

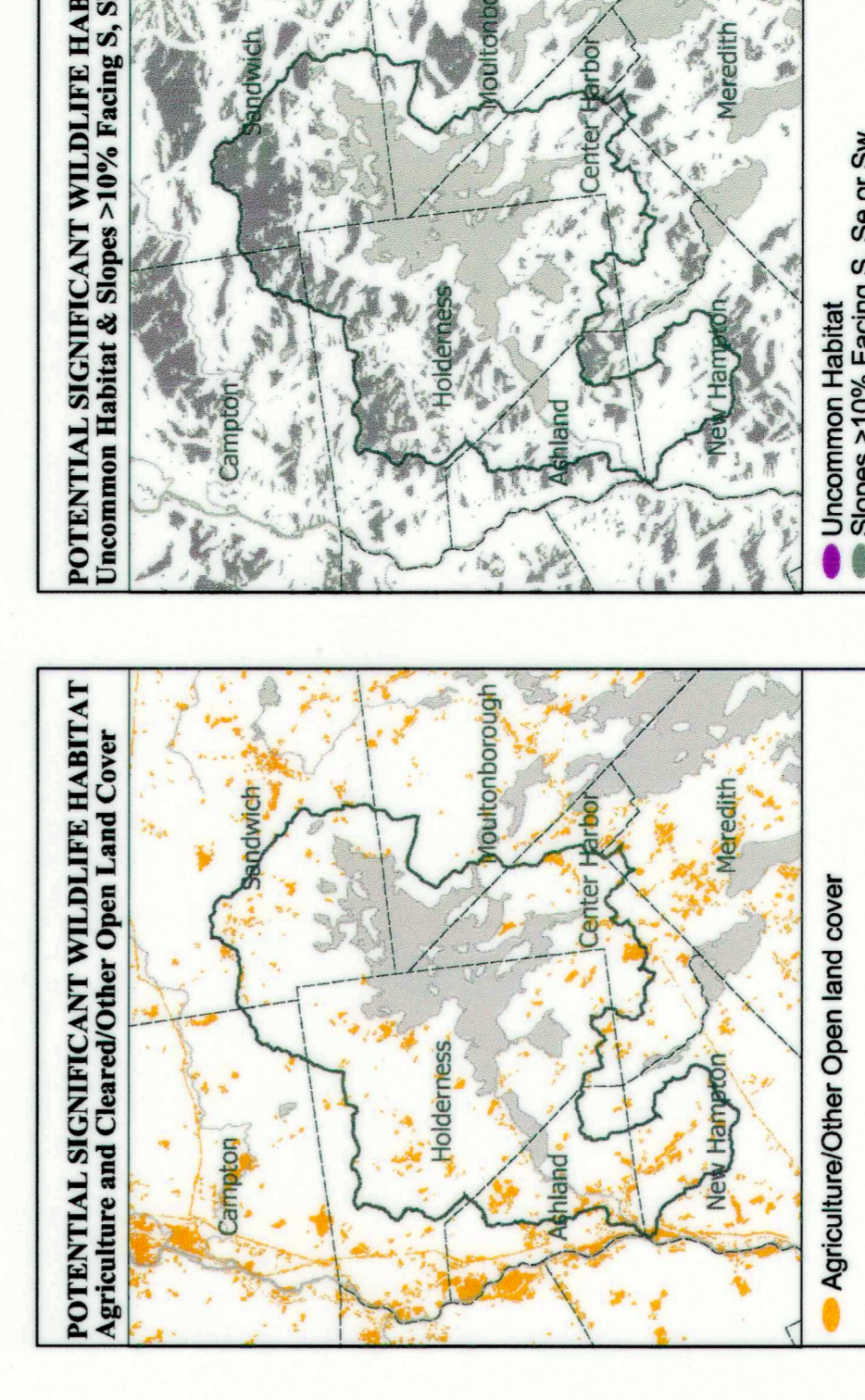
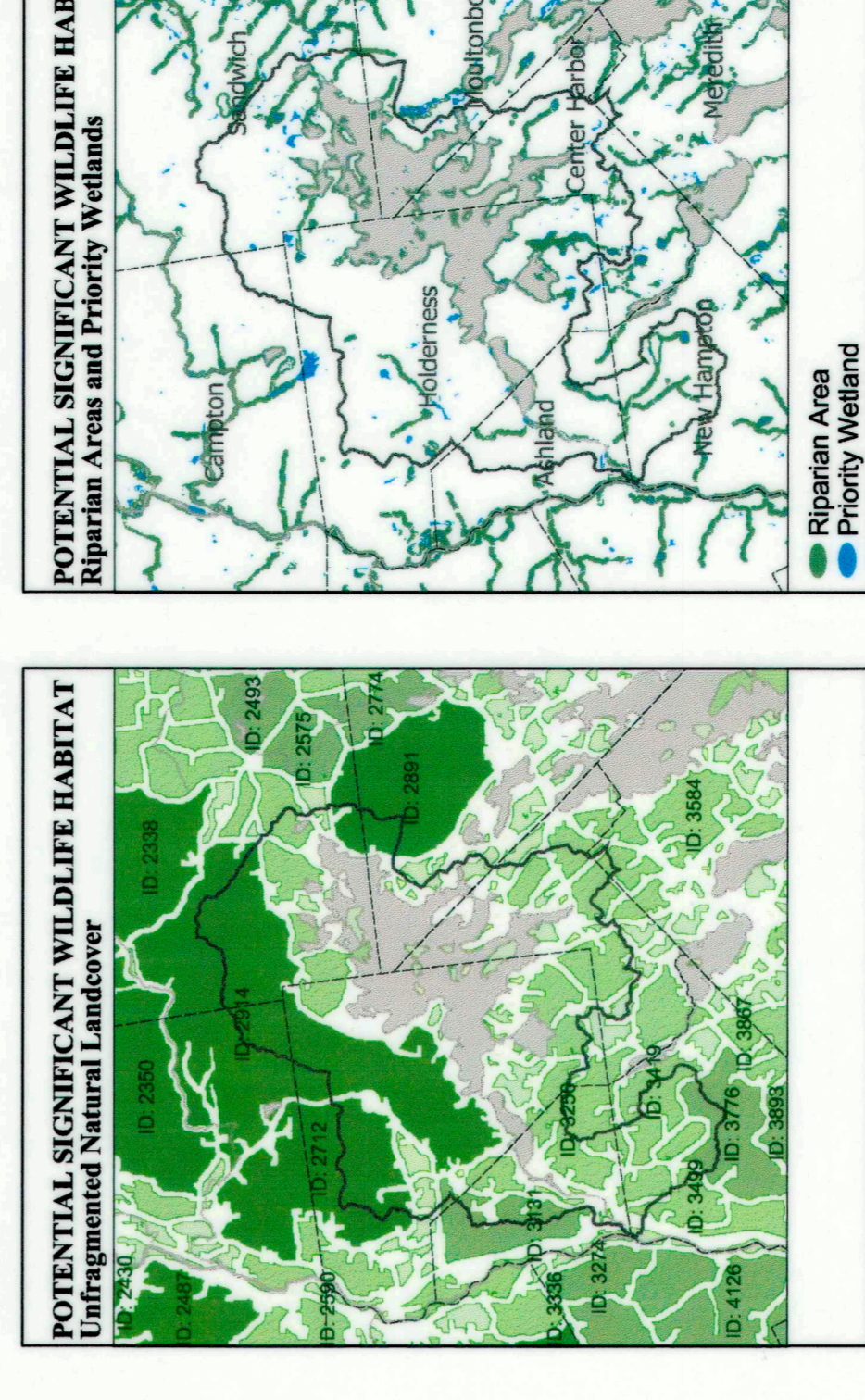
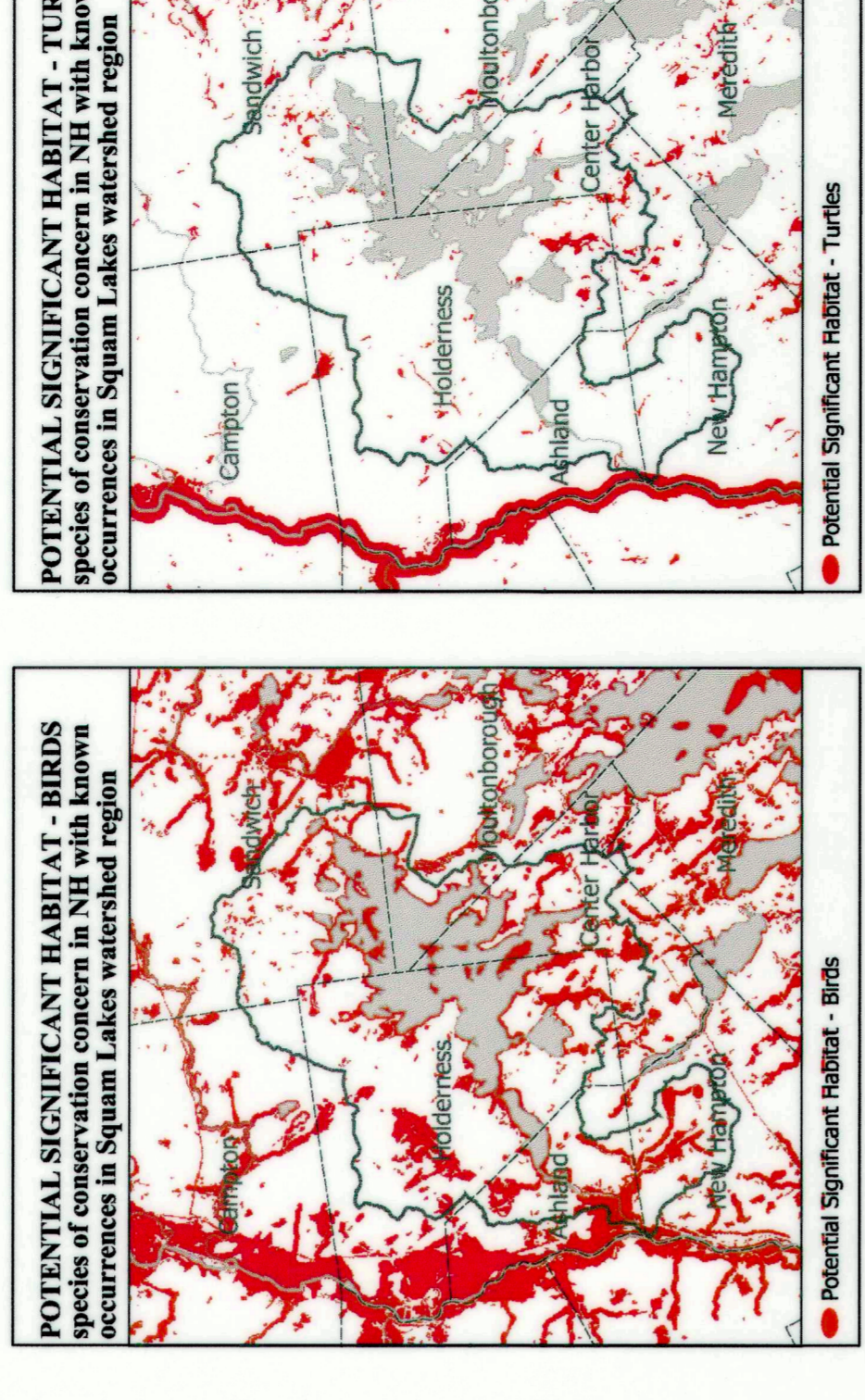
Squam Lakes Watershed COARSE FILTER SIGNIFICANT WILDLIFE HABITAT

- South-facing Slope > 10%
- Riparian Area
- Palustrine Wetland (NWI)
- Wetland Cluster (NWI, Soils)
- Wetland 5+ acres (NWI, Soils)
- Disturbed (NHLC)
- Cleared (NHLC)
- Bedrock/vegetated (NHLC)
- Agriculture (NHLC)
- Unfragmented Habitat Block (10+ acres)

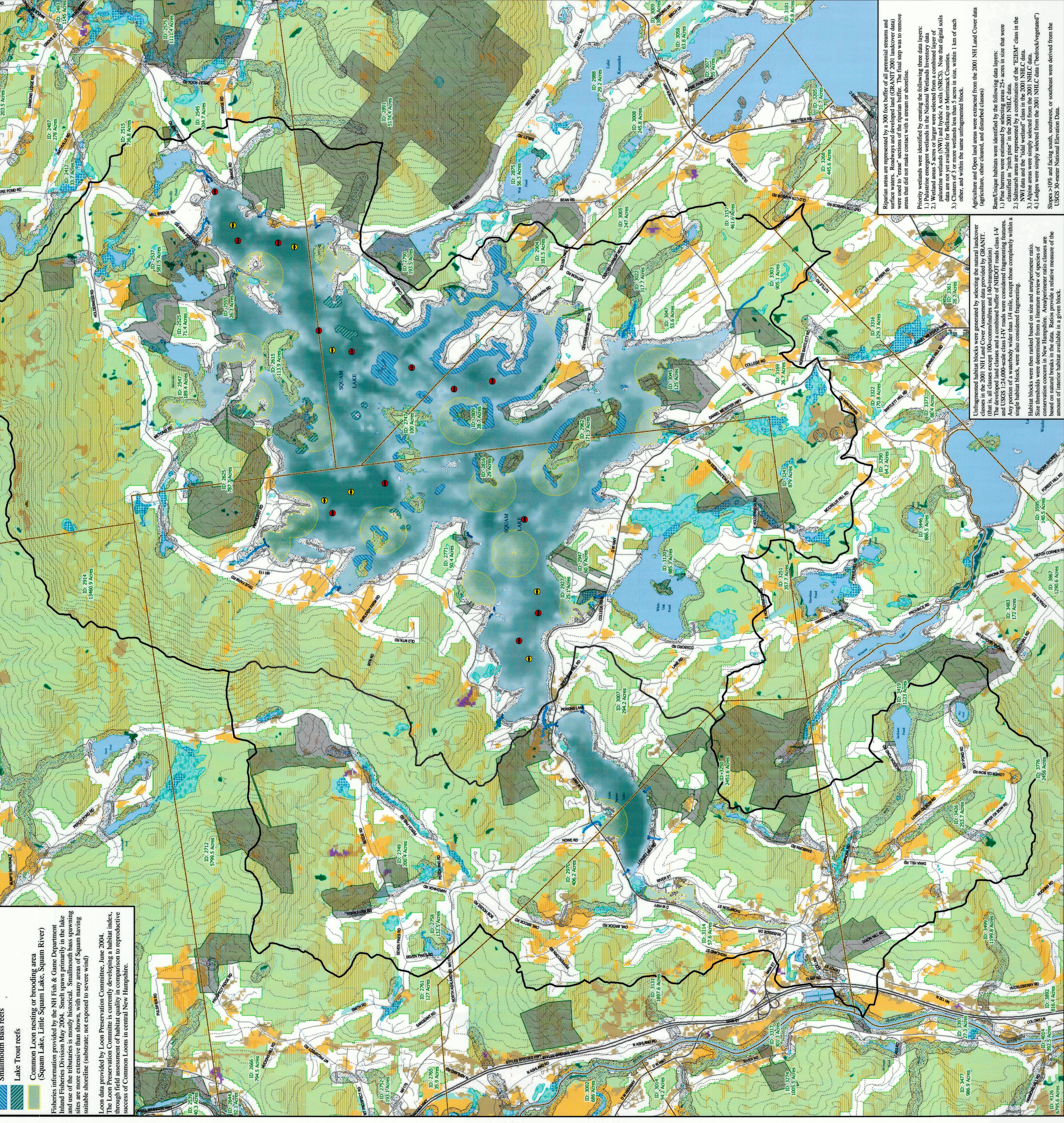
- Town boundary
- Water boundary
- Primary Road
- Secondary Road
- Road or Street
- Class VI Trail/Other
- Conservation/Public Land
- Stream or Shoreline
- Lake, Pond or River

Inset maps prepared according to the guide: "Identifying and Protecting New Hampshire's Significant Wildlife Habitat" (Kanter, Suomala, Snyder 2001).

- Inset map - Bird habitat:
- 1) Lake Whitefish: best protected by maintaining water quality and instituting shoreland protection.
 - 2) Blue-Gray Gnatcatcher: tracked species?, no further information
 - 3) Butcherbush: abandoned mines, naturally occurring caves
 - 4) White-throated sparrow: not available
 - 5) Smooth green snake: mapping information not available
 - 6) American Marten: contiguous (>1 sqmi) spruce-fir or northern mixed forests, cedar swamps, damaged stands
 - 7) Bobcat: large areas of contiguous forested habitat



The New Hampshire Fish & Game Department has completed a coarse filter analysis of potential significant wildlife habitat for the state based on a process using the 2001 National Wetlands Inventory (NWI) and the 2001 National Wetlands Inventory (NWI) data. This habitat map is being distributed to interested parties in the form of more specific species habitat maps that will be produced for the Comprehensive Wildlife Conservation Plan which is scheduled to be completed by October 2005.



Aquatic Habitat - Squam Lakes

- Salmon Areas
- Whitefish Areas
- Smelt brooks/reefs
- Smallmouth Bass reefs
- Lake Trout reefs
- Common Loon nesting or brooding area (Squam Lake, Little Squam Lake, Squam River)

Fisheries information provided by the NH Fish & Game Department Inland Fisheries Division May 2004. Smelt spawn primarily in the lake and use of the tributaries is mostly historical. Smallmouth bass spawning sites are more extensive than shown, with many areas of Squam having suitable shoreline (substrate: not exposed to severe wind).

Loon data provided by Loon Preservation Committee, June 2004. The Loon Preservation Committee is currently developing a habitat index, and the data is being used to determine the best location to reproductive success of Common Loons in central New Hampshire.

Riparian areas were represented by a 300 foot buffer of all perennial streams and were used to "erase" sections of the riparian buffer. The final step was to remove areas that did not make contact with a stream or shoreline.

Priority methods were identified by creating the following data layers:

- 1) Palustrine wetlands in the National Wetlands Inventory data
- 2) Wetland areas 5 acres or larger were selected from a combined layer of palustrine wetlands (NWI) and hydric A soils (NRCS). Note that digital soils data are not yet available for Belknap or Merrimack Counties.
- 3) Closures were selected from the 2001 NHLC data, within 1 km of each other, and within the same unfragmented block.

Agriculture and Open land areas were extracted from the 2001 NH Land Cover data (Agriculture, other cleared, and disturbed classes).

Rare/unique habitats were identified by the following data layers:

- 1) Pine barrens were identified by selecting areas 25+ acres in size that were 100+ feet wide and 100+ feet long.
- 2) Shrubswamp wetlands were identified by a combination of the "2320A" class in the NWI data and the "tidal wetland" class in the 2001 NHLC data.
- 3) Alpine areas were simply selected from the 2001 NHLC data ("bedrock/vegetated") class.
- 4) Leagues were simply selected from the 2001 NHLC data ("bedrock/vegetated") class.

Slopes > 10% and facing south, southwest, or southeast were derived from the USGS 30-meter National Elevation Data.

Unfragmented habitat blocks were generated by selecting the natural landcover classes in the 2001 NH Land Cover Assessment data provided by GRANIT. The developed land classes and a combined buffer of NHDOT road class 1-V and USGS 1:24,000-scale class 1-V roads were considered fragmenting features. Any portion of a watershed wider than 1/4 mile, except those completely within a single habitat block, were also considered fragmenting.

Habitat blocks were then ranked based on size and area/perimeter ratio. Size thresholds were determined from a literature review of species of concern. Areas with a perimeter to area ratio less than 1 were considered as potential habitat blocks. Relative to a relative measure of the amount of interior habitat available in a given block.

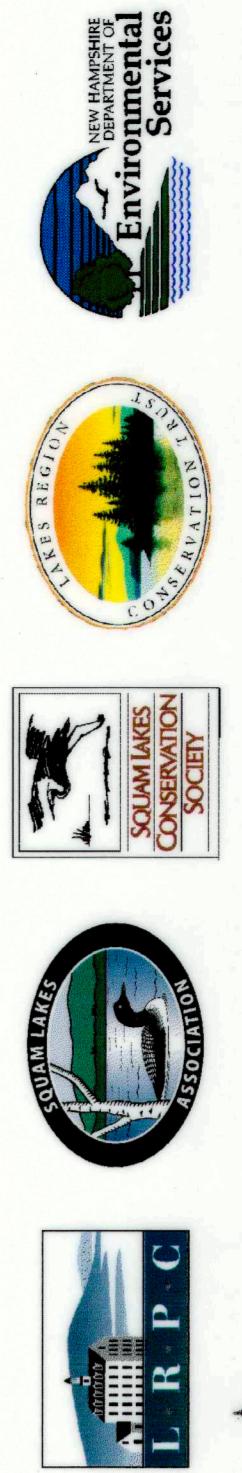
1) Base map data from 1:24,000 scale USGS digital line graph data over USGS digital raster graphics (demographic quadrangles) provided by GRANIT at Complex Systems Research Center, UNH (May 2003).

2) Road centerlines developed and maintained by NH Dept. of Transportation. Provided by NHDES (Sept 2003).

3) National Wetlands Inventory (NWI) data originally developed by the Society for the Protection of NH Forests (Sept 2003).

4) Conservation/Public Lands data originally developed by the Society for the Protection of NH Forests (Sept 2003).

5) National Wetlands Inventory (NWI) data developed by U.S. Fish and Wildlife Service. Provided by GRANIT (May 2003)



UNIVERSITY OF NEW HAMPSHIRE
Cooperative Extension

Assistance also provided by the NH Office of Energy and Planning.

