# **Plainfield Natural Resource Inventory**

#### Recommendations

### Agricultural Lands

- Educate people on the importance of this resource and how smart growth principles can be used to protect it for future generations.
- Use GIS mapping to identify active and inactive areas of prime and important farmland soils which have not been developed.
- Work with Natural Resource Conservation Service (NRCS) to assign values according to soil type, use, size, etc., and rank these areas taking into account other factors such as threat of development and other resource values (i.e.: proximity to an aquifer, wildlife habitat, etc.). Use this information to designate "resource envelopes" which identify areas of special importance.
- Seek funding to purchase development rights on the highest ranked prime farmland in order to preserve these areas.
- Evaluate Town zoning, building, sub-division and other regulations in terms of their impact on agriculture including the extent to which they do or should:
  - Promote "conservation subdivisions"
  - Require that development take place out of high quality agricultural "resource envelopes".
  - Allow the trading of development rights to protect quality farmland in exchange for higher density in more appropriate locations.
  - Prevent unreasonable barriers to agricultural uses.
  - Promote a vibrant local agricultural economy to help keep farms profitable thus reducing the threat of development on productive fields.

#### **Conserved and Public Lands**

- Identify lands with fragile or unique habitats which give them special value.
- Identify lands with other natural resource features valued by the community
- Identify lands which, if also protected, would expand or connect existing conserved and public parcels, thereby compounding the conservation value of individual parcels.
- Identify the parcels which should be given priority for conservation should that opportunity arise, and contact landowners to explore the benefits of voluntarily protecting those properties.

# Groundwater and Aquifers

- The Plainfield Master Plan recommends that, "An in-depth study of Plainfield's aquifers should be undertaken to identify recharge areas, aquifer and subsurface movement of water..."
- Examine our zoning and building regulations to determine if they adequately protect our groundwater resources.

- Educate residents and businesses about the proper disposal of hazardous wastes as an important safeguard against water contamination.
- The Town should continue to promote regional hazardous waste collections and encourage residents and businesses to participate.

## **Unfragmented Lands**

- Educate people on the importance of having large blocks of undeveloped habitat to certain species of wildlife.
- Map specific land cover and wildlife habitat in the Town's large unfragmented blocks of land.
- Identify land parcels which have the greatest conservation value because they contain significant plant or animal habitat or because their location could expand existing conserved lands or because of their value as a public resource.
- Educate landowners about the benefits of voluntary land conservation and encourage donations of conservation and agricultural easements to permanently protect tracts of important conservation land.
- Identify plant and animal species in Plainfield which are most sensitive to development.
- Evaluate the effectiveness of current zoning and building regulations which promote "conservation design" and recommend appropriate modifications.

#### **Surface Waters and Watersheds**

- Conduct a surface water testing program to establish the quality of our surface waters and to identify pollutants currently in our surface waters.
- Solicit cooperation from surrounding jurisdictions and explore the establishment of "Watershed districts".
- Review the Town's compliance with Best Management Practices for the use of road salt and for snow storage.
- Review <u>Best Management Practices to Control Nonpoint Source Pollution: A</u> <u>Guide for Citizens and Town Officials</u>-January 2004 and evaluate if any of the voluntary BMP's for controlling non-point source pollution should be incorporated into town regulations.
- Based on the results of a surface water testing program, send educational materials to landowners specific to the needs of the surface waters near their property. Encourage voluntary efforts to reduce non-point source pollution.

### Wetlands

- An evaluation of Town wetlands to identify specific plant and wildlife species which are supported.
- A wetland evaluation to determine the overall health of our wetlands and to determine which, if any, need special protections and/or should be given priority in our conservation efforts.
- Identify wetlands areas to be evaluated using the *Method for Comparative Evaluation of Nontidal Wetlands in New Hampshire* to determine which, if any, of the wetlands should be designated as 'Prime.'
- Identify smaller wetland areas to include vernal pools and make recommendations regarding the protection of these areas.
- Accurately map existing wetlands in Plainfield using GIS resources.

# **Co-occurance of Resources (GIS Mapping Projects)**

- Sensitive or prime habitat: Using features such as south-facing slopes, riparian buffers along surface waters, unfragmented land, specific ground cover types, wetlands, known colonies of rare species, and other factors, a map can be created showing those areas most likely to be beneficial to wildlife or plants.
- Groundwater protection: A map showing aquifers, surface waters, wetlands, wells, known point and non-point pollution sources, and population density can help identify areas which may need special regulation in order to protect our groundwater.
- Conservation priorities: Combining natural features, habitat and water resources can identify areas or parcels which have the greatest conservation value and help set priorities for the Town's conservation plan.
- Build-out analysis: By subtracting the acreage of protected or restricted land from a particular Zone, the theoretical maximum number of building lots can be calculated for the remaining land in that Zone. This data can be used to estimate the population potential allowed by current zoning regulations and can be a very powerful planning tool.