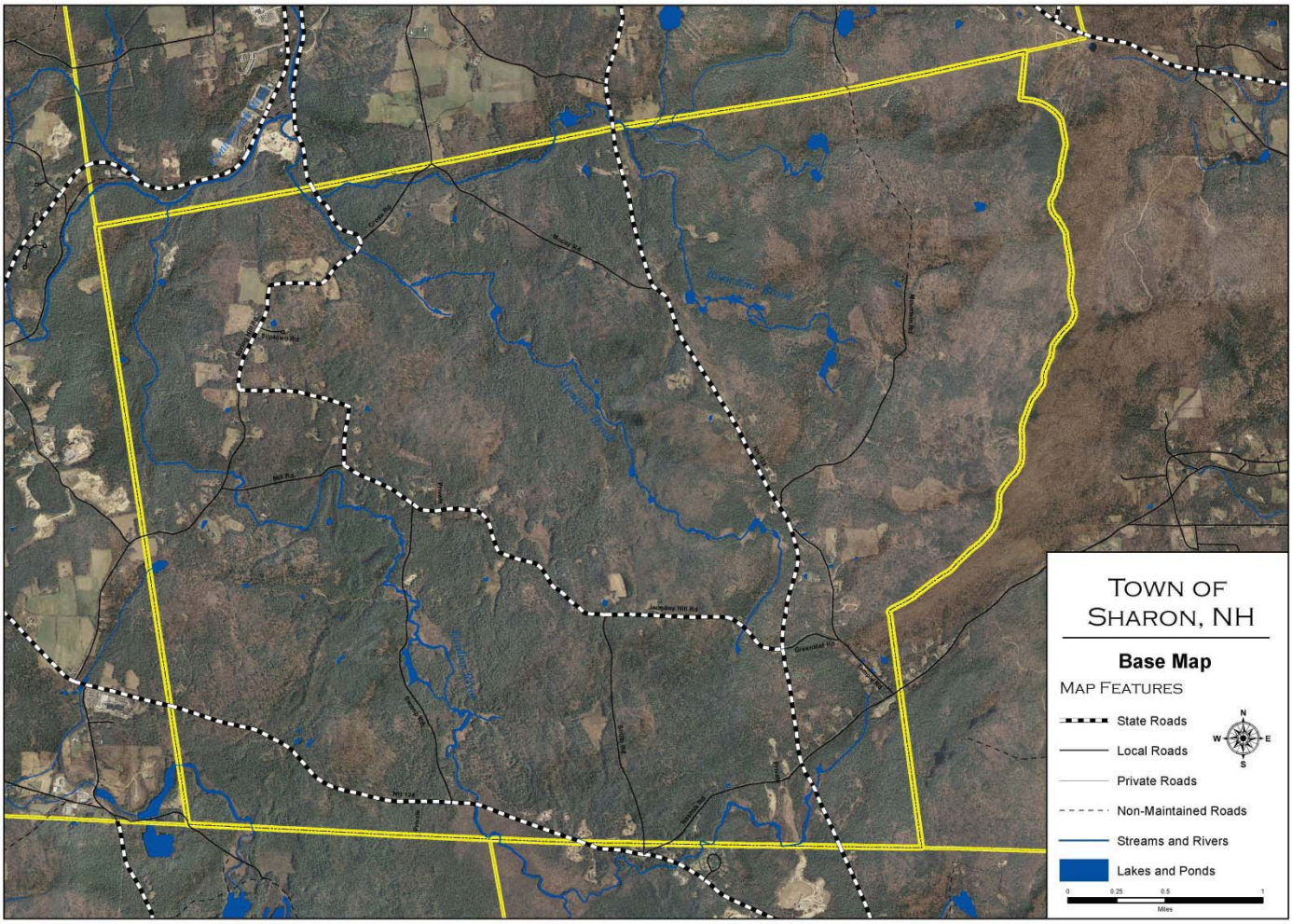
A Plan for the Protection of Sharon's Open Space

July 2012



2010 Leaf-off Aerial Photograph – NH Granit

Prepared by the Sharon Open Space Planning Committee, a sub-committee of the Sharon Conservation Commission, with assistance from The Monadnock Conservancy's Monadnock Community Conservation Partnership, and with input from the people of Sharon.

A. Introduction

Open space protection is an effective tool for preserving community character, protecting the environment and **enhancing quality of life. Consensus about the role of open space protection in community planning is critical.** Having taken into consideration other community goals, an Open Space Plan is the basis for establishing priorities and policies.

B. Background and Justification

The population of New Hampshire grew 6.5% from 2000 to 2010, with a population estimate of 1,316,470 according to 2010 census figures. Hillsborough County had the greatest population increase of the State's ten counties. While there are some positive aspects to growth, with it come many challenges, not the least of which are stresses on the environment. One of the most serious concerns is the permanent loss of open spaces. Statewide, it is estimated that 15,000 acres of open land are developed every year.

The 2002 Master Plan states that Sharon's environment is fragile with a limited capacity to support further development. The Master Plan also notes that in 2002, "much of the most suitable land for development has been utilized. Increasingly, building lots will be proposed on marginal land; land with steep slopes, wetlands, or with other limitations. Unless precautions are taken, future development could also diminish or destroy some of the Town's remaining historic landmarks."

C. Purposes

This Open Space Plan supports and fulfills many of the goals and recommendations of the 2002 Sharon Master Plan. Principally these include several appearing under the section "Goals and Recommendations" on page 18 of the Master Plan.

Goals:

1. "To preserve the essentially rural character in a growing and urbanizing world."
2. "To protect streams, rivers and wetlands."
7. "To recognize and protect environmentally sensitive lands and surface waters."
8. "To establish and maintain an open space system comprised of the Town's environmentally sensitive areas, which are linked by trails and corridors to provide wildlife and pedestrian passage throughout the town."
9. "To preserve large tracts of open woodland."
10 "To protect our forested hillsides."
11 "To preserve the rural character of all roads in Sharon."

Recommendations:

- "Complete the protection of the slopes of Temple Mountain."
- "Expand the Town Forest, linking it with our two other major open space areas to the east and southwest."
- "Protect the entire length of the Gridley River and its watershed from sedimentation, erosion, pollution or inappropriate development."
- "Take steps to assure that our children, new Town residents and the residents of an increasingly urbanizing state understand the importance of keeping Sharon rural."

- "Develop a conservation plan."
- "Develop a hillside development ordinance."
- "Make every effort to preserve the Gridley aquifer."
- "Make every effort to purchase or protect environmentally sensitive gravel bearing lands"

This Plan sets forth criteria, goals and recommendations for implementing an Open Space Protection Plan and establishes a role for Town government in land conservation as a matter of public policy. That public policy acknowledges that by protecting certain natural features described here under "Open Space Plan Goals," Town government is protecting or enhancing certain resource values. At a minimum, the Plan directs the Town of Sharon to promote land conservation and to be vigilant in seeking opportunities to protect land. The role of Town government in this area may also be to educate landowners about the topic, network among landowners and land trusts and acquire land or conservation easements.

D. Planning Approach

In the spring of 2010, the Town of Sharon began a process to develop a town open space conservation plan. An ad hoc Sharon Open Space Committee was formed as a sub-committee of the Sharon Conservation Commission. It joined the Monadnock Conservancy's Monadnock Community Conservation Partnership program. The Sharon Open Space Committee included members of the Conservation Commission, Planning Board, Select Board, and citizens at large.

The Committee conducted a Conservation Survey to collect input from residents as to what they value most about the town and what resources they feel contribute most to the town's quality of life. Residents were asked to indicate on a town map where special places are located and what makes these places unique. Residents who attended the 2010 Sharon Town Picnic were asked to complete the survey and during the fall of 2010, the survey was mailed to all 118 households in town. A total of 57 surveys were returned. In addition, volunteers from the planning committee intercepted citizens coming to the town offices during office hours on Tuesdays evenings and invited them to identify special places in town by placing sticky dots on a map. Between the surveys and the evenings at the town office, 298 dots were placed on the town map.

The planning committee also reviewed natural resource information and maps provided by the Monadnock Conservancy. The committee reached consensus on a set of *Open Space Goals* and *Natural Features Important to Protect*. In all cases, the goals and features were determined to be essential to community well-being in some basic way, or are part of how residents define Sharon's community character. Ultimately, all are basic to the environmental quality and rural character of Sharon.

E. Community Values

In summarizing the results of the Conservation Survey, it was found that survey respondents have the same primary value as stated in the 2002 Master Plan: "Our primary goal, and our responsibility, is to forge a blueprint that will ensure that twenty years from now, Sharon remains a small, rural, beautiful community." The survey results indicated that people believe that all of the resources addressed in the survey contribute to community character and quality of life, with clean water, clean air, wildlife habitat, and peace and quiet considered to be most important. The survey further highlighted that the undeveloped, unspoiled landscape, the peace and quiet and isolation, and the small scale of the town were the features that most contribute to the town's unique qualities. When asked to identify places most important to conserve, lands along the Gridley River, the Town Forest and Meadow Brook, the mountain area along the eastern town boundary and the undeveloped road frontages were areas most frequently identified.

F. Open Space Plan Goals

1. Conserve and protect river corridors and wetlands associated with the Gridley River, Meadow Brook, Town Line Brook, and their tributaries. This will buffer these high quality streams from the adverse effects of development and provide important corridors for wildlife.
2. Conserve and protect the current and potential drinking water resources including the stratified drift aquifers and their recharge areas located throughout the Town.
3. Maintain the large blocks of undeveloped land by conserving lands adjacent to existing conserved lands, including:
   - The block between Jarmany Hill Road and NH Rte. 124;
   - The Town Forest block north of Jarmany Hill Road; and
   - The block between NH Rte. 123 and Temple Mountain.

   Each of these blocks is a significant contributor to the health of wildlife populations and the water quality in the three streams.
4. Conserve land that can provide connectors and corridors between the large blocks of undeveloped land, as well as steep slopes and viewsheds.
5. Protect ridgelines, viewsheds and steep slopes. Regulate cut-and-fill to prevent landslides and to preserve water quality/safety.
6. Preserve the rural character of Sharon's roads, particularly those with scenic and undeveloped road frontages.

These goals reaffirm and expand on the goals and recommendations set forth in Sharon's 2002 Master Plan. The Goals also reflect the "lands with important conservation values" that were identified through this planning process and are displayed on the final map of the Natural and Community Resources Inventory, attached as Appendix A to this plan.

G. Implementation Strategies

Water Testing: The Conservation Commission will continue the water testing it has conducted each year since 2002.

Build Community Support: The Conservation Commission will encourage the people of Sharon to get out onto the land. Trails in the Town Forest have been cleared and marked, and additional trails are being developed. A map is being created and will be made available to the public, both on the Town web site and at the trail heads.

Community Awareness: The Open Space Committee shared survey results at the 2011 Town Picnic and on a poster board in the Town House. The Committee will share the Natural Resource Inventory and Open Space Plan with everyone in the community and will invite citizen comment and input.

Landowner Outreach: When appropriate, talk with landowners about the special characteristics of their land; share natural resource information; share information about conservation options; provide access to best management practices for managing their land.

H. Overview of Land Conservation

There are two primary ways to protect land for conservation purposes: Conservation Land Transactions and Regulation. This plan focuses primarily on the former, which involves working directly with interested landowners. The two most common Conservation Land Transactions are acquisition of the land, which can be

done through a landowner donation or by purchasing the land, and acquisition of a conservation easement, which also can be done through a landowner donation of the easement or by purchasing the easement.

Conservation Land Transactions can be initiated in two ways:

Active and strategic: Identifying high-priority parcels and actively encouraging the landowner to conserve their land. When successful, these projects have the greatest potential to achieve community goals.

Responsive to opportunities as they arise: Most land protection accomplishments come as the result of being vigilant and ready to respond when a landowner decides to conserve or sell their land. Having the Open Space Plan in place will help guide town decisions to support a project when these opportunities arise. It will also help create opportunities through education and outreach.

I. Recommendations

1. The Planning Board adopts the Open Space Plan as a chapter in the Town Master Plan.
2. In carrying out their responsibilities, the Board of Selectmen, Planning Board, Conservation Commission, and Zoning Board of Adjustment look for active ways to integrate the Open Space Plan into their deliberations and plans. These might include Master Plan updates, zoning changes, subdivision regulations, subdivision reviews, site plan reviews, placement and extension of infrastructure, economic development, emergency management, and facility siting.
3. The Conservation Commission continues to fulfill the functions of an Open Space Committee and will appoint an Open Space sub-committee as needed if the Conservation Commission's work-load increases.
4. Town Boards should continue community conversations to enhance support for conservation funding. Use these funds to pay for conservation transaction costs when a landowner agrees to donate a conservation easement.

J. Action Plan

<u>Within 6 months</u>

- Adopt a Land Conservation rating system to establish relative priorities and evaluate specific land conservation opportunities.
- Publicize the Open Space Plan to the general public and interested groups.
- Meet with the Planning Board to review the Open Space Plan and actions.

<u>Annually</u>

- Consider what actions are needed at the Town Meeting to implement the Open Space Plan. These could include expanding the Conservation Fund for acquiring specific parcels.
- Hold a landowner education workshop on conservation options.
- The Conservation Commission and the Open Space Committee should meet with the Planning Board and Selectboard to review progress toward implementation.

<u>Biannually</u>

- Review the Open Space Plan and revise, if necessary.

- Acquire updated maps from Southwest Region Planning Commission or the Monadnock Conservancy showing conservation lands, natural resources, and other related features.

K. Conclusion

The Sharon Master Plan of 2002 clearly states the community's goal of maintaining Sharon's unique rural character. It declares that we must not only work to protect our town's character, but we must do a better job of letting others know why our town is so special, and why keeping Sharon rural is not only in our best interest, but is also necessary for the welfare of the entire region. The Open Space Plan provides guidance regarding the important places within Sharon that should be protected in order to achieve this goal.

APPENDIX A – Natural and Community Resources Inventory

A. Introduction

The purpose of this Natural Resource Inventory (NRI) is to compile, map and describe important, naturally occurring resources in the town of Sharon. NRI's are typically used for a myriad of purposes including: natural resource planning and management, conservation planning, land use planning, evaluating effects of land use changes over time, and educating the public about what resources exist in a defined area (a town, a watershed, a region), where in the area they are located, and the role they play in maintaining ecological and community health. Natural resource inventories can be used to raise public awareness and understanding of how various land use practices can either harm or prevent harm to the resources' functions and values.

In addition to mapping Sharon's natural resources, the inventory approach invited town residents to contribute local knowledge about the various resources to enhance the quality and usefulness of the compiled information. Residents also provided input regarding places with cultural, historical, recreational, and scenic significance in town. This local knowledge informed the summary mapping of important conservation values that forms the basis for establishing conservation priorities.

B. Jurisdiction

New Hampshire law grants to municipalities the authority and responsibility through their conservation commissions to catalogue their local natural resources and to take actions toward their protection, as follows:

> **NH RSA 36A:2 (Conservation Commissions)**
>
> "Such commission shall conduct researches into its local land and water areas and shall seek to coordinate the activities of unofficial bodies organized for similar purposes, and may advertise, prepare, print and distribute books, maps, charts, plans and pamphlets, which in its judgment it deems necessary for its work. It shall keep an index of all open space and natural, aesthetic or ecological areas within the city or town, as the case may be, with the plan of obtaining information pertinent to proper utilization of such areas, including lands owned by the state or lands owned by a town or city. It shall keep an index of all marshlands, swamps and all other wet lands in a like manner, and may recommend to the city council or selectmen or to the department of resources and economic development a program for the protection, development or better utilization of all such areas."

C. General Explanation of Maps

All maps associated with this inventory were produced with ArcGIS 10.0, geographic information system (GIS) technology developed by Environmental Systems Research Institute, or ESRI. Most of the natural resources data used in this inventory are public data compiled from a variety of sources and made available through NH GRANIT, the statewide clearinghouse for GIS data. Original sources of data include the NH Fish & Game Department, the NH Department of Transportation, the US Geological Survey, the NH Department of Environmental Services, and USDA's Natural Resource Conservation Service among others.

While the data utilized in this inventory can be expected to have a high level of spatial, temporal, and content accuracy, they are intended to be used primarily for broad-scale planning purposes rather than site-scale analysis as most have not been field verified. Any land management or conservation activities initiated as a result of this inventory should also include some level of "on the ground" evaluation to confirm the findings of this report at the specific site and to identify any other features not included in this inventory.

Maps have been organized into six categories as follows:

1. Context Maps
    a. Aerial Photo Base Map (Shows land cover and topographic characteristics)
    b. Regional Context Watershed Map
2. Water Resources Maps
    a. Sub-watersheds and Surface Waters Map
    b. Wetlands Map
    c. Surface Water Quality Threats **(**Steep slopes, highly erodible soils, and stream buffers)
    d. Ground Water Map (includes soils with potential for groundwater recharge)
3. Wildlife and Ecology Maps
    a. NH Wildlife Action Plan Predicted Habitat land Cover Map (includes Natural Heritage Bureau historic rare species observations and exemplary natural communities)
    b. Open Lands Map (developed from 2010 aerial photograph)
    c. Unfragmented Lands Map (Areas without maintained roads or significant development)
    d. NH Wildlife Action Plan Priority Map (State wildlife habitat priorities)
4. Working Lands Resource Maps
    a. Agricultural Soils
    b. Forest Soils
5. Sharon Conservation Survey
    a. Special Places Identified by Citizens Map
6. Conservation Maps
    a. Conservation and Publicly Own Lands Map
    b. Summary of Lands with Important Conservation Values

All maps in this inventory include the following common "base layers":

- Town Boundaries - based on 1:24,000 USGS topographic maps.
- Roads data - produced and maintained by NH DOT. Data include state highways, town roads, private roads, and un-maintained roads (Class VI roads). In a few cases the DOT data were incorrect, and roads were added, removed, and/or reclassified based on input from the town.
- Surface Waters (lakes, ponds, rivers, and streams) - based on United States Geological Survey (USGS) data and updated using 2010 aerial imagery.

1. Context Maps

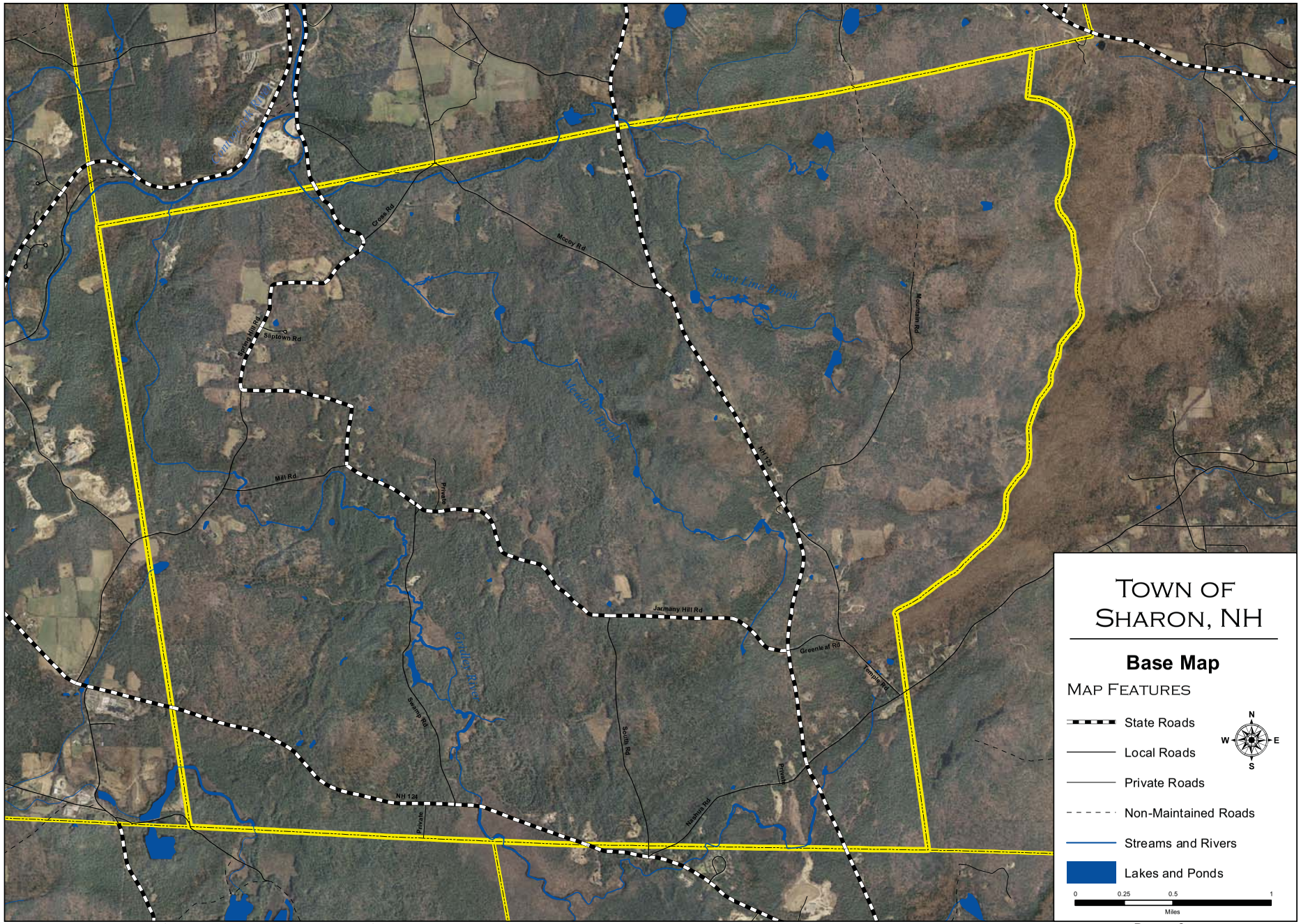
The maps in this section provide an orientation that is useful for putting the natural and cultural resources into context. This section includes two maps, an aerial map centered on the town showing town boundaries, roads, streams, and ponds; and a high level watershed map showing the town boundaries for Sharon and its surrounding towns, major watershed boundaries for the upper part of the Contoocook River and surrounding watersheds, and the rivers and streams flowing through each of the watersheds.

a. Aerial Photo Base Map (Showing land cover and topographic characteristics)

The Town of Sharon has an area of 10,022 acres. The town is sparsely populated with a total of 115 single family residential dwellings, most of which have frontage along one of the town's 14 public roads. Several homes are sited off of three of the four private roads in town. There is one Class VI road (Mountain Road) that is not maintained. Two class V roads, Swamp Road and South Road, are not plowed in the winter. All roads in town contribute to the town's rural character, and the town places a high priority on maintaining the scenic qualities of the roads. The following table provides a complete road inventory (all distances in miles).

Road Inventory	State Maintained	Town Maintained	Not Maintained	Private	Total Miles
NH 123	3.98				3.98
NH 124	2.25				2.25
Jarmany Hill Road	3.52				3.52
Spring Hill Road	1.52	1.04			2.56
Greenleaf Road		0.31			0.31
McCoy Road		1.35			1.35
Mill Road		0.70			0.7
Nashua Road		1.46			1.46
Sliptown Road		0.17			0.17
Spaulding Road		0.47			0.47
Temple Road		1.06			1.06
South Road		1.21			1.21
Swamp Road		1.30			1.3
Mountain Road		1.44	1.03		2.47
Private Roads				0.61	0.61
Total Miles	11.27	10.51	1.03	0.61	23.42

There are currently only a few parcels in town that are primarily dedicated to commercial business (including the Sharon Arts Center and Three Maples B&B), although there are a number of home-based businesses and several small agricultural business located in town. The majority of the town is forested with only 172 acres in open fields (including agricultural fields, hay fields, brush-cut fields, fallow/early succession fields and fields adjacent to residential properties; does not include lawn areas).


Cross Rd
McCoy Rd
Town Line Brook
Mountain Rd
Sharon Hill Rd
Sliptown Rd
Meredith Brook
Mill Rd
Private
NH 123
Jacmany Hill Rd
Greenleaf Rd
Temple Rd
Grindle River
Swamp Rd
Smith Rd
Private
NH 124
Newbury
Newbury Rd
Town of Sharon, NH
Base Map
Map Features
State Roads
Local Roads
Private Roads
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Lakes and Ponds
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b. Watershed Context Map

Most natural resources occur on the landscape in a manner that has little or no relationship to politically created boundaries (parcel, town, county and state boundaries), except in those instances where the boundary follows a natural feature such as the centerline of a river, the edge of a lake, or along the high point of a ridgeline. Water flows, plant communities, animal populations, and more broadly ecological functioning, typically occur across human defined boundaries, and may be disrupted when land use decisions are made only in the context of political boundaries, (i.e. at the parcel scale by an individual landowner or at the town scale through the implementation of municipal zoning).

Delineation of the landscape based on physical and/or biological characteristics has more significant meaning and utility, particularly when seeking to avoid impacts of land use decisions on surface water quality. A common form of land delineation for land use planners is the watershed, in part because of the important role and impact that water flow has on ecological health and functioning. Watersheds are defined by the topographic dividing lines (the high points) between drainage areas. Rain falling on one side or the other of these dividing lines will flow into different streams. In some instances these streams will join together further down in the drainage basin to form a large stream or river. In other cases, the water will flow in a completely different direction and remain separate until it ultimately reaches the ocean.

Watershed boundaries can be defined at various levels of scale, where a watershed for a small intermittent stream (as known as a catchment), is also a part of the sub-watershed of the stream it flows into, which in turn is part of the larger watershed of the river it flows into (sometimes referred to as a drainage basin). As such, some high level (basin scale) watershed boundaries act as real biological boundaries for the organisms and natural systems that occur within them. In other instances, smaller sub-watershed boundaries serve as a mechanism for concentrating migrating wildlife along preferred routes or corridors.

For the purpose of providing context for the Sharon Natural Resource Inventory, two watershed levels of scale are provided. The first level, shown in Map 1: "Watershed Context", provides a context for the entire town of Sharon, which is situated in the "upper" (southeast) headwaters of the 489 thousand acre Contoocook River watershed. The Eastern Boundary of Sharon is the ridgeline of Temple Mountain, which serves as the dividing line between the Contoocook River watershed and the Souhegan watershed, both of which are ultimately part of the greater 2.65 million acre Merrimack River drainage basin. As such, all water passing through and draining from Sharon's entire land area flows to the Contoocook River. This means that land uses within the town's boundaries can significantly influence the quality of surface water leaving the town.

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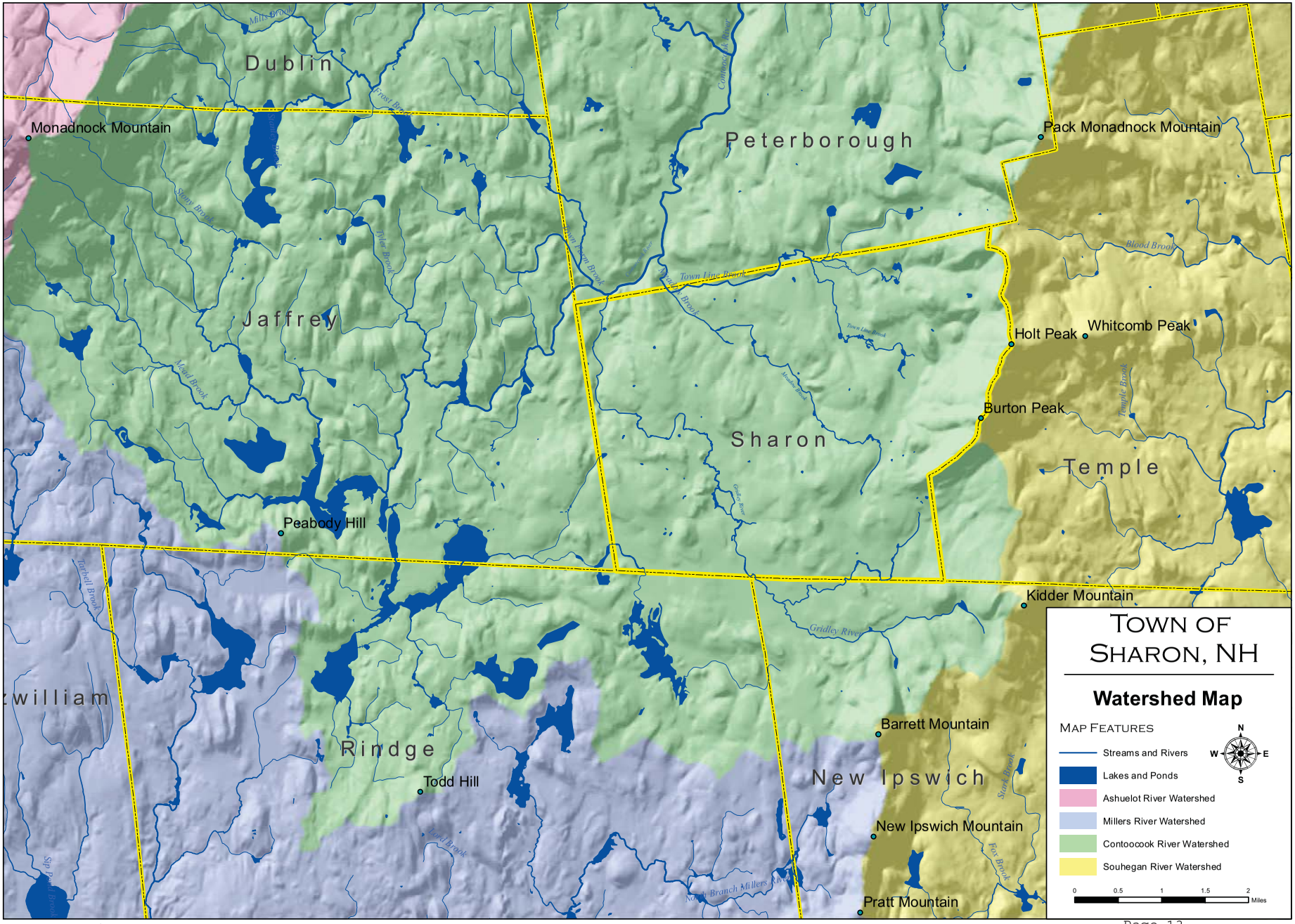
Dublin
Peterborough
Jaffrey
Sharon
Temple
Rindge
New Ipswich
Monadnock Mountain
Pack Monadnock Mountain
Holt Peak
Whitcomb Peak
Burton Peak
Peabody Hill
Kidder Mountain
Barrett Mountain
Todd Hill
New Ipswich Mountain
Pratt Mountain
Town of Sharon, NH
Watershed Map
Map Features
Streams and Rivers
Lakes and Ponds
Ashuelot River Watershed
Millers River Watershed
Contoocook River Watershed
Souhegan River Watershed
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2. Water Resources Maps

a. Sub-Watersheds and Surface Waters of Sharon Map

The land area within Sharon's boundaries is divided into four sub-watersheds. From northeast to southwest, these sub-watersheds include the Town Line Brook watershed, the Meadow Brook watershed, the Gridley River watershed, and a portion of the watershed for a small stream leading from Hubbard Pond to Contoocook Lake. Surface water resources are defined as lakes and ponds, rivers and streams, wetlands and vernal pools, and the riparian zones that play a crucial role in maintaining the health of these ecological systems.

Town Line Brook - Town Line Brook originates from four tributary streams along the western flanks of Temple Mountain, with 3040 acres of the 4212 acre sub-watershed located in Sharon and the balance located in southeastern Peterborough. Two tributaries originating in the northeast corner of Sharon are joined by two smaller tributaries originating in southeast Peterborough to form the main stem. At the point of confluence, the main stem of Town Line Brook dips northward into Peterborough flowing approximately .6 miles before dropping back down into Sharon for approximately 1.4 miles to the point at which it merges with Meadow Brook. At that point, the stream turns northwest for approximately .6 miles, crossing back into Peterborough and joining the Contoocook River.

The Sharon tributaries of Town Line Brook are characterized by several small ponds, beaver impoundments, and broad, open wetland areas. The northern tributary in Sharon originates from Sharon's largest pond, a four-acre unnamed pond located just south of the Peterborough boundary and west of the class VI portion of Mountain Road. The outlet from this pond flows into a 1.5 acre beaver pond approximately .1 miles downstream and then continues westward approximately 1.3 miles to the point where it joins with the Peterborough tributaries and then the southern tributary. The southern tributary in Sharon has 6 ponds or pools ranging in size from .2 acres to 3.2 acres, the largest of which is located at the top of tributary. Most of these appear to be beaver impoundments. Total length of this tributary is approximately 2.4 miles. The Town Line Brook is stocked with eastern brook trout by the NH Fish and Game Department.

The Town Line Brook watershed hosts three small ponds not directly associated with any of the Town Line Brook tributaries. A .2 acre man-made pond is located near a residential structure at the end of the Class V portion of Mountain Road, a .7 acre man-made pond is located near a residential structure west of NH Route 123 not far from the Peterborough town boundary, and a third 1.2 acre beaver pond is perched half way up the western side of Temple Mountain.

Meadow Brook - The 2726 acre Meadow Brook watershed is entirely contained within Sharon's town boundaries, originating from a large wetland area located south of Jarmany Hill Road and West of NH Route 123. After crossing Jarmany Hill Road, the brook flows northeast for approximately 1.1 miles from its origin, under Jarmany Hill Road, and then turns west and northwest as it enters Sharon's town forest. The brook meanders approximately 2.2 miles through the Town Forest before exiting to the north. After passing through .2 miles of private land, the brook enters a .9 mile stretch of privately conserved land to the point where it merges with the Town Line Brook. The entire length of the Meadow Brook is characterized by occasional small pools and beaver impoundments, including a 1.5 acre pond before it enters the town forest and 1.3 acre pond before it leaves the Town Forest. A small .3 mile side stream originates from wetlands at the west end of the Town Forest and travels northwest before joining Meadow Brook from the south, in the private conservation land. The Meadow Brook is a State designated native wild brook trout stream.

The Gridley River - The largest sub-watershed in Sharon encompasses the Gridley River. The Gridley River forms from three tributaries, the north tributary originating in the southeast corner of Sharon, east of NH Route 123, and the middle and south tributaries originating in New Ipswich. The north tributary meanders in a southwesterly direction for approximately 1.7 miles before crossing into New Ipswich where it joins the other two tributaries to form the Gridley River main stem. The north tributary and the main stem flow for

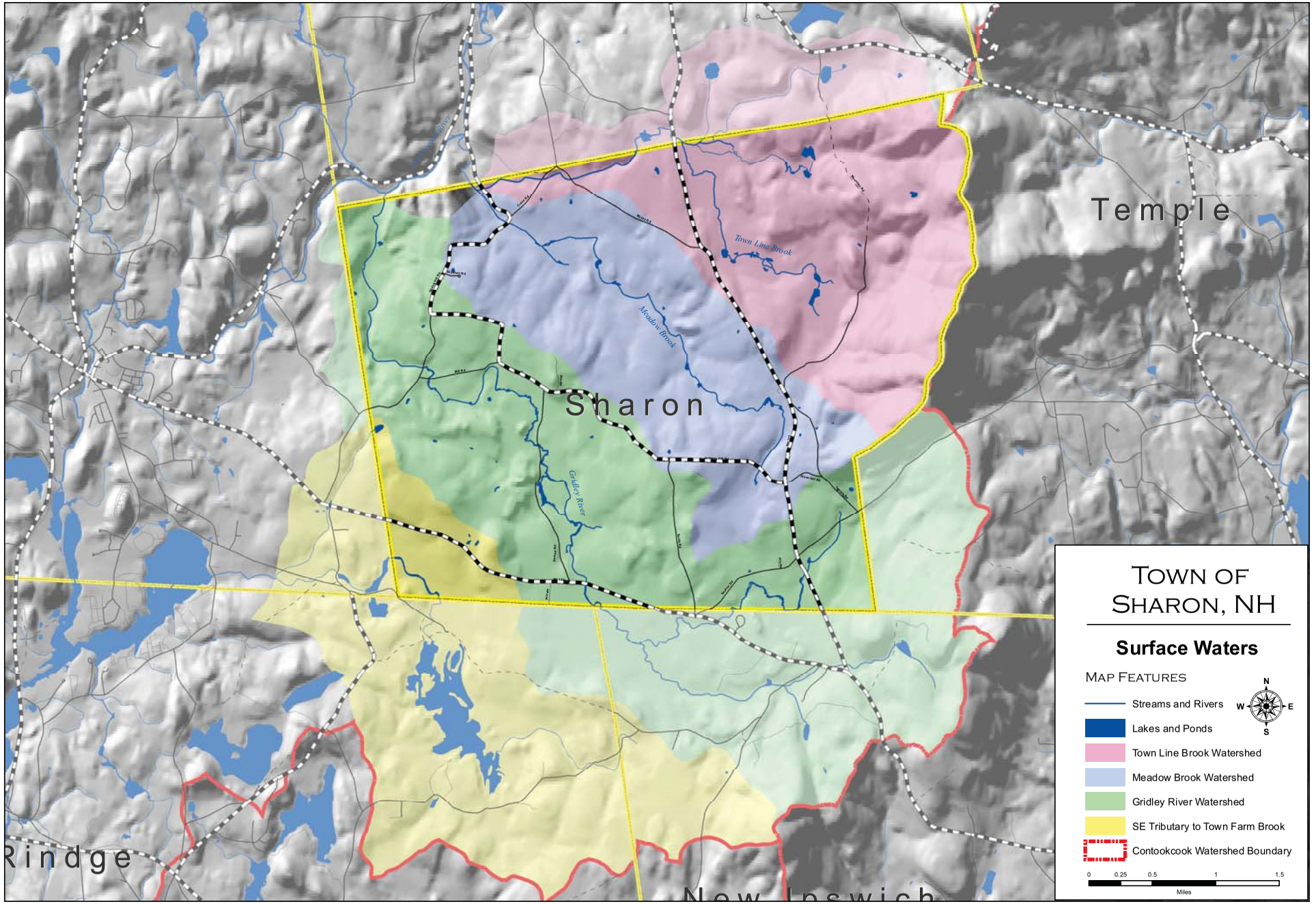
approximately 1.5 miles through New Ipswich before turning northwest and reentering Sharon. The Gridley River flows north through the west side of Sharon for approximately 5.5 miles before passing into Peterborough and then another 250 feet where it joins the Contoocook River. Approximately 2.3 miles of the river pass through or along lands owned or conserved by the Society for the Protection of NH Forests and an additional .7 miles through or along land owned by the Nature Conservancy. The total area of the sub-watershed is approximately 7034 acres and the portion of the watershed within Sharon is 3658 acres. Several locations along the Gridley River are stocked with eastern brook trout by the NH Fish and Game Department.

The Gridley River has several small in–stream ponds or impoundments, the largest of which (approximately 3.7 acres) was the mill pond for a former mill located east of Swamp Road. The watershed also includes several small woodland and farm ponds (under .5 acres) not directly associated with the Gridley River. Among these are the Sharon Bog pond (.4 acres), and a pond west of the river in the northwest corner of the town, located partially on the town boundary (.5 acres).

Contoocook Lake Tributary - A small portion of the watershed for a tributary to Contoocook Lake, located upstream from the other Sharon sub-watersheds, encompasses 477 acres of the southwest corner of Sharon. The tributary flows from Hubbard Pond in Rindge, through approximately .6 miles of Sharon, and into Jaffrey before entering Contoocook Lake 1.7 miles downstream. A 2.6 acre unnamed pond straddling the Sharon-Jaffrey Boundary is also located within the tributary watershed, with the outflow of the pond located in Jaffrey and flowing southwest before joining the tributary .5 miles upstream from Contoocook Lake.

Sub-watersheds	Total Sub-watershed Area (acres)	Sub-watershed Area in Sharon	Sharon Area as % of Total Sub-watershed	Sub-watershed Area in Sharon Conserved	% of Sub-watershed Area in Sharon Conserved
Town Line Brook	4,212	3,040	72.2%	1,216.0	40.0%
Meadow Brook	2,762	2,762	100.0%	1,327.0	48.0%
Gridley River	7,034	3,658	52.0%	1,200.0	32.8%
Tributary to Contoocook Lake	27,107	477	1.8%	408.0	85.5%

For the purpose of this Table, "Conserved" includes areas subject to a conservation easement and areas owned by a governmental entity or a conservation organization.


Temple
Sharon
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New Ipswich
Town Line Brook
Meadow Brook
Gridley River
TOWN OF SHARON, NH
Surface Waters
MAP FEATURES
Streams and Rivers
Lakes and Ponds
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Meadow Brook Watershed
Gridley River Watershed
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b. Wetlands in Sharon

Wetlands are places on the landscape that are periodically or seasonally flooded or inundated by water and that have vegetation present that is adapted to grow in this type of wet condition. Often these places are associated with streams, pond edges, or beaver activity, or they may be isolated from streams or ponds, located in areas where soils have characteristics that do not allow pooled storm water to readily drain. Wetlands provide important wildlife habitat and are also important for filtering pollutants and sediments as storm water runs off, thus maintaining water quality of rivers and streams. Wetlands in Sharon have not been comprehensively mapped or field verified. This NRI uses two sources of information to predict where wetlands are located in town, the National Wetlands Inventory (NWI) and the Hillsborough County Soil Survey. The NWI was created by the United States Geological Survey, which mapped all wetlands that were evident from aerial photography. This digital database, last revised in 2001, captures many of the larger and visible wetlands, but misses many of the smaller, forested wetlands. To predict additional wetlands occurrences, this NRI provides the location of soils classified as poorly drained and very poorly drained (hydric soils) by the Hillsborough County Soil Survey. The combination of these two data sources provide a reasonable predictor of wetlands. Many of the wetlands identified through the wetland mapping in Sharon appear to be associated with one of the stream networks in town. There also several isolated wetlands in each sub-watershed that do not appear to be directly connected on the land surface to the town's major streams.

Value of Streams, Rivers, Ponds, and Wetlands

Streams, rivers, ponds, and wetlands provide wildlife habitat in the form of direct support for aquatic and terrestrial species and also as corridors of travel to a wide variety of terrestrial species. They also provide recreational opportunities for fishing, swimming and boating, and in some towns, provide a source of drinking water for residents. Water quality of surface water is largely dependent on the land uses and the condition of the surrounding land, as well as the condition of ground and surface water inputs. As such, it is important that uplands adjacent to streams, rivers, ponds, and wetlands be preserved in their natural state to the greatest extent possible. Forestry, agricultural, commercial and residential activities, when not managed appropriately, all have the potential to degrade water quality.

The land areas immediately adjacent to surface waters, called riparian zones, provide a transition from surface waters to upland areas. Where they are undisturbed, these zones are important for the water quality services they provide. Undisturbed riparian zones can filter sediment, nutrients, and pollutants from storm water runoff before it enters surface waters. These zones, and in particular the wetlands associated with streams and ponds, often provide flood water storage during periods of heavy precipitation, groundwater recharge from the stored floodwater, and gradual release of stored water over time to surface water bodies, helping to maintain water flows during times of drought.

Undisturbed riparian zones provide many benefits to wildlife, including travel corridors, cover from predators, nesting areas, and food sources for many species. Shade provided by vegetation within the zone, particularly along the edges of streams and ponds is critical for maintaining cool water temperatures necessary for the health of the aquatic environment and for many sensitive aquatic species. Fallen woody debris within the zone provides important habitat both along and into surface water bodies.

As such, these zones tend to be hotspots for wildlife. They are preferred habitat in New Hampshire for the following species, among many others: Northern two-lined salamander, Fowlers toad, Blanding's turtle, ribbon snake, wood duck, red-shouldered hawk, Eastern screech owl, barred owl, red-bellied woodpecker, pileated woodpecker, veery, cerulean warbler, river otter, mink, and all species of bat in New Hampshire. The ecological systems that are incorporated within riparian zones make them worthy of consideration for conservation.

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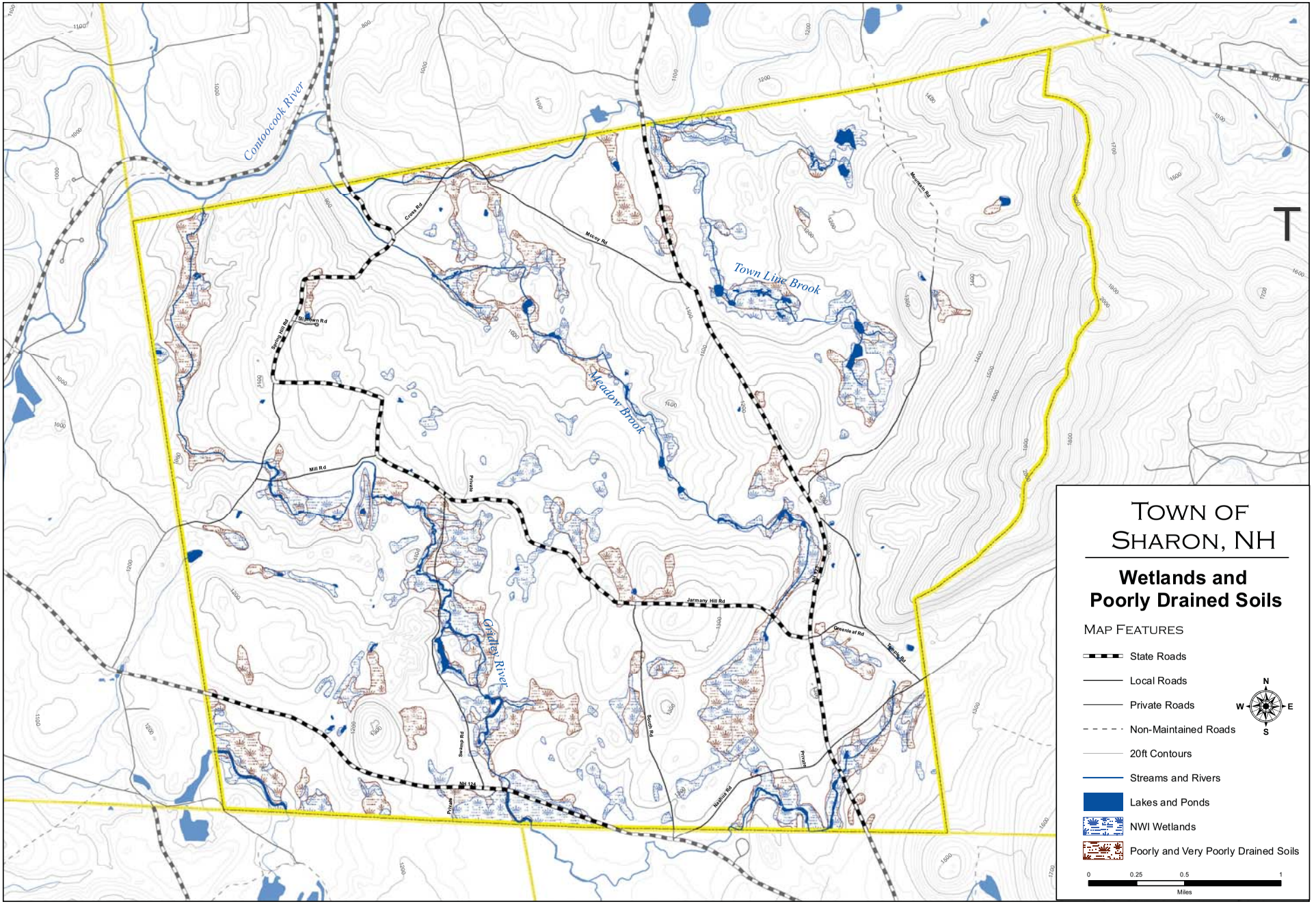
Contoocook River
Town Line Brook
Meadow Brook
Gulfer River
Cross Rd
Mccoy Rd
Mountain Rd
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Jarmany Hill Rd
Greenleaf Rd
Temple Rd
Smith Rd
Old Sharon Rd
NH 123
Nichols Rd
Private
T
TOWN OF SHARON, NH
Wetlands and Poorly Drained Soils
MAP FEATURES
State Roads
Local Roads
Private Roads
Non-Maintained Roads
20ft Contours
Streams and Rivers
Lakes and Ponds
NWI Wetlands
Poorly and Very Poorly Drained Soils
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c. Surface Water Quality Threats and Surface Water Buffers Map

Many types of land uses, when applied to areas with certain soil characteristics and or with steep slopes, dramatically increase the risk of water contamination from pollution, soil erosion, and transport of sediment into surface water bodies and to groundwater, particularly where the land use removes vegetation or disturbs the land surface on the slopes.

Contamination occurs from "point" and "non-point" pollution sources. Point source refers to releases of pollutants into the environment at specific, identifiable locations, such as leaking underground fuel storage tanks, industrial pipe discharges, accidental spills, and identifiable septic system failures. Non-point source pollution occurs more broadly across the landscape and cannot be identified to a specific site with certainty. Examples of non-point pollution sources include runoff from parking lots and roads and, in some cases, farm animal waste from pasture storm-water runoff, animals entering streams, or manure spreading in fields. Occurrences of pollution sources shown on the map were obtained from a NH DES database. The two occurrences in Sharon include non-point source pollution along the western town boundary and a one-time point source release east of NH Route 123, south of the town offices. The NH DES database indicated that this release has been remediated.

In considering soil erodibility, soils vary in their susceptibility to erosion. Both the extent to which soil particles bond to one another (resisting detachment) and the way in which soil texture affects the amount and rate of runoff, influence their susceptibility to erosion. Fine textured soils high in clay have lower susceptibility because they are resistant to detachment. Coarse texture soils, such as sandy soils, tend to have lower susceptibility because of low runoff characteristics, even though these soils are easily detached. Medium textured soils, such as silt loam soils, tend to be moderately erodible because they are moderately susceptible to detachment and they produce moderate runoff. Soils having high silt content are the most erodible of all soils. They are easily detached and they tend to crust and produce large amounts and rates of runoff.[i]

Steep slopes, those greater than 15%, can be a constraint to land development and some towns have adopted regulations that guide land uses within slopes of 15% to 25% and prohibit certain land uses with slopes over 25%. As slope increases, runoff volume and velocity tends to increase leading to a significant increase in the potential for erosion and sediment transport to occur.

Given the importance of the riparian zone for both wildlife benefits and water quality mitigation, 600 foot wide buffer strips have been mapped along both sides of perennial streams and 100 foot wide buffer strips have been mapped around wetlands and ponds. Buffer strips of up to 600 feet wide along streams are adequate to accommodate the corridor needs of most wide ranging wildlife species and the habitat needs for terrestrial species that are dependent on aquatic habitats.

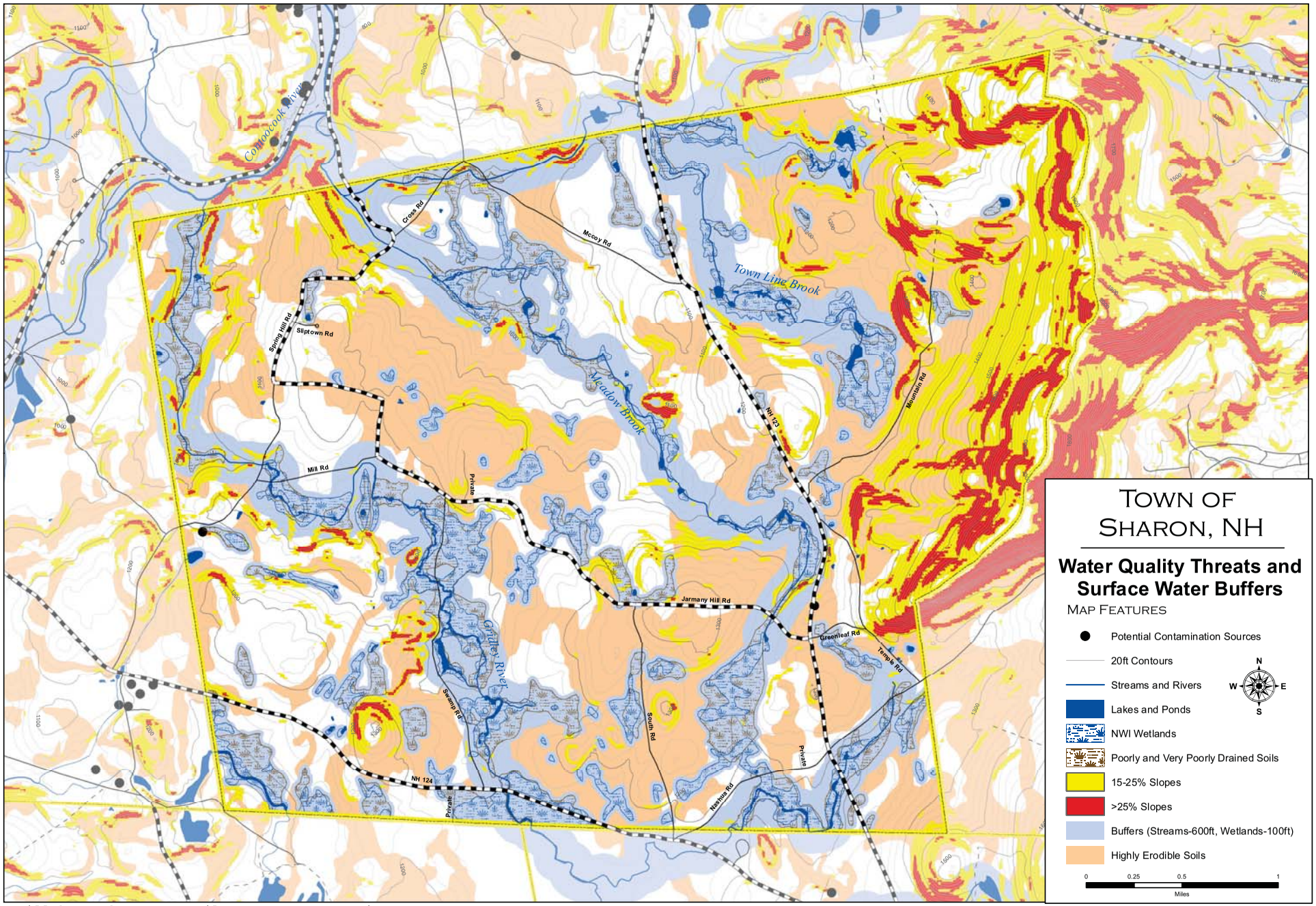
Depending on site conditions, such as surface texture, vegetation type, soil characteristics, and slope of the buffer strip, buffer widths of 100 feet or more may be needed to adequately filter out sediments, nutrients, and pollutants from storm water run-off and avoid water quality degradation. Wider buffer strips are often necessary to avoid the potential for water quality degradation in areas that slope down to the water's edge.

Water Resources	In Sharon	% of Town Total	In Sharon Conserved	% In Sharon Conserved
Highly Erodible Soils (Acres)	4,609	46.0%	1,818	39.0%
15-25% Slopes	1,310	13.1%	NA	NA
>25 % Slopes	428	4.3%	NA	NA

FEMA 100Year Floodplain

Typically a NRI would include the location of areas prone to flooding that are mapped by the Federal Emergency Management Agency (FEMA). FEMA maps identify all land areas within the 100-year floodplain, i.e. any area with a 1% probability of flooding in any given year, the development of which may be subject to state and federal regulation. In Sharon, no mapping of flood-prone areas has been completed by FEMA. However, flooding has been known to occur in the following locations:

1. Meadow Brook at Spring Hill Road
2. Town Line Brook at Spring Hill Road
3. Town Line Brook at Cross Road
4. Town Line Brook at McCoy Road


Contoocook River
Cross Rd
Mccoy Rd
Town Line Brook
Spring Hill Rd
Sliptown Rd
Meadow Brook
NH 123
Mountain Rd
Mill Rd
Private
Jarmany Hill Rd
Greenleaf Rd
Temple Rd
Gribbin River
Swamp Rd
South Rd
NH 124
Private
Private
Nashua Rd
TOWN OF SHARON, NH
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Lakes and Ponds
NWI Wetlands
Poorly and Very Poorly Drained Soils
15-25% Slopes
>25% Slopes
Buffers (Streams-600ft, Wetlands-100ft)
Highly Erodible Soils
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d. Ground Water Map

Aquifers

Virtually all portions of the landscape are capable of transmitting and storing some volume of water underground. Ground water is important as it both serves as a source of drinking water for human needs and it helps maintain the base flows in many rivers and streams allowing them to run even in times of drought. Those underground areas that are capable of transmitting and storing high volumes of ground water are called aquifers. One type of aquifer, the stratified drift aquifer, has been mapped by the state because of their exceptional potential as underground repositories of water.

Stratified drift aquifers are composed of deposits of coarse-grained sands and gravels underground that have a higher capacity for storing and transmitting water underground than areas with finer grain silt and clay particles. If water is withdrawn from a stratified drift aquifer, other water within the aquifer is able to flow to the location of withdrawal to replace it. These characteristics make stratified drift aquifers particularly suitable for use as public drinking water supplies.

The State of NH has ranked stratified drift aquifers based on the predicted volume of water that a given aquifer area will allow to be transmitted through itself per day, expressed in cubic feet of water. This predicted flow rate, known as transmissivity, provides an indicator of the potential for an aquifer to reliably meet drinking water supply needs.

The stratified drift aquifer map shows aquifers in Sharon that have been mapped by the State. The aquifers are shown in three shades of pink to purple according to transmissivity ranges. The light pink areas represent aquifers with predicted transmissivity rates between 0 and 1000 ft^3 per day, medium pink between 1000 and 4000 ft^3 per day and purple more than 4000 ft^3 per day. The majority of aquifer areas mapped in Sharon are predicted to yield relatively low transmissivity rates. These aquifer areas are located under the Town Line Brook tributaries east of NH Route 123 and under most of the Gridley River as it passes through Sharon.

The aquifer with the greatest potential for use as a future municipal water supply is located along the Gridley River, under the northern half of Swamp Road. The center portion of this portion of the aquifer, just west of the Gridley River, is predicted to have a transmissivity rate of 2000 to 4000 ft^3 per day. Other areas with moderately favorable transmissivity rates include the outer edge of a larger aquifer located in New Ipswich that just crosses Sharon's southern boundary and a small portion of an aquifer primarily located in Jaffrey that crosses over Sharon's northwest boundary.

For an aquifer to be utilized as a drinking water supply, the quality of the groundwater must be sufficiently free of pollutants and contaminants to be suitable for consumption. As such, many communities identify land areas over aquifers, and areas that potentially provide recharge to the aquifers, as high priority for conservation to reduce the risk of contamination when protected. Some towns in NH have also enacted ground water protection ordinances to prohibit certain land uses that could lead to contamination within the recharge areas.

Although recharge of groundwater does happen across the landscape, soils characterized by sand and gravel will drain more quickly and may provide a direct connection to stratified drift aquifers further underground. As such, soils classified in the Hillsborough County Soil Survey as having "probable" sand and/or gravel composition are shown on the aquifer map as potential recharge areas.

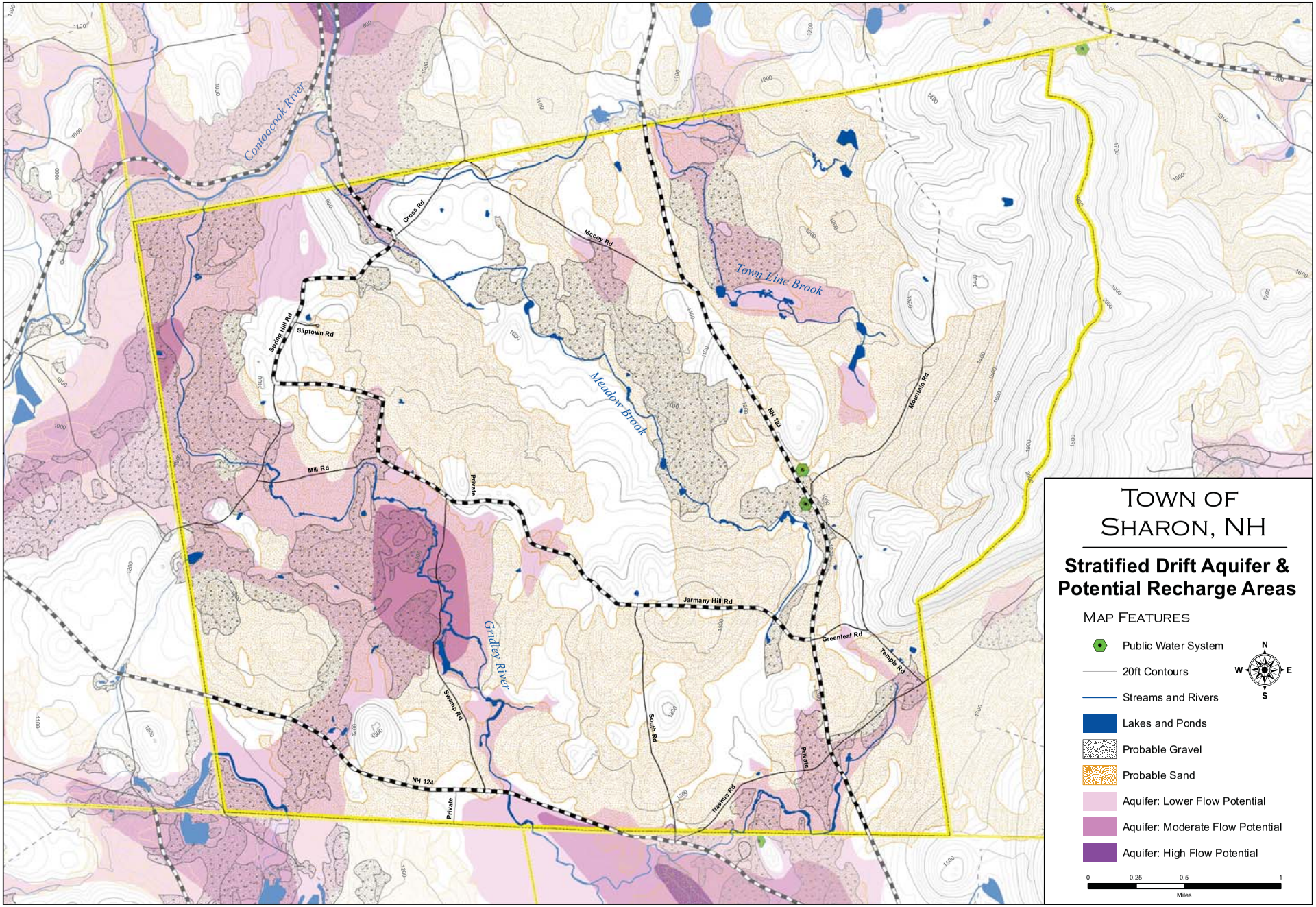
The map also shows two Public Water Systems identified in the NH Department of Environmental Services water systems database. A Public Water System is defined in NH statute as: "a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year." This includes all wells that support public buildings and commercial establishments meeting the threshold, or larger housing complexes served by a

common well. Both of the public water services listed in the NH DES database for Sharon serve the Sharon Arts Center. Both of these wells are drilled bedrock wells.

There may be other operating wells in Sharon that qualify as Public Water Systems, but do not appear in the NH DES database. In particular, two wells located in Northwest Sharon are owned by the Barking Dog Water Company. It is particularly important to protect the land around these wells, as well as the potential recharge areas, from land uses that may lead to contamination.

Water Resources	In Sharon	% of all Town Streams	In Sharon Conserved	% In Sharon Conserved
	Feet		Feet	
Streams & Tributaries (Sharon reaches only)	103,131	100%	50,291	49%
- Contoocook River	2,984	2.9%	2,984	100%
- Gridley River	43,227	41.9%	19,288	45%
- Meadow Brook	24,769	24.0%	17,310	70%
- Town Line Brook	32,151	31.2%	10,709	33%
	Acres		Acres	
Total Area of Sharon	10,022	100%		
Ponds (identified in NH Granit Database)	3.8	0.0%		0%
Open/Impounded Water (From 2010 Aerial)	40.8	0.4%	16	38%
NWI Wetlands	874	8.7%	408	47%
NWI Wetlands and poorly & very poorly drained soils	1,512	15.1%	664	44%
Stratified Drift Aquifer	2,320	23.1%	819	35%
Stratified Drift Aquifer - Area of moderate transmissivity	244	2.4%	159	65%
Public Water System - NH Wellhead Protection Area	802	8.0%		

For the purpose of all tables, "Conserved" includes areas subject to a conservation easement and areas owned by a governmental entity or a conservation organization that may not be subject to a conservation easement.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Streams and Rivers
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Probable Gravel
Probable Sand
Aquifer: Lower Flow Potential
Aquifer: Moderate Flow Potential
Aquifer: High Flow Potential
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3. Wildlife Resource Maps

a. Predicted Habitat Land Cover Map (includes Natural Heritage Bureau rare species observations)

Habitat for wildlife provides food, shelter, water and space for animal species to survive and thrive. Every species has unique habitat requirements and preferences. Virtually all portions of the landscape provide some form of wildlife habitat from time to time, yet some habitat areas are disproportionately important either to a particular species or to a diversity of species. Unfortunately, many of these important habitat types are relatively uncommon to begin with, and some are disappearing due to conversion or alteration by humans.

In 2006 New Hampshire Fish & Game Department published the NH Wildlife Acton Plan (WAP) which maps predicted habitat land cover types and establishes statewide priorities for habitat conservation. Recently updated in 2010, the WAP provides an important tool for landowners, towns, and conservation organizations to incorporate into their land use and conservation planning. When using this data in decision-making at specific sites, the WAP recommends verifying the predicted map data on the ground through field based surveys.

The WAP project worked with habitat groupings at three levels of scale: broad-scale (matrix forest type groupings), patch scale (smaller priority habitat types such as grasslands and peatlands) and individual site-scale (documented occurrences of rare and uncommon species and exemplary natural communities).

Patch-Scale Priority Wildlife Habitat Areas

The recent Wildlife Action Plan uses multi-variable modeling to predict locations where patches of significant habitat types are likely to occur in New Hampshire. All of the modeled patch scale habitat types are considered to be especially critical habitats for wildlife and are relatively uncommon in the state. According to the WAP findings, five patch scale priority habitat types can be found in Sharon: Marshes (Wet Meadow/Shrub Wetland), Peatlands, Grasslands, Rocky Ridge – Talus Slopes, and Floodplain Forest. The total acreages of each critical habitat type in Sharon and the percent of type that is designated as conserved are shown in a table at the end of this section.

Grasslands (Light Tan)

While grasslands in New England were historically created and maintained for agricultural uses, they also provide critical habitat for a variety of wildlife species that migrated into New England when 80% of the forest was initially converted to pasture in the 1800's. Grasslands have become increasingly uncommon in New Hampshire as the vast areas of open pasture and cultivated field that existed at the turn of the 19th century have given way to early successional and maturing second growth forests. This change in habitat structure has greatly reduced the numbers of species that rely on grassland habitat.

Large grasslands are especially important for wildlife diversity, with several species occurring only in the very largest of grasslands areas. Grasslands are generally active or recently abandoned farm fields. This can also include airports, restored sand and gravel pits, capped landfills, or heathlands. Northern harrier, upland sandpiper, purple martin, bobolinks, eastern meadowlark, grasshopper sparrow, horned lark, vesper sparrow, northern leopard frog and wood turtle are all uncommon species that depend on grassland habitat in New Hampshire.

There are relatively few large grassland areas in Sharon and many of the smaller grassland areas are associated with residential uses. The largest concentration of large grassland areas that are still actively managed are located along Spring Hill Road. It should be noted that the grassland data included in the WAP model was digitized from 2001 aerial photographs. The updated map showing open lands in Sharon, including grasslands, open wetlands, and large patch cut forest management applications, was digitized from 2010 high resolution aerial photographs.

Marsh and Shrub Wetlands (Aqua-Blue-Green)
This large habitat group includes dozens of natural wetland community types. These open wetlands are dominated by herbaceous vegetation or short (less than 3 meters) woody vegetation (i.e. shrubs) and include three broad habitat types: wet meadows, emergent marshes, and scrub-shrub wetlands. Significant wildlife species associated with these areas include ringed bog-haunter dragonfly, American black duck, American bittern, American woodcock, northern harrier, osprey, pied-billed grebe, common moorhen, great blue heron, least bittern, rusty blackbird, sedge wren, Blanding's turtle, spotted turtle, eastern red bat, silver haired bat and New England cottontail. Often thought to be safe from development due to State wetlands laws, these habitats are susceptible to impacts from the surrounding uplands as well as from surface waters flowing into the wetlands.

For the most part, Marsh and Shrub Wetlands in Sharon are associated with one the three main streams passing through town and are therefore fairly well distributed. Many of these occurrences are associated with existing or former human constructed dams and beaver dams. As beavers come and go, the character of wetlands and marshes associated with their dams tends to be very dynamic.

Peatlands (Dark Blue)
Peatlands are a category of wetland that accumulates slowly decomposing vegetative matter as peat. Peaty wetlands form due to limited or no groundwater input and thus have poor nutrient content and acidic water. This habitat category contains many dozens of natural wetland communities, a number of which are rare in New Hampshire. "Quaking" bogs are one relatively uncommon type of peatland. Rare plant species are often associated with peatlands. Associated uncommon wildlife species of note include ringed boghaunter dragonfly, palm warbler, spruce grouse, mink frog, ribbon snake and northern bog lemming.

While rare throughout New Hampshire, the WAP predicts a number of significant occurrences in Sharon, several of which may be relatively large. Peatlands are shown to be relatively well distributed across the town, with larger occurrences:

- along the north end of Swamp Road;
- in the land area east of South Road and West of NH Route 123;
- north of Jarmany Hill Road in the center of town;
- in the headwaters of Town Line Brook tributaries; and
- south of NH Route 124 crossing in to Rindge and New Ipswich

One peatland area, the Sharon Bog, has been designated by the New Hampshire Heritage Bureau as an "Exemplary Natural Community".

Floodplain Forests (Yellow)
Associated with larger streams and rivers and prone to periodic flooding, floodplain forest areas contain a wide variety of natural communities that provide important habitat for uncommon species. Tree species found in floodplain forests include: red maples, silver maples, black ash, black cherry ironwood, and less frequently swamp white oak, sycamore, American elm, eastern cottonwood, and river birch. Red shouldered hawk, veery, cerulean warbler, American redstart, chestnut-sided warbler, Baltimore oriole, beaver, mink, river otter, wood turtle, Blanding's turtle and spotted turtle all depend on such habitat. Many floodplain forest areas have been cleared and converted to agriculture, as these easily worked and rock-free, fine alluvial soils tend to be highly suitable for this use. Primarily for this reason, intact examples of this habitat are much less common than they once were.

The WAP predicts small floodplain forests in the northwest corner of Sharon, with areas along either side of the area where Meadow Brook and Town Line Brook converge. Another small area of floodplain forest is predicted along the lower Gridley River as it leaves Sharon.

Rocky Ridge – Talus Slope Areas (Grey with Black dots)
This habitat group includes two distinct types. Rocky ridge and summit outcrops are characterized by thin soils and dry, nutrient-poor settings. Talus slopes are steep and rocky and range from open to barren to woodland. Situated primarily at the upper elevations of the higher mountains, and at the base of steep cliffs, bedrock and loose bedrock fragments compose the primary substrate. Twenty-five natural plant communities are known to occur statewide in areas mapped as rocky ridge – talus slope. Melissa arctic butterfly, black racer, timber rattlesnake, common nighthawk, peregrine falcon, black bear and bobcat are important wildlife species known to associate with this habitat in New Hampshire. Rocky Ridge – Talus Slope habitat groups in Sharon are found only along the top of the Temple Mountain ridgeline at the northeastern boundary of Sharon.

NH Wildlife Action Plan Habitat Land Cover Types	Sharon Acres	% of Town	Conserved Acres	% Cons	Frequency In Sharon	Distribution In Sharon
Patch Scale Priority Habitats						
Grasslands	217	2.2%	43	19.8%	Uncommon	Concentrated
Marshlands	494	4.9%	220	44.5%	Uncommon	Along Rivers
Peatlands	319	3.2%	154	48.1%	Uncommon	Distributed
Flood Plain Forest	26	0.3%	8	30.4%	Rare	Northwest
Rocky Ridge - Talus Slopes	44	0.4%	0	0%	Rare	Northeast

For the purpose of this Table, "Conserved" includes areas subject to a conservation easement or areas owned by a governmental entity or a conservation organization.

NH WAP "Matrix Forest Types" Model
There are numerous classification systems of forest type (the associations of tree species that vary across the landscape). Each was developed with specific goals in mind by various entities such as the US Forest Service, the Natural Resource Conservation Service, and The Nature Conservancy. Working with The Nature Conservancy and the NH Natural Heritage Bureau, NH Fish & Game mapped areas predicted to support any of five large, inclusive "matrix forest" groupings as part of the WAP. All of the recognized forest species assemblages are included in one of these broad matrix forest types, and four of these are represented to some extent in Sharon. IN predicting forest type occurrences, the WAP model included such factors as slope, aspect, elevation, latitude, and soil type. Each matrix forest type may encompass a number of smaller-scale natural communities that commonly occur within them, including various types of specific wetland communities.

The Monadnock Region and Sharon are predominantly located in a transition zone between the southern and northern habitat types. The transitional habitat type is called the Hemlock Hardwood Pine forest. This is the most common habitat type in Sharon. In addition to Hemlock Hardwood Pine, there are three other forest habitats including Appalachian Oak Pine forests, Northern Hardwood Conifer forests, and Lowland Spruce-Fir forests.

Hemlock-Hardwood-Pine Matrix Forest (Light Green)
These forests are often considered a transitional zone between northern hardwood conifer forests and Appalachian oak pine forests. Major canopy species may include hemlock, red oak, and red maple. These forests are likely to succeed to hemlock and beech over the long term. Species of concern in New Hampshire associated with this habitat type include: spotted turtle, timber rattlesnake, wood turtle, northern goshawk, veery, Coopers hawk, cerulean warbler, eastern pipistrelle, eastern red bat, northern myotis, silver haired bat, New England cottontail and bobcat. This forest type grouping is especially suitable for popular game species including moose, white-tailed deer, wild turkey and black bear.

Appalachian Oak-Pine Matrix Forest (Brown)
Occurring in a southerly distribution relative to others, this matrix forest type reaches its northern extent in southeastern, southwestern and far western New Hampshire in association with warmer and drier conditions and often in fire-influenced landscapes. Major canopy species include the "southern" oaks such as white and black oaks as well as red oak and white pine. This matrix forest type is considered at risk, largely because it tends to occur in populated areas with impacts from infrastructure, development and intensive land use. Uncommon wildlife species known to associate with this matrix forest type include black racer, Fowler's toad, Eastern hognose snake, timber rattlesnake, smooth green snake, American woodcock, bald eagle, wild turkey, whip-poorwill, wood thrush, eastern pipistrelle, and eastern red bat. In Sharon, this matrix forest type is represented by a few very small patches in the Sharon northwest corner.

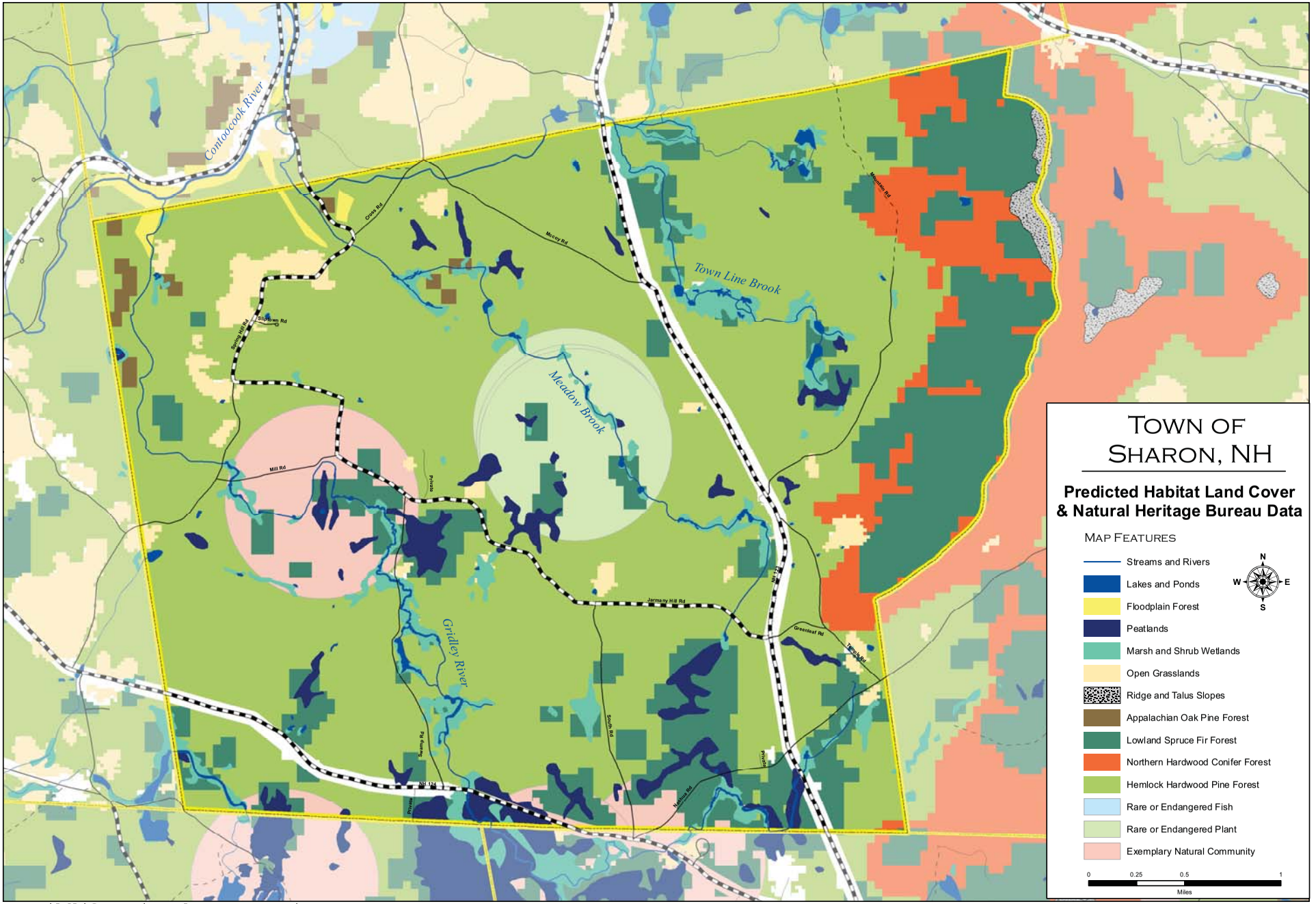
Northern Hardwood-Conifer Matrix Forest (Orange)
These mid-elevation forests generally include an even mix of sugar maple, yellow birch, and beech. They can also include and frequently mix with red spruce and balsam fir (especially at higher elevations). Species of concern in New Hampshire associated with this habitat type include: ruffed grouse, American woodcock, wood thrush, veery, Canada warbler, cerulean warbler, eastern pipistrelle, eastern red bat, hoary bat, northern long-eared bat, and silver-haired bat. Northern hardwood-conifer matrix forests are found in Sharon at mid and upper elevations along the western flanks of the Temple Mountain ridgeline.

Lowland Spruce-Fir Matrix Forest (Dark green)
These valley forests span an ecological gradient from swampy black spruce bogs to well-drained red spruce forests. Species of concern in New Hampshire associated with this habitat type include: spruce grouse, Northern goshawk, three-toed woodpecker, bay-breasted warbler, purple finch, rusty blackbird, hoary bat, Canadian lynx, American marten, and northern bog lemming. Lowland Spruce-fir matrix forests are found in Sharon at mid and upper elevations along the western flanks of the Temple Mountain ridgeline and in smaller patches distributed across the town. A relatively large patch, which also encompasses extensive peatlands, is predicted to occur in the land area between South Road and southeastern corner of town. These patches are significant because of the habitat diversity they provide for wildlife and given that they are relatively uncommon habitat types.

NH Wildlife Action Plan Habitat Land Cover Types	Sharon Acres	Sharon % of Town	Conserved Acres	Sharon % Cons	Frequency In Sharon	Distribution In Sharon
Matrix Forest Habitats						
Hemlock Hardwood Pine	7,182	71.7%	2,974	41.4%	Common	Ubiquitous
Appalachian Oak Pine	58	0.6%	7	12.1%	Rare	Northwest
Northern Hardwood Conifer	423	4.2%	155	36.5%	Uncommon	Temple Mtn.
Lowland Spruce Fir	1,997	19.9%	930	46.6%	Uncommon	Distributed

For the purpose of this Table, "Conserved" includes areas subject to a conservation easement or areas owned by a governmental entity or a conservation organization.

Rare and Uncommon Species and Natural Communities
Rare and uncommon plant and animal species have been documented in the Town of Sharon in the past, and these data are maintained by the New Hampshire Natural Heritage Bureau of DRED, in cooperation with the New Hampshire Fish & Game's Nongame and Endangered Wildlife Program. Generalized information on the presence of these species and communities is available from the Natural Heritage Bureau. Sharon has four such sites including an exemplary natural community and three rare or endangered plant observations. The exemplary natural community is located in the eastern part of town in the vicinity of Sharon Bog. The plant observations are located centrally in Sharon near Meadow Brook; however, two of the records indicate that the occurrences were documented many decades ago.


Contoocook River
Town Line Brook
Meadow Brook
Gridley River
Mill Rd
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Greenleaf Rd
South Rd
Nadeau Rd
Mccoy Rd
Cross Rd
Mountain Rd
Sleighdown Rd
Spring Hill Rd
Pig Stand Rd
Private
Town of Sharon, NH
Predicted Habitat Land Cover & Natural Heritage Bureau Data
Map Features
Streams and Rivers
Lakes and Ponds
Floodplain Forest
Peatlands
Marsh and Shrub Wetlands
Open Grasslands
Ridge and Talus Slopes
Appalachian Oak Pine Forest
Lowland Spruce Fir Forest
Northern Hardwood Conifer Forest
Hemlock Hardwood Pine Forest
Rare or Endangered Fish
Rare or Endangered Plant
Exemplary Natural Community
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b. Forest Openings Map

As previously mentioned, unforested lands and particularly grasslands have become increasingly uncommon in New Hampshire as these lands move quickly through an early successional stage and become maturing second growth forests. This change in habitat structure has greatly reduced the numbers of species that rely on grasslands and early successional habitat. In an effort to maintain some degree of open lands and early successional conditions, some landowners are engaging in active management to keep grasslands open, to recapture fields that have passed on to early succession, and to create new forest openings through targeted forest management practices.

The NH Wildlife Action Plan grasslands habitat type was identified through interpretation of 2001 aerial photographs. Because forest openings are so dynamic, grasslands data layer has been updated to reflect fields that have become smaller through the encroachment of hedge rows, fields that have been abandoned and reverted back to a forested condition, and new forest openings that have been created through management practices. The data layer has also been expanded to include unforested wetlands, and non-agricultural open lands (often remnant grassland) surrounding residential development. The updated and expanded data were developed from the interpretation of high-resolution 2010 NH Aerial Imagery photographs and the resulting data layer was named open Fields and Other Forest Openings. The data is summarized into four categories: Open Fields, Water Resource Openings, Forest Openings, and Gravel Pits and Disturbed lands.

Open Fields and other Forest Openings	Sharon Acres	Sharon % of Town	Conserved Acres	% Resource Conserved
All Open Lands	826.1	8.2%	505	61.1%
- Open Fields (managed and unmanaged)	179.5	1.8%	61	34.2%
- Water Resource Openings	452.8	4.5%	286	63.3%
- Forest Openings	171.3	1.7%	155	90.7%
- Gravel Pits and Disturbed Areas	22.5	0.2%	2	7.6%

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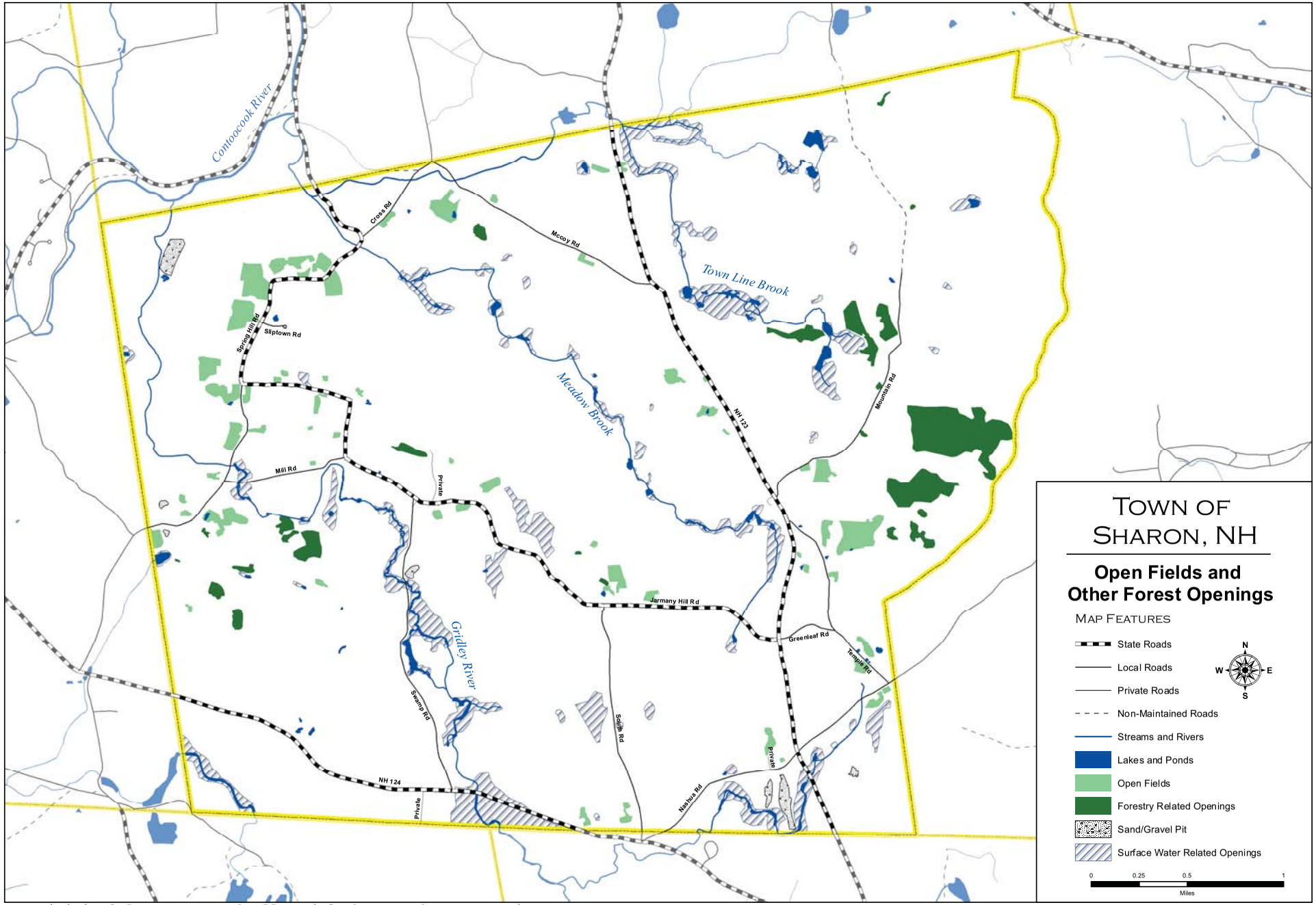
Contoocook River
Cross Rd
Mccoy Rd
Town Line Brook
Spring Hill Rd
Sliptown Rd
Meadow Brook
Mountain Rd
NH 123
Mill Rd
Private
Jarmany Hill Rd
Greenleaf Rd
Temple Rd
Gridley River
Swamp Rd
South Rd
Private
NH 124
Private
Nashua Rd
TOWN OF SHARON, NH
Open Fields and Other Forest Openings
MAP FEATURES
State Roads
Local Roads
Private Roads
Non-Maintained Roads
Streams and Rivers
Lakes and Ponds
Open Fields
Forestry Related Openings
Sand/Gravel Pit
Surface Water Related Openings
N
W
E
S
0
0.25
0.5
1
Miles

c. Unfragmented Lands

Large undeveloped areas are recognized for their significance as intact biological habitat, as areas with limited water pollution sources, and for their general open space values. These undeveloped areas are without maintained or regularly used roads. They contain natural land cover types such as forest, wetlands and surface waters, and can also contain (though far less frequently) agricultural lands and other unimproved human-disturbed areas such as managed forests and gravel pits.

Fragmentation primarily from road use has a well-documented impact on wildlife, both by direct death or injury from vehicles, and by environmental effects such as noise, terrain alteration and light disturbance. Certain migrant songbird species and several species of larger mammals including black bear and bobcat are known to avoid areas with significant fragmentation, while conversely being attracted to large unfragmented areas.

Unfragmented areas were delineated in the WAP using roads data. A 500-foot buffer along regularly traveled (i.e. ecologically fragmenting) roads was created for this analysis, to account for a typical existing or future house lot and its structures, and a disturbance area along maintained roads. This buffer was then removed from the landscape, resulting in areas unfragmented by roads and their associated development or development potential.

Class VI and some Class V town roads were considered by the planning group to be non-fragmenting because the roads are narrow, provide significant vegetative cover along the roads and experience low vehicle trip volumes. In Sharon, Swamp Road, South Road, and Mountain Road fall into this category. Private driveways and trails were also not included as fragmenting features. As natural features of the landscape, water bodies and streams are not considered fragmenting elements.

Blocks of unfragmented lands do not stop at political boundaries, and thus the analysis considered blocks that occur in Sharon that in most instances in Sharon extend into neighboring towns. For this analysis, unfragmented blocks were calculated on the basis of total size regardless of political boundaries. Acreages in these other towns are included in the analysis.

Large blocks of undeveloped land are one of the most important parts of the Monadnock Region's landscape as well as that of Sharon. Many of these undeveloped blocks of lands are made up of multiple parcels and ownerships. In addition to supporting wildlife habitat and water quality, these unfragmented lands support the timber industry, making it economical to harvest timber across large ownerships without having to create multiple landings and constantly move equipment. They also support recreation and tourism, providing large expanses of woodlands, fields and wetlands that make up the scenic backdrop for our communities and our favorite places to recreate. Protecting these areas from through roads that result in traffic, noise, development and other disturbances will help ensure wildlife will continue using these areas and that people can enjoy the wilderness.

Sharon includes portions of six large undeveloped blocks over 1,000 acres and portions of 3 smaller blocks between 100 acres and 500 acres in size. The largest block being 5,328 acres in size, located in the northwest corner of town around Temple Mountain and extending into the towns of Peterborough and Temple.

Large Unfragmented Blocks of Land	Total Block Acres	Block Acres in Sharon	Block Acres Conserved	Block Acres in Sharon Conserved	% of Blocks in Sharon	Blocks as % of Sharon Area	% in Sharon Conserved
>4000 Acres	5,328	2,725	2,117	1,247	51%	27%	46%
1000 to 4000 Acres	10,223	5,070	3,052	2,584	50%	51%	51%
500 to 1000 Acres	0	0	0	0	0%	0%	0%
100 to 500 Acres	617	206	157	0	33%	2%	0%
Smaller than 100	299	215	28	14	72%	2%	7%

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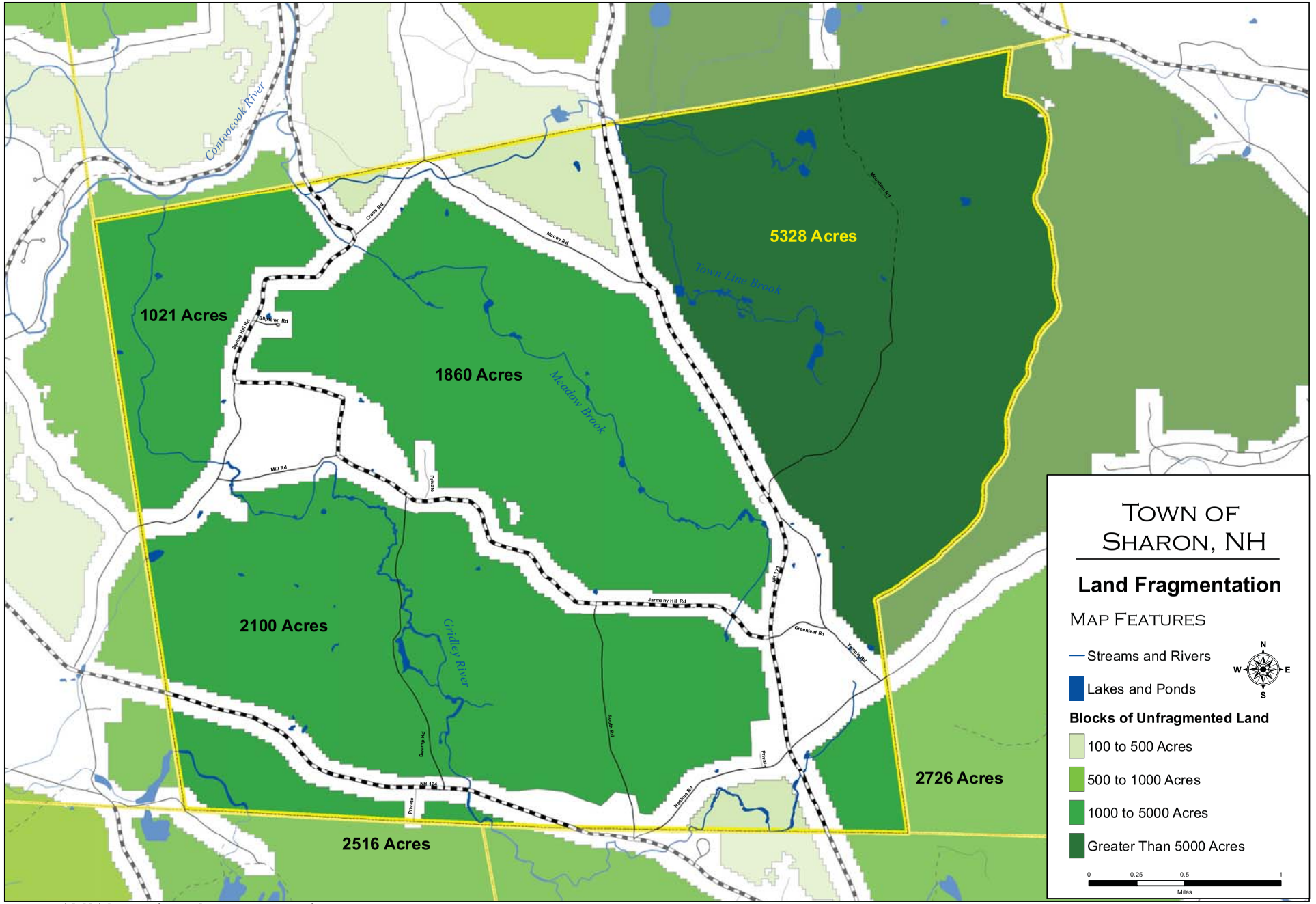
Contoocook River
Town Line Brook
Meadow Brook
Gridley River
5328 Acres
1860 Acres
1021 Acres
2100 Acres
2726 Acres
2516 Acres
Mountain Rd
Mccoy Rd
Cross Rd
Sherburne Hill Rd
Stinchfield Rd
Mill Rd
Private
Jarmany Hill Rd
Greenleaf Rd
Temple Rd
Hill Rd
South Rd
Rig Stores
NH 124
Private
Private
Nashua Rd
Town of Sharon, NH
Land Fragmentation
Map Features
Streams and Rivers
Lakes and Ponds
Blocks of Unfragmented Land
100 to 500 Acres
500 to 1000 Acres
1000 to 5000 Acres
Greater Than 5000 Acres
N
W
E
S
0
0.25
0.5
1
Miles

d. New Hampshire Wildlife Action Plan Tiers

A primary goal of the WAP is to identify state wide priorities for conservation of important wildlife habitat in New Hampshire. The WAP identified pristine, diverse, and significant land areas for each habitat type and then ranked the important land areas for each habitat type at both state-wide and biological region scales. This ranking analysis placed the top habitats in one of three levels, or tiers, of priority for conservation. Tier I land areas represent the highest ranking habitat for each habitat type in the state; Tier II areas represent the highest ranking habitat by type in each biological region; and Tier III areas represent supporting landscapes that are important for protecting the integrity and health of the higher ranked habitats.

Tier I habitats in Sharon are associated with wetlands along the Contoocook lake tributary, Sharon Bog, and along sections of Meadow Brook. Tier II habitats in Sharon are located along the top of the Temple Mountain ridgeline, along the Sharon tributaries to Town Line Brook, and an extensive area of the middle of the Gridley River watershed. Tier II habitat areas were also found in the southeast part of Sharon associated with the Contoocook Lake tributary and the wetland complex associated with the Gridley River along the town's southern border. The majority of the western two thirds of Sharon are classified as Tier III supporting landscape, along with lands along the Town Line Brook tributary.

NHWAP Conservation Priorities	Sharon Acres	Sharon % of Town	Conserved Acres	Sharon % Conserved
Tier1 – Statewide	177	1.8%	164	92.6%
Tier2 – Biological Region	706	1.8%	423	59.6%
Tier3 – Supporting Landscape	6,718	67.0%	2,892	43.1%

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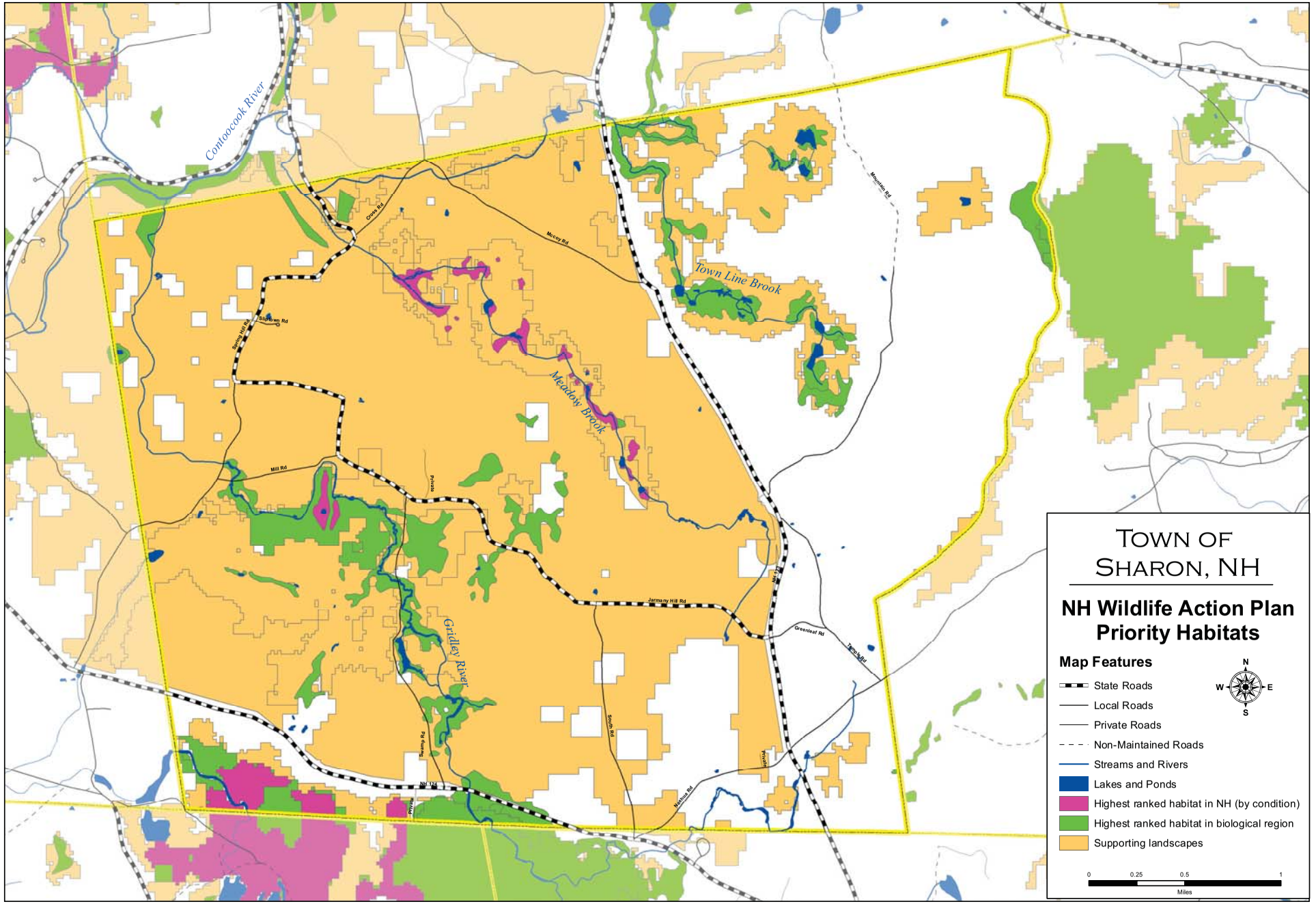
Contoocook River
Town Line Brook
Meadow Brook
Gridley River
Mill Rd
Jermany Hill Rd
Greenleaf Rd
South Rd
Nashua Rd
Mountain Rd
Cross Rd
Mccoy Rd
Stagecoach Rd
Spofford Hill Rd
Pig Stanley
NH 123
Private
TOWN OF SHARON, NH
NH Wildlife Action Plan Priority Habitats
Map Features
State Roads
Local Roads
Private Roads
Non-Maintained Roads
Streams and Rivers
Lakes and Ponds
Highest ranked habitat in NH (by condition)
Highest ranked habitat in biological region
Supporting landscapes
N
W
E
S
0
0.25
0.5
1
Miles

4. Working Lands Resource Maps

Forest Productivity

The economic benefits of forest lands to the state of New Hampshire are well known. Towns in New Hampshire traditionally derive revenue from the timber tax collected from timber sales, and the harvest, sale and utilization of wood products all contribute to the job base of the state. Keeping forest land in productive use provides an economically viable alternative to more intensive uses such as residential development. Forest land offers additional benefits as well, including preservation of rural character, wildlife habitat, water quality protection, recreational opportunities, hunting and fishing access, and scenic enjoyment, among others.

Soils are the basis of productive forest land, but not all soils are created equal in their capacity to grow forests. Areas with soils that are classed by the NRCS as more productive than others for their suitability to support some of the most economically valuable species, such as white pine and red oak, are especially important to preserve. These so-called Important Forest Soils have designations under which numerous particular soils units are grouped according to common traits such as moisture, depth of soil, and soil texture.

Productive Forest Soils

The Natural Resource Conservation Service (NRCS), a division of the United States Department of Agriculture, is responsible for maintaining the county soil surveys throughout the United States. The Hillsborough County Soil Survey contains soil maps and information for the town of Sharon. One way in which soils are classified is by their Forest Grouping. The forest soil groupings are defined by their ability to regenerate forest products and their suitability to mechanized harvesting. There are three groups of forest soils, Group I, Group II, and Soils not suitable for Forestry. Group I Forest Soils are soils that are highly fertile and support high growth rates in timber. There are three subgroups in Group I Forest Soils that delineate which species of trees will grow best based on mineral and water content characteristics. Group II Forest Soils are limited in their ability to support the timber industry in one of two ways. The first deficiency could be steepness or rockiness that make mechanized harvesting difficult. Another deficiency could be a lack of fertility or over saturation that cause slow growth rates or susceptibility of trees to damage such as wind throw or pests.

The Sharon NRI only maps Group I Forest Soils to show where the best soils for working forests are in town. These soils are found throughout town except for the steep, rocky soils in the northeast part of town by Temple Mountain and in the lowlands associated with the river valleys and wetlands. It is important to protect these resources to ensure that forestry and the timber industry can continue to be a viable part of the economy in Sharon and New Hampshire. Sustainable harvesting of these resources not only supports the economy, but also increases habitat diversity to support wildlife species.

Working Lands Resources Forest Soils	Sharon Acres	Sharon % of Town	Conserved Acres	Sharon % Cons
Group 1 Forest Soils	7,436	74.2%	3,041	40.5%

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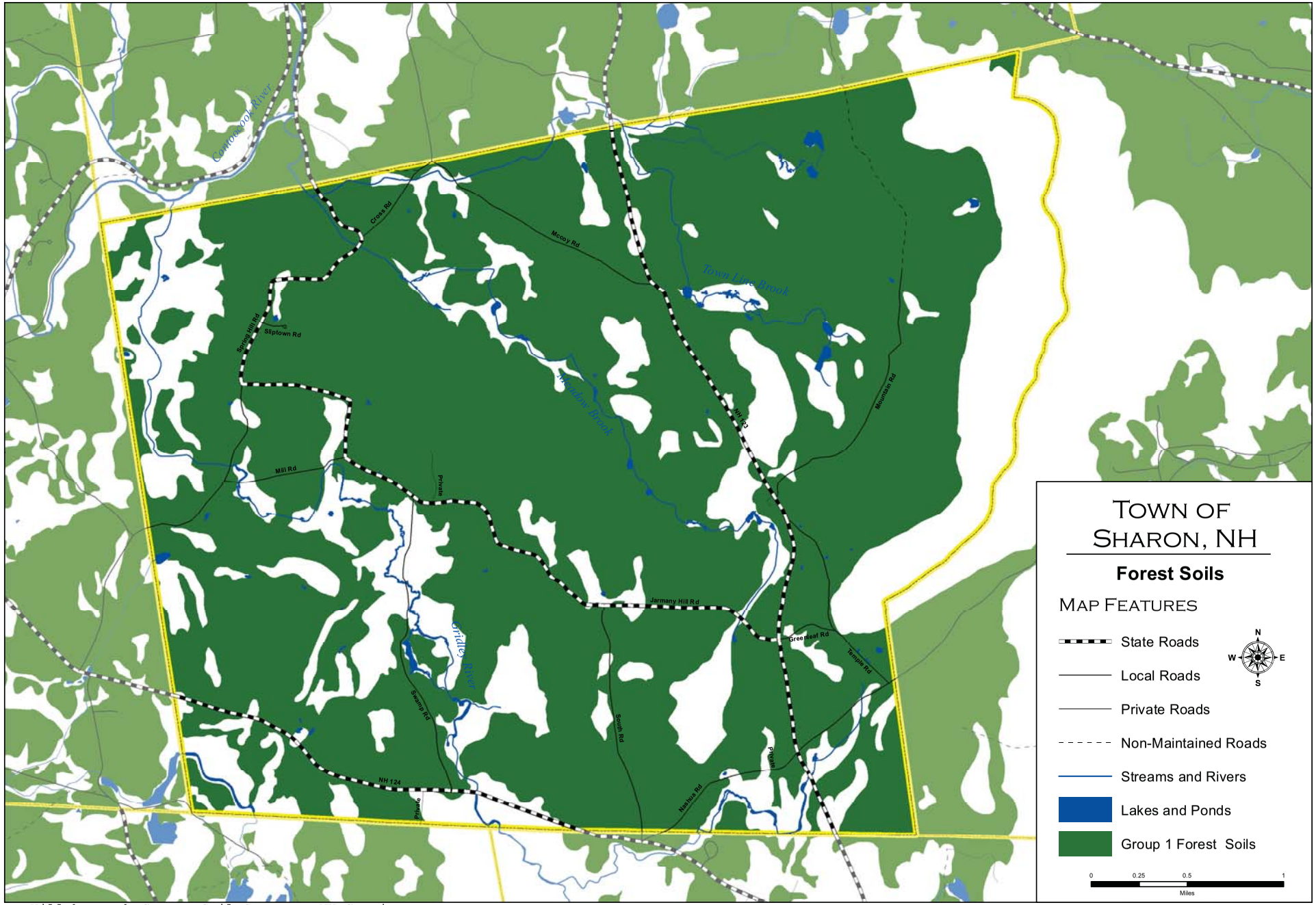
Contoocook River
Cross Rd
Mccoy Rd
Town Line Brook
Sharon Hill Rd
Sliptown Rd
Meadow Brook
NH Rt 3
Mountain Rd
Mill Rd
Private
Jarmany Hill Rd
Greenleaf Rd
Temple Rd
Ortley River
Swamp Rd
South Rd
NH 124
Private
Nahtua Rd
Private
TOWN OF SHARON, NH
Forest Soils
MAP FEATURES
State Roads
Local Roads
Private Roads
Non-Maintained Roads
Streams and Rivers
Lakes and Ponds
Group 1 Forest Soils
N
W
E
S
0
0.25
0.5
1
Miles

c. Agricultural Soils Map

The Farmland Protection Policy Act of 1981 was enacted to ensure that federal programs are compatible with state and local efforts to limit the conversion of farmland to other uses. The states and counties followed suit shortly thereafter by bestowing their own designations on state and locally important soils. The classes mapped in New Hampshire and available from the GRANIT GIS data system are "prime farmland soils", "soils of statewide importance", and "soils of local importance".

Prime Farmland

These deep and arable agricultural soils are suitable for a variety of agricultural uses and are of the highest quality designation. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Prime farmland may be cropland, pastureland, rangeland, forest land, or other land but not urban built-up land. It has the soil quality, growing season, and moisture supply needed to produce continuous, high yields of crops when treated and managed according to acceptable farming methods.

Soils of Statewide Importance

These soils are deemed significant for the production of food, feed, fiber, forage and oilseed crops in New Hampshire. The soils are fertile and can be expected to produce a reasonable yield. Determination of statewide importance is made by a state committee with representatives of the Department of Agriculture, Markets and Foods; UNH Cooperative Extension; the NH Association of Conservation Commissions; and the NH Office of State Planning (now the Office of Energy and Planning). Soils of Statewide Importance are not stony, not poorly drained or excessively well drained, and do not have slopes that exceed 15%.

Soils of Local Importance

Agricultural Soils of Local Importance tend to be soils that have the fertility to support the growth of crops but need improvement to actually manage and harvest the crops. These soils may be poorly drained and require drainage ditching or they may have many rocks that need to be removed. Such soils can be improved to support agriculture at the local or town scale.

Sharon has limited occurrences of Prime Farmland and Farmland of Statewide Importance and a number of these soils patches are forested or have been developed. Sharon has a greater abundance of Agricultural Soils of Local Importance which are fairly well distributed across the town. Most of these soils are forested. It is important to note that areas with agricultural soils tend to be easier to develop in rural towns because of the soils capacity to accommodate in-ground waste water systems. Former agricultural lands are also vulnerable developed as they are often relatively flat, and easy to clear of trees.

Working Lands Resources: Agricultural Soils	Sharon Acres	Sharon % of Town	Conserved Acres	Sharon % Cons
Prime Agricultural Soils	63	0.6%	1	1%
Soils of Statewide Importance	117	1.2%	29	25%
Soils of Local Importance	4,160	41.5%	1,699	41%

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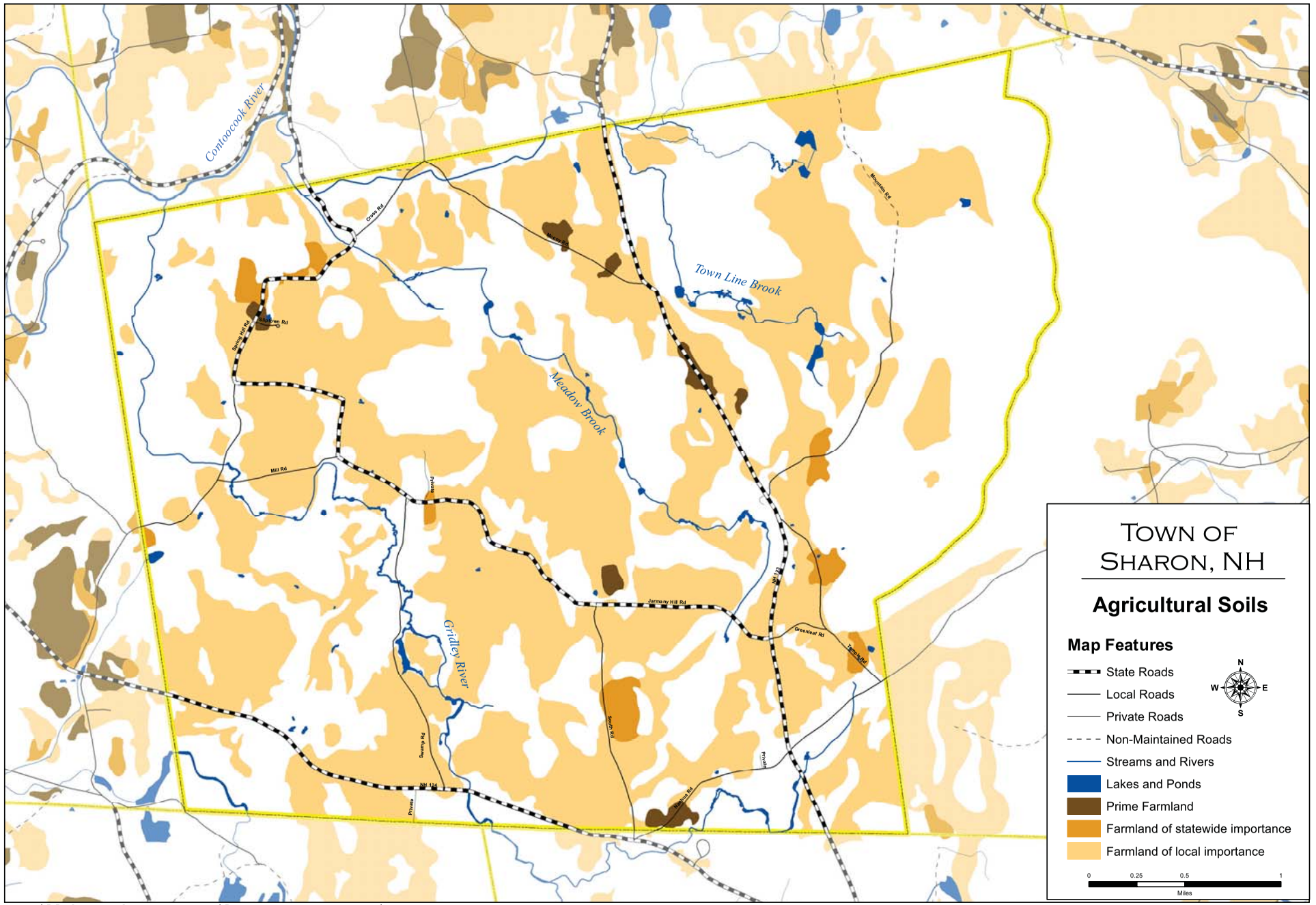

Contoocook River
Town Line Brook
Meadow Brook
Gridley River
Cross Rd
Mountain Rd
Stoddard Rd
Spring Hill Rd
Mill Rd
Private
Jermany Hill Rd
Greenleaf Rd
Turnpike Rd
South Rd
Stevens Rd
NH 123
Private
Private
TOWN OF SHARON, NH
Agricultural Soils
Map Features
State Roads
Local Roads
Private Roads
Non-Maintained Roads
Streams and Rivers
Lakes and Ponds
Prime Farmland
Farmland of statewide importance
Farmland of local importance
N
W
E
S
0
0.25
0.5
1
Miles

Community Values and Special Places

In late 2010 the Open Space Committee created the *Town of Sharon Conservation Survey,* which was sent to every household in town and presented at a variety of public forums. 57 surveys were returned providing information including a quantitative rating and ranking of resource values, a qualitative description of what aspects of town make Sharon a unique place, and what natural features in town are important to protect. The quantitative information was compiled in Microsoft Excel, while the locations of special places were plotted in ArcGIS mapping software. Charts of the quantitative assessment and the mapping activity can be found below which show the results of the survey, followed by a summary of themes from the Qualitative questions and the map showing the locations of special places identified by residents.

Survey respondents indicated that all of the resources listed were rated highly with no resource receiving an average rate less than 5 out of 7. The average rank of the resource did allow for some prioritization of some resources over others.

Resource	Average Importance Rating from 1 (low) to 7 (high)	Avg. Importance Ranking (1 is most important, 10 is least important)
Clean Water for humans and wildlife	6.80	3.05
Clean Air	6.78	3.23
Wildlife Habitat (forest and field, large unfragmented blocks)	6.74	3.80
Peace and Quiet from natural areas	6.65	3.85
Wetlands (flood prevention, wildlife habitat, recharge)	6.43	5.15
Land/Water for recreation (hiking, hunting, fishing, etc.)	6.20	5.69
Scenic areas associated with open space	6.12	6.78
Historic features (cellar holes, stone walls, springs, dirt roads)	5.49	7.88
Working forests (forest health, local products, economy)	5.18	7.16
Agriculture (character, local products, economy)	5.14	8.24

The top four resources as ranked by survey respondents were clean water, clean air, wildlife habitat, and peace and quiet with average rankings between 3 and 4. The second tier of important resources with an average rank between 5 and 7 includes wetlands, recreational areas, and scenic areas. The third tier of important resources with an average rank between 7 and 9 includes historic features, working forests, and agriculture.

The survey included two open ended, qualitative, questions. Open ended questions are written to allow respondents to come up with their own answers without prompting. Responses are then grouped into themes.

Question 1: What Makes Sharon Unique? Themes	% of all Respondents
Undeveloped, unspoiled landscape, open space	43%
Peaceful; quiet; isolation	43%
Small scale of town/size of population, settlement patterns	43%
Rural landscape/scenic land	41%
People; sense of community.	37%

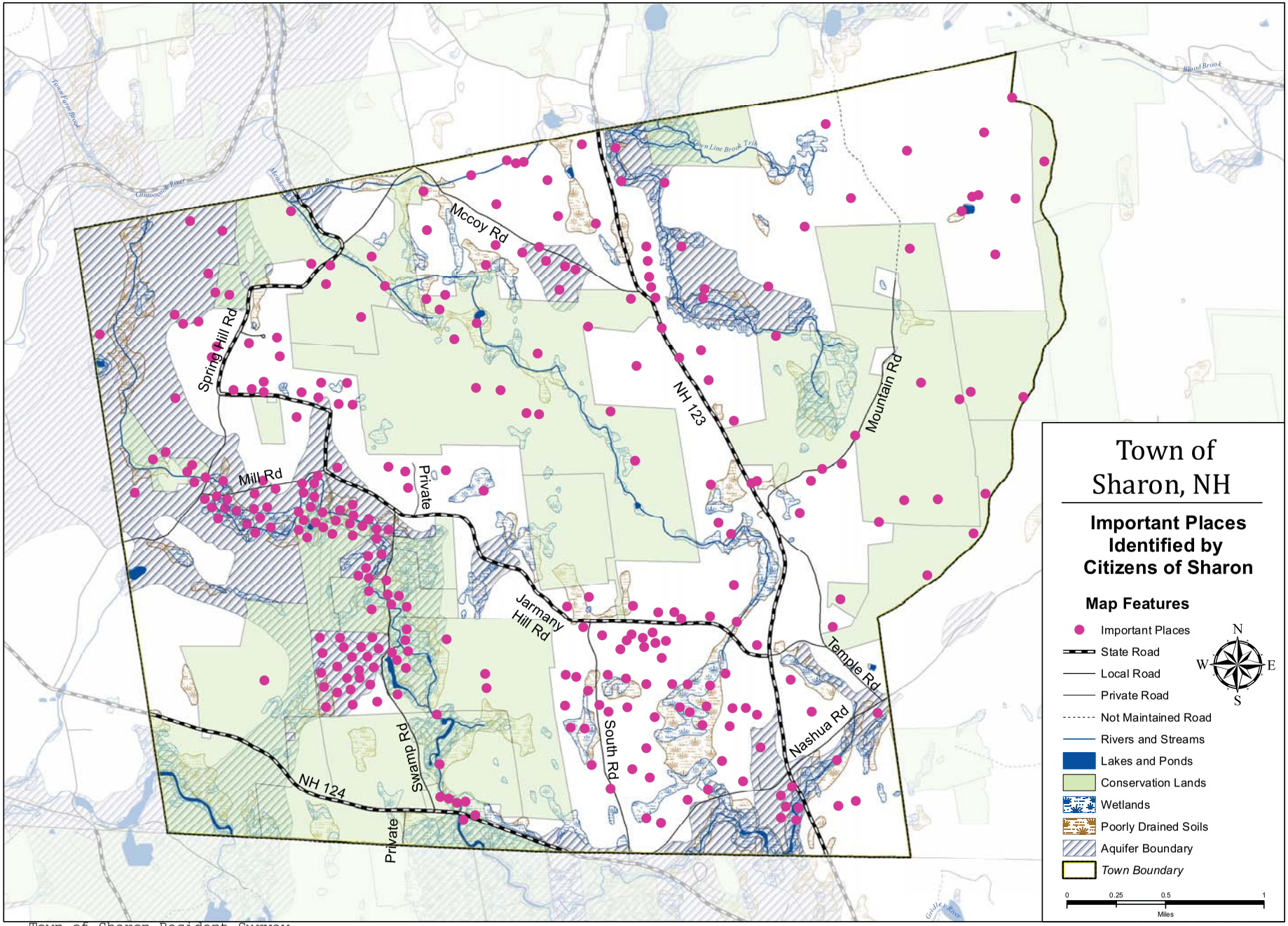
These responses appear to be consistent with the ratings and rankings data while also providing insight into how the form and settlement patterns contribute to the resources values that are appreciated.

Question 2: What Natural Features are Important to Protect? Themes	% of all Respondents
Gridley River/Sharon Springs/Swamp Road	37%
Forests/Town Forest/Habitat/ Wetlands	37%
Wapack trail/Mountains east of Rt 123.	24%
Undeveloped Frontage/Rt 123 & 124/ Center	22%
Any Open Space/Most of Town	20%

The themes that emerged from the second qualitative question were further reinforced by the identification of special places that should be considered a high priority for conservation on the town map.

In the sticky dot exercise, survey respondents identified 13 broad areas in Sharon as special places. The top area identified in the map was the lower Gridley River including Sharon Springs and Sharon Bog with 49 total votes. The second most identified special place in Sharon is Meadow Brook and the town forest with 40 votes. The third most identified special place in Sharon is the area around Temple Mountain. Other locations identified by Sharon residents included the upper Gridley River, northwest Sharon, the Sullivan property, NH Route 123 road frontage, Jarmany Hill Road and cemetery, South Road, McCoy Road and Cemetery, southeast Sharon, and Town Line Brook. These resources and locations were specified by survey respondents as important to the residents and add to the town's unique rural character. Thus, efforts to protect these resources and places will also protect Sharon's rural character and the quality of life of its residents. The results of the survey were influential in delineating the priority areas for conservation.

Part 3: Mapping Special Places	Number of Dots
Lower Gridley River including Sharon Springs and Sharon Bog	49
Town Forest and Meadow Brook	40
Mountains east of Rt 123.	32
Upper Gridley River including Swamp Road and former mill site	28
Northwest corner of town	27
Sullivan property	22
NH Route 123 road frontage	20
Jarmany Hill Road and cemetery	18
South Road	15
McCoy road and cemetery	11
Southeast corner of town	11
Town Line Brook	5
Other	20
Number of Dots Placed	298


Town of Sharon, NH
Important Places Identified by Citizens of Sharon
Map Features
Important Places
State Road
Local Road
Private Road
Not Maintained Road
Rivers and Streams
Lakes and Ponds
Conservation Lands
Wetlands
Poorly Drained Soils
Aquifer Boundary
Town Boundary
N
W
E
S
0
0.25
0.5
1
Miles
Mccoy Rd
Spring Hill Rd
Mill Rd
Private
NH 123
Mountain Rd
Jarmany Hill Rd
Temple Rd
Nashua Rd
South Rd
Swamp Rd
NH 124
Private
Town Line Brook Trib
Blood Brook
Contoocook River
Tower Farm Brook
Griffin Brook

5. Conservation Map

Land is conserved when it is permanently and legally protected in perpetuity. This form of protection is typically accomplished in one of two ways: a) it is owned "in fee" by a conservation organization or a government entity and cannot be sold or otherwise disposed of for used that are not compatible with protecting the conservation values; or b) it is encumbered with a conservation easement, reflected in a recorded deed, prohibiting uses that are inconsistent with the protection of identified conservation values, and provided that the easement held by a qualified conservation organization or governmental entity with the responsibility and capacity to enforce the terms of the easement.

The conservation lands data shown on the following map was provided from the NH Granit data base. The data base includes lands that may not meet all of the criteria to be considered permanently conserved, although from a practical standpoint, by virtue of ownership by a conservation organization or government entity for conservation purposes, it is included as conservation land. This particularly problematic for government owned land, which can and often is sold or developed for other uses that are deemed by the select board or town meeting to be more urgent that conservation.

The conserved lands map for the town of Sharon shows land owned by the state as part of the state park system, land owned by the town as town forest, land owned by conservation organizations, and privately owned land encumbered by conservation easements held by land trust.

Summary of Public and Conserved Lands	Parcels	Acres in Sharon	% of Conservation Land	% of Town
Conservation Easements				
Monadnock Conservancy	5	486	11.6%	4.8%
New England Forestry Foundation	3	222	5.3%	2.2%
Forest Society	3	192	4.6%	1.9%
Total Conservation Easements	11	900	21.5%	9.0%
Fee Owned (no easements)				
New England Forestry Foundation	3	922	22.0%	9.2%
Society for the Protection of NH Forests	15	1216	29.0%	12.1%
The Nature Conservancy	1	48	1.1%	0.5%
Sharon Town Forest	1	885	21.1%	8.8%
State Parks	2	215	5.1%	2.1%
Total Fee Owned	22	3286	78.5%	32.8%
Total Public and Conserved Lands		4186	100.0%	41.8%

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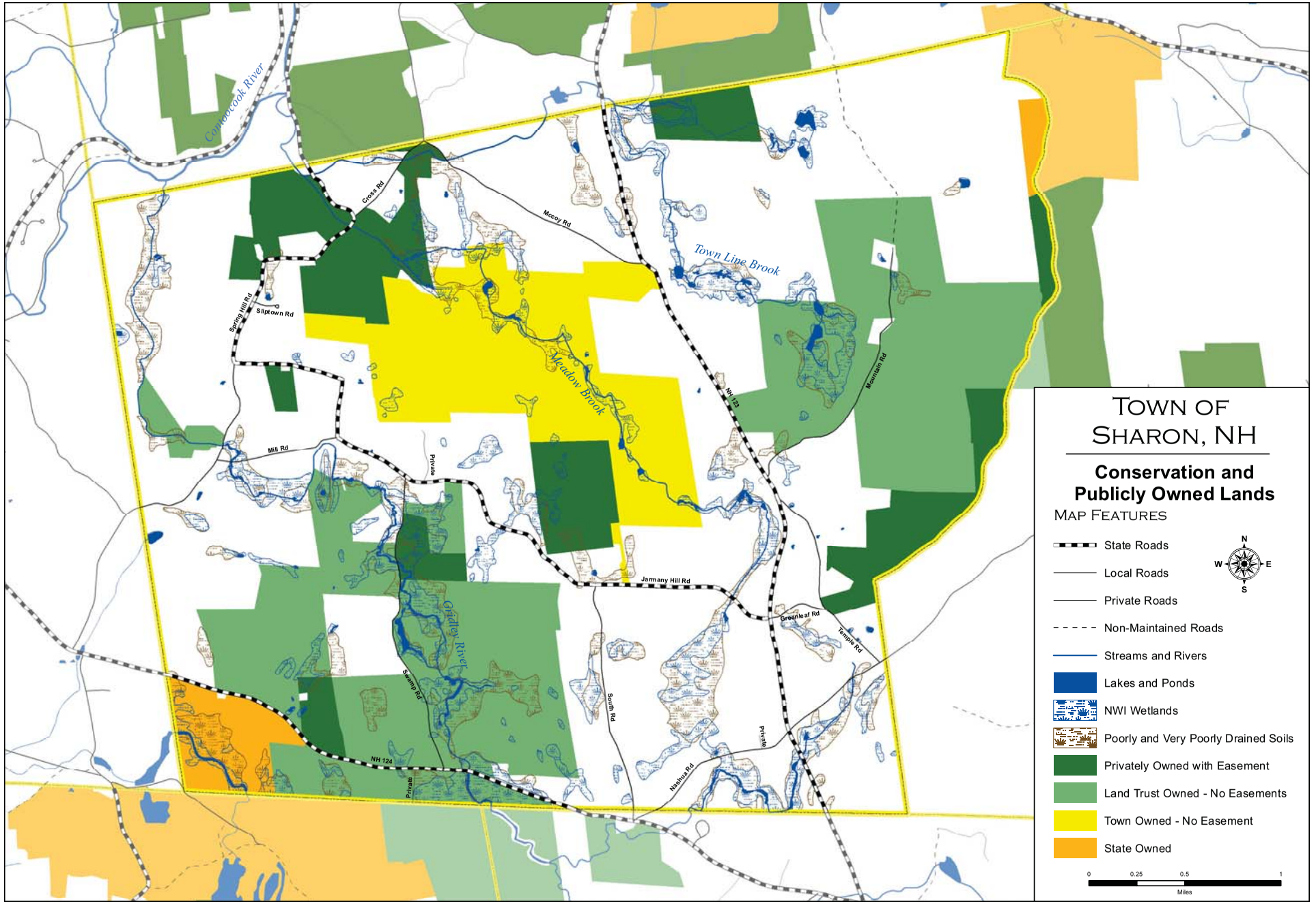
Contoocook River
Cross Rd
Mccoy Rd
Town Line Brook
Spring Hill Rd
Slliptown Rd
Meadow Brook
NH 123
Mountain Rd
Mill Rd
Private
Jarmany Hill Rd
Greenleaf Rd
Temple Rd
Gridley River
Swamp Rd
South Rd
NH 124
Private
Nashua Rd
Private
TOWN OF SHARON, NH
Conservation and Publicly Owned Lands
MAP FEATURES
N
W
E
S
State Roads
Local Roads
Private Roads
Non-Maintained Roads
Streams and Rivers
Lakes and Ponds
NWI Wetlands
Poorly and Very Poorly Drained Soils
Privately Owned with Easement
Land Trust Owned - No Easements
Town Owned - No Easement
State Owned
0
0.25
0.5
1
Miles

Lands with Important Conservation Values

This map summarizes the lands that have been identified as containing one or more natural and/or community resources that represent important conservation values. This determination is based on an analysis of all natural resource inventory data layers, informed by local knowledge of the town landscape, and consideration of community values. The lands with important conservation values include the following:

- River corridors and wetlands associated with the Gridley River, Meadow Brook, Town Line Brook, and their tributaries. These resources include 600 foot buffers along the streams and 100 foot buffers around the wetlands and ponds.
- Stratified drift aquifers with moderate or better flow potentials.
- Large blocks of undeveloped land, which provide significant conservation value from a wildlife, water quality, recreation, work lands, and aesthetic perspective because of their size and low levels of human disturbance.
    - The block between Jarmany Hill Road and NH Rte.124;
    - The Town Forest block north of Jarmany Hill Road; and
    - The block between NH Rte. 123 and Temple Mountain.
- Connectors and corridors between the large blocks of undeveloped land that benefit wildlife populations, recreation, and aesthetic qualities of the landscape.
- Ridgelines, viewsheds, and steep slopes to reduce the potential landslides, erosion and sediment transport that can adversely affect water quality and which often provide important corridors for wildlife.

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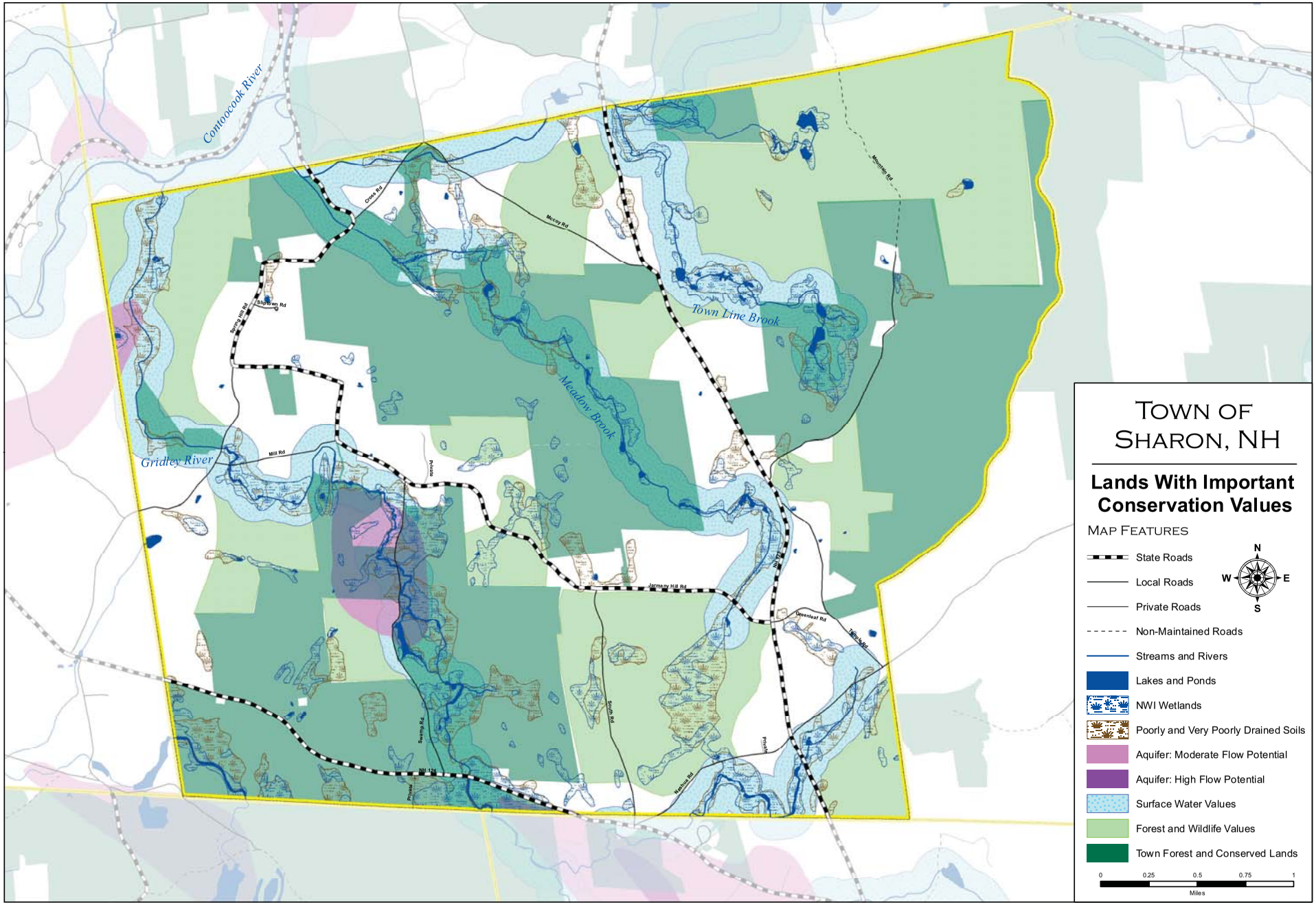
Contoocook River
Gridley River
Meadow Brook
Town Line Brook
Cross Rd
McCoy Rd
Mountain Rd
Spring Hill Rd
Ship Town Rd
Mill Rd
Private
Farmway Hill Rd
Greenleaf Rd
Tenney Rd
South Rd
Swamp Rd
Nahmitt Rd
Town of Sharon, NH
Lands With Important Conservation Values
Map Features
N
W
E
S
State Roads
Local Roads
Private Roads
Non-Maintained Roads
Streams and Rivers
Lakes and Ponds
NWI Wetlands
Poorly and Very Poorly Drained Soils
Aquifer: Moderate Flow Potential
Aquifer: High Flow Potential
Surface Water Values
Forest and Wildlife Values
Town Forest and Conserved Lands
0
0.25
0.5
0.75
1
Miles

ACKNOWLEDGEMENTS

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- The Wildlife Conservation Society –Wildlife Opportunities Fund
- Public Service of New Hampshire
- The New Hampshire Charitable Foundation's Express Grant Program
- Donors to the Monadnock Conservancy
- Sharon Conservation Commission's Conservation Fund

DISCLAIMER

Every reasonable effort has been made to maintain a high level of quality in developing the natural resource inventory information included in this plan. However, the Town of Sharon, the Monadnock Community Conservation Partnership, and the Monadnock Conservancy, make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the data described or displayed in the inventory. The information contained herein is not adequate for legal boundary definition, regulatory interpretation, or property conveyance purposes. In addition, the resources described and mapped in the inventory are subject to alteration by natural and human influences. This inventory represents a picture of the natural resources in Sharon at the point in time that the resource data was originally compiled.

[i] NRCS Website, Highly Erodible Land Definitions, <http://www.pr.nrcs.usda.gov/technical/soil_survey/HELdefs.htm>