

The Base Map is a primary map to any Natural Resource Inventory. It shows the base features of the community without any additional resources or map features. Many of the features shown on the Base Map also appear on the

Road, Property Line, Railroad and Lake and Pond data

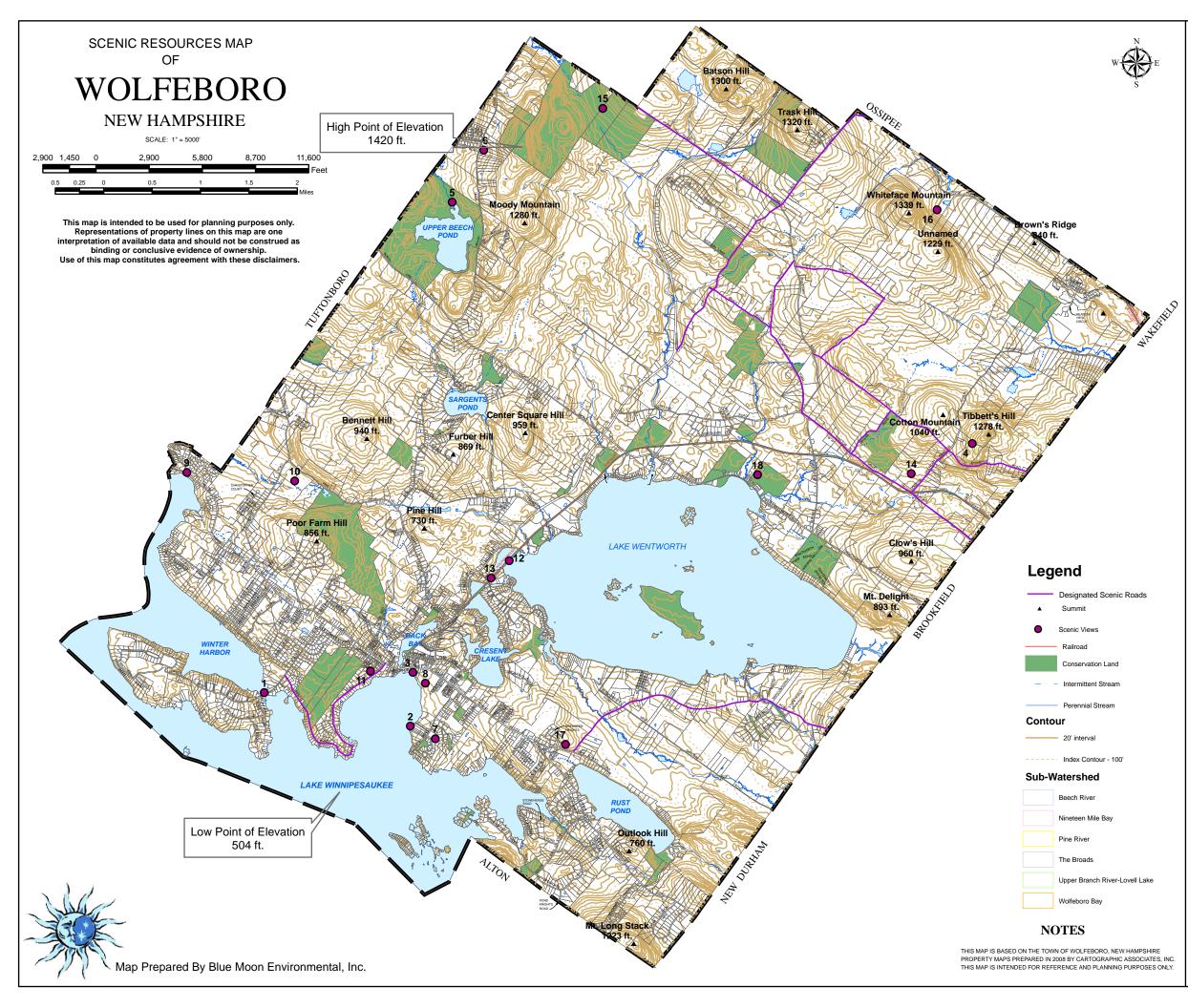
Conservation Lands layer includes data from the Town of

River and Stream hydrography layer from the NH GRANIT

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As of January 2010, this data represents the best of our

**Natural Resources Inventory** 



## New Hampshire Scenic Resources Map

#### **Topography**

Topography is the surface configuration of an area, usually defined in terms of elevation and slope.

Topography affects climate, erosion, vegetative growth, and other natural processes. Topography can easily affect human activity, from zoning to recreational activities. Topographic relief provides scenic vistas and viewsheds.

Topography within Wolfeboro ranges from a low elevation of 504 ft. at Lake Winnipesaukee to a high elevation of 1,420 ft. at Clark et. al. conservation easement.

#### **Scenic Vistas**

Number	Name	Direction	Number	Name	Direction
1	Carry Beach	NW/SE	10	Abenaki Ski Trail	N/NE
2	Brewster Beach	W	11	Pleasant & Sewall Streets	SW/E
3	Dockside	SW	12	Fernald's Basin	E
4	Cotton Mountain	W	13	Goodwin's Basin	E
5	Beach Pond Road	W	14	College Road	SE
6	Hidden Valley	360°	15	Pork Hill Road	SW
7	Kingswood Golf Club	360°	16	White Face Summit	NW/NE
8	Brewster Academy	W	17	Kingswood School	E/NE
9	Libby Museum	SW	18	Wentworth State Park	S

#### **Designated Scenic Roads**

RSA 253 Sections 17 and 18 allows towns to designate by town meeting vote any road (other than Class I or Class II state highways) as a scenic road. The main purpose of a scenic road designation is to help protect the scenic qualities of that road.

Avery Rd.
Cotton Mountain Rd.
Pleasant Valley Rd.
Trask Mountain Rd.
Bickford Rd.
Cotton Valley Rd.
Pork Hill Rd.
Dallas Rd.
Chick Rd.
Haines Hill Rd.
Sewall Rd.
Cowper Rd.
Cowper Rd.
North Wolfeboro Rd.
Stoneham Rd.

#### **Data**

Besides data from the Base Map, this map contains the following:

Contours data layer provided by Society for Protection of NH Forests. Based on GRANIT digital raster graphs of USGS topography. Summit and mountain information is based on USGS 7.5 minute topographic quadrangles.

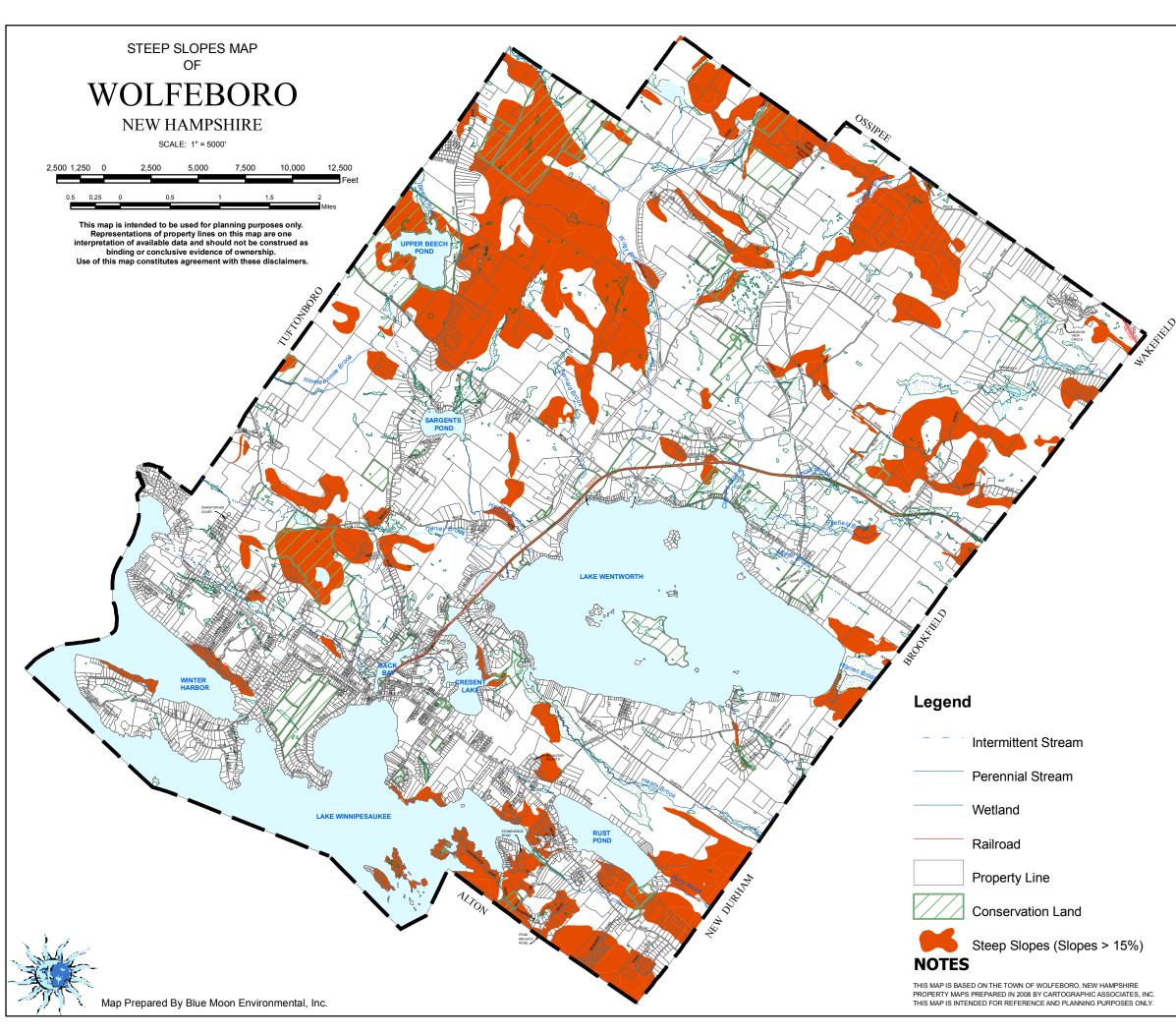


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Wolfeboro, NH Natural Resources Inventory

January 2010



New Hampshire

<u>Steep Slopes Map</u>

#### Steep Slopes

Steep slopes derived from Natural Resources Conservation Service (NRCS) soil map units by selecting all units with an average slope greater than 15%.

#### Summary

Slopes 15% to 30 % = 4,642 acres Slopes > 30% = 1,975 acres

#### Data

Road, Property Line, Railroad and Lake and Pond data from Cartographics Associates Inc.
Conservation Lands layer includes data from the Town of Wolfeboro and NH GRANIT Database.
River and Stream hydrography layer from the NH GRANIT Database.

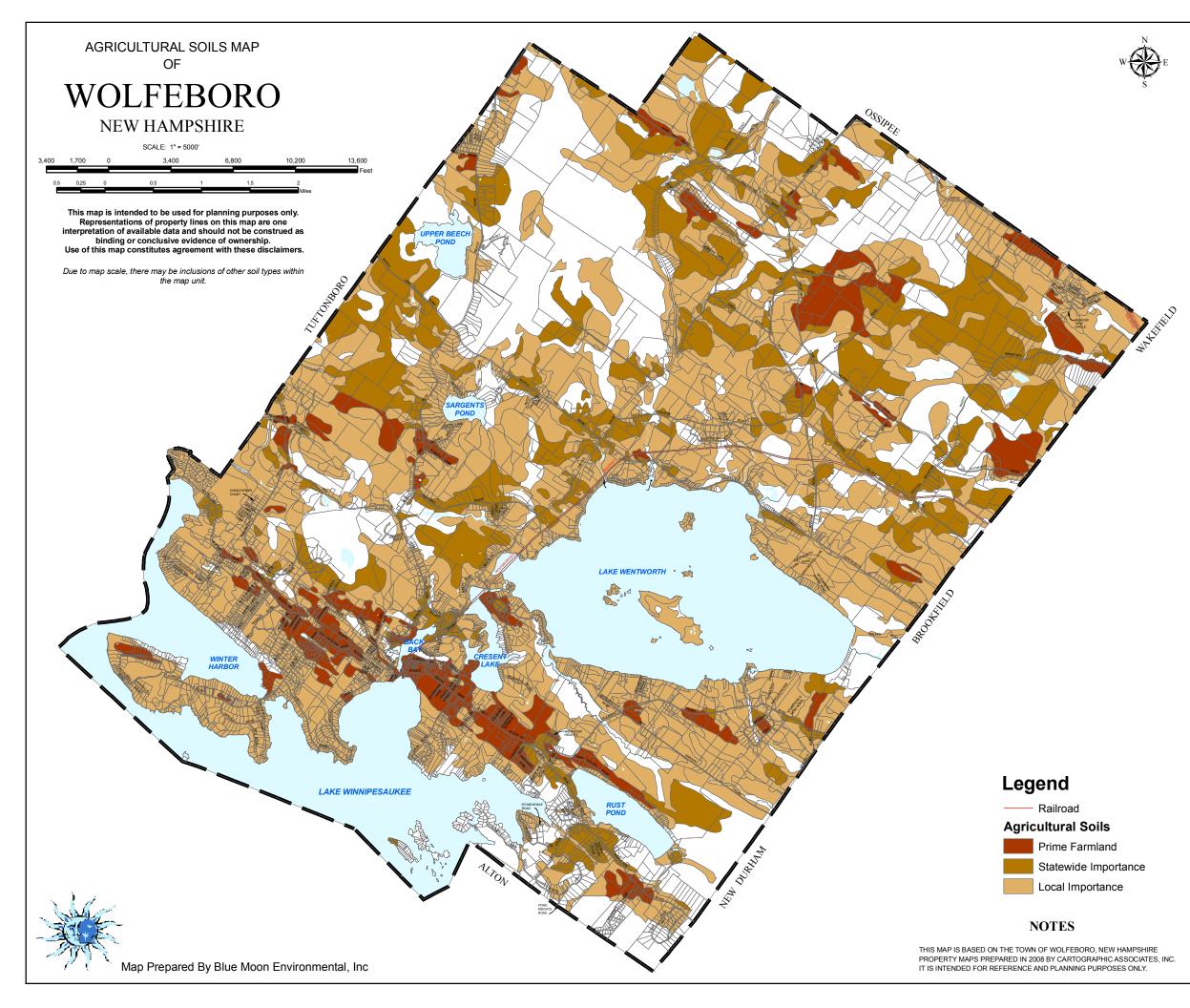


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As of May 2010, this data represents the best of our knowledge.

Wolfeboro, NH Natural Resources Inventory

May 2010



## New Hampshire Agricultural Soils Map

Prime Farmland Of Local Importance Of Statewide Importance

2,171 Acres 15.022 Acres 5,336 Acres

#### **Prime Farmland**

- Soils that have the ability to grow commonly grown cultivated crops adapted to New Hampshire in 7 or more years out of 10.
- Soils with no water table or a water table that is maintained at a sufficient depth during the cropping season to allow cultivated crops common to New Hampshire to be grown.
- Soils that are not frequently flooded during the growing season (less than a 50% chance in any year or the soil floods less than 50 years out of 100.)
- The product of the erodibility factor times the percent slope is less than 2.0,
- and the product of soil erodibility and the climate factor does not exceed 60. Soils that have a permeability rate of at least 0.06 inches per hour in the
- Soils that have less than 10 percent of the upper 6 inches consisting of rock fragments larger than 3 inches in diameter

#### Farmland of Statewide Importance

- Are not prime
- Have slopes of less than 15 percent
- Are not stony, very stony or bouldery
- Are not somewhat poorly, poorly or very poorly drained
- Includes soil complexes comprised of less than 30 percent shallow soils and rock outcrop and slopes do not exceed 8 percent.
- Are not excessively drained soils developed in stratified glacial drift, generally having low available water holding capacity.

#### **Farmland of Local Importance**

- Soils that are poorly drained, have artificial drainage established and are being farmed.
- Specific soil map units identified from the NRCS county soil survey legend, as determined by the Conservation District Board

#### Town Farms - No Data Provided

#### Data

Besides data from the Base Map, this map contains the following:

Soils data from USDA Soil Data Mart for Carroll County. Farmland classification notes from Natural Resources Conservation Service (NRCS)

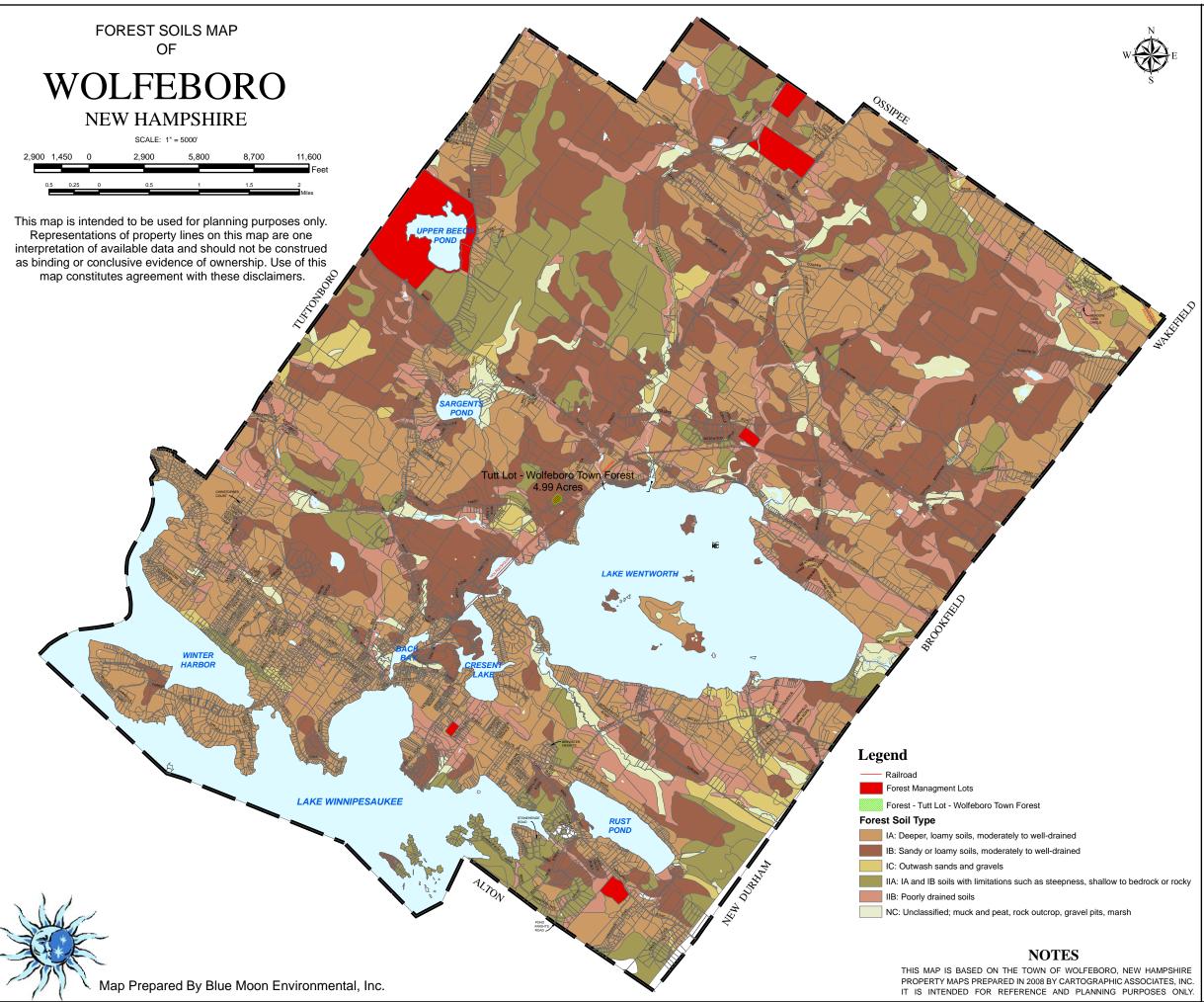
**GRANIT** 

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Wolfeboro, NH **Natural Resources Inventory** 

Figure 4 January 2010



## New Hampshire Forest Soils Map

#### **Forest Soil Class Description**

IA 11,225 Acres IB 9,905 Acres IC 902 Acres IIA 3,794 Acres IIB 3,499 Acres NC 1,208 Acres

- A Deeper, loamy textured, moderately well, and well-drained soils. Generally are more fertile and have the most favorable soil moisture relationships.
- Generally sandy or loamy over sandy textures and slightly less fertile than those in group IA. These soils are moderately well and well drained. Soil moisture is adequate for good tree growth, but may not be quite as abundant as in group IA soils.
- Outwash sands and gravels. Soil drainage is somewhat excessively to excessively drained and moderately well drained. Soil moisture is adequate for good softwood growth, but is limited for hardwoods. Ideally suited for forest management.
- IIA This diverse group includes many of the same soils as in groups IA and IB. However, these mapping units have been separated because of physical limitations which make forest management more difficult and costly, i.e., steep slopes, bedrock outcrops, erosive textures, surface boulders, and extreme rockiness.
- The soils in this group are poorly drained. The seasonal high water table is generally within 12 inches of the surface. Productivity of these poorly drained soils is generally less than soils in other groups.
- Several mapping units in the survey are either so variable or have such a limited potential for commercial production of forest products they have not been considered. Often an on-site visit would be required to evaluate the situation.

#### **Town Forest**

Wolfeboro only has one town forest located on Allen Rd. Also known as Tutt Lot, the forest has 4.99 acres. It is a permanent conservation land, with the Town of Wolfeboro as its primary protecting agency.

#### **Forest Management Lots**

Wolfeboro has forest management plans for Tutt Lot, Clow Lot, Trask Mountain Lot, and Upper Beech Pond. The town is also working on forest management plans for three other lots – Brown Lot, the Town Garden lot, and the Amory.

#### Data

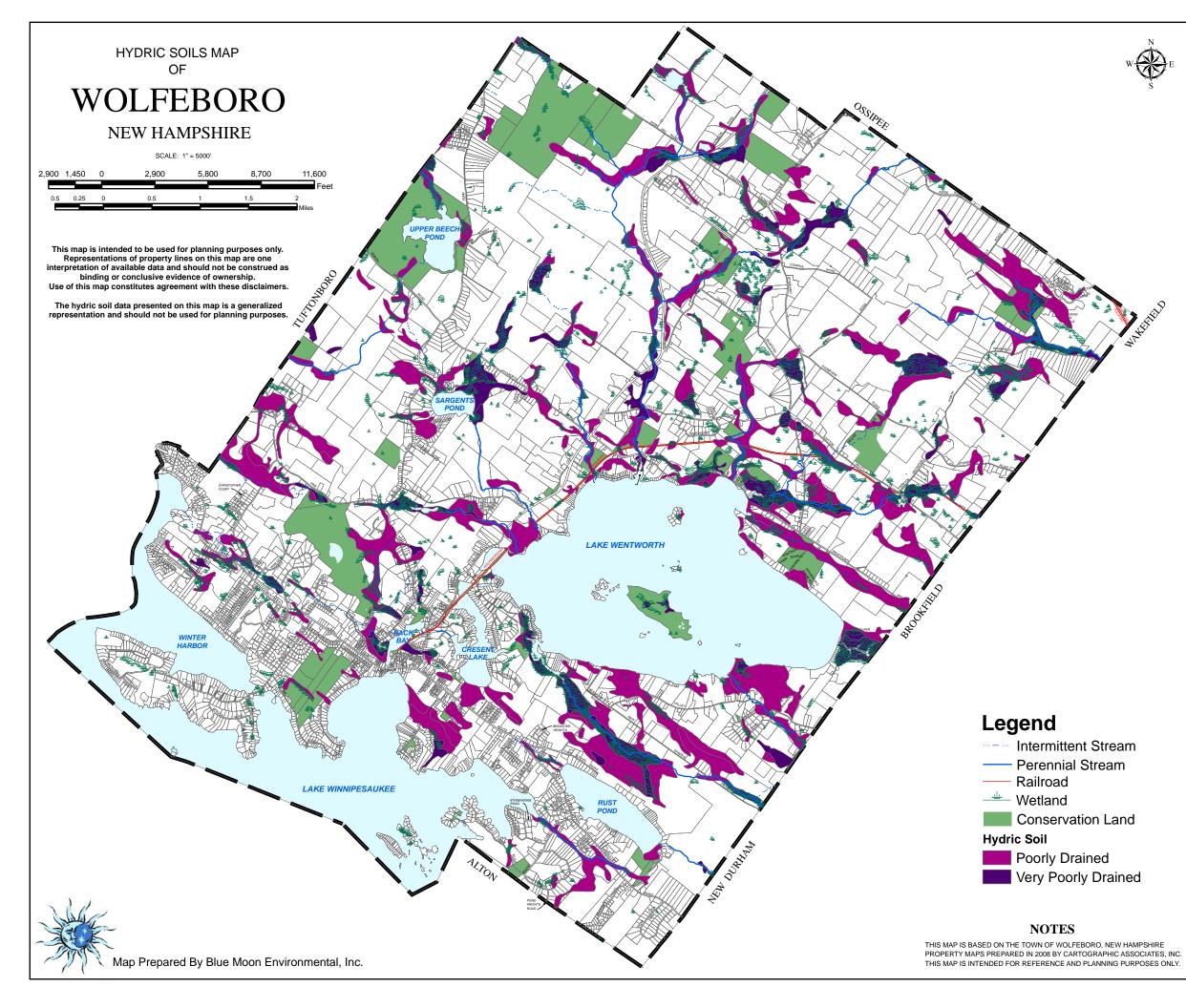
Besides data from the Base Map, this map contains the following:

Forest soil data provided by Natural Resources Conservation Service (NRCS) Forest soil rating data provided by the Society for the Protection of NH Forests Information on town forest from Town of Wolfeboro



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New Hampshire

<u>Hydric Soils Map</u>

#### **Definition of Hydric Soil**

NRCS defines hydric soil as, "soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part." As a result of soil saturation and reducing conditions, hydric soils undergo chemical reactions and physical processes that differ from those found in upland soils.

Hydric soils are soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation soils that are sufficiently wet because of artificial measures; and soils in which the hydrology has been artificially modified are hydric if the soil, in an unaltered state, was hydric. Some series that are designated as hydric have phases that are not hydric depending on water table, flooding, and ponding characteristics.

Hydric soils are one of three parameters used to identify jurisdictional wetlands. Hydric soils are commonly further differentiated by the terms poorly drained and very poorly drained. Some state and local ordinances have different provisions to regulate use of and/or provide varying buffers between poorly drained and very poorly drained soils. The map units created by the NRCS to show the extent of hydric soils for a county soil survey were created for use at a scale of 1:24000 and are not intended for site specific use. Polygons shown on this map may have inclusions of other soil types and drainage classes.

#### Wolfeboro's Hydric Soils

Poorly Drained Soil	3499 Acres	
Very Poorly Drained Soil	1131 Acres	

#### Data

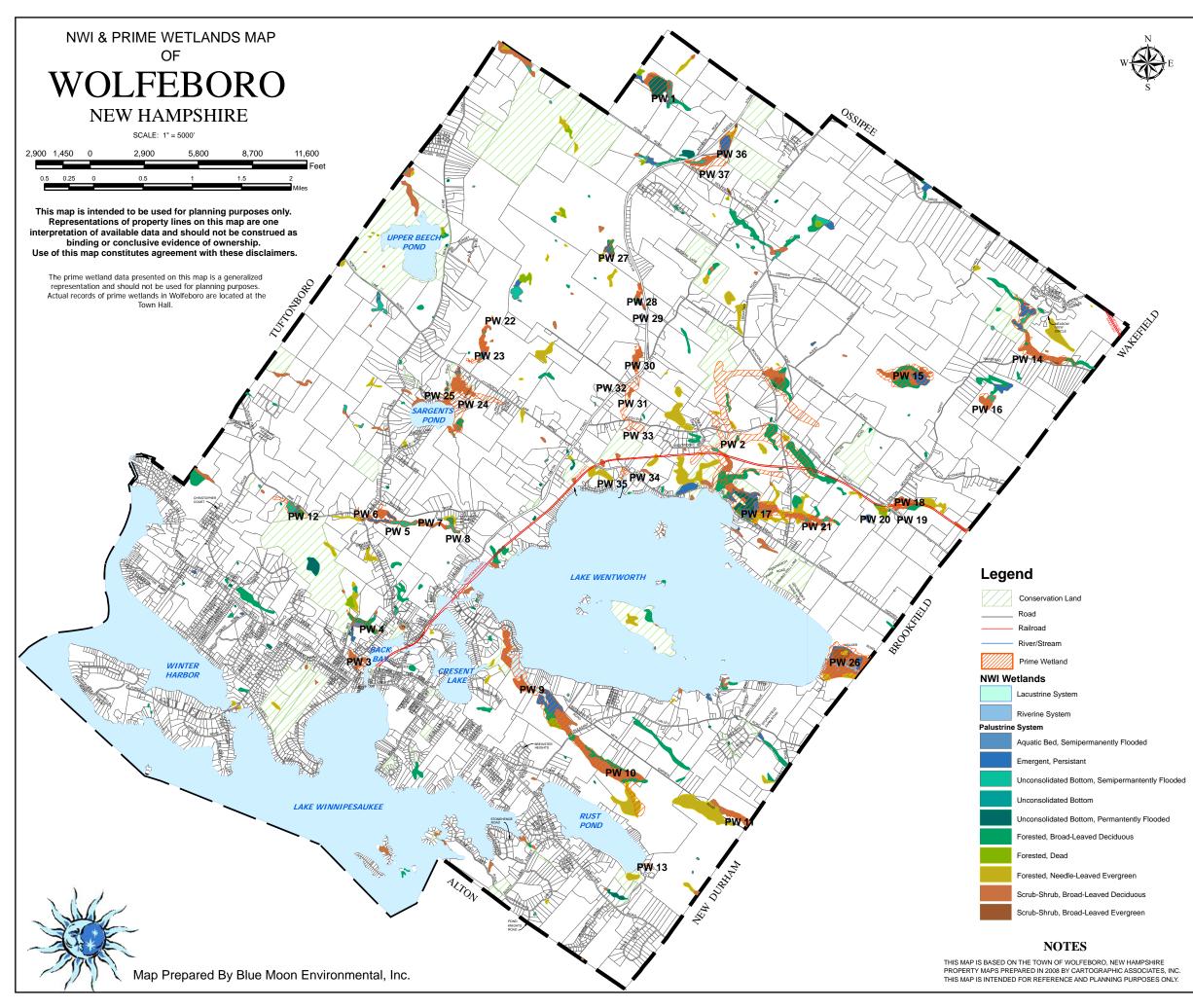
Besides data from the Base Map, this map contains the following:

Hydric Soil Data layer from New Hampshire Natural Resources Conservation Service (NRCS) for Carroll County. Soil data for Carroll County New Hampshire can be obtained on the NRCS website; www.nh.nrcs.usda.gov.



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New Hampshire

NWI & Prime Wetlands Map

#### **NWI Wetlands**

The U.S. Fish & Wildlife Service provides information on the extent and status of the Nation's wetlands, called the National Wetlands Inventory. These wetlands are divided into the following categories:

The Riverine system includes all wetlands and deepwater habitats contained within a channel. The Lacustrine system includes wetlands and deepwater habitats situated in a topographic depression or dammed river channel lacking trees, shrubs, etc.

The Palustrine system groups vegetated wetlands traditionally called by such names as marsh, swamp, bog, fen, pond, and prarie. The following are within the Palustrine system:

- The Emergent Wetland Class is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years, maintaining the same appearance year after year. These wetlands are usually dominated by perennial plants.
- The Forested Wetland Class is characterized by woody vegetation that is 6m (20ft) tall or taller. Forested wetlands are most common where moisture is relatively abundant, particularly along rivers and in the mountains.
- The Scrub-Shrub Wetland Class includes areas dominated by woody vegetation
  less that 6m tall. The species include true shrubs, young trees, and trees or shrubs
  that are small or stunted because of environmental conditions. Scrub-shrub
  wetlands may represent a successional stage leading to forested wetland, or they
  may be relatively stable communities.

#### Prime Wetlands

The town can increase protection of certain wetlands if their size, fragile condition, character and other factors make them significant. These wetlands are designated as prime, and are protected against activities that result in loss.

Name	Map PW #	Wolfeboro PW #	Name	Map PW #	Wolfeboro PW #
Batson Pond	1	4	Ryefield Brook	20	45
Clay Pit Brook	2	20	Ryefield Brook	21	41
Clows Brook	3	21A	Sargents Pond	22	14
Clows Brook	4	21B	Sargents Pond	23	14
Harvey Brook	5	26C	Sargents Pond	24	18
Harvey Brook	6	26B	Sargents Pond	25	18
Harvey Brook	7	26A	Warren Brook	26	39
Harvey Brook	8	26C	Willey Brook	27	1
Heath Brook	9	28A	Willey Brook	28	11A
Heath Brook	10	28A	Willey Brook	29	11A
Heath Brook	11	28B	Willey Brook	30	11A
Hersey Brook	12	27	Willey Brook	31	11B
Perry Brook	13	35	Willey Brook	32	11E
Porcupine Brook	14	48C	Willey Brook	33	11C
Porcupine Brook	15	48A	Willey Brook	34	11D
Porcupine Brook	16	48B	Willey Brook	35	11D
Ryefield Brook	17	42	Willey & Young B.	36	2
Ryefield Brook	18	46A	Willey & Young B.	37	2
Ryefield Brook	19	46B			

#### Data

Besides data from the Base Map, this map contains the following:

NWI data with classifications from NH GRANIT database

Prime Wetlands data from the Town of Wolfeboro Maps.

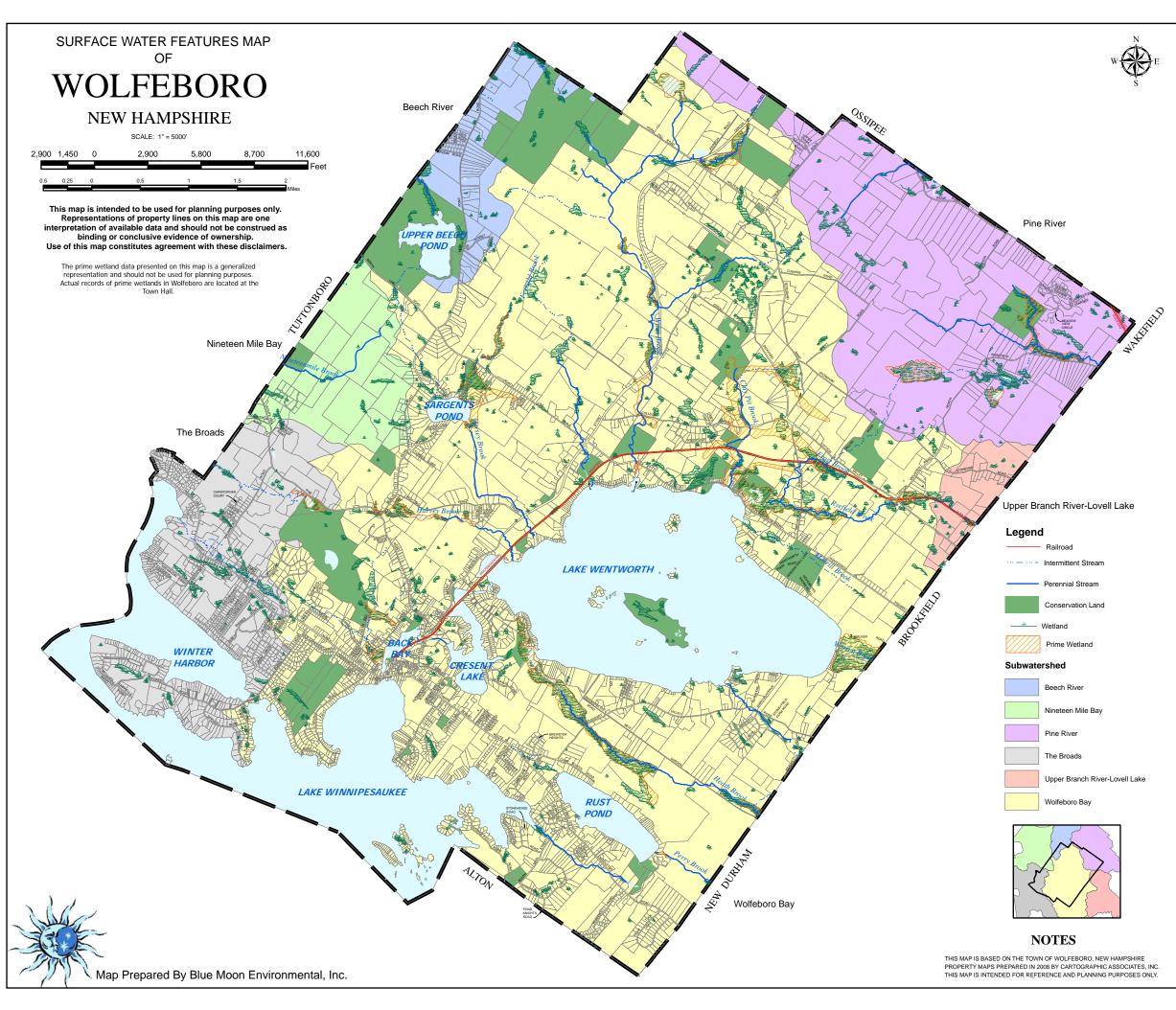
Hydric Soil Data layer from New Hampshire Natural Resources Conservation Service (NRCS) and USDA.

Soil data for Carroll County New Hampshire can be obtained on the NRCS website; www.nh.nrcs.usda.gov.



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New Hampshire

## Surface Water Features Map

There are 6,712.5 acres of surface water in the Town of Wolfeboro.

#### Surface Waters

Surface Water	Total Acres
Sargents Pond	62.4
Upper Beech Pond	143.9
Batson Pond	20.2
Rust Pond	239.1
Trapper Pond	2.3
Wentworth Lake	3096.5
Crescent Lake	146.8
Winnipesaukee Lake	45651.9
Front Bay	35
Ryefield Marsh	68.8

#### Watershed

Watersheds are areas that contribute runoff to a particular water body measured at a designated outlet point. Virtually any body of water has an area of upland surrounding it that drains to it which can be delineated as a watershed. Therefore, almost any watershed can be further divided into subwatersheds, depending on which body of water and which outlet is designated for the watershed.

Watershed Saco River 728127.2
Salmon Falls-Piscataqua Rivers
Winnipesaukee River 310911.6

Subwatershed	Total Acres	Watershed
Pine River	35247.8	Saco River
Beech River	12041.7	Saco River
Moultonborough Bay	29777.5	Winnipesaukee
		River
Wolfeboro Bay	36965	Winnipesaukee
		River
The Broads	38888.2	Winnipesaukee
		River
Upper Branch River-Lovell	18382.7	Salmon Falls-
Lake		Piscatagua Rivers

#### Data

Besides data from the Base Map, this map contains the following:

Stream and Watershed data gathered from NH GRANIT Database. Prime wetland data derived from the Town of Wolfeboro's prime wetland maps.

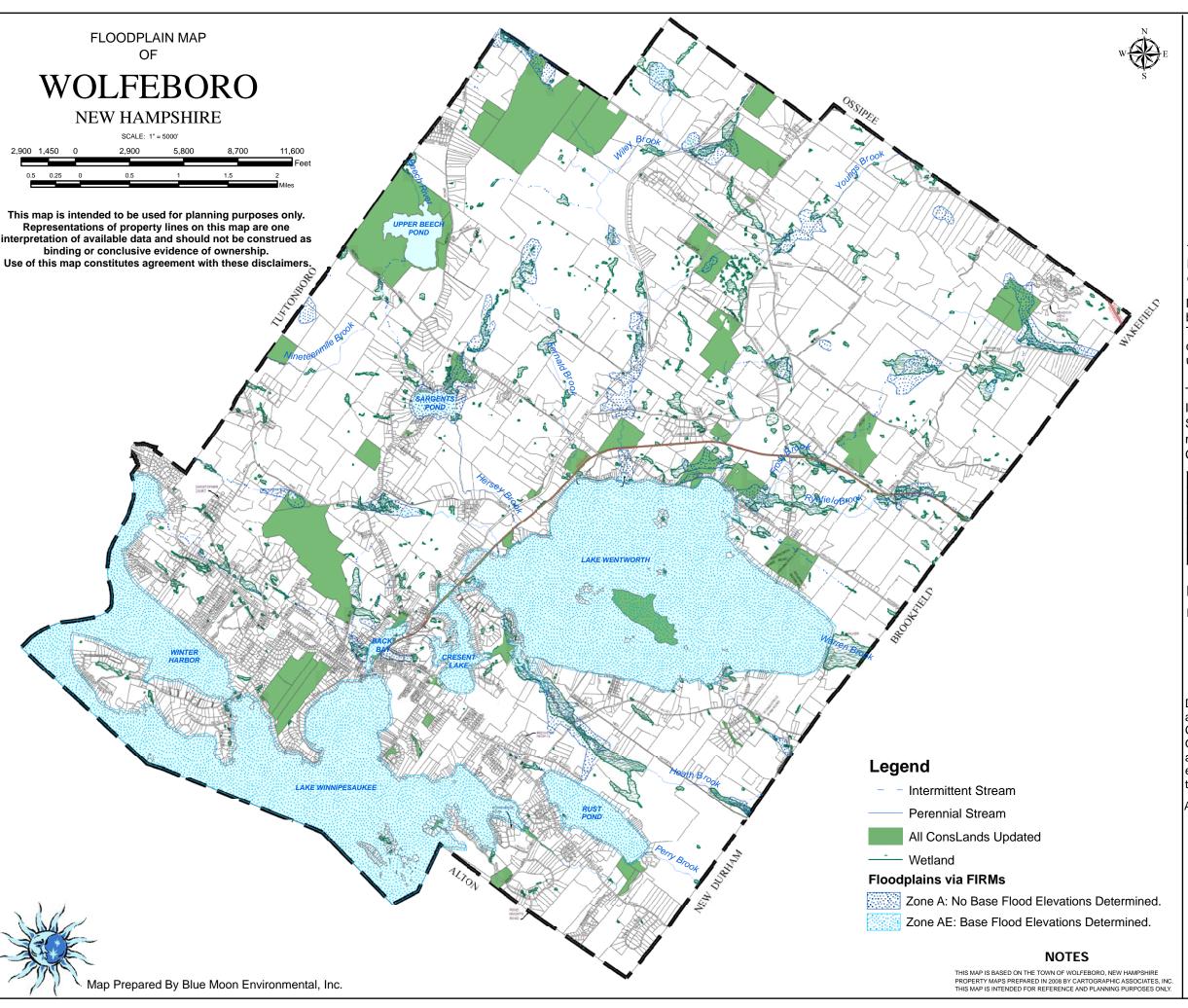


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Wolfeboro, NH Natural Resources Inventory

January 2010



## New Hampshire Floodplain Map

A floodplain is any land area that is susceptible to flooding, generally located in low-lying areas adjacent to rivers, lakes. It is easy for any stream or river to overflow their banks & spill onto the adjoining land area, causing a floodplain. It is important to identify floodplains for the safety of the community: Loss of life & property damage can result when people build in floodplains.

Those areas that are not Zone A or Zone AE are Zone X locations. These areas are known as areas determined to be outside 500-year floodplain.

Note: The data portrayed on this map is a rough estimate based off of FEMA panels of Wolfeboro, NH, dated May 1989. The shape, size and location of the floodplain data may have changed. This map should be updated once the panels are updated and more information is available.

The following is a list of all streets shown on the Flood Insurance Rate Map (FIRM) that are partially or totally within Special Flood Hazard Areas (SFHA). Similarly to this floodplain map, this index should not be used as an authoritative source. Consult the appropriate FIRM panel.

Beech Pond Road	College Road
Cotton Valley Road	Pleasant Valley Road
Rocky Shore Road	Sargents Pond Road
Springfield Point Road	State Route 28
State Routes 28 and 109	State Route 109
Walt's Lane	Whitten Neck Road

#### Data

Besides data from the Base Map, this map contains the following:

Floodplain data came from FEMA panels dated May 1989.

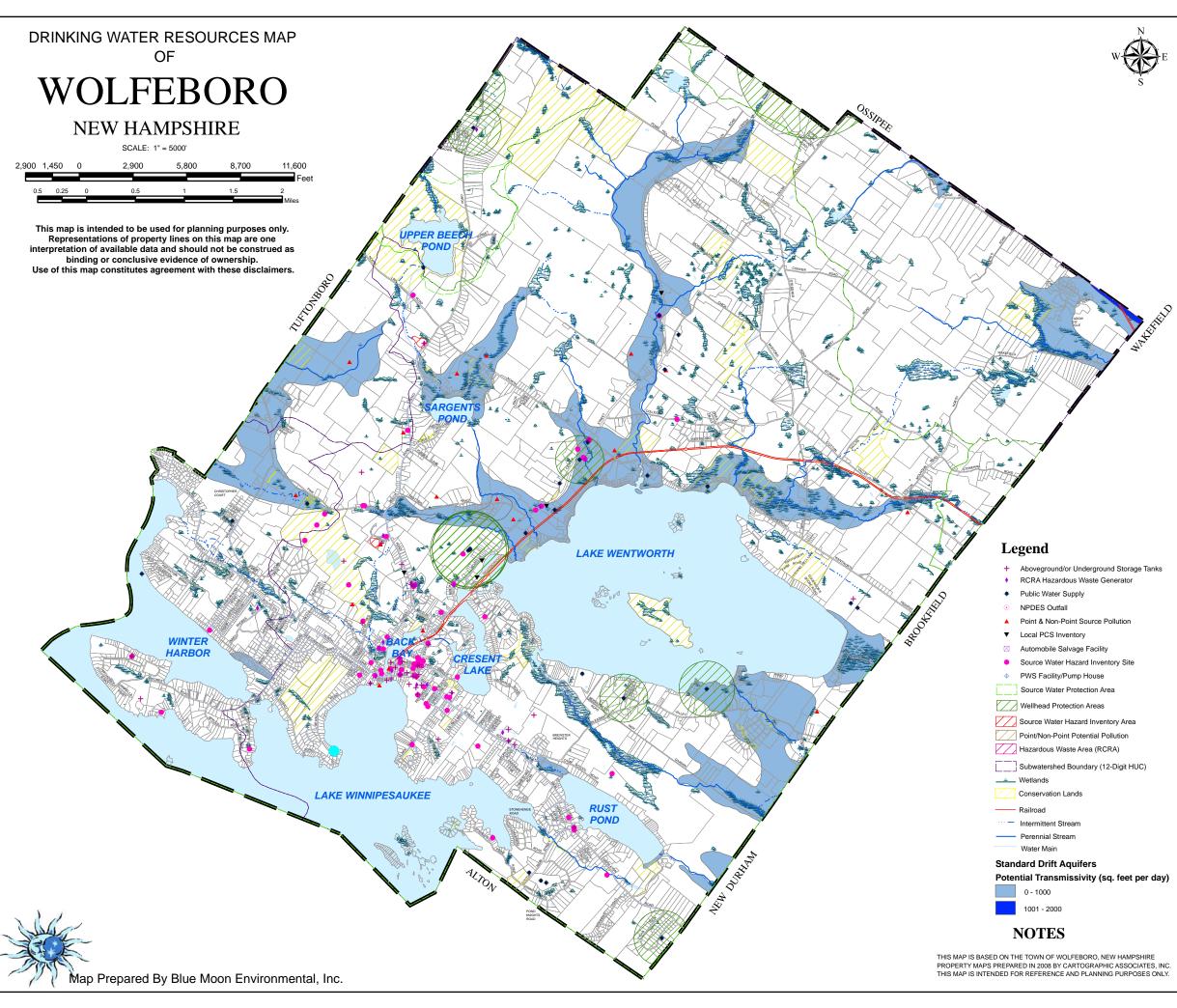


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Wolfeboro, NH Natural Resources Inventory

January 2010



## New Hampshire <u>Drinking Water Resources Map</u>

The Town of Wolfeboro mainly receives drinking water resources from surface water features rather than groundwater.

#### **Transmissivity**

The ability of an aquifer to supply water, measured in sq.ft./day. Aquifers with a transmissivity of 1000 sq.ft./day or less are not considered adequate for a public water supply.

#### **Public Drinking Water Supply Features**

Include wells, drinking water treatment facilities/pump houses registered with the NH DES, Water Supply Engineering Bureau.

#### Public Water Supply

System of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year.

#### Well Head Protection Areas

Represent drinking water supply protection areas as defined by the NH Drinking Water Source Protection Program, administered by the NHDES. Contains wellhead delineations for groundwater drinking sources.

#### **Known Or Potential Contamination Sites**

#### Groundwater Hazard Inventory

Represents existing and potential threats to groundwater quality as recorded in the files of the NH DES Oil Remediation and Compliance Bureau.

#### Aboveground/Underground Storage Tanks

Registered by the NH DES Oil Remediation and Compliance Bureau.

#### Facilities Generating Hazardous Waste

Wastes are considered hazardous when they are known to be harmful to human health and the environment if they are not managed properly. Regulated under the Resource Conservation and Recovery Act (RCRA) program.

#### Point & Non-Point Potential Pollution

Point source pollution is pollution that can be directly linked to a specific pollutant or discharge point, and can be identified and located. Non-point source pollution is pollution that can originate from a number of sources, and is difficult to identify. Generally, non-point source pollution has no specific point of discharge.

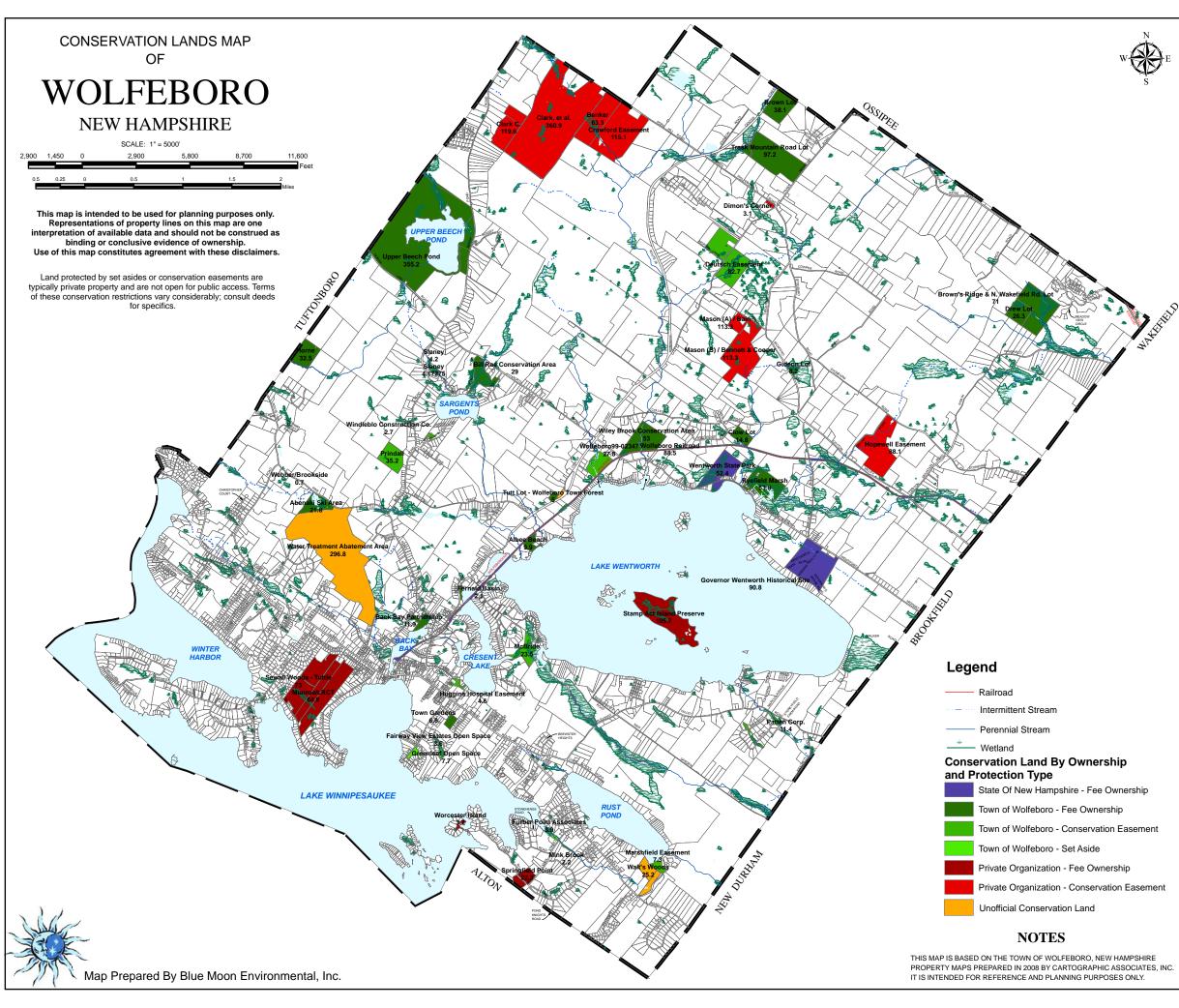
#### Data

Besides data from the Base Map, this map contains the following: All drinking water resource data provided by New Hampshire Department of Environmental Services.



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New Hampshire

<u>Conservation Lands Map</u>

The conservation lands displayed on this map are color-coded based on a classification by primary protecting organization, as well as by the protection type. The primary protecting organization can be the Town of Wolfeboro, the State of New Hampshire, or some private organization such as land trust or other private conservation-minded organization.

#### **Protection Type:**

Three classes represent protection type: conservation easements (CE), fee ownership (FO), or set aside (SA).

The two main classes are fee ownership and conservation easement Fee ownership, or FO, establishes the town, another governmental entity, or a conservation organization as owner of the conservation parcel, to protect through their own means. Conservation easement, or CE, allows the land to be owned by anyone, but is protected through an easement (or deed restriction) held by the town, another governmental entity, or a conservation organization. A set aside is usable area that is set aside for common open space.

#### **Unofficial Conservation Land**

Unofficial Conservation Land is land owned by an agency or organization whose mission is not conservation, but whose intent is to keep the land for conservation, recreation, or educational purposes. More than 50% of the area will remain undeveloped.

Wolfeboro's unofficial conservation lands include Town House Lot, Water Treatment Abatement Area, and Walt's Woods.

#### Data:

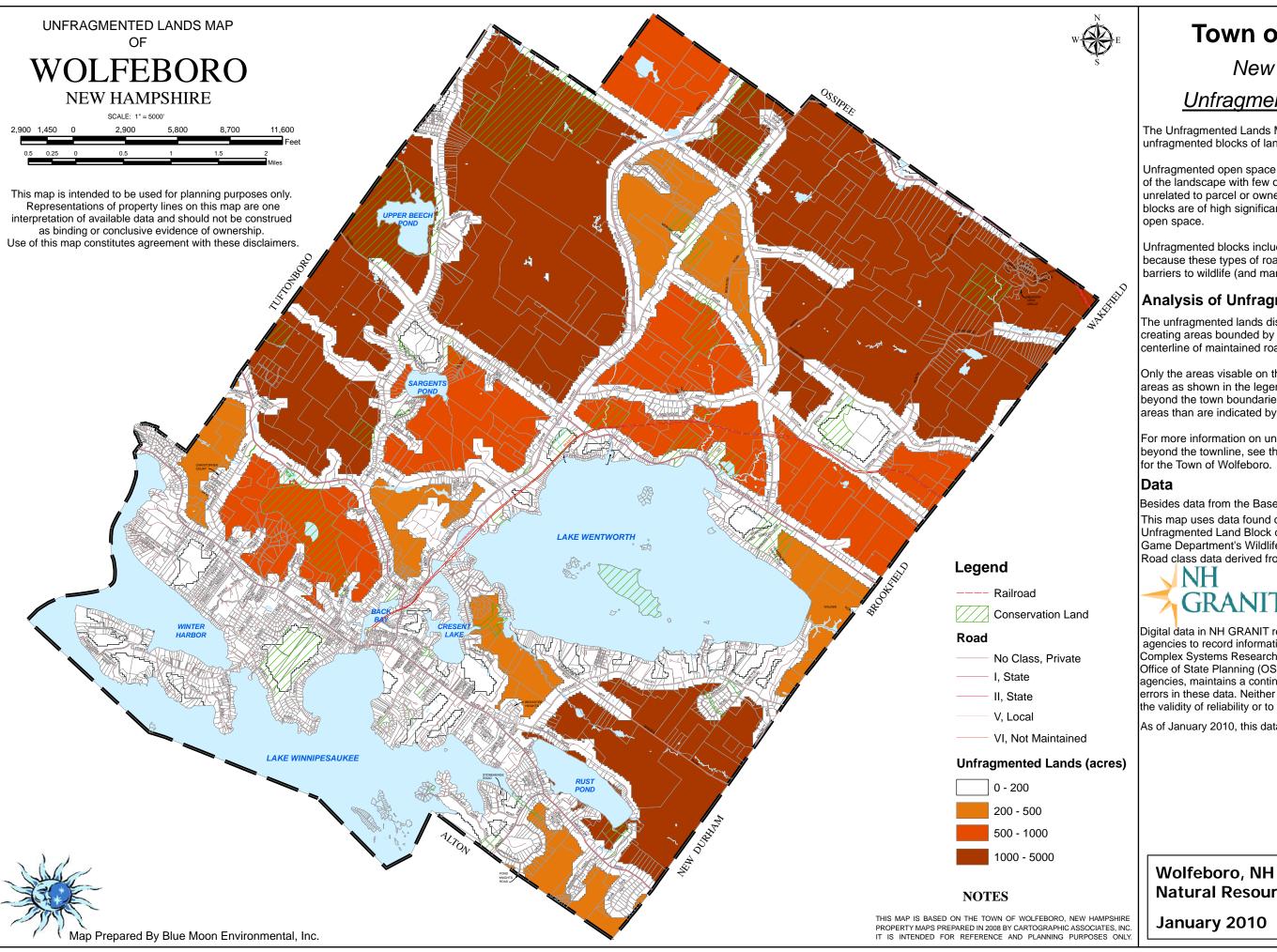
Besides data from the Base Map, this map contains the following:

Conservation Land Layer includes data from the Town of Wolfeboro and the NH GRANIT database.



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New Hampshire Unfragmented Lands Map

The Unfragmented Lands Map shows the location and size of unfragmented blocks of land in Wolfeboro.

Unfragmented open space blocks are undeveloped sections of the landscape with few or no roads. These blocks are unrelated to parcel or ownership boundaries. Unfragmented blocks are of high significance to wildlife and identify large areas

Unfragmented blocks include Class V and Class IV roads because these types of roads aren't considered significant barriers to wildlife (and many of them can be regarded as trails).

#### **Analysis of Unfragmented Land Blocks**

The unfragmented lands displayed on this map were derived by creating areas bounded by buffers that were set 500' from the centerline of maintained roads.

Only the areas visable on this map were used to calculate the areas as shown in the legend. Unfragmented blocks that extend beyond the town boundaries may have substantially greater areas than are indicated by the legend.

For more information on unfragmented land blocks that extend beyond the townline, see the Regional Unfragmented Lands Map

Besides data from the Base Map, this map contains the following This map uses data found on the Town of Wolfeboro's Base Map Unfragmented Land Block data derived from the N.H. Fish & Game Department's Wildlife Action Plan.

Road class data derived from the NH GRANIT Database.

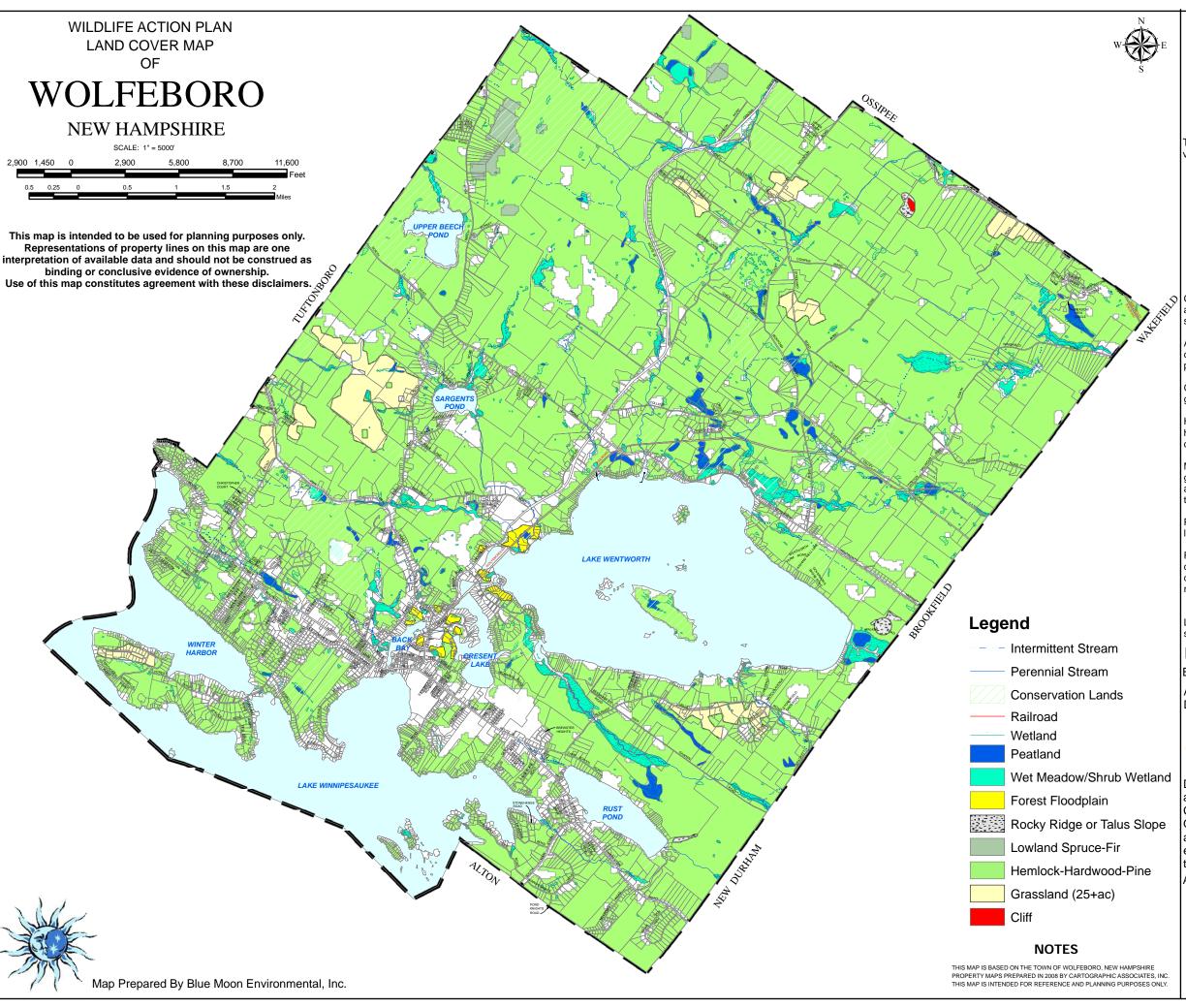


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**Natural Resources Inventory** 

January 2010



New Hampshire
Wildlife Action Plan
Land Cover Map

The Wildlife Habitat Land Cover Map provides the town of Wolfeboro with a visual representation of the various habitat types located in the town.

Habitat Type	Acres	Acres Conserved	Percent Conserved
Hemlock-Hardwood-Pine	24,940	1,966	7.9 %
Lowland Spruce-Fir	156	69	44.2 %
Grasslands over 25 acres	765	6	0.8 %
Cliffs	4	0	0 %
Rocky ridges and talus slopes	41	0	0 %
Floodplain Forest	105	15	14.5 %
Wet meadow/shrub wetland	808	110	13.6 %
Peatland	339	40	11.9 %

Cliffs are steep rocky outcrops greater than 65° in slope and 3 meters in height, and have sparse vegetation typically restricted to cracks and crevices where soil accumulates.

Also referred to as riparian forests, floodplain forests support diverse natural communities, protect and enhance water quality by filtering and sequestering pollution, and control erosion and sediment.

Grasslands are defined as areas greater than 25 acres that are dominated by grasses, wildflowers, and sedges with little shrub or tree cover.

Hemlock-Hardwood-Pine Forests are transitional forests, occurring between hardwood conifer and oak-pine forests. This common forest type is comprised of dry, sandy soils with red oak and white pine.

Marsh and shrub wetlands have a broad range of flood regimes, and is often grouped into three broad habitat categories: wet meadows, emergent marshes, and scrub-shrub wetlands. Marsh and wetlands filter pollutants, preventing them from getting into local streams, and help hold water to reduce flooding.

Peatlands have water with low nutrient content and higher acidity caused by limited groundwater input and surface runoff.

Rocky ridges and talus slopes are two related but distinct habitats. Talus slopes, comprised of loose or stable boulders and rocks, range from open, lichen covered talus "barrens" to closed-canopy forested talus communities. Rocky ridges generally occur on outcrops and bedrock ridges and summits below the aloine zone

Lowland Spruce Firs is a mosaic of lowland spruce-fir forest and red spruce swamp communities.

#### **Data**

Besides data from the Base Map, this map contains the following:

All habitat types comes from data derived from the NH Fish & Game Department's Wildlife Action Plan.

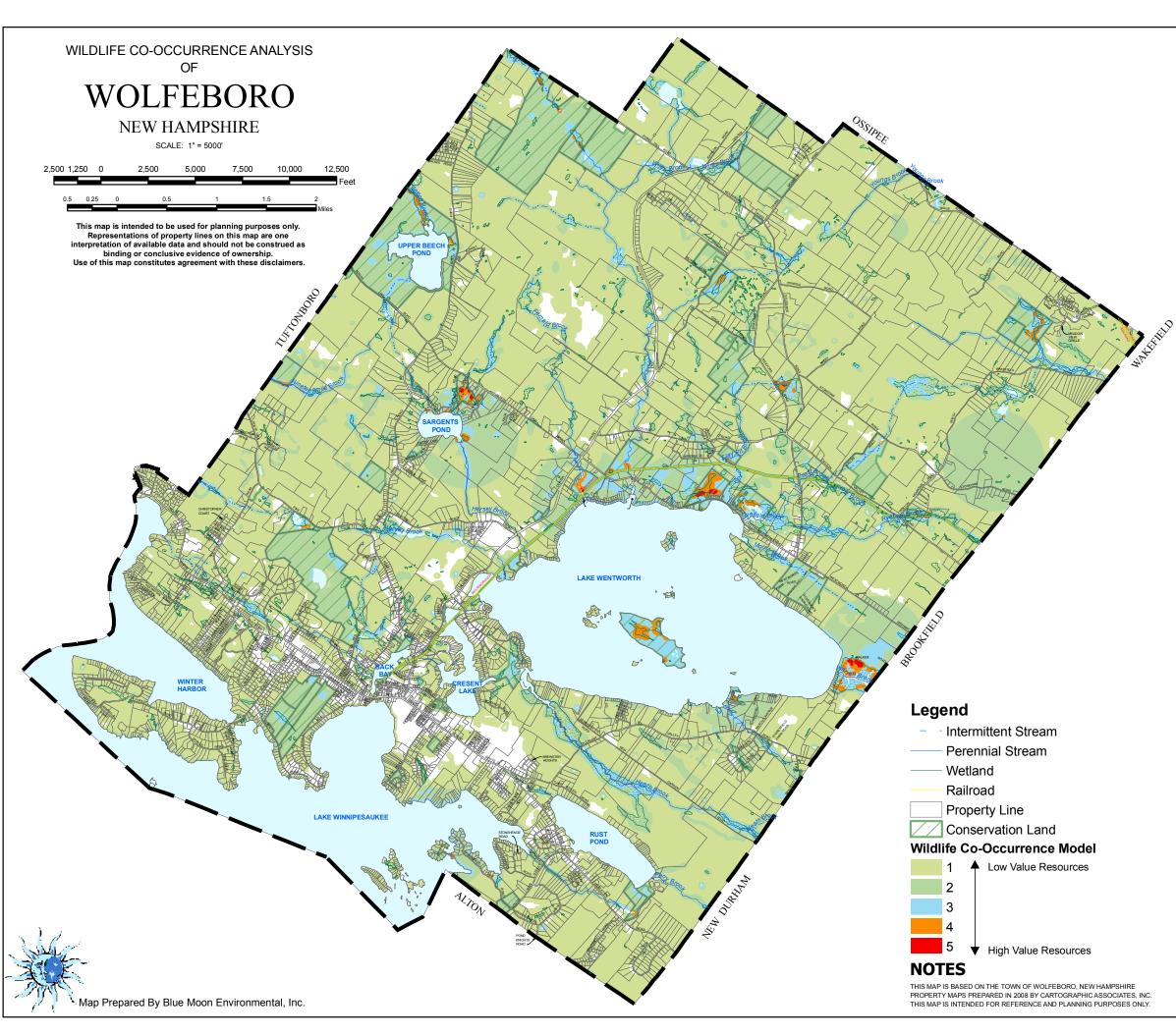


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Wolfeboro, NH Natural Resources Inventory

January 2010



New Hampshire

Wildlife Co-Occurrence Analysis

#### **Wildlife Co-Occurrence Model Inputs**

## NH Fish and Game Wildlife Action Plan Habitat Types

Cliffs

Grasslands

Hemlock-Hardwood Pine Forest

Lowland Spruce Fir Forest

Marshes

Peatlands

Rocky Ridge or Talus Slopes

NHB - Buffers of Known Occurences Riparian Buffer Zone (50' Buffer)

Wetlands, Streams, Surface Water

**Existing Conservation Land** 

#### Weighting Scheme

This Co-Occurrence Model assigns value based on the density and importance of the resources at place. It does this by identifying areas where multiple resources coincide and overlap, signaling locations of critical resource protection.

This analysis is based on an unweighted scoring scheme, where each resource (input) carries an equal weight.

#### Data

Road, Property Line, Railroad and Lake and Pond data from Cartographics Associates Inc.

Conservation Lands layer includes data from the Town of Wolfeboro and NH GRANIT Database.

River and Stream hydrography layer from the NH GRANIT Database.

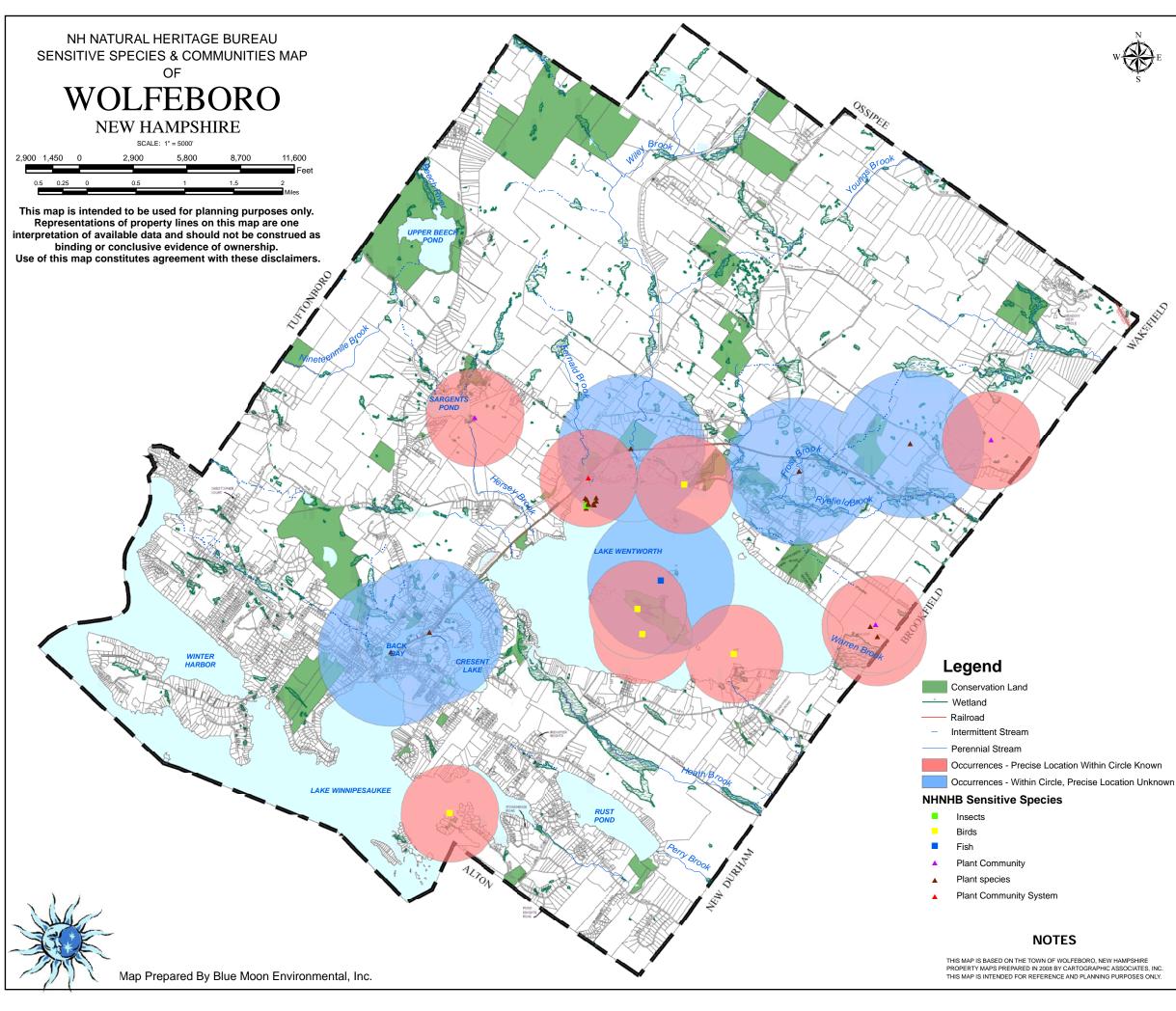


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Wolfeboro, NH Natural Resources Inventory

May 2010



## New Hampshire <u>NH Natural Heritage Bureau</u> <u>Sensitive Species & Communities Map</u>

This map illustrates the general locations of rare plants, wildlife, and natural communities. Precise locations are not shown due to the data's sensitive nature. The NH Natural Heritage Bureau's database contains more detailed information including locations, population sizes, and habitat descriptions.

Please contact the Natural Heritage Bureau at (603) 271-2214 for more information. Wildlife occurrences are compiled and displayed in cooperation with the NH Fish & Game Department's Nongame Program, who may be reached at (603) 271-2462.

#### **Declared Sensitive Species**

The New Hampshire Natural Heritage Bureau (NHNHB), along with the N.H. Fish & Game Wildlife Department, maintains an inventory of each town's species of concern. Species of concern are those species that are listed as endangered, threatened, or species that need to be maintained throughout each community.

Endangered Native species vulnerable to extripation due to rarity and endangerment considerations (population size and trends, area of occupancy, overall viability, geographic distribution, habitat rarity and integrity, and/or degree of protection).

Threatened: Native species vulnerable to becoming endangered due to rarity and the endangerment considerations listed above.

Species	Flag	# Reported in State
Plants		
American Cancerroot (Conopholis americana)	T	24
Butterfly Weed (Asclepias tuberosa)	E	7
Climbing Fumitory (Adlumia fungosa)	E	17
Dwarf Bulrush (Lipocarpha micrantha)	E	3
Fringed Gentian (Gentianopsis crinita)	T	25
Kidney-leaved Violet (Viola nephrophylla)	E	8
Large Yellow Lady's Slipper (Cypripedium parviflorum	T	20
var. makasin)		
Ram's-head Lady's Slipper (Cypripedium arietinum)	E	14
Small Whorled Pogonia (Isotria medeoloides)	T	49
Water Marigold (Megalodonta beckii)	E	11
Yellow Lady's Slipper (Cypripedium parviflorum var.		10
makasin)		
Vertebrates - Birds		
Common Loon (Gavia immer)	T	236
Great Blue Heron (Rookery) (Ardea Herodias)	-	38
Vertebrates – Fish		
Lake Whitefish (Coregonus clupeaformis)	-	8
Invertebrates – Insects		
A Noctuid Moth (Chytonix sensilis)	-	3

#### Data

Besides data from the Base Map, this map contains the following: Rare and endangered species, natural communities data provided by the NH Natural Heritage Bureau.

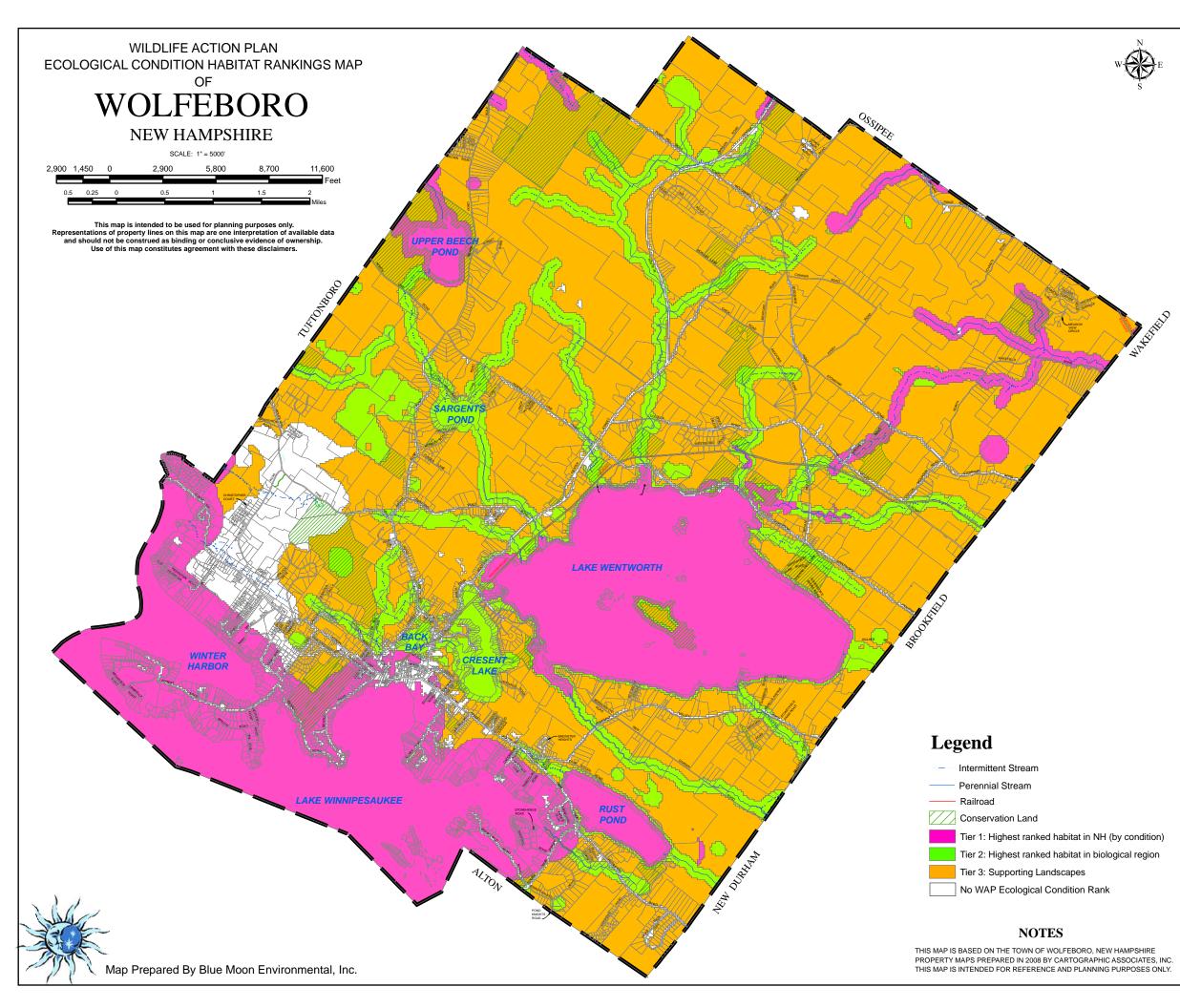


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Wolfeboro, NH Natural Resources Inventory

January 2010



New Hampshire Wildlife Action Plan Ecological Condition Habitat Rankings Map

Information about habitat condition was analyzed to develop a statewide and regional ranking, and identify the highest condition habitat relative to all polygons of a given habitat type in the state. Tiers were determined by assigning threshold values to each habitat type. Tier 1 rating was given to areas that contain the highest condition rank in the state. Tier 2 areas contain the highest condition rank in the biological region (defined by the TNC Ecoregional Subsection for terrestrial habitats or the Watershed Group for wetland and aquatic habitats). Tier 3 includes other significant factors such as watersheds containing top-ranked condition stream and lakes, large forest blocks of statewide significance, or specific animal, plant and natural community occurrences identified by NHFG as critically imperiled or by NHNHB as highest importance.

According to the NH Fish & Game, the overall condition of each habitat polygon was assigned a relative rank based on all polygons of a given habitat type that occur in New Hampshire. Generally, CONDITION was BIOLOSICAL:

Richness of rare wildlife within each habitat
Richness of rare wildlife within their dispersal distances from each habitat
Richness of all vertebrate wildlife within each habitat
Richness of rare plants within each habitat based on these factors:

- LANDSCAPE:

   Size of each habitat

   Ecological Land Unit
  diversity within each habitat

   Proximity index or distance
  to nearest neighbor of same habitat type

   Shane Index

#### HUMAN IMPACT:

- Cation depietion index/risk from acid deposition
   Mercury deposition
   Wind power potential
   Fragmentation or Mean IFES score
   Percent in Conservation
   Number of dams and impounded area upstream of forest forms the complexity.
- complexes

  Wetlands adjacent to a water body subject to drawdown
- Wetlands impacted by alterations
- Timber harvest, partial and clearcut
- Initial rearrest, partial and cleaning.

  Road density and/or distance to nearest road

  Buildable area or risk to development based on statewide general buildout

  Recreation use, e.g. cliffs listed in climbing guide books; density of hiking
- trails
  1990 and 2000 US Census data, population and housing unit density.
  Impervious surface and developed land use with upland buffer wetlands, peatlands, forest floodpalin, saltmarsh.
  Relative area impacted by irwasive plant species

#### Habitat Condition Acreage

Tier 1: Highest Ranked in State 76,957 Acres Tier 2: Highest Ranked in Biological Condition 6,193 Acres

Tier 3: Supporting Landscapes

64,990 Acres

#### Data

Besides data from the Base Map, this map contains the following:

Highest Ranked in Biological Condition, Highest Ranked in State, Supporting Landscapes data layer from NH Fish & Game Wildlife Action Plan (02/2007) Stream data from Carroll County Hydrography Layer from NH GRANIT Database

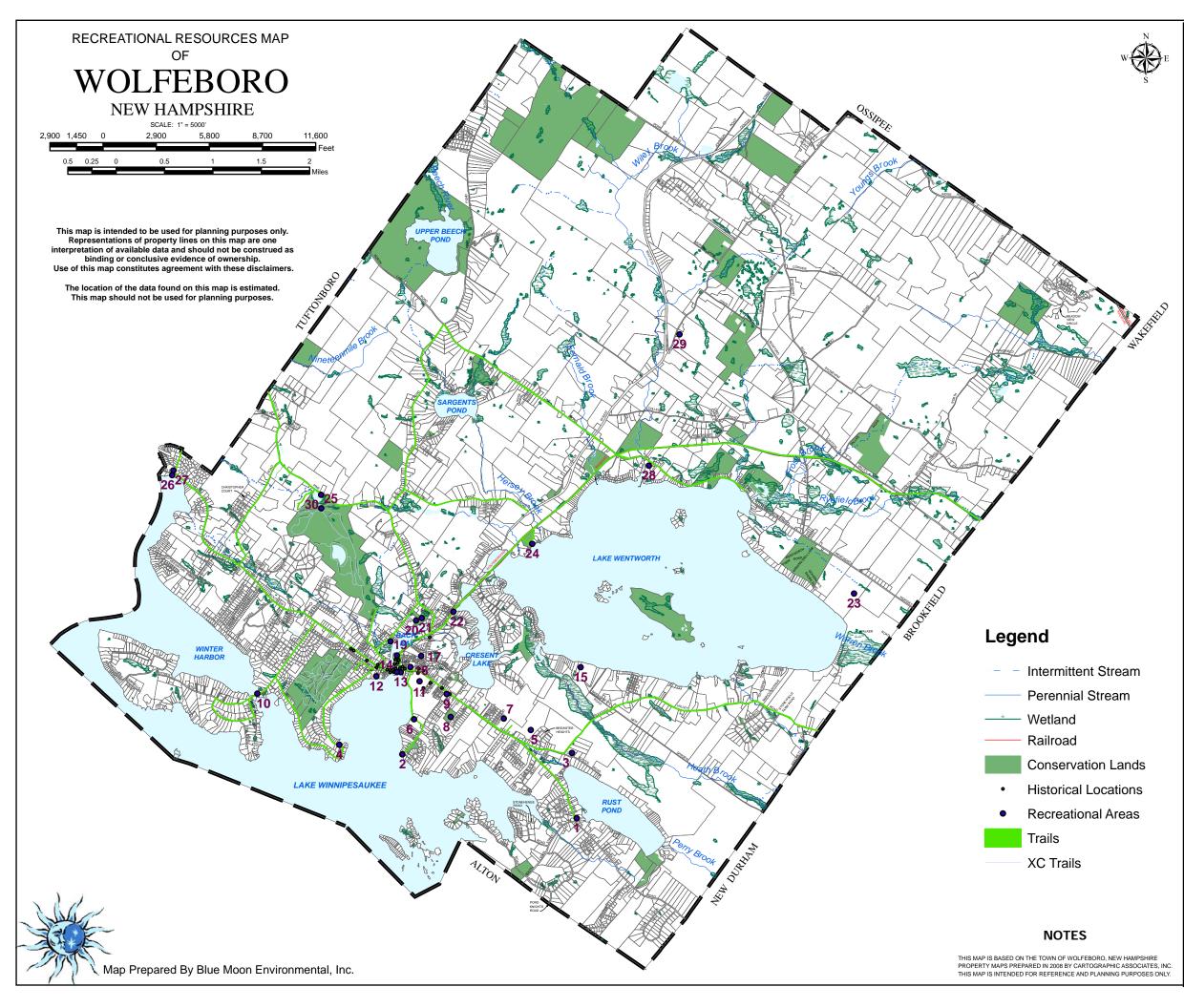


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Wolfeboro, NH **Natural Resources Inventory** 

January 2010



## New Hampshire Recreational Resources Map

This map contains the recreational resources found in Wolfeboro, including walking trails, cross country trails, historical locations, and other recreational areas.

#### **Recreational Areas**

Num	Location	Recreational Use
1	South Wolfeboro Park	Park
2	McKinney Park	Park
3	Wolfeboro Camp School	Campground
4	Goodhue and Hawkins Navy Yard	Water Sports Area
5	Kingswood Reg. High School	Field Sports
6	Brewster Beach – Lake Winnipesaukee	Water Sports Area
7	Kingswood Golf Course	Golf
8	Town Gardens	Natural Area
9	Clark Park - Clark House School House	Park
10	Carry Beach – Lake Winnipesaukee	Water Sports Area
11	Brewster Academy	Field Sports
12	Wolfeboro Corinthian Yacht Club	Water Sports Area
13	Cate Park – South Main Street	Park
14	Town Dock Area	Water Sports Area
15	Camp Bernadette	Campground
16	Carpenter School	Field Sports
17	Foss Field Recreation Area - Lehner	Field Sports
18	Russell C. Chase Bridge Falls Path	Park
19	Wolfeboro Marina	Water Sports Area
20	Bay Street – East Side	Natural Area
21	Back Bay - Elm Street West	Water Sports Area
22	Mast Landing	Water Sports Area
23	Pierce Camp Birchmont	Campground
24	Allen Albee Beach – Lake Wentworth	Water Sports Area
25	Abenaki Ski Area	Snow Ski Area
26	Lake Winnipesaukee – Access	Water Sports Area
27	Libby Museum	Other
28	Robies Camping Area	Campground
29	Wolfeboro Campground	Campground
30	Pop Whalen Ice Arena	Ice Skating

#### **Historical Locations**

Tuc' Me Inn B&B Clark House Museum Complex Brewster Admin. Building The Lakeview Inn Lucas-Nowell House Pickering Corner Train Depot Scott House First Christian Church Carpenter School Goodwin & Haley Building Town Park/Cate Park Wolfeboro Inn Avery Block Village Players **Durgin Block** Bridge Falls Path Post Office Grist Mill & Dam Shoe Factory

Admin. Building Estabrook Hall
Corner Soldier Monument
ise Yellow House
School Brewster Memorial Hal
/Cate Park Bridges Hallmark
k Bridge
ck Durgin Stables
E Latchaw Building

Church of Christ Scientis

#### Data

Besides data from the Base Map, this map has the following:

Recreational Areas data from NH GRANIT Database.

Historical Locations from Wolfeboro's Self-Guided Historical Tour Pamphlet, Town of Wolfeboro.

Trails data provided by the Town of Wolfeboro.

Cross Country Trails from the Wolfeboro Cross Country Ski Assoc.

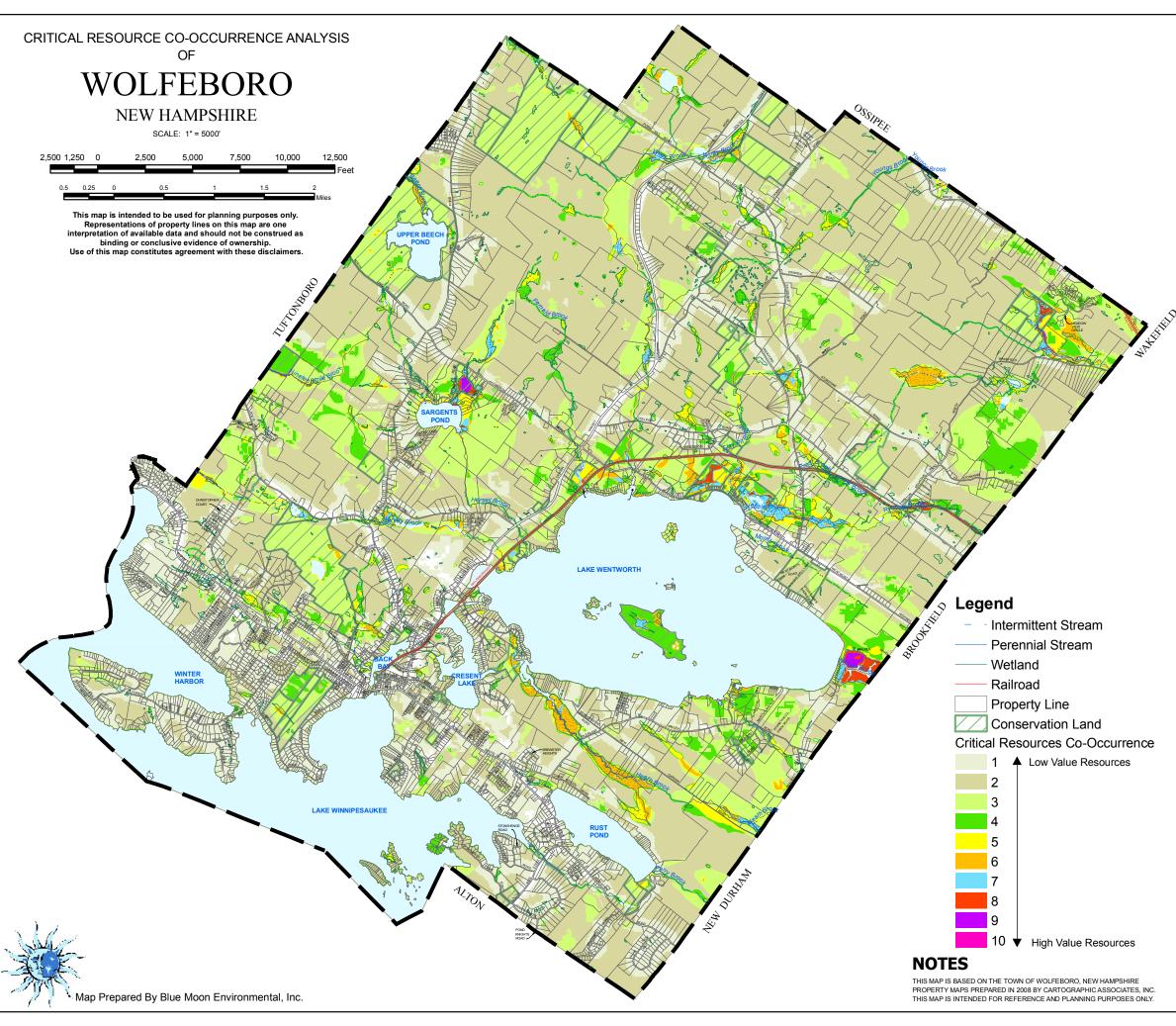


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Wolfeboro, NH Natural Resources Inventory

January 2010



New Hampshire

<u>Critical Resources Co-Occurrence</u> *Analysis* 

**Critical Co-Occurrence Model Inputs** 

Significant Wildlife Habitat Based on

Results of running Wildlife Co-Occurrence
Model Types
Aquifers
Prime Wetlands
Unfragmented lands
Prime Farmland
Riparian Buffer Zone (50' Buffer)
Wetlands, Streams, Surface Water

#### Weighting Scheme

This Co-Occurrence Model assigns value based on the density and importance of the resources at place. It does this by identifying areas where multiple resources coincide and overlap, signaling locations of critical resource protection.

This analysis is based on an unweighted scoring scheme, where each resource (input) carries an equal weight.

#### Data

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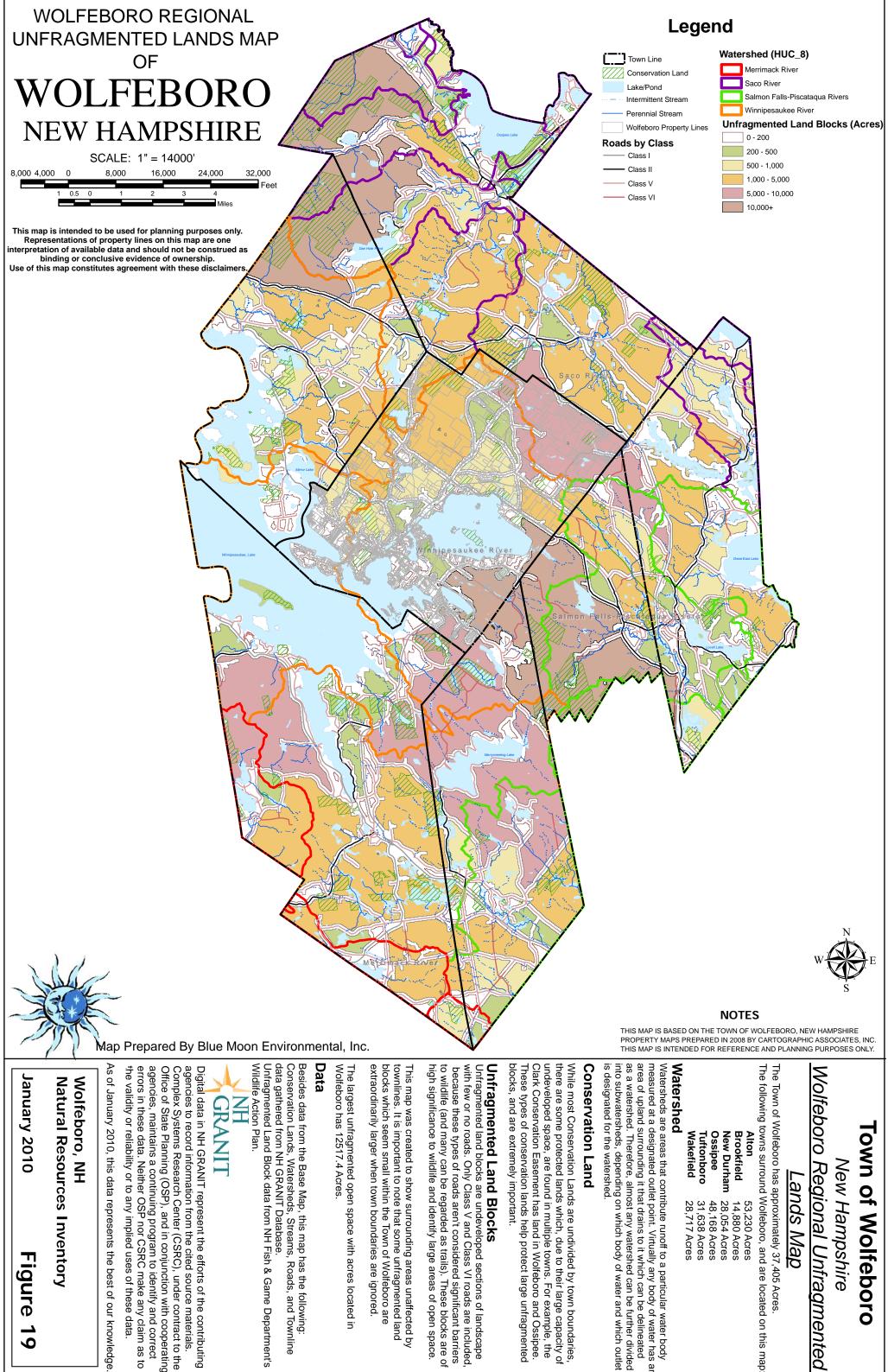


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Wolfeboro, NH Natural Resources Inventory

May 2010



**Natural Resources Inventory** Wolfeboro, NH

-igure

Town of Wolfeboro New Hampshire

Nolfeboro Regional Unfragmented ands Map

The Town of Wolfeboro has approximately 37,405 Acres. The following towns surround Wolfeboro, and are located on this map

Ossipee Brookfield New Durham 53,230 Acres 14,880 Acres 28,054 Acres

Alton

48,168 Acres 31,638 Acres 28,717 Acres

Wakefield

is designated for the watershed. as a watershed. Therefore, almost any watershed can be further divided While most Conservation Lands are undivided by town boundaries, into subwatersheds, depending on which body of water and which outlet area of upland surrounding it that drains to it which can be delineated Watersheds are areas that contribute runoff to a particular water body measured at a designated outlet point. Virtually any body of water has an Conservation Land

there are some protected lands which, due to their large capacity of undeveloped space, are found in multiple towns. For example, the **Unfragmented Land Blocks** blocks, and are extremely important These types of conservation lands help protect large unfragmented Clark Conservation Easement has land in Wolfeboro and Ossipee. Unfragmented land blocks are undeveloped sections of landscape

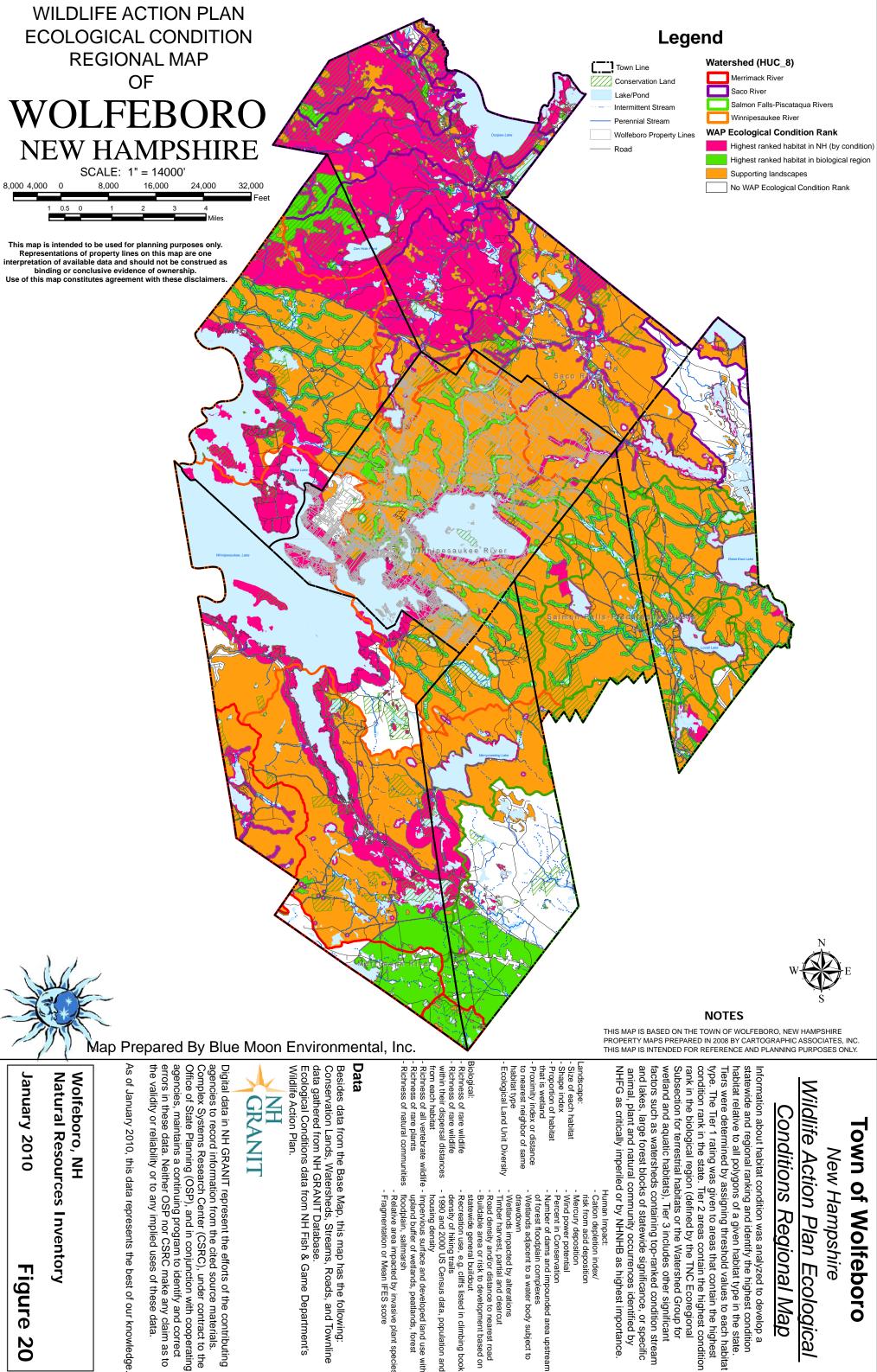
high significance to wildlife and identify large areas of open space. to wildlife (and many can be regarded as trails). These blocks are with few or no roads. Only Class V and Class VI roads are included, because these types of roads aren't considered significant barriers

extraordinarily larger when town boundaries are ignored. blocks which seem small within the Town of Wolfeboro are townlines. It is important to note that some unfragmented land This map was created to show surrounding areas unaffected by

The largest unfragmented open space with acres located in Wolfeboro has 12517.4 Acres.

Unfragmented Land Block data from NH Fish & Game Department's Wildlife Action Plan. Besides data from the Base Map, this map has the following: Conservation Lands, Watersheds, Streams, Roads, and Townline data gathered from NH GRANIT Database.

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Wolfeboro, NH Natural Resources Inventory

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# Wildlife Action Plan Ecological Town of Wolfeboro New Hampshire

and lakes, large forest blocks of statewide significance, or specific NHFG as critically imperiled or by NHNHB as highest importance. Subsection for terrestrial habitats or the Watershed Group for rank in the biological region (defined by the TNC Ecoregional type. The Tier 1 rating was given to areas that contain the highest statewide and regional ranking and identify the highest condition factors such as watersheds containing top-ranked condition stream condition rank in the state. Tier 2 areas contain the highest condition nabitat relative to all polygons of a given habitat type in the state. animal, plant and natural community occurrences identified by wetland and aquatic habitats), Tier 3 includes other significant Tiers were determined by assigning threshold values to each habitat nformation about habitat condition was analyzed to develop a Conditions Regional Map

Human Impact: Cation depletion index/

risk from acid deposition Mercury deposition Percent in Conservation Wind power potential

Number of dams and impounded area upstream of forest floodplain complexes Wetlands adjacent to a water body subject to

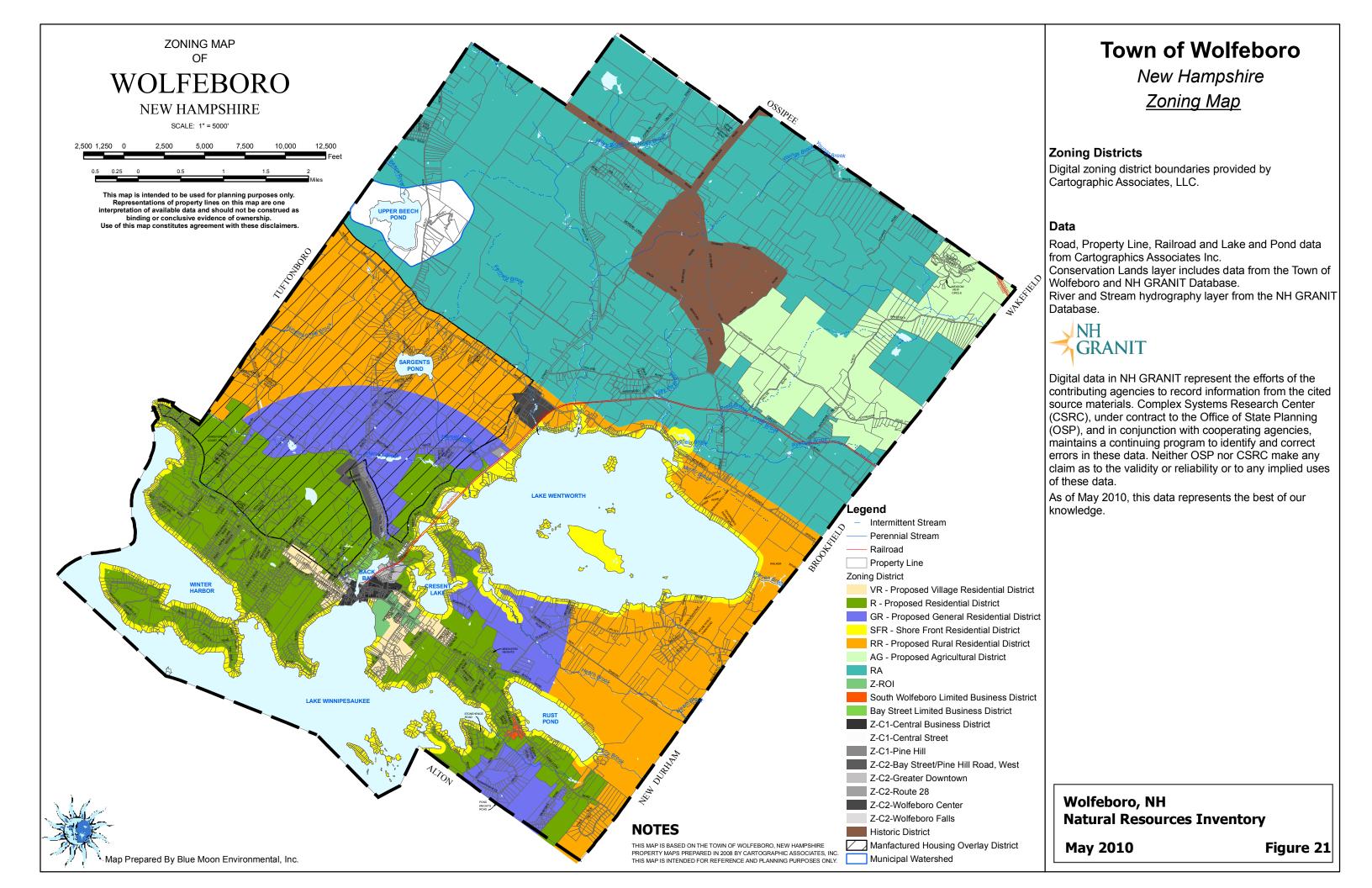
Buildable area or risk to development based on Wetlands impacted by alterations Timber harvest, partial and clearcut Road density and/or distance to nearest road

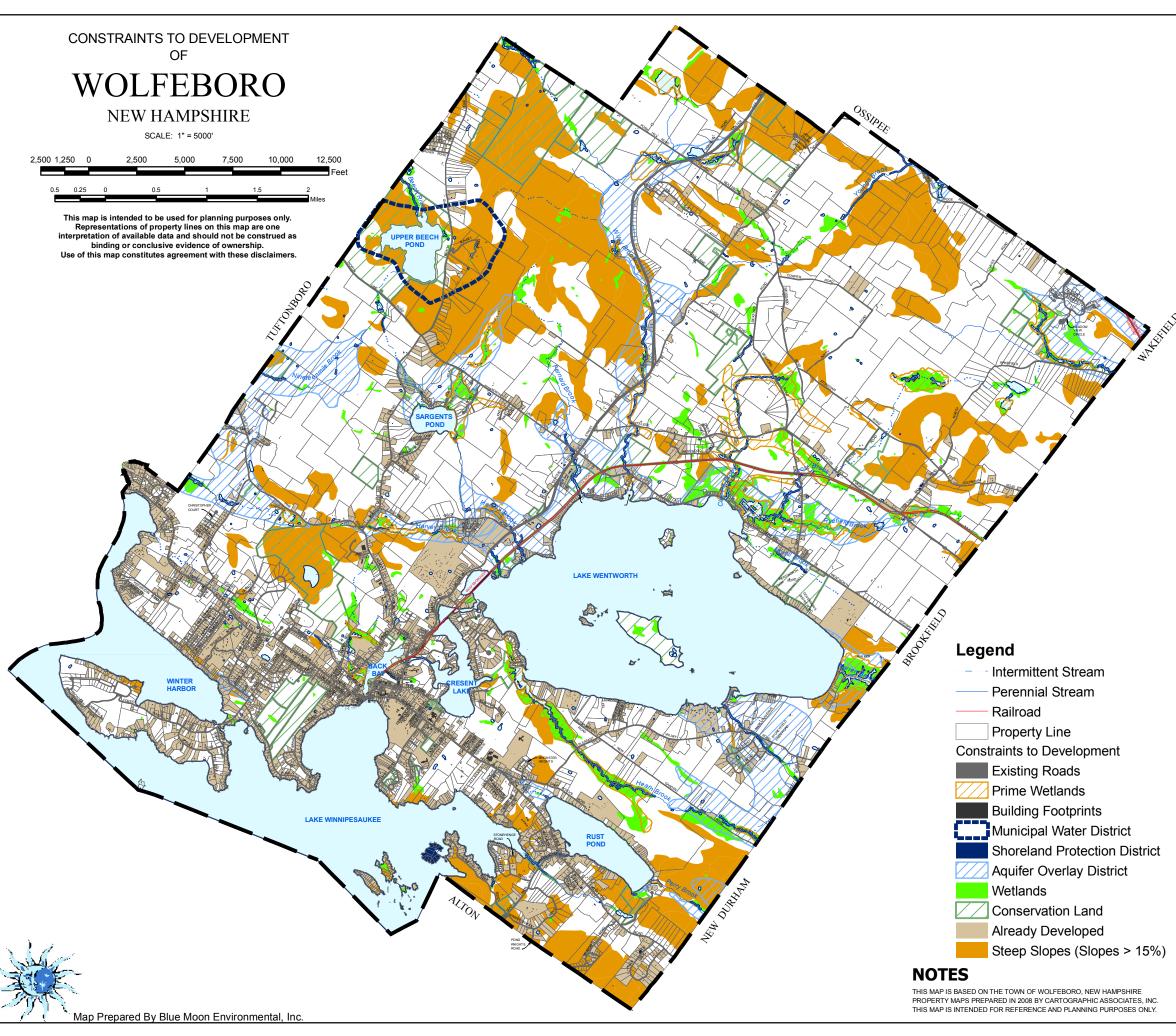
statewide general buildout

Impervious surface and developed land use with Recreation use, e.g. cliffs listed in climbing book 1990 and 2000 US Census data, population and

upland buffer of wetlands, peatlands, forest

floodplain, saltmarsh
Relative area impacted by invasive plant species
Fragmentation or Mean IFES score





New Hampshire
Constraints to Development

**Constraints to Development:** 

Steep Slopes (>15%)

Prime Wetlands

Wetlands

**Shoreland District** 

#### Municipal Watershed District

50' buffer of all ponds except Back Bay and Upper Beech Pond

#### Unfragmented lands

Lands in Conservation

#### Already Developed

Based on a selection of all parcels less than 5 acres in size with an existing building footprint located on it. In addition, larger parcels consisting of schools, multifamily housing, commercial development, etc were included. Golf courses were not included, as these areas could be sold and redeveloped in the future.

#### Data

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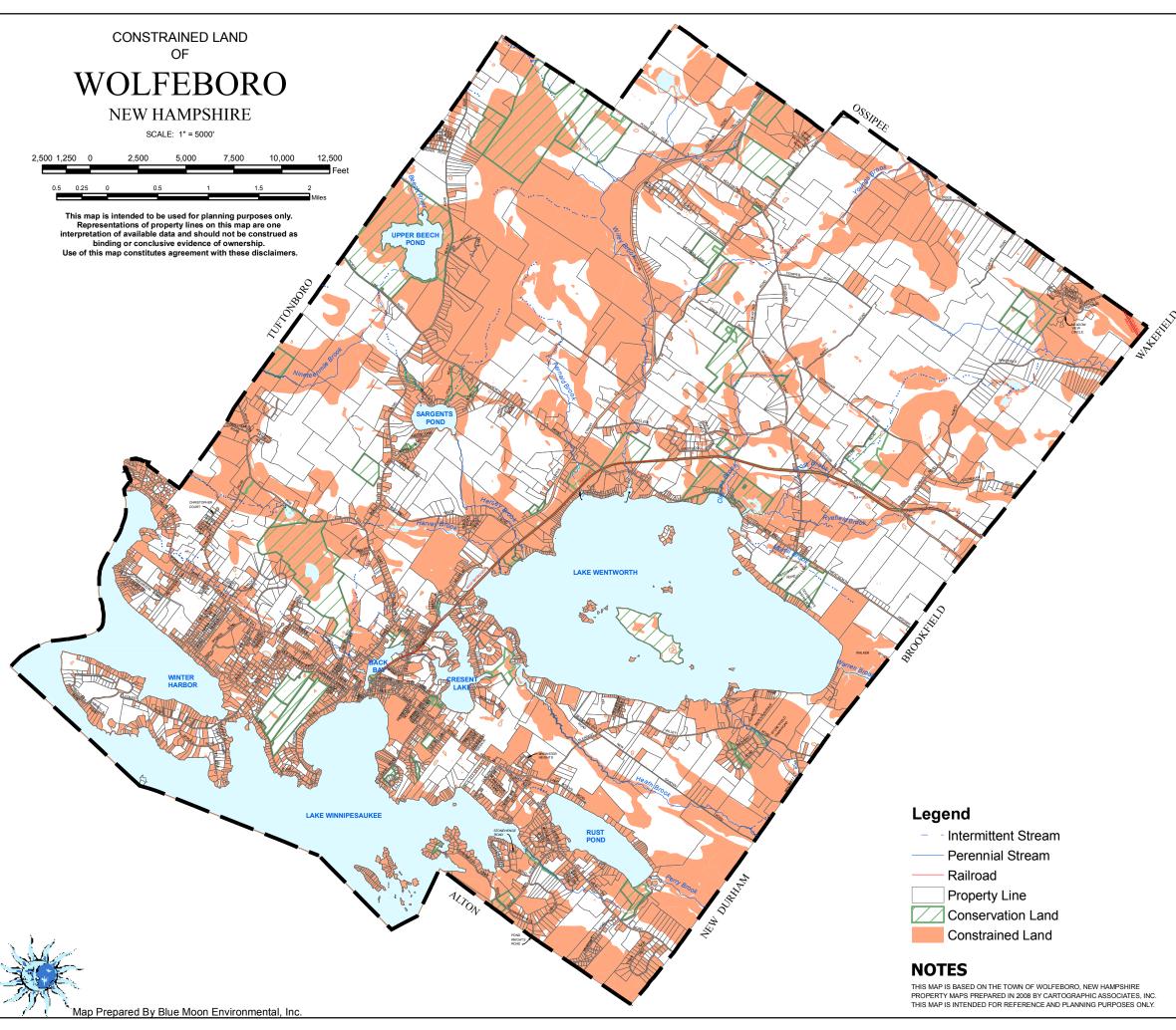


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Wolfeboro, NH Natural Resources Inventory

May 2010



New Hampshire Constrained Land

The Constrained Land Analysis Includes the Following Factors: Steep Slopes (>15%)

**Prime Wetlands** 

Wetlands

**Shoreland District** 

#### **Municipal Watershed District**

50' buffer of all ponds except Back Bay and Upper Beech Pond

Unfragmented lands

Lands in Conservation

#### Already Developed

Based on a selection of all parcels less than 5 acres in size with an existing building footprint located on it. In addition, larger parcels consisting of schools, multifamily housing, commercial development, etc were included. Golf courses were not included, as these areas could be sold and redeveloped in the future.

#### **Building Footprints**

#### Data

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