Methods

The natural resource features of concern to conservation shown in the map insets to the right total 12 distinct suites of data, some grouped as with wetlands, NHWAP habitat tiers, and terrestrial habitats, for a total of 17 "data factors" to be considered in determining conservation priorities in the study area. This analysis uses a co-occurrence modeling routine in the GIS to identify those areas where data factors are "co-located", or in other words, areas that share several natural resource values. A Delphi voting process was used to determine average values using votes pooled from three communities: New Hampton, Laconia and Gilford. The GIS then adds the values for each grid cell used in the model, at a resolution of 10-meters per cell, or about 30 x 30 feet. A high-resolution rendition of relative aggregate conservation value is the final result of the co-occurrence modeling.

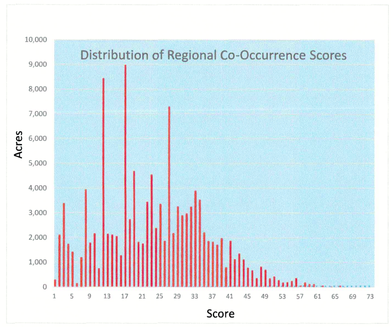
Results

The co-occurrence map shows how all natural resource data factors under consideration "stack up" in the study area. A one-mile zone extending beyond the study area boundary is also shown to help provide context, especially in high-scoring areas.

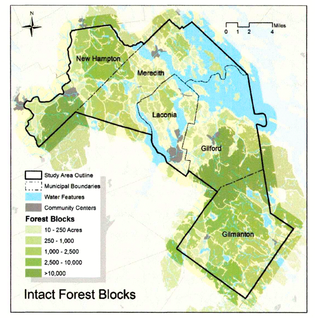
Darker colors indicate co-location of several data factors; the highest aggregate score is 73. Some areas with a score of 0 will be found in a light gray colors. The darker gray color indicates built-up community centers.

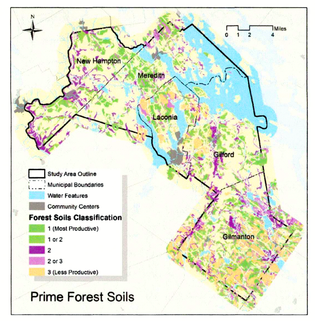
Interpretation

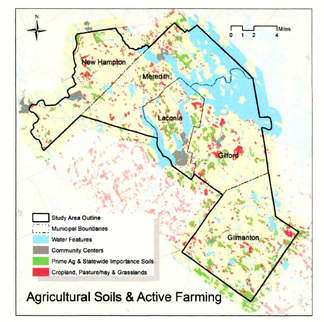
As can be seen in the table below, the fact that some land areas scored in the highest numbers does not carry much significance within the entire study area. The histogram of all scoring grid cells shows very low numbers of cells and associated acreage in the upper score range. The average regional score is something closer to 25 points, and scores in the range of about 7 through 50 represent the "core" of conservation values in the co-occurrence map.

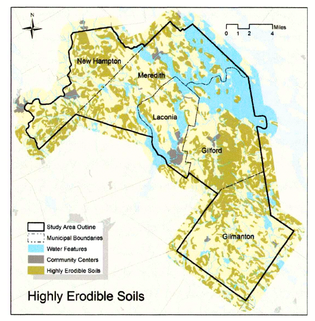


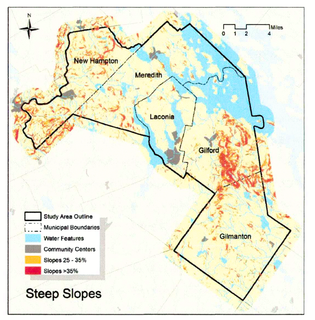
Natural Resource Data Factors

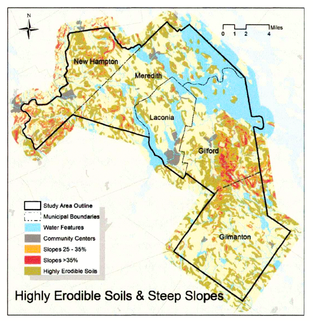


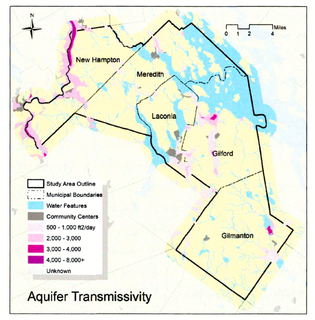


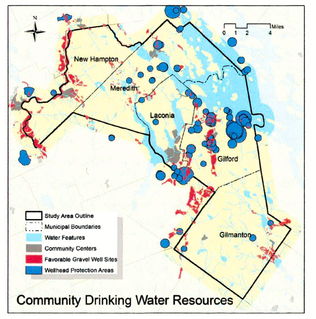


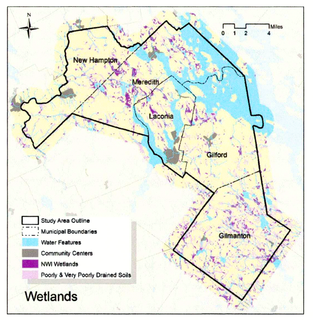


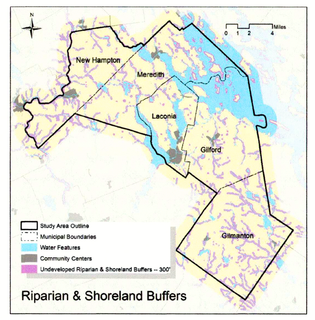


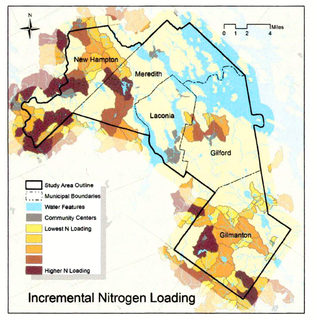


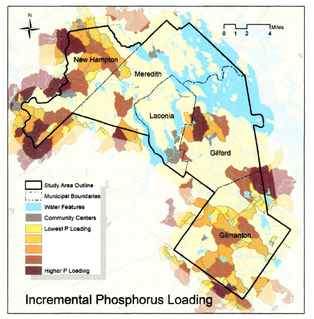


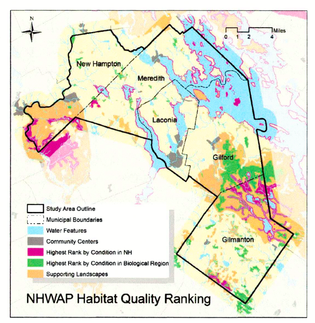


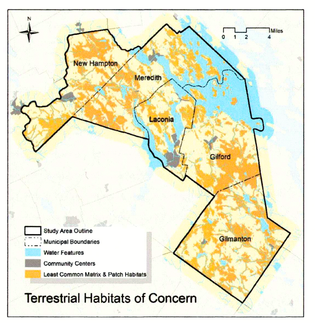


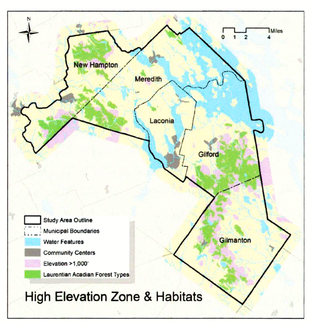












Meredith Regional Natural Resources Co-Occurrence Map

Laconia Region Conservation Coalition

Developing a Shared Vision for Conservation In the Lakes Region

A Conservation Planning Project of the
Society for the Protection of NH Forests

Funded by the Samuel F. Pardoe Foundation

GIS Mapping & Analysis by GreenFire GIS
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