

Natural Resource-Based Planning*

Planning, when done well, is among the most powerful tools available to communities. A solid plan, based on good natural resource information, guides rational land-use decisions, and allows the community to consider innovative tools for resource protection with fewer chances for legal challenges to their planning authority. The plan also sends a clear message about what the community values and wishes to preserve and, if well crafted, results in few surprises to developers, local officials or residents.

The Importance and Benefits of Natural Resource-Based Planning

Natural resource-based planning is a process that puts the community's natural resource base at the forefront. By identifying natural resources at the beginning of the planning process, your community can determine where development is most appropriate. This way, communities can avoid the unintended consequences of the typical planning process, such as open space becoming the "leftover" pieces, water resources being degraded, and community character being compromised.

A good comprehensive plan is not a "wish list" of local concerns – it's a rational list of actions based on accurate information about your community. Inventories and assessments are a key step in the planning process because they will help guide the discussion about where development or other land uses should occur and what natural resources should be protected or restored.

A **natural resource inventory (NRI)** is the information collected to identify the location and character of natural resources.

A **natural resources survey (NRS)** is an analysis of the NRI to aid in decision-making and management efforts.

What is a natural resources inventory (NRI)?

An NRI is simply a collection of data represented by descriptive maps – a collection of maps used to depict important naturally occurring resources within a town, watershed, or other geographic area. It can include anything from a simple hand-drawn map to comprehensive, geographic information system-based, land-cover maps. Once an NRI is completed, the information collected can then be used to conduct an NRS to investigate local natural resource issues.

The maps can be customized in various ways. Mapping categories may include:

- Geography/Topography
- Geology
- Hydrology
- Soils
- Vegetation
- Wildlife
- Wetlands
- Land Use
- Climate
- Air
- Historic and Cultural Features
- Existing and Planned Infrastructure
- Noise
- Regional Relationships
- Contaminated Sites
- Critical Environmental Areas

Where do the NRI maps come from?

The information contained in the maps comes from a database of natural and cultural data from statewide sources called the New York State GIS Clearinghouse and from additional sources, including the Otsego County Planning Department, Otsego County Soil and Water Conservation District, Natural Resources Conservation District, New York State Department of Environmental Conservation, and others. The computer tool used to pull information out of these databases is called GIS (Geographic Information System). It has the ability to display multiple layers of information (such as roads, parcels and water areas) overlaid upon one another.

Who uses the NRI maps?

Town and local government officials, conservationists, and others who want to achieve informed decision-making in their efforts to:

- Determine the current or future use, needs or protection of natural or man-made resources;
- Provide scientific basis for decision making about both regulatory and non-regulatory approaches to preserve natural resources;
- Use inventory maps to show the location and extent of existing resources, such as farmlands, surface and ground waters, and related features.

How do I use the NRI maps?

1. Determine your need: Using the Example Uses of NRI Maps list (below), or the description of maps (above), or your own needs/ideas, determine what resources you want to track/review
2. Find the right map: Using the description of maps above find the map or maps that contain the resource (natural or manmade) that you want to track/review.

Examples of NRI Maps: For general PLANNING, EDUCATION or DOCUMENTATION: the maps can display:

- Which areas in the community have the most important resource values, and where specific resource combinations occur
- What are the threats to the continued availability of important natural resources?
- Are there natural resources identified that are important to other communities or the region?
- Document current conditions so changes over time can be assessed
- Educate local officials and the public about natural resources
- Initiate and support land protection efforts
- Provide a basis for land use planning efforts
- Update towns' master plans

Additional uses of NRI maps:

- Education: Natural resource inventories can be used by conservation commissions to guide conservation planning, planning boards to review land use proposals requiring regulatory oversight, selectmen, citizens, conservation groups and land trusts to guide land conservation plans for the region, and regional planning commissions.
- Comprehensive Plan/Master Plan updates
- Regulatory techniques for protecting important natural resources
- Non-regulatory techniques for protecting important natural resources
- Build out analysis

A Natural Resource Inventory is not static. It is meant to be updated and corrected, as more current data becomes available, or additional data becomes digitized.