

## The Environment

### Goals and Strategies

The fragile features which form the natural environment – steep slopes, shallow soils, karst topography, wooded ridges and hilltops, major stream corridors, rich agricultural soils, wetlands, stream corridors, flood plains, and groundwater – must be protected from physical, chemical, biological, and aesthetic degradation to preserve the Town’s main natural and economic resources.

Recognizing the special nature of the Finger Lakes Region requires that a coherent and sustainable approach to development be implemented which provides special protections for surface water and groundwater quality, woodlands, wetlands, and agricultural soils.

The rural quality of the Town should also be preserved by maintaining a landscape where the predominant feature is the natural environment and the intrusion and impact of development is minimized.

### Natural Resource Protection

In order to preserve the rural character of the Town and the natural resource base upon which our community depends, important natural resources must be identified and conserved and land conservation and stewardship promoted. The Town should develop and maintain an inventory of natural resources which identifies areas of steep slopes, erodible soils, karst topography, agricultural and poor soils, unfragmented woodlands and forest, wetlands, aquifers, streams and floodplains, open fields, habitat for rare or threatened or endangered species, and other biotic, scenic, and outdoor recreational natural resources. It should identify, quantify, and describe the quality of surface and groundwater resources.

The critical natural resources identified must be reflected in Town planning through the development and maintenance of an Open Space Index, which identifies undeveloped lands for protection and establishes the pattern of future land use in the Town, and a Town Open Space Plan, which defines specific measures to make conservation of these priority natural resources possible. Town zoning ordinances, development guidelines, planning activities, and other initiatives must clearly reflect the identified natural resource protection priorities.

### Ecosystem Health and Biodiversity

Local ordinances, government initiatives, education programs, and other measures that encourage the protection and enhancement of the health and biodiversity of our natural resource base will be developed and promulgated. The use of native plants in landscaping, development, and land use should be encouraged with guidelines designed to foster the use and success of native species and to minimize the risk of introduction or increase of exotic invasive species. Populations of species facing declines due to loss of habitat should be protected through local measures as well as existing state and local laws. Management and stewardship of wooded lands to maintain healthy, productive forests resilient to catastrophic events such as pest infestation, windthrow, and fire should be encouraged. Development and planning guidelines will take into account and incorporate the requirements of maintaining ecosystem functions.

## Air Quality

Protection and improvement of air quality is an important part of public health and environmental protection. It is a necessary part of Town planning and will be ensured through education, ordinances, practices, and incentives that promote high quality air and deter air pollution. These should include encouraging the use of low-emission vehicles and discouraging open barrel burning, especially in residential areas, discouraging engine idling, and controls on emissions-producing heating systems or other sources.

## Waste Management and Recycling

Appropriate management and disposal of waste is critical to maintaining public health, the natural beauty of the landscape, and protecting community resources. Recycling and responsible disposal of waste should be promoted and facilities structured and operated to maximum benefit and minimum negative impact. Residents and businesses should be encouraged to select and work with disposal and removal contractors with practices that meet high health and environmental standards. The discarding of refuse outside of designated facilities should be curtailed and responsible waste management principles publicized and encouraged.

## Responsible Resource Use

Responsible use of water and energy resources by Town residents and businesses can help to ensure the future quality and viability of our community. Water recycling systems, technologies that minimize unnecessary water and energy consumption, and renewable and clean energy sources should be promoted and incentives for their use created wherever possible.

## Erosion Control

New development and activities on steep slopes can increase erosion unless proper erosion protection measures are taken during construction and incorporated into final design. Development plans in these sensitive areas must include erosion protection plans, and, in some more susceptible areas, development may be precluded. Banks of streams should be stabilized to prevent further erosion where public or private property or safety or natural resource integrity are threatened and eroded banks repaired, using recognized best management practices and techniques that minimize damage to the natural and visual environment.

## Recreational Use of Fish and Wildlife Resources

Recreational uses of natural resources include consumptive uses such as fishing, trapping, and hunting, and non-consumptive uses such as hiking and walking, boating, swimming, biking, horseback riding, wildlife photography, bird watching, nature study, and the like. The availability of outdoor areas for recreation is a community asset and valuable characteristic of the Town. Recreational use of resources such as parks, woodlands, and waterways will be promoted where appropriate in terms of public safety, public health, and resource conservation. Outdoor recreation should also be used to promote understanding of the natural environment and the development of a land stewardship ethic among recreational users. Recreational use must ensure the protection of flora and fauna and ecosystem function, and also take into consideration other assets provided by these resources such as the protection of air and water quality, promotion of public health, and economic uses of natural resources such as agriculture and forestry.

## Wetland Preservation

Zoning requirements and review of subdivision and site plans will be used to shield designated and other freshwater wetlands and their associated drainage basins from the adverse effects of development. Adverse effects include erosion, sedimentation, pollution, damage to wildlife habitats, destruction of hydrological function, and similar affects. In order to better protect

wetlands additional strategies may be employed, such as requiring impact mitigation through creative approaches to offsets that are designed to avoid fragmentation of contiguous wetland areas, rather than simple replacement. Some seasonal wetlands or those falling outside the protections afforded by federal and state law may need protection on the local level, particularly under circumstances where such habitats are being used by rare, threatened, or endangered species, or where the wetlands provide essential water recharge services for a connected aquifer.

### Scenic Resource Protection

Siting and design guidelines should be used to insure maximum protection of the Town's important scenic resources and ridge lines of the Bristol Hills, the natural scenic vistas created by unfragmented forests and old fields, undeveloped spaces, and agricultural lands.

Target areas are critical for scenic resources preservation and a process for open space planning must be developed that requires a more comprehensive approach to protect scenic resources. The Town should develop a comprehensive Open Space Index that identifies the Town's most important scenic resources. Following that the Town should prepare an Open Space Plan (created with community involvement), that recommends a specific action program. A variety of measures exist, including purchase of development rights, conservation easements, local land use ordinances, such as zoning and subdivision ordinances, and conservation development guidelines. An expanded Open Space Plan is needed that addresses the Town's scenic resources in a comprehensive manner and recommends specific measures in specific areas. It is of critical importance for the Town to possess this type of tool for land use planning and planned development purposes. The action program should involve the development and implementation of guidelines for building in scenic areas.

Each development situation is unique, and the guidelines will have to be applied accordingly and consider both the scenic resource and the Town's development objectives and priorities.

### Control of Quantity and Quality of Runoff

Stormwater runoff can significantly affect adjacent properties and water quality in streams, wetlands and reservoirs. To avoid adverse impacts the release of stormwater runoff from a developed area should not exceed predevelopment conditions unless drainage analysis recommends otherwise and stormwater control can be addressed through adequate structural means. The impacts of the "first flush" should be controlled in stormwater management plans because most runoff-related water quality contaminants are transported from land – particularly impervious surfaces – during the initial stages of a storm event.

Town ordinances and design guidelines will promote the goal of minimizing new impervious surfaces (paving, expansive parking lots, and other surfaces) that act as collectors and conduits of runoff. Alternatives to standard pavement and drainage structures will be evaluated and adopted as appropriate for maintaining high quality surface water and groundwater and to addressing the renovation of impaired surface water and groundwater quality.

### Lighting and Illumination

The vast expanse of unobstructed night sky and constellations is a significant feature in the rural environment. Necessary lighting should be shielded, directed downward, and limited in intensity to prevent light spillage that diminishes views of stars and planets or casts glare toward roads or adjacent properties.

## Promote Conservation Design

Many of the objectives set forth above can be accomplished by establishing a design process, particularly for major subdivisions, which arranges development on each parcel as it is being planned to preserve and protect sensitive natural and cultural features and environmental resources. This process, known as “conservation design” provides a density-neutral method of preserving streams and wetlands, natural habitats, flood plains, steep slopes, prime agricultural land, historic sites, scenic viewsheds, etc., in permanently protected open space while allowing development of the least sensitive lands. As opposed to conventional subdivision designs, this process allows the creation of linked systems of conservation land.