Conservation Matters

A monthly column focused on conservation education, as the result of collaboration among area conservation commissions and organizations. If you would like to contribute articles, please contact Jessica Tabolt Halm jess_tabolt@hotmail.com

Title: Balancing Community Planning and Conservation

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Community planning typically emphasizes where and how a municipality will grow to accommodate future development. Land conservation, an integral part of most strategic plans but not under the purview of most planning boards, tends to be opportunistic and therefore sporadic, with a Conservation Commission (and/or other conservation partners) reacting to willing landowners who wish to permanently protect their property. Coordinating these two critical goals, development and conservation, is required to balance a Town's vision of its future with reality.

As part of *Every Acre Counts: The Newfound Watershed Management Plan*, the distributions of twelve natural resources were assessed and combined into a regional, co-occurrence map for the 100-square-mile Newfound Lake watershed. The map identifies areas where multiple, valued natural resources, such as streams, wetlands, aquifers and prime agricultural soils, are "co-located". Thus, the Newfound watershed co-occurrence maps indicate where to best focus future development and conservation efforts in accordance with local values and vision.

In the map shown, darker colors indicate areas of greatest amounts of "co-located resources". These are high-value areas for land conservation and stewardship. Lighter areas indicate areas with less conservation value and so better targets for development. The largest area of co-located resources is the Fowler River valley in Alexandria and Bristol. The resources there include floodplain, aquifer, wetlands, riparian buffers, drinking water protection areas, and future water supplies. Prime agricultural soils and wildlife habitat values are also significant. The situation is similar in the Cockermouth River valley of Groton and Hebron, although at a smaller scale. Middle to high co-occurrence exists in the uplands of western Alexandria and Groton, and along the ridge separating the Fowler River and Cockermouth River watersheds (the so-called "Spruce Ridge").

The eastern portion of the watershed has conspicuously lower co-occurrence values. This does not necessarily mean there are no natural resources worthy of conservation because the data are from state-level surveys; a more detailed assessment of the eastern watershed is needed to determine its resource co-occurrences. Finally, with regard to water quality in Newfound Lake, tributaries entering the Lake from the east all contribute phosphorus (and other nutrients) and, at a Town scale, are important for riparian and wetland protection.

The map also shows resource co-occurrence associated with conservation and public lands (green),, showing where high-value resources are conserved. The Goose Pond tract in eastern Alexandria exemplifies conservation that protects high-value resources. High-elevation areas shared by Alexandria and Orange, and land along the border of Groton and Hebron, are fairly well protected as forestry, recreation and wildlife habitat, reflecting their historical uses. The Fowler and Cockermouth River valleys are not well protected, nor are the high ground (Spruce Ridge) separating those two watersheds or the uplands located in western Groton.

This simple approach to identifying important natural resources is fairly broad-based and limited in detail. More advanced, Town-specific mapping could adjust how resources are ranked to better reflect local values and provide a "shared vision" for community and conservation planning. A recent grant for additional work on the watershed master plan, creates opportunity to refine this initial study with participating Towns.

Ed Note. Author Dan Sundquist has provided land use analysis, mapping and consulting for *Every Acre Counts* since its earliest phases. As principal of GreenfireGIS, he continues to work with the NLRA supporting Newfound watershed Towns in their goals to balance smart growth and land conservation. He can be contacted at DSundquist@tds.net or through the NLRA at info@NewfoundLake.org.