

Open Space and Recreation Plan 2010

Prepared by the Topsfield Open Space Committee

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The *new*
Topsfield Linear Common
- Recreational Path -

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Draft - sent to Dept. Cons. Svcs. 12/29/2010

Section 1 – Plan Summary

The Town of Topsfield, population, 6,352, is a semi-rural community located 25 miles north of Boston. Incorporated in 1650, the Town is noted for its picturesque Town Common in the heart of the Historic District, its numerous historic homes and estates, many of which have been subdivided into house lots, its scenic roads and historic Old Route 1. Routes I 95, 1 and 97 pass through the town allowing for easy access to the Route 128 corridor and the Metropolitan Boston area. The Ipswich River and its system of tributaries create extensive wetlands, flood plains, and other natural resource areas throughout the Town. Open Space, including the Ipswich River Wildlife Sanctuary, Bradley Palmer State Park and lands under permanent conservation restriction, comprises nearly one third of Topsfield's land area and provides opportunities for public recreational and educational use. Topsfield's agricultural heritage lives on through the annual Topsfield Fair, the nation's oldest agricultural exposition, owned and operated by the Essex Agricultural Society and a growing interest in the locally grown food movement.

Like other cities and towns in Massachusetts, Topsfield is experiencing a budget crunch as a result of declining State aid and local revenues. In spite of a sluggish economy and stalled real estate market, our small town is seeing a significant increase in building with two large senior housing developments slated for 2010.

Through a survey and public outreach, the Topsfield Open Space Committee has learned that the majority of town residents want to preserve the rural nature of the Town. This desire has been consistent for the past four Open Space and Recreation Plans over the past 16 years. Residents are concerned about encroaching development and how it will impact their scenic vistas and way of life. They are also worried about the financial burdens of a shrinking town budget.

In spite of an ageing population, town residents overwhelmingly wish to improve Topsfield's existing recreational trails and create a linked network of trails. The committee was surprised to find that the majority of survey respondents used Topsfield trails more than once a week.

The purpose of the 2010 Open Space and Recreation Plan is to provide for the preservation of Topsfield's rural character and protection of its environment by balancing the Town's open space and recreation needs with the Town's developmental pressures.

Many towns and cities in Massachusetts have become unrecognizable in just one lifetime through over-development. Rachel Carson wrote in *Silent Spring*, "There was once a town in the heart of America where all life seemed to live in harmony with its surroundings." It is hoped that this plan will offer realistic goals and objectives based on the desire of the community to retain Topsfield's precious natural beauty and rural character so that we may continue to live in harmony with our natural environment for generations to come

Section 2 – Introduction

A. Statement of Purpose

The purpose of this document is to develop a plan that will enable Topsfield residents to have a greater level of control over the long-term character of the Town of Topsfield (also the “Town”). The Open Space and Recreation Plan (the “Plan”) seeks to provide processes by which residents can balance the pressures of commercial and residential growth with the desire and need for open space and recreational areas. As development pressures increase, Topsfield will be faced with decisions regarding how best to use its limited natural resources by developing or preserving land and open space. This Plan, the fourth in a series of updates since 1994, will capitalize on the progress of the 2004 Plan with a focus on specific achievable goals that can be met during trying economic times.

Public interest in open space and natural resources has increased for a variety of reasons. The global debate concerning climate change has raised general awareness of environmental issues. The related “green” movement has also made the public more conscious of the environment, energy efficiency, and the importance of preserving natural resources. There has been an increased incidence of significant rain events over the past 14 years with notable storms causing widespread flooding in 1996, 2001, 2004, 2006 and 2010. In 2006 two people died in the swollen Ipswich River. In an effort to acknowledge the changes occurring to our planet’s climate, this plan will include a goal to achieve greater energy efficiency and thereby help reduce Topsfield’s carbon footprint.

Since implementing the 2004 Plan, the Town has secured grants for the following critical projects:

- \$92,000 to create a trail on an abandoned railway.
- \$8,500 Clean Energy Choice Community for energy audits on Town Hall and a solar power demonstration module
- Two EOEA Technical Assistance Grants through which the following were developed:
 - Storm Water and Erosion Control Bylaw
 - Water Conservation Plan
 - Open Space Residential Plan Bylaw
 - Low Impact Development Guidelines
- Topsfield Reconnaissance Report, Essex County Landscape Inventory, Massachusetts Heritage Landscape Inventory Program Massachusetts Department of Conservation and Recreation & Essex National Heritage Commission

Additionally, the Town has been able to protect fifty percent (50%) of three (3) critical properties from development.

B. Planning Process and Public Participation

I. The Planning Process

The current Topsfield Open Space Committee (“TOSC”) was re-constituted by the Board of Selectmen in January of 2004 to update the Open Space Plan of 1997. This was accomplished by volunteers and resulted in the submission of the 2004 Plan in the spring of that year. It was approved in 2005.

The TOSC added two new members during the planning process for the 2010 plan update. The current TOSC members are as follows:

Joe Geller, Chair (member since 2004)
Pamela Newport, Secretary (member since 2004)
John Beck (member since 2004)
David Merrill (member since 2004)
Reggie Lockwood (member since September 2009)
Melissa Ogden (member since January 2010)

Additionally, the following individuals and entities have provided tremendous support and assistance in the creation of the 2010 update:

- Martha Morrison, Chair of the Topsfield Board of Selectmen, and liaison to the Open Space Committee
- Topsfield Board of Selectmen
- Topsfield Planning Board
- Topsfield Conservation Commission
- Topsfield Historical Commission
- Topsfield Recreation Committee
- Topsfield Water Board
- Topsfield Zoning Board
- Topsfield Board of Health
- Topsfield Board of Water Commissioners
- Topsfield Finance Committee
- Topsfield Board of Assessors
- Topsfield Board of Park and Cemetery Commissioners
- Topsfield Council on Aging
- Tree Planning Committee
- Topsfield Agricultural Commission

In the spring of 2009, the TOSC began the update process by first querying all of the Town boards, committees and departments to update the 2004 Open Space and Recreation Survey.

Comments were taken into consideration and a draft of the 2009 survey was sent to all Town boards, committees and departments for review. The TOSC also contacted members of all the Town boards, committees and departments personally to ensure that all pertinent feedback was obtained in going forward for the new Plan. With guidance from the Topsfield community and its leaders, the TOSC completed a final draft survey (See Appendix A - Open Space and Recreation Survey). The approved survey was mailed to Town residents in April 2009 (See Appendix A for 2009 Open Space and Recreation Survey Results).

II. Public Participation

2009 Open Space and Recreation Survey – The Open Space Survey was mailed to town residents in April 2009. Appendix A.

Topsfield Trails Day – The Town hosted Topsfield’s first ever Trails Day inviting residents to a guided tour of three new trails, providing an opportunity for discussion and feedback on the Open Space and Recreation Plan update.

1st Day Hike – A trail hike was organized by the DCR, with participation of the Topsfield TOSC, and held at Bradley-Palmer State Park on Jan. 1st, 2010. Approximately 50 people attended.

Topsfield Linear Common Ribbon Cutting Ceremony – Coinciding with the Topsfield Trails Day, the Town held a celebration to open the new rail trail to town residents. A reception prior to the event provided an opportunity for TOSC members to gather feedback from residents about their recreation needs and updated them on the 2010 plan process.

Public Forum – The Town hosted a Public Forum on **June 21, 2010** on the draft plan. Residents were able to make comments and recommendations.

C. Enhanced Outreach and Public Participation

Topsfield does not meet the environmental justice criteria as established by the Commonwealth’s population criteria. No town recreational programs, either in the schools or through the Recreation Committee, that require fees will deny registration for financial reasons.

Section 3 – Community Setting

A. Regional Context

Topsfield is a small, semi-rural community of 8,230 acres situated approximately 20 miles north of Boston in the heart of Essex County. On its borders are Boxford, Wenham, Hamilton, Middleton, Ipswich, and Danvers. With the exception of Danvers and Middleton, all of these towns still retain a rural character of their own, although all are threatened by encroaching development. Topsfield's excellent reputation as a town in which to live due to its schools, character, proximity to Boston and desirable neighborhoods assures that there will be continuing pressures for development both residentially and commercially.

Topsfield is linked to neighboring towns by a network of old County Roads, including Route 97, and to the Boston Metropolitan area and the Route 128 corridor by Routes 1 (Newburyport Turnpike) and I-95. Route I-95, Route 1 and Route 97 running north from Beverly are the main north-south connectors for the Town. Topsfield's Washington Street, High Street, and Ipswich Road provide the main east-west connectors through town.

An abandoned rail line, the Newburyport Branch of the Boston and Maine that ran from Wakefield to Newburyport, also runs through Topsfield. Abandoned for passenger service in the 1950's and freight service in the 1970's, the rail bed is now being developed into an Alternative Transportation Corridor (ATC) or recreational trail that ultimately will connect with trails on the railbed in towns from Salisbury to Boston. The recreational trails of other towns along this branch of the rail line are in various stages of development.

Topsfield centers on a National Register Historic District that is also a Local Historic District under the jurisdiction of the Historic District Commission. One of the best preserved town commons in New England, the Common features historic municipal and private structures from a number of eras of American architecture surrounding an open green areas, including the Veterans' Memorial Green with commemorative war memorials. Among the structures around the Common are the Parson Capen House, a National Register Landmark maintained by the Historical Society, the 1842 archetypal white steepled meetinghouse and the Federalist Emerson Center belonging to the Congregational Church, and the Town's Victorian Gothic Town Hall, Georgian Revival Library and Proctor School. Nearby is a small shopping center with small "Mom and Pop" stores. Topsfield does not have large strip malls or chain stores as are abundant in the abutting towns of Danvers and Middleton, but it does have several automobile businesses and industrial structures on a portion of Route 1 between the Fairgrounds and Route 97, as well as three (3) business parks farther north on Route 1.

The primary reason Topsfield has been able to retain its rural character is that approximately one-third, or 2,850 acres, of the total area of Topsfield is owned by various entities that consist primarily of a Massachusetts Audubon Sanctuary, land owned by Essex County Greenbelt, a portion of Bradley Palmer State Park, a portion of Willowdale State Forest, the Beverly-Salem Water Board land, land owned by the Town of Topsfield, and lands that individual residents have placed under Chapter Land classification which provides property tax benefits for encouraging the conservation, preservation and development of land for forest, agricultural and certain recreational uses. In addition, the Town has developed various protective by-laws,

including the Scenic Overlay Zone running along Route 1 from the Ipswich River to the Danvers line. This overlay zone establishes development standards along Topsfield's "scenic highway."

The Ipswich River is one of the most important natural features in the Town. However, in 2003 the Ipswich River was designated by the environmental group, American Rivers, as one of the country's ten most endangered rivers, a designation it still carries. In recent history, sections of the Ipswich River upstream of Topsfield have reported to have been "pumped dry" in the summer to meet increasing water demands of some of the 14 cities and towns drawing from its watershed. The restriction of water use based on river flow should help improve the condition of the Ipswich River, though continuing development of the 14 communities continues to pressure the river's water levels, endangering its quality, and the river's ability to sustain its native fish and wildlife population. In the summer of 2009, the towns of Reading and Wilmington stopped drawing water from the river, which may improve its flow in years to come. The river's source is in Wilmington, Massachusetts, and it flows in a northeast direction for about forty-five miles to Ipswich, where it empties into the Atlantic Ocean. More than seven miles of the river flow through Topsfield. The river also has several tributaries throughout Town, namely, Fish, Mile, School, Pye, and Howlett Brooks. Seasonal flooding in years of normal or more-than-normal precipitation is common and has been exaggerated by the filling of wetlands and the channeling of streams over the past decades. While the Town of Topsfield does not draw its water supply directly from the River, it does draw from the river's watershed, which is a vital natural resource for preservation of wildlife and recreation.

The open lands within Topsfield have significance beyond the Town's lines. Bradley Palmer State Park, Willowdale State Forest, the Massachusetts Audubon Sanctuary and the Salem and Beverly Water Supply Board's land all cross into adjoining towns. There is considerable regional interest in the protection of surface water quality for the Ipswich River watershed. In addition, the potential and existing linkage of trails and wildlife corridors increases the value of these open space and recreational assets for the Town, as well as for the entire region. Cooperation with adjacent towns should ensure that land use, zoning, and conservation measures are complementary, and may expand conservation and recreation benefits.

B. History of the Community

Three hundred and fifty years ago, the land, which today makes up most of Essex County, was the home of the Agawam Indians. In 1638, their Sachem, Masconomet, deeded the bulk of this land to John Winthrop, son of the first governor of the Commonwealth, for twenty pounds.

Topsfield's first settlers arrived about 1641. They named the area "New Meadows" which was taken from the Indian name, She-ne-we-medy, "the pleasant place by flowing waters". In 1648 the name was changed to Toppesfield, and eventually to Topsfield, after a small parish in Essex County, England, just north of London. The Town was incorporated in 1650.

Most of the early settlers were farmers. Corn was one of their major crops; therefore, grinding became an important industry. In addition to farming, there are records of a sawmill, with shoemaking, tanning, tailoring and blacksmithing being other early trades. Route 1 (Newburyport Turnpike) opened as a toll road in 1805. There was an attempt to establish a copper mine, which failed, and in the 1850's there were shoe factories on either side of Main Street. The first railroad cars passed through Topsfield in 1854.

Soon after 1900, with the advent of automobiles and improved roads, the Town became a favored residence for those whose work took them to Salem, Beverly, Lynn and Boston. Many of the small farms were bought up to become part of large estates, but the day of large estates, like the Town's industrial period, was of short duration.

In 1932, the present Proctor School was built and currently houses grades four through six. In 1963, the Steward School was opened and currently houses the Steward Station (a supplemental kindergarten and day care program), pre-school, and kindergarten through third grades. Topsfield students in grades 7 - 12 attend Masconomet Regional Middle School and High School, with students from Boxford and Middleton. Masconomet is located just across the Topsfield line in Boxford.

In 1946, Topsfield adopted its first zoning bylaw that has been amended and revised over the years to adapt to changes in State law and local needs. In 1956, a building code was adopted. Currently, minimum lot sizes range from a half-acre to two acres. In 1954, a soil removal bylaw was voted to control indiscriminate stripping of loam and excavation of gravel. In 1961, a Master Plan was developed. In 1964, a Flood-plain district was added to the zoning bylaw. In 1972, a Conservation Commission was appointed under the State Wetlands Protection Act. A Historical District and a Business District were both established in the 1970's. In the 1950's and 1960's, the Town experienced rapid population growth, doubling in size, becoming a bedroom community for residents working in surrounding commercial towns.

In 1976, the Topsfield Housing Authority developed Little Brook Village to serve the senior population. Subsequently, Washington Meadows, partially supported by federal funds, was also developed to provide affordable senior housing. In the mid-1990s, a cooperative community, called Great Hill was established to provide over-55 housing; this community helped to preserve a significant hillside area. More recently, the former Nike Village has been converted by Northeast Health Care into residences for individuals being served by the Department of Mental Health.

Since the 2004 report, Amberwood Farms, which was permitted as a 40B project with 24 units, 6 of which are affordable, was built to serve Topsfield's over-55 population. This year two additional over-55 developments have been permitted: New Meadows on Route 1, with 24 two (2) bedroom units, and English Commons, with 50 two (2) bedroom units, on the former Page estate, which lies between Route 1 and Rowley Bridge Road. Both contain significant open space components. By virtue of the Town's Open Space Residential Development Bylaw at least half the acreage of these two newest over-55 developments will be added to the Town's Open Space Inventory.

In addition, the Hickory Beech subdivision, located at 120 High Street, created out of 79 acres, half of which has been set aside as open space.

The Downtown area has also experienced new development with the addition of the New Meadows Market Alex's Roast Beef, and Topsfield Station, located adjacent to the Topsfield Linear Common, the recreational trail on land leased from the MBTA in 2006.

A separate Board of Health was established in 1982, and the Town voted a local wetlands bylaw in 1983. In 1985, the Town center was renovated with the installation of new curbing, and new trees and plantings. In 2005 and succeeding years, the Town adopted the Scenic Overlay District Bylaw, a Scenic Road bylaw, a Stormwater and Erosion Control Bylaw, and a Water Conservation Bylaw, all designed to protect the scenic and natural resources of the Town.

In the 1970's, Klock Park, an area of nineteen acres, was developed off North Street with baseball and soccer fields. Between 1997 and 2004, the TOSC created Pye Brook Community Park on the site of the abandoned landfill, located adjacent to Bare Hill Road and Route 97. The park includes active and passive recreational opportunities as well as additional playing fields for the Town. More recreational opportunities were created in 2009 with the addition of a new playing field at Pye Brook Community Park, which was created in connection with the formation of a new girls' field hockey league in Topsfield and the first phase of the Topsfield Linear Common, a recreational path on the abandoned B&M rail corridor was built. Currently, there over twenty playing fields or practice fields in Topsfield, which are as follows:

- Emerson Fields: 3 softball fields
- Proctor School: 1 baseball field; 1 softball field and 2 tennis courts
- Steward School: 1 baseball field and 2 tennis courts
- Klock Park: 2 baseball fields and 4 soccer fields
- Pyebrook Community Park: 2 baseball field, 4 soccer/lacrosse/football fields and a frisbee golf course,
- Topsfield Fairgrounds Central St: lacrosse/practice fields
- Topsfield Fairgrounds Wheatland Field: football/lacrosse
- Normandy Row Park: practice field

Generally speaking, Topsfield is still small enough to have a feeling of “neighborliness” and also be considered by its residents to be “rural”. The 2009 survey results indicate Topsfield’s residents most value scenic vistas, open space and town character. The village center offers a focal point for shopping and services, and many group activities take place in the churches, library, town hall, and schools.)

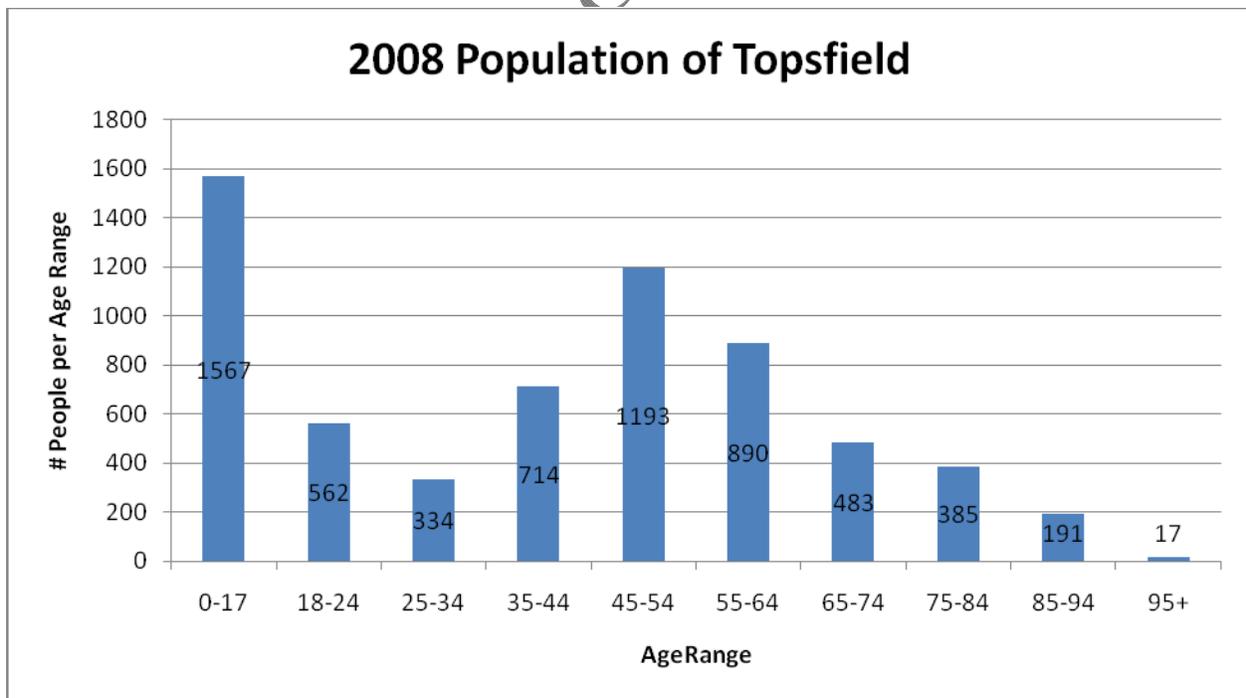
C. Population Characteristics

Topsfield’s population and housing units in absolute numbers have changed as follows:

| Year | Residents | Change | Housing Units | Change |
|------|-----------|--------|---------------|--------|
| 1970 | 5,225 | | 1,405 | |
| 1975 | 5,709 | +484 | N/A | |
| 1980 | 5,721 | +12 | 1,788 | +383 |
| 1985 | 5,939 | +218 | N/A | |
| 1990 | 5,841 | -98 | 1,967 | +179 |
| 1995 | 5,624 | -217 | N/A | |
| 2000 | 6,410 | +786 | 2,144 | +177 |
| 2005 | 6,392 | -18 | 2,208 | +54 |
| 2010 | 6,344 | +13 | 2211 | +3 |

As the above figures show, between 1970 and 2000, a population increase of nearly 23% was matched by an increase of 57% in the number of housing units in Topsfield, indicating fewer residents per household. Based on the 2009 Town census, there are 479 residents per square mile. The average family income, based on the 2000 U.S. census information, was \$96,430 per year, with approximately 2,099 families residing in Topsfield. The majority of residents (82%) work outside of Topsfield, which is down slightly from 1990. One reason for the small number of residents employed in Town is that only about 5% of the properties are devoted to commercial and industrial purposes. These are located primarily in the Business Village District and along Route 1 near its intersections with Route 97, Ipswich Road and especially, North Street in several small office parks. These businesses are relatively small and have few employees. In addition, employment opportunities within Topsfield will be based on the development of small office parks with little or no new manufacturing due to resident opposition to this type of development (See Appendix A). However, numerous job opportunities exist both in nearby towns and cities (i.e. Beverly and Salem, and in Boston and on Route 128).

The total population increase for the 39 year period from 1970 to 2009 was 1180 people and is characterized not only by increases, but also by notable decreases, especially in the last 10 years. The cyclical increases and decreases in population, matched by solid and marked increases in the number of housing units, is most likely explained by the number of older residents in Town. In 1970 there were 3.7 persons per household. This decreased to 2.9 in 2010. Currently about 30% of the population is over 55, which has led to this decreasing ratio of occupants per residence. This, combined with generally smaller families and larger building lots has meant that Topsfield has undergone “suburban sprawl” over the past 20 to 25 years regardless of its relatively stable population.



Although the population has remained fairly stable over the past several years, the demographics of the Town are changing. After an influx of young families to Topsfield, the population of school age children is declining (from a high of 796 students in grades Pre-K through 6 in 2000-

2001, to 677 students enrolled in the same grades in 2008-2009). Currently, there are approximately 1400 senior citizens living in Topsfield. This number is projected to trend upward due to the growth of planned housing developments targeted towards senior citizens (i.e. English Commons and New Meadows, as previously described), as well as increases in the number of baby boomers who are remaining in their homes longer. A declining number of children combined with the increase in elderly housing developments in Topsfield (i.e. English Commons and New Meadows) result in a median population that is growing older. The 2009 survey indicates the need for more recreational trails, as our senior citizens are physically active.

D. Growth and Development Patterns

1. Patterns and Trends.

Generally, Topsfield has retained its desired rural character, as its growth has been orderly and rather static in comparison to surrounding communities, due in part to the large land holdings discussed in Section 3(B) of this plan. It is now primarily a bedroom community with little commercial or industrial development. Residential growth in several areas in the Town, however, has nearly exhausted the remaining building space with little or no provision for open space. See Map 3 - Zoning.

Reflecting the stable population in Topsfield, we have seen very few single family building permits over the past several years.

| Year | Single Family Buildings | Condominium Units |
|--------------------------|-------------------------|-------------------|
| FY2005 | 3 | 4 |
| FY2006 | 6 | 0 |
| FY2007 | 2 | 0 |
| FY2008 | 2 | 0 |
| FY2009 | 3 | 0 |
| FY2010 (as of 3/10/2010) | 3 | 3 |

The cost of various property classifications has been estimated using the COCS (Cost of Community Services) calculation. A COCS ratio greater than 1 indicates the property classification costs the Town more in services than it receives in revenue from taxes. For residential properties the taxes required in FY '08 to support those properties were \$14,539,676.00 while it the Town actually received \$13,648,980.00 in real estate taxes. This represents a net loss of \$890,696.00. At the other end of the spectrum open space and chapter land have a ratio of 0.057. The cost to the Town was \$1,384.00 while those lands generated \$24,428.00 in taxes. The COCS shows there are positive financial benefits to the Town for commercial, industrial, agricultural and open space and chapter land.

| Property type | Assessment/ acre | Taxes req'd. | Taxes FY'08 | COCS ratio |
|--|---------------------|--------------|--------------|---------------|
| Residential | 306,000 | \$14,539,676 | \$13,648,980 | 1.065 |
| Residential (Elderly Housing District) | 236,000 | \$379,439 | \$365,740 | .816 |
| Mixed use Residential | 393,000 | \$321,393 | \$309,789 | .964 |
| Mixed use Commercial/Industrial | 649,000 | \$39,891 | \$99,843 | .303 |
| Commercial/Industrial | 207,000 | \$329,781 | \$825,402 | 0.400 |
| Agricultural | 282 | \$252 | \$1,161 | 0.217 |
| Open Space + Chapter land | 382 | \$1,384 | \$24,428 | 0.057 |

The Town's requirement that all lots provide for on-site sewerage disposal serves to limit unchecked commercial and residential growth. One of the issues that the Town may face is the impact of the State's year 2002 change in Title V soil infiltration times (from 30 minutes/inch to 60 minutes/inch while the Town's bylaw is 20 minutes/inch) and the ability of developers to provide for community septic systems. Lands that could not previously be developed may now be buildable and even further building could be realized if community septic systems are installed (as is planned for the English Commons and New Meadows properties). A town-wide sewer system has been consistently rejected for economic reasons and on the belief that it would destroy the town's rural character and permit development of land presently marginally suited because of wetlands, high water tables, unsuitable soils (such as clay) or steep slopes. A recent change in the septic system design bylaw no longer permits retaining walls for breakout grading which protects the land by increasing the available septage filtration.

The Topsfield Selectmen appointed a Commission to analyze the Board of Health regulations pertaining to on-site disposal systems (OSDS) in 2004 to analyze the existing Board of Health regulations supplemental to Title V and to study the consequences of changing these to conform to the recently enacted rules by the State. The Topsfield Board of Health Regulations Review Committee (BOHRRC) issued a report on February 17, 2005 that contained a number of findings relative to the present regulations and the possible results of amending these to the lower percolation limits. The Committee then recommended that the Town *not* adopt the new soil percolation limits promulgated by the DEP as the Committee's findings indicated that these would threaten the Town's water supply by raising the nitrate levels in the groundwater in excess of the EPA limit of 10 mg/l. The detailed analysis of this threat is contained in the report available on the Town's website (www.Topsfield-ma.gov/documents). Subsequent to the issuance of that report, the Topsfield Board of Health declared its intention to maintain the current percolation limit of 20 minutes per inch.

Regulation of the number and type of commercial and light industrial development uses was realized in the late 1970's when the zoning bylaws were amended to create a Business Park District north of North Street extending along both sides of the Route 1 (Newburyport Turnpike) for a maximum depth of 200 feet. Previously, development along Route 1 in Town had varied between residential and business uses with no attempt to separate the two.

Topsfield's Executive Order 418 Community Development Plan focused on Housing and Economic Development in that the Open Space and Transportation components were fulfilled by Topsfield's Open Space Plan and the State's regional transportation plans. To accommodate more diverse housing opportunities, mixed-use development is now permitted by Special Permit

in the four business districts. Before the recent downturn in the housing market, two over 55 communities completed the permitting process and a subdivision of 20 new houses in the Hickory Beech 78 acre development (with a 39 acre open space set aside) was approved. The English Commons will have fifty (50) units sited off of Rt. 1 on property formerly owned Boston College. The 68-acre parcel will have 50 acres set aside for open space. The New Meadows development is also sited on Rt. 1 on the New Meadows golf course. Topsfield earned Housing Certification from the Commonwealth of Massachusetts and has a re-utilization and improvement plan to produce seventeen (17) units of affordable housing per year over a 10-year period. The English Commons project has begun construction and the New Meadows development will begin shortly.

As for Economic Development, at the 2009 Town meeting, zoning changes included the expansion of uses in the Business Highway and a new business district, the Business Highway North District, was created. Goals of these changes were to establish acceptable uses for these areas and bring existing non-conforming uses into conformity in order to provide the Town with some control over how the lots might be developed in the future. Uses of the property were specified limiting development to respect the surrounding residential neighborhoods. This also has the effect of minimizing the possibility of a property-by-property appeals process for future development and provide uniform regulations.

Topsfield has an improved Open Space Residential Development Bylaw for parcels over 10 acres which may serve to alter future residential development from the typical Form A lots. The benefits to the Town and Open Space are: to allow for greater flexibility in the design of residential developments in the Inner Residential and Agricultural District and Outlying Residential and Agricultural District; to encourage, for conservation and recreation purposes, the permanent preservation of open space, agricultural land, woodland, wildlife habitat, other natural resources including aquifers, water bodies and wetlands, recreational, historical and archeological resources; to encourage a less sprawling and more efficient form of development that consumes less open land and conforms to existing topography and natural features, than a conventional or grid subdivision; to minimize the total amount of disturbance on the site of residential developments; to further the goals and policies of the Topsfield Open Space Plan; and to facilitate the construction and maintenance of housing, streets, utilities, and public services in a more economic and efficient manner while protecting open space. Ownership of the open space can be held by a corporation of the land owners, by the Town of Topsfield, by an independent conservation entity approved by the Planning Board, or in common by the owners of the land in the tract.

To protect its historic and natural resources, as noted above, Topsfield adopted a Scenic Roads Bylaw, a Scenic Overlay Zoning District along old Route 1, a revised and more stringent Open Space Residential Development Bylaw, a Stormwater and Erosion Control Bylaw, low-impact development guidelines and Water conservation bylaws.

2. Infrastructure

a) Transportation Systems.

The major East-West roads in Town are Washington Street, High Street and Ipswich Road, while Routes 1 (Newburyport Turnpike) and 97 (Haverhill, High Street and Valley Road) serve as the

main North-South connectors. Nearly all other roads are connections between or among the various residential areas in Town with the notable exception of Route I-95 that cuts through the extreme southwest corner of Town.

Public transportation to Boston is provided by The Coach Company. There is no direct rail service to Topsfield; however, residents can use MBTA trains from Ipswich, Hamilton-Wenham, North Beverly, and Beverly. Public transportation to Logan Airport is available in Peabody using the Logan Express parking lot and bus.

For ten days each year, the Topsfield Fair, the oldest agricultural fair in the United States, is held at the fairgrounds on Route 1 attracting nearly a half million visitors. Traffic becomes somewhat congested during this time, especially during the two weekends the Fair is in session when backups occur on Routes 1 and 97 and as far south as I-95. However, one can travel to all other parts of Town during Fair week without trouble provided alternate secondary roads are traveled. The current practice of residential development using cul-de-sacs provides for quiet neighborhoods with the consequence of increased usage of major connector roads in town is continuing as is cluster housing with open space making up for the acreage lost per the zoning requirements. This pattern is expected to continue as many undeveloped lots and the larger underdeveloped holdings in Town have become “pockets” in surrounding developed areas.

The Topsfield Linear Common recreational path, which was overwhelmingly supported in the past three Open Space surveys, is in process of being built. The path is being built on the abandoned B&M railroad utility corridor, which was known as the Newburyport Branch from Wakefield to Newburyport. The corridor is about 4 miles in length and will become part of the Border-to-Boston trail, which will also become part of the East Coast Greenway, a trail from Florida through Maine. We expect the built portions of the trail to be almost 1 mile in length by the spring of 2010.

A walking path was constructed along South Main Street from Maple Street to Salem Road to provide a safe off-road path for the many people who walk “the circuit” through the River Road National Historic Register District that includes a portion of the heavily traveled South Main Street. This path also allows safer access to the Topsfield Fairgrounds and the Ipswich River canoe launch.

b) Public or Private Water Supply Systems:

Topsfield currently meets its demand for potable water by utilizing the area’s ground water resources. Topsfield does not use surface water bodies such as brooks, ponds, and the Ipswich River as a direct supply of drinking water. However, these bodies are linked to the availability and quality of the ground water supply (See Map 6- Water Resources). During the summer and early fall, the groundwater is recharged by water that percolates through the beds of streams, ponds, and rivers, as well as by rainfall. The greatest benefit of groundwater is the filtration that occurs as the water flows through the soil, naturally removing impurities and microorganisms.

Approximately fifteen percent (15%) of the Town’s residents obtain their water from private wells that range in depth from 10 to 4000 feet or more. The Eagle Tor water system uses four interconnected shallow wells to supply approximately fifteen (15) homes. The Topsfield Water Department has nearly 1,750 connections that serve domestic, commercial, municipal, and

industrial users. The Town pumps approximately 150 million gallons of water a year to serve its customers, whose average usage is approximately 80,000 gallons.

The public system utilizes an unconfined (water table) aquifer made up of sand and gravel deposits that are approximately 40 feet deep. The supply system consists of two well fields. For security reasons, these well fields will be referred to as “A” and “B”. The “A” well field uses 36 interconnected shallow wells and is capable of pumping 900 gallons per minute to meet peak demands, but normally operates at 550 gallons per minute. The “B” well field uses 20 interconnected shallow wells and produces 300 gallons per minute.

The quality of the Town operated water supply has changed very little in the last 50 years. Currently, one part per million of sodium fluoride is added to prevent tooth decay, potassium hydroxide is used to reduce the corrosive effects of the water and sodium hypochlorite is used as a disinfectant.

The Water Department has two principal water resource concerns: the vulnerability of the Town’s aquifer to contamination and the ability to provide water during high volume drought season. Unconfined aquifers are particularly susceptible to contamination due to the lack of a confining layer that would act as a barrier to any contamination percolating down from above. The proximity of main roads and gasoline stations near the supply areas heightens the risk of contamination.

The Water Department operates under a stringent water withdrawal permit from DEP. Meeting the Town’s burgeoning demand for water during the high volume and dry summer months is another major area of concern for the Water Department. This is an issue that all of the communities utilizing the Ipswich River Watershed share. Summer water use is double or triple winter use in most of these communities. A major culprit for the increase is due to lawn watering. This dramatic increase in demand coupled with hot, dry weather results in the Town pumping more water than allowed by the Commonwealth.

The Ipswich River is not as threatened as it was in the past during the summer months. Annual and summer water withdrawals are trending downwards due to a variety of factors including the Towns of Reading and Wilmington now using MWRA supplied water, wet summer weather, mandatory outdoor watering bans during periods of low Ipswich River stream flow, leak detection efforts and replacement of inefficient plumbing fixtures.

c) Sewer Systems

In the Town of Topsfield, there is no public sewer system. Therefore, homes, offices, and any industrial-use buildings rely on in-ground septic systems for the disposal of sanitary sewerage. These are systems comprised of a holding tank and leaching areas which consist of leaching fields, trenches, leaching pits, galleries, or chambers. The liquid portion of the waste or effluent percolates through the ground locally. Septage, the more solid residue, is pumped from the holding tank and is disposed of at a treatment facility outside the community.

The Town’s public water supply is dependent upon the quality of our ground water. The proper functioning of our septic systems is vitally important. The functioning of storm drains is also important since storm water runoff collects fecal bacteria from a variety of sources, including

failing septic systems, pets, farm animals, birds and other wildlife and transports it long distances via streams, ditches, and especially, the municipal street drain systems.

The design and location of septic systems is regulated by the Commonwealth's Department of Environmental Protection (DEP) by means of the Title V regulations (30 CMR 15.00) and the Town of Topsfield's Board of Health, which also monitors the installation of the system itself.

New DEP Title V regulations became effective in March 1995 and were again changed in 2002. The change in percolation rate (2002) and its impacts have been previously mentioned. Many aspects of these new regulations will directly impact sewage disposal systems in Topsfield and future development. The Topsfield Selectmen appointed a committee to review the impact of proposed change, which consisted of representatives from the TOSC, Conservation Commission, Board of Health, Planning Board and two non-affiliated volunteers. The committee recommended the percolation rates should not be changed as it might increase the nitrate effluent concentration.

3. Long-term Development Patterns

The Metropolitan Area Planning Council (MAPC) conducted a build-out analysis for the Town of Topsfield in 2001. The study was reviewed and revised by a local mapping committee to correct significant errors and apply conditions specific to Topsfield. The largest error originated from the Coolidge Estate where 550 acres were calculated for development when there was a conservation restriction placed on the property by the owner, Massachusetts Institute of Technology. When looking at the corrected data, from both the MAPC analysis and the local revisions, it was determined that Topsfield was nearing maximum buildout assuming current zoning, Title V, and wetlands regulations. This study became the basis for land use planning because it allowed Town boards to consider the location and character of the remaining land, the potential impact of full development on Town services and the best uses for this land. The projections from the Buildout Analysis are summarized in the following table:

Draft - sent to Dept. of Conservation and Recreation, 12/1/01

| 2001 Buildout Analysis (a projection to the future) | | |
|--|-------------------------|------------------|
| Demographic Projections | Year | Statistic |
| Number of Residents | 1990 | 5,754 |
| | 2001 | 6,141 |
| | MAPC Projection | 8,771 |
| | Topsfield Projection | 8,099 |
| Students (K-12) | 1990 | 922 |
| | 2001 | 1,222 |
| | MAPC Projection | 1,560 |
| | Topsfield Projection | |
| Residential Units | 1990 | 1,910 |
| | 2001 | 2,144 |
| | MAPC Projection | 3,167 |
| | Topsfield Projection | 2,906 |
| Water Use (gallons/day) | 2001 | 505,000 |
| | MAPC Projection | 734,598 |
| | Topsfield Projection | 651,845 |
| Buildout Impacts | | |
| Additional Residents | Topsfield Projection | 2,630 |
| Additional Students (K-12) | Topsfield Projection | 338 |
| Additional Residential Units | Topsfield Projection | 1,023 |
| Additional Developable Land Area (acres) | Topsfield Projection | 1,990 |
| Additional Commercial/Industrial Buildable Floor Area (sq ft) | Topsfield Projection | 431,491 |
| Additional Water Demand at Buildout (gallons/day) | | |
| • Residential | Topsfield Projection | 197,236 |
| • Commercial & Industrial | Topsfield Projection | 32,362 |
| Additional Solid Waste (tons/yr) | Topsfield Projection | 1,349 |
| Non-Recyclable waste | Topsfield Projection | 959 |
| Recyclable waste | Topsfield Projection | 390 |
| Additional Roadway at Build out (miles) | Topsfield Projection | 20 |

Full build-out as zoning allowed (i.e. single-family homes on parcels of one or two acres), would have a significant impact on demand for Town services, including the Town's limited water supply, with alarming fiscal and resource management implications. The unbuilt parcels were located in residential zoning districts along Route 1 and otherwise scattered throughout the town in a patchwork of developed, undeveloped, and permanently protected open space parcels. In addition, development of these parcels would, in some instances, further fragment open space, dividing habitats and diminishing the environmental benefit of open space tracts. In that the undeveloped land did not cluster in any sort of coherent way, these parcels did not lend themselves to the creation of a new zoning district dedicated to a particular use, such as mixed-use, commercial or industrial uses. Of particular significance, the southern end of Route 1 with its stone walls and large trees is the "gateway" to Topsfield - a cherished landscape identified as one of Topsfield's heritage landscapes in the 2005 Topsfield Reconnaissance Report of the Essex County Landscape Inventory, Massachusetts Heritage Landscape Inventory Program. In addition, the remaining parcels were in large part marginally appropriate for development because of poor soils, wetlands, or steep slopes. In a number of cases, there had been efforts in the past to develop the land without success because of these constraints. Experience with similar properties had shown that alternation of such land led to significant problems with erosion and stormwater management.

Topsfield's current zoning and resource management regulations reflect the Town's response to these issues. Zoning Bylaws allowed for one- and two-acre single-family home development in most of the Town with commercial and retail uses allowed only in the small Business Village District and in two districts on Route 1. The Town already had in place a strict General Wetlands Bylaw (Town of Topsfield Code, Chapter LXII). Board of Health regulations have traditionally been stricter than Title V relative to perc and flow rates, among others. The Elderly Housing District Bylaw (Topsfield Zoning Bylaw, Article III, 3.16), allowing multi-unit dwellings on parcels greater than 10 acres in residential districts by Special Permit and Town Meeting adoption of a new overlay district, allows 5 units per buildable acre with a maximum of 74 units. All other land in the parcel is protected from future development by terms of the Bylaw. From 2004 to 2008, new bylaws were adopted by Annual Town Meeting. A small new commercial district was established at the intersection of Route 1 and Ipswich Road. Mixed-use zoning was adopted for all four of Topsfield's commercial districts, and uses in the Route 1 districts were expanded to include more retail uses.

These changes were made to address existing non-conforming commercial uses in the districts and to encourage diversity in housing stock and the creation of small-scale retail and commercial establishments. The Scenic Overlay District Bylaw (Topsfield Zoning Bylaw, Article XIV, 2005) establishes development standards for the Route 1 corridor from the Danvers town line to the Ipswich River. These are designed to protect and preserve the scenic and rural character of the southern entryway to the Town. The Stormwater Management and Erosion Control Bylaw (Town of Topsfield Code, Chapter LI, 2005), developed with the assistance of MAPC under a Technical Assistance Grant from EOEEA, establishes standards and controls for the alternation of over 7500 sq. ft. of land on existing or proposed slopes less than 15% and 4000 sq. ft. of land on existing or proposed slopes over 15%. This Bylaw ultimately protects water quality in the Town. A strict Water Conservation Bylaw brings Topsfield in line with DEP's requirements relative to the Ipswich River Watershed. Most important, Topsfield's Open Space Development

Plan Bylaw (Topsfield Zoning Bylaw, Article IV, 4.09, 2007) was revised to better define the nature, future use and location of land to be set aside as open space. In particular, no more than 50% of the land can be already protected wetland or river-front area; the open space must be “suitable for and protected and maintained for wildlife habitat, conservation, historic preservation (landscapes and/or structures), outdoor education, passive or active recreation, park purposes, agriculture, horticulture, forestry, or any combination of these uses;” and the open space must be in one contiguous parcel and, where possible, be contiguous with existing open space in abutting parcels so as to create large, unbroken, permanently protected areas.

All of these local land-use regulations allow for the development of property but provide protections for Topsfield’s character and environmental and scenic resources. Of note in this Plan, they are designed to maintain the quality of Topsfield’s existing open space and plan for the creation of future permanently protected open space that is continuous and will accrue to the public’s benefit

Draft - sent to Dept. Cons. Svcs. 12/29/2010

Section 4 – Environmental Inventory and Analysis

A. Geology, Soils and Topography

Topsfield's topography is more varied than that of the average coastal town or the upland towns further inland. The range in elevations is from about 30 feet along the Ipswich River to 250 feet on the highest hills. It was from such heights during earlier times, when forests had been cleared for pasture land, that residents could see Ipswich Bay to the East, Mt. Wachusett to the West, the Monadnock range to the Northwest, and Boston to the South. Lowlands between the hills are relatively flat, and provided ideal sites for settlements and farms, first by indigenous peoples and later by colonists. This range of topographic features and land uses reflect directly the glacial and post-glacial geological history of the region.

This geological history began approximately 15,000 years ago at the end of the Wisconsin Glacial Period, as the North American Ice Sheet decayed and receded northward. As it did so, an unsorted mix of clay, silt, sand, cobbles and boulders plucked from the underlying bedrock were carried in the ice and deposited beneath or adjacent to it as till. Some of the more distinctive cobbles in the till, for example rusty orange ones with distinctive large light blue quartz crystals, can be traced to scattered outcrops of a formation named after our town where it was first described (Topsfield Granodiorite). Mostly however, the cobbles can't be traced to a source area in town, since a veneer of glacial deposits covers most of the underlying bedrock. Much of the till deposited by the receding glacier was ultimately molded into streamlined hills known as drumlins. Rea Farm, Witch, Pingree, Town, Great and Bradstreet Hills, to name a few of the larger ones, are drumlins elongate in the direction the glaciers last moved (northwest to southeast). Driving or bicycling up and down these hills in Topsfield makes for a thrilling ride, and one almost unique on Route 1 from Maine to Georgia.

Just as important to the town are its lowland "plains," occurring between the drumlins and along the Ipswich River and its tributaries. These areas, which cover approximately forty percent of Topsfield, are largely underlain by well-sorted, medium grained sand, 20 to 90 feet thick. Known as outwash plains, they were deposited by melt-water from the decaying ice sheet. Historically, these areas were settled first since foundations built on them are easy to dig, soils derived from them are rock free, and yields from shallow (water table) aquifers within them are prolific. Even today, Topsfield's entire public water supply comes from shallow wells completed in such deposits. Swampy areas adjacent to most major streams in town lie atop the outwash plains, and are composed of post-glacial aged spongy organic matter and silt, generally less than five feet thick.

Less abundant, but related to the outwash sand plains, are poorly sorted silty to sandy cobble gravel deposits. These occur either as (kame) terraces on higher ground around the margins of drumlins, or as sinuous ridges (eskers) formed by melt-water flowing through a tunnel near the margin of the decaying ice sheet. Evidence of several eskers can be found in Topsfield, including a classic one in the Massachusetts Audubon Society's Ipswich River Wildlife Sanctuary and another along Colrain Road. Both kames and eskers were mined in the past for their gravel, but today are either uneconomical or restricted from development by zoning laws.

Overlying all the glacial deposits are the soils derived from them. As shown in the Soils and Geologic Resources Map in Section 5, approximately 80% of Topsfield's soils are grouped into two main associations. Soils of the Hinckley-Windsor-Merrimac association form on the lowland outwash plains that are characteristically deep, sandy to loamy, and excessively to somewhat excessively drained. Areas covered by these soil types are generally suitable for residential development and farming, except near streams and rivers where the water table is high in the winter and spring. Soils of the Paxton-Woodbridge-Montauk association form on compact glacial till, which composes Topsfield's drumlins and uplands. The soils of this association are deep, but less well-drained than those of the outwash plains. They are well suited to residential development, providing that careful sewage disposal facilities are engineered to overcome a slowly permeable clay-rich subsurface layer (fragipan). Historically, fields developed on these soils "grew" stones (and stone walls) seeded from the subsurface layers and till below.

The remaining soils in Topsfield are classified in the Canton-Charlton-Sutton association. These occur mainly along the western edge of town. They have many of the same drainage qualities as the previous association, except they form over looser till and bedrock that consequently deliver more rocks to the surface layer.

In summary, the soils and glacial landscapes of Topsfield should be considered nothing but variable. Within any given soil association, one can find many different soil types, each with slightly different drainage and engineering qualities. Future development should recognize these differences, particularly in regard to siting septic system absorption fields and/or high environmental risk businesses where drainage from them could readily contaminate our drinking water supplies contained in shallow unconfined aquifers.

B. Landscape Character

As one drives through Topsfield, the combined views of rolling hilltops, meadows, meandering brooks, marshes, fields, and forests are remarkable, making the Town's visual character one of its most priceless assets. Topsfield's past development has enabled it to maintain its rural character. However, there are currently several large tracts of land throughout the Town that are at risk for future development. Development, if not carefully planned and monitored, will severely impact the visual and environmental character of the Town. The scenic vistas of Rt. 1 are now being challenged with development (See Map 7 and Appendix B).

The Ipswich River has mostly been left to flow through Topsfield in its natural state. It provides natural habitat for a wide range of wildlife and plant life, as well as recreational opportunities such as canoeing/kayaking, and fishing. Three other brooks are stocked with trout by the state, creating further fishing opportunities. Topsfield has created several recreational trails, including the 3.9 mile Rail Trail, for walking, jogging, biking, and horseback riding. A discontinued landfill has been capped and developed into a recreational area, that include athletic fields, Equestrian event area, Frisbee golf course, and a wooded recreational trail that runs along Pye Brook Marsh.

C. Water Resources

1. Watershed

Topsfield is wholly located within the Ipswich River Watershed.

2. Surface Water

There are two principal sites of surface water in Topsfield: the Ipswich River (and several of its tributaries, namely, Fish, Mile, Pye, and Howlett Brooks) and Hood Pond (See Maps 4, 6A and 6B). Topsfield is one of several Towns on the North Shore that share the Ipswich River as a regional recreation source. The Ipswich River Watershed Association (IRWA) oversees protection and management of the Ipswich River, as well as its underlying aquifer. IRWA's RiverWatch Program includes nearly 60 volunteers monitoring a total of 30 sites in each month including many within the town of Topsfield. These skilled and dedicated volunteers collect data on air temperature, water temperature, color (visual inspection), odor, depth, velocity, dissolved oxygen, and nutrients. Additionally, a Topsfield Stream Team was formed in 2001 and later disbanded. Hood Pond (located off of Route 97) provides recreational uses, such as swimming, boating, and ice-skating, as well as habitat for wildlife for Topsfield and Ipswich residents.

3. Aquifer Recharge Areas

As stated in Section 3, Part D, Topsfield does not use surface water bodies as a direct drinking water supply. However, these bodies are linked to the quality and availability of the groundwater supply. The public water supply system uses an unconfined aquifer consisting of two well fields. Due to Homeland Security guidelines from the federal government the well field locations can no longer be shown on maps.

4. Flood Hazard Areas

Mean annual precipitation is 43 inches. Snowfall depths, which vary widely from year to year depending on winter storm tracks generally range from 30 to 70 inches per year. In the Boston area, the average snowfall depth per year is 50 inches; in Topsfield, the average depth is 55 inches.

Major storms and subsequent floods have occurred in nearly every month of the year. Large storms that affect the coastal region of Massachusetts, including Topsfield, are spring rainstorms, summer thunderstorms, fall hurricanes, and winter northeasters. When these storms hit, major flooding can occur throughout Town causing property damage and erosion while helping to recharge existing flood plain areas (See Maps 6A and 6B). The 2006 "Mother's Day Flood" caused the loss of two lives, and extensive property damage within the town of Topsfield. Three substantial rain events in the spring of 2010 again caused extensive flooding and property damage within the Town of Topsfield.

The Ipswich River and its tributaries run through numerous wetlands, marshes, and swamps that have major resource values. Together they collect, store, and filter precipitation and recharge groundwater that is the Town's only source of potable water. In addition they provide habitat and food for numerous indigenous and transient species of animals that depend on these resources.

In recognition of this the Town adopted a local General Wetlands Bylaw (GWB) that extends protection over and beyond the resources already protected under the provisions of G.L. c.131, §40 and CMR 310 10:00 promulgated pursuant to the statute. These protections include vernal pools that provide spawning areas for frogs, salamanders, and fairy shrimp of which some are rare and endangered species. The Town counts a number of such vernal pools as certified under the criteria formulated and administered by the Natural Heritage and Endangered Species Program. It also protects as resource areas intermittent streams that have a substantial effect on the recharge of storm-water run-off in Town. These streams channel surface run-off from poorly drained areas at high elevations to wetlands and marshes at lower altitudes. When these are disturbed or disrupted by development, the consequences are flooded basements and failed septic systems. Additionally the Town's GWB lists by name a number of perennial streams, all tributaries of the Ipswich River, that are a priori protected under the State's Rivers Protection Act and CMR 310-10.58.

The GWB also provides protection of land subject to flooding inclusive of the 100-year flood plain identified in the Federal Insurance Rate Map (FIRM) pursuant to 310 CMR 10.57 and the Town's own Flood-plain Zoning District that is based on the FIRM. These areas that constitute the Ipswich River floodplain and those of its tributaries in Town provide an essential surface water recharge mechanism that provides well-water for the Town's residents and also maintains groundwater elevations that are required to ensure water in the stream channels of these tributaries and the Ipswich River throughout the year. Moreover the protection extends to vernal pools located in these areas.

The Town also provides several layers of protection from development in the riverbank areas. The Town's Zoning Bylaws establish a 200 foot Ipswich River Bank Zoning District in which only a very limited number of activities such as farming, passive recreation, and conservation projects may be conducted. The GWB also incorporates by reference 310 CMR 10.58 that regulates permissible activities in the riverbank areas pursuant to the "Rivers Act" - Chapter 258 of the Acts of 1996. This protection of course is extended to all perennial streams in Town.

The Town provides outreach on conservation issues through its membership in the North Shore Greenscapes coalition – a chapter of the national Greenscapes Program. This chapter is composed of eight towns – Newbury, Amesbury, Salisbury, Gloucester, Rockport, Rowley, Ipswich, and Essex and the Bay Watch as well as the Salem Sound Coastwatch, and the Ipswich River Watershed Association (IRWA). Its mission is to provide information and services to the public for the protection of coastal watersheds and the North Shore estuaries.

See Appendix B for more information on Town-owned Open Space parcels.

D. Vegetation

Much of the protected land in Town is forested. Willowdale State Forest and the Town Forest are exclusively forests while Bradley Palmer Park is mostly forest in the portion that lies within Topsfield. All three areas contain established networks of trails. The Massachusetts Audubon lands contain fields, but are mostly comprised of wetlands, river, forested wetlands and forested uplands. The Salem-Beverly Water Board land is predominantly wetlands. With the exception of the Salem-Beverly Water Board land, these protected lands are used frequently for recreation, including: walking, hiking, running, and cross-country skiing. With the exception of the Audubon land, they are also used for running, biking and horseback riding. The unprotected lands range from river, wetlands, forests, and the many fields of the former MIT/Coolidge property. While the MIT/Coolidge property has conservation restrictions, some of the current owners have their lands posted.

The major vegetative cover type in Topsfield is woodland. White pine is the predominant softwood, while maple is the predominate hardwood, with lesser volumes of white and red oaks. The rare River Bulrush is found in Topsfield, while a Silver Maple flood plain forest is located on the Topsfield Fairgrounds along the Ipswich River, and a stand of white cedar, unique to the Atlantic seaboard, can be found near Hood Pond.

Tree planning and forestry issues have become a concern to the Town. Many of the trees on the Town's scenic roads and main streets need to be replaced due to age and disease. Proper forestry practices are needed to maintain and protect the Town's open space from over growth and invasive plant life.

E. Agriculture.

There is no land classified as "prime" farmland in Topsfield at present. Several Topsfield residents, with lands totaling approximately 1147 acres, take advantage of the protection offered under Ch. 61, 61A, 61B and Ch. 780 of the Acts of 1977.

Agricultural land contributes significantly to Topsfield's open space and rural character. Topsfield has a number of properties listed as Chapter 61A and other smaller properties on which agricultural activities are conducted. Essentially passive agricultural uses are found in some of the tree farms located within the Town. Active farming is represented by Valley View Farm, Holiday Tree Farm, Connemara House Farm, Red Pine Tree Farm, Natural Way Farm, Alfalfa Farm and Greywood Farm. These farms are dedicated to a variety of agricultural and horticultural operations, including cheese, honey and maple syrup operations, apple orchards, berries, organic vegetables, a winery and Christmas trees. Richardson's Dairy, based in Middleton, utilizes Topsfield land to grow corn that supports its herds of dairy cattle. Many large open properties produce hay that is cut, baled and distributed by local farmers.

On a smaller scale, a number of local residents engage in the production of agricultural products, including eggs, honey, maple syrup, and organic vegetables that are sold at farmers' markets and through distributors. Valley View Farm partners with First Light Farm in Hamilton as a CSA collection point. The Agricultural Commission, Topsfield Garden Club, and Historical Society

promote agricultural history and the grow-local movement through school programs, participation in the Topsfield Fair and other educational activities. The Essex Agricultural Society has partnered with Northeast Harvest to promote locally grown products.

A revitalized Agricultural Commission will be researching the scope of agricultural activities in Topsfield more extensively in the coming year. Plans are being pursued for a larger Farmers' Market that would draw regional farmers as vendors. In addition, regional cooperation with farmers' groups in Ipswich, Danvers, Boxford, Hamilton, Wenham and Essex is a promising avenue of exploration for Topsfield groups.

Topsfield's combination of extensive forests and wetlands provide rich habitat for the vegetation found in our area. See Appendix C for the vegetation inventory.

F. Fisheries and Wildlife

Open lands in Topsfield play an integral part in creating corridors that are important for wildlife and for recreation. Some of these corridors, such as those involving the Audubon, are more useful to birds and animals, while others are better suited to human recreation. Nonetheless, that these corridors exist at all is a true asset for the Town and further strengthening of these corridors should be encouraged.

The Ipswich River provides the most complete watershed corridor. The largest and most complete protected land corridors lie east of Route 1 and north of Route 97 joining Willowdale State Forest, Bradley Palmer State Park and the Massachusetts Audubon Society's Wildlife Sanctuary. Willowdale continues from Topsfield into Ipswich and lies just across Ipswich Road from Bradley Palmer, which extends into Hamilton and Ipswich. Linkage for pedestrians and horses is made possible by a bridge over the river (the road must still be crossed). Bradley Palmer and the Audubon are separated only by Asbury Street and the strip of land between the street and the river and connected by a path and a bridge on private property. The Sanctuary's land continues into Wenham and Hamilton. The abandoned MBTA rail trail runs about 4.5 miles through Topsfield. The southern half crosses the Ipswich River and provides access to a wooden bridge leading to the Beverly-Salem Water Board's canal, which draws water from the River and then runs through a section of the Audubon Sanctuary in Wenham stretching almost 2 miles to Wenham Lake. Additional wildlife and pedestrian corridors exist around Hood Pond and the Town Forest in the Town's northeast quadrant, and throughout the former Coolidge property in the southwest quadrant.

Topsfield's extensive wetlands, ponds and streams provide habitat for numerous waterfowl, otter, muskrat, beaver, as well as turtles, frogs, and other amphibian life. Several species of fish are found in Hood Pond and the Ipswich River. Woodland and meadows abound with migratory and resident birds.

Topsfield's mammal population is typical of other Essex County towns with deer, rabbit, skunk, fox, raccoon, woodchuck, squirrel, Coyote and mice most prominent. Three rare reptiles and amphibians also reside in Topsfield: the Blandings Turtle, the Blue Spotted Salamander, and the Eastern Spadefoot.

The Ipswich River Wildlife Sanctuary, which runs through land owned by the Massachusetts Audubon Society, as well as Bradley Palmer State Park and Willowdale State Forest, which are owned by the Commonwealth. Other public and privately owned open space provides both permanent and temporary protection for wildlife habitats in Topsfield.

Rare and endangered species are listed on the table below:

| Group | Scientific Name | Common Name | State Rank | Federal Rank |
|-------------------|-----------------------------------|--------------------------|------------|--------------|
| Fish | <i>Notropis bifrenatus</i> | Bridle Shiner | SC | None |
| Amphibians | <i>Ambystoma laterale</i> | Blue-Spotted Salamander | SC | None |
| | <i>Ambystoma opacum</i> | Marbled Salamander | T | None |
| | <i>Scaphiopus holbrookii</i> | Eastern Spadefoot | T | None |
| Reptile | <i>Terrapene carolina</i> | Eastern Box Turtle | SC | None |
| | <i>Glyptemys insculpta</i> | Wood Turtle | SC | None |
| | <i>Emydoidea blandingii</i> | Blanding's Turtle | T | None |
| Birds | <i>Accipiter Striatus</i> | Sharp-Shinned Hawk | SC | None |
| | <i>Gallinula chloropus</i> | Common Moorhen | SC | None |
| | <i>Tyto alba</i> | Barn Owl | SC | None |
| | <i>Vermivora chrysoptera</i> | Golden-Winged Warbler | E | None |
| Mussels | <i>Ligumia nasuta</i> | Eastern Pondmussel | SC | None |
| Insects | <i>Anax longipes</i> | Comet Darner | SC | None |
| | <i>Somatochlora kennedyi</i> | Kennedy's Emerald | E | None |
| | <i>Somatochlora linearis</i> | Mocha Emerald | SC | None |
| | <i>Williamsonia litneri</i> | Ringed Boghaunter | E | None |
| | <i>Enallagma laterale</i> | New England Bluet | SC | None |
| Plants | <i>Sagittaria subulata</i> | River Arrowhead | E | None |
| | <i>Liatrus scariosa</i> | New England Blazing Star | SC | None |
| | <i>Symphoricarpos albus</i> | Snowberry | E | None |
| | <i>Scolboschoenus fluviatilis</i> | River Bulrush | SC | None |
| | <i>Eriophorum gracile</i> | Slender Cottongrass | T | None |
| | <i>Galium boreale</i> | Northern Bedstraw | E | None |

G. Scenic Resources and Unique Environments

Topsfield's visual character is a reflection of its agricultural past. Since the decline of the region's agricultural economy, open farmland has reverted back to forest. Open space, forests, meadows, rivers, and wetlands contain many interrelated, intangible benefits to the visual character of Topsfield and to the public in general. The aesthetic, cultural, historic, ecological, and recreational value that these resources contribute to the community's rural character (See also Map 5).

The Scenic Landscape Inventory published by the Department of Environmental Management (DEM) shows that almost half of the Town of Topsfield falls into the area designated as “The Ipswich River Unit (A3)”, which is described in the inventory as “extending from the Rowley River on the north inland to Topsfield in the west and south to include an area along the Miles River in Hamilton”. To be more specific relative to the Town of Topsfield, this area encompasses all of Topsfield south of the Topsfield Fairgrounds on Route 1 and east thereof to the Wenham town line; almost all of Topsfield south of the Fairgrounds on Route 1 and west thereof to the Boxford town line; and including approximately two thirds of all land north of the Fairgrounds on Route 1 and east thereof (including Bradley Palmer State Park), to the Ipswich and Hamilton town lines. The “Ipswich River Unit” is designated as “Class A - Distinctive”, the highest rating an area can receive. As stated in the Scenic Landscape Inventory, the “Ipswich River Unit (A3)”, in which a significant portion of Topsfield is located, is “probably the finest coastal scenery in the Commonwealth as well as outstanding farm and river scenery land”. (See the Inventory of Lands map in Section 5)

In addition to the State Scenic Landscape Inventory, the Historical Commission applied for and received assistance from the Essex National Heritage Commission and the Department of Conservation and Recreation to conduct the Topsfield Reconnaissance Report of the Essex County Landscape Inventory. This report identifies the heritage landscapes in Topsfield and makes recommendations as to strategies for preserving them. The Scenic Overlay zoning district that establishes development guidelines for the southern portion of Route 1 was one result of this inventory.

The National Register of Historic Places is the official federal list of districts, sites, buildings, structures and objects that have been determined significant in American history, architecture, archaeology, engineering and culture. All National Register properties are automatically listed in the State Register of Historic Places. Topsfield’s National Register (NR) program began in 1966 with the listing of the Reverend Joseph Capen House (generally referred to as the Parson Capen House) on the National Register and as a National Historic Landmark. In 1976, the Topsfield Town Common Historic District was established. It includes 131 acres and 10 buildings representing the major periods of early American architecture. A second National Register District, added in 2005, is the River Road-Cross Street District that encompasses 4500 acres, 39 buildings, and 4 structures. Pending listing in the National Register is a Multiple Property Context Submission, titled “Historic Farms and Rural Retreats of Topsfield”. Also listed in the State Register are those properties protected by a preservation restriction, drawn up in accordance with G. L. c. 183 §§ 31-33. A preservation restriction (PR) runs with the deed and is one of the strongest preservation strategies available. All properties which have PRs filed under the state statute are automatically listed in the State Register. The Topsfield Town Hall, which is in the Common National Register district, is the only Topsfield property for which there is a PR.

Local historic districts, which are administered at the local level, are special areas within a community where the distinctive characteristics of buildings and places are preserved and protected by a local historic district commission. In 1974, Topsfield adopted the Topsfield Common Historic District which runs along Main and High Streets and contains 37 properties. The boundaries of the National Register district and the local historic district are not

identical. All local historic district properties are automatically listed in the State Register of Historic Places.

The Topsfield Historical Commission maintains a list of Historically Significant Structures that are subject to the Demolition Delay Bylaw. The list is available at <http://topsfield-ma.gov/documents/historic/documents/Historic%20List%20of%20Significant%20Structures.pdf>. A number of these structures are also listed in the National Register of Historic Places.

H. Environmental Challenges

1. Sewage Disposal Systems

The design and location of septic systems is regulated by the Commonwealth's Department of Environmental Protection by means of the Title V regulations and the Town of Topsfield's Board of Health, which also monitors the installation of the system itself. DEP Title V regulations became effective in March 1995, and were updated in 2002. The change in percolation rate (2002) and its impacts have been previously mentioned. Many aspects of these new regulations will directly impact sewage disposal systems in Topsfield and future development. The Topsfield Selectmen appointed a committee to review the impact of proposed change, which consisted of representatives from TOSP, Conservation, Commission, Board of Health, Planning Board and two non-affiliated volunteers. The committee recommended the percolation rates should not be changed as it might increase the nitrate effluent concentration. To date the percolation rates have not been changed.

At this time there is no public sewer system in the Town of Topsfield; however, two private systems have been permitted for the newest over-55 housing communities being built. Generally, homes, offices, and any industrial-use buildings rely on in-ground septic systems for the disposal of sanitary sewerage. These are systems comprised of a holding tank and leaching areas which consist of leaching fields, trenches, leaching pits, galleries, or chambers. The liquid portion of the waste or effluent, percolates through the ground locally. Septage, the more solid residue, is pumped from the holding tank and is disposed of at a treatment facility outside the community.

Since the Town's public water supply is dependent upon the quality of the ground water the proper functioning of septic systems is vitally important. The functioning of storm drains is also important. Storm water runoff collects fecal bacteria from a variety of sources, including failing septic systems, pets, farm animals, birds and other wildlife, and transports it long distances via streams, ditches, and especially, the municipal street drain systems.

2. Hazards to Town Water

The current Massachusetts percolation rate is 60 minutes/inch. Topsfield is more stringent at 20 minutes/inch. Relaxing the septic percolation rate to 60 minutes/inch from the current 20 minutes/inch may put ground water at risk. The committee mentioned in the previous section issued a final report in March 2005, with eight findings:

1. It is perfectly feasible to construct, operate, and maintain on-site disposal systems in 60 minutes/inch soils. This was not clear at the outset in that such systems rely to a substantial part on transpiration of groundwater to function properly. New England winters are sufficiently severe to substantially limit such action. The investigations of OSDS technology in Nova Scotia by Mooers and Waller have provided convincing evidence in favor of these findings.

2. Nitrate concentrations in drinking water are a public health hazard. That is the reason for the 10 mg/L (ppm) limit of nitrates in potable water set by the federal EPA.

3. Nitrate concentrations in ground water from OSDS installations in 60 minutes/inch soils are substantially rainfall recharge driven. The results of the Bauman and Schafer model indicate that one and two acre lots in 60 minutes/inch soils cause nitrate concentrations in groundwater from these developments to be at or in excess of the federal EPA limit for some or all of the time during the year.

4. The present Board of Health limit of 20 minutes/inch does keep nitrate concentrations below the EPA limit for all but half-acre lots.

5. Almost half (45%) of the total land that can be developed in Town is located on soils that have percolation rates in excess of the current Board of Health limit

6. Groundwater nitrate concentrations will exceed the EPA limit if the available inventory of undeveloped land with a low percolation rate identified in task (2) is developed in accordance with the present zoning rules and the higher Title V percolation rate limit.

7. Elderly Housing Districts in their present form represent a more intense land use than the current "by right" zoning unless the EHD also encompasses sufficient undeveloped land to limit the land use to an equivalent of at least one acre/OSDS.

8. The tax rate of the Town will increase substantially in the presence of development as described in (4) above.

Section 5 – Inventory of Lands of Conservation and Recreation Interest

Topsfield has successfully intermixed suburban development with rural character but the town cannot take its existing open space for granted. The community needs to continue to be proactive in controlling future growth and development.

The open lands within Topsfield have significance beyond the Town's lines. With Bradley Palmer State Park and Willowdale State Forest crossing into adjoining towns, with considerable regional interest in the protection of surface water quality for the Ipswich River watershed, and with the potential and existing linkage of trails and wildlife corridors across the region, the value of these open space and recreational assets for Topsfield, and the entire region, increases. Hence, Section 8, Goals A and B are to preserve significant land for open space to help maintain Topsfield's visual quality and rural character with the objectives being: to identify land considered most significant to the Town's character, to work with the Conservation Commission, Essex County Greenbelt, the Massachusetts Audubon Society, the Department of Environmental Protection, and the Water Department to identify land to be protected, and to target lands adjacent to existing conservation lands, parks, the Ipswich River Watershed, and Route 1 for preservation (See Map 7).

The inventory lists parcels of land in Topsfield which are: owned by government entities; owned by conservation organizations; protected by conservation restrictions; classified for tax purposes as forest, agricultural, or recreational land under G.L. chapters 61, 61A, and 61B, respectively.

Recreational land and activities in Topsfield include support by: the Town of Topsfield, the State, and private organizations. The Town's component includes properties maintained by the Park and Cemetery Department and activities organized by the Town's Recreation Committee and various volunteer organizations. Funding for the Town's recreational land and activities comes from tax dollars, user fees, donations and grants. Following is a list of the major facilities:

- Bradley Palmer State Park and Willowdale State Forest, both are under the jurisdiction of the Massachusetts Department of Conservation and Recreation with State ownership of land, which confers a high degree of protection. Both contain miles of trails for walking, hiking, biking, horseback riding, and cross-country skiing, along with opportunities for canoeing.
- Ipswich River Wildlife Sanctuary, owned and managed by the Massachusetts Audubon Society, for a nominal fee, provides access to an additional 10 miles of trails and opportunities for canoeing.
- The all-volunteer Topsfield Rail Trail Committee is well along in the process of transforming the abandoned 4 mile rail corridor into a recreational path known as the Topsfield Linear Common. By the end of 2010 two miles will have been completed. Funds for this project, as well as continuing maintenance, have been raised through grants, gifts and the generosity of volunteer labor.
- Topsfield Park and Cemetery Dept. oversees the management and maintenance of:
 - Klock Park (located between North Street and Route 1, with access from North Street). Included are four soccer and two baseball fields.

- Pye Brook Community Park located between Bare Hill Road and Route 97/Haverhill Road, with access from Haverhill Road is approximately 70 acres in size and includes:
 - ♣ Playing fields: multi-use fields for small-sided soccer, baseball and football. The developed field area is approximately 25 acres
 - ♣ Wildlife Path almost two miles in length. This path, built by volunteers at no cost to the Town, is almost totally in the woods, cannot be seen from the playing fields, is quiet, and borders marshes and ponds for about half its length. The path is used for educational purposes, walking, trail running and wildlife viewing.
 - ♣ Picnic area with tables designed for handicapped use.
 - ♣ 18 hole Frisbee golf course (funded by a private donation).
 - ♣ Horse show facility (funded by private donations).
- Emerson Park with three baseball fields. Emerson Field is owned by the Congregational Church of Topsfield and leased to the Town on an annual basis.
- Normandy Row Park
- Town Common, large grassy area that hosts the Topsfield Historical Society's annual Strawberry Festival, a summer band concert series hosted by the Topsfield Recreation Committee, and many other events.
- Proctor School and adjacent Town property with two playgrounds, two tennis courts, a basketball court and two baseball fields. The newly formed Topsfield Playground Committee has replaced an aging playground at Proctor School and the Grove Street "tot lot" playground. This area is serviced by the Topsfield Linear Common recreational trail.
- Hood Pond. A separate group of volunteers, the Topsfield Beach Association, maintains a safe swimming area for residents of Topsfield and surrounding towns at Hood Pond. There is a family membership fee that pays for the maintenance of docks, restroom facilities and lifeguards. Swimming lessons are offered for a fee throughout the summer.
- Steward School Two tennis courts and various recreational facilities.
- Wheatland Hill, a town owned popular sledding location.

Team-oriented community athletic programs for children through age sixteen are organized in Topsfield by the all-volunteer Topsfield Athletic Association (TAA), among others. The public schools do not provide team sporting opportunities until the junior high school. The TAA Board of Directors plans the activities, raises funds, recruits coaches and managers and provides equipment. Klock Park, Pye Brook Community Park and Emerson Field are the three main sites where the TAA conducts its activities. Football, field hockey and lacrosse are organized by other volunteer organizations in Town, including Masco Youth Football, Masco Girls' Field Hockey and Tribal Lacrosse. The Town Park and Cemetery Commission maintains the facilities, which the teams use. Boy Scouts, Girl Scouts and 4-H clubs are active, volunteer-led organizations involving young people in Topsfield.

The all-volunteer Topsfield Recreation Committee, appointed by the Board of Park and Cemetery Commissioners, offers many (non-competitive) programs throughout the year including:

- Summer concert series
- Holiday Walk
- Summer camp (six weekly sessions)
- Instructions in tennis, cooking, swimming, running, knitting, scrapbooking, horse care, bicycle course, floor hockey, origami, yoga, fencing, volleyball, mountain biking, CPR, jewelry making, square dancing, disc golf, and indoor field hockey

Note: participants in the summer camp and instructional programs pay fees that support these programs. There is no charge for activities such as the Holiday Walk and concert series.

The Ipswich River, which passes through Topsfield, is a popular recreational resource for canoeing, kayaking, swimming and fishing. Each spring, summer, and fall hundreds of canoe and kayak enthusiasts paddle the river.

The Salem and Beverly Water Supply Board owns approximately 270 acres of land in Topsfield including a portion of Putnamville Reservoir and extensive acreage on both sides of Route 1 for use as a future reservoir. These properties are not accessible to the public.

The parcels listed in Appendix B, Inventory of Lands, are protected in several ways.

First, some parcels have been deeded outright to the town under the jurisdiction of the Conservation Commission. Although technically town-owned, these properties do not have trails, programs, or services. Other parcels have been deeded to the Essex County Greenbelt Association, a nonprofit land trust that has conserved nearly 13,000 acres in Essex County.

Other parcels have been subjected to a formal Conservation Restriction or Agricultural Protection Restriction, legally binding agreements between a landowner and a restriction holder – usually a public agency or a private land trust (In Topsfield, the Essex County Greenbelt Association has most often served in this capacity.) Unlike private restrictions on land, which expire after 30 years unless provided to terminate earlier, formal Conservation Restrictions generally run in perpetuity and fall under the protection of Article 97 of the Massachusetts Constitution, which (as with the disposition of any other government-owned land or public parks) requires a 2/3 vote of the legislature for termination.

Properties enrolled in the tax classification status provided in Chapters 61 (forest lands and forest products), 61A (agricultural and horticultural land), and 61B (recreational land) of the Massachusetts General Laws are protected temporarily from development while so assessed. Conversion of such lands to other purposes while assessed under one of these statutory schemes gives the town a right of first refusal for 120 days after notification. In the likely event that the Town is unable to exercise this right within the 120 days, it may be assigned to a non-profit conservation organization.

504 Inventory: The Town of Topsfield has no sites under the authority of the Conservation Commission, which provide programs, services, or public access (the Wildlife Path at Pye Brook Community Park is almost 100% within the wetlands buffer). The only site of concern is Klock Park, developed with Division of Conservation Services grant funds, which is under the jurisdiction of the Park and Cemetery Commission. The Klock Park ADA/Section 504 Accessibility Report was written by Mr. James Lyons of the Northeast Independent Living Program, Inc., on February 6, 1997.

Following are acreage land totals in the various categories:

| | |
|--------------------------------------|------------|
| Town owned land | 532 acres |
| State owned land | 156 acres |
| Salem and Beverly Water Supply Board | 270 acres |
| Ipswich River Wildlife Sanctuary | 264 acres |
| Conservation land | 845 acres |
| Parcels with Chapter Land Agreements | 1100 acres |

Acreage is approximate. See Appendix B - Inventory of Lands for detail and a description of individual parcels.

Draft - sent to Dept. Cons. Svcs. 12/29/2010

Section 6 – Community Vision

A. Description of Process

The Planning process for 2010 was more comprehensive than in years past for several reasons. First, Town government is more cohesive, employing a Master Planning initiative and Community Development Strategy for the first time. As a result, the full importance of an Open Space and Recreation Plan is now realized. Since the approval of the 2004 Plan, the Town has been able to secure a Scenic Overlay Zone, a Water Conservation Plan, an OSRD Bylaw and a Storm Water and Erosion Control Bylaw. This has created better synergy between the TOSC and the other committees and boards.

Secondly, the TOSC has utilized multiple methods for determining what the citizens of the community value. The planning process began in the spring with a survey (Appendix A) to Town residents. The 433 residents responded that responded were significantly more than the 376 respondents in the 2004 survey. The TOSC followed the survey with the first ever Topsfield Trails Day, where Town Residents were given guided tours of new trails. This gave the TOSC a chance to talk with residents and obtain further feedback on community values and Open Space and Recreational needs for the future.

Finally, in 2010 the TOSC hosted an Open Space Forum, providing residents with the chance to once again give voice to their values, needs and concerns. The TOSC explained the importance of the Open Space Plan, the results of the 2009 Open Space and Recreation Survey and opened the meeting to discussion.

To address clean air the Green Community/Renewable Energy Committee was created by the Selectmen. This committee has the charter of reducing energy consumption in the Town and developing alternate forms of energy generation such as windmills and solar photovoltaic.

After this extensive outreach to the community, the TOSC had a clear understanding of the values of the community and began to compile the goals and objectives for the next seven (7) years.

B. Statement of Open Space and Recreation Goals

The overall vision of the Plan is to preserve the rural and historic characteristics of the Town and to maintain the high quality of life that rolling hills, agricultural landscapes and riparian environments provide to the Town Residents. We envision a Town that includes an expanded offering of passive and active recreational opportunities that affords all residents access to nature walks, to a system of linked trails and to historical sites. Achieving this vision includes:

- Preserving the Rural and Historic Character of the Town
- Keeping Open Space Open
- Enhancing and Expanding Recreational Trails
- Protecting Water Resources

- Protecting Critical Habitats
- Increasing ADA Accessibility for Topsfield Open Space and Recreational Facilities
- Public Outreach and Education
- Achieving Greater Energy Efficiency

Draft - sent to Dept. Cons. Svcs. 12/29/2010

Section 7 – Analysis of Needs

A. Summary of Resource Protection Needs

Topsfield has an abundance of natural resources and attributes that contribute to the rural character of the town. The scenic vistas, wetlands, waterways, recreational trails, and forests provide natural habitats for wildlife and vegetation as well as prime recreational opportunities for the Town's residents.

Results of the current and previous TOSC Surveys indicated residents support acquisition of open space for conservation and recreation. Many felt that the present amount of space used for recreation is adequate. In response to the question as to what recreational facilities are needed the most, a significant number of respondents indicated, in the order of preference, that recreation trails, nature trails, interconnected trails, sidewalks, children's play areas, small local parks, and senior centers were needed the most. Since the Survey was distributed, additional recreation trails and a new multi-use field were added. Clearly, development will continue, but we hope to protect those parcels whose development would most negatively impact the Town. One example of a new trail added in 2009 is the Hickory Beech trail, which was the result of an open space set aside.

Complete protection of open land is best accomplished by transferring ownership, by gift or sale, to the Town's Conservation Commission or to a conservation trust, such as the Essex County Greenbelt Association, The Trustees of Reservations or a non-profit such as the Friends of Topsfield Trails. Other avenues for protection would include the use of permanent conservation restrictions, easements, purchase of development rights or outright purchase by the Town. All of the methods described had strong support from respondents; including the Town purchase option, which was strongly supported (as very important or acceptable) by over 92% of the respondents.

In its Metro Plan 2000, the MAPC has identified conservation and recreation priorities for the greater metropolitan Boston region. Its goals are "to preserve and protect critical land resources, to shape the growth of the region, to help preserve and enhance a "sense of place", and to fulfill the recreation needs and provide access to appropriate open spaces". Of the eleven criteria MAPC identified for land resources protection, nine are relevant to Topsfield's open space planning:

- ♣ Establish links with the Bay Circuit trails, Topsfield Linear Common recreational trails, Wildlife Trail at Pye Brook Park, the Beech Trail at Hickory Beech Open Space and other protected lands
- ♣ Protect lands identified by local communities as lands of conservation interest
- ♣ Identify and protect Areas of Critical Environmental Concern (ACEC's)
- ♣ Protect areas identified as critical habitat for wetlands wildlife
- ♣ Protect critical watershed or recharge areas for public water supply
- ♣ Protect wetlands

- ♣ Identify and protect scenic landscapes, including old farms, stone walls, churches, town commons, historic districts, and views.
- ♣ Protect major water bodies, rivers and streams

Current MAPC focus is on sustainable growth patterns, consistent with the “smart growth” philosophy espoused by recent state administrations. According to its website (“MetroFuture”), MAPC aims to concentrate population and job growth “in developed areas already served by infrastructure, with slower growth in less developed areas where infrastructure is more limited.”

The current 2006 update to the Statewide Comprehensive Outdoor Recreation Plan, or SCORP, reveals that northeastern Massachusetts has as many recreational sites and as diverse a set of recreational offerings as any other region in the state while containing the third lowest recreational acreage totals. This concentration continues to put considerable strain on currently available open space and recreational resources in the northeastern Massachusetts and in Topsfield. It suggests the need for a greater number of open space and recreational resources as well as careful and active management. The issue of recreational impact on natural resources straddles the boundary between resource protection needs and recreational needs. The quality of the environment is critical if its full recreational potential is to be realized. Field-based recreation is a well-documented need in SCORP. The northeast shows a higher preference than elsewhere in the state for recreational activities such as baseball, soccer and playgrounds. The study also reveals that the greatest expressed need among northeast residents for new recreational areas is for park-based recreation. Field-based recreation continues to place heavy demands on available fields in town. The organizations in Topsfield, the Topsfield Recreation Committee and the Topsfield Athletic Association, that run field-based recreation programs coordinate with the Parks and Cemetery Department. Thus centralized scheduling and grounds maintenance is handled well. The 2009 Survey results are not consistent with the 2006 Northeast Massachusetts study in that the Town has adequate recreational facilities. However, since the 2009 survey requests are being made for additional facilities in Topsfield.

B. Summary of Community's Needs

The results of the 2009 Survey are included in this section. Ninety-six percent (96%) of survey respondents felt that it was important to retain the Town’s rural character, scenic vistas and open space. Seventy-Six (76%) of the respondents felt that the Town should pursue efforts to obtain open space. Sixty-two percent (62%) favored corporate development, while ninety percent (90%) favored adding retail businesses, and seventy-seven percent (77%) favoring the addition of other services, such a gyms, hair salons and day care facilities.

Satisfaction with existing recreation facilities was high. Satisfaction (excellent, good and adequate) is seventy-four percent (74%) for children/youth facilities, sixty-five percent (65%) for seniors, eighty percent (80%) for families and seventy-nine (79%) for adults. The top five requested additional recreational facilities were the following: nature trails, interconnected trails, recreational trails, sidewalks and children’s play areas, in that order. Addressing the interconnecting of trails, the Topsfield Linear Common, a 4 mile trail built on an abandoned rail bed, is almost twenty-five percent (25%) complete, without the use of town funds as the Rail Trail Committee has been successful in obtaining grants. When complete this trail will connect

with the towns of Wenham and Boxford. When fully completed the “Border-to-Boston” trail from Danvers to the New Hampshire border will be a 28 mile recreational trail.

Topsfield has a small, bustling, downtown area, which encompasses retail shops and professional offices, the Town Hall, Town Library, and the Proctor School. With many Town residents enjoying activities such as jogging, cycling, and walking, access to the downtown area, other than by motor vehicle, was of great concern to the respondents. There were many handwritten comments concerning the need for additional sidewalks and the poor condition of existing ones in many areas of Town. A major reason given for the inability of residents east of Route 1 to get downtown is the lack of safe pedestrian crossings over Routes 1 and 97. Along the rail trail alignment the Rail Trail Committee is working with both MassDOT and the Topsfield Traffic Safety Committee to provide a safe crossings over each of these roads.

Respondents also expressed concern for the protection and preservation of scenic areas in Town, specifically, the vistas from Route 1 and Wheatland’s Hill, to name just two. Additionally, respondents wanted better land markings of existing trails (this is now being done).

C. Management Needs, Potential Change of Use

Topsfield’s governmental structure disperses jurisdictional authority widely across Town Departments, boards and committees. Communication among these various groups is essential to shape development in a way that best protects the Town’s character and resources. Coordination between town departments and committees has greatly improved in the past five years with the addition of a Town Administrator, the adoption of a number of “Best Permitting Practices,” including intensive use of the Town website for documents, forms and posted filings, and better liaison activities with selectmen.

While Topsfield does not have an updated “master plan” per se, it does have an active EO 418 Community Development Plan and a Community Development Strategy currently being updated by the Planning Board. To achieve the goals and objectives of these plans, communication is also crucial among the Town’s boards. For example, the Selectmen should automatically contact the TOSC if a parcel of Chapter 61 land is to be sold to determine whether it has been identified as a target for protection. Under the “61” rules, the Town has the right of first refusal at the sale of these parcels. This right is assignable and, if the Town cannot raise the funds, the right can be transferred to a conservation group, which could secure moneys to purchase the lands. The TOSC would assist the conservation group in assessing the importance of the parcel to the Town, among other duties.

With regard to Chapter lands, it is important that the Town develop a strategy for considering acquisition of such properties should they be deemed significant. A review of each of these properties with their potential uses should be conducted. Additionally, the process the Town would follow to acquire any such property should be ascertained in light of the time frame in which the Town would need to act.

Continuing review and examination of the Town’s bylaws is one of the most critical actions that needs need to take place to insure, to the greatest degree legally possible, the protection of the

Town's rural character. Town Meeting has recently approved a number of bylaws and zoning initiatives in this area. For instance, at the 2009 Town Meeting, two zoning changes were approved that encompass businesses. These businesses were grandfathered in their zones by virtue of their prior use. The Business Highway and Business Highway North areas were rezoned to allow mixed uses making the existing businesses conform to the new Table of Uses. This allows those buildings to house different businesses and to change their footprint and expand, within guidelines. These changes were designed to encourage business owners to improve their properties and offer new opportunities for economic development without impacting residential or open space land. Future study is necessary to determine how best to protect agricultural land and large estate properties. Additionally, Town Meeting voted to create two elderly housing overlay districts at the 2009 Town meeting with the result that two large parcels are being developed as over 55 communities. Both developments are required to have open space set-aside components. On one, a public walking trail will be created.

There is also a need for plans to be drawn up focusing on the long-term uses of town-owned recreation and conservation lands. The Conservation Commission is currently mapping conservation lands in the effort to establish an inventory. The long-term plan is to ascertain how these lands can best be utilized, managed, and protected. The Board of Selectmen, in conjunction with the Park and Cemetery Department, will be taking up the issue of the delivery of recreational services in Town with the goal of determining how best to support volunteer groups or assume official responsibility in this area. Among the elements of this study will be an inventory of recreational facilities and services and an analysis of the costs and available sources of funding. The implementation of these plans, as well as general maintenance activities, is a need that will require a creative solution, such as extensive use of volunteers, given the Town's current budgetary constraints. There is little likelihood that property taxes can support expanded Town recreational services or maintenance of Town-owned properties.

Recreational and open space resources in Topsfield are not constrained by town boundaries, but are regional in nature. Town efforts to coordinate open space issues can best be enhanced with the aid of local interest groups such as the Ipswich River Watershed Association and the Essex County Greenbelt Association that are already working together on a wide range of issues. The Friends of Topsfield Trails, a 501(c)3 organization (created in 2008 for the purpose of creating and maintaining recreational trails in Topsfield) along with the Essex County Trails Association and the Topsfield Rail Trail Committee are working towards interconnecting trails with neighboring towns. The Agricultural Commission will be working with Commissions in neighboring towns and with regional and state groups to further efforts to preserve farmland and promote agriculture.

Section 8 - Goals and Objectives

As noted in the prior section, the Open Space Survey results and public feedback from the Topsfield Trails Day and Open Space Forum are the driving forces behind this plan's goals and objectives. The majority of residents like the Town the way it is and wish to retain its rural character. Residents also expressed a desire for trail expansion and connectivity. Additionally, residents were concerned about fiscal responsibility during difficult economic times and favored Open Space initiatives that would not involve an increase in taxes. The following list provides concrete objectives to realize the vision discussed in Section 6.

Goal A. Preserve the Rural and Historic Character of the Town

1. Retain and protect scenic vistas, byways, archaeological sites and natural features in Topsfield
2. Preserve Topsfield's farmlands
3. Obtain Grants to fund the Open Space Committee's initiatives.

Goal B. Keep Open Space Open

1. Work with Town officials and other groups on land protection options.
2. Ensure that Open Space goals and objectives are met.
3. Utilize Forestry Management to preserve forests.

Goal C. Enhance and Expand Trails

1. Work with other groups and associations to coordinate efforts.
2. Coordinate with neighboring towns to link trails
3. Coordinate with Town authorities and other groups to improve existing trails

Goal D. Protect Water Resources

1. Coordinate with organizations such as the Ipswich River Watershed Association to protect the Ipswich River and tributaries.
2. Coordinate with Town authorities to protect the Ipswich River Watershed and the surface and ground water supplies within the Town.
3. Coordinate with Town and State authorities to promote the protection of vernal pools and wetlands from the effects of development.

Goal E. Protect Critical Habitats

1. Inventory critical habitats.
2. Work with Town boards, committees and departments to ensure that critical habitats are protected from development and the effects of development.
3. Protect contiguous forests, fields and meadows from fragmentation for wildlife habitat.

Goal F. Increasing ADA Accessibility for Topsfield Open Space and Recreational Facilities

1. Expand ADA Accessibility Options.
2. Publicize existing ADA Accessibility recreational areas in Town.

Goal G. Public Outreach and Education

1. Create educational programs.
2. Expand the Open Space Committee's web presence.
3. Encourage awareness and use of Topsfield's trails and recreation areas.

Goal H. Achieve Greater Energy Efficiency

1. Help Topsfield focus on reducing its use of fossil fuels

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Section 9-- Seven-Year Action Plan

The TOSC has designated the following programs and initiatives as vital to meeting its goals including: retaining the character of Topsfield, preserving open space, protecting the water supply and enhancing Topsfield's trail system. The TOSC has outlined areas of general concern for preservation in Map 8.

Goal A. Preserve the Rural and Historic Character of the Town

| Objective | Action | Start Year | Responsible Party |
|-----------|---|------------|----------------------------------|
| A-1 | Install railroad commemorative signage and historical markers along the Topsfield Linear Common (rail trail). | 2010 | Rail Trail Committee |
| | Showcase historic agricultural and archeological sites in town. | 2011 | Historical Commission |
| | Work to ensure that cemetery monuments are preserved. | 2011 | Parks and Cemetery Commissioners |
| | Nominate Pine Grove Cemetery to be listed on the National Register of Historic Sites http://www.nps.gov/nr/ | 2011 | Historical Commission |
| | Create additional recreational paths | 2012 | Friends of Topsfield Trails |
| A-2 | Inventory Topsfield farms and their products. | 2011 | Agricultural Commission |
| | Pursue new agricultural opportunities such as maple syrup production. | 2012 | Agricultural Commission |
| | Apply for grants for agricultural preservation. | 2010 | Agricultural Commission |
| | Encourage local produce and farmer's markets | 2010 | Agricultural Commission |
| A-3 | Apply for grants for historic preservation. | On-going | Historical Commission |

Goal B. Keep Open Space Open

| Objective | Action | Year | Responsible Party |
|-----------|--|------------------|----------------------------|
| B-1 | Consider Town acceptance of Great Estates/ Agricultural Preservation Bylaw and Agriculture Preservation Restriction Program (APR). Establish criteria that will better enable the Town to act on right of first refusal on Chapter 61, 61A or 61B land. | 2012 2011 | Planning Board TOSC |
| B-2 | Coordinate efforts with the Planning Board and officials on new growth management and master planning to ensure that Open Space goals and objectives are realized. | On-going | TOSC |
| B-3 | Work with the Tree Planning Committee to Develop a Forestry Management Plan | 2012 | TOSC |

Goal C. Enhance and Expand Trails

| Objective | Action | Year | Responsible Party |
|-----------|--|------|--|
| C-1 | Work with the Topsfield Conservation Commission, Rail Trail Committee, Friends of Topsfield Trails, Essex County Trails Association, local landowners, Essex County Greenbelt Association and Mass Audubon to create a linked trail network. | 2012 | TOSC |
| C-2 | Work with the Border-to-Boston coalition of 8 towns and regional environmental organizations to ensure the linked trail system expands beyond Topsfield. | 2012 | Rail Trail Committee and Friends of Topsfield Trails |
| C-3 | Coordinate with town committees to host fund raising events and volunteer work parties to improve and maintain existing trails. | 2011 | Rail Trail Committee, Friends of Topsfield Trails and Recreation Committee |

Goal D. Protect Water Resources

| Objective | Action | Year | Responsible Party |
|-----------|---|--------------------------|---|
| D-1 | Create a Topsfield Stream Team to work with the Ipswich River Watershed Association on initiatives such as fish count, public outreach, monitoring and fundraising for river conservation efforts (i.e. rain barrel promotion). | 2010 | TOSC |
| D-2 | Educate the public on water conservation and the effects of chemical fertilizers. "Spot check" nitrates and other contaminants in streams and ponds to track their origin. | On-going On-going | Water Commission Conservation Commission & Board of Health |
| D-3 | Continue to identify and certify vernal pools | 2011 | Conservation Commission |

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Goal E. Protect Critical Habitats

| Objective | Action | Year | Responsible Party |
|-----------|---|----------|-------------------------|
| E-1 | Inventory critical habitats coordinating with organizations including the Natural Heritage & Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries and Wildlife, the Essex County Greenbelt Association and Mass Audubon Society. | 2013 | Conservation Commission |
| E-2 | Work to change bylaws for greater protection. | 2014 | TOSC |
| | Publicize Conservation and Planning Board meetings that impact critical habitats. | 2013 | TOSC |
| | Create an incentive program for residents to protect critical habitats on their property. | 2013 | TOSC |
| | Utilize the media (Town website, local access channels and weekly paper) to publicize and educate the public on development projects that could impact critical habitats. | On-Going | TOSC |
| E-3 | Ensure that Open Space set asides are linked to adjoining parcels where feasible to preserve wildlife corridors. | On-Going | TOSC |
| | Educate residents on the importance of contiguous habitats through programs such as guided nature walks and media outreach. | 2010 | TOSC |
| | Encourage opportunities for passive recreation so the forests can be appreciated. | 2011 | TOSC |
| | Encourage opportunities for passive recreation so the forests can be appreciated. | 2011 | TOSC |
| | Work with programs, such as the Keystone Project, on forest conservation. | 2011 | Tree Planning Committee |
| | Apply to become a Tree City USA community http://www.arboday.org/programs/treeCityUSA/index.cfm | | Tree Planning Committee |

Goal F. Enhance ADA Accessibility for Topsfield Open Space and Recreational Areas

| Objective | Action | Year | Responsible Party |
|-----------|---|------|--|
| F-1 | Work with Town Committees and ADA Accessibility Officer to identify one or more Topsfield trails to become ADA Accessible. | 2011 | TOSC |
| F-2 | Provide an information outreach to the public to ensure awareness that the new Topsfield Linear Common is ADA Accessible. Create an Accessibility trail guide that includes the wheel-chair accessible trail in Bradley Palmer State Park. | 2011 | TOSC and Topsfield Rail Trail Committee |

Goal G. Public Outreach and Education

| Objective | Action | Year | Responsible Party |
|-----------|--|------|-------------------|
| G-1 | Coordinate with Masconomet High School's AP Biology Department on a program to encourage students to give their time to community service. | 2011 | TOSC |
| | Coordinate efforts with the Conservation Commission to create a Topsfield Nature Club featuring speakers and trail walks that would focus on various topics ranging from preserving natural habitats to the flora and fauna of Essex County. | 2011 | TOSC |
| G-2 | Enhance the Open Space Committee web pages with Topsfield trail maps and a self-guided tour of natural and historic areas of interest. | 2011 | TOSC |
| | Include a "What's New" section to highlight new Open Space initiatives. | 2011 | TOSC |

Goal H. Achieve Greater Energy Efficiency

| Objective | Action | Year | Responsible Party |
|-----------|--|----------|------------------------|
| H-1 | Coordinate with the Planning Board, Green Community/Renewable Energy Committee and the Conservation Commission and other town authorities to encourage environmentally sound development in public buildings and private residences. | On-going | TOSC & GC/RE Committee |
| | Implement the received CECBG grant to improve the energy efficiency of all town buildings through energy conservation, modernization of equipment, insulation and infiltration reduction. | On-going | GC/RE Committee |
| | Retrofit the town's 150 street lamps with higher efficiency units. | 2011 | GC/RE Committee |
| | Organize a tour of energy efficiency houses in the Town | 2013 | GC/RE Committee |

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Section 10 – Public Comment

Public comment at the Open Space Forum held on June 21, 2010 centered primarily on available and future recreational lands and the activities thereon. Following the forum Section 5 was greatly expanded with a more detailed listing of Town and privately owned facilities and the respective activities taking place. Requests for additional sports facilities and activities were made. They are to be included in the next Open Space Survey.

Additional comments from reviewing bodies and individuals will be added prior to submission of this plan.

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Section 11 – References

- Massachusetts Executive Office Of Energy and Environmental Affairs “A Open Space and Recreation Planner’s Workbook”.
- Mass Department of Conservation and Recreation
- Mass Department of Fish & Game
- Mass Department Agricultural Resources
- Mass Wildlife/Natural Heritage & Endangered Species
- Mass GIS (graphic information systems) website
- Metropolitan Area Planning Commission
- Town of Topsfield, Open Space Plan 2005
- Cost of Community Services, Holger Luther, Topsfield Finance Committee
- Ms. Lydia Bertolino, Director, Town of Topsfield Council on Aging
- Dr. Bernard Creedon, Superintendent, Tri-Town School Union
- Greg Krom, Topsfield Water Department
- Ipswich River Watershed Association
- Scenic Landscape Inventory published by the Department of Environmental Management (DEM)
- The Topsfield Historical Commission, Topsfield Reconnaissance Report
- Statewide Comprehensive Outdoor Recreation Plan
- Town of Topsfield, Building Department & Board of Health
- Massachusetts Audubon Society
- U.S. Department of Agriculture – Dept. of Soil Conservation Services

Draft - sent to Dept. Cons. Svcs. 12/29/2010

Appendices

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Appendix A – Open Space Survey

2009 Topsfield Open Space Survey

1) Do you consider Topsfield:

| | Yes | % |
|---|------------|-------------|
| a. A rural Town? | 217 | 55% |
| b. A Town in transition from rural to suburban? | 102 | 26% |
| c. A suburban Town? | 74 | 19% |
| Total | 393 | 100% |

2) Why did you move to Topsfield? (please check a box for each item)

| | Very Important | | Important | | Not Important | | Total | % important |
|--------------------------------|----------------|-----|-----------|-----|---------------|-----|-------|-------------|
| | Important | % | Important | % | Not Important | % | | |
| a. Business Opportunities | 6 | 2% | 23 | 7% | 292 | 91% | 321 | 9% |
| b. School System | 248 | 68% | 65 | 18% | 54 | 15% | 367 | 85% |
| c. Proximity to Boston | 93 | 26% | 183 | 51% | 80 | 22% | 356 | 78% |
| d. Affordability of Housing | 42 | 13% | 170 | 52% | 112 | 35% | 324 | 65% |
| e. Scenic Views and Open Space | 235 | 65% | 104 | 29% | 21 | 6% | 360 | 94% |
| f. Town Character | 238 | 66% | 104 | 29% | 21 | 6% | 363 | 94% |
| g. Public Safety/Services | 104 | 31% | 165 | 49% | 65 | 19% | 334 | 81% |
| h. Family | 139 | 42% | 74 | 22% | 119 | 36% | 332 | 64% |

3) What characteristics about Topsfield do you value?

| | Very Important | | Important | | Not Important | | Total | % important |
|---|----------------|-----|-----------|-----|---------------|-----|-------|-------------|
| | Important | % | Important | % | Not Important | % | | |
| a. Cultural (library, historical, etc.) | 174 | 49% | 149 | 42% | 33 | 9% | 356 | 91% |
| b. School System | 237 | 63% | 94 | 25% | 44 | 12% | 375 | 88% |
| c. Proximity to Boston | 106 | 29% | 173 | 48% | 83 | 23% | 362 | 77% |
| d. Affordability of Housing | 35 | 11% | 158 | 51% | 119 | 38% | 312 | 62% |
| e. Scenic Views and Open Space | 258 | 69% | 99 | 27% | 15 | 4% | 372 | 96% |
| f. Town Character | 248 | 66% | 114 | 30% | 16 | 4% | 378 | 96% |
| g. Public Safety/Services | 136 | 55% | 64 | 26% | 49 | 20% | 249 | 80% |
| h. Recreational Opportunities | 187 | 45% | 157 | 38% | 72 | 17% | 416 | 83% |
| i. Small Town Atmosphere | 152 | 54% | 108 | 39% | 19 | 7% | 279 | 93% |
| j. Family | 72 | 36% | 83 | 41% | 46 | 23% | 201 | 77% |

4) Do you want the physical appearance, character or building practices of Topsfield to change over the next five years? (If you answered NO, please explain, then you may wish to proceed to Question 7.)

| | | |
|--------------|------------|-----|
| Yes | 177 | 50% |
| No | 174 | 50% |
| Total | 351 | |

5a) What type of residential development is most acceptable to you?

| | Very Important | | Acceptable | | Don't Care | | Opposed | | Total | % important |
|------------------------------|----------------|-----|------------|-----|------------|-----|---------|-----|-------|-------------|
| | Important | % | Acceptable | % | Don't Care | % | Opposed | % | | |
| a. Elderly Housing | 70 | 23% | 185 | 60% | 35 | 11% | 20 | 6% | 310 | 82% |
| b. Affordable Housing | 44 | 14% | 133 | 41% | 59 | 18% | 88 | 27% | 324 | 55% |
| c. Apartments/Condominiums | 6 | 2% | 90 | 28% | 37 | 12% | 186 | 58% | 319 | 30% |
| d. Single-family 2+acre lots | 102 | 31% | 137 | 42% | 34 | 10% | 53 | 16% | 326 | 73% |
| e. Single-family 1 acre lots | 80 | 23% | 137 | 57% | 24 | 7% | 47 | 14% | 348 | 80% |
| f. Cluster Housing | 24 | 10% | 90 | 38% | 40 | 17% | 86 | 36% | 240 | 48% |

5b) Should "green building practices" (e.g. energy savings approaches) be part of the building code in Topsfield?

| | | |
|--------------|------------|-----|
| Yes | 204 | 63% |
| No | 118 | 37% |
| Total | 322 | |

If you answered YES, please circle the type(s) of residential development (listed in the previous question) to which green development should be applied. Please use the space at the end of the survey to describe your ideas or thoughts about Green Development in Topsfield.

6a) What type of commercial development is most acceptable to you?

| | Very Important | | Acceptable | | Don't Care | | Opposed | | Total | % very important & acceptable |
|---|----------------|-----|------------|-----|------------|-----|---------|-----|-------|-------------------------------|
| | | % | | % | | % | | % | | |
| a. Individual Retail | 142 | 41% | 170 | 49% | 15 | 4% | 21 | 6% | 348 | 90% |
| b. Corporate Businesses | 40 | 13% | 149 | 49% | 45 | 15% | 73 | 24% | 307 | 62% |
| c. Office Buildings/Parks | 33 | 10% | 128 | 37% | 39 | 11% | 142 | 42% | 342 | 47% |
| d. Auto Dealerships/Repair shops | 9 | 3% | 69 | 22% | 64 | 20% | 171 | 55% | 313 | 25% |
| e. Fast Food Restaurants | 12 | 5% | 32 | 12% | 41 | 16% | 173 | 67% | 258 | 17% |
| f. Manufacturing | 19 | 6% | 65 | 22% | 74 | 25% | 143 | 48% | 301 | 28% |
| g. Full Service Restaurants | 93 | 30% | 135 | 44% | 40 | 13% | 38 | 12% | 306 | 75% |
| h. Services (e.g. gyms, hair salons, day care facilities, etc.) | 86 | 26% | 170 | 51% | 55 | 17% | 20 | 6% | 331 | 77% |

6b) Where would commercial development be most acceptable to you?

| | | % |
|-------------------------------------|------------|-----|
| a. Route 1 north of Ipswich Road to | 255 | 68% |
| b. Route 1 north of Route 97 to | 93 | 25% |
| c. Route 1 between the Topsfield | 138 | 37% |
| d. Route 1 south of the Topsfield | 67 | 18% |
| e. Topsfield Center | 158 | 42% |
| Total | 375 | |

7) What town actions do you favor to preserve and/or obtain open space and recreation land?

| | Very Important | | Acceptable | | Don't Care | | Opposed | | Total | % very important & acceptable |
|--|----------------|-----|------------|-----|------------|----|---------|-----|-------|-------------------------------|
| | | % | | % | | % | | % | | |
| a. Outright purchase of land by Topsfield | 103 | 29% | 169 | 47% | 18 | 5% | 67 | 19% | 357 | 76% |
| b. Town to purchase land development rights | 74 | 22% | 180 | 53% | 23 | 7% | 62 | 18% | 339 | 75% |
| c. Change zoning laws to limit development | 129 | 36% | 156 | 44% | 17 | 5% | 52 | 15% | 354 | 81% |
| d. Use funds from town taxes and land transfers | 59 | 18% | 152 | 46% | 18 | 5% | 99 | 30% | 328 | 64% |
| e. Work with property owners to obtain Conservation Restrictions | 143 | 41% | 165 | 47% | 23 | 7% | 22 | 6% | 353 | 87% |

8) What additional recreation facilities are most needed?

| | Very Important | | Acceptable | | Don't Care | | Opposed | | Total | % very important & acceptable |
|--------------------------------------|----------------|-----|------------|-----|------------|-----|---------|-----|-------|-------------------------------|
| | | % | | % | | % | | % | | |
| a. Nature trails | 132 | 37% | 160 | 45% | 40 | 11% | 26 | 7% | 358 | 82% |
| b. Trails connected to one another | 127 | 37% | 143 | 41% | 47 | 14% | 30 | 9% | 347 | 78% |
| c. Recreation trails (non motorized) | 186 | 49% | 138 | 37% | 36 | 10% | 17 | 5% | 377 | 86% |
| d. Additional sidewalks | 143 | 40% | 128 | 36% | 56 | 16% | 28 | 8% | 355 | 76% |
| e. Children's play area | 169 | 41% | 136 | 33% | 72 | 17% | 38 | 9% | 415 | 73% |
| f. Sports playing fields | 75 | 21% | 133 | 37% | 93 | 26% | 61 | 17% | 362 | 57% |
| g. Picnic Areas | 60 | 17% | 130 | 38% | 118 | 34% | 37 | 11% | 345 | 55% |
| h. Small local parks | 76 | 22% | 162 | 47% | 76 | 22% | 32 | 9% | 346 | 69% |
| i. Senior Center | 98 | 24% | 160 | 44% | 67 | 18% | 52 | 14% | 367 | 68% |
| j. Outdoor amphitheater | 23 | 7% | 90 | 28% | 111 | 34% | 102 | 31% | 326 | 35% |
| k. Community Center | 72 | 22% | 110 | 33% | 80 | 24% | 72 | 22% | 334 | 54% |
| l. Tennis Courts | 44 | 13% | 130 | 37% | 101 | 29% | 73 | 21% | 348 | 50% |
| m. Skateboard park | 18 | 4% | 89 | 22% | 108 | 27% | 191 | 47% | 406 | 26% |
| n. Swimming pool (municipal) | 32 | 9% | 63 | 19% | 61 | 18% | 181 | 54% | 337 | 28% |

| 9a) How satisfied are you with the recreation facilities in Town for the following groups? | | | | | | | | | | |
|--|-----------|-----|------|-----|----------|-----|------------|-----|-------|--------------------|
| | Excellent | % | Good | % | Adequate | % | Inadequate | % | Total | % Excellent & Good |
| a. Children/Teens | 56 | 15% | 105 | 28% | 120 | 32% | 97 | 26% | 378 | 74% |
| b. Adults | 37 | 10% | 106 | 29% | 141 | 39% | 77 | 21% | 361 | 73% |
| c. Families | 38 | 10% | 114 | 31% | 144 | 39% | 76 | 20% | 372 | 80% |
| d. Seniors | 24 | 7% | 70 | 20% | 133 | 38% | 122 | 35% | 349 | 65% |

9b) How often do you or your family use consevation areas, town parks and/or recreational facilities during the spring, summer and fall?

| | | |
|--------------|------------|-----|
| 5x per week | 82 | 21% |
| 1x per week | 145 | 37% |
| 1x per month | 101 | 26% |
| Never | 67 | 17% |
| Total | 395 | |

9c) Should Topsfield develop a residential indoor water conservation program, possibly with financial aid from the state, to reduce water consumption?

| | | |
|--------------|------------|-----|
| Yes | 185 | 60% |
| No | 124 | 40% |
| Total | 309 | |

10) The federal government recently passed a "Safe Routes to School" program that may make funds available to help develop safe accesses to schools. Should Topsfield participate in this program?

| | | |
|--------------|------------|-----|
| Yes | 229 | 73% |
| No | 83 | 27% |
| Total | 312 | |

11) How long have you been a resident of Topsfield

| | | |
|--------------------|------------|-----|
| Less than 5 years | 57 | 14% |
| 5 to 10 years | 78 | 20% |
| 10 to 20 years | 91 | 23% |
| More than 20 years | 172 | 43% |
| Total | 398 | |

12) If you have children, how many are living in Topsfield in each of the following age groups?

| | | |
|------------------|------------|-----|
| Less 3 years old | 38 | 12% |
| 4 to 12 Years | 152 | 49% |
| 13 to 17 Years | 126 | 40% |
| Total | 316 | |

13) How many adults in the following age groups reside in your household?

| | | |
|--------------|------------|-------------|
| 18-25 | 86 | 11% |
| 26-35 | 43 | 5% |
| 36-45 | 144 | 18% |
| 46-55 | 202 | 25% |
| 56-65 | 157 | 19% |
| Over 65 | 185 | 23% |
| Total | 817 | 100% |

Open Space Survey – Comparison for years 1994, 1999, 2004 and 2009

Your Open Space Committee looks for trends. These trends are from select questions that have been repeated over the past 3 surveys (1994, 1999, and 2004). The reason we look at trends is to determine if residents feel Topsfield has changed, is changing, and how they would like it to change.

| Survey Year | # Sent | # Returned | % Returned |
|-------------|--------|------------|------------|
| 1994 | 1820 | 530 | 29.12% |
| 1999 | 2027 | 548 | 27.04% |
| 2004 | 2137 | 376 | 17.59% |
| 2009 | 2176 | 406 | 18.65% |

The number of survey returned for 2009 increased a bit compared to 2004. Previous surveys had higher percentage returns since they were handed out freely at the post office and Village Shopping Center over several weekends.

1) Do you consider Topsfield.

| | 1994 | 1999 | 2004 | 2009 |
|---|------|------|------|------|
| A rural Town | 43% | 42% | 61% | 55% |
| A suburban Town | 22% | 23% | 19% | 26% |
| A Town in transition, rural to suburban | 34% | 35% | 20% | 19% |

Topsfield residents continue the trend feeling we are still a rural town with fewer indicating we are in transition to be a suburban town.

2) Why did you move to Topsfield?

| | % Important | | | |
|--------------------------|-------------|------|------|------|
| | 1994 | 1999 | 2004 | 2009 |
| School System | 88% | 87% | 72% | 85% |
| Proximity to Boston | 63% | 66% | 46% | 78% |
| Affordability of Housing | 59% | 66% | 29% | 65% |
| Town Character | 91% | 97% | 77% | 94% |
| Public Safety | 92% | 83% | 80% | 81% |
| Family | 18% | 22% | 41% | 64%* |

* 2004 survey phrasing was "Family is here".

4) What type of residential development do you feel should take place in Topsfield? (Answers reflect the "very important" and "acceptable" combined responses).

| | 1994 | 1999 | 2004 | 2009 |
|----------------------------|------|------|------|------|
| Elderly Housing | 91% | 83% | 82% | 82% |
| Affordable Housing | 54% | 55% | 59% | 55% |
| Apartments/Condominiums | 20% | 20% | 32% | 30% |
| Single-family 2+ acre lots | 90% | 84% | 71% | 73% |
| Single-family 1-acre lots | 82% | 70% | 70% | 80% |
| No residential development | 50% | 64% | * | 48% |

* Not on questionnaire

5) What type of commercial development is most acceptable to you?

| | 1994 | 1999 | 2004 | 2009 |
|------------------------------|------|------|------|------|
| Office Buildings/Parks | 62% | 56% | 54% | 47% |
| Individual Retail Businesses | 83% | 82% | 83% | 90% |
| Shopping Centers | 12% | 26% | 25% | * |
| Auto Dealerships | 7% | 7% | 9% | 25% |
| Fast Food Restaurants | 7% | 10% | 15% | 17% |
| Full Service Restaurants | 76% | 70% | 75% | 75% |
| No Commercial Development | 73% | 67% | * | * |
| Manufacturing | | | * | 28% |
| Services | | | 75% | 77% |

* Not on questionnaire

There was a significant increase in those accepting autodealerships.

6) Is it important to you that future development be sensitive to Topsfield's rural (the word "current" was used in 2004) character?

Answers include Strongly agree and agree. For 2004 it was a "yes" or "no" question.

| 1994 | 1999 | 2004 | 2009 |
|------|------|------|------|
| 96% | 97% | 97% | * |

*This question did not appear on the 2009 survey but is included so that it appears in future surveys.

7) Do you feel the Town should make efforts to obtain open space land?

Answers include "aggressively pursue" and "pursue". For 2004 it was a "yes" or "no" question.

| 1994 | 1999 | 2004 | 2009 |
|------|------|------|------|
| 94% | 98% | 94% | * |

*This question did not appear on the 2009 survey but is included so that it appears in future surveys.

8) How satisfied are you with recreation facilities in Town?

Answers include "very satisfied" and "satisfied" (on a scale of 1 - 4). For 2004 it includes categories "1" and "2" and also includes "3" (neutral) since the scale went from 1 - 5.

| | 1994 | 1999 | 2004 | 2009* |
|-----------------------|-------------|-------------|-------------|--------------|
| Children/Youth | 87% | 71% | 47% | 74% |
| Adults | 74% | 74% | 42% | 79% |
| Families | 74% | 75% | 43% | 80% |
| Seniors | 56% | 71% | 29% | 65% |

9) How long have you been a resident of Topsfield?

| | 1999 | 2004 | 2009 |
|---------------------------|-------------|-------------|-------------|
| Less than 5 years | 21% | 11% | 14% |
| 5 - 10 years | 18% | 23% | 20% |
| 10 - 20 years | 22% | 23% | 23% |
| More than 20 years | 40% | 44% | 43% |

There has been no significant change in the length of residency.

10) Do you have children? How many in each age category?

| | 1999 | 2004 | 2009 |
|-------------------------|-------------|-------------|-------------|
| Birth to 3 years | 17% | 11% | 12% |
| 4 - 12 years | 54% | 40% | 48% |
| 13 - 17 years | 29% | 49% | 40% |

There has been no significant change in the number of children per age range in the last 10 years.

11) How many adults in the following age groups reside in your household?

| | 1999 | 2004 | 2009 |
|----------------|-------------|-------------|-------------|
| 18 - 25 | 6% | 10% | 11% |
| 26 - 35 | 11% | 6% | 5% |
| 36 - 45 | 29% | 26% | 18% |
| 46 - 55 | 21% | 21% | 25% |
| 56 - 65 | 14% | 16% | 19% |
| Over 65 | 19% | 22% | 23% |

There has been a notable decrease in the number of adults per household in the 36 – 45 age group and increases in all the higher age groups over the last 10 years.

Appendix B – Inventory of Lands

Private Parcels – Chapter Lands

| NO | STREET NAME | LAND AREA | CH. LAND | COMMENTS |
|------|--------------------|-----------|----------|-----------------------------------|
| 83 | ASBURY ST | 72.31 | 66.70 | PORTION UNDER CH 61A |
| 132 | ASBURY ST | 6.85 | 6.38 | PORTION UNDER CH 61, 61A, 59 |
| 137 | ASBURY ST | 6.49 | 6.49 | CH 61 |
| 147 | ASBURY ST | 33.21 | 33.21 | CH 61 AND PCR |
| 147 | ASBURY ST | 5.03 | 5.03 | CH 61 |
| 147 | ASBURY ST | 1.02 | 1.02 | CH 61 & PCR |
| 150 | ASBURY ST | 39.27 | 39.27 | CH 61 & PCR |
| 154 | ASBURY ST | 1.95 | 1.95 | CH 61 |
| 97 | BOSTON ST | 9.00 | 9.00 | CH 61A |
| s111 | BOSTON ST | 14.30 | 13.30 | PORTION UNDER CH 61A |
| 130 | BOSTON ST | 70.84 | 70.84 | CH 61B & PCAR |
| 180 | BOSTON ST | 11.50 | 11.50 | CH 61B & PCAR |
| 293 | BOSTON ST | 107.08 | 107.08 | CH 61B |
| 17 | BRADSTREET LN | 30.00 | 29.20 | PORTION UNDER CH 61A & PCAR |
| 43 | CANTERBURY HILL RD | 2.22 | 1.67 | PORTION UNDER CH 61A |
| 10 | CROSS ST | 12.20 | 12.20 | CH 61B & PCAR |
| 41 | CROSS ST | 155.72 | 145.96 | PORTION UNDER CH 61A & 61B & PCAR |
| 47 | CROSS ST | 10.09 | 8.09 | PORTION UNDER CH 61B & PCAR |
| 37 | EAST ST | 8.94 | 8.69 | PORTION UNDER CH 61A |
| 57 | HIGH ST | 7.05 | 7.05 | CH 61A |
| 278 | HIGH ST | 7.00 | 5.00 | PORTION UNDER CH 61A |
| 120 | HILL ST | 60.00 | 58.00 | PORTION UNDER CH 61A |
| 166 | IPSWICH RD | 3.38 | 3.38 | CH 61A & PCR |
| 74 | NORTH ST | 0.95 | 0.95 | CH 61A |
| 78 | NORTH ST | 0.92 | 0.92 | CH 61A |
| 82 | NORTH ST | 5.80 | 4.80 | PORTION UNDER CH 61A |
| 64 | PERKINS ROW | 9.80 | 8.80 | PORTION UNDER CH 61A |
| 203 | PERKINS ROW | 25.28 | 25.28 | CH 61B |
| 68 | RIVER RD | 100.00 | 92.91 | PORTION UNDER CH 61B & PCAR |
| 9 | ROWLEY BRIDGE RD | 14.90 | 14.90 | CH 61B & PCAR |
| 77 | ROWLEY BRIDGE RD | 120.52 | 120.52 | CH 61B & CH 61 |
| 252 | ROWLEY BRIDGE RD | 35.06 | 31.46 | PORTION UNDER CH 61A |
| 70 | SALEM RD | 40.15 | 37.00 | PORTION UNDER CH 61 |
| 128 | SALEM RD | 31.51 | 31.51 | CH 61A |
| 142 | SALEM RD | 26.44 | 26.44 | CH 61A |
| 22 | WENHAM RD | 7.89 | 5.89 | PORTION UNDER CH 61B |
| 16 | WILDES RD | 10.10 | 8.10 | PORTION UNDER CH 61B |
| 30 | WILDES RD | 42.15 | 40.15 | PORTION UNDER CH 61B |

Private Lands – Conservation Restrictions

| NO | STREET NAME | LAND AREA | COMMENTS |
|------|----------------|-----------|---------------------------------|
| 27R | ASBURY ST | 16.20 | PCR ESSEX COUNTY GREENBELT |
| 41R | ASBURY ST | 6.00 | PCR ESSEX COUNTY GREENBELT |
| 51R | ASBURY ST | 4.10 | PCR ESSEX COUNTY GREENBELT |
| 65R | ASBURY ST | 6.30 | PCR ESSEX COUNTY GREENBELT |
| 137 | ASBURY ST | 23.20 | ESSEX COUNTY GREENBELT |
| 147 | ASBURY ST | 33.21 | CH 61 & PCR |
| 147 | ASBURY ST | 1.02 | CH 61 & PCR |
| 150 | ASBURY ST | 39.27 | CH 61 & PCR |
| 37 | BARE HILL RD | 4.00 | ESSEX COUNTY GREENBELT |
| 130 | BOSTON ST | 70.84 | CH 61B & PCAR |
| 180 | BOSTON ST | 11.50 | CH 61B & PCAR |
| 17 | BRADSTREET LN | 30.00 | PORTION UNDER 61A & PCAR |
| 29 | CAMPMEETING RD | 2.60 | PCR ESSEX COUNTY GREENBELT |
| 33 | CAMPMEETING RD | 6.76 | PCR ESSEX COUNTY GREENBELT |
| 26 | COPPERMINE RD | 1.67 | CONSERVATION COMMISSION |
| 10 | CROSS ST | 12.20 | CH 61B & PCAR |
| 41 | CROSS ST | 155.72 | PORTION UNDER CH 61A & B & PCAR |
| 47 | CROSS ST | 10.09 | PCAR |
| 4 | EVERGREEN LN | 0.85 | DESIGNATED OPEN SPACE |
| 52 | FOX RUN RD | 1.14 | OPEN SPACE |
| 23 | GARDEN ST | 2.72 | ESSEX COUNTY GREENBELT |
| 1 | HICKORY LN | 35.46 | DESIGNATED OPEN SPACE |
| 7 | HICKORY LN | 1.48 | DESIGNATED OPEN SPACE |
| 50 | HOWLETT ST | 5.00 | UNDER CONSERVATION COMMISSION |
| 166 | IPSWICH RD | 3.38 | CH 61A & PCR |
| 166 | IPSWICH RD | 0.45 | PCR ESSEX COUNTY GREENBELT |
| 180 | IPSWICH RD | 6.18 | PCR ESSEX COUNTY GREENBELT |
| 180A | IPSWICH RD | 0.18 | PCR ESSEX COUNTY GREENBELT |
| 182 | IPSWICH RD | 1.04 | PCR ESSEX COUNTY GREENBELT |
| 231 | IPSWICH RD | 5.50 | ESSEX COUNTY GREENBELT |
| 241 | IPSWICH RD | 7.40 | ESSEX COUNTY GREENBELT |
| 290 | IPSWICH RD | 8.74 | ESSEX COUNTY GREENBELT |
| 25 | JOHNS LN | 38.20 | PCR ESSEX COUNTY GREENBELT |
| 16 | LOCKWOOD LN | 10.28 | ESSEX COUNTY GREENBELT |
| 17R | MORNINGSIDE DR | 1.61 | CONSERVATION COMMISSION |
| 19R | MORNINGSIDE DR | 1.62 | CONSERVATION COMMISSION |
| 21R | MORNINGSIDE DR | 1.62 | CONSERVATION COMMISSION |
| 25R | MORNINGSIDE DR | 1.66 | CONSERVATION COMMISSION |
| 27R | MORNINGSIDE DR | 1.67 | CONSERVATION COMMISSION |
| 29R | MORNINGSIDE DR | 6.18 | ESSEX COUNTY GREENBELT |
| 33 | MORNINGSIDE DR | 7.34 | ESSEX COUNTY GREENBELT |
| 86 | NORTH ST | 10.60 | ESSEX COUNTY GREENBELT |
| 90 | NORTH ST | 2.64 | ESSEX COUNTY GREENBELT |
| 96R | NORTH ST | 2.49 | PCR ESSEX COUNTY GREENBELT |
| 100 | NORTH ST | 2.49 | ESSEX COUNTY GREENBELT |
| 104 | NORTH ST | 1.55 | PCR ESSEX COUNTY GREENBELT |
| 303 | PERKINS ROW | 36.60 | PCR ESSEX COUNTY GREENBELT |

| | | | |
|-----|------------------|--------|-----------------------------|
| 9 | RIVER RD | 2.25 | PCAR ESSEX COUNTY GREENBELT |
| 15 | RIVER RD | 2.27 | PCAR ESSEX COUNTY GREENBELT |
| 29 | RIVER RD | 3.02 | PCAR ESSEX COUNTY GREENBELT |
| 45 | RIVER RD | 31.75 | PCAR ESSEX COUNTY GREENBELT |
| 68 | RIVER RD | 100.00 | PCAR ESSEX COUNTY GREENBELT |
| 82 | RIVER RD | 12.53 | PCAR ESSEX COUNTY GREENBELT |
| 102 | RIVER RD | 10.10 | PCAR ESSEX COUNTY GREENBELT |
| 9 | ROWLEY BRIDGE RD | 14.90 | PCAR ESSEX COUNTY GREENBELT |
| 10 | ROWLEY BRIDGE RD | 3.00 | PCAR ESSEX COUNTY GREENBELT |
| 51 | ROWLEY BRIDGE RD | 3.50 | ESSEX COUNTY GREENBELT |
| 59 | ROWLEY BRIDGE RD | 2.18 | ESSEX COUNTY GREENBELT |
| 64 | SALEM RD | 8.28 | PCR ESSEX COUNTY GREENBELT |
| 135 | SALEM RD | 2.86 | ESSEX COUNTY GREENBELT |
| 15 | SCHOOL AV | 2.77 | ESSEX COUNTY GREENBELT |
| 238 | WASHINGTON ST | 5.59 | ESSEX COUNTY GREENBELT |

12/29/2010

Town Owned

| NO | STREET NAME | LAND AREA | COMMENTS |
|-----|---------------|-----------|--------------------------------------|
| 24 | BLUEBERRY LN | 5.66 | OPEN SPACE BLUEBERRY LN |
| 148 | BOSTON ST | 13.80 | SLEDDING HILL |
| 210 | BOSTON ST | 1.07 | BOSTON ST CEMETERY |
| 216 | BOSTON ST | 1.15 | POLICE DEPT |
| 279 | BOSTON ST | 20.43 | HIGHWAY/WATER |
| 288 | BOSTON ST | 0.70 | WATER TOWER |
| 386 | BOSTON ST | 8.72 | CONSERVATION COMM |
| 11 | BROOKSIDE RD | 1.38 | WATER DEPT |
| 50 | CANDLEWOOD DR | 0.61 | TAKING |
| 78 | CENTRAL ST | 0.85 | WATER |
| 46 | COLRAIN RD | 0.02 | TAKING |
| 58 | COLRAIN RD | 2.11 | OPEN SPACE KINSMAN CIR |
| 59 | COLRAIN RD | 4.59 | OPEN SPACE KINSMAN CIR |
| 86 | EAST ST | 2.06 | TAKING (WET) |
| 13 | GARDEN ST | 0.80 | WATER TOWER |
| 32 | GROVE ST | 0.25 | TAKING |
| 8 | HAVERHILL RD | 47.91 | PINE GROVE CEMETERY |
| 51 | HAVERHILL RD | 1.60 | PORTION OF BUSY BEE (WET) |
| 124 | HAVERHILL RD | 132.70 | PYE BROOK PARK 72.20 AC |
| 131 | HAVERHILL RD | 49.11 | TOWN FOREST |
| 27 | HIGH ST | 1.94 | FIRE STATION |
| 138 | HIGH ST | 12.78 | OPEN SPACE |
| 255 | HIGH ST | 32.88 | OPEN SPACE MORNINGSIDE RIVER ESTATES |
| 114 | IPSWICH RD | 0.80 | CONSERVATION COMMISSION |
| 191 | IPSWICH RD | 1.55 | TAKING(SWAMPY) |
| 48 | KINSMAN CIR | 0.33 | OPEN SPACE KINSMAN CIR |
| 60 | MAIN ST | 11.30 | PROCTOR SCHOOL |
| 65 | MAIN ST | 0.30 | TOWN COMMON |
| 80 | MAIN ST | 1.97 | TOWN COMMON |
| 83 | MAIN ST | 2.26 | TOWN COMMON |
| 29 | MAPLE ST | 0.70 | BROOK (WET) |

| | | | |
|-----|------------------|-------|--------------------------|
| 10 | NORTH ST | 64.31 | WATER DEPT |
| 17 | NORTH ST | 18.90 | KLOCK PARK |
| 250 | PERKINS ROW | 49.94 | WATER DEPT |
| 277 | PERKINS ROW | 14.14 | STEWARD SCHOOL |
| 19 | PHEASANT LN | 13.72 | OPEN SPACE |
| 12 | PROSPECT ST | 0.60 | CONSERVATION COMMISSION |
| 196 | ROWLEY BRIDGE RD | 0.78 | SOUTH SIDE CEMETERY |
| 1 | SOUTH COMMON ST | 1.03 | LIBRARY |
| 38 | STAGECOACH RD | 0.37 | WATER DEPT |
| 8 | WEST COMMON ST | 0.94 | TOWN HALL |
| 34 | WILMOR RD | 5.75 | TAKING FLOOD PLAIN (WET) |

Salem and Beverly Water Supply Board

| NO | STREET NAME | LAND AREA | COMMENTS |
|-----|------------------|-----------|------------------------|
| 3 | BOSTON ST | 14.02 | PUTNAMVILLE RESERVOIR |
| 56 | BOSTON ST | 107.14 | FUTURE RESERVOIR |
| 153 | BOSTON ST | 1.00 | |
| 44 | MCLEOD LN | 130.00 | FUTURE RESERVOIR |
| 71 | ROWLEY BRIDGE RD | 2.72 | RESERVOIR RIVER ACCESS |
| 2 | VALLEY RD | 14.89 | CANAL |

Willowdale State Forest

| NO | STREET NAME | LAND AREA |
|-----|-------------------|-----------|
| 55 | ROWLEY ROAD | 24.50 |
| 62 | EAST ST | 18.92 |
| 61 | EAST ST | 21.75 |
| 262 | IPSWICH RD | 61.00 |
| 0 | GRAVELLY BROOK RD | 0.62 |

Bradley Palmer State Forest

| NO | STREET NAME | LAND AREA |
|----|-------------|-----------|
| 28 | ASBURY ST | 6.10 |
| 24 | ASBURY ST | 2.02 |
| 37 | ASBURY ST | 20.91 |

Massachusetts Audubon Society

| NO | STREET NAME | LAND AREA |
|-----|----------------|-----------|
| 239 | PERKINS ROW | 50.00 |
| 87 | PERKINS ROW | 157.37 |
| 0 | VALLEY RD REAR | 45.02 |
| 0 | VALLEY RD REAR | 11.70 |

Appendix C – Vegetation Inventory

Plant life includes:

Early saxifrage, water hemlock, false hellebore, skunk cabbage, colt's foot, hepatica, fumitory, wood and rue anemone, blood root, jack-in-the-pulpit, marsh marigold, shad blow, trout lily, benzoin, violets (including yellow, woolly, white, Canada white, many varieties of blue), Dutchman's breeches, partridge berry, Quaker ladies, dandelions, Canada lily, trillium, wild lily of the valley, gold thread, American star flower, wild geranium, wild oats, Solomon's seal and false Solomon's seal, winter green, rattlesnake plantain, pipsissiwa, swamp azalea, rhododendron, wood betony, blue flag, wild red columbine, blue-eyed grass, orchids (including lady's slipper and lady's tresses), buttercups, ox eye daisies, hawkweed, chicory, Queen Anne's lace, strawberries, blueberries, black raspberries, cranberries, bunch berry, bear berry, elderberry, bittersweet, Virginia creeper, carrion flower, green briar, beachplum, hobble bush, blue flag iris, leather leaf, jersey tea, button bush, spiderwort, steeple bush, rattlebox, thermopsis, tansy, yarrow, mullein, roses, knapweed, blazing star, milkweed, pokeweed, evening primrose, butter & eggs, spreading dogbane, daisy fleabane, purple vetch, cinquefoil, self heal, golden ragwort, bastard toadflax, frost weed, turtlehead, clover, celandine, catnip, clintonia, dame's racket, tall meadow rue, deptford pink, ragged robin, bouncing bet, bladder campion bindweed, St. John's wort, loosetrife, asters, golden rods, blue vervain, boneset, Joe Pye weed, pearly everlasting, brown-eyed susans, nightshade, bayberry, sweet fern, jewelweed, rattlesnake grape, polypody, Christmas, royal interrupted, marsh, ostrich, New York, cinnamon, hayscented, bracken, sensitive, fringe gentian, pitcherplant, cardinal flower, mosses, ground pine, Indian pipe, beechdrops.

Hardwoods include:

White, red, and black oak, sugar and swamp maple, white and gray birch, pignut and shagbark hickory, beech, white ash, American elm, hornbeam.

Conifers include:

White, red, and pitch pine, hemlock, blue spruce, white and red cedar, juniper, tamarack.

Appendix D – Fish and Wildlife Inventory

Mammals include:

Opossum, short-tailed Shrew, Cinereus Shrew, Hairy-tailed Mole, Star-nosed Mole, Little Brown Myotis, Big Brown Bat, Red Bat, Eastern Pipistrelle, Eastern Cottontail, Snowshoe Hare, Eastern Chipmunk, Woodchuck, Red Squirrel, Gray Squirrel, Northern and Southern Flying Squirrel, Beaver, Deer Mouse, White-footed Deermouse, House Mouse, Brown Rat, Meadow Jumping Mouse, Meadow and Southern Red-backed Voles, Muskrat, Coyote, Red Fox, Gray Fox, Raccoon, Fisher, Ermine, Mink, Striped Skunk, River Otter, White-tailed Deer.

Fish include:

* Brook Trout, *Rainbow Trout, *Brown Trout, Lake Trout, Chain Pickerel, White Perch, Yellow perch, Tesselated darter, Pumpkinseed Sunfish, Banded Sunfish, Redbreast Sunfish, Green Sunfish, Bluegill, Black Crappie, White Crappie, Largemouth Bass, Brown Bullhead, Yellow Bullhead, Golden Shiner, American Eel, Common Carp, Bridle Shiner, Common Shiner, Fallfish, White Sucker, Creek Chubsucker, Banded Killifish, Mummichog, Swamp Darter.

* Stocked by the state.

Reptiles include:

Ring-necked Snake, Smooth Greensnake, Dekay's Brownsnake, North American Racer, Northern Watersnake, Milk Snake, Red-bellied Snake, Ribbon Snake, Common Garter Snake, Snapping Turtle, Painted Turtle, Musk Turtle, Blanding's Turtle, Spotted Turtle, Eastern Box Turtle, Wood Turtle

Amphibians include:

Bullfrog, Green Frog, Leopard Frog, Pickerel Frog, Wood Frog, Gray Tree Frog, Spring Peeper, Eastern Spadefoot American Toad, Fowler's Toad, Spotted Salamander, Blue-spotted Salamander, Red-backed Salamander, Northern Dusky Salamander, Four-toed Salamander, Northern Two-lined Salamander, Red-spotted Newt, Eastern Newt.

Birds include:

Permanent Resident

Cooper Hawk, Sharp-shinned Hawk, Red Tailed Hawk, Barred Owl, Great Horned Owl Wild Turkey, Mourning Dove, Pileated Woodpecker, Downy Woodpecker, Hairy Woodpecker, Red-bellied Woodpecker, Blue Jay, American Crow, Black-capped Chickadee, Tufted Titmouse, White-breasted Nuthatch, Red-breasted Nuthatch, Brown Creeper, House Sparrow, Mallard, Rock Dove, Northern Mockingbird, European Starling, Northern Cardinal, Song Sparrow, House Finch, Purple Finch, American Goldfinch, Carolina Wren, Winter Wren

Summer Residents

American Bittern, Least Bittern, Great Egret, Turkey Vulture, Canada Goose, Mallard, Blue-winged Teal, Wood Duck, Red-Shouldered Hawk, Broad-Winged Hawk, American Kestrel, Barn Owl, Virginia Rail, Killdeer, Common Moorhen, Whip-poor-will, Chimney Swift, Ruby-throated Hummingbird, Belted Kingfisher, Northern Flicker, Eastern Wood Pewee, Willow Flycatcher, Least Flycatcher, Eastern Pheobe, Great Crested Flycatcher, Eastern Kingbird, Yellow-throated Vireo, Warbling Vireo, Red-eyed Vireo, Purple Martin, Tree Swallow, Barn Swallow, House Wren, Marsh Wren, Golden-crowned Kinglet, Ruby-crowned Kinglet, Blue-gray Gnatcatcher, Eastern Bluebird, Veery, Hermit Thrush, Wood Thrush, American Robin, Gray Catbird, Cedar Waxwing, Blue-winged Warbler, Golden-winged Warbler, Nashville Warbler, Chestnut-sided Warbler, Yellow Warbler, Blackburnian Warbler, Pine Warbler, Black-and-white Warbler, American Redstart, Ovenbird, Common Yellowthroat, Canada Warbler, Scarlet Tanager, Eastern Towhee, Chipping Sparrow, Song Sparrow, Rose-breasted Grosbeak, Indigo Bunting, Red-winged Blackbird, Common Crackle, Brown-headed Cowbird, Baltimore Oriole, Purple Finch

Winter Residents

Golden-crowned Kinglet, American Tree Sparrow, Fox Sparrow, White-throated Sparrow, Dark-eyed Junco, Pine Siskin

Draft - sent to Dept. Cons. Svcs. 12/29/2010

Appendix E – Review Letters of Approval

- Board of Selectmen
- MAPC
- Conservation Commission
- Planning Board
- ZBA
- Recreation Committee
- Board of Health

Draft - sent to Dept. Cons. Svcs. 12/29/2010

Selectmen's Letter



TOWN OF TOPSFIELD
BOARD OF SELECTMEN

8 West Common Street, Topsfield, Massachusetts 01983

29 December 2010

Joseph Geller, Chairman
Topsfield Open Space Committee
Town Hall
8 West Common Street
Topsfield, MA 01983

Dear Mr. Geller,

On behalf of the Topsfield Board of Selectmen, be advised that the Board approves the 2010 "Topsfield Open Space Plan" dated December 29, 2010 which your committee has prepared for the Department of Conservation and Recreation.

We recognize this Open Space Plan is dynamic and will be periodically updated. We acknowledge your comments about the Open Space Forum in Section 10 and appreciate your intent to add questions concerning Topsfield's available recreational land and activities in future surveys.

Thanks to the members of your committee for all their work in preparing this current plan.

Yours truly,

For the Board of Selectmen

Richard Gandt
Chairman

MAPC



Smart Growth & Regional Collaboration

August 24, 2010

Joe Geller
Chairman, Topsfield Open Space Committee
Geller MicroAnalytical Laboratory, Inc.
426e Boston Street
Topsfield, MA 01983

Dear Mr. Geller:

Thank you for submitting the Topsfield Open Space and Recreation Plan 2010 to the Metropolitan Area Planning Council (MAPC) for review.

The Division of Conservation Services (DCS) requires that all open space plans must be submitted to the regional planning agency for review. This review is advisory and only DCS has the power to approve a municipal open space plan. While DCS reviews open space plans for compliance with their guidelines, MAPC reviews these plans for their attention to regional issues generally and more specifically for consistency with *MetroFuture*, the regional policy plan for the Boston metropolitan area.

The following are MAPC's recommendations for amendments to the Topsfield Open Space and Recreation Plan that will serve to bring a more regional perspective to the plan.

Subregion - The open space plan does not mention that Topsfield is a member of the North Shore Task Force (NSTF) which is one of eight MAPC subregions. NSTF is a group of 16 communities that meet regularly to discuss issues of common interest and is an excellent forum for discussing regional open space issues and opportunities.

Consistency with MetroFuture

MetroFuture is the official regional plan for Greater Boston, adopted consistently with the requirements of Massachusetts General Law. The plan includes goals and objectives as well as 13 detailed implementation strategies for accomplishing these goals. We encourage all communities to become familiar with the plan by visiting the web site at <http://www.metrofuture.org/>.

We are pleased to see that *MetroFuture* is discussed on page 35. We note that the previous regional development plan, *Metro Plan 2000* is also discussed. Because the current plan is *MetroFuture* this plan should be highlighted in more detail. Overall, we see many positive

60 Temple Place, Boston, MA 02111 • 617-451-2770 • Fax 617-482-7185 • www.mapc.org

Jay Ash, *President* • Michelle Ciccolo, *Vice-President* • Marilyn Contreas, *Secretary* • Grace S. Shepard, *Treasurer* • Marc Draisen, *Executive Director*

Conservation
Commission



TOWN OF TOPSFIELD

Conservation Commission

8 West Common Street, Topsfield, Massachusetts 01983

September 13, 2010

Joe Geller, Chairman, Open Space Committee
Town Hall
8 West Common Street
Topsfield, MA 01983

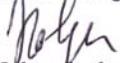
Re: Open Space Plan for 2010

Dear Joe and the OSC;

The Topsfield Conservation Committee has participated in the preparation of the 2010 Open Space Plan and has also reviewed the original draft. Editorial comments relative to the draft were submitted to you at the Public hearing held by the OSC and subsequent to that time. These have been incorporated into the final draft version by you.

At this time the TCC endorses the 2010 Open Space Plan prepared by the OSC as a thoughtful and comprehensive effort to document the open space aspirations of the Town of Topsfield.

With best regards;


Holger Luther
Member, TCC



TOWN OF TOPSFIELD PLANNING BOARD

8 West Common Street, Topsfield, Massachusetts 01983

September --, 2010

Mr. Joseph Geller, Chairman
Topsfield Open Space Committee
Town Hall
8 West Common Street
Topsfield, MA 01983

Dear Mr. Geller:

Congratulations to the members of the Open Space Committee for again providing the Town with a very thorough and valuable updated Open Space Plan. The Planning Board has voted to approve the updated 2010 Open Space Plan in its entirety and will incorporate its goals and objectives as part of the Board's master planning process.

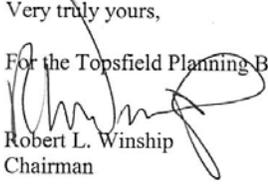
During the upcoming year, the Planning Board once again will be updating the Town's Community Development Strategy which is an integral part of the Board's statutory responsibilities of planning for the future use of land and resources within the Town of Topsfield. The survey performed by the Committee as part of this plan has clearly defined that the residents of Topsfield consider the preservation of the rural character of the Town as their highest priority despite the current economic climate and pressures of development to create a more diversified tax base.

As part of the planning process, the Planning Board will continue its on-going review and examination of the Town's Zoning By-laws, General By-laws, Rules & Regulations for the Subdivision of Land, and accompanying guidelines as a means of charting Topsfield's future and preserving open space within the Town. The Board has implemented several key elements based on the goals and objectives of the 2004 Open Space Plan that include the development of the Stormwater and Erosion Control By-law, a revised Open Space Residential By-law, the Scenic Road Overlay District, Low Impact Guidelines, and the creation of a new mixed use zoning district, the "Business Highway District North". Through its special permitting process, the Planning Board has been able to preserve areas of open space within three major housing developments.

The Planning Board recognizes the tremendous effort and time consuming work of the members of the Open Space Committee in the development of the 2010 Open Space Plan, and the Board will once again incorporate these goals and objectives within its on-going planning process for the Town of Topsfield.

Very truly yours,

For the Topsfield Planning Board


Robert L. Winship
Chairman

ZBA



TOWN OF TOPSFIELD

ZONING BOARD OF APPEALS

8 West Common Street, Topsfield, Massachusetts 01983

September 28, 2010

Mr. Joseph Geller, Chairman
Topsfield Open Space Committee
Town Hall
8 West Common Street
Topsfield, MA 01983

Dear Mr. Geller:

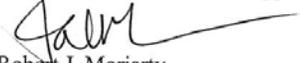
Congratulations to the members of the Open Space Committee for again providing the Town with a very thorough and valuable updated Open Space Plan. The Zoning Board of Appeals endorses the plan and as such recognizes the importance of the plan in setting goals and objectives for the preservation of open space within the Topsfield community.

This Plan will lay a foundation for the Town's on-going land use planning process. Although the Zoning Board's role is to hear appeals with respect to permits and grant variances providing relief, the members are cognizant of the goals and objectives of preserving the Town's rural character as so thoroughly summarized in the 2010 updated Open Space Plan. This Board understands that continuing review and examination of the Town's Zoning By-laws is one of the most critical actions that needs to take place within the on-going planning process in order to insure the protection of the Town's rural character and provide protected open space to the residents of Topsfield.

The Zoning Board of Appeals recognizes the tremendous effort and time consuming work of the members of the Open Space Committee in the development of the 2010 Open Space Plan, and thanks the volunteer members for providing the Town with this important planning tool.

Very truly yours,

For the Topsfield Board of Appeals


Robert J. Moriarty,
Chairman

Recreation
Committee



Town of Topsfield

TOPSFIELD, MASSACHUSETTS

Recreation Committee

October 8, 2010

Mr. Joseph D. Geller, Chairman
Topsfield Open Space Committee
Town Hall
8 West Common Street
Topsfield, Massachusetts 01983

Dear Joe:

The Topsfield Recreation Committee has reviewed the proposed 2010 Topsfield Open Space Plan. We were pleased to participate in its creation and feel it accurately portrays the existing conditions in Topsfield and the goals listed are in the Town's best interest. This committee will work diligently to achieve them.

Specifically, we will work on enhancing the trail system in Topsfield working with the Rail Trail Committee and on our own, and creating educational non-competitive recreational programs for our residents.

Regards,

Stephen Powers
Chairman, Topsfield Recreation Committee

Board of Health



TOWN OF TOPSFIELD

Board of Health

8 West Common Street, Topsfield, Massachusetts 01983
(978) 887-1520/Fax (978) 887-1521



December 30, 2010

Mr. Joe Geller
Chairman, Topsfield Open Space Committee
Town Hall
8 West Common Street
Topsfield, MA 01983

Dear Mr. Geller:

The Topsfield Board of Health supports the goals and objectives of the
Topsfield Open Space and Recreation Plan.

Sincerely,

Topsfield Board of Health
John Coulon, R.S., Health Agent
health@topsfeld-ma.org

Maps

Map 1: Regional Context

Map 2 – Environmental Justice Populations

Map 3 – Zoning Map

Map 4 – Soils and Geologic Features

Map 5 – Unique Features

Map 6A – Water Resources and Flood Hazards

Map 6B – Water Resources Regulated Areas

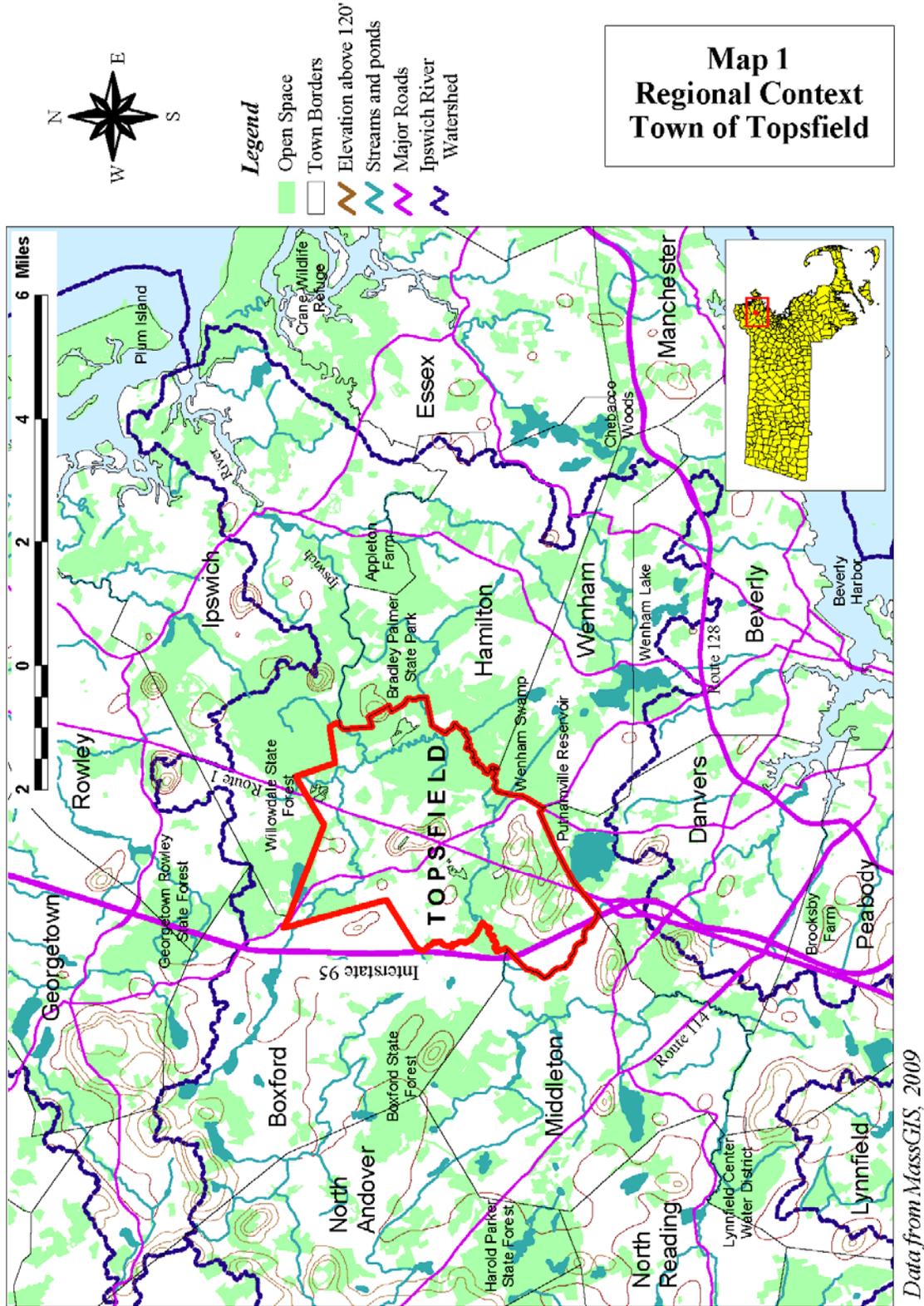
Map 7 – Inventory of Open Space

Map 8 -- Action Plan Map

Map 9 - Topsfield Farmlands

Draft - sent to Dept. Cons. Svcs. 12/29/2010

Map 1 -- Regional Context Map



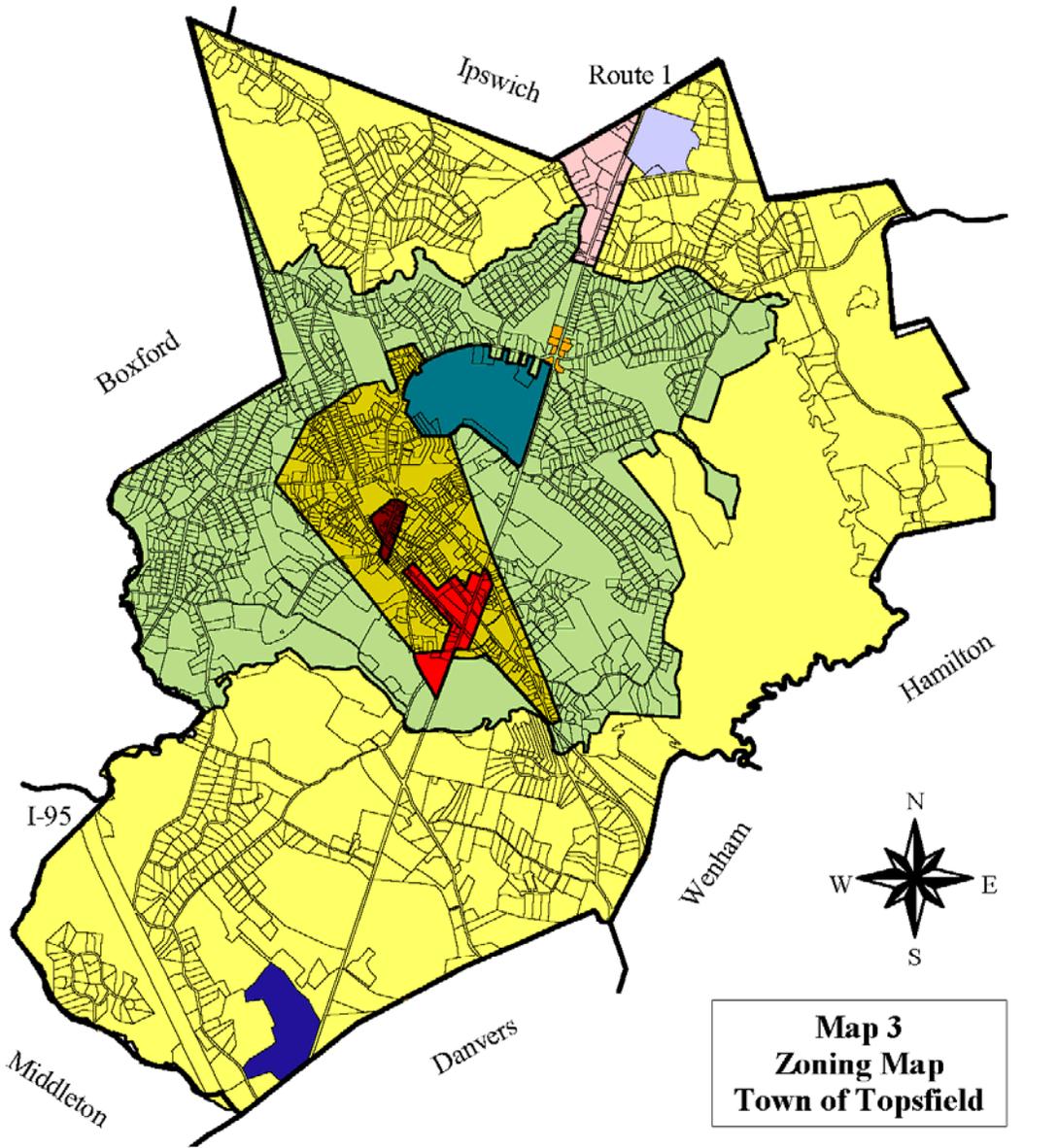
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Map 2 – Environmental Justice Populations

NOT APPLICABLE TO THE TOWN OF TOPSFIELD
See Section 3(C)

Draft - sent to Dept. Cons. Svcs. 12/29/2010

Map 3 – Zoning Map

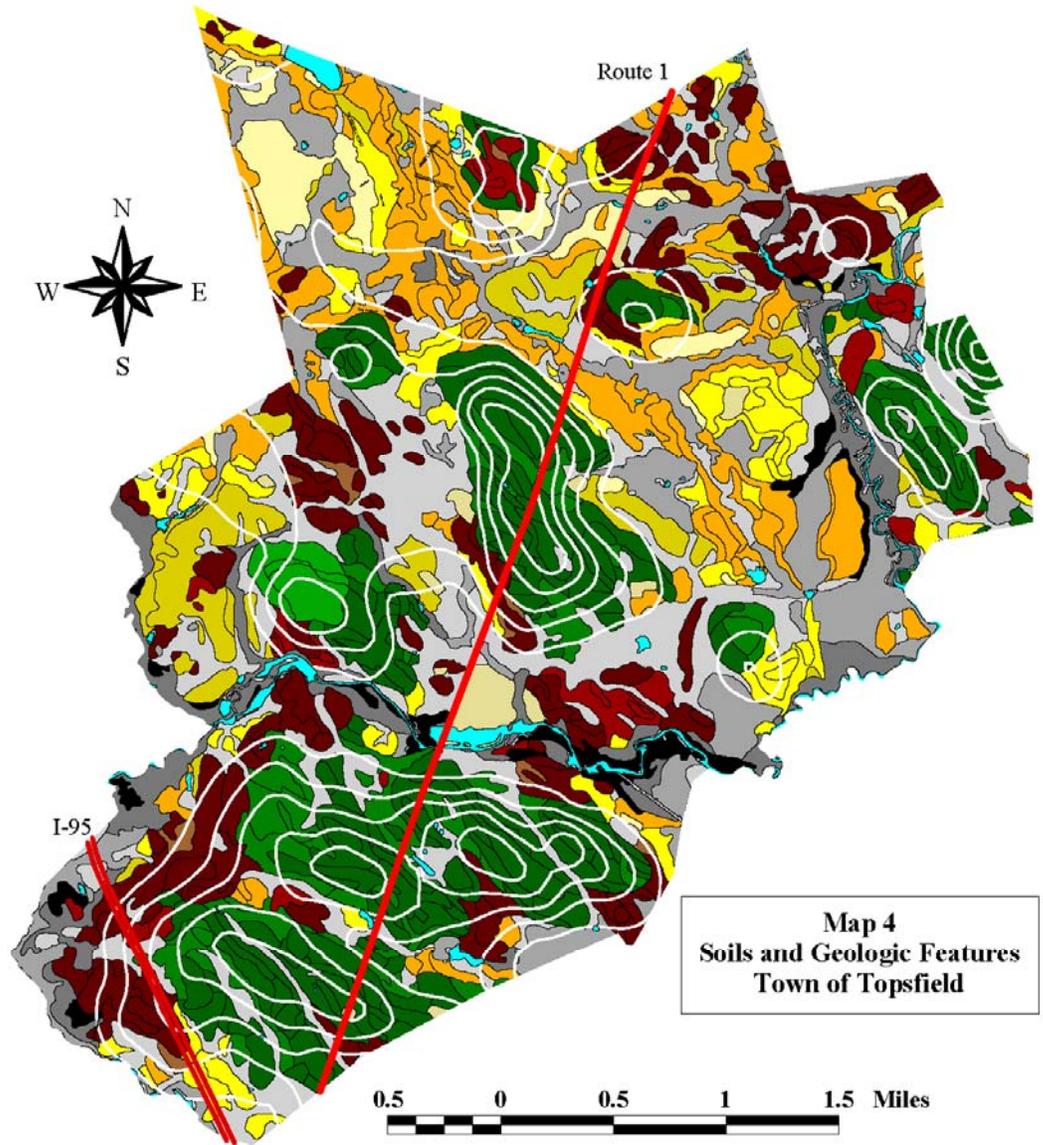


**Map 3
Zoning Map
Town of Topsfield**

Data from Town of Topsfield Assessors Office, October 2009

| | | | |
|---|-----------------------------------|---|---|
|  | Business District - Village |  | Inner Residential and Agricultural District |
|  | Business District - Highway |  | Outlying Residential and Agricultural District |
|  | Business District - Park |  | Elderly Housing District |
|  | Business District - Highway North |  | Elderly Housing Overlay - English Commons |
|  | Central Residential District |  | Elderly Housing Overlay - New Meadows Golf Course |

Map 4 – Soils and Geologic Features

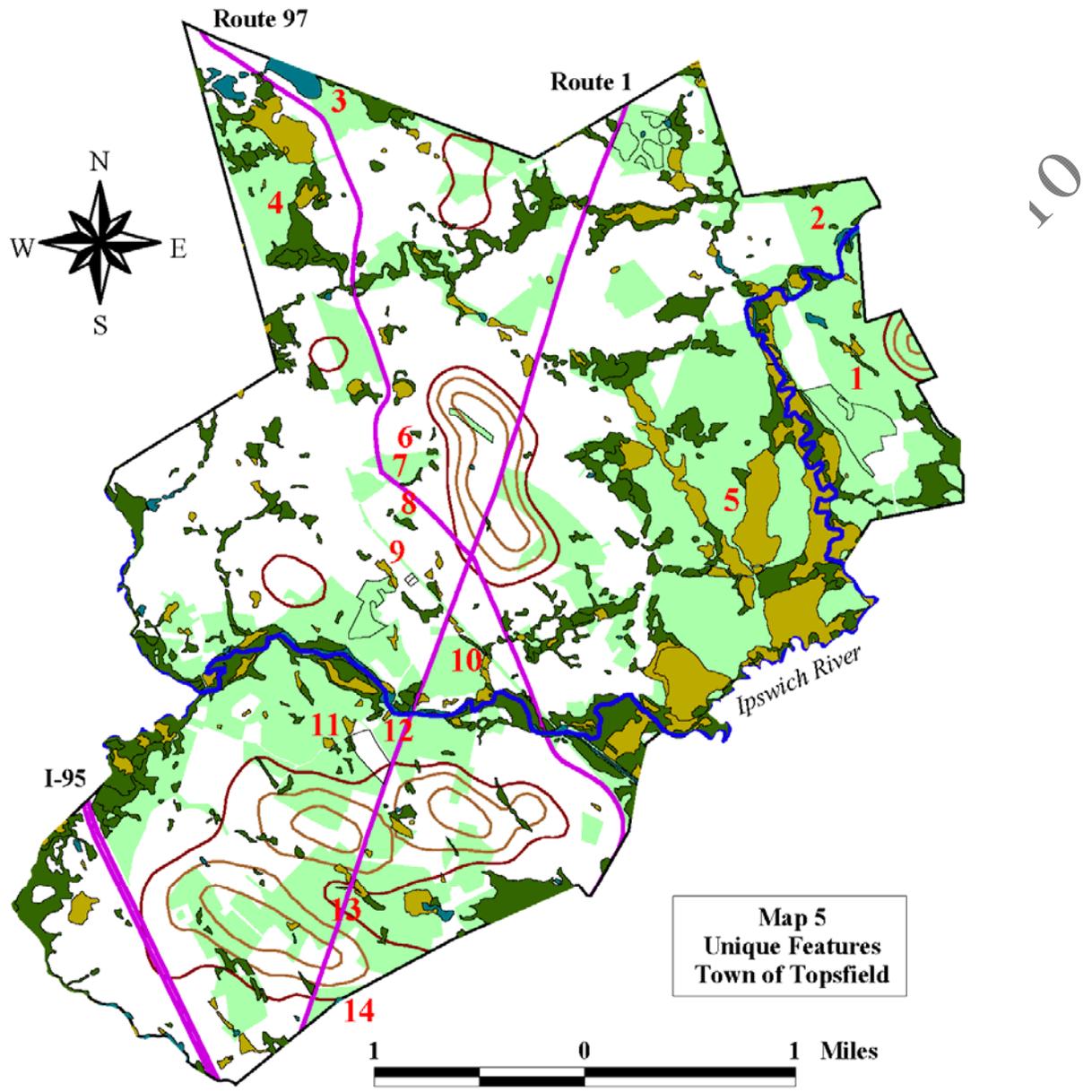


**Map 4
Soils and Geologic Features
Town of Topsfield**

| | | | |
|-----------------------------|---|--|---|
| "Drumlins" soil association | <ul style="list-style-type: none"> Paxton series Woodbridge series Montauk series | "Outwash plains" soil association | <ul style="list-style-type: none"> Hinckley series Windsor series Merrimac series |
| "Uplands" soil association | <ul style="list-style-type: none"> Canton series Charlton series Sutton series | Poorly drained, marsh & floodplain soils | <ul style="list-style-type: none"> Limerick and Rumney soils Saco Variant Medisaprists Miscellaneous & poorly drained soils |
| Mined & Disturbed soils | <ul style="list-style-type: none"> Gravel pits Udorthents | Streams, Rivers and Ponds | <ul style="list-style-type: none"> Drumlins contours |

Data from USDA Soil Conservation Services, Essex County North and MassGIS

Map 5 – Unique Features

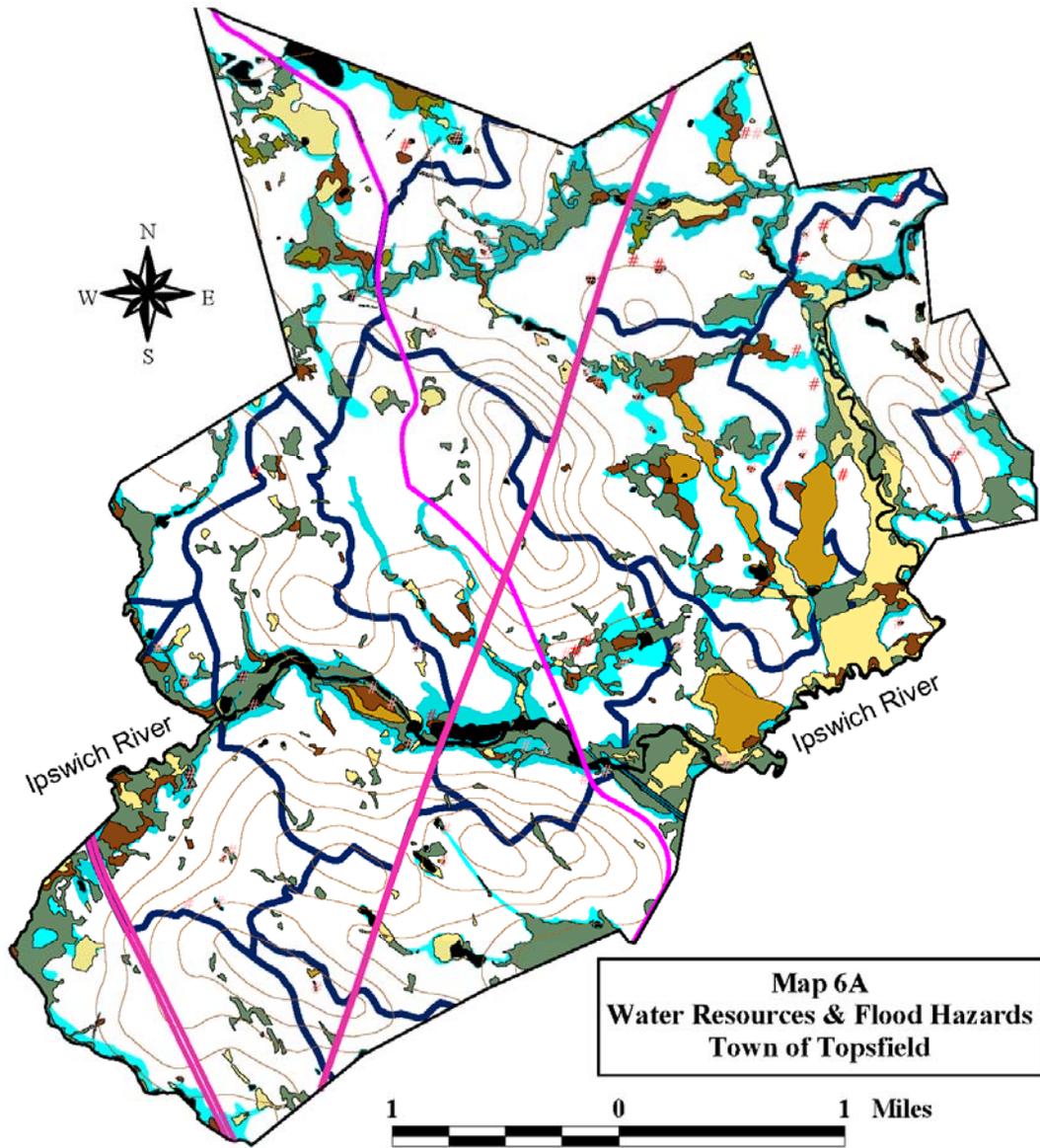


- Drumlins
- Open space
- Marsh
- Open water
- Wooded swamp

1. Bradley Palmer State Park
2. Willowdale State Forest
3. Hood's Pond Town Beach
4. Pye Brook Park
5. Ipswich River Wildlife Sanctuary
6. Parson Capen House
7. Topsfield Village Green

8. Topsfield Village Historic District
9. Topsfield Linear Common Rail Trail
10. Topsfield Fairgrounds
11. Coolidge Estate Conservation Land
12. Wheatland Sledding Hill
13. Route 1 Scenic Highway
14. Putnamville Reservoir

Map 6A – Water Resources and Flood Hazards



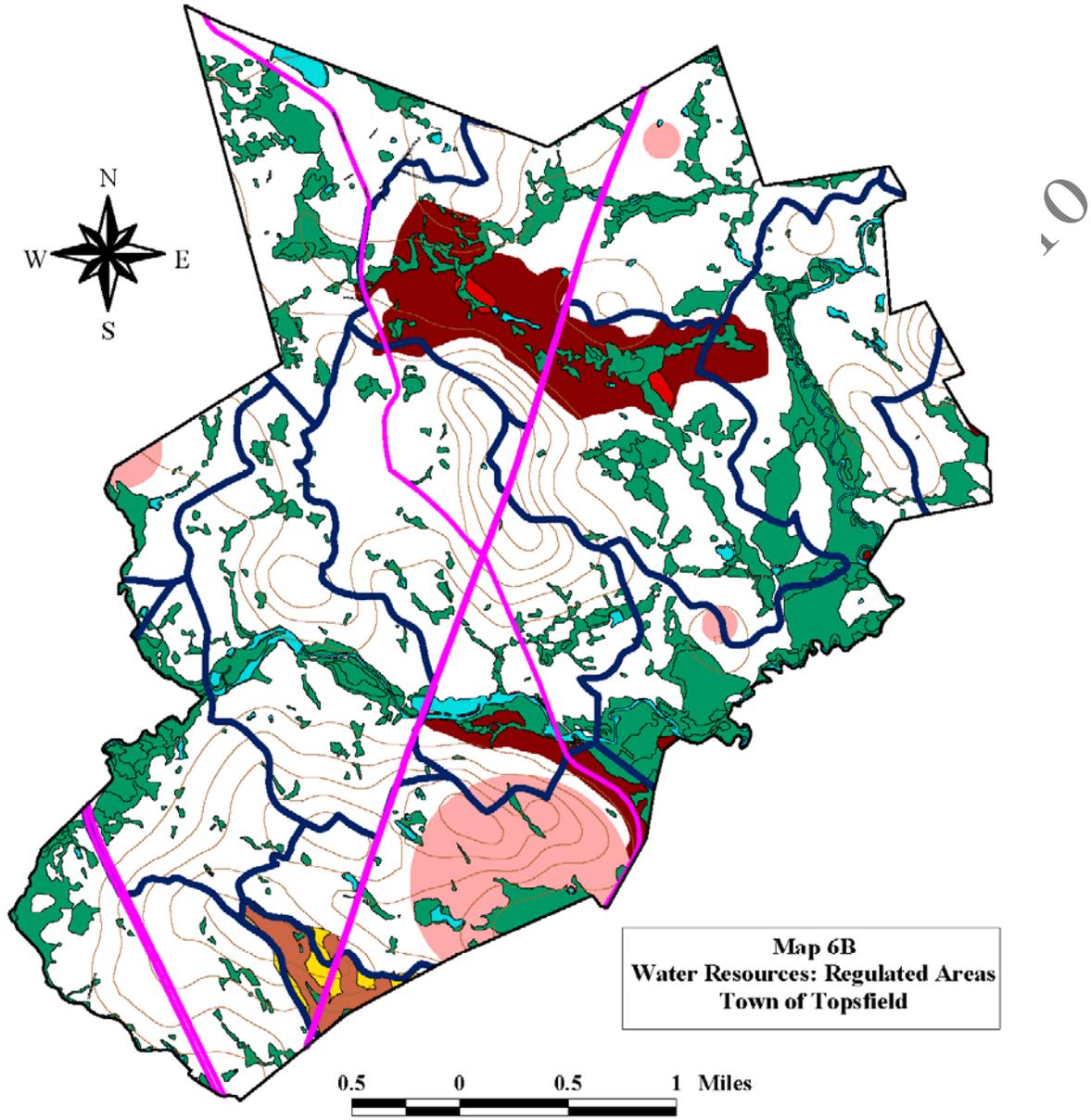
Flood Hazard areas
 Zone A
 Zone AE
 Zone V

Certified Vernal Pool
 # Potential Vernal Pool
 Topographic contours
 Subbasins of Ipswich River
 Major roads

Wetlands
 Open water
 Deep marsh
 Shallow marsh
 Shrub swamp
 Deciduous wooded swamp
 Conifer wooded swamp
 Mixed wooded swamp

Data from MassGIS, 2009

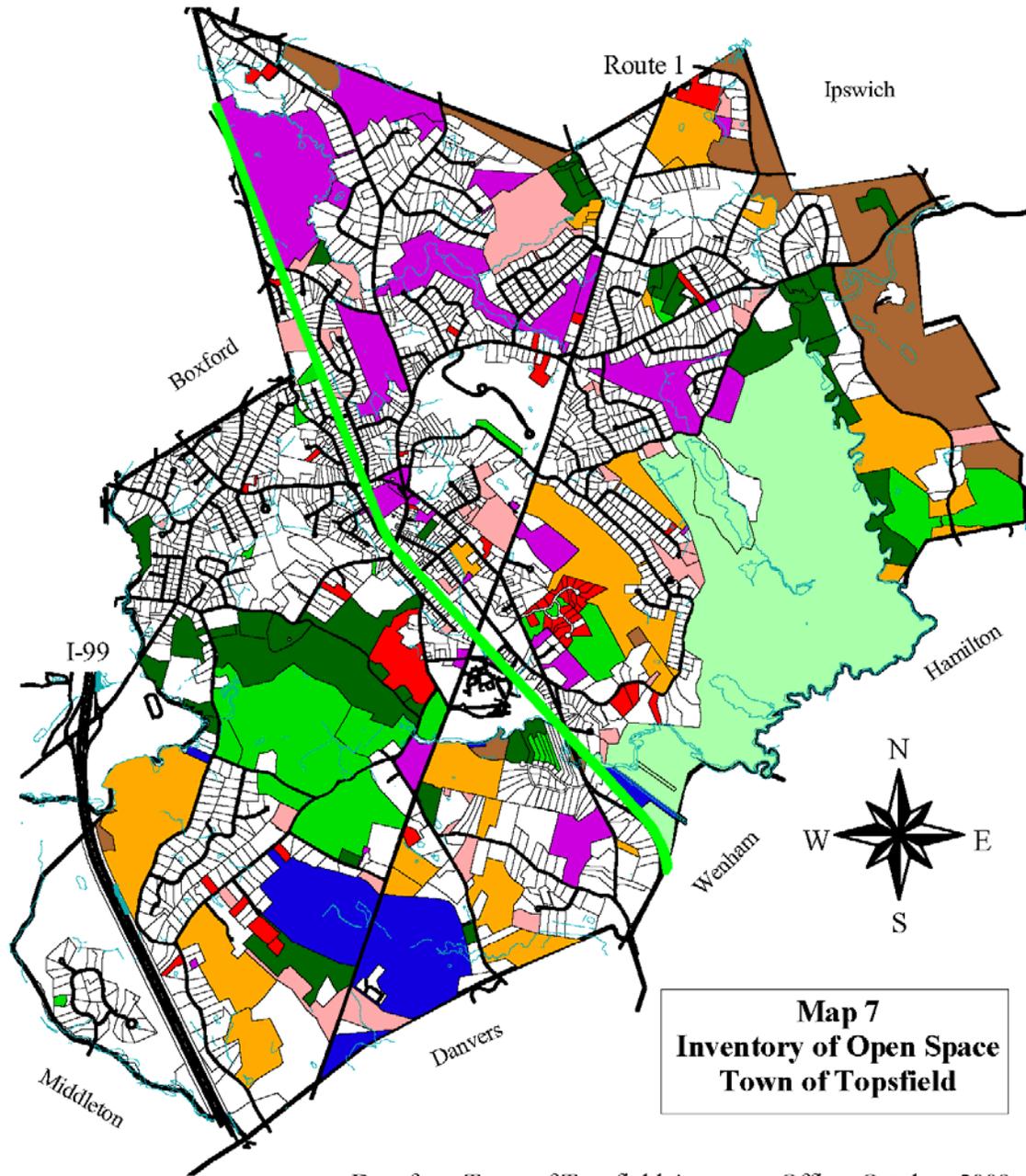
Map 6B – Water Resources Regulated Areas



Data from MassGIS, 2009

- | | |
|---|---|
| <p>Surface water supply protection zones</p> <ul style="list-style-type: none"> Zone A Zone B <p>Sub-surface water supply protection zones</p> <ul style="list-style-type: none"> IWPA Zone I Zone II | <ul style="list-style-type: none"> Roads Subbasins Topographic contours Open water Wetlands |
|---|---|

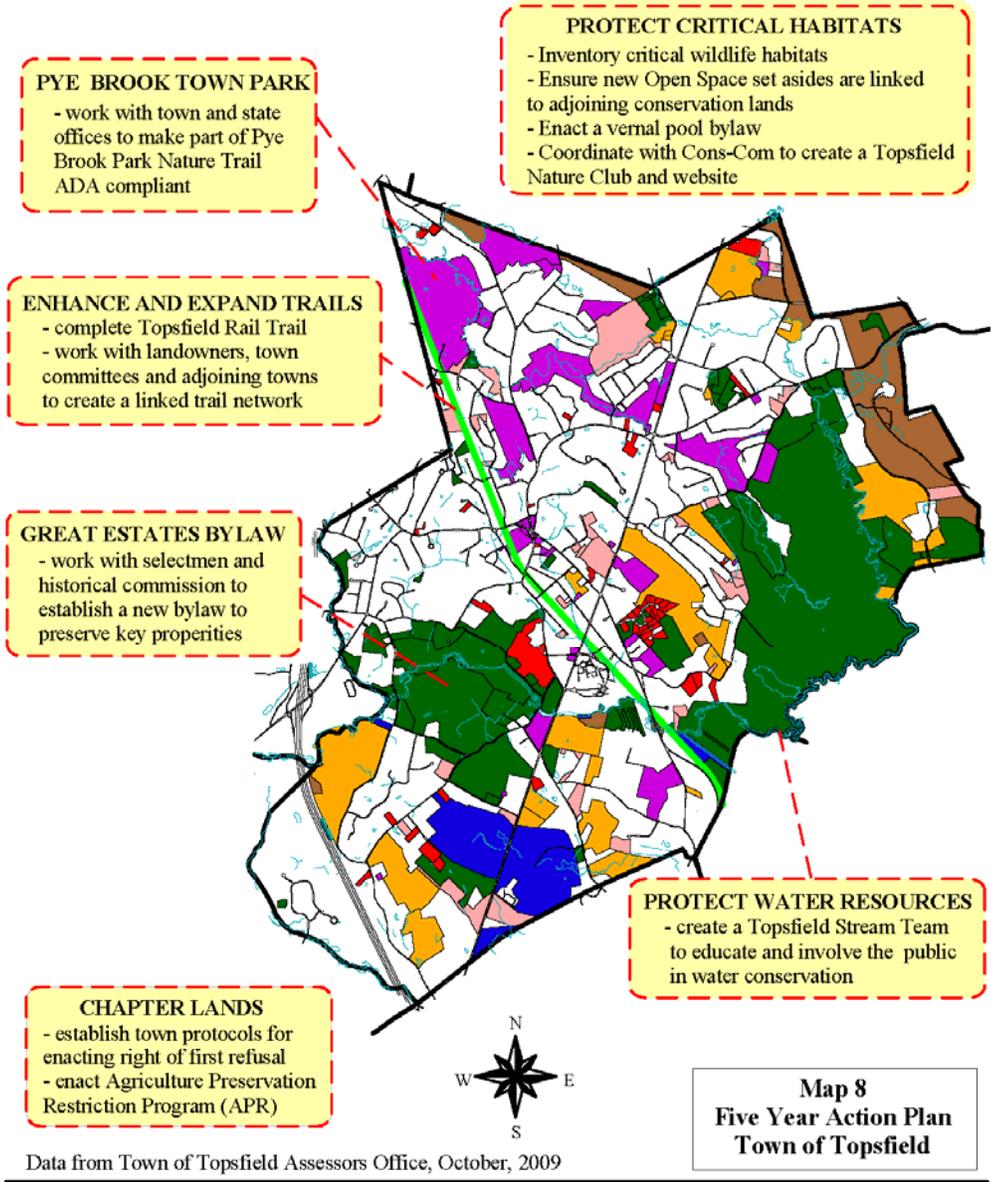
Map 7 – Inventory of Open Space



Data from Town of Topsfield Assessors Office, October, 2009

| | |
|---|--|
|  Residential & Commercial |  Chapter land (61A & 61B) |
|  Undevelopable (> 1 acre) |  Salem-Beverly Water Board |
|  Developable (Code 1300-10) |  Town-owned |
|  Audubon Ipswich River Wildlife Sanctuary |  State & County |
|  Essex County Greenbelt Conservation Restriction |  Topsfield Linear Common Rail Trail |
|  Other Permanent Conservation Restriction |  Waterways |

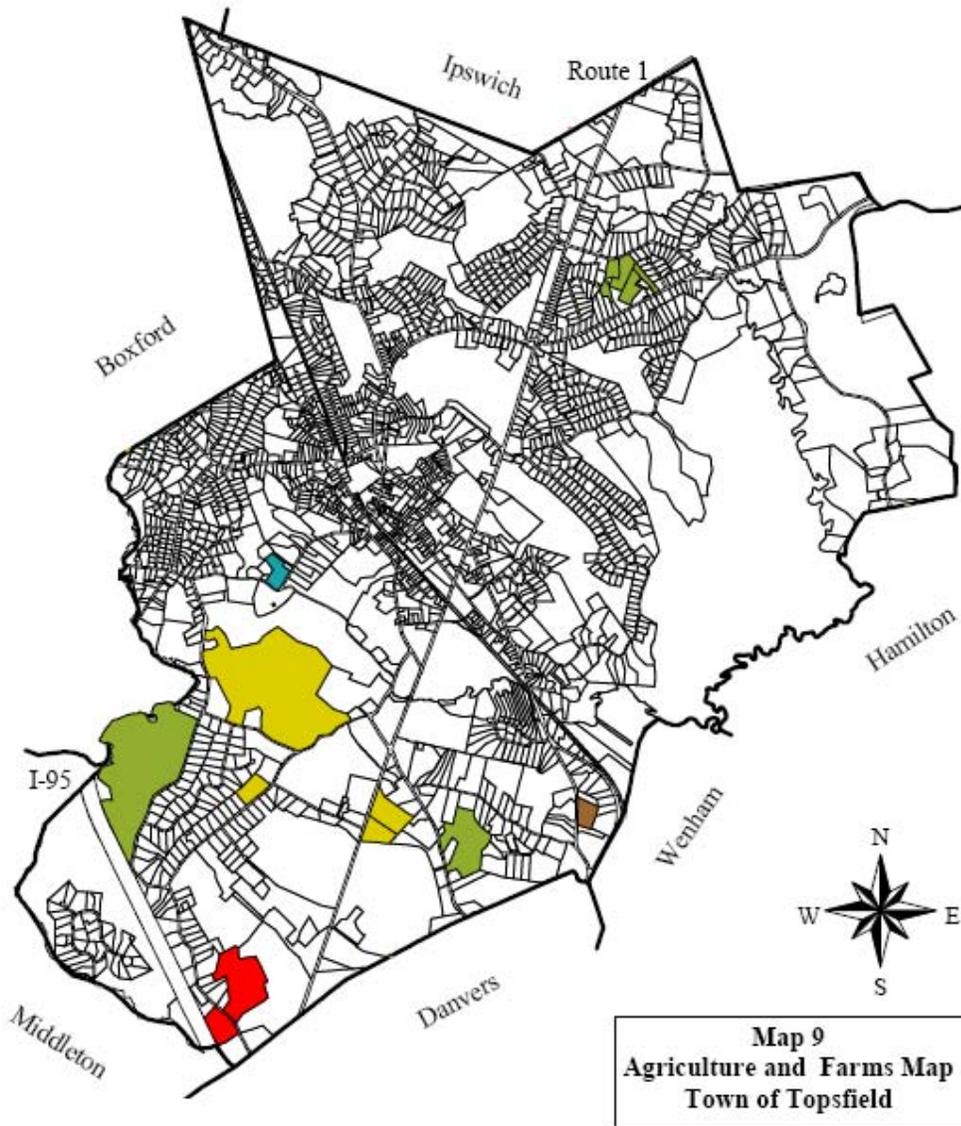
Map 8 -- Action Plan Map



Data from Town of Topsfield Assessors Office, October, 2009

| | |
|---|---|
| Residential & Commercial | Salem-Beverly Water Board |
| Developable (Code 1300-10) | Town-owned |
| Undevelopable (> 1 acre) | State & County |
| Chapter land (61A & 61B) | Conservation Restriction |

Map 9 - Topsfield Farmlands



- | | | |
|---|--|---|
|  Dairy and mixed use |  Wood lot and Christmas trees |  Flowers |
|  Fruit |  Vegetables or row crops | |

Data from Town of Topsfield Agriculture Committee, May 2010