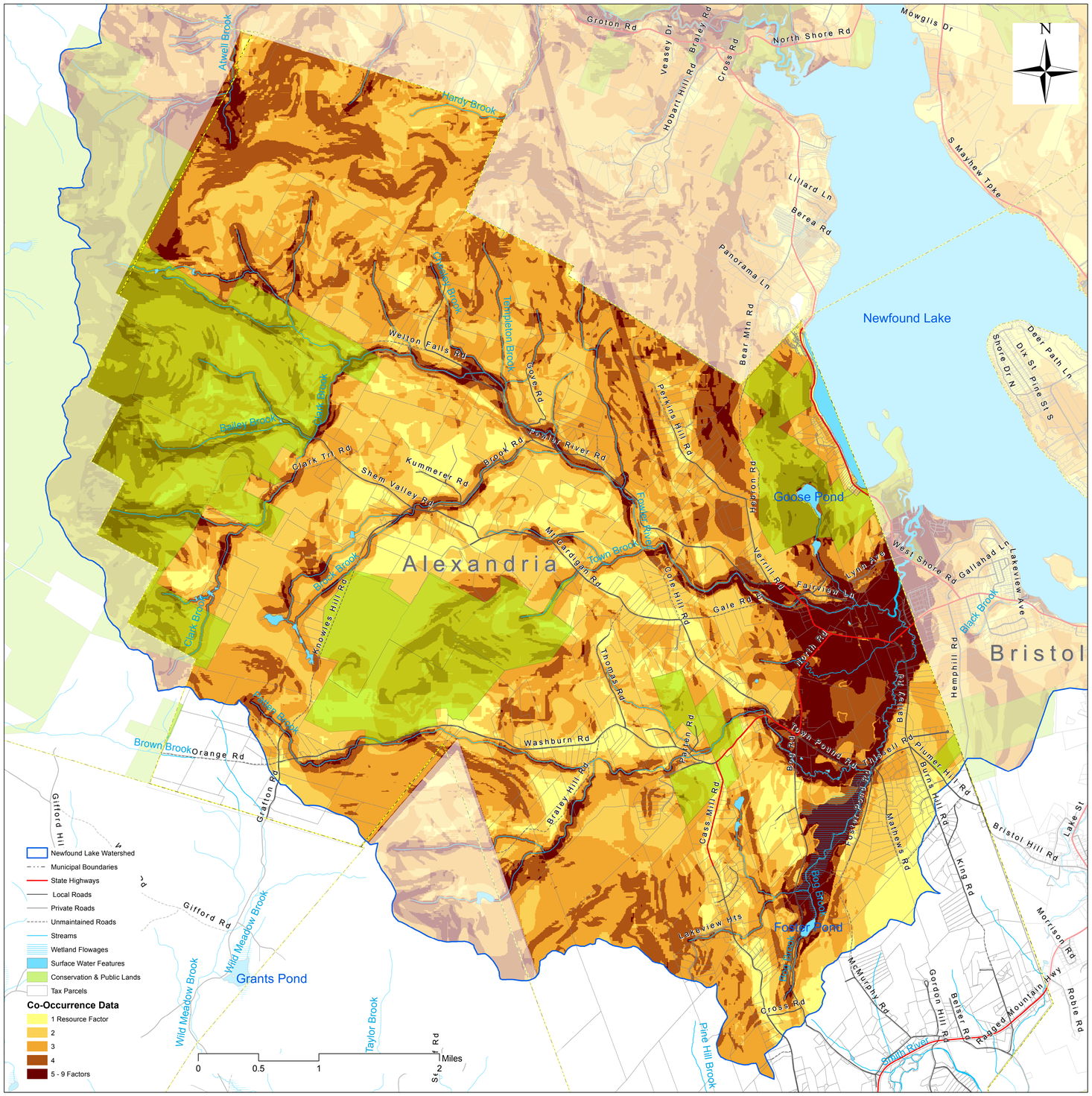
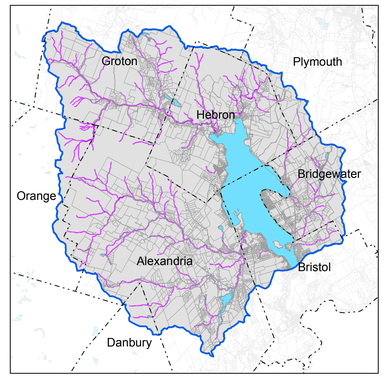


Town of Alexandria

Wetlands

Source: NRCS Soil Survey for Grafton County: Hydric Soils

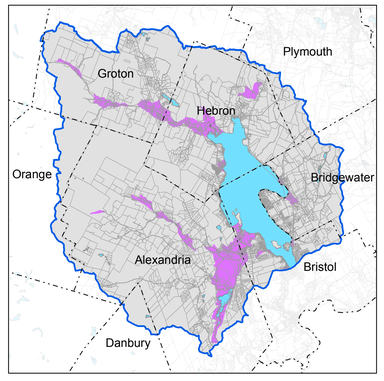


Tiered Riparian Buffers

Source: Centers for Watershed Protection: Tiered Buffer Model

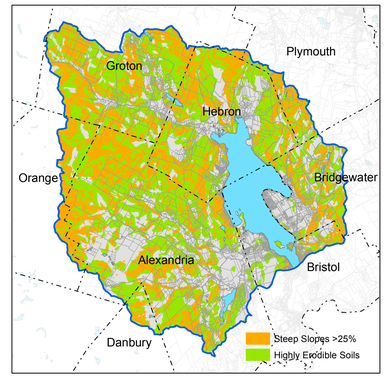
Floodplains

Source: FEMA/DFIRM Flood Insurance Mapping



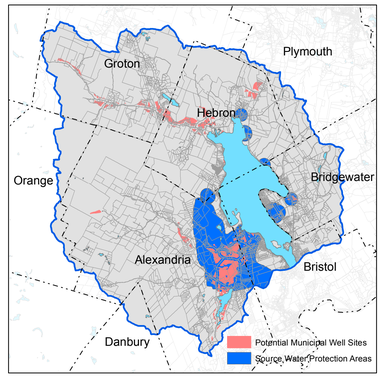
Aquifers

Source: USGS Aquifer Mapping: Pemigewasset Basin



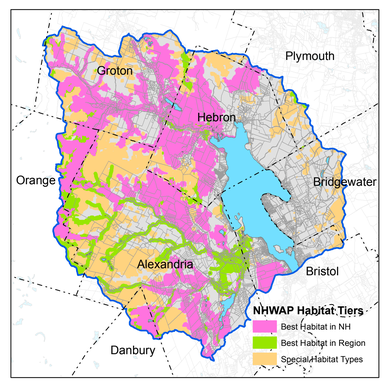
Steep Slopes & Highly Erodible Soils

Source: USGS Digital Elevation Model; NRCS Soil Survey Grafton County



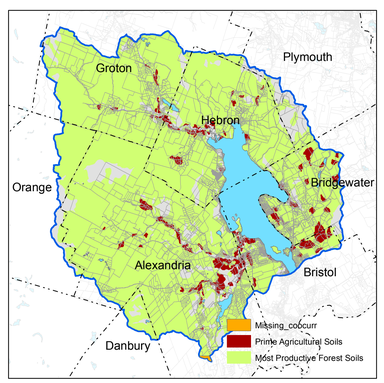
Drinking Water Protection

Source: NHDES Source Water Protection Program Mapping



NHWAP Habitat Types & Quality

Source: NH Fish & Game Dept.: NH Wildlife Action Plan



Productive Soils

Source: NRCS Soil Survey Grafton County

Notes

Purpose

This map is intended to provide guidance to local decision-makers from two perspectives: suitability for development and land conservation priorities. Both approaches provide positive water quality benefits to Newfound Lake. From a water quality enhancement point of view, conserving the following natural resource features in the map are important to maintaining water quality in the Newfound Lake watershed (in rank order): riparian corridors, wetlands, floodplains, steep slopes, and highly erodible soils. Other resources important to local conservation planning include: aquifers, drinking water protection, high quality wildlife habitat, special wildlife habitats, prime agricultural soils, and most productive forest soils.

Co-Occurrence Mapping

The inset maps display a range of natural resource features which have been processed by GIS (computerized geographic information system) to identify areas where multiple resources are co-located. Each resource feature has a numerical value of 1; the scoring in the legend and the presence of lighter or darker colors in the map reflect the number of resource features existing in any given location. Areas with darker colors typically represent more natural resource features, higher sensitivity to new development and/or higher conservation priorities.

The inset maps to the right illustrate the extent and distribution of the natural resource features considered in the co-occurrence map. The major transmission line right-of-way through Groton and Alexandria is also included in the co-occurrence mapping as a development constraint.

See the accompanying technical report for more detail on each natural resource feature and interpretation of importance to development suitability and conservation value.

Protection Statistics

The table included on the map provides a summary of the acres of each natural resource feature by municipality, as well as the status of permanent protection in 2014, based on the most current information available for conservation and public lands.

Status of Resource Protection in the Newfound Lake Watershed -- 2014

Municipality	Land Area (Ac)	Wetlands	Riparian Buffer	Floodplains	Aquifer	Steep Slopes >25%	Highly Erodible Soils	Future Well Sites	Wellhead Protection Areas	NHWAP Tier 1	NHWAP Tier 2	Special Habitat Types	Prime Ag Soils	Prime Forest Soils
Alexandria	22,084	737	1,054	350	1,637	4,323	14,671	596	3,015	6,017	4,040	9,321	755	19,107
Bridgewater	5,322	315	197	55	95	877	2,709	9	401	0	3	938	443	4,860
Bristol	2,473	226	91	127	385	252	1,009	30	950	502	241	391	452	2,105
Danbury	855	57	30	0	0	192	486	0	0	477	87	766	0	686
Groton	10,672	159	610	171	530	2,838	8,508	107	0	7,920	261	3,089	114	9,927
Hebron	11,392	432	486	259	785	2,530	8,067	265	344	6,138	292	2,318	300	10,331
Orange	2,057	1	111	0	0	933	1,869	0	0	1,954	631	1,798	0	1,574
Plymouth	1,469	43	47	0	0	551	1,240	0	0	83	62	588	0	507
Watershed Total	**56,326**	**1,970**	**2,626**	**961**	**3,432**	**12,497**	**38,559**	**1,007**	**4,710**	**23,091**	**5,618**	**19,210**	**2,065**	**49,098**
Percent of Watershed		**3.5%**	**4.7%**	**1.7%**	**6.1%**	**22.2%**	**68.5%**	**1.8%**	**8.4%**	**41.0%**	**10.0%**	**34.1%**	**3.7%**	**87.2%**

Acres of Resource Conserved In Each Municipality

	Total Acres Conserved													
Alexandria	4,583	39	169	0	22	1,271	3,337	15	458	767	1,040	2,928	32	4,226
Bridgewater	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bristol	322	79	7	21	60	4	64	3	255	157	32	47	39	280
Danbury	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groton	1,837	57	98	1	13	582	1,622	3	0	1,411	149	640	0	1,484
Hebron	1,675	103	94	107	211	515	1,262	73	0	1,716	82	434	57	1,315
Orange	1,456	1	46	0	0	760	1,339	0	0	1,208	477	1,406	0	992
Plymouth	151	0	0	0	0	87	146	0	0	0	59	133	0	6
Watershed Total	**10,024**	**279**	**415**	**129**	**306**	**3,220**	**7,770**	**95**	**713**	**5,258**	**1,838**	**5,587**	**127**	**8,304**
		279.2												

Percent of Resource Conserved In Each Municipality

	Percent Conserved													
Alexandria	20.8%	5.3%	16.1%	0.0%	1.3%	29.4%	22.7%	2.6%	15.2%	12.7%	25.7%	31.4%	4.2%	22.1%
Bridgewater	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bristol	13.0%	34.9%	7.6%	16.9%	15.6%	1.4%	6.3%	11.5%	26.8%	31.2%	13.1%	11.9%	8.5%	13.3%
Danbury	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Groton	17.2%	35.7%	16.1%	0.4%	2.5%	20.5%	19.1%	2.6%	0.0%	17.8%	57.1%	20.7%	0.0%	14.9%
Hebron	14.7%	23.9%	19.3%	41.2%	26.8%	20.4%	15.6%	27.6%	0.0%	28.0%	28.0%	18.7%	19.0%	12.7%
Orange	70.8%	100.0%	42.0%	0.0%	0.0%	81.5%	71.6%	0.0%	0.0%	61.8%	75.5%	78.2%	0.0%	63.0%
Plymouth	10.3%	0.0%	0.4%	0.0%	0.0%	15.8%	11.8%	0.0%	0.0%	0.0%	95.8%	22.6%	0.0%	1.2%
Percent Protected	**17.8%**	**14.2%**	**15.8%**	**13.4%**	**8.9%**	**25.8%**	**20.2%**	**9.4%**	**15.1%**	**22.8%**	**32.7%**	**29.1%**	**6.2%**	**16.9%**

Natural Resources Co-Occurrence Map

Newfound Lake Watershed Master Plan

A Project of the Newfound Lake Region Association
with the following Partners:

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Mapping & Analysis by
GreenFire GIS
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