Natural Resources Inventory

In September 1990 the Brooklyn Conservation Commission began an extensive inventory and data gathering process in order to understand and account for our community's natural resources in a more comprehensive manner. This natural resource inventory is an attempt to quantify the components that make up our environment and quality of life. It is also designed to learn and consider what is important to the residents of Brooklyn; i.e why they enjoy living here. Towards this end, two public hearings and a mail survey were conducted by the Commission in 1991 (for results, see Appendix A). In total, this process provided the information needed to do conservation planning.

A heightened sense of environmentalism stemmed from this process as Commission members learned more about the community that they have been a part of for years. The Commission labored over an extensive amount of information to develop a plan that would be understandable and useful from many different perspectives. All aspects of the community, from the individual landowner to the citizenry as a whole were considered in the process.

Statement of Purpose

The following statement of purpose for the inventory was adopted after public hearing in June, 1991:

To identify and evaluate the quality, quantity and distribution of Brooklyn's land, water and biotic resources so that:

1. A town open space and conservation plan will be developed and integrated into the town plan of development;
2. Land use decisions made by the town commissions, town officials and individual landowners are made with full understanding of their environmental impacts;
3. Open space priorities and protection strategies are developed which create an optimum balance between continued economic growth and the protection of Brooklyn's environment and quality of life;
4. Regulatory procedures may be recommended to the town agencies and commissions for the protection of natural and cultural resources;
5. The information compiled will be shared with other local, regional, and state organizations so that they may be aware of community protection goals;
6. Strategies for the protection and preservation of existing open spaces may be developed and strategies for the acquisition of new open spaces be formulated.

The Conservation Commission, in developing a natural resources inventory shall consider:

1. Significant natural and cultural features unique to the town and unique within the town;
2. Existing open spaces both private and public;
3. Water resources which support both plant and animal life;
4. Existing and future drinking water supplies;
5. Any other factors which the commission deems to be important to the quality of life in Brooklyn.

Resource Identification and Mapping

Once the inventory goals were clear, the Commission began to identify those natural resources and other town features that could be worthy of various levels of protection.

Advice and assistance in determining what information to gather, how best to interpret it, and which resources to map was sought and received from many sources. Chief among them were the Department of Environmental Protection, the UConn Cooperative Extension System, the U.S. Department of Agriculture (USDA) Soil Conservation Service, the UConn Department of Natural Resource Management, the USDA Agricultural Stabilization and Conservation Service, and other Connecticut communities which are conducting, and/or have conducted similar studies.

Based on this research, a total of seventeen (17) resource maps were produced. The maps are listed by category with I. being the Cultural Features and Resources; these maps represent areas that are affected by human impacts or are a result of human impacts. Category II. maps are the Natural Areas, a final group, Category III. maps are described later in this plan and are the resultant maps of the four areas of concentration in the Plan of Conservation section. Much of the information used in producing these maps was collected by the volunteer efforts of the Commission members themselves. These members spent many hours compiling and analyzing data and producing draft maps which, once complete, were sent to a professional cartographer. Their volunteer efforts saved our town thousands of dollars over what a professional consultant would have charged to produce the same information.

I. Cultural Features and Resources

1. **Property Line Base Map**
   An updated property line map of all parcels in Brooklyn as of July 1991.

2. **Historic Districts**
   A property line base map showing the Historic Districts in Brooklyn and those properties which are on the National Register of Historic Places.

3. **Land in Agricultural Use**
   A property line base map indicating fields which were in some type of active agricultural use according to the USDA Agricultural Stabilization and Conservation Service records in 1991.

4. **Archeological Features, Unique Natural Areas**
   Prehistoric Native American Sites were identified by Nicholas Bellantoni, Connecticut State Archeologist based on known locations of sites compiled from various state records. The locations of Scenic Vistas, Rock Outcrops, and Unique Natural Areas are based on information obtained from Brooklyn residents either through the previously mentioned mail survey or during a public hearing held by the Conservation Commission on June 24, 1991.

5. **Committed Open Space**
   A property line base map showing all land in Brooklyn that is permanently protected from development. This includes state forest land, town owned conservation land, private land trust property, private lands containing easements to the town and/or other legal restrictions preventing development, and farmland where the development rights have been sold to the state. A complete listing of the open space land is included as Appendix B.

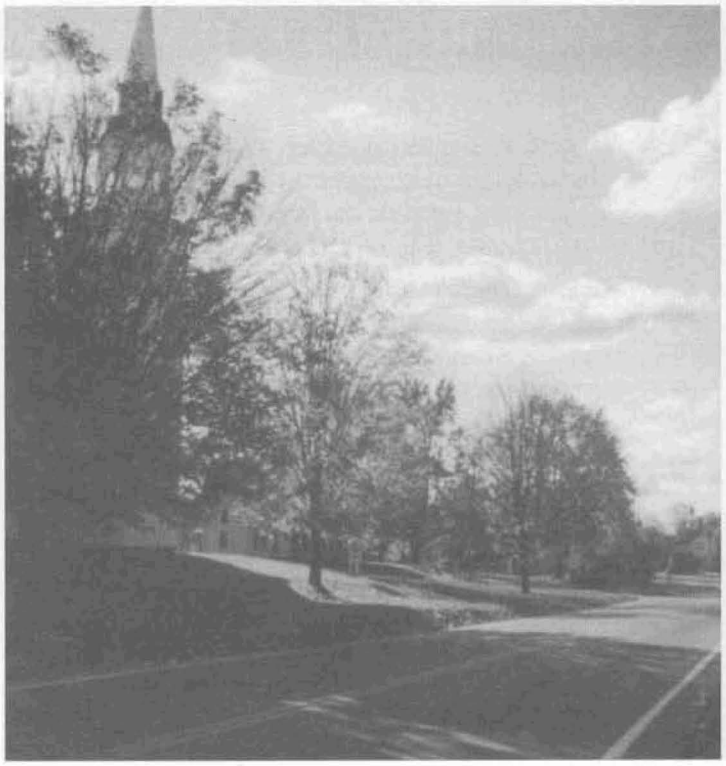
6. **Water Quality Map**
   A U.S. Geological Survey (USGS) topographical base map indicating the water quality in Brooklyn's streams and ponds as designated by the Department of Environmental Protection standards. The classifications are based on known discharges for surface waters and known well contaminations from ground water.

II. Natural Areas

1. **Flood Insurance Rate Map**
   A USGS topographical map indicating 100 year and 500 year flood hazard zones.

   The purpose of this map is to identify areas which are prone to flooding due to elevation and proximity to a water body and to discourage inappropriate development in those areas.

2. **Ground Water Resources**
   A USGS topographical map identifying saturated stratified drift aquifers which may be suitable for public water supply wells due to their extremely high water yield.



View of Brooklyn Center

Currently, a majority of the town's drinking water supply is provided from private wells. These untapped high yield areas could be of critical future importance if population growth or contamination of existing wells create the need for additional public water supplies.

3. **Drainage Basins**
   This map divides the entire town into drainage areas and identifies the direction of water flow out of each area. The edges of drainage basins are along ridge tops and other high elevation areas, from which surface waters flow downhill until they encounter a brook or watercourse which eventually outlets at the lowest point in the basin. There are several tiers of basins and sub-basins. The largest sub basin wholly within Brooklyn is 1600 acres and encompasses Stony Brook, which outlets into Blackwell's Brook. The most unusual sub basin flows north into the Quinebaug River near Day Street. It encompasses Long Brook and drains almost 1200 acres.

4. **Inland Wetlands and Watercourses**
   A USGS topographical map showing all town wetland areas as defined by the USDA Soil Conservation Service. The wetland areas are broken into three classifications: 1) upland wetland soils, terrace soils and flood plain soils, 2) inland organic soils, and 3) water bodies and streams.

   Regulated wetland areas are determined in Connecticut by soil type. A wetlands and watercourses map was overlaid onto the drainage basin map to show direction of flow. This map has already proven very helpful to the Inland Wetlands Commission in their review of applications.

5. National Wetlands Inventory

Wetlands delineated by vegetative cover in accordance with the Classification of Wetlands and Deep-Water Habitats of the United States, Cowardin, et al, 1977. U.S. Fish and Wildlife Service.

This map identifies wetland classes and types by vegetation. It is not used for regulatory purposes but was useful in identifying unique plant communities and wildlife habitat corridors. The map is not available in a reproducible format but it is available as a color copy.

6. Fisheries; Management for Trout and Anadromous Fish

Stocking of streams, and restoration of fish migration runs are indicated on a USGS map for major streams and the Quinebaug River in Brooklyn.

7. Steep Slopes

Slopes from 15% to 24% and slopes 25% and over are shown on a USGS topographical map.

This map is particularly useful for the Planning and Zoning Commission in the review of subdivision applications.

8. Productive Forest Soils

A USGS topographical base map showing soils which are particularly productive in growing trees and other forest vegetation. Soils are shown in two categories: Most Productive Forest Soils and Productive Forest Soils. The data was provided by the USDA Soil Conservation Service and is based on average growth rates of two key indicator species, northern red oak and eastern white pine, on soils with slopes under 15%. Because of their ability to produce forest biomass in abundance, these soils have high potential value for both forest products and as wildlife habitat.

9. Important Agricultural Lands

Prime Farmland Soils and Farmland Soils of Statewide Importance are identified on a USGS topographical map. The soil types were established in "Important Farmland, Connecticut" published by U.S.D.A. and SCS in May 1982. The areas identified are most suitable to farming operations.

10. Productive Wildlife Habitats and Habitat Corridors

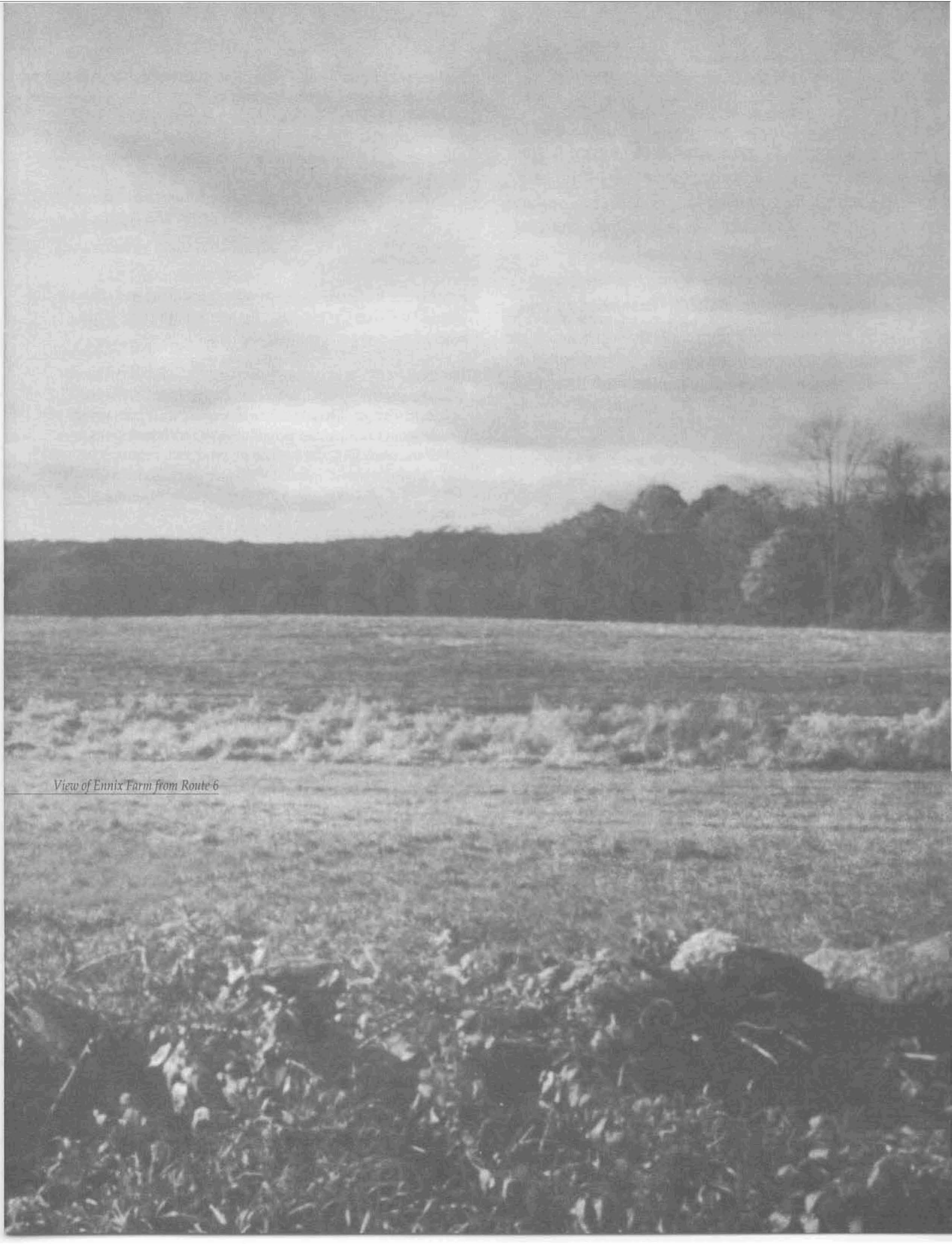
This map identifies priority wildlife habitat areas, defined as undeveloped areas greater than 200 acres in size which are predominately comprised of productive forest soils and wetlands. Such sites abundantly provide the food, cover and water which wildlife require, and are of sufficient size to allow most interior forest dwelling species to breed successfully.

The map also identifies important linking corridors between habitat areas, which prevent them from becoming isolated "islands". Such corridors allow for necessary migration, dispersal and interaction among wildlife populations and prevent population inbreeding.

11. Streambelt Map

The streambelts as delineated include areas in proximity to named streams and their tributaries, including lands subject to stream overflow, associated wetlands and other areas necessary as links to form a continuous streambelt system. The areas were delineated by representatives of the U.S. Soil and Water Conservation Service (SCS) with assistance from the Eastern Connecticut Resource Conservation and Development Project in April 1971 following a request by the Town of Brooklyn. The complete results of this analysis are listed in the Brooklyn Streambelt Report which was compiled by SCS. This map is not available in a reproducible format, only on paper copies.

In February, 1992, once most of these maps were complete, a second public hearing was held to present the information and seek questions and advice, about 60 citizens attended. Most of them supported the effort in general and several praised the Commission's efforts. A number of landowners in attendance, however, expressed a strong concern that a conservation plan would somehow result in a loss of private property rights. As with the input from the previous hearing and mail survey, the Commission incorporated all of these concerns and suggestions into the planning process.



View of Ennix Farm from Route 6