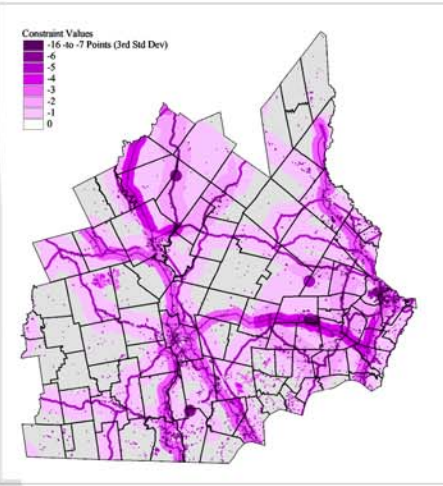


Notes:

1. This map is derived from a composite of weighted values associated with the data factor grid displayed in the inset maps to the left. The grid cell resolution is 200 feet by 200 feet, or about one acre per cell. Except for the Scenic Byways map, each inset map represents a sub-composite suite of unique natural resource values totaling 26 separate data factors or layers built into the master co-occurrence map (see also Note #3 and #4 below).
2. Each data factor has been assigned a numerical value by a 12-member inter-departmental staff team of the Forest Society. The staff team participated in a "Delphi Process" in which each team member anonymously assigned relative point scores to each data factor, drawing from a maximum pool of 100 points. Statistical analysis of the aggregate team scores resulted in an array of mean values for all the data factors.
3. A composite of the mean values was calculated in the GIS to generate a single map displaying the spatial pattern of total score values across the entire study area. The range of numerical values is displayed as a color gradient, with the darker colors representing progressively higher resource values, and consequently, higher priority for conservation. The color scheme used in this map is based on a statistical classification of the mean values by standard deviation. The purple color gradient highlights those areas with lowest priority for conservation, while the orange color scheme targets those areas with the highest priority for conservation. Only about 4% of all scoring cells in the study area are within the 1st standard deviation or higher, so this approach pinpoints the "best of the best".
4. A parallel composite of constraints factors was also developed, using negative numerical values which, when combined with the positive values for various natural resource factors noted above, result in a second generation co-occurrence grid that balances both opportunities and constraints across the study area. The constraint data factors include noise from road tracks and major highways, ATV access to forest blocks from designated trails, and known and potential contamination sites unsuitable for conservation. The constraints composite is displayed in the inset map to the right.
5. Further GIS processing of the co-occurrence values was done using a "neighborhood analysis" technique that averages grid cell values across a 100-acre moving analysis window, thus smoothing the data to help reveal regional conservation opportunities. Proximity to conservation lands and to centers of higher-than-average population density was also tested using GIS filters. These steps are displayed in other maps.

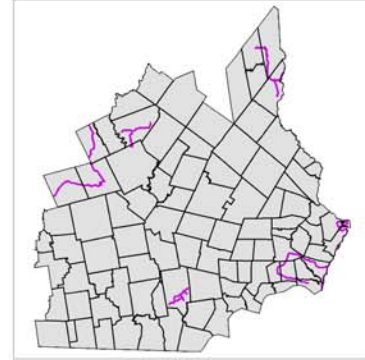
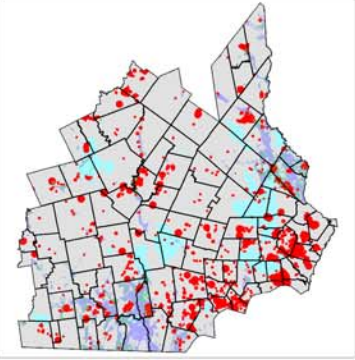


Forest Blocks > 250 Acres

Important Forest Soils

Prime Agricultural Soils & Lands

Constraints Composite



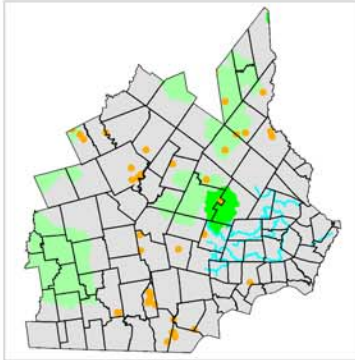
Drinking Water Resources

Designated Scenic Byways

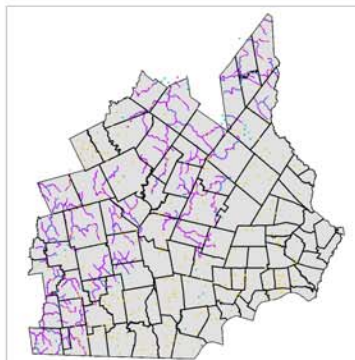


Riparian & Shoreland Buffers

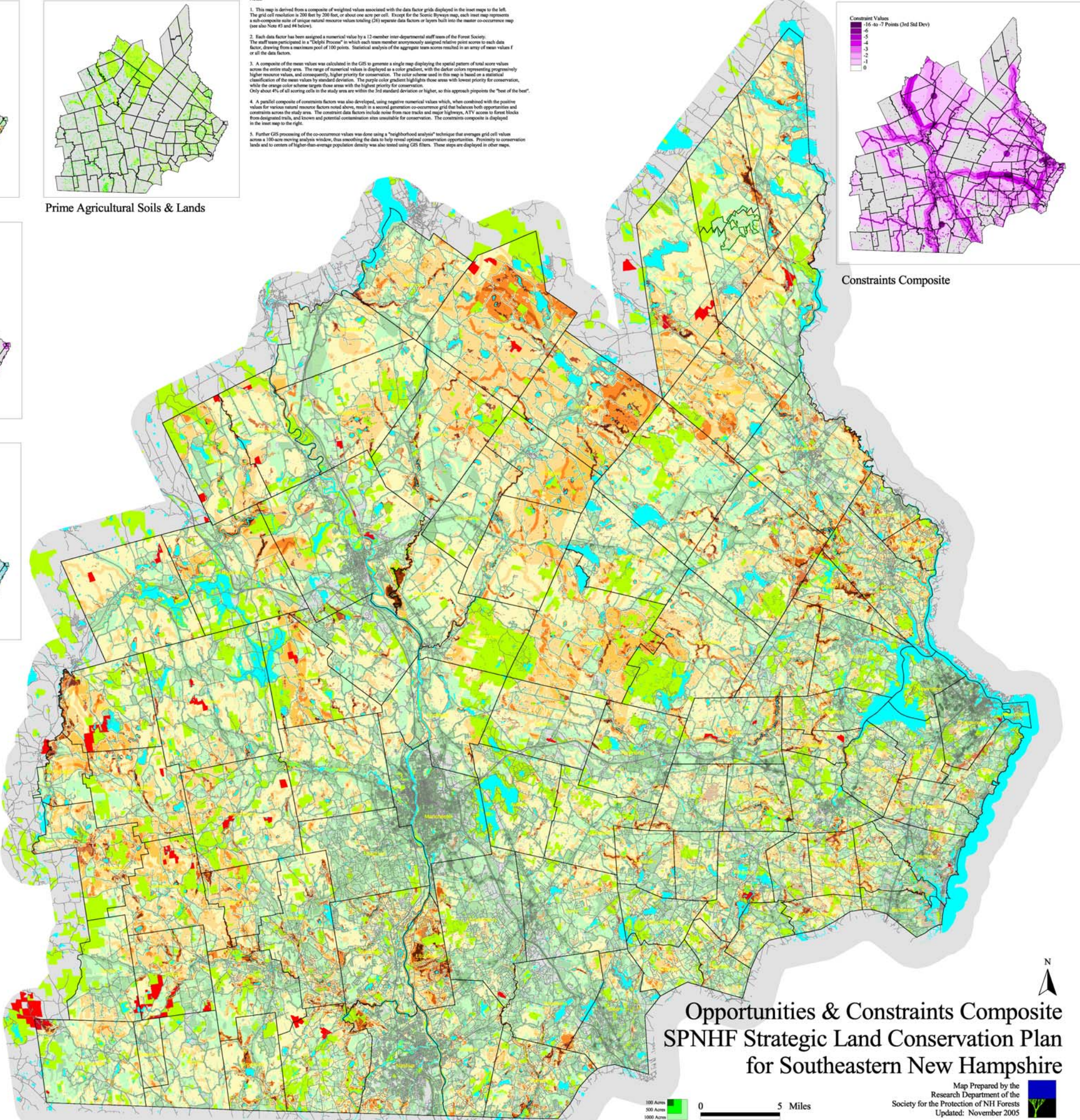
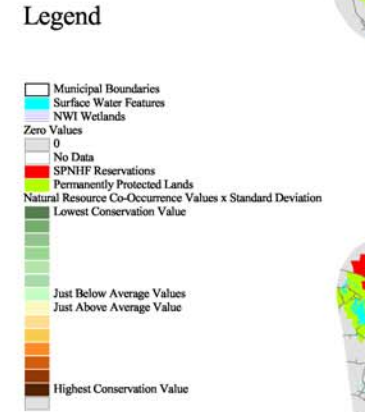
Wetlands Composite



Patch & Matrix Habitat Blocks



Wildlife Corridors & Passpoints



Opportunities & Constraints Composite SPNHF Strategic Land Conservation Plan for Southeastern New Hampshire

