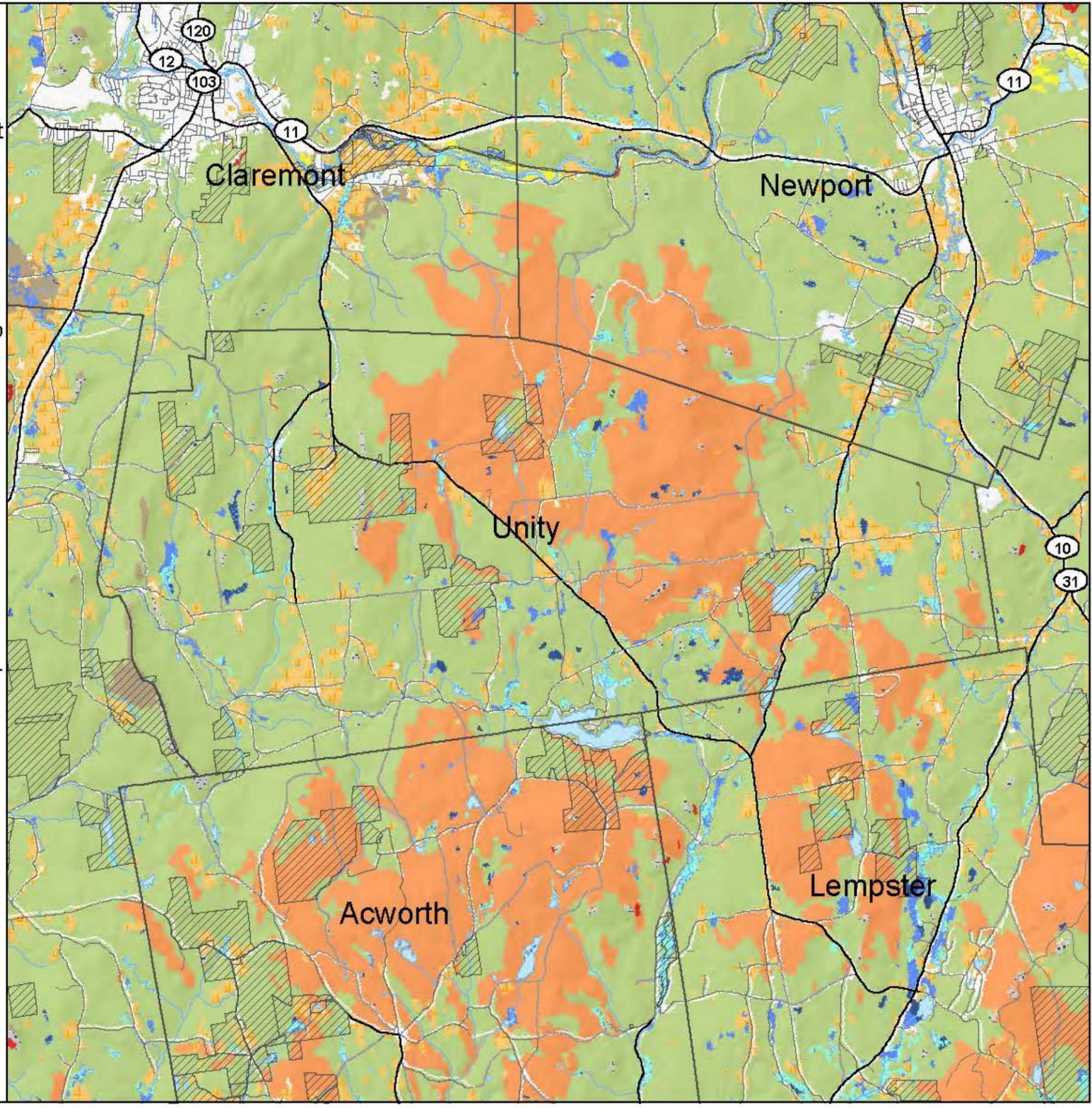
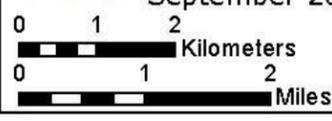
Data Source Disclaimer: Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy and Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.

- Legend**
- Town Boundaries
 - Electric Transmission Line
 - Railroad
 - Roads**
 - State
 - Local
 - Not Maintained
 - Private
 - Waterbodies**
 - Lake or Pond
 - Streams
 - Agricultural Soils**
 - Prime farmland (federal designation)
 - Farmland of statewide importance
 - Farmland of local importance

NEW HAMPSHIRE WILDLIFE HABITAT LAND COVER 2015

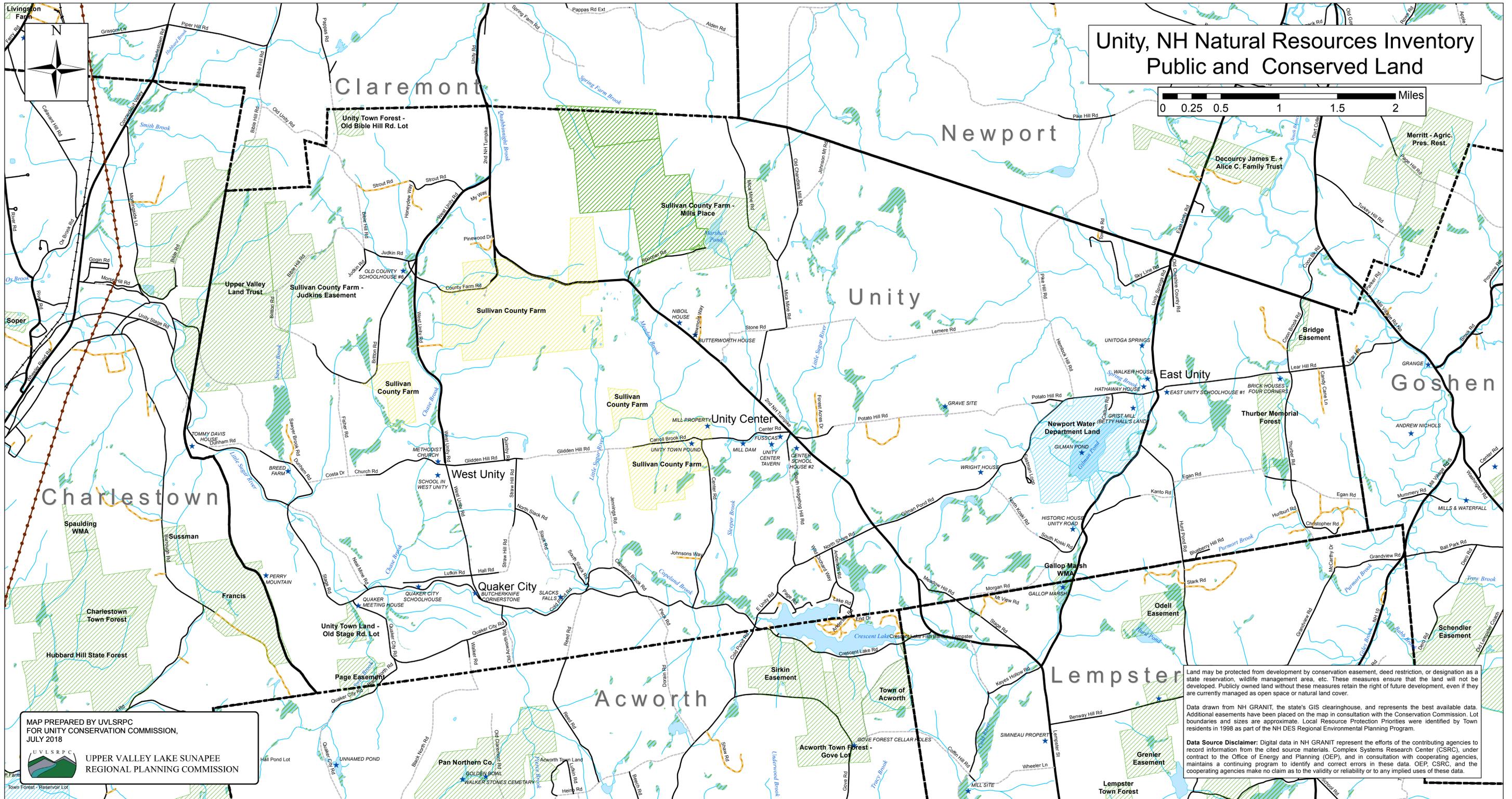
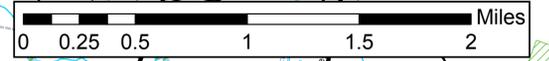
-  Coastal Island/Rocky coast
-  Dune
-  Salt marsh
-  Peatland
-  Marsh and Shrub wetland
-  Northern or Temperate Swamp
-  Floodplain Forest
-  Grassland
-  Pine barren
-  Cliff or Talus slope
-  Rocky ridge
-  Alpine
-  High-elevation Spruce-fir
-  Low-elevation Spruce-fir
-  Northern hardwood-conifer
-  Appalachian oak-pine
-  Hemlock-hardwood-pine
-  Open Water
-  Developed or Barren (NLCD)
-  Conservation or public land

Base map data provided by NH GRANIT (2015)
Intended for planning use only.



Map 6

Unity, NH Natural Resources Inventory Public and Conserved Land



MAP PREPARED BY UVLSRPC
FOR UNITY CONSERVATION COMMISSION,
JULY 2018

UVLSRPC
UPPER VALLEY LAKE SUNAPEE
REGIONAL PLANNING COMMISSION

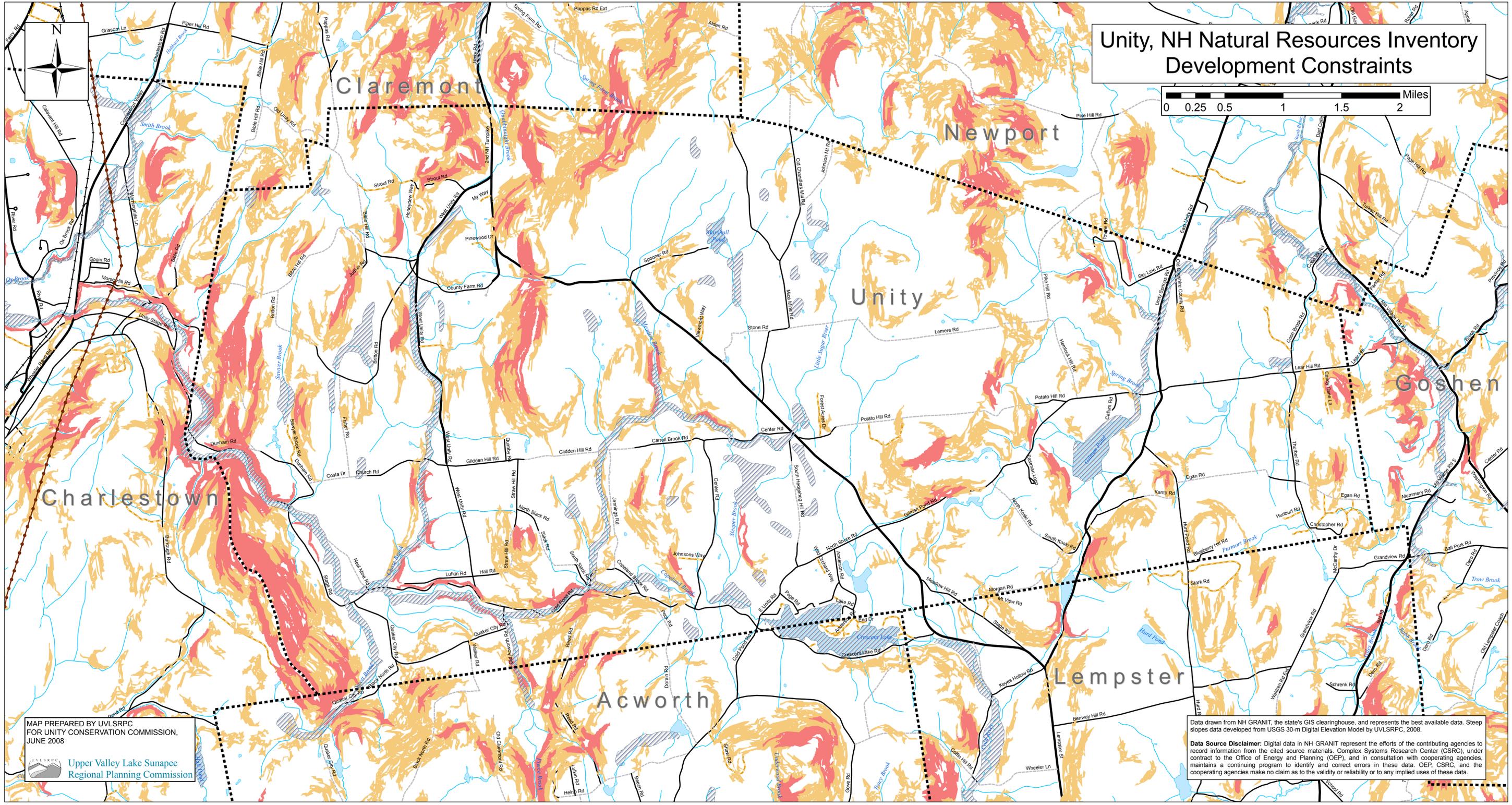
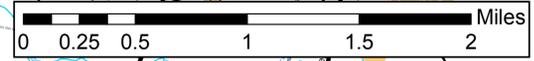
Land may be protected from development by conservation easement, deed restriction, or designation as a state reservation, wildlife management area, etc. These measures ensure that the land will not be developed. Publicly owned land without these measures retain the right of future development, even if they are currently managed as open space or natural land cover.

Data drawn from NH GRANIT, the state's GIS clearinghouse, and represents the best available data. Additional easements have been placed on the map in consultation with the Conservation Commission. Lot boundaries and sizes are approximate. Local Resource Protection Priorities were identified by Town residents in 1998 as part of the NH DES Regional Environmental Planning Program.

Data Source Disclaimer: Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy and Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.

- ### Legend
- | | | | |
|----------------------------|--------------|---|-----------------------------|
| Town Boundaries | Waterbodies | Public Land not Protected from Development | Local Resources to Protect |
| Electric Transmission Line | Lake or Pond | Land Protected from Development (Public or Private) | Priority Sites or Buildings |
| Railroad | Streams | Water Supply Land Public, No Permanent Protection | |
| Roads | Wetlands | | |
| State | | | |
| Local | | | |
| Not Maintained | | | |
| Private | | | |

Unity, NH Natural Resources Inventory Development Constraints



MAP PREPARED BY UVLSRPC
FOR UNITY CONSERVATION COMMISSION,
JUNE 2008



Data drawn from NH GRANIT, the state's GIS clearinghouse, and represents the best available data. Steep slopes data developed from USGS 30-m Digital Elevation Model by UVLSRPC, 2008.
Data Source Disclaimer: Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy and Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.

Legend

Town Boundaries	Waterbodies	Development Constraints
Electric Transmission Line	Lake or Pond	100-Year Floodplain
Railroad	Streams	>15% Slope
Roads		>25% Slope
State		
Local		
Not Maintained		
Private		