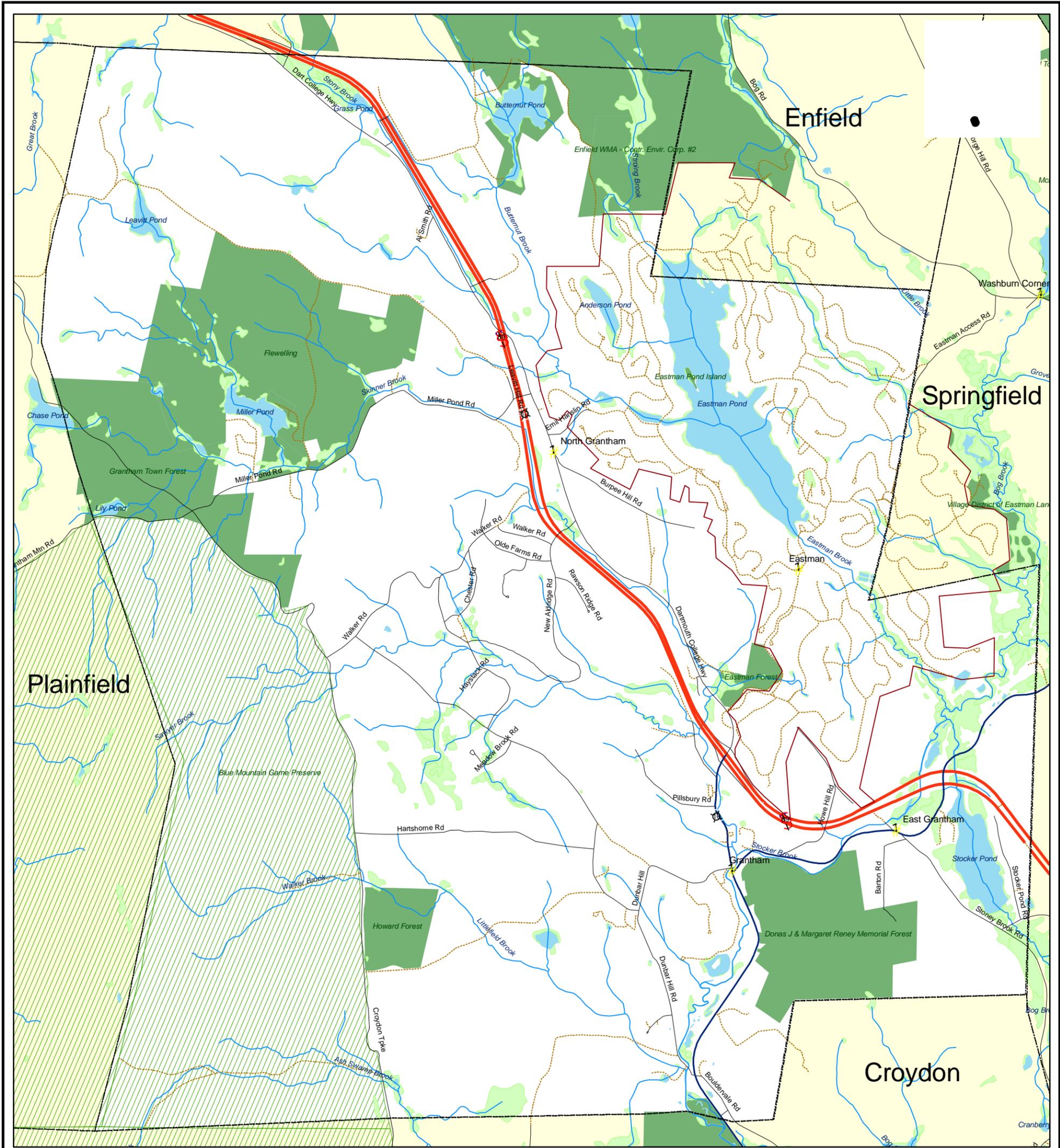


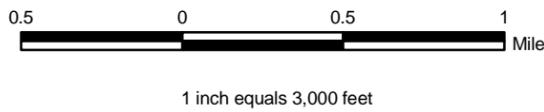
# Appendix A

## Maps



# Grantham, NH

## Figure 1-1 Base Map



### Legend

- |              |                            |  |                             |
|--------------|----------------------------|--|-----------------------------|
|              | Town Boundary              |  | Places                      |
|              | Eastman Community Boundary |  | Lake, Pond, or River        |
| <b>Roads</b> |                            |  | Streams                     |
|              | Interstate                 |  | Wetlands (NWI)              |
|              | US or State Route          |  | Conserved Lands             |
|              | Town Maintained Road       |  | Blue Mountain Game Preserve |
|              | Private Road               |  |                             |

#### DATA SOURCES:

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1:24,000 scale, mapped and distributed by CSRC.

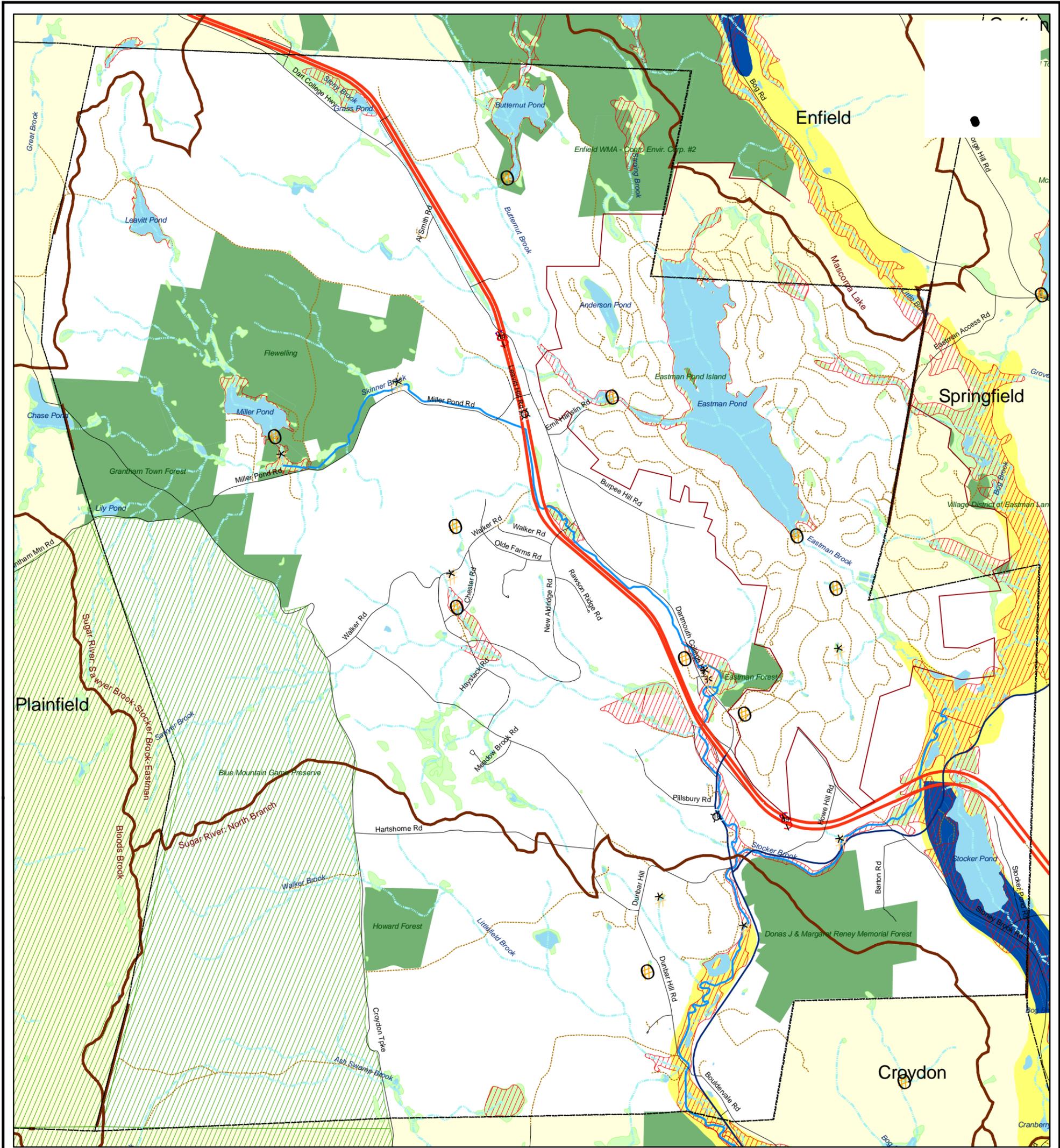
Conserved lands from CSRC, 1:24,000 scale, 2005.

Blue Mountain Forest Game Preserve and Eastman Community boundaries from the Society for the Protection of NH Forests.

Wetlands from the US Fish and Wildlife Service National Wetlands Inventory, 1:24,000 scale, distributed by CSRC, 2001.



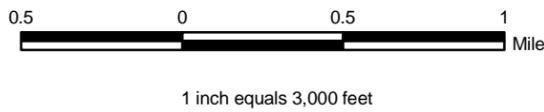
This project is supported by funds from the sale of the Conservation License Plate (Moose Plate) under the NH State Conservation Committee grant program. Matching funds were provided by the Town of Grantham, NH and by the Center for the Environment at Plymouth State University.



# Grantham, NH

## Figure 2-2

### Water Resources



**DATA SOURCES:**

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1:24,000 scale, mapped and distributed by CSRC.

Conserved lands from CSRC, 1:24,000 scale, 2005.

Blue Mountain Forest Game Preserve and Eastman Community boundaries from the Society for the Protection of NH Forests.

Dam locations and status from the NH Department of Environmental Services, 2008.

Watershed boundaries from US Department of Agriculture, Natural Resource Conservation Service, and NH Department of Environmental Services, 1:24,000 scale, distributed by CSRC, 2002.

Aquifer transmissivity from the US Geological Survey, 1:24,000 scale, automated and distributed by CSRC, 2000. Transmissivity quantifies the ability of an aquifer to transmit water, measured in feet squared per day; low yield is less than 1000 acre-feet per day, medium yield is 1000-2000 acre feet per day, and high yield is greater than 2000 acre feet per day.

Wetlands from the US Fish and Wildlife Service National Wetlands Inventory, 1:24,000 scale, distributed by CSRC, 2001.

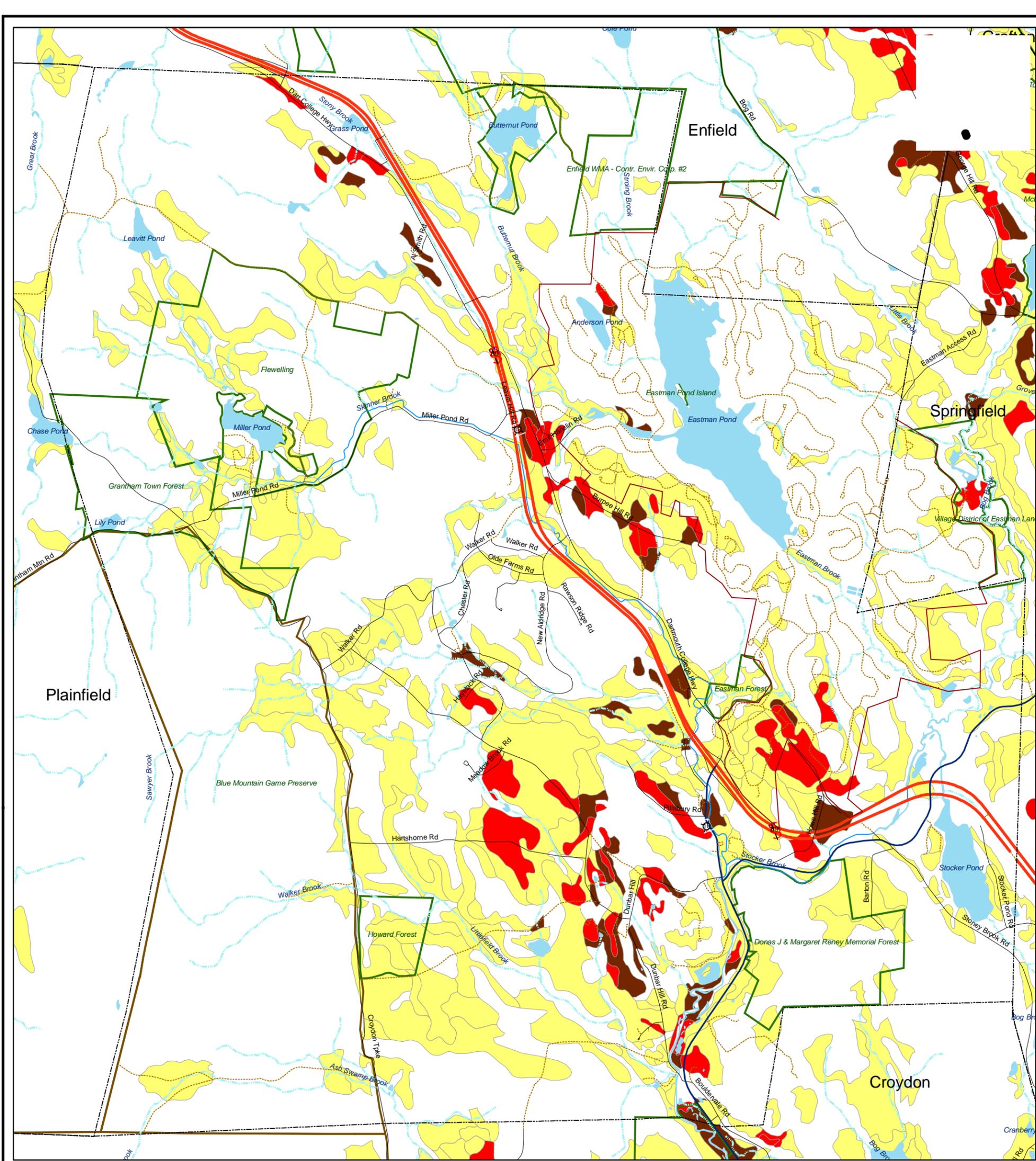
100-Year floodplains from Federal Emergency Management Agency Flood Insurance Rate Maps, distributed by CSRC, 2006.

**Legend**

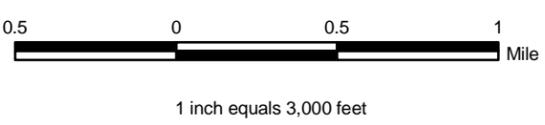
- Town Boundary
- Eastman Community Boundary
- Watershed Boundary
- Interstate
- US or State Route
- Town Maintained Road
- Private Road
- High Yield Aquifers
- Low or Unknown Yield Aquifers
- Streams 4th Order and Higher
- Streams 3rd Order and Less
- Lake, Pond, or River
- Wetlands (NWI)
- Flood Zone
- Conserved Lands
- Blue Mountain Game Preserve
- Active
- Not Active



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**Grantham, NH**  
**Figure 3-1**  
**Prime Agricultural Soils**



**Legend**

Town Boundary	Conserved Lands
Eastman Community Boundary	Blue Mountain Game Preserve
<b>Roads</b>	
Interstate	Prime farmland
US or State Route	Farmland of statewide importance
Town Maintained Road	Farmland of local importance
Private Road	
Lake, Pond, or River	
Streams 4th Order and Higher	
Streams 3rd Order and Less	

**DATA SOURCES:**

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1:24,000 scale, mapped and distributed by CSRC.

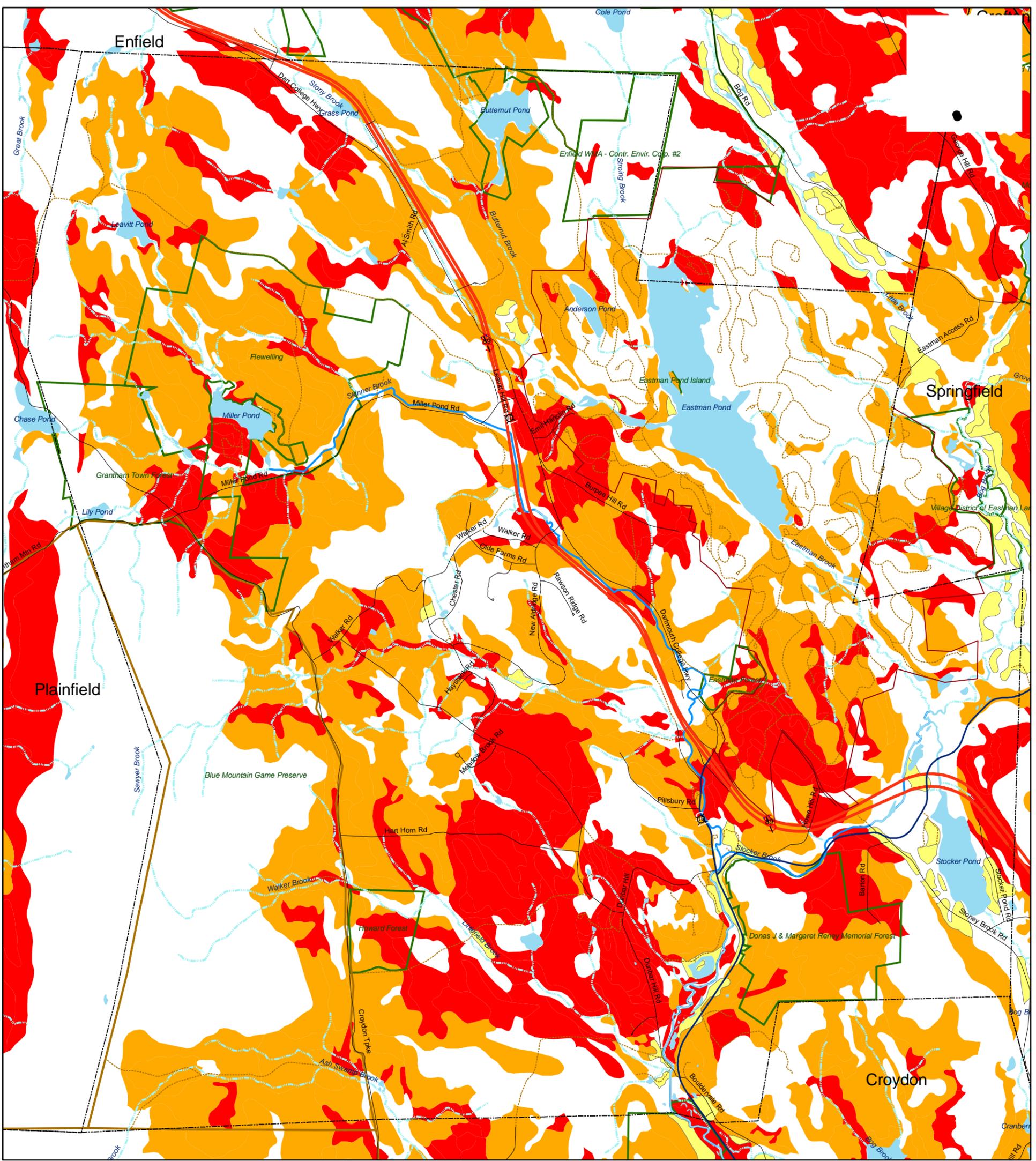
Conserved lands from CSRC, 1:24,000 scale, 2005.

Blue Mountain Forest Game Preserve and Eastman Community Boundaries from the Society for the Protection of NH Forests.

Soils mapped by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), digitized 1:24,000 scale and distributed by CSRS, 2000. Prime agricultural soils are consistent with, and are derived from, the NRCS National Soil Information System.



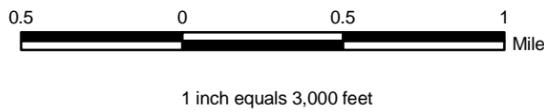
This project is supported by funds from the sale of the Conservation License Plate (Moose Plate) under the NH State Conservation Committee grant program. Matching funds were provided by the Town of Grantham, NH and by the Center for the Environment at Plymouth State University.



# Grantham, NH

## Figure 3-2

### Important Forest Soils



#### Legend

- |                            |                                |
|----------------------------|--------------------------------|
| Town Boundary              | Streams 4th Order and Higher   |
| Eastman Community Boundary | Streams 3rd Order and Less     |
| <b>Roads</b>               | Blue Mountain Game Preserve    |
| Interstate                 | Conserved Lands                |
| US or State Route          | <b>Important Forest Soils*</b> |
| Town Maintained Road       | IA                             |
| Private Road               | IB                             |
| Lake, Pond, or River       | IC                             |

\* See text for explanation of forest soil categories.

#### DATA SOURCES:

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1: 24,000 scale, mapped and distributed by CSRC.

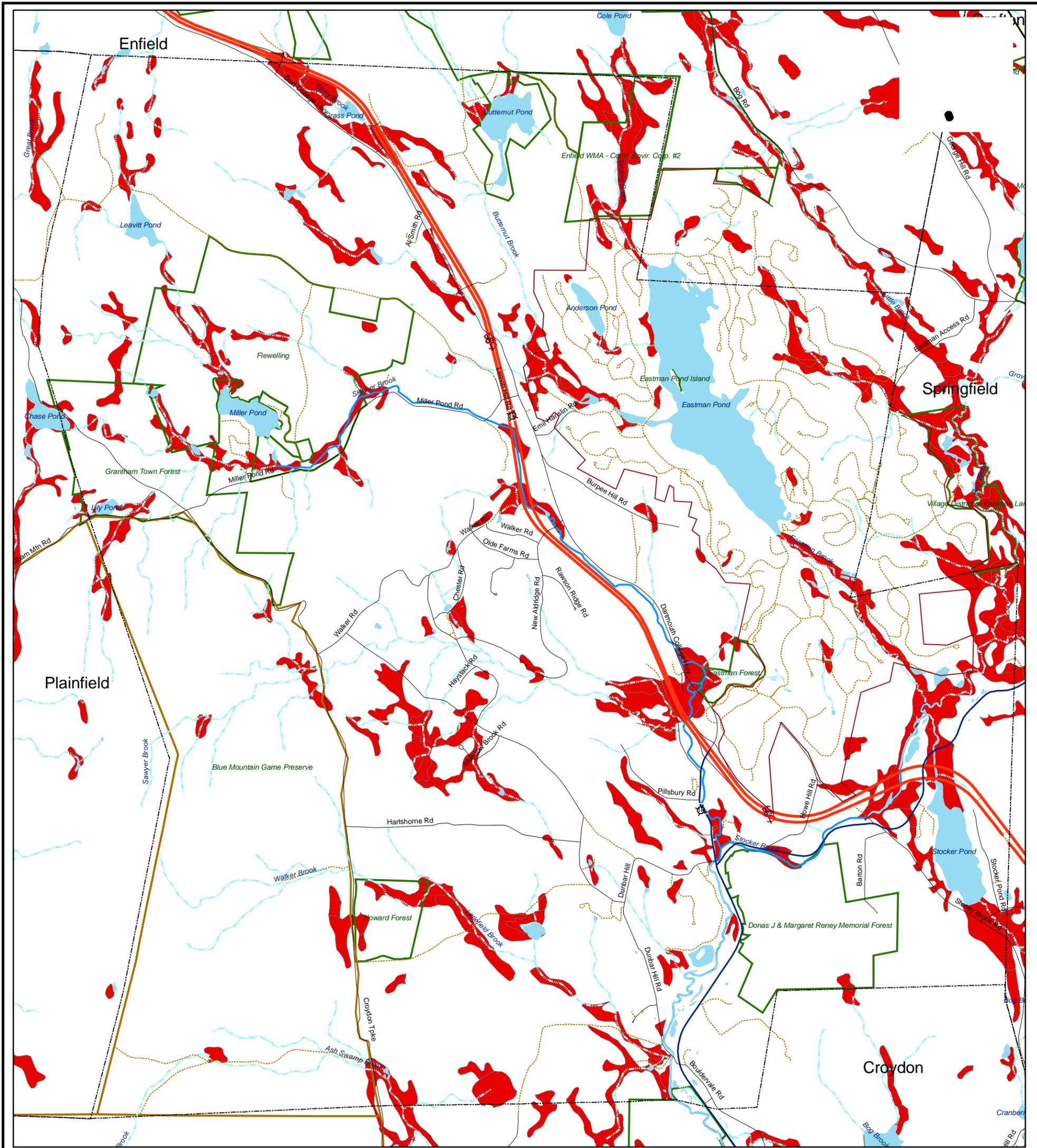
Conserved lands from CSRC, 1:24,000 scale, 2005.

Blue Mountain Forest Game Preserve and Eastman Community boundary from the Society for the Protection of NH Forests.

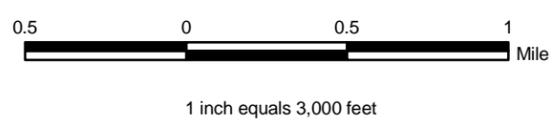
Soils mapped by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), digitized 1:24,000 scale and distributed by CSRS, 2000. Important forest soils are consistent with, and are derived from, the NRCS National Soil Information System.



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**Grantham, NH**  
**Figure 3-3**  
**Hydric Soils**



**Legend**

Town Boundary	Conserved Lands
Eastman Community Boundary	Blue Mountain Game Preserve
<b>Roads</b>	
Interstate	Lake, Pond, or River
US or State Route	Streams 4th Order and Higher
Town Maintained Road	Streams 3rd Order and Less
Private Road	Hydric Soils

**DATA SOURCES:**

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1: 24,000 scale, mapped and distributed by CSRC.

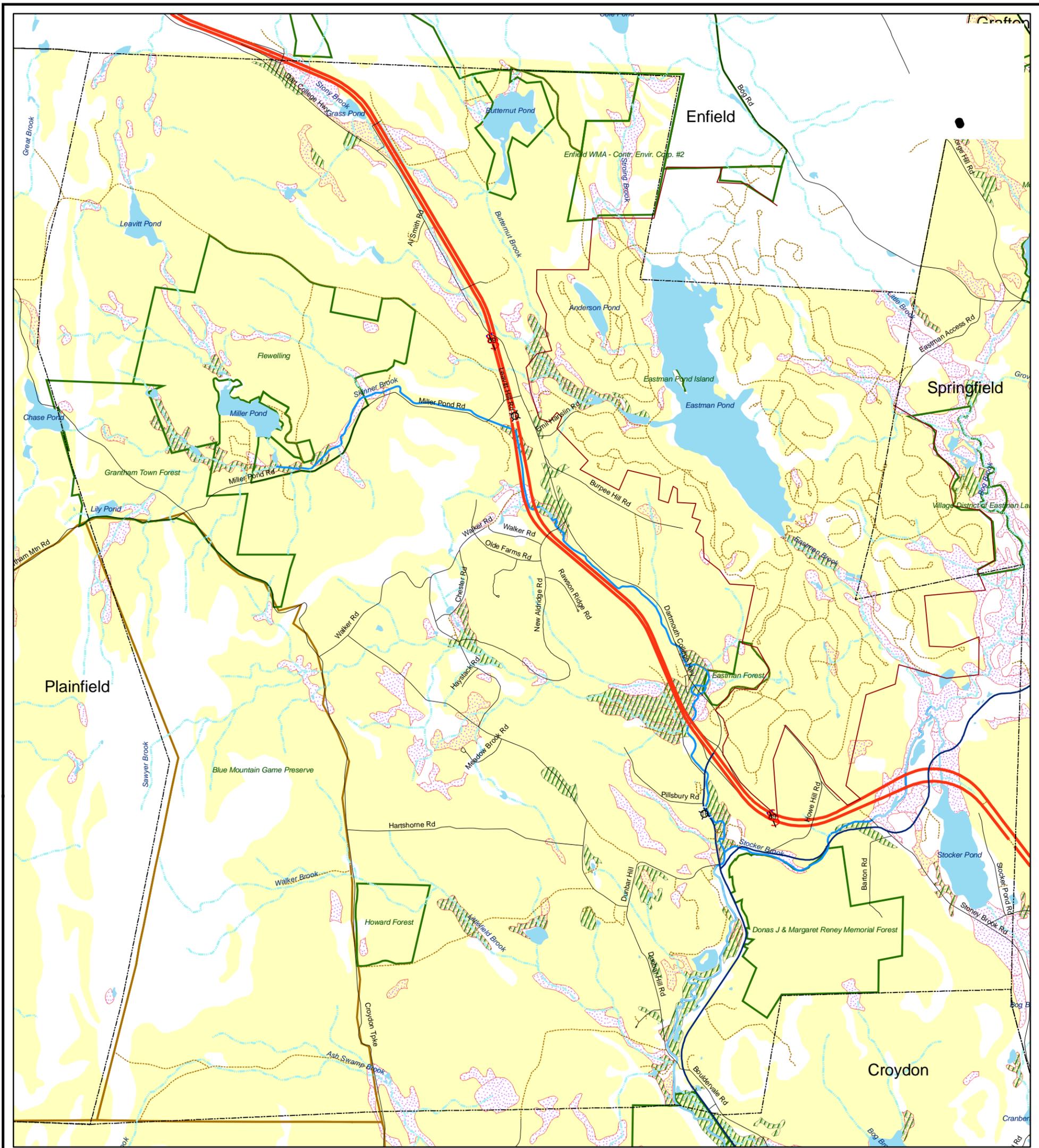
Conserved lands from CSRC, 1:24,000 scale, 2005.

Blue Mountain Forest Game Preserve and Eastman Community boundary from the Society for the Protection of NH Forests.

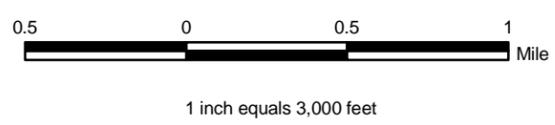
Soils mapped by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), digitized 1:24,000 scale and distributed by CSRS, 2000. Important forest soils are consistent with, and are derived from, the NRCS National Soil Information System.



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**Grantham, NH**  
**Figure 3-4**  
**Soils With Good to Fair**  
**Wildlife Habitat Potential**



**Legend**

Town Boundary	Conserved Lands
Eastman Community Boundary	Blue Mountain Game Preserve
<b>Roads</b>	
Interstate	Lake, Pond, or River
US or State Route	Streams 4th Order and Higher
Town Maintained Road	Streams 3rd Order and Less
Private Road	<b>Wildlife Habitat Potential of Soil</b>
	Openland Wildlife
	Wetland Wildlife
	Woodland Wildlife

**DATA SOURCES:**

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1: 24,000 scale, mapped and distributed by CSRC.

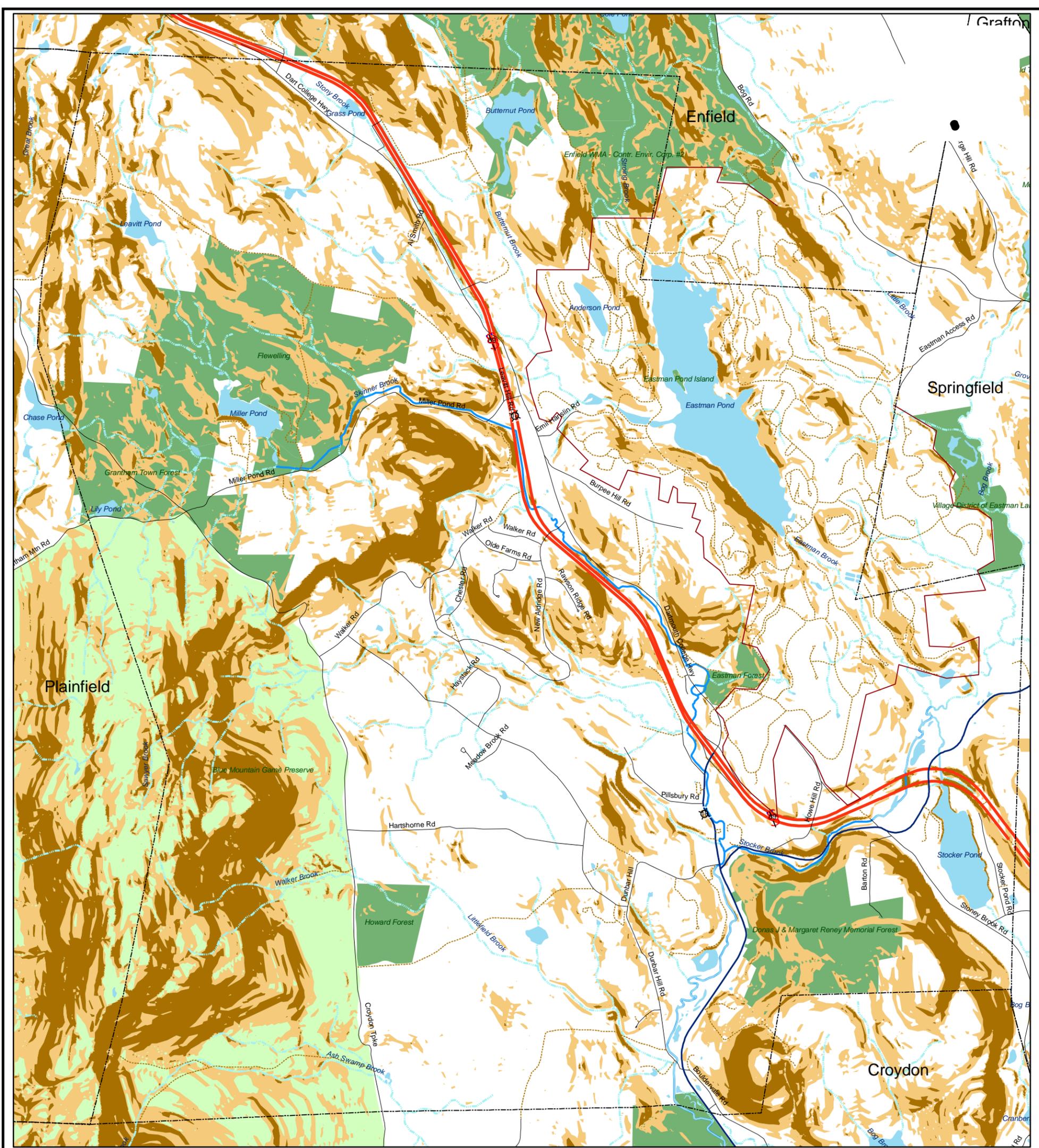
Conserved Lands from CSRC, 1:24,000 scale, 2005.

Blue Mountain Forest Game Preserve and Eastman Community boundary from the Society for the Protection of NH Forests.

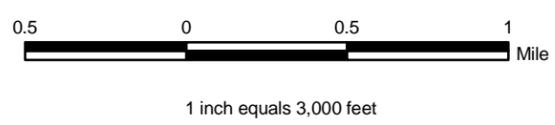
Soils mapped by the U.S. Department of Agriculture, Natural Resources Conservation Service, digitized 1:24,000 scale and distributed by CSRS, 2000. Potential wildlife habitat value from the Soil Survey of Sullivan County, NH, 1983.



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**Grantham, NH**  
**Figure 3-5**  
**Steep Slopes**



**Legend**

Town Boundary	Conserved Lands
Eastman Community Boundary	Blue Mountain Game Preserve
<b>Roads</b>	
Interstate	Lake, Pond, or River
US or State Route	Streams 4th Order and Higher
Town Maintained Road	Streams 3rd Order and Less
Private Road	<b>Steep Slopes</b>
	>15% but <=25% slope
	>25% slope

**DATA SOURCES:**

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1:24,000 scale, mapped and distributed by CSRC.

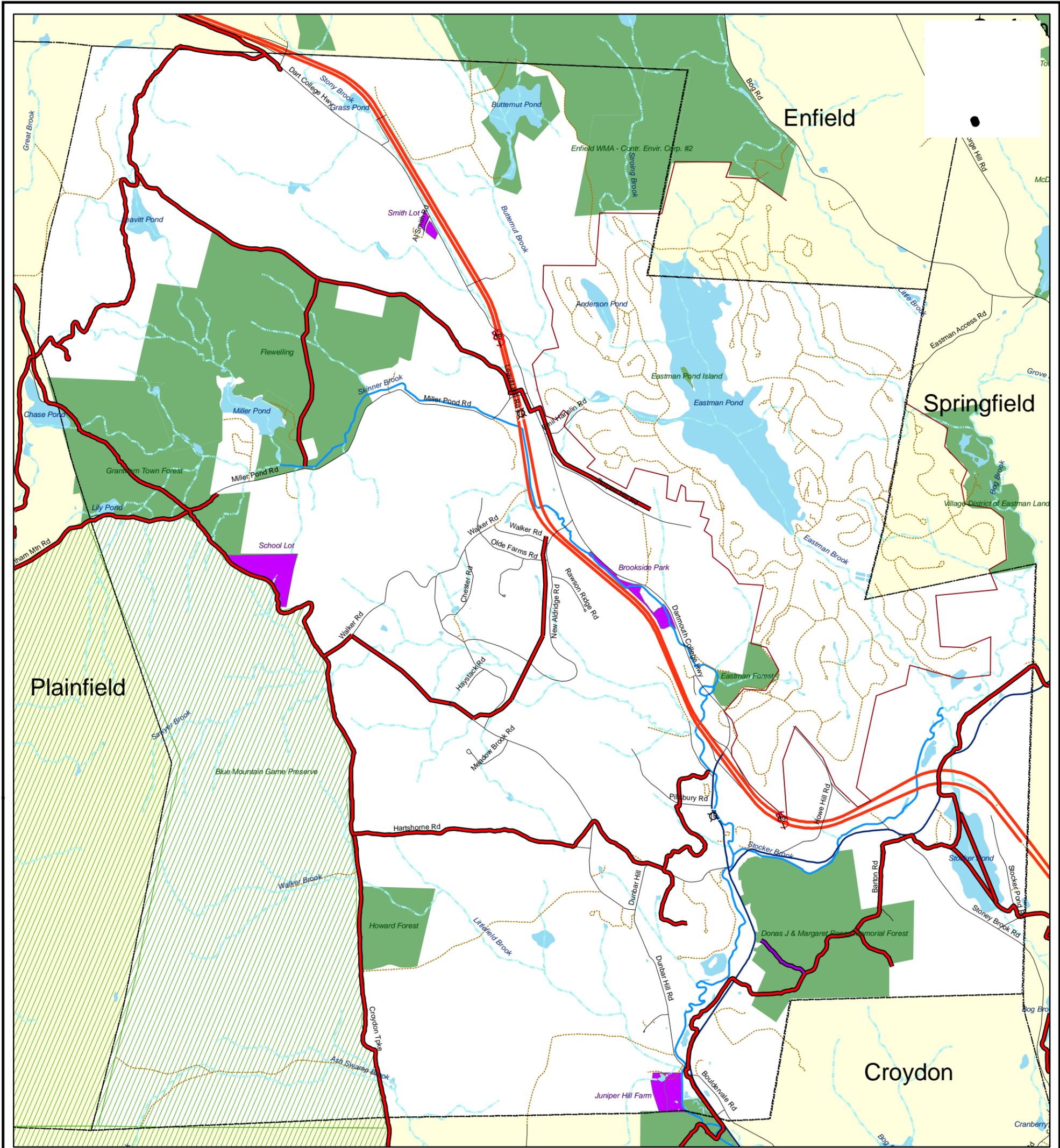
Conserved lands from CSRC, 1:24,000 scale, 2005.

Blue Mountain Forest Game Preserve and Eastman Community boundary from the Society for the Protection of NH Forests.

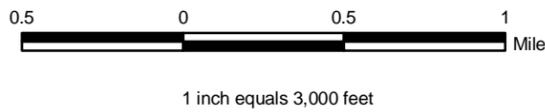
Steep slopes derived from USGS Digital Elevation Models by the Upper Valley Lake Sunapee Regional Planning Commission, 2008.



This project is supported by funds from the sale of the Conservation License Plate (Moose Plate) under the NH State Conservation Committee grant program. Matching funds were provided by the Town of Grantham, NH and by the Center for the Environment at Plymouth State University.



# Grantham, NH



## Figure 4-1 Conserved Lands and Recreational Opportunities

### DATA SOURCES:

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1: 24,000 scale, mapped and distributed by CSRC.

Conserved lands from CSRC, 1:24,000 scale, 2005.

Blue Mountain Forest Game Preserve and Eastman Community boundaries from the Society for the Protection of NH Forests.

Reney trail derived from latitude and longitude waypoints. Blue Mountain Snow Dusters snowmobile trail system approximated based on 2003/2004 paper map printed by Wildflower Productions. Trail access may have changed; contact Blue Mountain Snowdusters Outdoor Recreation Club, Inc., Grantham, NH, for up-to-date trail system.

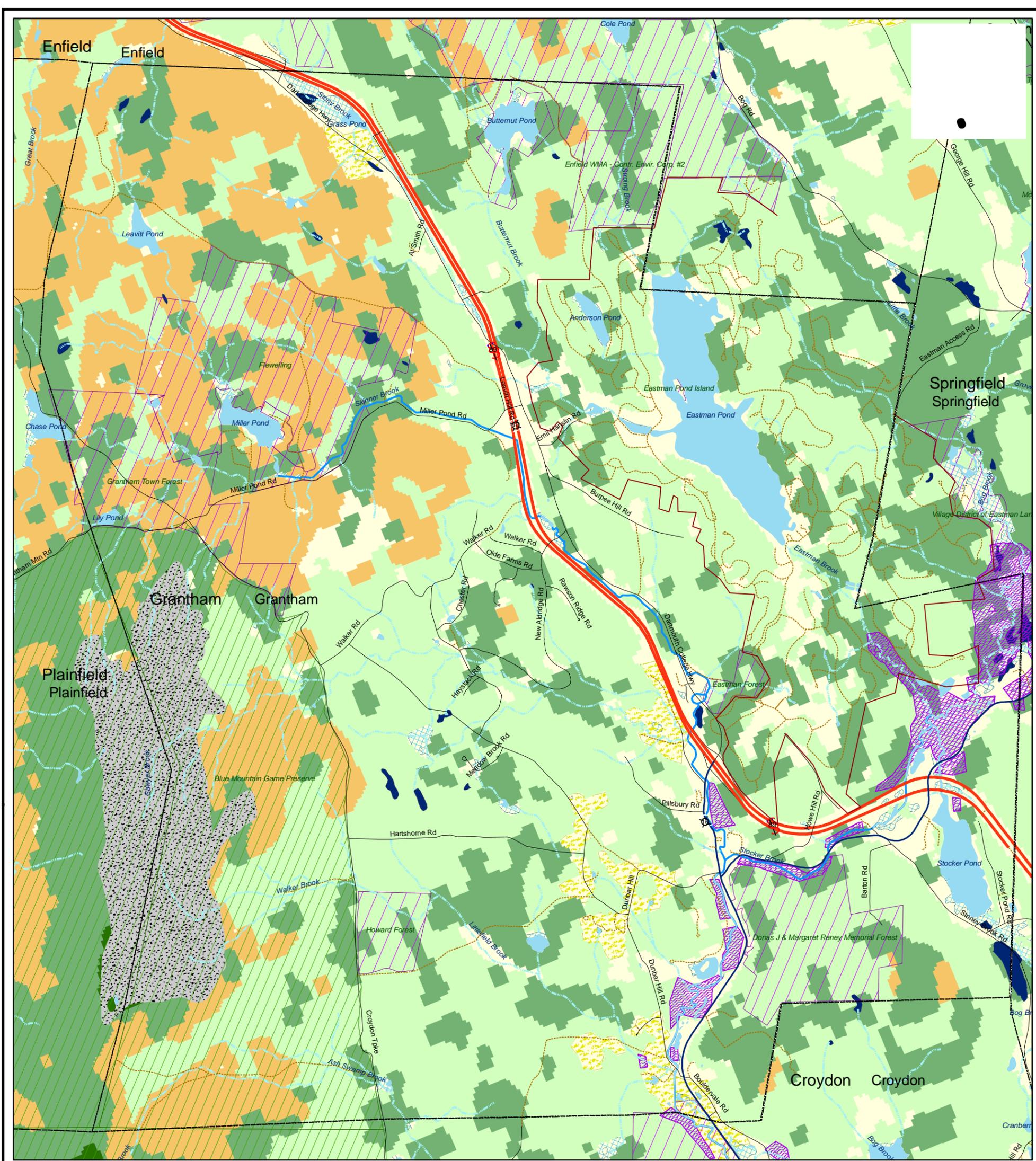
### Legend

- Town Boundary
- Eastman Community Boundary
- Interstate
- US or State Route
- Town Maintained Road
- Private Road
- Lake, Pond, or River
- Streams 4th Order and Higher
- Streams 3rd Order and Less
- Reney Trails
- BMSD Trail System\*
- Town-owned Recreational Lands
- Conserved Lands
- Blue Mountain Game Preserve

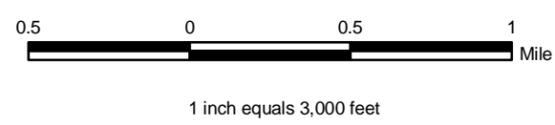
**\*NOTE: All Blue Mountain Snowduster (BMSD) recreation trails may be rerouted or closed without prior notice. Approximate trail routes shown on this map are based on 2009 data and may have already changed. Please contact the BMSD Outdoor Recreation Club, Inc., Grantham, NH, for updates to the trail system.**



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**Grantham, NH**  
**Figure 5-1**  
**Habitat Land Cover**



**Legend**

Town Boundary	Rocky Ridge/Talus Slope
Eastman Community Boundary	Floodplain Forest
<b>Roads</b>	
Interstate	Peatlands
US or State Route	Northern Hardwood-Conifer
Town Maintained Road	Hemlock-Hardwood-Pine
Private Road	Lowland Spruce-Fir
Lake, Pond, or River	High Elevation Spruce-Fir
Streams 4th Order and Higher	Grassland (25+ acres)
Streams 3rd Order and Less	Marsh and Shrub Wetlands
Conserved Lands	Blue Mountain Game Preserve

**DATA SOURCES:**

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1: 24,000 scale, mapped and distributed by CSRC.

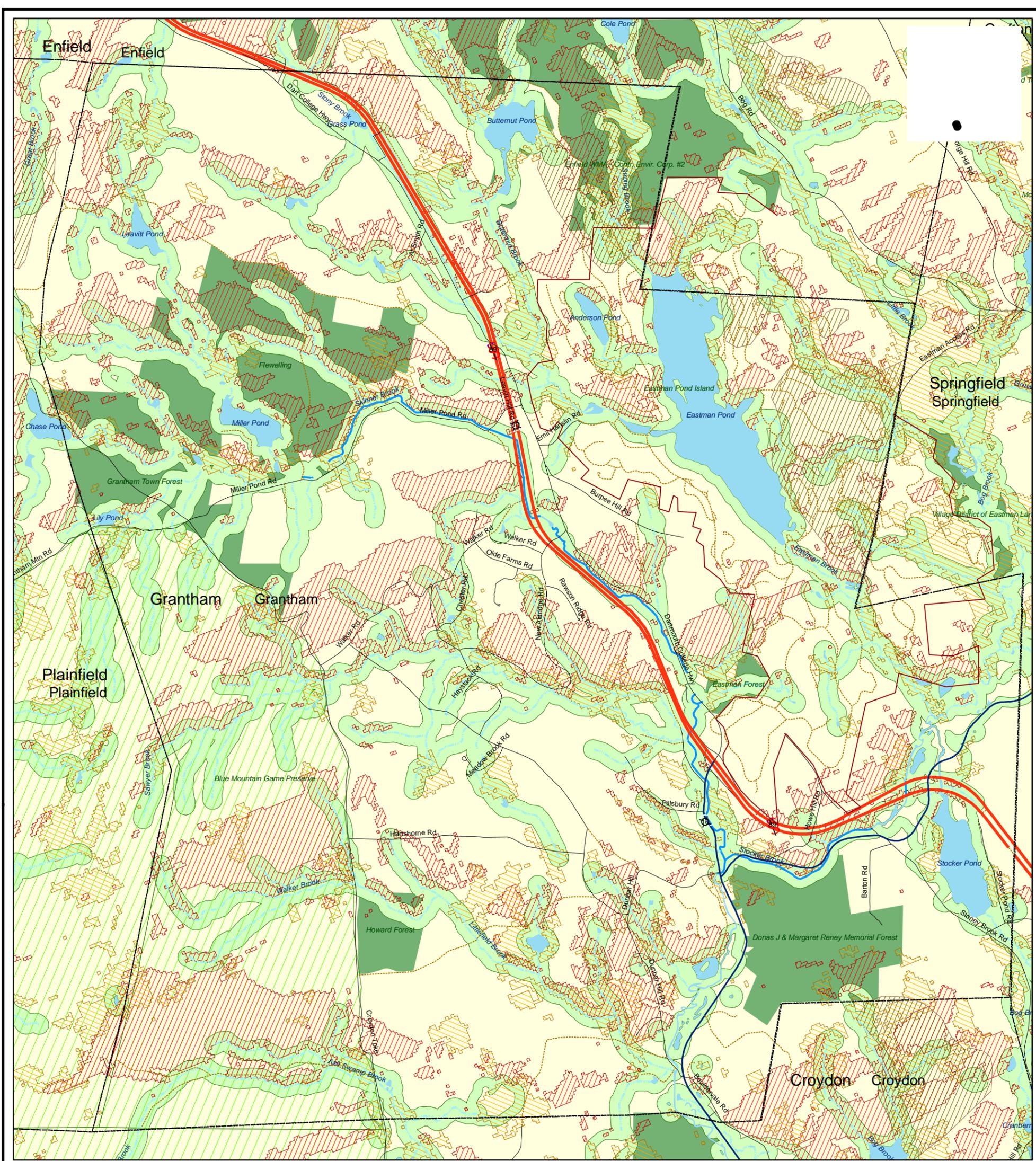
Conserved lands from CSRC, 1:24,000 scale, 2005.

Blue Mountain Forest Game Preserve and Eastman Community boundaries from the Society for the Protection of NH Forests.

Habitat land cover from the NH Wildlife Action Plan, Wildlife Habitat Maps and Data, 2007.



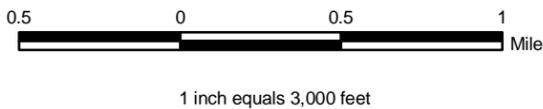
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# Grantham, NH

## Figure 5-2

### Wildlife Habitat



**Legend**

Town Boundary	Lake, Pond, or River
Eastman Community Boundary	Streams 4th Order and Higher
<b>Roads</b>	Streams 3rd Order and Less
Interstate	Conserved Lands
US or State Route	Blue Mountain Game Preserve
Town Maintained Road	Deer Wintering Areas
Private Road	Potential Deer Wintering Areas
	South Facing Slopes >10%
	Riparian Areas (300 Ft Buffer)

**DATA SOURCES:**

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1: 24,000 scale, mapped and distributed by CSRC.

Conserved lands from CSRC, 1:24,000 scale, 2005.

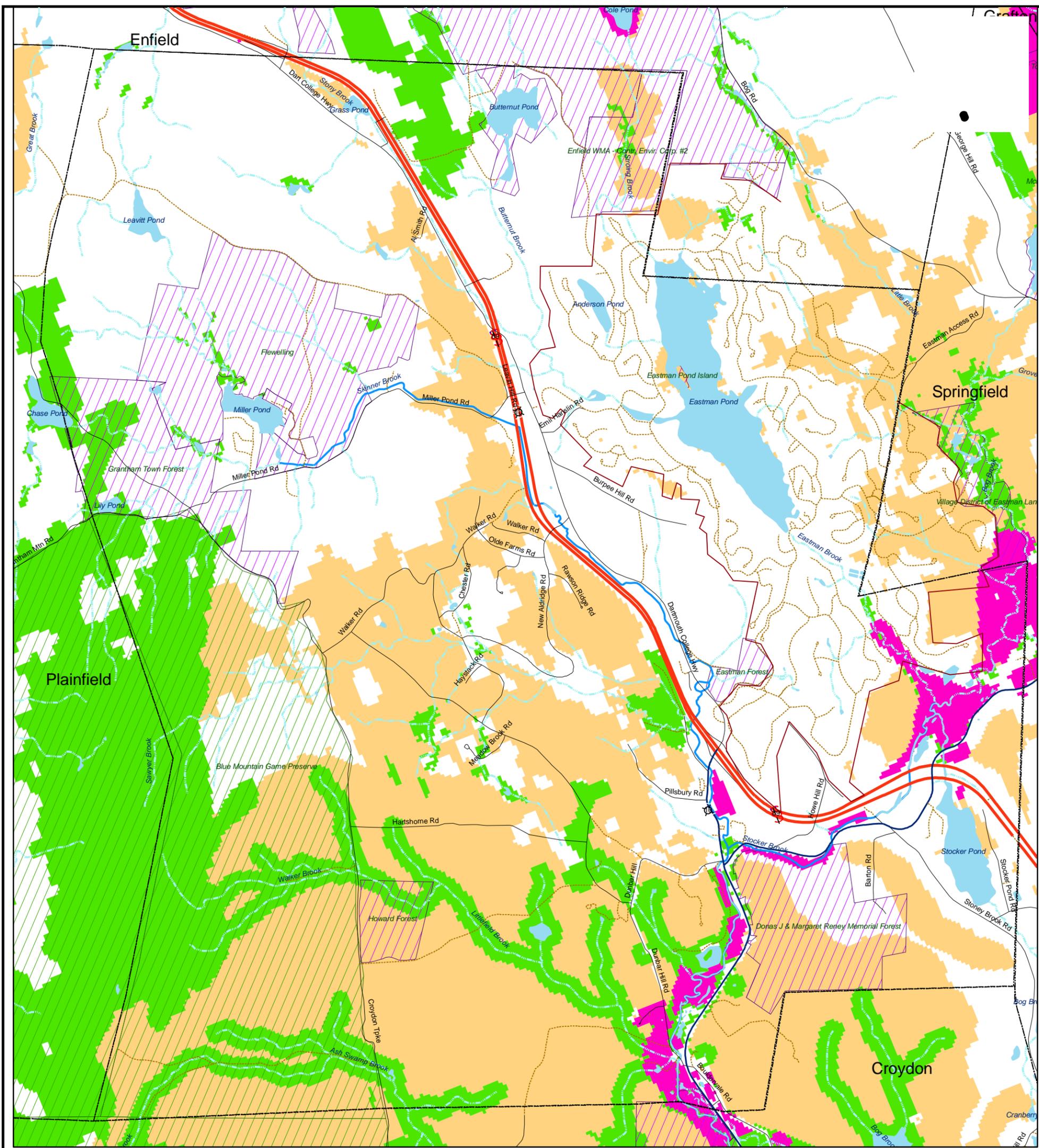
Blue Mountain Forest Game Preserve and Eastman Community boundaries from the Society for the Protection of NH Forests.

South facing steep slopes, deer wintering areas, and potential deer wintering areas from the NH Fish and Game Department.

Riparian areas based on surface water and stream data distributed by CSRC.



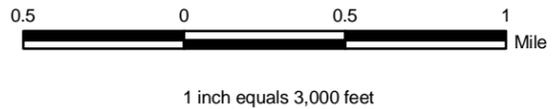
This project is supported by funds from the sale of the Conservation License Plate (Moose Plate) under the NH State Conservation Committee grant program. Matching funds were provided by the Town of Grantham, NH and by the Center for the Environment at Plymouth State University.



**Grantham, NH**  
**Figure 5-4**  
**Highest Ranked Wildlife Habitat**  
**(NH Wildlife Action Plan)**

**Legend**

Town Boundary	Conserved Lands
Eastman Community Boundary	Blue Mountain Game Preserve
Lake, Pond, or River	<b>Habitat Ranking</b>
Streams 4th Order and Higher	Habitat not top-ranked
Streams 3rd Order and Less	Highest ranked habitat in NH (by condition)
<b>Roads</b>	Highest ranked habitat in biological region
Interstate	Supporting landscapes
US or State Route	
Town Maintained Road	
Private Road	



**DATA SOURCES:**

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1: 24,000 scale, mapped and distributed by CSRC.

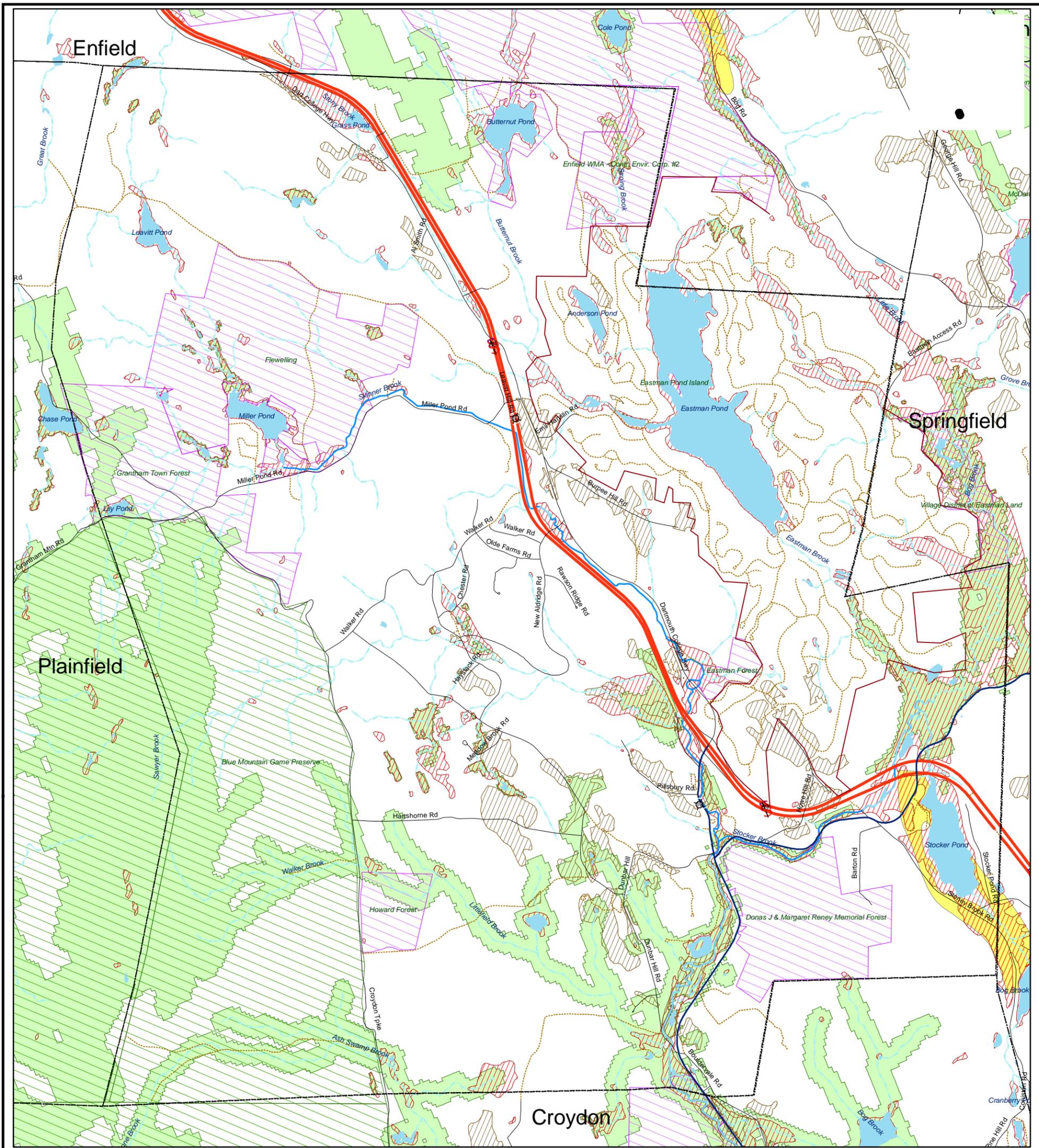
Conserved lands from CSRC, 1:24,000 scale, 2005.

Blue Mountain Forest Game Preserve and Eastman Community boundaries from the Society for the Protection of NH Forests.

Habitat ranking from the NH Wildlife Action Plan, Wildlife Habitat Maps and Data, 2007.



This project is supported by funds from the sale of the Conservation License Plate (Moose Plate) under the NH State Conservation Committee grant program. Matching funds were provided by the Town of Grantham, NH and by the Center for the Environment at Plymouth State University.



**Grantham, NH**  
**Figure 5-5**  
**Natural Services Network**

**Legend**

	Town Boundary		Blue Mountain Game Preserve
	Eastman Community Boundary		Conserved Lands
	Lake, Pond, or River	<b>Natural Services Network</b>	
	Streams 4th Order and Higher		Productive Soils
	Streams 3rd Order and Less		Flood Storage Lands
<b>Roads</b>			Water Supply Lands
	Interstate		Important Wildlife Habitat
	US or State Route		
	Town Maintained Road		
	Private Road		



1 inch equals 3,000 feet

**DATA SOURCES:**

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1:24,000 scale, mapped and distributed by CSRC.

Conserved lands from CSRC, 1:24,000 scale, 2005.

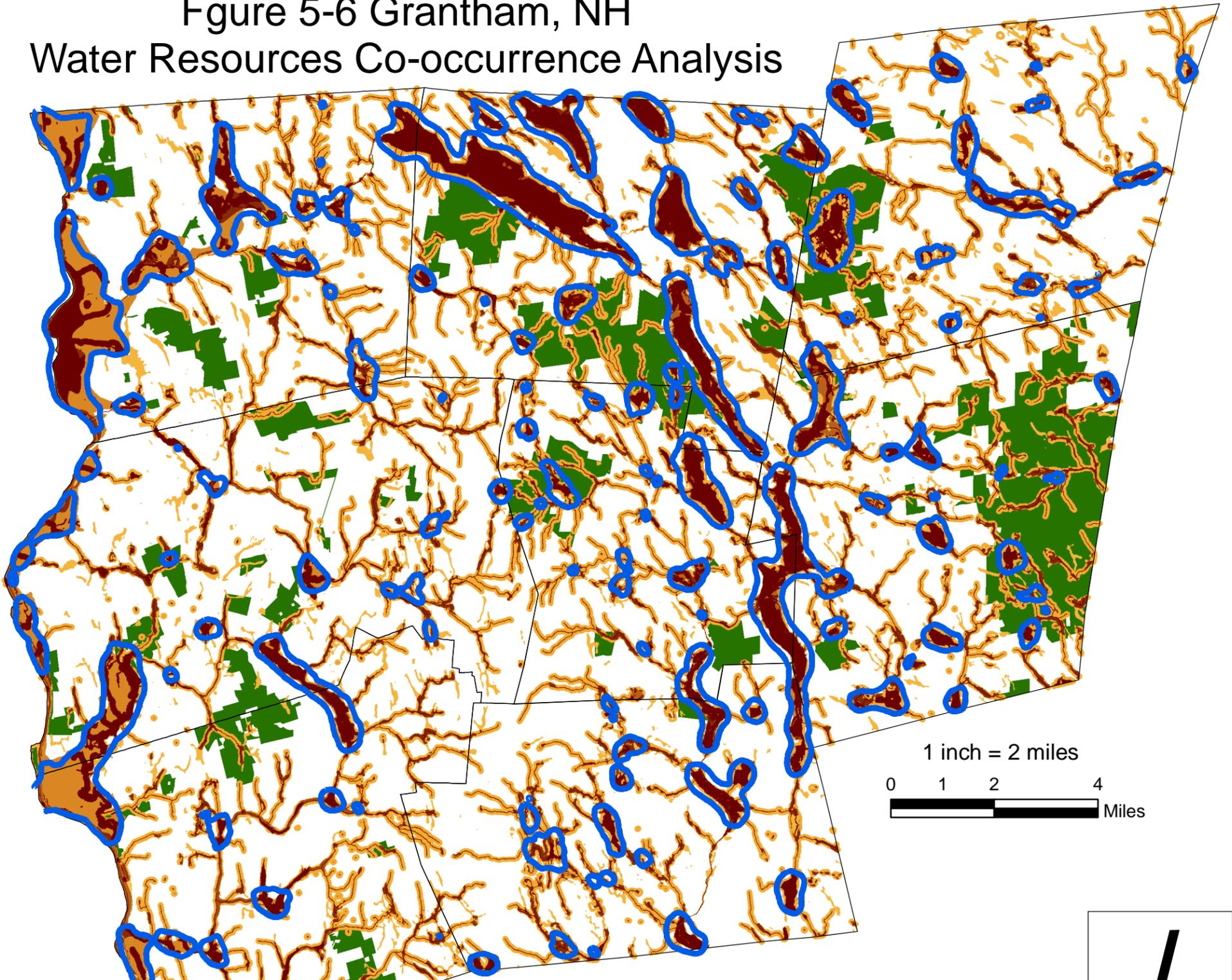
Blue Mountain Forest Game Preserve and Eastman Community boundary from the Society for the Protection of NH Forests.

Natural Services Network from CSRC, 2007. For further information, please reference the "Natural Services Network User Guide," available from The Jordan Institute, Concord, NH.



This project is supported by funds from the sale of the Conservation License Plate (Moose Plate) under the NH State Conservation Committee grant program. Matching funds were provided by the Town of Grantham, NH and by the Center for the Environment at Plymouth State University.

# Figure 5-6 Grantham, NH Water Resources Co-occurrence Analysis

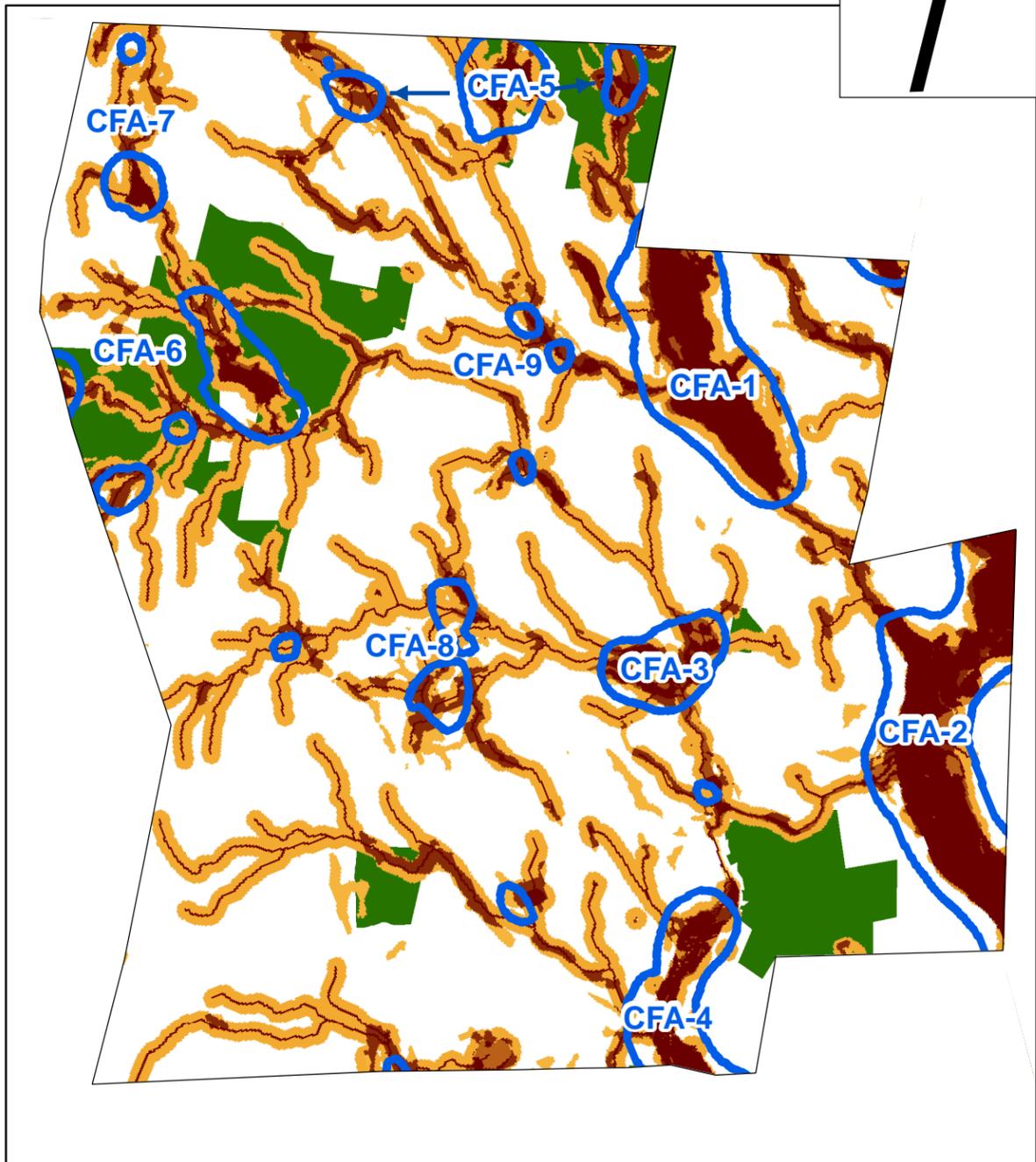


-  Conservation Focus Area (CFA)
-  Conserved Lands
- Cooccurrence Score**
- Value**
-  High
-  Low

High-value natural resource areas can be identified with a co-occurrence model. The model is developed by assigning a numeric value to selected natural resource layers and overlaying them in GIS. The values are summed so that in places where multiple natural resource layers exist, the value of the model is higher. The highest value locations are considered to be Conservation Focus Areas (CFA). See the Grantham Critical Conservation Lands Index for detailed methodology of the co-occurrence analysis and discussion of the results.

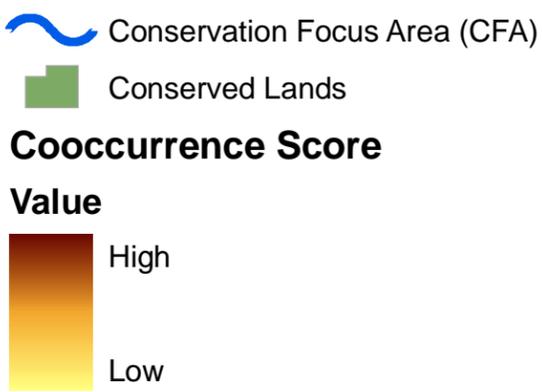
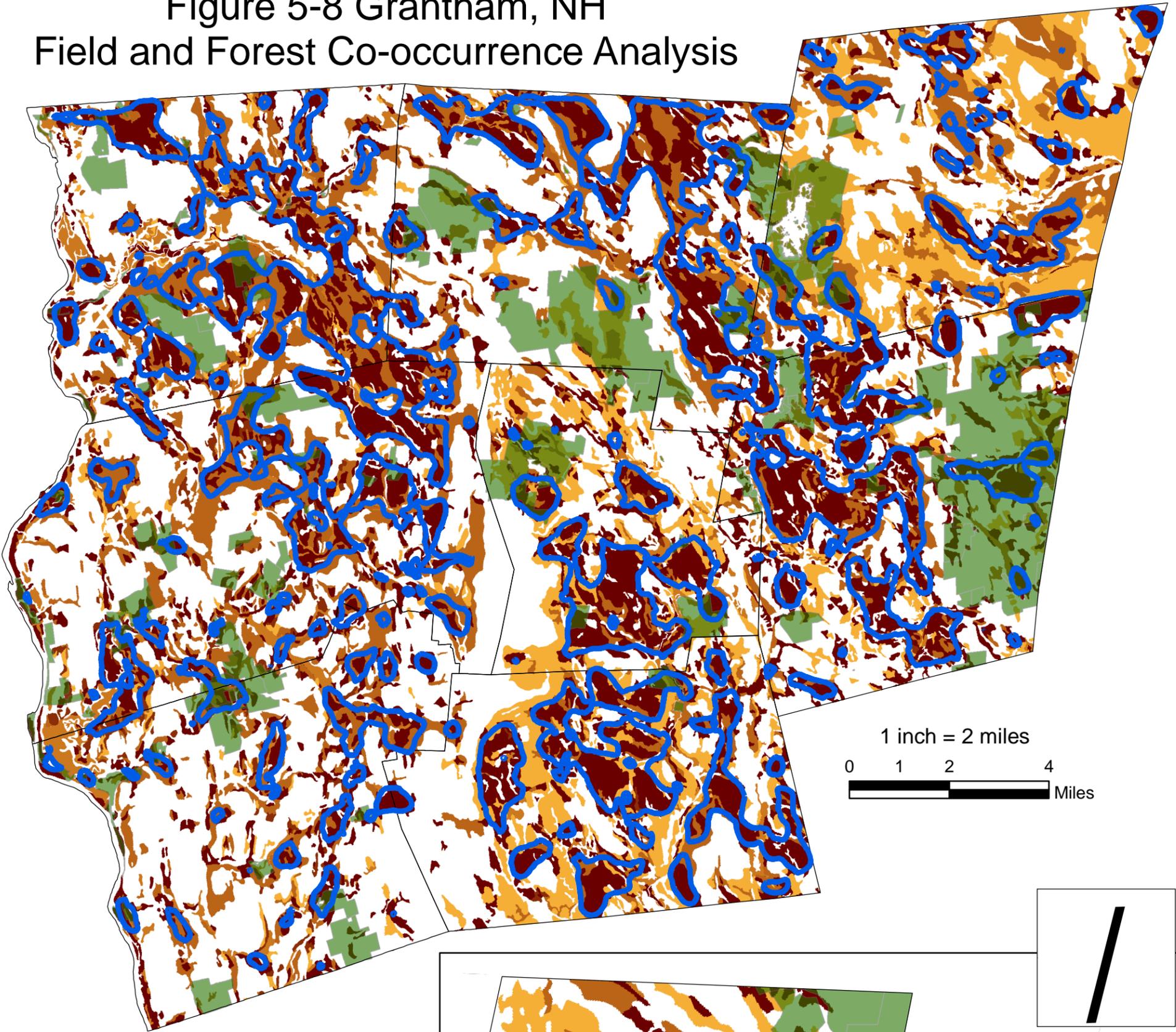
**DATA SOURCES:**

Co-occurrence analysis and conservation focus areas developed by Denyce Gagne, 2009. **The numbered order of conservation focus areas do not in any way reflect order of importance of water resources.**



This project is supported by funds from the sale of the Conservation License Plate (Moose Plate) under the NH State Conservation Committee grant program. Matching funds were provided by the Town of Grantham, NH and by the Center for the Environment at Plymouth State University.

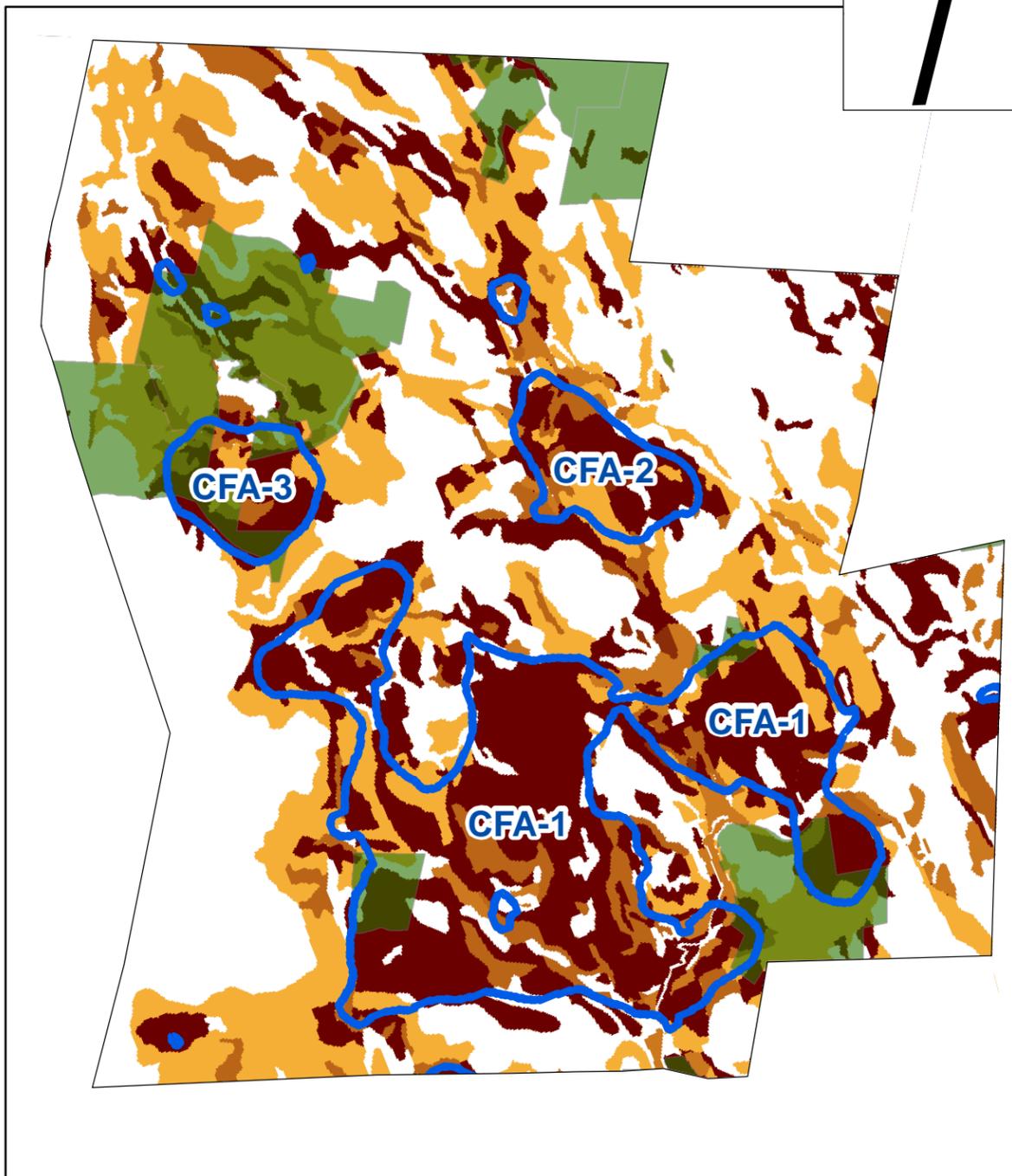
# Figure 5-8 Grantham, NH Field and Forest Co-occurrence Analysis



High-value natural resource areas can be identified with a co-occurrence model. The model is developed by assigning a numeric value to selected natural resource layers and overlaying them in GIS. The values are summed so that in places where multiple natural resource layers exist, the value of the model is higher. The highest value locations are considered to be Conservation Focus Areas (CFA). See the Grantham Critical Conservation Lands Index for detailed methodology of the co-occurrence analysis and discussion of the results.

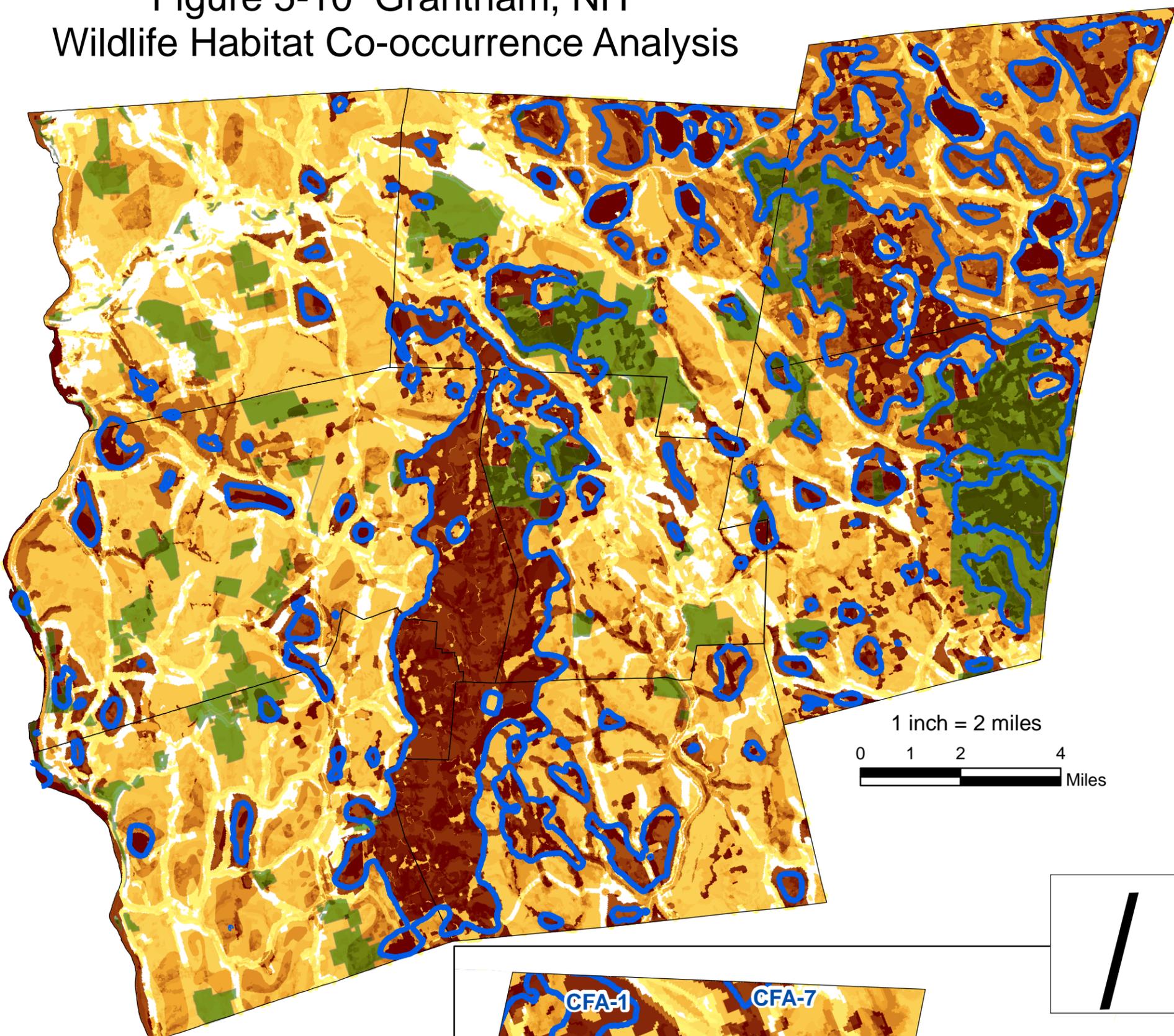
**DATA SOURCES:**

Co-occurrence analysis and conservation focus areas developed by Denyce Gagne, 2009. **The numbered order of conservation focus areas do not in any way reflect order of importance of water resources.**



This project is supported by funds from the sale of the Conservation License Plate (Moose Plate) under the NH State Conservation Committee grant program. Matching funds were provided by the Town of Grantham, NH and by the Center for the Environment at Plymouth State University.

# Figure 5-10 Grantham, NH Wildlife Habitat Co-occurrence Analysis



 Conservation Focus Area (CFA)

 Conserved Lands

### Cooccurrence Score

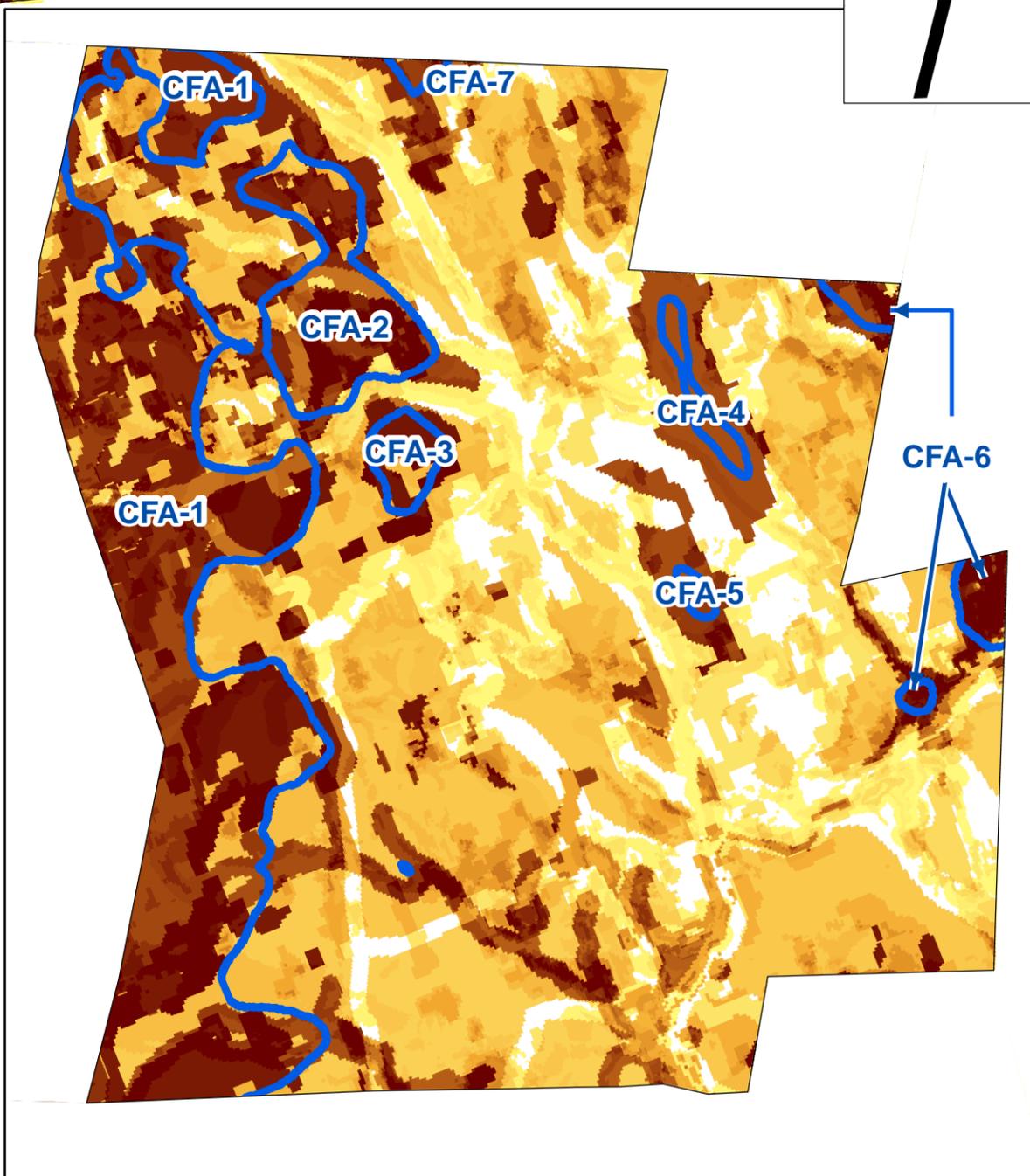
Value



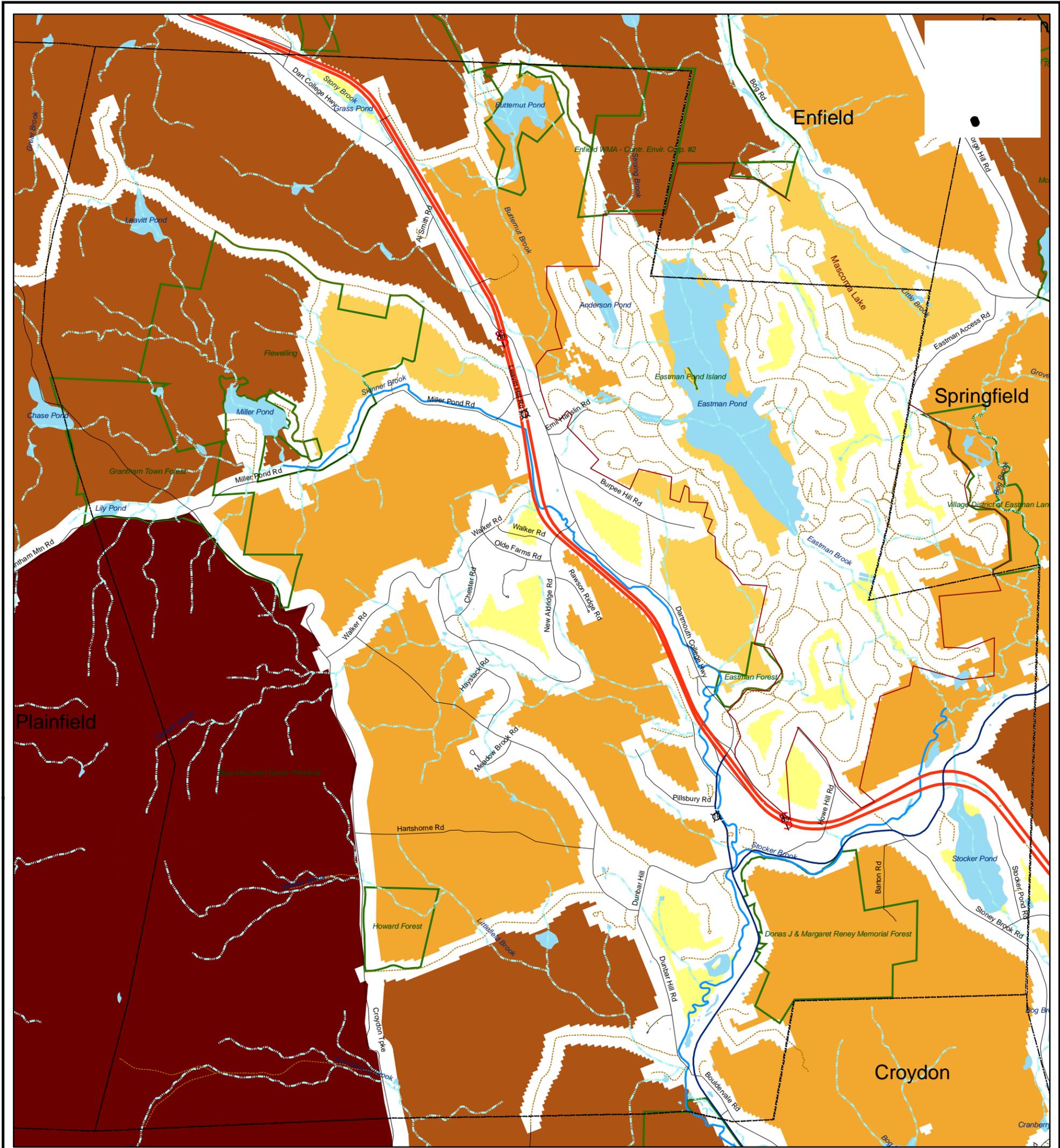
High-value natural resource areas can be identified with a co-occurrence model. The model is developed by assigning a numeric value to selected natural resource layers and overlaying them in GIS. The values are summed so that in places where multiple natural resource layers exist, the value of the model is higher. The highest value locations are considered to be Conservation Focus Areas (CFA). See the Grantham Critical Conservation Lands Index for detailed methodology of the co-occurrence analysis and discussion of the results.

### DATA SOURCES:

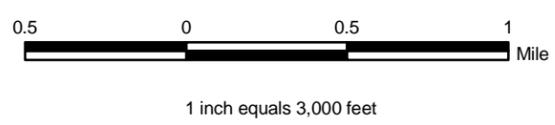
Co-occurrence analysis and conservation focus areas developed by Denyce Gagne, 2009. **The numbered order of conservation focus areas do not in any way reflect order of importance of water resources.**



*This project is supported by funds from the sale of the Conservation License Plate (Moose Plate) under the NH State Conservation Committee grant program. Matching funds were provided by the Town of Grantham, NH and by the Center for the Environment at Plymouth State University.*



**Grantham, NH**  
**Figure 7-2**  
**Unfragmented Lands**



**Legend**

	Town Boundary		Streams 4th Order and Higher
	Eastman Community Boundary		Streams 3rd Order and Less
	Conserved Lands		Lake, Pond, or River
<b>Roads</b>		<b>Unfragmented Lands</b>	
	Interstate		100 Acres Or Less
	US or State Route		100 - 500 Acres
	Town Maintained Road		500 - 2,500 Acres
	Private Road		2,500 - 10,000 Acres
			Greater than 10,000 Acres

**DATA SOURCES:**

Roads from the NH Department of Transportation, 2005, distributed by Complex Research Systems Center (CSRC), University of New Hampshire. Other Base map features from standard 7.5-minute USGS quadrangles, 1: 24,000 scale, mapped and distributed by CSRC.

Conserved lands from CSRC, 1:24,000 scale, 2005.

Unfragmented lands analyzed and distributed by the New Hampshire Fish and Game Department, 2006, and modified to include the Corbin Park fence as a source of fragmentation.



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