

Open Space and Recreation Plan
Town of Newbury

**Amended Final Draft
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Table of Contents

Section 1: Plan Summary	1
Section 2: Introduction	3
A. Statement of Purpose	3
B. Planning Process and Public Participation.....	3
Section 3: Community Setting	5
A. Regional Context	5
B. History of the Community	5
C. Population Characteristics	6
D. Growth and Development Patterns.....	10
E. Active Recreation	19
Section 4: Environmental Inventory and Analysis	24
A. Geology, Soils and Topography	24
B. Landscape Character	27
C. Water Resources	30
D. Vegetation.....	37
E. Fisheries and Wildlife	40
F. Scenic Resources and Unique Environments.....	52
G. Environmental Challenges.....	56
Section 5: Inventory of Lands of Conservation and Recreation Interest	60
A. Introduction	60
B. Protected Conservation and Recreation Lands	60
C. Unprotected Open Space Properties	70
D. Recreational Resources	75
Section 6: Community Vision	82
A. Description of Process	82
B. Statement of Open Space and Recreation Goals.....	82
C. Criteria for Selection of Open Space and Recreation Properties.....	82
Section 7: Analysis of Needs	84
A. Summary of Resource Protection Needs	84
B. Summary of Community's Needs	88
C. Management Needs, Potential Change of Use	76
Section 8: Goals and Objectives	94
Section 9: Five-Year Action Plan	96
Section 10: Public Comments	108
Section 11: References	109
Appendices	A-1

List of Tables

Table 3-1: Population Growth Trends of Newbury, MA	7
Table 3-2: Population Trends and Projections by Age.....	7
Table 3-3: Newbury Subdivisions Since 2002.....	17
Table 3-4: Buildout and Growth Impacts.....	18
Table 3-5: Newbury Youth Sports Participation (2007)	22
Table 4-1: Soil Characteristics	25
Table 4-2: Newbury Land Use – 2003.....	29
Table 4-4: Major Types of Habitat.....	38
Table 4-5: Vegetation: Rare, Threatened, or Endangered Species	39
Table 4-6: Vertebrates and Invertebrates: Rare, Threatened, or Endangered Species	52
Table 5-1, Permanently Protected Properties Over 100 Acres.....	63
Table 5-2, Essex County Greenbelt Association Conservation and Recreation Properties.....	64
Table 5-3, Miscellaneous Protected Properties	65
Table 5-4, Town of Newbury Owned Conservation and Recreation Properties	66
Table 5-5, Agricultural Preservation Restrictions, Conservation Restrictions..	68
Table 5-6, Town Owned Parcels of Unknown Open Space Attributes	69
Table 5-7, Chapter 61A Properties	71
Table 5-8, Privately Owned and Unprotected Parcels of Open Space Interest.	73
Table 5-9: Existing Fields for Active Recreation	75
Table 5-10: Primary areas for Passive Recreation.....	76
Table 6-1: Criteria for selection of Open Space and Recreation Properties	83

List of Maps

(See Appendix A)

1. Regional Context
2. Zoning
3. Zoning Overlays
4. Water Resources
5. Surficial Geology
6. Special Features
7. Open Space Inventory
8. Action Plan

Section 1 – Plan Summary

This Open Space and Recreation Plan represents a two year-long planning effort. It is an update of the original 2000 plan and includes input not only from the 1999 Open Space planning process, but also from more recent planning efforts, such as the EO 418 Community Development Plan completed in 2004, the Newbury Estuarine Management Plan completed in 2005, and the Town's Master Plan, which was completed in 2006. The revised Plan also incorporates citizen input from two public workshops that were held by the Open Space Committee as part of the update process. As with the 2000 Open Space and Recreation Plan, the updated Plan details Newbury's natural resources, recreation facilities, and unique aspects. It also identifies many opportunities to preserve the Town's rural character, scenic views, and environmental quality that are overwhelmingly valued by Town residents.

Since the first Open Space Plan was completed in 2000, the Town has been involved in many conversations about the stewardship of the Town's natural resources, primarily through the planning processes listed above. The outcome of those processes was used along with the original Open Space Plan survey of over 500 Town residents, 50% of whom have lived in Town more than ten years. Residents have clearly indicated that as a group they:

- Value the rural character and open space of the Town;
- Feel that there is a great need for increasing spaces for both active and passive recreation;
- Are willing to appropriate funds, accept state funds, and change zoning to accomplish the above;
- Are overwhelmingly concerned about growth pressures in Town.

This plan identifies five broad goals that resulted from the planning process and represent an achievable vision for the coming five years. These goals are:

- Protect the Town's rural character;
- Protect natural resources: rivers, coastal areas, wetlands, marshland, and wildlife;
- Meet the demand for active recreation;
- Enhance passive recreation opportunities;
- Establish ongoing responsibility for open space and recreation concerns.

Achieving these goals will require a commitment by a large number of entities including Town boards and commissions, schools, non-profit organizations, and volunteers. The implementation of the Plan must be ongoing and evolving. To build on the existing momentum and ensure that this implementation process continues, the Board of Selectmen have established a permanent Open Space Committee that will be responsible for implementing this plan and focusing on the following major objectives :

- Address growth and growth management strategies;

- Encourage new and continued agricultural uses in Town;
- Identify and preserve scenic views and historic sites;
- Protect water supplies and watersheds;
- Protect the river and marshlands;
- Protect coastal areas and wetlands;
- Identify suitable properties available for purchase, lease or gift;
- Provide information to Town residents about available existing resources.

The creation of this plan represents a beginning, not an end. The Committee preparing it welcomes input and ideas as well as participation in making the vision within this Plan a reality for Newbury.

Section 2—Introduction

Statement of Purpose

This plan was undertaken in response to a strong sentiment that the character and health of natural resources in Newbury are becoming increasingly strained by rapid development. Planning such as this is needed to ensure that the inevitable growth does not decimate the Town's natural and historic environment. It is the Townspeople's concern that Newbury is losing its rural character.

The planning process that has resulted in this Plan has been instructive and thoughtful. Its purposes have been to:

- Understand the Town's existing built and natural resources;
- Understand and anticipate the Town's needs for open space and recreation space;
- Improve the Town's maps and associated tools;
- Garner broad input about priorities for the Town;
- Identify priority areas for protection and recreation;
- Complete the State's open space planning requirement.

The plan provides a comprehensive inventory of the Town's open space and natural resources. It also includes a series of action steps that can help the Town preserve its resources for future generations, maintain water quality in the Parker River watershed, and provide adequate recreation opportunities for Town residents. The plan will provide a vehicle to guide future planning processes and actions.

Planning Process and Public Participation

The Planning Board spearheaded the planning process for the original 2000 Open Space Plan. In the spring of 1998 it asked two graduate students from the Tufts University department of Urban and Environmental Policy to assist in preparing the inventory of lands and background information that makes up the Environmental Inventory and Analysis section. In January of 1999 the Planning Board formed an Open Space and Recreation Subcommittee of interested residents. This Subcommittee met semi-monthly for nearly one year and undertook a Town-wide survey conducted in March of 1999, a detailed mapping effort, site walks, and a public hearing and presentation to Town boards.

In 2006, the Board of Selectmen appointed a full-time on-going Open Space Committee, whose first task would be the update of the 2000 Plan. The Committee has been meeting monthly since November 2006 and held three public meetings, in May 2007, June 2008, and February 2010, to share the results of their planning process, to gather input from Town residents about the state of the natural resources of the Town, and to identify the priorities that the Committee

should use in its approach to open space planning. These public meetings strongly influenced the development of this Plan.

The final plan was presented to the Board of Selectmen, Planning Board, the Conservation Commission, and the Merrimack Valley Planning Commission for input and approval and was approved by the Board of Selectmen on September 28, 2010. This effort represents an important commitment of planning and time by volunteers from within the Town.

Section 3—Community Setting

A. Regional Context

Newbury is a growing coastal community located in Northeastern Massachusetts. The Town has significant water resources including tidal rivers, saltwater marshes, and wetlands. The Parker River, where the first settlers arrived, provided the lifeline for a fishing and agrarian economy and for limited colonial milling. However, the flows were insufficient to power the larger mills which developed in the neighboring Merrimack Valley in the nineteenth century.

Newbury remains a semi-rural Town with long-standing ties to shell fishing and agriculture. In the twentieth century, Newbury became a desirable residential community as the population of Newburyport spread out. At the end of the century, it became even more desirable as the Boston Metropolitan region expanded and train service between Newburyport and Boston was restored.

Newbury is an attractive community in which to live due to its natural beauty and relative proximity to Boston. The ocean and tidal rivers provide superior opportunities for swimming and boating. The broad reaches of wetlands, tidal marsh, and river valley contribute to the livability of homes and neighborhoods and provide wide natural buffers that separate clusters of developed areas. Transportation links via interstate highway to employment centers in greater Boston and the Merrimack Valley, along with relatively easy access to Logan International Airport and, more recently, the Manchester, NH airport, have contributed to residential growth. Commuter rail service was restored in 1998 and commuters can arrive in Boston in about one hour.

Currently, commercial and industrial development has a limited presence in Newbury. Industry places few burdens on the Town's natural resources. No significant commercial development has occurred to date, as poorly drained soils and a lack of water and sewer infrastructure have inhibited large scale development. Competition from established commercial centers in neighboring Seabrook, NH and in nearby Peabody and Danvers also limits the viability of large commercial development. Plans for a mixed-use development at the intersection of Route 1 and Middle Road, near the commuter train station in what is known as the Little River Transit Area, were presented early in 2008 by a prospective developer, but the required zoning changes were not accepted by the Town. No other plans for mixed-use or commercial development are currently before the Town.

B. History of the Community

In 1634 the ship "Mary and John" left the Thames River in England carrying John Parker, James Noyes, and other men, women and children bound for a better life in the Massachusetts Bay Colony. They wintered in Agawam (today Ipswich) and in the spring of 1635 moved up the Quascacunquen (today the Parker River) and landed east of the present day Parker River

Bridge. At the end of present day Cottage Road is a Memorial Boulder commemorating the landing spot and marking Newbury's beginnings. These first settlers were farmers dependent upon the land and themselves for survival.

The colonists built their settlement and prospered. As the population increased, Newbury's boundaries extended from the Parker River outward to the Merrimack River and the Artichoke. In 1654 the first navigable bridge, called Thurlow's Bridge, was built over the Parker River by Richard Thurlow. Thurlow's Bridge opened the road for travel from Boston, Ipswich, and Salem. Richard Thurlow charged a toll, not for humans but for animals. The fourth bridge at this site was recently rebuilt and is still known by its original name.

On the upper Parker River, near the falls, industry was started – the Byfield Woolen Mills on the Falls, Old Tappan Grist Mill on Main Street, Sawmill on River Street and the Larkin-Moffill Mill, which later became Pearson's Snuff Mill, on Larkin Road. By 1932 the only industrial business remaining was Pearson's Snuff Mill; that closed in the 1990s.

In 1807 the first Female Seminary in America was founded in Byfield. Today the building is privately owned, after a few years of serving as a Military School. The Governor's Academy, formerly known as Governor Dummer Academy, the oldest continuously operating boarding school in America, was founded in 1763, and is still an integral part of Newbury.

In 1878 silver was discovered in a large field off Scotland Road. This discovery made money for those who sold their land and those who became involved in what was known as the Chipman Silver Mine. The mine produced \$500,000.00 worth of silver and \$100,000.00 in dividends. The mine closed in 1925.

The "Waterside" group built their homes, churches, businesses and municipal buildings along the Merrimack River. This "Waterside" group, comprised of merchants, shipbuilders, and sea captains, decided that they had nothing in common with the farmers of "Old Town." These "Waterside" people petitioned the General Court to become a separate community. In 1764 the Town of Newburyport became incorporated. In 1819 the residents of the West Parish petitioned the General Court to become a separate community and they became the Town of West Newbury.

C. Population Characteristics¹

According to the 2000 Census, the Town of Newbury has a population of 6,717. While Newbury retains a rural, small-town feel, the town's population has grown strongly and consistently over the past 50 years, outpacing the growth of the Commonwealth of Massachusetts during that same time period. During the 30-year period between 1960 and 1990, Newbury's year-round population increased dramatically, more than doubling from

¹ Information in this section is taken from the 2006 Newbury Master Plan and the 2001 Newbury Open Space Plan.

2,519 to 5,623 (see Table 3.1, below). Population projections for the year 2020 anticipate that growth rates will be somewhat slower than in the past, but still very strong.

Table 3-1: Population Growth Trends of Newbury, MA

Year	1960 Census	1970 Census	1980 Census	1990 Census	2000 Census	2010 MISER Projection	2020 MISER Projection
Population	2,519	3,804	4,529	5,623	6,717	7,406	8,177
Growth Rate	-	51.0%	19.1%	24.2%	19.5%	10.3%	10.4%

Sources: 1980, 1990, 2000 US Census of Population;

Massachusetts Institute for Social and Economic Research (MISER)

"Mid" Population Projections

Age

In 2000, the average age of a Newbury resident was 37.3 years of age. Following national trends, Newbury's population is expected to continue to age in the coming years, as the so-called Baby Boom generation ages (shown in the Table 3.2 as the cells in bold). Currently, Newbury's largest age groups are those in the 30-39, 40-49 and 50-59 age ranges, roughly corresponding to the age of the Baby Boomers. By 2020, growth of the resident population between the ages of 60 and 80 is expected to increase by almost 200%. This age group is expected to remain in Town, increasing future demand for recreation venues that meet the needs and desires of older citizens. This may increase the demand for walking trails and necessitate the expansion of sidewalks

The population of Newbury children and teens (those under age 20) is projected to decrease slightly between 2000 and 2020. The population of residents in their 20s, however, is expected to increase by 71.4% between 2000 and 2020. With increasing numbers of both older residents on fixed incomes and young adults in their twenties, it is likely that the need for affordable housing for these two age categories will continue to grow.

Table 3-2: Population Trends and Projections by Age

Age Group	1980 Census	1990 Census	2000 Census	2010 MISER Projection	Population Growth (2000-2010)	2020 MISER Projection	Population Growth (2010-2020)
0-9	649	844	945	819	-13.3%	923	12.7%
9-19	775	718	994	1,058	6.4%	930	-12.1%
20-29	652	583	391	622	59.1%	670	7.7%
30-39	798	1,101	1,098	693	-36.9%	1,108	59.9%
40-49	465	1,003	1,355	1,346	-0.7%	855	-36.5%

50-59	491	482	974	1,370	40.7%	1,366	-0.3%
60-69	358	458	447	932	108.5%	1,317	41.3%
70-79	253	305	347	371	6.9%	786	111.9%
80-89	77	113	143	167	16.8%	186	11.4%
90+	11	16	23	28	21.7%	36	28.6%
Total	4,529	5,623	6,717	7,406	10.3%	8,177	10.4%

Sources: 1980, 1990, 2000 US Census of Population;
MISER "Mid" Population Projections

Note: Generalized "Baby Boom" age group is shown in **bold** typeface.

Population Density

Newbury remains a town with a strong rural aesthetic. While its population in general is relatively spread out, there are more concentrated residential areas in and around Byfield Center, the Upper Green in Old Town, and on Plum Island. At first glance, the population density of the Town of Newbury is much lower than that of the Commonwealth of Massachusetts (277 vs. 809 persons per square mile). Further investigation reveals that the actual density is much higher than gross area calculations indicate, however, given that over 6,700 acres of land (consisting principally of salt marsh and state/federal lands) are non-inhabitable. When only the areas that are actually habitable are factored into the equation, the population density exceeds 500 persons per square mile (Year 2000 population of 6,717 divided by 13.3 square miles habitable = 503 persons/square mile)

Newbury is primarily a commuter or "bedroom" community, as its residents are for the most part employed outside of the Town in the larger employment centers surrounding Greater Boston. More Newbury residents are employed in the Education, Health and Social Science industries than any other. This is followed by the Professional Services, Manufacturing, and Retail Trade sectors. Newbury has a higher percentage of resident employment in Construction, Information, Transportation and Retail Trade industries than the Merrimack Valley region and the Commonwealth. Newbury residents are relatively underrepresented in the Finance, Insurance, Real Estate and Service industries, when compared to the region and the Commonwealth.

Family Income²

Newbury has attracted a high-income residential population. The median household income of Newbury residents (\$74,836) is almost 50% higher than the Essex County (\$51,576) and Massachusetts (\$50,502) median. Over 29% of households earn in excess of \$100,000 annually, compared with 19% in Essex County and 17.9% in Massachusetts.

² Consult the 2006 Newbury Master Plan for additional explanation and data about this topic

Unemployment³

The Town of Newbury has traditionally had one of the lowest unemployment rates in the region. Its unemployment rate has mirrored trends of both the region and the Commonwealth, but has consistently been lower than both over the past few decades. In February of 2007 Newbury's unemployment rate stood at 4.4%, lower than the Massachusetts rate of 5.8%.⁴

Educational Attainment⁵

Newbury reflects the high level of educational attainment of the Commonwealth and the surrounding region. Over 95% of the residents of Newbury over the age of 18 have graduated from high school. Furthermore, a greater percentage of Newbury residents (52.5%) have attained at least an associate's degree than residents in the region (38.5%) and in the Commonwealth (39.4%) as a whole. The high rate of educational attainment has likely contributed to the consistently lower unemployment rate.

Industry and Employment in Newbury⁶

Total employment in Newbury averaged 1,481 persons during the first quarter of 2006. This figure, although small, has been growing steadily over the past two decades.

Within Newbury, the educational services and retail trade industries employ the most people. As is shown in Figure 3.1, the educational services sector employs 34% (493) of Newbury's in-town employment. The largest employers in town include the Triton Regional School District (including Newbury Elementary School), as well as The Governor's Academy, which is located in South Byfield.

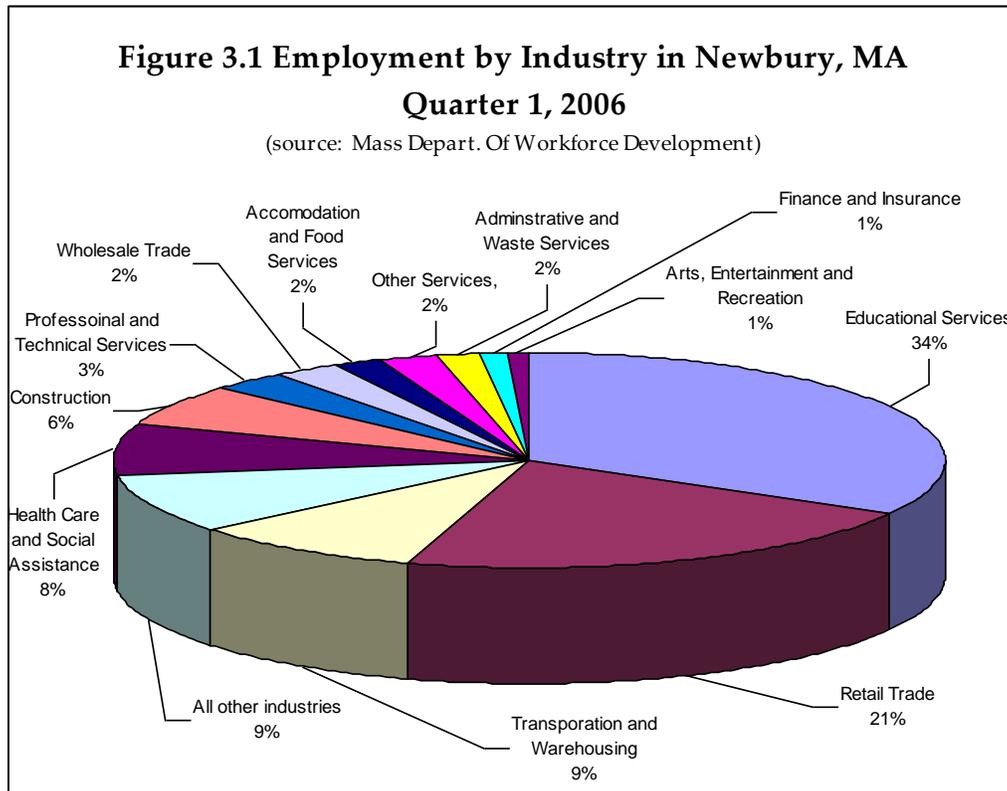
A growing segment of the economic base in Newbury is home-based business. Between 1990 and 2000, the population of residents over the age of 16 who worked at home increased by over 17% (US Census). The experience of Newbury mirrors a regional and national trend. An increasing number of employees are able to telecommute from home or decide to start up new businesses out of a home office. The emergence of the Internet and other telecommunications advancements has stimulated this growth of home-based businesses.

³ Consult the 2006 Newbury Master Plan for additional explanation and data about this topic

⁴ Massachusetts Department of Workforce Development Division of Unemployment Assistance

⁵ Consult the 2006 Newbury Master Plan for additional explanation and data about this topic

⁶ Consult the 2006 Newbury Master Plan for additional explanation and data about this topic



D. Growth and Development Patterns

Patterns and Trends

Like many New England towns, development in Newbury first occurred around small villages. Homes were clustered near these small civic and commercial centers. Farms expanded in areas outside of the village centers. These village centers were bounded by farms and separated by significant tracts of undeveloped land. Distinctions between these villages are still clear today, as natural barriers (rivers and marshes) along with large tracts of preserved open land (state game reserves, forests and other protected land) still separate these areas from one another. The clear separation of these village centers persists, despite significant growth in population and development, particularly in the post World War II period. This has occurred almost exclusively in the residential sector with the proliferation of low-density large-lot subdivisions. However, most residents still identify strongly with the particular section of Town in which they live, associating closely with either the historic Old Town section or Byfield or the former summer cottage community of Plum Island.

- Old Town:** Throughout the twentieth century there has been a steady development of new housing in Old Town. Initially this development occurred as a natural extension of the neighborhoods of Newburyport's South End, resulting in a relatively dense residential area extending from Marlboro Street to Rolfe's Lane. Development then spread along the frontage of Old Town's established roads, such as High Road to the Lower Green, and

along Parker, Hanover, Green and Hay Streets. In the 1960s the first significant subdivisions occurred, including Riverview Drive and developments on new side streets off of Hanover Street, followed later by Seaview Lane off of High Road and Old Farm Way off of Hay Street. In the 1960s the first significant subdivisions occurred, including Riverview Drive off of High Road and developments on new side streets off of Hanover Street, followed later by Seaview Lane off of High Road and Old Farm Way off of Hay Street. In the 1980s and 1990s new housing spread along Scotland Road, Orchard Street, and Middle Road, resulting in the connection of Old Town and Byfield neighborhoods.

- **Plum Island:** Early in the 20th Century, Plum Island was divided into hundreds of small house lots. Thereafter there was a steady development of summer cottages and camps, with a handful of year-round homes. The past twenty-five years have seen a significant increase in the number of year-round residents. Summer cottages have been converted and expanded into year-round homes or razed and replaced. The desirability of this seaside neighborhood has increased land values and home prices dramatically. The completion of water and sewer infrastructure throughout Plum Island has also increased costs due to betterments.
- **Byfield:** The substantial growth of housing and neighborhoods in Byfield occurred later in the century largely as a result of the construction of Interstate Highway 95. With the highway, Byfield became an attractive rural suburban address for metropolitan commuters. This growth initially occurred along established streets and then in subdivisions beginning with Academy Park and Pearson Drive. In the 1980s new subdivisions included Knobb Hill and Courser Brook. The trend continued in the 1990s with the addition of Austin Fields and Fatherland Farms.

Today, Newbury is a community with a predominance of single family housing. Eighty-eight percent of homes in Newbury at the time of the 2000 US Census were single-family. There were 2,816 housing units in the Town of Newbury in 2000. This represents a sixteen percent (16%) increase since 1990 (451 additional units).

Community Facilities

This steady growth has placed significant additional demands on Town services. The two village schools, Byfield and Woodbridge, were retired in 1997 when the "Round School," which had been built in the 1950s, was expanded and totally renovated as part of the Triton Regional School District to accommodate all elementary school children in Newbury. The Triton Regional Middle School and High School building was constructed in Byfield in 1970 and serves Newbury, Rowley and Salisbury. In 1998 the Town voted to construct a new library in Byfield to serve the Town's growing population.

The 2006 Newbury Master Plan identified the need for additional community facilities. The Plan advocated for further planning in anticipation of expanding the Town Offices complex

and the Police Station. Another emerging need included a new senior center to support the anticipated aging of the “baby boom” generation. The public works complex also was identified as becoming insufficient and obsolete.

Infrastructure

Transportation System

Newbury is fortunate to be well-connected to the regional highway system. Over the last fifty years, Newbury has seen the initial development of I-95 (early 1950s), the reconstruction and widening of I-95, and the construction of I-495 (1960s), passing through neighboring Amesbury. This has resulted in excellent connections to Newbury from the north and south. With two exits off of I-95 and other well-traveled routes through town (Routes 1 and 1A), car and truck access going north and south is ideal.

Despite the excellent connections to and from the north and south, Newbury lacks efficient east/west connections within the town. Major north/south roads are connected typically by winding country roads. Scotland Road, which provides a connection between I-95 and Route 1, via the industrial areas of Newburyport near the Route 1 traffic circle, provides a suitable corridor for east/west travel. Central Street and Elm Street also provide this opportunity.

Newbury is served by a commuter rail line which runs between Newburyport and Boston; the station is located at the Newbury/Newburyport border near the Route 1 traffic circle.

The expansion of the interstate transportation system has made Newbury an increasingly attractive location for residential development over the past 50 years. As a result, Newbury has experienced a population growth unmatched in the Town’s history. The type of development that has proliferated has generally been low density, converting large parcels of land into suburban home subdivisions. Housing development of this type continues to have a negative impact upon the open space system in Newbury, as land converted into housing threatens to break up wildlife corridors, other open space networks, and the rural feel of the community. However, as much of Newbury’s land is unbuildable due to soil conditions and wetlands, the impact of development has been significantly less than in some other towns. Nevertheless, with the population continuing to grow, it is likely that there will be increasing pressure to consider marginal land for development.

Water Supply System

Residents and businesses are serviced by a combination of sources, including the Byfield Water District, the City of Newburyport, and private, on-site wells. The two water supply systems currently serve approximately 13% of Newbury’s area, leaving most of Newbury to rely on private wells.

- **Old Town:** This area is located primarily in the Parker River and Plum Island Sound Water Basins. The City of Newburyport presently services 465 residential accounts and 24 business accounts in Newbury. The Newburyport Water Department provides water from two surface water supplies, one located in Newburyport and one located in West Newbury. According to Newburyport's Water Master Plan, water demand over the past ten years has averaged 100,000 gallons per day. Fay, Spofford & Thorndike, the project consultant, estimated that the water demand in Newbury will increase by 14% by 2020.
- **Plum Island:** This area is located exclusively in the Merrimack Watershed Basin. A comprehensive water and sewer infrastructure project was undertaken to connect all homes on Plum Island to the Newburyport Water System. With all buildings connected to the system, it is estimated that the Plum Island residents of Newbury will consume approximately 133,000 gallons per day (assuming 2.5 people per occupied lot served multiplied by 760 occupied lots using 70 gallons per capita per day).

Due to the Plum Island Overly District (PIOD) zoning regulations and other growth restrictions placed on the Island in connection with the water and sewer project, limited additional growth is anticipated. According to analysis by the Plum Island Workgroup, only 24 additional lots can be developed in Newbury due to the availability of water and sewer service. It is expected that demand for an additional 4,200 gallons per day will ultimately be generated. However, the full impacts of the growth on Plum Island are not yet clear.

- **Byfield:** The Byfield service area is located in the Parker River Watershed. This area is primarily serviced by a private water company, the Byfield Water Company. The Byfield Water District provides water from two wells located within the Parker River Watershed, the Byfield Well, a rock well located on Forest Street, and a gravel-packed well located on Larkin Road. The Byfield water distribution system is also connected to the Rowley and Georgetown water systems for emergency purposes.

According to the Byfield Water District, a daily average of 190,000 gpd is pumped from the two Byfield wells. Under the Water Management Act, all permitted withdrawals are able to withdraw up to 100,000 gpd over their permitted volume. This means that the BWD can withdraw up to 270,000 gpd and still be in compliance with the permit. According to the Commonwealth's Water Management Act (WMA), the Byfield Water District currently holds a registration to withdraw 0.17 million gallons per day (mgd) from the Parker River watershed. The EOE's population projections predict that water demand for the Byfield Water District will be 0.19 mgd in 2005 and 0.20 in 2015. In addition, the Byfield Water District has a permit to withdraw 200,000 gpd.

- **Other Areas:** Other areas are served by private water wells.

Newbury's limited centralized water supply infrastructure has helped to limit the expansion of residential development and the conversion of open lands.

Wastewater and Sewer System

The Town of Newbury does not have an extensive wastewater collection system or a town-wide wastewater treatment system. Wastewater disposal options differ, depending upon location. A **small** number of residences and businesses utilize the City of Newburyport's wastewater collection and treatment system. Other areas generally utilize on-site disposal systems, which must comply with Title 5 of the Commonwealth of Massachusetts Environmental Code, as well as the Town of Newbury Bylaws.

- **Old Town:** Only 22 residential, six business accounts, and the Newbury Elementary School are tied into Newburyport's sewerage system. These customers send approximately 4400 gallons of wastewater per day to Newburyport's wastewater treatment plant.
- **Plum Island:** For years, this area was served with private on-site septic tank disposal systems. Due to non-compliance issues with the State's Title 5 Regulations, a comprehensive sewer infrastructure project was completed in 2005 that now brings Plum Island wastewater to the Newburyport Wastewater Treatment Plant.
- **Byfield:** All private residences in Byfield utilize on-site septic tank disposal systems. New developments such as Caldwell Farms and Colby Village include on-site treatment systems, as does the Triton Regional School. The Governor's Academy operates an on-site treatment system which discharges directly into a small tributary of the Mill River.
- **Other Areas:** All other areas use on-site septic tank disposal systems.

Newbury's lack of a comprehensive and centralized sewer infrastructure has significantly limited residential development. The prevalence of poor soils has left much of the Town's land unbuildable. However, in recent years the failure of private on-site septic systems has been widespread in some areas of Town. This limitation has been addressed on Plum Island, but remains a problem in other older and denser parts of town.

Long-Term Development Patterns

Zoning

The Town of Newbury currently guides development through zoning regulations and a handful of other land use controls.

Existing residential zoning districts comprise 96.3% of Newbury. There are two types of residential zoning: the Agricultural-Residential District and the Parker River Residential District. Both districts allow for the development of single family homes on large lots (40,000

square foot minimum). The Agricultural-Residential District also allows two-family homes and a host of other low-impact uses.

Only 3.7% of Newbury is zoned for non-residential development. There are five commercial districts: Industrial, Commercial Highway, Highway Commercial-A, Business, and the Residential-Limited Business district. The largest continuous area where commercial business is allowed is along Route 1 in the northern part of Town extending to the Route 1 rotary.

The largest commercial/industrial area is located in the northern part of Town, to the east and west of Route 1. Two additional smaller commercial/industrial areas exist, one near the southwest junction of I-95 and Central Street and one south of the Parker River near Route 1A. The intent of the Industrial District is to preserve industries that were once integral to Newbury's economy, particularly those that are associated with agriculture and fishing. The large Commercial Highway Districts expand upon the basic intention of the Industrial district, by allowing more retail and service related uses. There are four areas zoned as a Commercial Highway District. This includes a large area along Route 1 in the northern part of Newbury, south of the Industrial Zone, two small areas located at the junction of I-95 and Central Street, and one area located near the junction of I-95 and Scotland Road.

The 20-acre Business District encompasses much of Byfield Village. It is a mixed-use district which is intended to support the historic village development pattern of Byfield. Permitted uses include one and two story residences, retail stores, personal service establishments, banks, farm stands, theatres, religious facilities, home occupations, and bed and breakfasts.

Overlay and Other Special Districts

The Water Supply Protection District is an overlay district superimposed on the traditional zoning districts. It places additional restrictions on new construction, reconstruction, or expansion of existing buildings and new or expanded uses. There are two Water Supply Protection Overlay District areas in Newbury; they include a significant portion of Byfield and a large portion in the Old Town/Upper Green area, extending over the Commercial Highway and Industrial District.

Provisions in the district are intended to prevent contamination and protect water quality. Land uses that involve activities and materials that could threaten water quality are prohibited in the district. Prohibited uses include landfills, storage of liquid petroleum products (with some exceptions), storage of de-icing chemicals, landfills receiving only wastewater residuals, some types of earth removal, and auto junkyards. With certain exceptions, the bylaw also prohibits facilities that treat, store, or dispose of hazardous waste.

The Plum Island Overlay District (PIOD) was created in order to reduce damage to public and private property resulting from flood waters, ensure public safety by reducing threats to life and personal injury, eliminate costs associated with the response and cleanup of flooding conditions, preserve open space, and limit the expansion of nonconforming single and two-

family structures so as to prevent the exacerbation of existing problems with density and intensity of use. The bylaw places restrictions on new development, significant alteration, and changes of use within the very sensitive lands that encompass the built environment of Plum Island.

Newbury has established a Floodplain District to prevent and mitigate the impacts of flooding. The Floodplain District is an overlay district that includes areas classified as being within Zones V1-30 (coastal high hazard area) on the special Federal Insurance Administration's Flood Insurance Rate Maps (FIRM). Due to Newbury's coastal proximity and predominantly low elevation, a large proportion of Town lies within the floodplain district. The provisions prohibit any alteration or development that would change the existing flood storage volume of the site.

Open Space Residential Development Bylaw

In 2001, the Town of Newbury created the Open Space Residential Development Bylaw (OSRD), which provides a method of planning residential development to conserve open space in a new subdivision. The OSRD allows the development of the same number of homes as would be permissible in a conventionally-zoned subdivision, but it allows site planning flexibility and a more efficient, collaborative approval process. The Newbury bylaw makes any subdivision eligible for the OSRD if it creates more than four lots.

In recent years, the OSRD Bylaw has proven to be a popular and effective tool for reducing the amount of land lost to development. As is shown below in Table 3.3, three of the last four approved subdivisions of four or more lots utilized the OSRD. The OSRD has encouraged unique site designs which have preserved significant open space (at least 50% is required by the bylaw), preserved historic properties, and encouraged new housing types and options (e.g. condos, over 55-housing).

Table 3-3: Newbury Subdivisions Since 2002

Development	Year	Type	Lots or Dwellings	Total Acres	Open space	Land Area / Lot (total)	Land Area / Lot (w/o open space)
High Tail Lane	2002	Conventional	4	12.5	-	3.13	3.1
Colby Village	2003	OSRD	12				
Caldwell Farm	2003	OSRD	66	125	62.5	1.89	0.9
Scotland Woods	2002	OSRD	9	49	24.5	5.44	2.7
Jespersen	2005	OSRD	6	134	67	22.33	11.2
Total			97	320.5	154	3.77	2.0

Source: Newbury Planning Board

The bylaw also provides a density bonus for every historic structure saved with a preservation easement (one unit bonus), for the creation of affordable housing unit (one unit bonus), and for preserving open space over and above the 50% requirement.

Future Buildout

In 2002, the Commonwealth of Massachusetts, in partnership with the Merrimack Valley Planning Commission, undertook a buildout analysis of the Town of Newbury and every other municipality in the region. The intention of the build-out analysis was to evaluate local zoning and other regulations, as well as other known physical limitations to development and determine the municipality's absolute potential for growth. The buildout analysis then projected the impacts that this potential development would have on the need for additional services (schools, new roads, and water).

The buildout analysis estimated that, based on the current Zoning By-law, there were approximately 2,953 acres of residentially-zoned, buildable land left in Newbury, which would yield approximately 2,480 new units of housing in Newbury, at the point of full buildout.

The buildout analysis then used the estimated number of new residential lots and additional commercial/industrial floor space under buildout to project the impacts of new growth on Newbury's student (K-12) population, municipal water use, solid waste generation, road miles, and vehicle trip generation. Details are provided in Table 3.4 for both the ultimate buildout and an estimate of the buildout expected by 2020. Both buildout scenarios utilize the zoning bylaws currently in effect.

Table 3-4: Buildout and Growth Impacts

	Total Buildout	2020 Buildout
Developable Land (sq. ft.)	134,630,587	-
Developable Land (acres)	3,142	-
Total Additional Residential Lots	2,480	693
Comm./Ind. Buildable Floor Area (sq. ft.)	2,609,565	-
Residential Water Use (gallons per day) ¹	507,690	101,100
Comm./Ind. Water Use (gallons per day) ¹	195,717	-
Municipal Solid Waste (tons per year) ²	4,082	813
Non-Recycled Solid Waste (tons per year) ³	2,369	320
New Residents (over and above 2000 Census) ⁴	6,596	1,460
New Public School Students ⁵	1,330	372
New Residential Subdivision Roads (miles) ⁶	35	7.9

Notes:

1. "Residential Water Use" is based on 75 gallons per day per person. "Comm./ Industrial. Water Use" is based on 75 gallons per 1,000 square feet of floor space.
2. "Municipal Solid Waste" is based on 1,206 lbs per person per year. All waste estimates are for residential uses only.
3. "Non-Recycled Solid Waste" is a subset of Municipal Solid Waste and is based on 730 lbs per person per year ending up in a landfill or incinerator.
4. The number of "New Residents" at buildout is based on the persons per household figure derived from the 2000 US Census.
5. The number of "New Public School Students" at buildout is based on a figure of the number of public school students per household ratio taken from 2000 US Census data (.537 students per household)
6. "New Residential Subdivision Roads" are the total number of new lots multiplied by the frontage requirement, then multiplied by 0.6 to account for lots on opposite sites of the streets.

Full buildout is estimated to occur sometime after 2060. Full buildout of Newbury under the current zoning regulations will have a substantial impact upon the character of Newbury and negatively impact the quality of the open space network within the Town. The buildout analysis predicts that the population of Newbury will roughly double and that the conversion of land from an undeveloped state into large-lot residential subdivisions will continue. The rural feel of Newbury will be compromised as open lands are developed. Natural scenery will be replaced by the built environment. Existing wildlife corridors may become broken and other environmental impacts associated with development will become more prevalent. More pressure will be brought to bear on marginal land for development.

A critical look at the buildout estimate and its associated impacts was conducted during the planning process of the 2006 Newbury Master Plan. During this process, a number of strategies were outlined to counteract recent trends and the predictions made with the buildout analysis. There was a strong desire to enhance the existing village centers and to encourage the development of a transit-oriented development adjacent to the commuter rail stop near the Newburyport/Newbury line and the Route 1 Traffic Circle. It is hoped that this targeted

development in these villages, along with tools implemented to control growth in the rural and undeveloped areas, will help to preserve the community character of rural, small-town Newbury.

E. Active Recreation

The Town has a number of active youth sports organizations. Mirroring the constituency of the Triton Regional School District, in which the Towns of Salisbury, Newbury/Byfield, and Rowley collectively fund and support the elementary, middle, and high schools, many of the youth sports groups and activities are coordinated across these three towns.

Triton Youth Soccer

This program provides an opportunity for the youth of Byfield, Newbury, Rowley and Salisbury to learn and enjoy the game of soccer. The program includes three groups: a) Instructional – Ages 4-8, b) In-Town Intramural – Ages 8-10 and c) Travel Teams – Ages 10-18. The program consists of two seasons –spring (April to June) and fall (end of August to November). Practices are held during the week and games are played on weekends.

There is considerable interest and growth potential in adult and club soccer that will require additional field space

Annual Participation: Triton Youth Soccer

Year	Participants (actual or estimated)	% Newbury/Rowley/ Salisbury/ Other
2000	600	48/47/5/0
2002	625 spring, 525 fall	
2007	575 spring, 500 fall	40/49/10/1
2012	Equal to population growth	

Current Use of Town Facilities: Triton Youth Soccer

Location	Description	Frequency
Central Street Fields	2 Large Fields; 2 Small Fields	Spring – Monday to Sunday
Central Street Fields	1 Large Fields; 2 Small Fields	Fall – Monday to Saturday

Current Use of Other Facilities: Triton Youth Soccer

Location	Number	frequency
Eiras Field, Rowley	1 Large Field	Spring - Sunday
Eiras Field, Rowley	1 Large Field; 1 Small Field	Fall – Monday to Sunday

Triton Pop Warner Football

Triton Pop Warner is a football and cheerleading program which follows the philosophy, rules, and regulations of the National Pop Warner Little Scholars, Inc. organization. Triton Pop Warner consists of boys and girls from Byfield, Newbury, Rowley, Salisbury, Georgetown, and

other neighboring towns in Essex County. The season runs in the fall, beginning in August and ending in early November

Pop Warner has played its games at Triton High School for many years, but there is interest in possibly playing games at the Central Street Field in the future due to the high cost of using the Triton athletic fields.

Annual Participation: Triton Pop Warner

Year	Participants (actual or estimated)	% Newbury/Rowley/ Salisbury/ Other
2000	170 football, 120 cheerleaders	33/33/14/20
2002	150 football, 120 cheerleaders	
2007	170 football, 130 cheerleaders	45/25/15/15
2012	170 football, 130 cheerleaders	

Current Use of Town Facilities: Triton Pop Warner

Location	Number	Frequency
Central Street Field (Practices)	1	August: M-F, 10 hrs/week; Sept – Early Nov: M, W, F, 6 hrs/week

Current Use of Other Facilities: Triton Pop Warner

location	Number	Frequency
Triton High School football field (Games)	1	8 games Sept. – Oct.: 9 hours per Sunday
Triton High School (cheerleading practice)	1	Sept. – Oct.: M, W, F, 6 hrs/week

Byfield—Newbury Little League

Byfield-Newbury Little League is a non-profit sports organization operating in the town providing youth baseball for children from 5 – 12 years of age. The program is affiliated with the national Little League and operates within its guidelines, rules, & regulations. Byfield-Newbury Little League is part of an inter-town baseball league which includes Georgetown, Rowley, Salisbury, and Seabrook. The season runs in the spring, from April to June.

Annual Participation: Byfield/Newbury Little League

Year	Participants	% Newbury/Rowley/ Salisbury/ Other
2000	175	100/0/0/0
2002	200	
2007	215	100/0/0/0
2012	250-275	

Current Use of Town Facilities: Byfield/Newbury Little League

Location	Number	Frequency
Pearson Field, Byfield	1	M-F 4-8; Sat. 8-6; some Sun.
Newbury Upper Green	1	M-F 4-8; Sat 8-6; some Sun.

Current Use of Other Facilities: Byfield/Newbury Little League

Location	Number	Frequency
Triton High School softball fields (5-8 year-olds)	2	MWF, 3 games/day

Newbury Girl's Softball

In addition to developing physical skills, the program builds character, confidence, and cooperation in young women from 8-15 years of age. The season runs typically from April to June. The program in the past has rented some field space out of town

Annual Participation: Newbury Girl's Softball

Year	Participants (actual or estimated)	% Newbury/Rowley/ Salisbury/ Other
2000	70	100/0/0/0
2002	70	
2007	85	100/0/0/0
2012	110	

Current Use of Town Facilities: Newbury Girl's Softball

Location	Number	Frequency
None		

Current use of other facilities: Newbury Girl's Softball

Location	Number	Frequency
Newbury Elementary School	1	M-F, 4-8; Sat. & Sun., some games
Triton High School	1	M-F, 4-8; Sat. & Sun., some games

Triton Youth Lacrosse Association

The Triton Youth Lacrosse Association fields teams for boys in grades 3 through 8 as well as an instructional league for boys in grades K through 2. The season runs from April 1 through June 15. The grades 3 through 8 teams participate in games with other town teams in the Mass Bay Youth Lacrosse League.

Annual Participants: Triton Youth Lacrosse

Year	Participants (actual or estimated)	% Newbury/Rowley/ Salisbury/ Other
2000	Program started 2001	
2002	100	
2007	95	52/34/12/2
2012	120	

Current Use of Town Facilities: Triton Youth Lacrosse

Location	Number	Frequency
Central St. Fields	2	M-F, 4-8; Sat. & Sun., games all day

Current Use of Other Facilities: Triton Youth Lacrosse

Location	Number	Frequency
None		

Table 3-5: Newbury Youth Sports Participation (2007)

Sport	2007 Participation
Soccer (Spring)	220
Soccer (Fall)	200
Pop Warner Football	76
Pop Warner Cheerleading	58
Little League	215
Girl’s Softball	85
Lacrosse	95
Total	949

Management of Town Recreation Fields

The Newbury Recreation Committee (NRC) is an advisory committee to the Selectmen initiated primarily to manage the development of Town recreation properties acquired in 2000. The NRC continues to deal with ongoing management of the Central St. Recreation Area, including scheduling, maintenance, and funding of that maintenance through user fees.

User fees (\$25 per player per season) as of 2007 cover all expenses other than field mowing and refuse removal, both of which are undertaken by the DPW as a part of its parks maintenance program. Fees are currently charged only for field use at Central Street.

The NRC does not exercise any control over other Town recreational facilities, such as the Lunt St. Little League Field or the Upper Green. The Triton Regional High School and the Newbury

Elementary School athletic facilities are used by youth sports groups by arrangement with Triton.

Conclusions

Over the last five years, there has been no significant growth in the number of youth sports participants. Generally, growth in the next five years can be expected to follow population growth in the town. This might be in the range of 5% over the next five years for residents under 19.

Other important findings include:

- There is significant growth potential in organized sports for adults.
- Given the regional makeup of soccer, lacrosse, and Pop Warner Football, Newbury is a strong contributor of facilities and there is reason to expect that Salisbury and Rowley will be developing additional field space, if they are made aware of the need to accommodate new growth.
- Soccer generates the most demand for field space, but also provides the greatest fee revenue due to two seasons of use.
- Both Little League and Girl's Softball are in immediate need of field space.
- The assumption and the recommendation of the NRC is that Little League will be best accommodated at two potential fields at the Kent Way property acquired in 2000. The Little League and the Town are jointly seeking funding to develop that location.
- The Central St. Fields are functioning well, but a building with rest rooms and concession area is a useful amenity that is currently (2008) being pursued by the NRC and interested sports groups.
- The Triton Regional High School leaching field area has potential as an expansion site for athletic fields.

Section 4: Environmental Inventory & Analysis

A. Geology, Soils and Topography⁷

Newbury is a low-lying coastal Town located on Massachusetts' northeastern shore. The gently rolling terrain ranges from sea level to 120 feet above sea level. It is bordered on its eastern shore by the Atlantic Ocean and extensive tidal marshes.

Although Newbury is a small Town, its surficial geology is quite varied. The northern and western parts of the Town are comprised primarily of till or bedrock (mixtures of gravel, sand and particles in differing proportions). The northernmost part of the Town and areas in the southwest are soils comprised of fine-grained deposits (particles range in size from .5 mm to less than .004 mm in diameter). The soils adjacent to the Parker River and Plum Island are largely Floodplain Alluvium. The remaining portions of Newbury, Plum Island and a large area north of the Parker River are comprised of sand and gravel.

Specifically, Newbury is made up of five soil associations. Soil associations are comprised of a mixture of soil types that have a distinct pattern of soils, relief and drainage. The U.S. Geologic Survey "general soil map" of the associations provides a broad perspective for assessing land uses and limitations. The five major associations, their characteristics, and suitability for septic systems, recreation, and other uses are outlined on the next page in Table 4-1.

⁷ The information in this section is based on the MASS GIS Base Map of Newbury and the USGS Soil Survey of Essex County, Massachusetts, Northern Part. It should be noted that while the Soil Survey broadly characterizes the soil types in Newbury as poorly draining and generally incapable of supporting on-site septic systems, empirical evidence has shown that there are many localized pockets of soil in the Town suitable for supporting building structures and septic systems.

Table 4-1: Soil Characteristics

Soil Association Name	Characteristics	Suitability for Septic Systems	Suitability for Recreational Uses	Other Comments
Ipswich-Westbrook-Udipsamments Association	Deep, nearly level, very poorly drained, mucky soils formed in organic deposits; gently sloping to very steep, excessively drained, sand soils formed in windblown sand	Poorly suited for septic systems due to high water tables.	Considered suitable for limited recreation uses and for the development of wildlife habitat. Wetness of soils may be a limitation.	The wetness, tidal flooding and high organic matter of the Ipswich and Westbrook soils and the droughtiness, susceptibility to erosion, and low fertility of Udipsamments make the association ill suited to most other uses.
Hinkley-Windsor-Merrimack Association	Deep, nearly level to steep, excessively drained and somewhat excessively drained, sandy and loamy soils formed in outwash deposits.	Poorly suited for septic systems due to high water tables.	Soils are suitable for some forms of recreation although the wetness of the soils may be a limitation	Some parts of the association are droughty and steep, and most of the soils have seasonal high water tables. Soils are generally suitable for farming and residential development.
Canton-Charlton-Sutton Association	Deep, nearly level to steep, well drained and moderately well drained, loamy soils formed in friable glacial till.	Poorly suited for septic systems due to high water tables.	Soils are suitable for some forms of recreation although the wetness of the soils may be a limitation.	These soils are suitable for dairy farming, orchards, truck crops, and most for residential development. Like other area associations, they are plagued by high seasonal water tables that limit their use for septic systems and recreation.
Scantic-Maybrid-Buxton Association	Deep, nearly level to moderately sloping, very poorly drained and moderately well-drained, loamy soils formed in lacustrine to marine sediments.	Poorly suited for septic systems due to wetness and high water tables.	Soils are suitable for some forms of recreation, although the wetness of the soils may be a limitation.	These soils are poorly suited for residential development. They are characterized by high seasonal water tables and flooding. Wetness is the main limitation for most uses of these soils.
Charlton-rock outcrop-Medisaprist Association	Deep, nearly level to steep, well drained, loamy solid formed in glacial till, rock outcrop; and deep, nearly level, very poorly drained, mucky soils formed in organic deposits.	Poorly suited for septic systems due to wetness and high water tables.	Soils are suitable for some forms of recreation, although the wetness of the soils may be a limitation.	These soils are best suited for woodland and woodland wildlife. They have good potential for wetland wildlife. Some of these soils are suitable for residential development, but are also subject to wetness and high organic matter content.

Source: USGS Topographic Quadrangles and the USGS Soil Survey of Essex County, Massachusetts, Northern Part, 1981

Implications for Sanitary Facilities and Water Resources

Based on an analysis of the information in the above table, the majority of Newbury's soils are considered unsuitable for septic systems due to the high water tables and poor drainage characteristics of the soils. This does not mean that it is illegal to construct septic systems in these soils; however the Town runs a greater risk of contamination of both private and public water supplies by permitting their use. The soils are poor septic system absorption fields and fail to provide a good buffer between the septic systems and water table. This is problematic for Newbury because the majority of the Town has no public sewer system and must therefore rely on septic systems for handling sanitary waste. Plum Island, with its new public water and sewer system connected to Newburyport, is the exception.

Implications for Recreational Land Uses

All of the associations are rated as highly unsuitable (severe) for most forms of recreational uses. The USGS Soil Survey rates each soil type for its suitability to support various types of recreation, including camp areas, picnic areas, playgrounds, paths and trails, and golf fairways. Ratings range from slight (limitations are easily overcome), to moderate (limitations can be overcome with planning, design and maintenance), and severe (soil properties are unfavorable and redemption is likely to be costly).

This does not mean that soils suitable for recreation uses such as baseball and soccer fields do not exist, but rather that the general characteristics of Newbury's soils are not considered suitable for these recreational uses. Lands that are suitable for recreation in Newbury are a valuable resource for the Town. However, it should be noted that these soils are also prime lands for development.

B. Landscape Character

Newbury's large and numerous tracts of open space, including protected areas and private parcels, and its modest population density of approximately 232 people per square mile, provide the Town with a strong rural character. Conservation lands comprise nearly half of the Town's total acreage; however, a large percentage of this is wetland area.

Newbury's most prominent landscape characteristic is the area of vast tidal marshland, which is part of the Great Marsh. The Great Marsh is the largest salt marsh in New England and includes over 20,000 acres of marsh, barrier beach, tidal river, estuary, mudflat, and upland islands extending across the Massachusetts North Shore from Gloucester to Salisbury. In recognition of these extraordinary resources, a portion of this area was designated by the state in 1979 as the Parker River/Essex Bay Area of Critical Environmental Concern; it has since been renamed the Great Marsh Area of Critical Environmental Concern. "The Great Marsh is an internationally recognized Important Bird Area (IBA) as it contributes to the preservation of many breeding and migratory birds"⁸.



A large portion of the Great Marsh in Newbury is protected as part of the Parker River National Wildlife Refuge. The Refuge includes much of the Parker River, its tributaries and tidal marshes,

⁸ http://www.massaudubon.org/GreatMarsh/Great_Marsh_Web_Site/index.htm

and most of the southern two-thirds of Plum Island. The Refuge, established in 1942 and managed in accordance with U.S. Fish and Wildlife Service policy, is open year round and is considered one of the top ten bird watching sanctuaries in the United States. The Refuge is 4,662 acres and is comprised of tidal marshes, freshwater impoundments, bogs, and sandy dunes. It is one of the few natural barrier beach-dune-salt marsh complexes remaining in the Northeast. It is home to over 800 species of plants and animals. The Refuge and over three miles of public beaches on Plum Island are a unique landscape and provide local residents and tourists with opportunities for cross-country skiing, hiking, nature observing, picnicking, bicycling, surf fishing, hunting, and swimming.

Another noteworthy landscape feature is the series of three major roadways that fragment Newbury: Interstate 95, Route 1 and Route 1A. These roads run north-south and cut the Town into thirds. The rest of the roadways in Town are, for the most part, smaller winding rural roads with many scenic qualities.

Newbury is within the Essex National Heritage Area and includes a portion of the Essex National Heritage Area Scenic Byway, which follows Route 133 from Gloucester to Ipswich and then Route 1A up through Ipswich, Rowley, and Newbury to Newburyport.

Land Use

Table 4-2, below, provides additional information about the current utilization of land in Newbury

Table 4-2: Newbury Land Use – 2003

Land Use	Acres	% of Total	Description
Residential Multi-Family	6.6	0%	Multi-family
Residential Dense	157.5	1%	Smaller than 1/4 acre lots
Residential Medium	454.7	3%	1/4 – 1/2 acre lots
Residential Sparse	1,466.4	10%	Larger than 1/2 acre lots
Residential	2,085.1	14%	
Salt Wetland	4,643.3	30%	Salt marsh
Forest	5,073.2	33%	Forest
Wetland	402.7	3%	Non-forested freshwater wetland
Water	29.8	0%	Fresh water; coastal embayment
Natural Lands and Water	10,149.0	67%	
Cropland	1,199.2	8%	Intensive agriculture
Pasture	335.9	2%	Extensive agriculture
Woody Perennial	2.5	0%	Orchard; nursery; cranberry bog
Agriculture	1,537.6	10%	
Commercial	66.5	0%	General urban; shopping center
Industrial	1.9	0%	Light & heavy industry
Mining	-	0%	Sand; gravel & rock
Waste Disposal	36.5	0%	Landfills; sewage lagoons
Transportation	227.4	1%	Airports; docks; highway; freight; railroads
Industrial / Commercial	332.3	2%	
Urban Open	105.0	1%	Parks; cemeteries; public & institutional green space; vacant undeveloped land
Open Land	793.9	5%	Abandoned agriculture; power lines; areas of no vegetation
Participation Recreation	121.2	1%	Golf; tennis; Playgrounds; skiing
Spectator Recreation	-	0%	Stadiums; racetracks; Fairgrounds
Water Based Recreation	113.9	1%	Beaches; marinas; Swimming pools
Recreation	1,134.0	7%	
Total Undeveloped Lands	12,480	82%	Includes Natural Lands and Water, Agriculture, and Open Land categories
Total Developed Lands	2,758	18%	Includes all other land use categories
Total	15,238.0	100%	

Source: MassGIS; MVPC

C. Water Resources⁹

Watersheds and Rivers

The most dominant riverine water feature in Newbury is the scenic Parker River and its tributaries (see Surface Water Resources Map). The Parker River mainstem flows generally easterly into and through Newbury from its headwaters in the towns of Boxford, Georgetown, Groveland, and West Newbury, eventually emptying into Plum Island Sound. The river is fresh water upstream from the Central Street Dam and brackish in the roughly 9-mile tidal reach below the dam. The Parker River's final three miles lie within the state (EOEA)-designated Great Marsh Area of Critical Environmental Concern (ACEC), a 34-square mile multi-town area of incredible physical beauty and biological richness.

Two major tributaries of the Parker River in Newbury are the Little River and the Mill River. The Little River is roughly seven miles long and flows southward through Newburyport, entering the Parker River above Route 1A and the Newbury Town Landing. About four miles of the Little River is tidal and includes a three-mile reach within the ACEC. Dominant land uses within the Little River subwatershed include expansive forest and farmland (including the "Common Pasture"); the Newburyport Industrial Park and commercial retail properties; two inactive landfills (one each in Newbury and Newburyport); and extensive salt marsh. Important natural resources in the watershed include biologically rich upland, wetland, and riverine habitats that support diverse plant and wildlife species, including a number of rare and threatened species. Water quality studies of the Little River by the Massachusetts Audubon Society and the Merrimack Valley Planning Commission in the 1990s showed the Little River to be a significant contributor of fecal coliform bacteria to the Lower Parker River and Plum Island Sound. Suspected sources of this pollution, which contributes to the frequent closure of the area's shellfish beds, include agricultural and urban runoff, inadequately functioning septic systems, and leaky sewers in the Newburyport Industrial Park

The Mill River originates in the Georgetown-Rowley State Forest and flows northeasterly through Rowley, joining the Parker River in Newbury at Oyster Point about a mile east of The Governor's Academy. The lower reach of the Mill River forms the boundary between Newbury and Rowley. At 8,200 acres, the Mill River subwatershed is the largest of the Parker River's subwatersheds, and provides important spawning habitat for several anadromous fish species including blueback herring and rainbow smelt. Water quality monitoring data collected in 2003 and 2004 by the Parker River Clean Water Association showed the Mill River to have significantly higher nutrient (nitrogen and phosphorus) concentrations than other Parker River locations. The origins of these pollutants are unknown, but are not considered to be entirely naturally occurring and likely derive from stormwater runoff and other nonpoint sources of pollution.

⁹ Passages in this section are taken from the Newbury Master Plan (2006).

Development activity in the Parker River watershed is clearly having adverse impacts on the river system, including some impairment of water quality and changes to the natural flow regime. (With increased development comes greater impervious surface area, less rainfall infiltration, higher peak runoff rates, and lower base flows in the river). In spite of these impacts, however, the Parker River remains a vital natural resource of uncommon beauty and biological diversity, supporting an abundance of fish, shellfish, and wildlife populations. Protecting the river's streambanks, natural stream flows, water quality, and other important attributes in the face of this development will require vigilance and the implementation of effective management strategies by Newbury, its neighboring watershed communities, and partnering organizations. These management strategies are outlined in the Goals and Strategies section that follows.¹⁰

As the Town of Newbury continues to grow and develop, there is a heightened risk of incremental encroachment into the surrounding buffer areas that protect the Town's vital fresh and salt water wetland resources. Improper building construction, septic system use, lawn care activities, and storm water runoff all could jeopardize the health and functions of the wetlands. Impacts have already been observed. To address these threats, additional regulatory controls and best management practices are needed.

The Parker River Clean Water Association (PRCWA) is a non-profit organization that monitors the Parker River subwatersheds as well as educates citizens about the importance of the watershed perspective. There are many monitoring sites that have been regularly sampled inside the Newbury ACEC. The PRCWA monitors the following river indicators: dissolved oxygen, velocity, depth, water temperature, fecal coliform, turbidity, and phosphate and nitrate levels. Each of the above water quality indicators helps piece together a diagnosis for the health of a river.

The Massachusetts Division of Marine Fisheries (MDMF) Shellfish Program regularly tests the water in the tidal portion of the Parker River as well. Information on fecal coliform levels that was collected by the MDMF from 1992-2003 is shown below.

The Plum Island ecosystem was designated as a "Long-term Ecological Research" (PIE-LTER) site by the National Science Foundation in 1998. However, research and data have been collected on this area since the late 1980s. The Marine Biological Laboratory is one of the major institutions involved in research and recently established a new research center in Newbury. Many different data sets are available online from the Plum Island Long-term Ecological Research Site. The program areas include information on: Watersheds, Marsh, Water Column, Benthos, Higher Trophic Levels, Models, Long-term experiments, and short-term experiments. Figure 3 shows the location of the PIE-LTER monitoring stations. These include a transect

¹⁰ For a comprehensive discussion of the natural resource features and values of the Great Marsh ecosystem in Newbury, consult the Newbury Estuarine Management Plan (2005).

(estuary sampling stations) along the Parker River from the Central Street dam to the mouth of the River where dissolved oxygen, conductivity, temperature, percent saturation, pH, DIC and pCO₂, water-column nutrient, and particulate information has been collected since the mid-1990s. There are two marsh plots along the Parker River where experiments contrasting Cattail (*Typha*) and *Spartina* marsh ecology have been conducted. The water column depth has been measured every 15 minutes at the Parker River monitoring stations located just below the Route 1 bridge and at Middle Road. Other stations include benthic sampling, fish trawl sites, seine sampling stations, and watershed sampling stations.

Aquifer Recharge Areas¹¹

Newbury's water supply needs are met by three sources: the Byfield Water District, the City of Newburyport municipal water system, and private wells. The Byfield Water District serves the Byfield area of Newbury (see accompanying Water Supply Resources Map) via two groundwater wells located on Larkin Road near Interstate 95 and on Forest Street. The Larkin Road well is an 8-inch gravel pack well with a pumping capacity of 149 gallons per minute (gpm). The Forest Street well is a deep rock well with a capacity of 264 gpm. With its larger capacity and exceptional water quality, the Forest Street well currently supplies most of the District's drinking water, pumping an average of 190,000 gallons per day (gpd). Together, these two groundwater sources are sufficient to meet the District's water supply demand except during certain peak periods in summer and fall, when outdoor water use restrictions must be imposed. Over the years, the District has commissioned numerous test well explorations in search of additional water sources, but these investigations have not proved successful. As a consequence, strict protection and effective conservation of the District's two existing wells and their recharge areas are, and will continue to be, of paramount importance. Since portions of the recharge areas extend beyond Newbury into neighboring communities, it will be important to work cooperatively on a regional level to institute effective intermunicipal water supply protection measures.

A portion of property owners of the Old Town area of Newbury purchases its water from the City of Newburyport. The city presently services about 465 residential accounts and 24 business accounts in Newbury, and over the past ten years has provided an average of 100,000 gallons per day to meet Old Town's water needs. Newburyport has also extended water service to Plum Island, and is expected to provide approximately 133,000 gpd to the Island's Newbury residents and businesses.

The remaining developed areas of Newbury not served by either the Byfield Water District or the City of Newburyport rely on individual on-site wells for their water supply needs.

¹¹ Passages in this section are taken from the Newbury Master Plan (2006).

Flood Hazard Areas

Given the massive network of the Parker River and its tributaries, as well as Plum Island and the Sound, Newbury has extensive flood hazard areas. Most of these areas fall in low-lying undeveloped conservation lands around the Parker River and Plum Island and do not cause an obvious threat to human development. However, the floodplain also stretches into Newbury's interior and creates chronic flooding problems in that area. In addition, a flood event in the spring of 2006 seriously affected the beaches of Plum Island, as extreme flooding along the Merrimack River washed debris all the way to Atlantic Ocean and deposited much of it on the barrier beach. The same storm event caused serious erosion of both the beach and the primary dunes. Since 2006, erosion along the Plum Island beach has worsened exponentially. One house has been undermined and portions of other structures have been severely compromised. At the writing of this Plan, measures are being taken to protect the most vulnerable areas from further erosion.

Wetlands¹²

In addition to its numerous rivers and streams, Newbury is also blessed with a rich variety and distribution of both fresh water and salt water wetlands (see Surface Water Resources Map). Together, these wetland resources provide outstanding habitat for numerous species of plants, birds, fish, shellfish, and wildlife.

Fresh Water Wetlands

The fresh water wetlands comprise 1,675 acres, or 10% of the Town. They are most prevalent along the banks of the Parker River system, but also occur in scattered upland locations away from the river. The wetlands serve a number of important functions, including flood control, pollution attenuation, and sustaining of streamflows during periods of drought. They also provide core habitat for numerous plant and wildlife species, including beaver, otter, and other fur-bearing mammals. In dispersed locations there are numerous vernal pools, 11 of which are state-certified. These small, temporary, isolated wetlands (represented by colored triangles on the map) provide critical habitat for many sensitive vertebrate and invertebrate wildlife species, including the rare wood frog and mole salamander, which breed exclusively in vernal pools.

The Common Pasture, which spans the Newbury/Newburyport border, has been referred to as the “premier” moist grassland in Eastern Massachusetts by Mass Audubon’s Director of the Important Birding Area Program. Eight of the ten state-listed bird species utilize the Common Pasture in some way during their life cycle. Birders can regularly be seen with scopes and binoculars viewing the Common Pasture along Scotland Road in Newbury. The Common Pasture provides habitat for state-listed butterflies, insects, amphibians, and plants, including a globally rare plant. Several parcels of land within the Common Pasture have already been permanently protected as part of the work of the Common Pasture Coalition. The Coffin Island

¹² Passages in this section are taken from the Newbury Master Plan (2006)

parcel in the Common Pasture is open to the public with access by a cart path entrance on Scotland Road.

Salt Water Wetlands

Newbury's salt wetlands are perhaps the Town's most prominent and visually stunning landscape feature, inspiring many local artists over the years, including the famous 19th century painter, Martin Johnson Heade. They comprise over 5,200 acres, or almost one-third of the total area of the Town. Part of the vast Great Marsh ecosystem that extends 17 miles from Cape Ann almost to the New Hampshire border, the Newbury salt marsh is a transition zone between the land and sea, and serves many important ecological and physical functions. These include habitat for multiple marine and estuarine species, filtering of runoff pollutants from upland areas, and mitigation of coastal storm surges and shoreland erosion. The tidal wetlands serve as vital nursery and spawning areas for many fish and shellfish species, including striped bass, winter flounder, and the commercially important soft-shell clam. In addition, they provide prime breeding, migration, and winter habitats for a wide array of bird and waterfowl species, including the Least Bittern, Piping Plover, and American Black Duck. In November, 2004, in recognition of its high ecological value to birds, the Great Marsh was designated a "Site of Regional Importance" in the Western Hemisphere Shorebird Reserve Network. It is described as "one of the most important coastal ecosystems in northeastern North America".

A significant part of Newbury's tidal wetlands lie within the federally-protected Parker River National Wildlife Refuge. As noted earlier in this Section, the Refuge contains 4,662 acres of tidal marsh, fresh water impoundments, bogs, and sandy dunes, and is one of the few barrier beach-dune-salt marsh complexes remaining in the Northeast. The Refuge is home to over 800 species of plants and animals, and is considered one of the top ten bird watching sanctuaries in the United States.

There are currently 284 mooring permits that have been granted in the town of Newbury. There is only one "designated mooring area" in Newbury, located upstream of the Route 1A bridge on the Parker River. Water uses are limited in this designated area. Additional moorings have also been placed in Plum Island Basin, and downstream of Route 1A. Activities such as sailing, water-skiing, jet-skiing, and wind-surfing are allowed¹³. Several private organizations in Town have multiple mooring permits. These include Pert Lowell (8 moorings), Old Town Country Club (15 moorings), Fernald's Marine (30 moorings), and Riverfront Marine (10 moorings).

Public Water Access¹⁴

The Parker River remains a significant venue for boating, canoeing and kayaking. Boat slips can be rented or leased from the two marinas in Town (Fernald's Marine and Riverfront Marine)

¹³ According to personal communication from John Keville, 2005

¹⁴ Passages in this section are taken from the Newbury Estuarine Management Plan (2005)

and Town mooring permits can be applied for through the Harbor Master. There is only one public boat ramp in the town of Newbury, located at the crossing of Route 1A over the Parker River. Access to the Town ramp is automatically granted to anyone who has a mooring permit. At peak times almost 200 boats will make use of the ramp to access the Parker River, Plum Island Sound, and beyond. Parking at the ramp is available only to Town residents who have the appropriate sticker.

Currently there are 52 docks permitted locally under Chapter 91, section 10A, of the Massachusetts General Laws. Chapter 122 of the Town bylaws also pertains to docks. The owners of each of these docks applied to the Newbury Conservation Commission for a permit; once approval was granted, a 10A permit was issued and the structures were created. There are four docks that are permitted by the State (DEP) rather than Newbury. Riverfront Marine Sports, Inc., is an example of the State-permitted docks.

Motorized watercrafts typically travel downriver from the Newbury mooring field into the Plum Island Sound and beyond. It is very rare for motorized craft to travel up the Parker River beyond the Newbury mooring field. Canoes, kayaks, and sailboats are the predominant type of craft that venture upstream¹⁵.

Public access to the estuary for non-motorized watercraft (e.g. canoes and kayaks) is fairly limited in Newbury. There are eight access points to the estuarine resources of Newbury that residents and non-residents use. Not all are accessible to non-residents, and some do not provide access to the river at all times of day due to the tidal changes. These access points are the following:

- **“Route 1” access near William Forward Wildlife Management Area (Kents Island):** The Massachusetts Public Access Board provides information on the “Route 1” access point to the Parker River. A detailed map and description of this access is available online.
- **Newbury “Town Landing”:** At the Newbury Town Landing, Town residents can launch boats that require trailers. Non-residents can also launch boats with the appropriate ramp sticker. However, non-residents are not permitted to leave cars at this ramp. Parking at the Lower Green and walking one’s boat to the ramp are also not usually permitted.
- **Cottage Road:** Cottage Road provides access to the Parker River just downstream of the Newbury Landing. However, this is a residential street with no available parking. Unless one lives on Cottage Road or has obtained permission to make use of a resident’s driveway, this access is functionally off-limits to most residents and non-residents alike.
- **Newman Road:** This point accesses the Little River tributary of the Parker River.
- **“Plum Island Turnpike” Bridge:** The Plum Island Turnpike ramp provides access to the Plum River. However, this point is available for only a portion of the tidal cycle (plus or minus 2 hours from high tide). At other times, low water levels make this point very difficult. Paddling south brings you to the confluence of the Parker River and the Plum

¹⁵ According to personal communication from John Keville, 2005.

Island Sound. There may be heavy power boat traffic and winds at this point. Paddling upstream against the tide is feasible, but very difficult.

- **Parker River National Wildlife Refuge (“PRNWR”)**: The Refuge has been allowing some river access from Parking Lot 1 with permission from the Refuge Management. It is very important to contact the refuge before using this access point.
- **“Middle Road” near The Governor’s Academy**: While parking is available at this location, it is difficult to access the river due to erosion taking place on the bank. This point allows only a short trip upstream or downstream with no convenient take out in either direction.
- **“Route 1 – Mill River”**: On the border between Rowley and Newbury there is an area just off of Route 1 where limited parking is available and provides access to the Mill River. Access, however, is not simple at this point.

The PRCWA and other groups, including the Massachusetts Public Access Board, are working to create three new additional access points in Newbury. The sites include:

- **Downstream Side of the “Central Street Dam”**: The PRCWA, in cooperation with Massachusetts Riverways Program, has submitted a grant for technical help to investigate what would be involved in establishing this access point.
- **“Route 1A” Bridge by Fernald’s Marine**: This access point received funding from the Massachusetts Public Access Board and is in queue to be built.
- **Town-owned Central Street Recreational Land (“Town land”)** – This access point is easily reached from nearby parking on the Town-owned recreation land. A boardwalk over the existing marshes would need to be constructed to facilitate access.

Public Beach Access

The beaches of Newbury, located on Plum Island, are a significant recreational resource for its residents. Public access to the beach is found at the Parker River National Wildlife Refuge and via two public parking areas in the northern portion of Plum Island.

Swimming on Plum Island at the Parker River National Wildlife Refuge is permitted only for a limited time during the summer. Each year the entire 6.3 miles (10.1 kilometers) of refuge beach is closed to all public entry for several months beginning April 1 to provide undisturbed nesting and feeding habitat for the piping plover, a shorebird species threatened with extinction. Portions of the beach not being used by the birds may be reopened beginning July 1. Typically all sections are reopened by mid to late August.

Public parking is available on the developed portion of Plum Island for beach-goers coming to the Island by car. There is a fee-based paved public parking lot, owned and operated by the City of Newburyport, at the northern tip of the Island. This lot has a small ticket booth and can accommodate approximately 150 vehicles; it provides parking for both beach-goers and people using the adjacent playground. There is a public parking lot located at the intersection of Plum Island Boulevard and Northern Boulevard which is owned and managed by the Town of

Newbury. There are also several fee-based private parking lots located near the Plum Island Center; together these lots provide 100- 200 parking spaces. While the Newburyport parking lot has a bathroom facility, the Newbury lot currently has only portable toilets.

Public access to the beaches is available through a handful of the estimated 100 beach rights-of-way along Plum Island (including both Newbury and Newburyport). Over time, most of these have been compromised due to unclear trail markings, natural encroachment from sand and vegetation, as well as encroachment from adjacent private property owners. There are also existing paths that extend from the public roads to the Atlantic Ocean that are not located on rights-of-way.

In 2006, the City of Newburyport and the Town of Newbury requested funding from the State Seaport Council to undertake a public access planning study for the residentially developed portion of Plum Island. The Seaport Council subsequently authorized the State Division of Conservation and Recreation to prepare the study. The purpose of this study is to identify potential access routes to Plum Island beaches and the Newburyport Plum Island Basin and to develop conceptual plans for the Plum Island Point Parking lot and restroom facility and for the Newbury Center Parking lot and proposed lifeguard station, viewing platform, and restroom facility.

The goal of the public access plan is to reactivate, in priority order, important public rights-of-way and to abandon paths that extend from the street that are not on rights-of-way so that these areas can return to their natural state as part of the dune system. Some of the rights-of-way will be improved with surface treatment such as MobiMats and a signage system will be developed to assist the public in identifying rights-of-way to be used to travel to their desired destination.

More details about the specific recommendations outlined in the plan have been incorporated into this plan, in Section 8 (Goals and Objectives) and Section 9 (Five-Year Action Plan).

D. Vegetation

Overview

There are seven Natural Heritage Priority Areas in, or partially in, Newbury that are home to many common and rare species. Newbury's coastal ecosystems are a designated Area of Critical Environmental Concern. Two inland areas located in the Northwest corner of Newbury are also priority areas. "These areas contain composites of uplands and non-tidal wetlands, providing habitat for species that need wet conditions for part of their lives, such as breeding, and upland forested areas for the rest of their lives"¹⁶

¹⁶ Massachusetts Heritage and Endangered Species Program.

Newbury also contains several certified vernal pools. Vernal pools are temporary, isolated bodies of freshwater that provide critical habitat for many vertebrate and invertebrate wildlife species. In Massachusetts, the Massachusetts Natural Heritage and Endangered Species Program certifies pools that meet certain biological and physical criteria. These pools qualify for some regulatory protection.

Because Newbury boasts such a diverse community of ecosystems, a wide range of vegetative species can be found throughout the Town.

Coastal Areas

Species commonly found in the tidal wetlands are the Salt Marsh Aster (*Aster tenuifolius*), Common Reed (*Phragmites australis*, an invasive species), Switchgrass (*Panicum virgatum*), Three-squares (*Scirpus pungens* and *americanus*), Rose Mallow (*Hibiscus moscheutos*), Broad-leaved Cattail (*Typha latifolia*), and Wild Rice (*Zizania aquatica*).

Forested Lands

As noted earlier, Newbury has extensive conservation lands, some of which are densely populated with rich coniferous forests. Forested areas include several Wildlife Management Areas, Fish and Game Lands, the Old Town Hill Reservation, the William/Henry Graf Reserve, and the Common Pasture, as well as other privately held tracts of land.

Several of the most common types of habitat found in Newbury include Woodland, Brush Borders, and Open Fields. These areas are generally defined by the type of vegetation and often include local wildlife. Table 4-3, below, briefly outlines the three areas noted above.

Table 4-3: Major Types of Habitat

Type of Habitat	Dominant Plant Species	Commonly found Wildlife
Woodland	Oak Stands	Chickadees, Chipmunks
Brush Borders	Sumac	Song Sparrows, Field Mice
Open Fields	Thistles	Golden Finch, Groundhogs

Source: Trustees of Reservations, 1998

Public Shade Trees

Newbury does not have a shade-tree by-law or a tree planting program. An elected Tree Warden manages trees on municipal land and a budget line item has appeared on the Town Meeting warrant for many years. For FY 02, the amount approved for tree management expenses was \$33,000, plus a salary of \$3000 for the Warden. While the salary amount has

remained the same, the allocation for public tree management has gone down over time to \$5000 in FY 10. In FY 11, the budget line item for Tree Warden Expense was transferred to the DPW budget, which will now provide funding for any tree maintenance or planting. This will allow more flexibility to address issues when needed, while not committing funds for tree maintenance when it is not needed.

At the end of 2009, current Tree Warden, Peter Hollis, indicated that the health of Town trees was generally good. Most of his activities are related to cleaning up storm damage and occasional removal of unhealthy specimens.

The Town benefited in 2009 from action taken by the electric utility, National Grid, to address a number of public and private trees along Hanover Street that were determined to be at risk for storm damage and a potential hazard to the electric distribution system. National Grid removed 21 trees at a cost of over \$100,000. The Town does not have the resources to accomplish a comprehensive evaluation and treatment on such a large area. Encouraging similar activity by utilities may benefit the Town going forward.

There may be grants available for municipal tree management that the Town has not taken advantage of in the past. This is an area worth exploring to bolster the limited budget available.

Developing Management Plans for public areas such as the Upper and Lower Greens may also allow for more focus on shade tree issues in these important cultural and historic locations.

Rare, Threatened, or Endangered Species

The Massachusetts Heritage and Endangered Species Program (MHESP) is the agency responsible for identifying, monitoring, and helping communities protect their unique environments and species. Table 4-4, below, identifies many of Newbury’s threatened or endangered species, and their status, based on MHESP’s most recent data.

Table 4-4: Vegetation: Rare, Threatened, or Endangered Species

Latin Name	Common Name	Federal Status/ Year of Last Observation
Aristida Tuberculosa	Seabeach Needlegrass	T/2004
Bidens Hyperborea	Estuary Beggar Ticks	E/1981
Bolboschoenus Fluviatilis	River Bulrush	SC/1913
Conioselinum Chinense	Hemlock Parsley	SC/2003
Elymus Villosus	Hairy Wild Rye	E/1897
Equisetum Scirpoides	Dwarf Scouring-Rush	SC/1900
Eriocaulon Parkeri	Parker’s Pipewart	E/1924
Gentiana Andrewsii	Andrews’ Bottle Gentian	E/1954
Rumex Verticillatus	Swamp Dock	T/1951
Sagittaria Montevicensis ssp.	Estuary Arrowhead	E/2004

Spongiosa		
Sanicula Odorata	Long-Styled Sanicle	T/1902
Scirpus Longii	Long’s Bulrush	T/1998

Key: (DFW Rank): E=Endangered; T= Threatened; SC=Special Concern; WL=Unofficial Watchlist
 Source: Massachusetts Natural Heritage and Endangered Species Program, Division of Fisheries and Wildlife, 2008.

One concern is the emerging threat brought forth by the expansion of invasive plants. These pose a significant threat to the natural resource. One major threat that has been identified in large areas of salt marsh within the Parker River Watershed east of Route 1 is the formation of new stands of Phragmites, also known as Common Reed. Tidal restrictions have been identified as a large contributing factor to encroachment by this difficult-to-control invasive plant. Other invasive species of particular concern in the area include Purple Loosestrife, Japanese Knotweed, and Pepperweed. Invasives crowd out species that are a traditional part of the saltmarsh ecosystem—a threat that also compromises the aesthetic beauty of Newbury’s salt-marshes.

E. Fisheries and Wildlife

Newbury’s rich mosaic of rivers, inland and coastal wetlands, and forested conservation lands provides abundant habitat for many species.

Marine and Estuary Fish, Freshwater Fish, Shellfish, Crustaceans

An abundance of salt water fish and shellfish can be found in and around the Newbury coast, and freshwater fish in the inland freshwater sections of the Parker River and its tributaries. Several species are dependent on tidal wetlands, including Striped Bass, Bluefish, Winter Flounder, Scup, Tautog, Black Sea Bass, Menhaden, Summer Flounder, Wealfish, Eel, White Perch, River Herring, Shad, Smelt, Blue Crab, Jonah Crab, Lobster, Quahog, Soft Shell Clam, Bay Scallop, Oyster, and Conch.

Additionally the Parker River has diadromous fish which migrate between fresh and marine waters for at least part of their life cycles. Representatives of the National Marine Fisheries Division of NOAA have stated that the Parker River is one of the few coastal rivers which still has the potential to support a viable alewife herring run. The local watershed organization, the Parker River Clean Water Association, works in conjunction with NOAA to monitor the alewife run with their annual “fish count” of alewife herring, providing excellent data to the National Oceanographic and Atmospheric Administration (NOAA) . The Town and the Massachusetts Division of Ecological Restoration (DER) have been working on several dam removal projects whose goal is to restore free flow to sections of the river, improving river health and fish habitat. Table 4-5, below, provides a listing of fish, eel, shellfish, and crustacea species that can be found in Newbury’s waters.

Table 4-5: Fish, Eel, Shellfish, and Crustacea Species

Common and Latin Name	Common and Latin Name
Spiny Dogfish (<i>Squalus acanthias</i>)	Windowpane flounder (<i>Scophthalmus aquosus</i>)
Little Skate (<i>Raja erinacea</i>)	Yellowtail flounder (<i>Pleuronectes ferruginea</i>)
Winter Skate (<i>Raja ocellata</i>)	Winter flounder (<i>Pseudopleuronectes americanus</i>)
Atlantic sturgeon (<i>Acipenser oxyrinchus</i>)	Goosefish (<i>Lophius americanus</i>)
Blueback herring (<i>Alosa aestivalis</i>)	White sucker (<i>Catostomus commersoni</i>)
Alewife (<i>Alosa pseudoharengus</i>)	Pumpkinseed (<i>Leopomis gibbosus</i>)
Shad (<i>Alosa sapidissima</i>)	Banded sunfish (<i>Enneacanthus obesus</i>)
Atlantic menhaden (<i>Brevoortia tyrannus</i>)	Yellow bullhead (<i>Ameiurus natalis</i>)
Atlantic herring (<i>Clupea harengus</i>)	Large mouthed bass (<i>Micropterus salmoides</i>)
Thread herring (<i>Opisthonema oglinum</i>)	Small mouthed bass (<i>Micropterus dolomieu</i>)
American smelt (<i>Osmerus mordax</i>)	Crappie (<i>Pomoxis</i>)
Brown trout (<i>Salmo trutta</i>)	White catfish (<i>Ameiurus catus</i>)
Golden shiner (<i>Notemigonus chrysoleucus</i>)	Pickrel (<i>Esox lucius</i>)
American eel (<i>Anguilla rostrata</i>)	Carp (<i>Cyprinus carpio carpio</i>)
Mummichog (<i>Fundulus heteroclitus</i>)	Brown bullhead (<i>Ameiurus nebulosus</i>)
Banded killifish (<i>Fundulus diaphanus</i>)	Rock fish (<i>Mycteroperca venenosa</i>)
Atlantic cod (<i>Gadus morhua</i>)	Channel catfish (<i>Ictalurus punctatus</i>)
Atlantic tomcod (<i>Microgadus tomcod</i>)	Brook trout (<i>Salvelinus fontinalis</i>)
Hake (<i>Urophycis</i> spp.)	Summer flounder (<i>Paralichthys dentatus</i>)
Four-spined stickleback (<i>Apeltes quadricus</i>)	Scup (<i>Stenotomus chrysops</i>)
Three-spined stickleback (<i>Gasterosteus aculeatus</i>)	Weakfish (<i>Cynoscion regalis</i>)
Black-spotted stickleback (<i>Gasterosteus wheatlandi</i>)	Tautog (<i>Tautoga onitis</i>)
Nine-spined stickleback (<i>Pungitius pungitius</i>)	Black sea bass (<i>Centropristis striata</i>)
Northern pipefish (<i>Syngnathus fuscus</i>)	Striped bass (<i>Morone saxatilis</i>)
White perch (<i>Morone saxatilis</i>)	Lamprey eel (<i>Petromyzon marinus</i>)
Bluegill sunfish (<i>Lepomis macrochirus</i>)	American eel (<i>Anguilla rostrata</i>)
Yellow perch (<i>Perca flavescens</i>)	Oyster (<i>Crassostrea virginica</i>)
Bluefish (<i>Pomatomus saltatrix</i>)	Soft-shell clam (<i>Mya arenaria</i>)
Moonfish (<i>Vomer setapinnus</i>)	Surf clam (<i>Spisula solidissima</i>)
Cunner (<i>Tautoglabrus adspersus</i>)	Blue mussel (<i>Mytilus edulis</i>)
American sand lance (<i>Ammodytes americanus</i>)	Razor clam (<i>Ensis directus</i>)

Table 4-5: Fish, Eel, Shellfish, and Crustacea Species (cont.)

Common and Latin Name	Common and Latin Name
Sea raven (<i>Hemipterus americanus</i>)	Ocean quahog (<i>Artica islandica</i>)
Longhorn sculpin (<i>Myoxocephalus octodecemspinousus</i>)	Bay scallop (<i>Argopecten irradians</i>)
Grubby (<i>Myoxocephalus aeneus</i>)	Lobster (<i>Homarus americanus</i>)
Lumpfish (<i>Cyclopterus lumpus</i>)	Green crab (<i>Carcinus maenas</i>)
Atlantic wolffish (<i>Anarhichus lupus</i>)	Crayfish (<i>Distocambarus youngineri</i>)
Ocean pout (<i>Macrozoarces americanus</i>)	Blue crab (<i>Callinectes sapidus</i>)
Atlantic silversides (<i>Menidia menidia</i>)	Jonah crab (<i>Cancer borealis</i>)
Rock gunnel (<i>Pholis gunnellus</i>)	Conch (<i>Strombus gigas</i>)

Source:

Clam beds provide an important source of revenue for Town residents, as do other forms of commercial fishing. An oyster bed in the Parker River has been totally lost as a result of bacteria levels. The Massachusetts Division of Marine Fisheries monitors the safety of the local waters for shellfishing by taking monthly water samples to test for fecal coliform bacteria. Clam flats are automatically closed for five days when more than .5 inches of rain falls within 24 hours between April 1 and December 14, and for eight days when more than one inch falls in a 24-hour period. During the winter months the flats are closed when more than an inch is received within 25 hours. In general, the Town’s clam flats are closed approximately one third of the year due to high levels of fecal coliform bacteria, both in the Sound and further up the Parker River.

The Department of Marine Fisheries has identified the following pollution sources: agricultural runoff (especially from the cow farm on Parker Street), failing septic systems, and wildlife waste. Effluent from The Governor’s Academy’s waste water treatment plant, which is discharged directly into a small tributary of the Mill River, has also been a pollution source in the past. However, The Academy worked with the Environmental Protection Agency and Department of Environmental Protection to address inflow and infiltration problems and reduced bacteria counts to acceptable levels, with only occasional increases in counts above acceptable maximums. In addition to these significant and easily identifiable sources of pollution, many smaller sources such as lawn fertilizers, household cleaners, and pet waste are also major pollutants.

Vernal Pools

Vernal pools are small, shallow ponds characterized by a lack of fish and annual or semi-annual periods of dryness. Vernal pool habitats are extremely important to a variety of wildlife species,

including some amphibians that breed exclusively in vernal pools, and other organisms which spend their entire life cycles confined to such locales.

Fourteen vernal pools have been certified in Newbury by the Natural Heritage & Endangered Species Program (NHESP) according to the Guidelines for Certification of Vernal Pool Habitat. Certified vernal pools are protected if they fall under the jurisdiction of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00). However, the certification of a pool only establishes that it functions biologically as a vernal pool. Certification does not determine that the pool is within a resource area protected by the Wetlands Protection Act. Certified vernal pools are also afforded protection under the state Water Quality Certification regulations (401 Program), the state Title 5 regulations, and the Forest Cutting Practices Act regulations.¹⁷

There are an estimated 106 additional potential vernal pools identified by MassGIS through the interpretation of aerial photos. These potential vernal pools have not been field verified and therefore are not protected by regulation. Efforts on the part of Newbury, the Parker River Clean Water Association, and the Massachusetts DOT are beginning to focus on public education of road kill issues for amphibians and reptiles as well as improved road design to mitigate road kill.

The diverse varieties of wetlands, including an abundance of vernal pools as well as varying kinds of uplands in Newbury provide excellent habitat for amphibians and reptiles. Table 4-6, below, provides a listing of amphibians and reptiles commonly found in Newbury.

Table 4-6: Amphibians and Reptiles

Common and Latin Name	Common and Latin Name
Blue-spotted salamander (<i>Ambystoma laterale</i>)	Snapping turtle (<i>Chelydra serpentina</i>)
Spotted salamander (<i>Ambystoma maculatum</i>)	Eastern musk turtle (<i>Sternotherus odoratus</i>)
Eastern newt (<i>Notophthalmus viridescens</i>)	Painted turtle (<i>Chrysemys picta</i>)
Northern dusky salamander (<i>Desmognathus fuscus fuscus</i>)	Spotted turtle (<i>Clemmys guttata</i>)
Eastern red-backed salamander (<i>Plethodon cinereus</i>)	Wood turtle (<i>Gleipemys insculpta</i>)
Four-toed salamander (<i>Hemidactylum scutatum</i>)	Blanding's turtle (<i>Emydoidea blandingii</i>)
Northern two-lined salamander (<i>Eurycea bislineata</i>)	Eastern box turtle (<i>Terrapene carolina</i>)

¹⁷ MassGIS: <http://www.mass.gov/mgis/cvp.htm>

Table 4-6: Amphibians and Reptiles (cont.)

Common and Latin Name	
astern spadefoot toad (<i>Scaphiopus holbrookii</i>)	North American black racer snake (<i>Coluber constrictor</i>)
American toad (<i>Anaxyrus americanus</i>)	Ring-necked snake (<i>Diadophis punctatus</i>)
Fowler’s toad (<i>Anaxyrus fowleri</i>)	Milk snake (<i>Lampropeltis triangulum</i>)
Spring peeper (<i>Pseudacris crucifer</i>)	Northern watersnake (<i>Nerodia sipedon</i>)
Gray tree frog (<i>Hyla versicolor</i>)	Smooth greensnake (<i>Opheodrys vernalis</i>)
American bullfrog (<i>Lithobates catesbeianus</i>)	DeKay’s brownsnake (<i>Storeria dekayi</i>)
Green frog (<i>Lothobates clamitans</i>)	Red-bellied snake (<i>Storeria occipitomaculata</i>)
Pickerel frog (<i>Lithobates palustris</i>)	Eastern ribbonsnake (<i>Thamnophis sauritus</i>)
Northern leopard frog (<i>Lithobates pipiens</i>)	Common gartersnake (<i>Thamnophis sirtalis</i>)
Wood frog (<i>Lithobates sylvaticus</i>)	

Source:

Corridors for wildlife migration

As noted earlier, almost half of Newbury’s total acreage is conservation land. The Town also has large undeveloped tracts of privately held land and miles of rivers and streams. These open spaces provide wildlife – both resident and migratory species – with abundant habitat and safe avenues in which to travel. However, other than the corridors created by the waterways, Newbury does not have any preserved wildlife corridors that connect the largest tracts of land, especially between the coastal and inland conservation lands. Wildlife’s ability to move between areas will be significantly restricted when the privately held open space areas are developed. Currently, the Town is fragmented by Interstate 95 and Routes 1 and 1A. Recently, the Open Space Committee is in conversations with the Massachusetts Land Acquisition Commission, Division of Fish and Wildlife, to identify parcels for purchase that would strengthen wildlife corridor areas.

Mammals commonly found in Newbury are listed in Table 4-7, below.

Table 4-7: Mammals

Common Name and Latin Name	Common Name and Latin Name
White-tailed deer (<i>Odocoileus virginianus</i>)	Eastern chipmunk (<i>Tamias striatus</i>)
Eastern Cottontail (<i>Sylvilagus floridanus</i>)	Woodchuck (<i>Marmota monax</i>)
New England Cottontail (<i>S. Mutalli</i>)	Beaver (<i>Castor Canadensis</i>)
Varying Hare (<i>Lepus americanus</i>)	Porcupine (<i>Erethizon dorsatum</i>)
Striped skunk (<i>Mephitis mephitis</i>)	White-footed mouse (<i>Peromyscus leucopus</i>)

Table 4-7: Mammals (cont.)

Common Name and Latin Name	Common Name and Latin Name
Short-tailed weasel (<i>Mustela ermine</i>)	Meadow vole (<i>Microtus pennsylvanicus</i>)
Long-tailed weasel (<i>Mustela frenata</i>)	Muskrat (<i>Ondatra zibethica</i>)
Mink (<i>Mustela vison</i>)	Meadow jumping mouse (<i>Zapus hudsonius</i>)
Otter (<i>Lutra Canadensis</i>)	Woodland jumping mouse (<i>Napaeozapus insignis</i>)
Fisher (<i>Martes pennant</i>)	Norway rat (<i>Rattus norvegicus</i>)
Raccoon (<i>Procyon lotor</i>)	House mouse (<i>Mus musculus</i>)
Opossum (<i>Didelphis marsupialis</i>)	Eastern mole (<i>Scalopus aquaticus</i>)
Bobcat (<i>Lynx rufus</i>)	Hairtaile mole (<i>Parascalops breweri</i>)
New England Coyote (<i>Canis latrans</i>)	Star-nose mole (<i>Condylura cristata</i>)
Gray fox (<i>Urocyon cinereoargenteus</i>)	Masked shrew (<i>Sorex cinereus</i>)
Red fox (<i>Vulpes fulva</i>)	Shorttail shrew (<i>Blarina brevicauda</i>)
Eastern gray squirrel (<i>Sciurus carolinensis</i>)	
Red squirrel (<i>Tamiasciurus judsonicus</i>)	
Southern flying squirrel (<i>Glaucomys volans</i>)	

Source:

The Greater Newburyport area, including Newbury, is regarded as one of the ten best birding areas in the country because the varying habitats offer nesting and migrating stop-over opportunities to an unusually large number of species of birds from pelagic, to shore, to salt marsh, riverine, estuary, freshwater marsh, wooded wetlands, grasslands, and wooded uplands avian species. Significant contributions to the area’s birding opportunities are made by the presence of the Mass Audubon Joppa Flats Education Center and programs conducted by the staff at the headquarters for the Parker River National Wildlife Refuge.

Table 4-8: Birds

Common Name and Latin Name	Common Name and Latin Name
White-eyed Vireo (<i>Vireo griseus</i>)	Ring-necked Pheasant (<i>Phasianus colchicus</i>)
Yellow-throated Vireo (<i>Vireo flavifrons</i>)	Ruffed Grouse (u) (<i>Bonasa umbellus</i>)
Blue-headed Vireo (<i>Vireo solitaries</i>)	Wild Turkey (<i>Meleagris gallapavo</i>)
Warbling Vireo (<i>Vireo gilvus</i>)	Red-throated Loon (<i>Gavia stellata</i>)
Philadelphia Vireo (u) (<i>Vireo philadelphicus</i>)	Pacific Loon (r) (<i>Gavia pacifica</i>)
Red-eyed Vireo (<i>Vireo olivaceus</i>)	Common Loon (<i>Gavia immer</i>)
Blue Jay (<i>Cyanocitta cristata</i>)	Pied-billed Grebe (<i>Podilymbus podiceps</i>)
Fish Crow (<i>Corvus ossifragus</i>)	Eared Grebe (r) (<i>Podiceps nigricollis</i>)

Table 4-8: Birds (cont.)

Common Name and Latin Name	Common Name and Latin Name
Common Raven (<i>Corvus corax</i>)	Western Grebe (r) (<i>Aechmophorus occidentalis</i>)
Horned Lark (<i>Eremophila alpestris</i>)	Red-necked Grebe (<i>Podiceps grisegena</i>)
Purple Martin (<i>Progne subis</i>)	Northern Fulmar (u) (<i>Fulmaris glacialis</i>)
Tree Swallow (<i>Tachycineta bicolor</i>)	Cory's Shearwater (r) (<i>Calonectris diomedea</i>)
Northern Rough-winged Swallow (<i>Stelgidopteryx serripennis</i>)	American Oystercatcher (u) (<i>Haematopus palliatus</i>)
Bank Swallow (<i>Riparia riparia</i>)	American Avocet (r) (<i>Recurvirostra americana</i>)
Cliff Swallow (<i>Hirundo pyrrhonota</i>)	Greater Yellowlegs (<i>Tringa melanoleuca</i>)
(<i>Hirundo rustica</i>)	Lesser Yellowlegs (<i>Tringa flavipes</i>)
Black-capped Chickadee (<i>Parus atricapillus</i>)	Solitary Sandpiper (<i>Tringa solitaria</i>)
Tufted Titmouse (<i>Parus bicolor</i>)	Willet (<i>Tringa semipalmata</i>)
Red-breasted Nuthatch (<i>Sitta Canadensis</i>)	Spotted Sandpiper (<i>Actitis macularius</i>)
White-breasted Nuthatch (<i>Sitta carolinensis</i>)	Upland Sandpiper (<i>Bartramia longicauda</i>)
Brown Creeper (<i>Certhia Americana</i>)	Whimbrel (<i>Numenius phaeopus</i>)
Carolina Wren (<i>Thryothorus ludovicianus</i>)	Hudsonian Godwit (<i>Limosa haemastica</i>)
House Wren (<i>Troglodytes aedon</i>)	Marbled Godwit (u) (<i>Limosa fedoa</i>)
Winter Wren (<i>Troglodytes troglodytes</i>)	Ruddy Turnstone (<i>Arenaria interpres</i>)
Marsh Wren (<i>Cistothorus palustris</i>)	Red Knot (<i>Calidris canutus</i>)
Golden-crowned Kinglet (<i>Regulus satrapa</i>)	Sanderling (<i>Calidris alba</i>)
Ruby-crowned Kinglet (<i>Regulus calendula</i>)	Semipalmated Sandpiper (<i>Calidris pusilla</i>)
Blue-gray Gnatcatcher (<i>Polioptila caerulea</i>)	Western Sandpiper (<i>Calidris mauri</i>)
Eastern Bluebird (<i>Sialia sialis</i>)	Least Sandpiper (<i>Calidris minutilla</i>)
Veery (<i>Catharus fuscescens</i>)	White-rumped Sandpiper (<i>Calidris fuscicollis</i>)
Swainson's Thrush (<i>Catharus ustulatus</i>)	Baird's Sandpiper (<i>Calidris bairdii</i>)
Hermit Thrush (<i>Catharus guttatus</i>)	Pectoral Sandpiper (<i>Calidris melanotos</i>)
Wood Thrush (<i>Hylocichla mustelina</i>)	Purple Sandpiper (<i>Calidris maritime</i>)
American Robin (<i>Turdus migratorius</i>)	Dunlin (<i>Calidris alpina</i>)
Gray Catbird (<i>Dumetalla carolinensis</i>)	Curlew Sandpiper (r) (<i>Calidris ferruginea</i>)
Northern Mockingbird (<i>Mimus polyglottos</i>)	Stilt Sandpiper (<i>Calidris himantopus</i>)
Brown Thrasher (<i>Toxostoma rufum</i>)	Buff-breasted Sandpiper (u) (<i>Tryngites subruficollis</i>)
Sage Thrasher (r) (<i>Oreoscoptes montanus</i>)	Ruff (r) (<i>Philomachus pugnax</i>)
European Starling (<i>Sturnus vulgaris</i>)	Short-billed Dowitcher (<i>Limnodromus griseus</i>)

Table 4-8: Birds (cont.)

Common Name and Latin Name	Common Name and Latin Name
American Pipit (<i>Anthus rubescens</i>)	Long-billed Dowitcher (<i>Limnodromus scolopaceus</i>)
Bohemian Waxwing (u) (<i>Bombycilla garrulus</i>)	Wilson's Snipe (<i>Gallinago delicata</i>)
Cedar Waxwing (<i>Bombycilla cedrorum</i>)	American Woodcock (<i>Scolopax minor</i>)
Blue-winged Warbler (<i>Vermivora pinus</i>)	Wilson's Phalarope (<i>Phalaropus tricolor</i>)
Golden-winged Warbler (u)	Red-necked Phalarope (<i>Phalaropus lobatus</i>)
Tennessee Warbler (<i>Vermivora peregrine</i>)	Red Phalarope (r) (<i>Phalaropus fulicarius</i>)
Orange-crowned Warbler (u)	Pomarine Jaeger (u) (<i>Stercorarius pomarinus</i>)
Nashville Warbler (<i>Vermivora ruficapilla</i>)	Parasitic Jaeger (<i>Stercorarius parasiticus</i>)
Northern Parula (<i>Parula Americana</i>)	Laughing Gull (<i>Leucophaeus atricilla</i>)
Yellow Warbler (<i>Dendroica petechia</i>)	Little Gull (u) (<i>Hydrocoloeus minutus</i>)
Chestnut-sided Warbler (<i>Dendroica pensylvanica</i>)	Black-headed Gull (u) (<i>Chroicocephalus ridibundus</i>)
Magnolia Warbler (<i>Dendroica magnolia</i>)	Bonaparte's Gull (<i>Chroicocephalus philadelphia</i>)
Cape May Warbler (u) (<i>Dendroica tigrina</i>)	Ring-billed Gull (<i>Leucophaeus delawarensis</i>)
Black-throated Blue Warbler (<i>Dendroica caerulescens</i>)	Herring Gull (<i>Leucophaeus argentatus</i>)
Yellow-rumped Warbler (<i>Dendroica coronate</i>)	Iceland Gull (<i>Leucophaeus glaucoides</i>)
Black-throated Green Warbler (<i>Dendroica virens</i>)	Lesser Black-backed Gull (<i>Leucophaeus fuscus</i>)
Blackburnian Warbler (<i>Dendroica fusca</i>)	Glaucous Gull (<i>Leucophaeus hyperboreus</i>)
Pine Warbler (<i>Dendroica pinus</i>)	Great Black-backed Gull (<i>Leucophaeus marinus</i>)
Prairie Warbler (<i>Dendroica discolor</i>)	Black-legged Kittiwake (<i>Rissa tridactyla</i>)
Palm Warbler (<i>Dendroica palmarum</i>)	Ivory Gull (r) (<i>Pagophila eburnea</i>)
Bay-breasted Warbler (<i>Dendroica castanea</i>)	Caspian Tern (u) (<i>Hydroprogne caspia</i>)
Blackpoll Warbler (<i>Dendroica striata</i>)	Royal Tern (r) (<i>Thalasseus maximus</i>)
Black-and-white Warbler (<i>Mniotilta varia</i>)	Greater Shearwater (<i>Puffinus gravis</i>)
American Redstart (<i>Setophaga ruticilla</i>)	Sooty Shearwater (<i>Puffinus griseus</i>)
Swainson's Warbler (r) (<i>Limnithlypis swainsonii</i>)	Manx Shearwater (<i>Puffinus puffinus</i>)
Ovenbird (<i>Seiurus aurocapillus</i>)	Wilson's Storm-Petrel (<i>Oceanites oceanicus</i>)

Table 4-8: Birds (cont.)

Common Name and Latin Name	Common Name and Latin Name
Northern Waterthrush (Seiurus noveboracensis)	Leach's Storm-Petrel (Oceanodroma leucorhoa)
Louisiana Waterthrush (Seiurus motacilla)	Northern Gannet (Morus bassanus)
Mourning Warbler (Oporornis Philadelphia)	American White Pelican (r) (Pelecanus erythrorhynchos)
Common Yellowthroat (Geothlypis trichas)	Double-crested Cormorant (Phalacrocorax auritus)
Hooded Warbler (r) (Wilsonia citrina)	Great Cormorant (Phalacrocorax carbo)
Wilson's Warbler (Wilsonia pusilla)	American Bittern (Botaurus lentiginosus)
Canada Warbler (Wilsonia canadensis)	Least Bittern (u) (Ixobrychus exilis)
Yellow-breasted Chat (Icteria virens)	Great Blue Heron (Ardea herodias)
Scarlet Tanager (Piranga olivacea)	Great Egret (Ardea alba)
Summer Tanager (r) (Piranga rubra)	Snowy Egret (Egretta thula)
Green-tailed Towhee (r) (Pipilo chlorurus)	Little Blue Heron (Egretta caerulea)
Eastern Towhee (Pipilo erythrophthalmus)	Tricolored Heron (u) (Egretta tricolor)
American Tree Sparrow (Spizella arborea)	Cattle Egret (Bubulcus ibis)
Chipping Sparrow (Spizella passerine)	Green Heron (Butorides virescens)
Clay-colored Sparrow (Spizella pallida)	Black-crowned Night-Heron (Nycticorax nycticorax)
Field Sparrow (Spizella pusilla)	Yellow-crowned Night-Heron (u) (Nyctanassa violacea)
Vesper Sparrow (u) (Pooecetes gramineus)	Glossy Ibis (Plegadis falcinellus)
Lark Sparrow (r) (Chondestes grammacus)	White-faced Ibis (r) (Plegadis chihi)
Savannah Sparrow (Passerculus sandwichensis)	Turkey Vulture (Cathartes aura)
Grasshopper Sparrow (u) (Ammodramus savannarum)	Osprey (Pandion haliaetus)
Nelson's Sparrow (Ammodramus nelson)	Bald Eagle (Haliaeetus leucocephalus)
Saltmarsh Sparrow (Ammodramus caudacutus)	Northern Harrier (Circus cyaneus)
Seaside Sparrow (Ammodramus maritimus)	Sharp-shinned Hawk (Accipiter striatus)
Fox Sparrow (Passerella iliaca)	Cooper's Hawk (Accipiter cooperii)
Song Sparrow (Melospiza melodia)	Northern Goshawk (u) (Accipiter gentilis)
Lincoln's Sparrow (Melospiza lincolni)	Red-shouldered Hawk (u) (Buteo lineatus)
Swamp Sparrow (Melospiza Georgiana)	Broad-winged Hawk Buteo platypterus)
White-throated Sparrow (Zonotrichia albicollis)	Red-tailed Hawk (Buteo jamaicensis)
Harris's Sparrow (r) (Zonotrichia querula)	Rough-legged Hawk (Buteo lagopus)

Table 4-8: Birds (cont.)

Common Name and Latin Name	Common Name and Latin Name
White-crowned Sparrow (<i>Zonotrichia leucophrys</i>)	American Kestrel (<i>Falco sparverius</i>)
Dark-eyed Junco (<i>Junco hyemalis</i>)	Merlin (<i>Falco columbarius</i>)
Lapland Longspur (<i>Calcarius lapponicus</i>)	Gyr Falcon (r) (<i>Falco rusticolus</i>)
Chestnut-collared Longspur (r) (<i>Calcarius ornatus</i>)	Peregrine Falcon (<i>Falco peregrinus</i>)
Snow Bunting (<i>Plectrophenax nivalis</i>)	Clapper Rail (<i>Rallus longirostris</i>)
Northern Cardinal (<i>Cardinalis cardinalis</i>)	King Rail (u) (<i>Rallus elegans</i>)
Rose-breasted Grosbeak (<i>Pheucticus ludovicianus</i>)	Virginia Rail (<i>Rallus limicola</i>)
Blue Grosbeak (r) (<i>Passerina caerulea</i>)	Sora (<i>Porzana carolina</i>)
Indigo Bunting (<i>Passerina cyanea</i>)	Common Moorhen (r) (<i>Gallinula chloropus</i>)
Dickcissel (u) (<i>Spiza Americana</i>)	American Coot (u) (<i>Fulica americana</i>)
Bobolink (<i>Dolichonyx oryzivorus</i>)	Black-bellied Plover (<i>Pluvialis squatarola</i>)
Red-winged Blackbird (<i>Agelaius phoeniceus</i>)	American Golden-Plover (<i>Pluvialis dominica</i>)
Eastern Meadowlark (<i>Sturnella magna</i>)	Pacific Golden-Plover (r) <i>Pluvialis fulva</i>)
Rusty Blackbird (<i>Euphagus carolinus</i>)	Semipalmated Plover (<i>Charadrius semipalmatus</i>)
Brewer's Blackbird (r) (<i>Euphagus cyanocephalus</i>)	Piping Plover (<i>Charadrius melodus</i>)
Common Grackle (<i>Quiscalus quiscula</i>)	Killdeer (<i>Charadrius vociferus</i>)
Brown-headed Cowbird (<i>Molothrus ater</i>)	Roseate Tern (u) (<i>Sterna dougallii</i>)
Orchard Oriole (<i>Icterus spurius</i>)	Common Tern (<i>Sterna hirundo</i>)
Baltimore Oriole (<i>Icterus galbula</i>)	Arctic Tern (u) (<i>Sterna paradisaea</i>)
Purple Finch (<i>Carpodacus purpureus</i>)	Forster's Tern (<i>Sterna forsteri</i>)
House Finch (<i>Carpodacus mexicanus</i>)	Least Tern (<i>Sternula antillarum</i>)
Red Crossbill (u) (<i>Loxia curvirostra</i>)	Black Tern (u) (<i>Chlidonias niger</i>)
White-winged Crossbill (u) (<i>Loxia leucoptera</i>)	Dovekie (u) (<i>Alle alle</i>)
Common Redpoll (u) (<i>Carduelis flammea</i>)	Common Murre (r) (<i>Uria aalge</i>)
Pine Siskin (<i>Carduelis pinus</i>)	Thick-billed Murre (u) <i>Uria lomvia</i>)
American Goldfinch (<i>Carduelis tristis</i>)	Razorbill (<i>Alca torda</i>)
House Sparrow (<i>Passer domesticus</i>)	Black Guillemot (<i>Cepphus grille</i>)
Greater White-fronted Goose (r) (<i>Anser albifrons</i>)	Rock Pigeon (<i>Columba livia</i>)
Snow Goose (<i>Chen caerulescens</i>)	Mourning Dove (<i>Zenaida macroura</i>)
Ross's Goose (r) (<i>Chen rossii</i>)	Black-billed Cuckoo (u) (<i>Coccyzus erythrophthalmus</i>)

Table 4-8: Birds (cont.)

Common Name and Latin Name	Common Name and Latin Name
Brant (Branta bernicla)	Yellow-billed Cuckoo (u) (Coccyzus americanus)
Canada Goose (Branta canadensis)	Barn Owl (r) (Tyto alba)
Barnacle Goose (r) (Branta leucopsis)	Eastern Screech-Owl (Megascops asio)
Mute Swan (Cygnus olor)	Great Horned Owl (Bubo virginianus)
Wood Duck (Aix sponsa)	Snowy Owl (Bubo scandiacus)
Gadwall (Anas strepera)	Barred Owl (Strix varia)
Eurasian Wigeon (u) (Anas penelope)	Long-eared Owl (Asio otus)
American Wigeon (Anas americana)	Short-eared Owl (Asio flammeus)
American Black Duck (Anas rubripes)	Northern Saw-whet Owl (Aegolius acadicus)
Mallard (Anas platyrhynchos)	Whip-poor-will (Caprimulgus carolinensis)
Blue-winged Teal (Anas discors)	Common Nighthawk (Chordeiles minor)
Northern Shoveler (Anas clypeata)	Chimney Swift (Chaetura pelagic)
Northern Pintail (Anas acuta)	Ruby-throated Hummingbird (Archilochus colubris)
Green-winged Teal (Anas crecca)	Belted Kingfisher (Megaceryle alcyon)
Canvasback (u) (Aythya valisineria)	Red-headed Woodpecker (r) (Melanerpes erythrocephalus)
Redhead (u) (Aythya americana)	Red-bellied Woodpecker (Melanerpes carolinus)
Ring-necked Duck (Aythya collaris)	Yellow-bellied Sapsucker (Sphyrapicus varius)
Greater Scaup (Aythya marila)	Downy Woodpecker (Picoides pubescens)
Lesser Scaup (Aythya affinis)	Hairy Woodpecker (Picoides villosus)
King Eider (u) (Somateria spectabilis)	Northern Flicker (Colaptes auratus)
Common Eider (Somateria mollissima)	Pileated Woodpecker (Dryocopus pileatus)
Harlequin Duck (Histrionicus histrionicus)	Olive-sided Flycatcher (Contopus cooperi)
Surf Scoter ((Melanitta perspicillata)	Eastern Wood-Pewee (Contopus virens)
White-winged Scoter (Melanitta fusca)	Yellow-bellied Flycatcher (Empidonax flaviventris)
Black Scoter (Melanitta nigra)	Alder Flycatcher (Empidonax alnorum)
Long-tailed Duck (Clangula hyemalis)	Willow Flycatcher (Empidonax traillii)
Bufflehead (Bucephala albeola)	Least Flycatcher (Empidonax minimus)
Common Goldeneye (Bucephala clangula)	Eastern Phoebe (Sayornis phoebe)
Barrow's Goldeneye (Bucephala islandica)	Ash-throated Flycatcher (r) (Miarchus cinerascens)
Hooded Merganser (Lophodytes cucullatus)	Great Crested Flycatcher (Miarchus crinitus)
Common Merganser (Mergus merganser)	Western Kingbird (r) (Tyrannus verticalis)
Red-breasted Merganser (Mergus serrator)	Eastern Kingbird (Tyrannus tyrannus)

Table 4-8: Birds (cont.)

Common Name and Latin Name	Common Name and Latin Name
Ruddy Duck (<i>Oxyura jamaicensis</i>)	Fork-tailed Flycatcher (r) (<i>Tyrannus savanna</i>) Loggerhead Shrike (r) (<i>Lanius ludovicianus</i>) Northern Shrike (<i>Lanius excubitor</i>)

Key: (u) = Uncommon; typically seen annually (r) = Rarity; seen only once or twice in ten years.
All other species seen every year in the appropriate habitat at the right time of year.
Source: This list represents all species seen during the Massachusetts Audubon Joppa Flats Education Center’s scheduled programs conducted in Massachusetts’ North Shore region. Total species observed: 318

Rare, Endangered, Threatened and Special Concern Species

Table 4-9, located on the following page, identifies many of Newbury’s threatened or endangered fish and wildlife species, and their status, based on MHESP’s most recent data.

Table 4-9: Vertebrates and Invertebrates: Rare, Threatened, or Endangered Species

Latin Name	Common Name	Federal Status
Ambystoma Laterale	Blue-Spotted Salamander	SC/1990
Scaphiopus holbrookii	Eastern Spadefoot	T/2005
Bartramia Longicauda	Upland Sandpiper	E/1994
Botaurus Lentiginos	American Bittern	E/1984
Charadrius Melodus	Piping Plover	T/2006
Circus Cyaneus	Northern Harrier	T/2004
Cistothorus Platensis	Sedge Wren	E/1985
Podilymbus Podiceps	Pied-Billed Grebe	E/1973
Poocetes Gramineus	Vesper Sparrow	T/1982
Rallus Elegans	King Rail	T/1956
Sterna Dougallii	Roseate Tern	E/1980
Sterna Hirundo	Common Tern	SC/2007
Sternula Antillarum	Least Tern	SC/2007
Tyto Alba	Barn Owl	SC/1993
Vermivora Chrysoptera	Golden-winged Warbler	E/1999
Somatochlora linearis	Mocha Emerald	SC/1998
Emydoidea Blandingii	Blanding's Turtle	T/2006
Glyptemys Insculpta	Wood Turtle	SC/1994
Malaclemys Terrapin	Diamond-backed Terrapin	T/2002
Floridobia Winkleyi	New England Siltsnail	SC/2006
Littoridinops Tenuipes	Coastal Marsh Snail	SC/2006

Key: (DFW Rank): E=Endangered; T=Threatened; SC=Special Concern; WL=Unofficial Watch list
 Source: Massachusetts Natural Heritage and Endangered Species Program, Division of Fisheries and Wildlife, 2008.

F. Scenic Resources and Unique Environments

The Great Marsh, which in Newbury includes Plum Island and the Parker River National Wildlife Refuge, is Newbury’s most scenic and unique environment. Extensive tidal wetlands are home to hundreds of species and provide both recreational and commercial value for the Town.

In addition to the Refuge area and Plum Island, Newbury has large tracts of rich forested lands that add to its rural character. The Martin Burns and William Forward Wildlife Management Area, each approximately 1,500 acres, and other tracts of forested lands are ideal for cross-country skiing, hiking, hunting, and nature walks. Several other smaller areas, such as the Old

Town Hill Reservation and the F. William/Henry Graf Reserve, also provide opportunities for hunting, boating, walking, skiing and hiking.

The Town is also rich in scenic and historic sites, including open vistas across the marshes along Routes 1 and 1A and numerous homesteads dating back to the 17th and 18th centuries.

In 2004, the Massachusetts Department of Conservation and Recreation and the Essex National Heritage Commission jointly funded the *Newbury Reconnaissance Report*, which is part of a wider Essex County Landscape Program. The primary goal of the program was to help communities identify the wide range of landscape resources, particularly those that are significant and unprotected and those that have not been identified in previous survey efforts.

The *Newbury Reconnaissance Report* described nine priority heritage landscapes that are the focus of the Reconnaissance work in Newbury. The report recommended additional intensive survey work to be completed, which would further document the physical characteristics and the historical development in these areas. A short description of these areas, and a brief analysis of the preservation issues facing these areas, is as follows:

- **Common Pasture:** This area runs along Scotland Road near the Newburyport line and has long been identified as an important regional landscape. Several active farms occupy this area. It is also an important habitat for migratory birds and other wildlife. Currently, there are efforts underway to preserve these lands in their entirety, as there is a concern that development pressures threaten the existing landscape. Coffin Island and the wet meadows have already been preserved.
- **Parker River:** The River travels through Newbury from West to East, entering the Atlantic Ocean through the Plum Island Sound. The views of the river and landscape surrounding the river and its banks are among the most beautiful and environmentally diverse areas of Newbury. These areas, which encompass historic mill sites and dams, salt marshes and other important resources, represent critical elements of the cultural identity and character of Newbury. There is a concern that development pressures threaten views from the River and that of the surrounding land.
- **Plum Island:** Plum Island is a long barrier beach located on the eastern side of Newbury. The northern portion of the Island is densely populated; the southern portion is occupied by the Parker River National Wildlife Refuge and the Sandy Point State Reservation. While the Island was originally developed as a summer vacation area in the early 20th century, the developed area is now occupied almost entirely by year-round residents. The Refuge area contains a sensitive and valuable natural environment. Development and redevelopment on the Island are a concern as the scale of new development increases. Public access to the beach is under an ever-growing threat as private owners encroach upon public rights-of-way.

- **Scenic Roads:** The scenic value of many of the old country roads in Newbury is high among Newbury residents. Objects near the roads, like stone walls and other monuments, as well as the natural beauty of the lands adjacent to the roads greatly contribute to the identity of Newbury. Specific roads identified as special include High Road, Pine Island Road, Newman Road, Orchard Street, Hay Street, Middle Road, and Scotland Road. A portion of Route 1A has been designated by the Essex National Heritage Area as a Scenic Byway.

Major Characteristic or Unusual Geologic Features

Glacial Erratics, found throughout Town, are unique geologic features. These Erratics are glacially deposited rock formations which include Great Rock, at the border of Newbury and West Newbury, Devil's Pulpit, Gerrish's Rock, and Bummer's Rock. These areas are threatened by the limited documentation of the assets, as well as by the limited maintenance and visibility of the sites.

Two significant geologic fault lines run through Newbury. One is the Clinton-Newbury fault, which roughly follows Scotland Road and Parker Street. South of this is the Parker River Fault.

Cultural, Archeological, and Historic Areas

Newbury is a town rich in cultural and historic sites and areas which contribute greatly to Newbury's character. Major areas of interest include:

- **Upper Green:** This area includes portions of High Road, Rolfe's Lane, Green Street, Parker Street, Hanover Street, and some adjoining side streets. It maintains a strong cultural identity due to the historic Upper Green and the surrounding historic buildings. This area contains the Town municipal offices, the historic Woodbridge School, and a few small retail and service businesses. Green Street, along with its immediate surrounding area, is designated as the Newbury Historic District, which is listed on the National Register of Historic Places.
- **Byfield Village:** Encompassing the area surrounding the intersection of Main Street and Central Street in the western portion of Newbury, this area now functions as the civic center for the Byfield area. Previously, however, it was the industrial core of the area due to its location at the headwaters of the Parker River. Resources in the area include The Pearson's Snuff Mill, various 18th century mill buildings, 19th century workers' housing, and other historic structures. This area lacks a comprehensive historical survey, which could serve as the foundation for future preservation efforts.
- **Byfield Cemetery:** Located on Elm Street at the Georgetown border, this area is also referred to as the Old Burial Ground. Maintenance issues are a concern.

- **The Governor’s Academy:** The oldest continuously operating independent day and boarding school in the United States, The Governor’s Academy has been an important Newbury institution for over 200 years. Located in the southern part of Newbury at the intersection of Middle Road and Elm Street, the campus encompasses a number of historic properties and important landscape areas.
- **Lower Green:** Located at the intersection of High Road and Newman Road, this area was the original town center. The original school house sits on the Lower Green and a number of historic buildings, including the Seddon Tavern, are situated around the Green. The First Burial Ground, which has recently been cleaned by Trustees of the First Burial Ground, is located nearby. There is limited documentation of the historic assets and a lack of funds for maintenance of the publicly-owned assets.
- **Other historic homes:** Newbury is blessed to have a number of historic buildings which have received recognition on either the National or State Register of Historic Places. These buildings, while located throughout Newbury, are by no means the Town’s only historic assets. These historic homes collectively contribute to the strong community character of Newbury. Notable properties include the Tristram Coffin House, the Spencer-Pierce-Little House, the Spencer-Pierce-Little Barn, the Hale-Boynton House, the James Noyes House, the Abraham Adams House, the Ferry House, the Short House, and Seddon Tavern.

Unique Environments

The Great Marsh Area of Critical Environmental Concern (ACEC) was designated in 1979 by the Massachusetts Secretary of Environmental Affairs. It contains 25,500 acres of estuarine, riverine, salt marsh, and barrier beach ecosystems in the towns of Essex, Gloucester, Ipswich, Newbury, and Rowley. Designation of an ACEC encourages the coordination of local, regional, State, and Federal agencies and organizations to preserve, restore, and enhance the valuable resources found in the area. In addition, projects taking place in the ACEC require higher environmental standards and review under various State environmental regulations including the Massachusetts Environmental Policy Act (MEPA), The Waterways Regulations (Chapter 91), the Wetland Protection Act, the Solid Waste Facilities Site Assignment Regulations, and Coastal Zone Management (CZM) policies.

To become an ACEC, an area must possess at least five of the seventeen significant resources mentioned in section 6.44 of the CZM regulations. In the document that designated the Great Marsh ACEC (originally called the Parker River/Essex Bay ACEC), 14 out of these seventeen resources were documented and described. While thirteen out of the fourteen significant resources are present in the ACEC as a whole, all of these are present within the Newbury portion of the ACEC. These resources include: barrier beach systems, salt marsh, dunes, beach, shellfish, estuaries and embayments, anadromous fish runs, floodplain, erosion and accretion areas, coastal related recreation, historic sites or districts, significant wildlife habitat, and significant scenic sites.

The Newbury portion of the Great Marsh ACEC was studied during the preparation of the Estuarine Resource Management Plan for the Town of Newbury, which was sponsored by the Mass Department of Conservation and Recreation. The specific objectives of the management plan are to:

- Evaluate the physical conditions and trends in the estuary;
- Evaluate biological resource conditions and trends in the estuary;
- Evaluate human uses and trends in the estuary;
- Identify the major resource management issues in the estuary;
- Create a set of recommendations to address the major resource management issues;
- Create a plan for the organizational structure and actions needed to implement the recommendations.

G. Environmental Challenges

Hazardous Waste and Brownfield Sites

According to the Massachusetts Department of Environmental Protection, there are currently seven Tier Classified Oil or Hazardous Materials sites in Newbury. These sites are areas where oil or hazardous materials have been spilled and where assessment or cleanup is currently underway. These spills are associated with current transportation uses (gas station, railroad) and with agricultural uses (farm and greenhouses).

Landfills¹⁸

The new Newbury Solid Waste facility was completed in 2005 on the site of the Town's closed and capped landfill. The facility is a residential drop-off center and transfer station with a design capacity of 50 tons MSW per day and adequate collection area for a full range of recyclables. The transfer station operates 3 days per week and processes an average of 150 tons of municipal solid waste per month, or approximately 12.5 tons per day of operation. The capacity of the station is adequate for current and future increases in solid waste generation, as the design took into account a 20-year solid waste master plan developed by Camp Dresser and McKee of Cambridge, MA in 2001.

Two full-time Board of Health employees presently staff the operation, with occasional help from the Department of Public Works. Staffing levels are adequate and will accommodate a significant increase in the amounts of material in the future.

¹⁸ A portion of this section has been taken from the Newbury Master Plan (2006)

Erosion

Given the maze of rivers, streams, and wetlands throughout the Town, there are many areas subject to problems with erosion. Plum Island in particular, as a barrier island situated between the Plum Island Sound and the Atlantic Ocean, is subject to the wind and water pressures that generally cause erosion. The general characteristics of Newbury's soils also make them susceptible to erosion.

Chronic Flooding

Because Newbury is a low-lying coastal Town, significant portions of it lie in flood plain zones, making the area highly susceptible to flooding. When tides run high (approximately twelve feet) and/or the region receives storms with eighteen inches of precipitation or more, many areas in Newbury are subject to chronic flooding. The Highway Department has identified most of the “problem” areas and is working to upgrade the culvert pipes to accommodate the increased flow. However, Newbury experiences “100-year storms” about every five years and given Newbury’s topography, the Town will continue to face chronic flooding problems.

Several areas that flood on a regular basis, largely due to lunar phase high tide overwash, are Middle Road near The Governor’s Academy, Newman Road near Hay Street, and Pine Island Road off of High Road. Culverts on Boston Road near the railroad tracks were recently upgraded to reduce public road and driveway flooding in that area. As a result of flooding, Newbury faces problems with washouts on roads. Erosion on Plum Island beaches has become increasingly severe, during both storm events and periods of higher-than-normal tides.

Ground Water Pollution Including Both Point and Non-Point Sources

As noted previously, Newbury has several water quality issues that cause regular problems for the Town, including bacteria infiltrating the ground water from the Parker River and its tributaries, salt from the roadways, septic system effluent, and other non-point sources of pollution. One well in the Byfield Water District is being taken off line because of high levels of bacteria originating from the nearby Parker River.

Exploratory test wells have been drilled in several locations throughout Newbury for potential new water sources. However, no new wells have been developed due either to their pumping capacity or to the possibility that the aquifer is at risk of contamination from pre-existing industries that leached contaminants in the wellhead area. High levels of bacteria and nitrates also threaten Town and private wells due to the high water table and soils which are poorly suited for septic tank absorption fields.

Surface Water Pollution Including Both Point and Non-Point Sources

Based on several studies of the Parker River and its tributaries, which comprise the majority of Newbury’s surface water, the water quality is generally quite good. However, there are several

threats that need to be addressed: development along the Parker River is still permitted, septic system setbacks are minimal (approximately 50 feet), septic systems leach in to surface waters, untreated runoff from Interstate 95 is diverted directly into the Parker River, and other non-point sources of pollution enter surface waters (e.g., pet waste, household chemicals, and lawn fertilizers). There is a Town bylaw that increases the buffer area to 300 feet in non-tidal areas.

A majority of the ground and surface water pollution can be addressed through better management practices, some of which have already been implemented by the Highway Department and the School Department. Coordination with adjacent towns to address these issues will have a positive impact upon water quality in watersheds which cross municipal boundaries, like the one which encompasses the Parker River.

Forest Resources

In addition to its vast wetlands, Newbury is also blessed with abundant forest land (see 1999 MassGIS Land Use Map). Much of this forest is protected as state, municipal, or nonprofit conservation land. The largest of these conservation holdings, containing mixed forest and wetlands, are two state Wildlife Management Areas (1,462-acre Martin Burns WMA and 1,294-acre William Forward WMA) and the 497-acre Old Town Hill Reservation, owned and managed by the Trustees of Reservations. Numerous smaller forest areas exist in scattered upland locations as private property woodlots. According to the state's 1999 MassGIS land use figures for Newbury, over 5,600 acres (or 33% of the Town) is forested. This represents a decline of about 550 acres (9.8%) since 1971. Most of this forest loss was due to new residential development. Newbury's forests provide outstanding habitat and cover for a broad array of plants and animals, including larger mammals such as White-tail deer and fox, and numerous species of woodland bird, such as Indigo Bunting and Wood Thrush. Future development encroachment into priority woodland habitats could threaten the local viability of some of these populations. Of particular concern is the potential fragmentation of existing migration corridors that provide safe passage for wildlife and that serve as vital links to essential food and water sources and breeding grounds. There are currently no privately owned parcels in Newbury that are managed for forestry under Chapter 61. Forestry projects do occur in Wildlife Management Areas controlled by the Division of Fisheries and Wildlife, primarily to create early successional habitat. The Newbury Conservation Commission reviews these projects.

Sedimentation and Erosion

Newbury currently has no notable areas of erosion in inland locations. Shoreline erosion on the Plum Island barrier beach has always been a concern, but, starting in 2008, erosion has become a severe threat to homes and property along the beachfront from the "Center" northward. The Town has recently undertaken short-term remedial action to stabilize the primary dune in this area and to re-nourish the beach with sand dredged from the Merrimack River entrance. Prior to placement of the dredged sand, through both public and private assistance, the most severely eroded area was reinforced with a large sand bag structure to

protect the primary dune face, which has retreated landward. Also of concern is the potential loss of or damage to public water and sewer infrastructure, which might threaten the viability of residences and businesses throughout Plum Island. Long term remedies to address the causes of this erosion, such as the repair of the Merrimack River jetties or reconfiguration of existing groins, are under study.

In an effort to address sedimentation and erosion issues, Newbury is actively involved in achieving compliance with NPDES storm water permitting requirements. At the Annual Town Meeting of May 26, 2009, residents voted to adopt a Storm Water Management and Illicit Discharge and Erosion Control By-Law (see **Appendix E**), which establishes a local permitting process for and regulation of construction projects that meet certain thresholds. Along with a Site Plan Review By-Law adopted in May 2006 (ATM Article 18) and amended in October 2006 (STM Article 2), this process should help the Town avoid significant sedimentation impacts in the future.

Section 5--Inventory of Lands of Conservation and Recreation Interest

A. Introduction

Along with an inventory of the Town's natural resources, an Open Space Plan is required to contain an inventory of the Town's conservation, recreation, and undeveloped land.

Conservation land is land that has been protected against development for the purpose of conserving the land and the natural resources that are supported by the land. The Parker River Wildlife Refuge is an example of conservation land. *Recreation land* can be divided into two sub categories, active recreation land, and passive recreation land. *Active recreation* land is land that is primarily used for intensive recreation such as baseball, soccer, and playgrounds. Schools are an example of active recreation land. *Passive recreation* land, on the other hand, is primarily used for less intense purposes such as hiking, bird watching, and canoeing. The Amelia Little Salt Marsh is an example of land used for passive recreation.

The level of protection afforded to recreation land varies; these lands are not all protected.

Conservation and recreation land is summarized in Section 5-B in Tables 5-1 through 5-8.

Unprotected Parcels of Open Space Interest are lands that are currently "open space", but are at risk for development because it is held in private hands and has no restrictions placed upon it. These parcels are summarized in Section 5-B in Table 5-8. *Chapter 61 Properties* are land that is under temporary protection for the purpose of agriculture, forestry or recreation, and is taxed at a lower rate.

These tables serve several purposes. First, they provide information regarding a Town's existing conservation and recreation lands in one database for easy reference. This information is useful when a Town is examining its resources regarding passive and active recreation space. Second, the tables provide information regarding open, unprotected, privately-owned parcels. This information can be used to examine opportunities for acquiring new conservation and recreation space. These tables are a very specific tool in the open space planning process. From them, Newbury can examine its current resources, conservation and recreation lands, and at the same time identify potential resources that could be acquired or otherwise utilized in the future.

B. Protected Conservation and Recreation Lands

Tables 5-1 through 5-6, located on the following pages, contain information on the properties within Newbury that are considered protected conservation and/or recreation land. 'Protected' means that for any variety of reasons a property cannot currently be developed or development is restricted in some way. Some properties are more protected than others. For instance, a property protected in perpetuity or forever, has a higher degree of protection than a property

that has a school on it. The Town could always decide to further develop the school, thus developing seemingly protected open space.

Table 5-6 is based upon information from the Town Assessor's office and is included to provide a base for further assessment of the suitability of these parcels for conservation or recreational use.

Methodology

The property parcel information in this plan is based upon two primary sources: the MASSGIS Protected and Recreational Open Space datalayer (2/2008) and the Town Assessor's database (1/1/2008). With the recent revisions to the MASSGIS Open Space datalayer, the Town and the Open Space Committee will use and update this layer, which does not include Chapter 61 parcels, Town parcels of unknown use, or private unprotected parcels. These categories of data will be maintained primarily from direct output of assessor data, which is generated in an annual electronic report. The resulting tables that follow are the product of this new methodology.

To make the tables more user-friendly, they have been divided in the following manner:

- Table 5-1, Permanently Protected Properties Over 100 Acres
- Table 5-2, Essex County Greenbelt Association Conservation and Recreation Properties
- Table 5-3, Miscellaneous Protected Properties
- Table 5-4, Town of Newbury Owned Conservation and Recreation Properties
- Table 5-5, Agricultural Preservation Restrictions, Conservation Restrictions
- Table 5-6, Town Owned parcels of Unknown Open Space Attributes

The source database does not organize the properties in any logical manner, which makes finding a specific property quite time consuming. By dividing the properties into five separate tables, individual properties will be easier to find and information can be compared and examined at a glance instead of flipping through pages of numbers and symbols.

The information in the following tables is current as of January 2008. Any missing information was not available at that time from the Assessors' current database. Particulars are believed to be correct, but errors may exist. Please bring these to the attention of the Newbury Open Space Committee. Updating these tables as land-use changes occur over time is an important part of the Open Space Planning process. Acreage in most instances is calculated from GIS and does not necessarily mirror assessor acreage.

Key to Tables 5-1 – 5-8

Map-Lot: Assessor's Map and Assessor's Lot Numbers (R=Rural, U=Urban)
Property Name: The common name of the combined parcels. Some do not have common names.
Owner: Currently listed property owner. USFWS: United States Fish and Wildlife Service DFWELE: Mass Dept. of Fish and Wildlife and Environmental Law Enforcement TTOR: The Trustees of Reservations ECGB: Essex County Green Belt Association HNE: Historic New England SDFS: Sons and Daughters of the First Settlers Town: Town of Newbury or a Municipal Agency MA: Commonwealth of Massachusetts Fed: The United States Government
Address: Street address is provided when available
Ownership Status: N Private Nonprofit P Private for Profit
Public Access: L Limited X Unknown 1 Public 4 Private (public welcome) 5 Private (members only) 6 None
Primary Purpose: Why the property is protected and what is its primary use R Recreation (facilities-based activities) C Conservation (non-facilities based activities) B Recreation and Conservation H Historic/Cultural A Agriculture W Water Supply Protection S Scenic O Other X Unknown
Protection Level: To what degree is the parcel protected P In perpetuity T Temporary (Chapter 61, some CRs) L Limited N None X Unknown

Table 5-1, Permanently Protected Properties Over 100 Acres

Map-Lot	Owner	Property Name	Acres	Primary Purpose	Public Access
R-40-1	DFG	Crane Pond WMA	302	C	Yes
R-40-13					
R-40-2					
U-12-40					
R-40-6					
R-40-6A					
R-40-7					
R-40-8					
R-40-9					
R-20-9	DFG	Martin H. Burns WMA	1,417	C	Yes
R-39-8					
R-42-10					
R-42-2					
R-42-3					
R-43-9					
R-44-21					
R-46-11					
R-46-8					
R-32-30	DFG	North Shore Salt Marsh	107.00	C	Yes
R-13-1	DFG	William Forward WMA	1,316	C	Yes
R-3-1					
R-3-2					
R-5-51					
R-5-46C					
R-5-51					
R-24-6					
R-3-2					
R-34-34	HNE	Spencer Peirce Little Farm	191	A	Limited
R-49-1					
R-49-9					
R-11-15	TTOR	Old Town Hill Reservation	545	B	Yes
R-11-15A					
R-11-17B					
R-11-17C					
R-12-10					
R-12-11					
R-12-12					
R-25-1					
R-25-11					
R-25-19					
R-25-22					
R-25-24					
R-26-1					
R-26-2					
R-26-25					
R-26-4					
R-26-5					
R-35-8					
U-10-1	USFWS	Parker River NWR Headquarters	2.02	B	Yes
R-10-1	USFWS	Parker River Wildlife Refuge	2,144	C	Yes
R-30-8					
R-6-13					
Total: 52 parcels, 5,833 acres			Source: Mass GIS OS Datalayer (2/2008)		

Table 5-2, Essex County Greenbelt Association Conservation and Recreation Properties

Map-Lot	Property Name	Acres	Primary Purpose	Public Access	Protection Level
R14-0-14	Ingram's Saltmarsh	11.4	C	Y	P
R50-0-18	AMELIA LITTLE SALT MARSH	4.9	B	L	P
R14-0-13	Wilson Woodland	10.2	B	Y	P
R16-0-5	Joseph Moody Meadow	5.5	C	L	P
R21-0-17	Oak Island	7.0	C	Y	P
R21-0-17A	Knights Common	10.2	C	Y	P
R21-0-18	Knights Common	22.9	C	Y	P
R22-0-28	Hoopes Salt Marsh	2.3	B	L	P
R22-0-29	Hoopes Salt Marsh	23.0	C	Y	P
R30-0-2	Graf Reservation	166.4	C	Y	P
R30-0-3	Graf Reservation	4.6	C	Y	P
R30-0-6	Graf Reservation	16.2	C	L	P
R30-0-7	Graf Reservation	7.4	C	L	P
R30-0-8	Graf Reservation	58.7	C	L	P
R30-0-9	Graf Reservation	4.0	C	Y	P
R31-0-22	Graf Reservation	6.2	C	L	P
R31-0-31	Pine Island Road	0.4	B	L	P
R31-0-32	Pine Island Road	5.1	B	L	P
R31-0-33	Pine Island Road	1.0	B	L	P
R31-0-7	Pine Island Road	7.8	B	L	P
R31-0-9A	Pine Island Road	2.3	B	L	P
R32-0-37D	Pine Island Sugarloaf	5.5	B	L	P
R38-0-2	Barton/Humphreys	13.8	C	L	P
R39-0-4	Barton/Humphreys	4.0	C	Y	P
R41-0-25	Gray Adams Reservation	1.0	C	L	P
R44-0-10	WET MEADOWS	15.7	C	Y	P
R44-0-9	WET MEADOWS	8.0	C	Y	P
R45-0-8	WET MEADOWS	22.7	C	Y	P
R49-0-23	Graf Reservation	4.3	C	Y	P
R50-0-14	Plumbush Salt Marsh	3.2	C	Y	P
R50-0-15	J. Lee Potter Meadow	1.0	C	Y	P
R50-0-15	J. Lee Potter Meadow	8.3	C	Y	P
R50-0-16	Graf Reservation	2.7	C	Y	P
R50-0-16	Graf Reservation	2.7	C	Y	P
R50-0-18	Graf Reservation	4.4	C	Y	P
R50-0-19	Graf Reservation	7.2	C	Y	P
R50-0-2	Amelia Little Salt Marsh	27.9	C	Y	P
R50-0-7	Graf Reservation	11.2	C	Y	P
R5-0-40	Stilt Pond	13.0	C	Y	P
Total: 39 parcels, 533 acres					

Source: Mass GIS OS data layer (2/2008)

Table 5-3, Miscellaneous Protected Properties

Map-Lot	Owner	Owner Status	Site Name	Acres	Primary Purpose	Public Access	Protection Level
U-6-27A	X	N	FIRST PARISH CEMETERY	3.00	H	X	P
R-11-10B	SDFS	P		0.47	H	X	P
R-11-10C	SDFS	P		0.50	H	X	P
R-11-10D	SDFS	P		0.51	H	X	P
Total: 4 parcels, 4.4 acres							

Table 5-4, Town of Newbury Owned Conservation and Recreation Properties

Map-Lot	Owner	Property Name	Manager	Acres	Zoning	Primary Purpose	Public Access	Protection Level	Condition	Recreation Potential	Grant
R15-0-6	Byfield Water District	Byfield Water District		3.4	A/R	U	Y	P	good	limited	
R18-0-23	Byfield Water District	Byfield Water District		7.1	A/R	W	N	P	good	no	
R18-0-24	Byfield Water District	Byfield Water District		4.5	A/R	W	N	P	good	no	
R18-0-25	Byfield Water District	Byfield Water District		12.8	A/R	W	N	P	good	no	
R40-0-3	Byfield Water District	Byfield Water District		5.0	A/R	W	N	P	good	no	
R11-0-10A	Town of Newbury	Evergreen Cemetery		2.6	A/R	H	Y	P	good	no	
R11-0-74	Town of Newbury	Town Pier		4.5	PRR	R	Y	L	good	yes	
R12-0-5	Town of Newbury	Lower Green		3.4	A/R	R	Y	P	good	yes	
R16-0-6	Town of Newbury	Great Meadow	Con Comm	13.0	A/R	B	Y	P	good	yes	Self-Help
R16-0-7	Town of Newbury	Great Meadow	Con Comm	25.6	A/R	B	Y	P	good	yes	Self-Help
R17-0-13	Town of Newbury	Central Street Fields		62.2	A/R	B	Y	L	good	yes	
R17-0-18	Town of Newbury	Triton High School		96.9	A/R	R	Y	L	good	yes	
R19-0-6	Town of Newbury	Woolen Mill		2.1	A/R	H	Y	L	good	limited	
R20-0-108	Town of Newbury	Pearson Drive Playground		1.9	A/R	R	Y	L	good	yes	
R21-0-19	Town of Newbury	Great Meadow	Con Comm	52.1	A/R	B	Y	P	good	yes	Self-Help
R21-0-22A	Town of Newbury	Great Meadow	Con Comm	5.4	A/R	B	Y	P	good	yes	Self-Help
R22-0-9B	Town of Newbury	Austin Lane Open Space		0.3	A/R	C	Y	L	good	yes	
R25-0-12A	Town of Newbury	Little River frontage		0.9	A/R	X	Y	L	good	yes	
R32-0-14A	Town of Newbury	High Road Salt Marsh		28.4	A/R	X	X	L	good	limited	
R32-0-3	Town of Newbury	High Road Salt Marsh		4.4	A/R	X	X	L	good	limited	
R32-0-32	Town of Newbury	Gravel Pit		3.6	A/R	C	Y	L	average	limited	
R32-0-7A	Town of Newbury	High Road Salt Marsh		19.9	A/R	X	X	L	good	limited	
R35-0-10	Town of Newbury	Old Landfill		1.9	A/R	X	X	L	good	no	
R36-0-21	Town of Newbury	Little River marsh		3.8	A/R	X	X	L	good	limited	
R36-0-27	Town of Newbury	Town Forest		9.3	A/R	C	Y	L	good	yes	
R36-0-9	Town of Newbury	Middle Road		0.9	A/R	X	Y	L	good	no	
R39-0-1	Town of Newbury	Wayside Avenue		3.0	A/R	X	X	L	good	no	
R39-0-6	Town of Newbury	Martin Burns inholding		3.4	A/R	R	Y	L	good	yes	
R44-0-2,3,5	Town of Newbury	Common Pasture		11.0	A/R	C	Y	P	good	yes	Self-Help
R47-0-1	Town of Newbury	Newbury Elementary School		11.2	A/R	R	Y	L	good	limited	
R47-0-36	Town of Newbury	adj. To RR ROW		2.6	A/R	B	Y	L	good	yes	

R47-0-37	Town of Newbury	adj. To RR ROW	1.0	A/R	B	Y	L	good	yes
R50-0-4	Town of Newbury	Plum Island River Island	2.0	A/R	C	Y	L	good	limited
R51-0-18	Town of Newbury	Island North of Bridge	1.7	A/R	C	Y	L	good	limited
U1-0-139	Town of Newbury	Father Sears Park	.2	A/R	R	Y	P	good	yes
U1-0-191	Town of Newbury	Plum Island Beach	4.8	A/R	R	Y	L	good	yes
U11-0-65	Town of Newbury	Byfield School	1.2	A/R	H	Y	L	average	limited
U11-0-66	Town of Newbury	Newbury Grange	0.2	A/R	H	Y	L	average	limited
U14-0-17	Town of Newbury	Library & Ballfield	3.8	A/R	R	Y	L	good	yes
U14-0-19A	Town of Newbury	Kent Way Land	6.0	A/R	R	Y	L	poor	yes
U2-0-3	Town of Newbury	Newbury Beach	27.8	A/R	R	Y	P	good	yes
U6-0-49	Town of Newbury	Woodbridge School	0.6	A/R	R	N	L	poor	no
U7-0-24	Town of Newbury	Oak Hill Cemetery	0.9	A/R	H	Y	P	good	no
U7-0-26	Town of Newbury	Parker St. at RR ROW	0.1	A/R	C	N	L	unimproved	limited
U8-0-20	Town of Newbury	NES addl. Acreage	12.1	A/R	X	X	L	unimproved	no
U9-0-75	Town of Newbury	Town Green	3.5	A/R	B	Y	P	good	yes
R1-0-60	District	Triton Regional School Triton High School	34.3	A/R	R	Y	L	good	yes

Total: 47 parcels, 476.5 acres

Source: MassGIS OS Datalayer (2/2008)

Table 5-5, Agricultural Preservation Restrictions, Conservation Restrictions

Map_Lot	Site_Name	Owner	Owner Status	CR/A PR	Art. 97	Acres	Primary Purpose	Public Access	Protection Level
R12-0-4	Barton Field	Menicocci/Polis	P	CR	N	6.9	C	N	P
R34-0-34	Spencer-Pierce-Little Farm	Historic NE	N	APR	Y	77.6	A	N	P
R34-0-34	Spencer-Pierce-Little Farm	Historic NE	N	APR	Y	54.7	A	N	P
R49-0-1	Spencer-Pierce-Little Farm	Historic NE	N	APR	Y	23.0	A	N	P
R16-0-1	Caldwell Farm	Caldwell Farm, LLC	P	CR	Y	(est)50.1	C	L	P
R48-0-55	Colby Farm	Colby	P	APR	Y	51.7	A	N	P
R48-0-1A	Tendercrop Farm	Kozazcki	P	APR	Y	10.7	A	N	P
U13-0-3	Johnson Mill	Sutherland	P	CR	Y	1.4	C	N	P
U14-0-21	Johnson Mill	Sutherland	P	CR	Y	0.6	C	N	P
R34-0-20	Tendercrop Farm	Knight	P	APR	Y	11.3	A	L	P
R34-0-40	Tendercrop Farm	Kozazcki	P	APR	Y	16.0	A	N	P
R34-0-46	Tendercrop Farm	Kozazcki	P	APR	Y	17.8	A	N	P
R22-0-27	Newbury Perennial Gardens	Simkins	P	CR	N	14.4	C	L	T
R34-0-30	Sunshine Dairy Farm	Traister	P	APR	Y	29.4	A	N	P
R34-0-4	Sunshine Dairy Farm	Traister	P	APR	Y	6.2	A	N	P
R47-0-	Sunshine Dairy Farm	Traister	P	APR	Y	1.9	A	N	P
R47-0-	Sunshine Dairy Farm	Traister	P	APR	Y	7.8	A	N	P
R47-0-	Sunshine Dairy Farm	Traister	P	APR	Y	15.6	A	N	P
R18-0-1	Colby Village	Travis & Tim Const.	P	CR	Y	(est)7.0	C	Y	P
Total: 19 parcels, estimated 832 acres									

Source: Mass GIS OS Datalayer (2/2008)

Table 5-6, Town Owned Parcels of Unknown Open Space Attributes

Map-Lot	Site Name	Address	Primary Purpose	Public Access	Protection Level
R-2-5	Across corner of Middle	Elm St.	X	X	X
U-14-37	behind PO	2A Central St.	X	X	X
U-2-13	Beachfront	7 5th St.	X	X	X
U-2-138		22 Old Point Rd.	X	X	X
U-2-139		27 10th St,	X	X	X
U-2-14	Beachfront	6 5th St.	X	X	X
U-2-142		20 6th St.	X	X	X
U-2-143		9 McLeod Ave.	X	X	X
U-2-150		14 Old Point Rd.	X	X	X
U-2-158		10 Olga Way	X	X	X
U-2-171		12 Olga Way	X	X	X
U-2-20	Beachfront	7 3rd St.	X	X	X
U-2-21	Beachfront	8 3rd St.	X	X	X
U-2-27	Beachfront	39 PI Bl.	X	X	X
U-2-8	Beachfront	5 7th St.	X	X	X
U-2-9	Beachfront	6 7th St.	X	X	X
U-3-118		11 16th St.	X	X	X
U-3-19		Hutchins Rd.	X	X	X
U-3-21		21 Hutchins Rd.	X	X	X
U-3-23		Hutchins Rd.	X	X	X
U-3-25		15 Hutchins Terr.	X	X	X
U-3-37		34 14th St.	X	X	X
U-3-43		12th St.	X	X	X
U-3-45		25 12th St.	X	X	X
U-3-47		21 12th St.	X	X	X
U-3-48		26 12th St.	X	X	X
U-3-53		32 14th St.	X	X	X
U-3-87		9 12th St.	X	X	X
U-4-173	Basinfront	7 35th St.	X	X	X
U-5-1	Saltmarsh	71 Old Point Rd.	X	X	X
U-5-2	Saltmarsh	73 Old Point Rd.	X	X	X
U-5-20		119 Old Point Rd.	X	X	X
U-5-5	Saltmarsh	81 Old Point Rd,	X	X	X

Source: Town of Newbury Assessor data (1/1/2008), OSC

C. Unprotected Open Space Properties

The following tables contain information on privately-owned open space properties within Newbury that are not permanently protected:

- Table 5-7, Chapter 61 Properties
- Table 5-8, Privately owned and Unprotected Parcels of Open Space Interest

The Chapter 61, 61A, and 61B lands are held under restriction by the Massachusetts General Laws. The restriction against development affords an owner substantial tax benefits while the land is designated as a Chapter Land. The Town has the Right of First Refusal to purchase these properties when they come on the market for sale. In addition to maintaining the agricultural character of the Town, these lands therefore offer a valuable opportunity for the Town to acquire additional recreation space.

The Parcels of Open Space Interest listed below are included based upon the following criteria: greater than 10 acres in size, under private ownership, and with no land protection (temporary or permanent). The Open Space committee has reviewed this data and has removed some parcels that are already developed or are otherwise unsuitable for conservation or recreational uses.

Methodology

The Town can use this database to prioritize and examine its acquisition options. The Open Space Committee will continuously update data to reflect further development, preservation, or change of use in any parcel. Furthermore, the community members can petition to add properties to the list, or to remove them, as the Town examines its options for acquiring recreation space in the future. Parcel selection is in no way intended to target specific properties or to cause landowners to feel that maintaining their land as open space is in any way required.

A major task for the Open Space Committee in the years ahead will be to prioritize the properties in Table 5-8 so that land conservation and acquisition of land for recreation will occur where most appropriate, given the resources available.

Table 5-7, Chapter 61 Properties

Map-Lot	Address	Owner	Land Use Code	Assessed Acreage	Ch. 61 Type
R-1-1	1 Coleman Rd	Armstrong Christopher J	17	34.3	A
R-2-12	15 Coleman Rd	Woodbury Donald S	17	11.2	A
R-5-49	304 High Rd	Aletter Trustee Dennis K W	17	16.9	A
R-11-16	Off Cottage Rd	Story Joseph Ii Story Nancy	17	18.0	A
R-11-70	277 High Rd	Barton Robert A Trustee	17	6.5	A
R-12-4	280 High Rd	Menicocci Robert Jr	17	7.0	A
R-20-25	10 Fruit St	Pearson Trustee Ronald O	17	12.7	A
R-20-25B	2 Fruit St	Pearson Ronald O.+	17	8.2	A
R-20-44	168 Orchard St	Bulgaris Lewis Est Of	17	8.0	A
R-22-10	26 Orchard St	Jespersen Marsha	17	121.2	A
R-22-24	43 Orchard St	Creed Florence E	17	17.8	A
R-22-27	65 Orchard St	Simkins Richard A	17	26.7	A
R-23-3	208 Newburyport Tp	Hoyt Meredith B	17	18.4	A
R-26-11	240 High Rd	Story Joseph II Story Nancy	17	6.3	A
R-27-61	243 High Rd	De Armond Glen A	17	7.4	A
R-27-64	255 High Rd	Hurley Wm. J	17	13.2	A
R-31-20	Off Pine Island Rd	Colby Robert J	17	1.2	A
R-32-16A	173 High Rd	Walker Geoffrey H	17	7.6	A
R-32-4	139 High Rd	Stickney Pollyann Havner	17	9.3	A
R-32-6-2	147 High Rd	Towns Bradley J	17	7.7	A
R-33-19	48 R Low St	Jackman Eva M Trustee	17	43.0	A
R-33-33	41 Low St	Wilkinson Paul A +	17	7.7	A
R-33-4	186 High Rd	Smith Shirley L Trustee	17	7.4	A
R-34-40	71 High Rd	Kozazcki Matthew	17	16.0	A
R-35-21	68 Green St	Jackman Eva M Trustee	17	23.1	A
R-37-1	136 Middle Rd	Littlefield Sylvia J	17	70.0	A
R-45-5	50 Scotland Rd	Colby William A	17	50.0	A
R-48-44	97 High Rd	Pizzarella Frank J	17	5.5	A
R-48-49	105 High Rd	Costonis Arthur G	17	16.3	A
R-48-61	131 High Rd	Colby Robert J	17	30.8	A
U-14-19	48 Main St	Mackay Trustee Cynthia S	17	6.6	A
R-32-2C	3 Long View Ln	Ryan John	17	10.9	A
R-5-47	324 High Rd	Story Joseph II	712	76.3	A
R-20-43	Off Orchard St	Bulgaris Lewis Est Of	712	16.0	A
R-34-46	Off High Rd	Kozazcki Matthew	712	18.0	A
R-48-1A	89 High Rd	Kozazcki Matthew	712	10.9	A
R-5-18	Off High Rd	Story Joseph II	713	13.4	A
R-20-42	Orchard St	Bulgaris Lewis Est Of	713	3.0	A
R-21-16	Off Orchard St	Hoyt Tr Doris E	713	14.9	A
R-23-2	212 Newburyport Tp	Hoyt Meredith B	713	2.0	A
R-23-6	Newburyport Tp	Littlefield Sylvia J	713	26.3	A
R-25-10A	94 Newman Rd	Colby Robert J	713	0.3	A
R-25-9	Off Newman Rd	Jackman Fred	713	15.0	A
R-26-14	Off High Rd	Story Joseph II Story Nancy	713	14.0	A
R-26-15	Off High Rd	Story Joseph II Story Nancy	713	22.0	A

Table 5-7, Chapter 61 Properties

Map-Lot	Address	Owner	Land Use Code	Assessed Acreage	Ch. 61 Type
R-26-28	High Rd	Smith Shirley L Trustee	713	8.3	A
R-31-29	Off Pine Island Rd	Colby Robert J	713	6.9	A
R-31-37	Pine Island Rd	Salt Marsh Realty Trust	713	18.4	A
R-31-38	Old Pine Island Rd	Salt Marsh Realty Trust	713	0.3	A
R-31-39	Off Old Pine Island Rd	Salt Marsh Realty Trust	713	5.2	A
R-32-7	Off High Rd	Colby Robert J	713	12.0	A
R-34-10A	65 Green St	Little Susan J	713	10.2	A
R-34-4	47 Green St	Traister Howard C +	713	5.0	A
R-36-26	Off Boston Rd	Jackman Fred F	713	4.8	A
R-38-1	Off Orchard St	Jespersen Marsha	713	14.0	A
R-44-11	Scotland Rd	Myette Jere	713	25.0	A
R-45-1	Scotland Rd	Pikul Stanley J Trustee	713	71.0	A
R-45-3	Off Scotland Rd	Myette Jere Trustee	713	10.5	A
R-45-4	Off Scotland Rd	Myette Jere Trustee	713	10.0	A
R-45-6	Scotland Rd	Hiller Realty Trust	713	17.8	A
R-45-8	Parker St	Traister Howard C +	713	10.0	A
R-48-55	119 High Rd	Colby Robert J	713	52.3	A
R-49-1	Plum Island Tpke	Historic New England	713	22.8	A
U-9-15	11 Green St	Atkinson Mae	713	8.2	A
U-9-14	9 Green St	Atkinson Leslie E	714	0.9	A
R-33-14	17 Plummers Ln	Musterfield Realty Trust	716	12.7	A
R-33-15	Low St	Musterfield Realty Trust	716	23.0	A
R-33-47	138 High Rd	Colby Robert J	716	9.9	A
R-2-13	Coleman Rd	Woodbury Donald S	717	19.5	A
R-47-8	93 Hanover St	Jackman Fred F	717	3.5	A
R-36-20	Newburyport Tp	Millen Donna M Trustee	718	31.1	A
R-36-25	Boston Rd	Millen Donna M Trustee	718	26.0	A
R-44-6	Scotland Rd	Maskiewicz Alexander J Est Of	718	10.0	A
R-44-8	Scotland Rd	Maskiewicz Alexander J Est Of	718	10.0	A
R-45-9	Highfield Rd	Traister Howard C +	718	15.7	A
R-46-7	23 Highfield Rd	Traister Howard C +	718	0.7	A
U-7-15	29 R Parker St	Kozazcki Matthew J	718	7.0	A
U-7-17	29 Parker St	Kozazcki Matthew J	718	7.0	A
U-7-22	41 R Parker St	Kozazcki Matthew J	718	22.7	A
U-8-49	64 Hanover St	Walton Keith P	718	18.8	A
R-33-20	42 Low St	Newbury Farm Llc	720	7.1	A
R-5-20	High Rd	Colby Robert J	722	10.6	A
R-5-23	336 High Rd	Colby Robert J	722	11.5	A
R-24-4	165 Hay St	Colby Robert J	722	11.0	A
R-25-10	Newman Rd	Colby Robert J	722	2.2	A
R-31-17	Off Pine Island Rd	Colby Robert J	722	59.6	A
R-31-35	Pine Island Rd	Colby Robert J	722	6.4	A
R-37-2	Off Middle Rd	Littlefield Sylvia J	722	14.0	A
R-37-3	Off Middle Rd	Littlefield Sylvia J	722	11.0	A
R-37-4	Off Middle Rd	Littlefield Sylvia J	722	60.0	A
R-49-10	Plum Island Tpke	Colby Robert J	722	63.2	A

Table 5-7, Chapter 61 Properties

Map-Lot	Address	Owner	Land Use Code	Assessed Acreage	Ch. 61 Type
R-50-11	Off Plum Island Tpke	Colby Robert J	722	1.6	A
R-50-6	Plum Island Tpke	Colby Robert J	722	13.0	A
R-50-8	Plum Island Tpke	Colby Robert J	722	21.0	A
R-51-23	3 Old Point Rd	Colby Robert J	722	17.0	A
R-33-16	46 Low St.	Hall David	18	15.3	B
R-42-11	49 South St.	Donald Mary M Dr	801	39.8	B
R-23-31	Off Middle Rd	Littlefield Frederick K	803	10.0	B
R-49-22	Plum Bush Creek	Rolfe Myrtle O Etal	803	9.0	B
R-11-19	Cottage Rd	Barton Robert A Trustee	803	5.6	B
R-46-10	32 Middle Rd	Merrimack Valley Beagle Club	807	29.5	B
R-46-9	Off Highfield Rd	Merrimack Valley Beagle Club	807	12.4	B
Total Chapter 61: 102 parcels, 1840.6 acres					

Source: Town of Newbury Assessor data (1/1/2008)

Note: Selected by LUC and includes some APR and CR parcels

Table 5-8, Privately-Owned and Unprotected Parcels of Open Space Interest

Map-Lot	Owner	Address/Site Name	Acres	Primary Purpose	Public Access
R-12-2	Private	282 High Rd.	15.2		
R-12-7	Private	Newman Rd.	6.7		
R-12-8	Private	Newman Rd.	5.5		
R-14-5	Essex County Sportsman's Assoc.	Essex County Sportsman's Assoc.	10.2	R	X
R-15-10	Essex County Sportsman's Assoc.	Essex County Sportsman's Assoc.	2	R	X
R-15-11	Governor's Academy	Governor's Academy	98	R	4
R-18-21	Private	Larkin Rd.	13.1		
R-18-22	Private	7 Larkin Rd.	27.3		
R-21-15	Private	99 Orchard St.	11.5		
R-2-2	Governor's Academy	Governor's Academy	85.7	R	4
R-22-16	Private	254 Middle Rd.	17.7		
R-22-19	Private	7 Maple St.	0.22		
R-23-22	Private	off Orchard St.	12		
R-23-22A	Private	off Orchard St.	17		
R-23-23	Private	Middle Rd.	10.8		
R-24-2	Private	off Hay St.	19		
R-35-11B	Private	Boston Rd.	14.3		
R-36-11	Private	166 Boston Rd.	21.4		
R-36-22	Private	Devil's Den Pasture	34		
R-36-24	Private	Newburyport Tpke.	47		
R-39-5	Private	INHOLDING	5.99	X	X
R-39-7	X	INHOLDING	5.05	X	X
R-41-42	Private	138 Main St.	43.6		
R-42-13	Private	off I-95	25.7		
R-43-4	Private	155 Scotland Rd.	20.5		
R-43-8	Private	191 Scotland Rd.	28.7		
R-44-16	Private	113 Scotland Rd.	28.8		
R-44-19	Private	Scotland Rd.	19		

Table 5-8, Privately-Owned and Unprotected Parcels of Open Space Interest

Map-Lot Owner	Address/Site Name	Acres	Primary Purpose	Public Access
R-44-20 Private	off Scotland Rd.	46		
R-45-14 Private	Scotland Rd.	27.1		
R-45-15 Private	Scotland Rd.	24		
R-45-17 Private	Scotland Rd.	23		
R-47-26 Private	8 Newbury Tpke.	59.6		
R-49-9 Historic New England	Plum Island Airport	43.8	X	6
R-6-12 Private	23 Marsh Ave.	30.8		
R-47-0-18 Private	off Scotland Rd.	12.5		
R-25-18 Private	142 Hay St	17		
R-37-6B Private	108 Middle Rd.	25.7		
R-51-24 Private	Old Point Rd.	25		
R-51-24A Private	Old Point Rd.	30.4		
R-50-3 Private	PI Blvd.	16.5		
R-26-20 Private	Little Old Town Hill	16.99		
R-26-19 Private	1 Little Old Town Hill	14.6		
R-32-11 Private	157 High Rd.	23.03		
R-32-14B Private	163 High Rd.	12.8		
R-48-60 Private	127 High Rd.	21.7		
R-48-49 Private	105 High Rd.	16.5		
R-30-4 Private	PI Tpke.	14.1		
R-41-60 Private	31 Downfall Rd.	9.4		
R-40-61 Private	31 Downfall Rd.	15.7		
R-47-35 Private	off Highfield Rd.	27.9		
R-47-34 Private	off Parker St.	13.5		
R-44-18 Private	off Scotland Rd.	12.5		
Total: 53 parcels, 1,226 acres				

Source: Town of Newbury Assessor data (1/1/2008)

Source for all tables:

- MassGIS Protected and Recreational Open Space datalayer 2/2008
- Town Of Newbury Assessor Information Report 1/2008,
- GIS data from Merrimack Valley Planning Commission, 1999-2008.

D. Recreational Resources

As seen in Section 3, there is substantial and growing interest in both active and passive recreation in Town. This section details the existing resources that are currently available and discusses their condition. Section 7 provides an analysis of needs.

Active Recreation

Table 5-9 below summarizes the existing fields and facilities for active recreation.

Table 5-9: Existing Fields for Active Recreation

SPORT	Central Street	Newbury Elementary School	Upper Green	Lower Green	Library (Lunt St)	Triton (subject to availability)
Field hockey						1
Football	2					2
Soccer	3					1
Lacrosse	2					
Baseball (ll)			1		1	
Softball		1		2		2
Baseball (br)						2
T-ball						1
Tennis						3
Basketball		1				
Hockey			1 ^φ			

In 2000, the Town acquired two parcels of land in order to improve the Town's facilities for active recreation and youth sports. The Central St. property was developed to include four additional multi-use fields and additional space for softball or other uses, as well as a walking path and nature study area.

The undeveloped 5.7 acre parcel off Kent Way in Byfield, which can accommodate two additional Little League or softball fields, with parking, a possible rest room/concession structure, and small basketball court or playground, is awaiting funding for further improvements.

The Governor's Academy has abundant space for athletic activities. The school utilizes them fully; there is limited opportunity for use by local sports groups. However, the Academy does rent out its hockey rink and the Triton Cross Country teams have started using the Academy's running trail.

^φ There is no actual rink on the Upper Green. This is in reference to the duck pond freezing over.

Triton updated their field space several years ago and remains a cooperative partner with the Town and local sports organizations in providing field space when available.

Playgrounds

Playgrounds in the Town are in short supply. There are only two – one at Newbury Elementary School and one at the Newbury Public Library in Byfield. There are nearby playgrounds in Newburyport at Perkins Park, Mosely Pines, and on Plum Island Point. There appears to be an unmet need and the Town might look at expanding the Library playground, adding one at Central St., or adding one at another location. However, input from the public at a 2007 Open Space Plan workshop indicates that playground development is not a high priority for many families who have easy access to facilities in adjacent towns.

Passive Recreation and Trails

Passive recreation includes such activities as walking, hiking, bicycling, hunting, wildlife observation and bird watching. Water-based endeavors like swimming, canoeing, and boating are also of importance. In general, passive recreation refers to activities that do not require specialized facilities or improvements.

Newbury has a large percentage of its land area classified as protected open space. Many of these landscapes are strikingly beautiful and are of many diverse types, including barrier beach, tidal marsh and estuary, coastal drumlins, glaciated uplands, forest, and farmland.

Table 5-10: Primary areas for Passive Recreation

Primary areas for passive recreation	Acreage in Newbury/total
Parker River National Wildlife Refuge (USFWS)	2,015/4,662
Old Town Hill Reservation (TTOR)	531
William Forward Wildlife Management Area (DFWELE)	1,316/1,707
Martin Burns Wildlife Management Area (DFWELE)	1,417
Crane Pond Wildlife Management Area (DFWELE)	302
Spencer-Peirce-Little Farm (HNE)	191
Great Meadow Farm (Town)	96
Newbury Beach (Town)	7.3
Central Street Fields (Town)	
Coffin’s Island	
Total acreage in Newbury	5,841

With an abundance of publicly accessible land, it would appear that the Town has more than enough land available for passive recreational uses. There are, however, several factors which affect the usefulness of the existing open space inventory:

Wetlands

A considerable amount of our protected open space is either marsh or other wetlands. As noted in Section 4 there are over 5,000 acres of tidal wetlands in the Town. There is an unknown but considerable amount of non-tidal wetlands as well. Upland areas generally do not extend long distances without wetland interruptions.

Soil Conditions

As seen in Section 4, the soil types present in many locations present difficulties for any frequent or heavy recreational use.

Restricted Use

Some of the protected lands in the Town are primarily used for hunting or wildlife-based recreation or are otherwise restricted in their use.

Underutilization

A positive is the generally accepted fact that many of our current passive recreation areas are underutilized and expanded use is possible. Town residents may not be aware of all the recreational opportunities available to them in the Town.

Trail Inventory

While there is at this time no comprehensive inventory of trails in the Town, a number of existing maps serve as useful references:

Bay Circuit Trail Map (source: Bay Circuit Alliance)

<http://www.baycircuit.org/MAP1A.pdf>

William Forward WMA (source: Coastal Trail Coalition)

<http://coastaltrails.org/xoops/modules/mydownloads/visit.php?cid=2&lid=9>

Martin Burns WMA (source: Coastal Trail Coalition)

<http://coastaltrails.org/xoops/modules/mydownloads/visit.php?cid=2&lid=7>

Crane Pond WMA (source: Coastal Trail Coalition)

<http://coastaltrails.org/xoops/modules/mydownloads/visit.php?cid=2&lid=8>

Great Meadow Conservation Area (source: MVPC)

<http://www.mvpc.org/index.asp?menu=wp128200612214&page=wp129200616915#>

Old Town Hill Trail Map

<http://www.thetrustees.org/documents.cfm?documentID=135>

The map of the Bay Circuit Trail covers most of Old Town and is included in Appendix D, Trail Resources. These maps show in general that each of the large open space properties has available trails, but wetlands or major roadways present obstacles to linking the various areas with continuous off-road pathways.

The Merrimack Valley Planning Commission initiated a detailed inventory and GIS mapping of all trails in the area in early 2000. This is not yet complete and is still an active project.

Regional Trails

The **Bay Circuit Trail** (BCT) has its northern terminus at Plum Island Beach, from which it follows a 200-mile arc around metropolitan Boston, ending at Duxbury Bay in Kingston.

In the early 1990s, Town residents worked to designate the Newbury portion of the trail. A route in the eastern portion of the Town was needed, to include Old Town Hill as a “jewel” along the trail and to connect with the Rowley and Ipswich sections at Prospect Hill.

Finding ways to locate the trail off-road has been a challenge. However several landowners have allowed the trail to cross their land. The Eliza Little Trail from the Plum Island Turnpike to Little’s Lane is a wonderful path through Historic New England’s Spencer-Pierce-Little Farm. And in the fall of 1999, The Trustees of Reservations (TTOR), the Newbury Bay Circuit Committee, and FOOT collaborated on a trail section with several lengthy boardwalks connecting Boston Road and Hay St. The hike to the top of Old Town Hill is the only other off-road section.

The remainder of the trail follows existing roadways. This is necessary primarily to cross marshland and rivers, such as along the Plum Island Turnpike and Newman Road, or where there is no public access. There is some potential to add more off-road sections if the permission of private landowners can be obtained.

The **Border-to-Boston Trail** (B2B) is a rail-trail or multi-use path concept that has been under consideration and development for a decade or more. The proposed trail utilizes a former rail bed and utility corridor that stretches from the New Hampshire border south to Danvers. In Newbury, the extent of the potential trail is from the Newburyport city line at the MBTA Commuter Rail Station to the Georgetown line west of the Parker River. This route would clearly offer a strong connection between Byfield and Old Town for non-motorized recreation and transportation, in addition to offering connections with our neighboring communities. This corridor has also been selected as the route for the East Coast Greenway, which will extend from Canada to Key West.

Both Newburyport and Georgetown are actively pursuing trail development on the B2B Trail; Newburyport has begun construction on the section from the Newburyport MBTA station north to the Merrimack River, including installation of a bridge over Low Street near Route 1. Salisbury is also in advanced planning stages for its segment of the route.

Sen. Tierney arranged an earmark in the federal transportation bond bill for design and engineering along the B2B route and there is currently (2008) an ad-hoc multi-community

working group meeting monthly to promote the regional concept and best use of the earmarked funds, as well as facilitate inter-community cooperation.

Newbury formed a Trails Committee in 2007, with an initial focus of representing Newbury in these cooperative efforts.

Also active is the Coastal Trails Coalition, a non-profit trails organization with representatives from Amesbury, Salisbury, Newbury, and Newburyport. This group was instrumental in installation in 2006 of bike lanes on the Plum Island Turnpike.

The **Clipper City Rail-Trail** is a proposed rail-trail or multi-use path forming a loop around the City of Newburyport. A portion of the eastern section will traverse Newbury in the area south of March's Hill and east of Route 1 near the traffic circle. The Town and City collaborated on purchasing control of several Newbury parcels in 2006, with funding coming from the Newburyport Community Preservation Fund. Additional planning is needed to better connect the trail system with the commuter rail station.

Greenways: Connections and Gaps

Greenways are continuous areas of abutting open land. They are beneficial not only in terms of resource protection, but can also provide a good location for community-wide recreational trails. It is useful to look at Newbury's existing greenways for potential trail connections.

- Parker River National Wildlife Refuge – Old Town Hill – Wm. Forward WMA – Parker River (*Route 1 Gap*)
- Little River – Highfield Rd. APRs – Martin Burns WMA – Great Meadow Farm (*Byfield Village/ I-95 Gap*)
- Crane Pond WMA – connections with Georgetown and Groveland open lands

The marshes and the estuary that make up much of the Town are the primary obstacle to trail linkages, as most of our open lands connect well with the exception of gaps at major highways. An important feature enhancing access to the Martin Burns and Crane Pond Wildlife Management Areas is the former railroad bed (and now a utility corridor), which extends from the Newburyport Commuter Rail Station west to I-95 and from Byfield Village into Georgetown with few impediments or encroachments. Without this improvement, transiting either area would be all but impossible due to wetlands and water crossings. As noted above, trail improvement plans are underway for this feature.

As a potential resource to the Town, this rail bed and expanded non-hunting use of the Martin Burns and Crane Pond Wildlife Management Areas offer perhaps the most potential to provide more open space recreation, if potential conflicts with sportsmen can be addressed. In addition, use of this corridor may provide connections with our neighbors in Georgetown and Newburyport, as well as with public transit.

Access to the Beach

Surveys and public outreach conducted during the 1999 Open Space Plan process and the recent Master Plan update indicated that access to the beach is a prominent concern among Newbury residents. The *Plum Island Beach Access Plan*, completed in 2007, details all rights-of-way and access improvements at Plum Island Center and Plum Island Point. Beginning with the winter of 2007-2008, the ocean beach at Plum Island Center has been affected by serious beach erosion; the beach is all but gone in front of the main Newbury access point at Plum Island Center and erosion control measures have been put in place. This may hamper public access and delay improvements until a beach nourishment plan is instituted.

Newbury residents expressed some displeasure at the seasonal closure of the beach at the federal refuge. This action is based on a reasonable need for protection of endangered species and is unlikely to change. Despite this access restriction, the townspeople enjoy much better public access to the beach than most neighboring communities.

Access for Boating

The Town operates a residents-only boat ramp on the Parker River, along with facilities for temporary docking. The Parker River and the Basin at Plum Island provide considerable area for boat moorings. Several commercial marine facilities exist on the Parker River, which offer improved access for a fee.

A number of informal access points are available for “portable” watercraft, i.e., canoes, kayaks, etc., such as the Parker River at Middle Road, the Plum Island River at the Plum Island Turnpike, Pine Island, etc. As noted in the Master Plan (2007) and the Newbury Estuarine Management Plan (2005), improvements for access for this type of watercraft, especially for non-residents, are needed.

While accommodating all who want to enjoy our waterways is becoming a difficult task due to the popularity of water-based activities, the Selectmen and Harbormaster do a commendable job of meeting residents’ needs.

Recreation on our Roadways

There is a demonstrated desire to use the Town’s improved roadways to make recreational trail connections. Newbury residents can be commonly observed walking, bicycling, and jogging on the back roads in their neighborhoods. The recent addition of bike lanes on the Plum Island Turnpike has been a well-received initiative to make non-motorized transportation and recreation safer and more convenient. Clearly, there is a need to consider recreational use when the Town maintains or improves its highway system.

As growth occurs and traffic levels increase, walking on Town roads will likely become less attractive and perhaps even unsafe. At that point, additional improvements for pedestrians and cyclists will be required at some expense to the Town. With careful planning, this problem can perhaps be avoided.

Open Space Equity

Land open to the public in Newbury is well distributed and diverse in landscape type. No Town resident need go far to find a quiet place to walk, a beach at which to swim, a skating pond, or a natural area to observe wildlife. As might be expected, dedicated active recreation facilities are more centralized, but Town Greens and other fields are never far away and provide locations for informal sports activities.

Section 6 - Community Vision

A. Description of Process

The Goals, Objectives, and Actions outlined in this plan were developed by a standing Open Space Committee, appointed by the Board of Selectmen in the fall of 2006. Members were solicited from Town with input from the Planning Board, Conservation Commission, and Selectmen. The members of the Committee are:

Mike Carbone
Matt Kozazcki
David Powell
Marlene Schroeder
Dan Streeter
Geoffrey Walker

Martha Taylor – Town Planner, Ex-Officio

Monthly meetings were held starting in January of 2007 through the summer of 2009 to review the sections of the 2000 Plan that needed updating, to update the Town’s open space inventory, to solicit public input, and to develop the Action Plan that follows. The Committee held two public meetings, one on May 30, 2007 and one on June 11, 2008, and reviewed the results of both the 1999 open space survey and the 2004 Master Plan survey to develop recommendations.

B. Statement of Open Space and Recreation Goals

The following goals are a mix of goals for the short and long-term. They represent input from a wide cross-section of Town residents. Section 8 details the Objectives and Action Steps that support these goals

Goals for Open Space and Recreation in Newbury are:

1. Protect the Town’s rural character;
2. Protect natural resources, rivers, coastal areas, wetlands, marshland, and wildlife;
3. Meet the demand for active recreation;
4. Enhance passive recreation opportunities;
5. Establish ongoing responsibility for open space and recreation concerns.

C. Criteria for Selection of Open Space and Recreation Properties

In addition to the creation of the goals, the Committee spent a great deal of time discussing criteria for the selection of properties to meet the Town’s needs. As properties come on the market or are available to the Town through the Chapter 61A process, it is important to be able

to evaluate them in a timely manner. While there is no strict formula to help Newbury decide what are the most appropriate lands for open space preservation and recreational development, Table 6-1 details the features that might make a property desirable. The most suitable parcels will likely include one or more items from each column. Lands that meet multiple needs, offer resource protection, and are located in such a way that they connect with other open space and Town facilities are a rare commodity and deserve special attention.

Table 6-1: Criteria for selection of Open Space and Recreation Properties

Protection of Unique Resources	Community Needs	Strategic Location
Watersheds and rivers	Active recreation facilities	Abuts existing conservation land
Existing public water supplies	Passive recreation areas and trails	Near existing Town facilities, schools
Potential water supplies and aquifers	Beach and river access	Provides trail connection
Scenic vistas	Access for boating	Expands wildlife corridor
Agricultural heritage	Access for hunting and fishing	
Historic buildings and locations	Playgrounds, parks, and picnic areas	
	Land for future municipal facilities	

Section 7 - Analysis of Needs

In February 1999, the Open Space and Recreation Committee distributed a Survey Questionnaire to all households in Newbury to determine the residents' priorities regarding open space and recreation issues. The responses to this survey formed the basis for the Town's 2001 Open Space and Recreation Plan.

In May 2007 and June 2008 public information and input meetings on the draft revised Open Space and Recreation Plan (OSRP) were held by the Open Space Committee. During the May 2007 meeting, a straw poll was taken to gather input related to the goals and strategies being considered for inclusion in the Action Plan. Topics addressed in the poll included:

- preservation of farmland,
- trading off density for open space,
- protecting natural resources and wildlife habitat,
- adequacy of recreation facilities and acquisition of open space for recreation, and
- adoption of the Community Preservation Act.

The results of these surveys indicate a continuing need to protect existing resources and a strong desire among residents to preserve existing open space.

A. Summary of Resource Protection Needs

1999 Open Space Survey

A large majority of those who responded to the 1999 Survey felt that there was a "great need" for the Town to increase its efforts to:

- Preserve open space (84% of respondents);
- Protect the Parker River and its tributaries (84% of respondents);
- Preserve the rural character of the Town (83% of respondents);
- Protect the watersheds around public wells (84% of respondents); and
- Preserve buildings of historic or architectural interest (64% of respondents).

The first four of these items are inextricably intertwined. The abundance of forested and non-forested open space is a critical component of the rural character of the Town. Marshes, farmland, and wooded areas provide scenic vistas along both major and secondary roads and make the area exceptionally attractive to residents and tourists alike. These areas provide resources for both passive recreation (hiking, bird watching, hunting, etc.) and for agricultural uses. All of these activities provide economic benefits to the area.

Over the past few years, two significant parcels along the north side of Scotland Road, within the area historically known as the “Common Pasture”, have been permanently protected as open space. In addition, there have been several OSRD projects which have permanently protected many acres of land, some of which is adjacent to the Martin Burns Wildlife Management Area. Most recently, an Agricultural Preservation Restriction has been added to the Colby Farm and former Hiller properties on Scotland Road.

As open space diminishes and more land is developed, local groundwater and surface water resources are at an increased risk of pollution from numerous sources, including runoff from roadways, septic systems, and privately held sewage treatment plants. Clam flats in both the Parker River and Plum Island Sound are routinely closed due to high levels of Fecal Coliform bacteria. One of Byfield’s two community-supply wells was taken off-line in 1998 due to chronically high levels of bacteria from the Parker River and was replaced with a new well. As noted in the Ford/Jameson study, the soils in many areas of Newbury are ill-suited to supporting septic systems, putting ground and surface water at even greater risk of contamination as new septic systems go on line.

During long dry spells, the Parker River can experience extreme low flow conditions. There are two issues here: potential need for additional water conservation measures by the Byfield Water District, and the possible impact of some of the wells in Georgetown on the Byfield Water District recharge area.

The fifth item, the preservation of buildings of historic and architectural interest, is also a significant factor contributing to the rural and scenic character of the Town. The age and the quality of the Town’s historic building stock contribute significantly to the attractiveness of the area. The Town’s history is deeply woven into the fabric of the built environment; these buildings provide an irreplaceable link between the present and the past.

May 2007 Public Meeting

The Straw Poll from the May 2007 Public Input meetings offered the following results:

Question 1: How important is preservation of farmland?

- High—86%
- Medium—14%
- Low—0%

Question 2: How likely are you to support increased density in some areas in exchange for open space in others?

- Very Likely—70%
- Likely—30%
- Not Likely—0%

Question 3: Is the Town doing enough to maintain and protect its natural resources and wildlife habitat?

- Yes—0%
- Undecided—61%
- No—39%

Question 4: Is the town doing enough to maintain and protect its natural resources and wildlife habitat?

- Yes—0%
- Undecided—61%
- No—39%

Question 5: Which do you support more – improving/maintaining existing recreation facilities or acquiring conservation lands for recreation?

- Improve/maintain—76%
- Acquire lands—24%

Question 6: If the choice was between conservation areas and fields for active recreation, which would you support?

- Conservation—90%
- Recreation—10%

Question 7: Should Newbury adopt the Community Preservation Act (to provide funding for open space acquisition and facilities improvements)?

- Yes—85%
- Undecided—5%
- No—10%

Question 8: What is, or will be in the next five years, Newbury’s most pressing open space or recreation need?

- a) More protected open space—68%
- b) More space for organized recreation—9%
- c) More public access to resources—23%

At the May 30, 2007 OSRP Public Meeting, attendees suggested other items to be added to the overall list of interests and concerns related to Open Space:

- Reduction of artificial light at night;
- Development of stronger inter-town relationships for shared athletic fields, playgrounds, etc.;
- Informing the public about drinking water resources and potential drinking water supplies;
- Economic impact of development vs. economic impact of maintaining open space;
- Preservation of open space to aid in flood control;

- Consideration of underdeveloped property (parcels that will never be or can never be conserved) for redevelopment

Section 4 identifies a number of concerns and issues related to the priorities identified by the Town’s residents in their responses to the 1999 Survey:

- **Potential loss of existing wildlife habitats:** As noted in the 1998 Ford/Jameson Study, “Newbury has an abundance of wildlife and a variety of unique ecosystems” which are in danger of being lost as existing open space is developed. These habitats support both common and rare species of vegetation and wildlife and provide opportunities for many passive recreational activities. These habitats are valuable ecological and economic resources.
- **Potential fragmentation of wildlife corridors:** While approximately 50% of Newbury’s total acreage is conservation land, much of this land is discontinuous – it is separated by privately held parcels and fragmented by the major highways running through the Town (Routes 1 and 1A and Interstate 95). The resulting fragmentation, especially as privately held parcels are sold and developed, could threaten the health and diversity of the area’s ecosystems. Opportunities for linking recreational areas will also be lost.

The Master Plan identifies additional concerns and needs (based upon citizen input from the September 23, 2004 Public Forum on Natural Resources):

- Protecting both known and potential municipal water supply sources;
- Protecting and enhancing unique habitats to sustain biodiversity;
- Protecting and enhancing inland, estuarine, and coastal water quality;
- Education of residents about the Town’s Natural Resources;
- Management of future land development and redevelopment in an environmentally sensitive manner.

Existing protected and unprotected open space parcels have been listed in the Section 5 inventory. By mapping these parcels, open areas deemed critical – whether because of their scenic character, the wildlife or vegetative populations they support, their influence on surface or groundwater resources, or other factors – can be identified and steps can be taken to work toward their preservation.

Even in areas where open space in the Town is permanently protected, there are significant threats to the natural resources. One major threat that has been identified in large areas of salt marsh that are within the Parker River Watershed east of Route 1 is the formation of new stands of Phragmites. Tidal restrictions have been identified as a significant factor contributing to encroachment by this difficult-to-control invasive plant.

In order to maintain high-quality resources within the Town, it is important to limit degradation of water quality, both in wetland areas and in areas where runoff into streams or rivers can

occur. This fact highlights the need for town-wide Wetlands and Stormwater Management Bylaws. Protection of vernal pools should be addressed as part of the town-wide Wetlands Bylaw.

There is an ongoing need for funding sources that the Town can use to buy land that meets the goals of this Open Space Plan. The Community Preservation Act (CPA) should be pursued as a tool that the Town can use as necessary.

The preservation of suitable areas of open space, whether forested or not, and whether preserved as part of an OSRD, through direct acquisition, or by Conservation Restriction, continues to be a priority of the Town's Open Space Plan. Of greatest interest are areas with a significant identified resource or areas that are contiguous to open space that is already protected.

B. Summary of Community's Needs

Recreation Needs

Of those who answered the 1999 Open Space and Recreation Survey, 50% indicated a "great need" for the Town to increase Town-owned recreation areas. Out of a list of 17 items, respondents considered the following five to be the Town's highest priorities:

- Trails for uses such as hiking, skiing and horseback riding (45% of respondents);
- Access to the beach (43% of respondents);
- Athletic fields for soccer, baseball, Little League, etc. (36% of respondents);
- Playgrounds (32% of respondents);
- Access to the water for boating (31% of respondents).

Respondents indicated the same five resources as the ones for which the Town has the greatest need, in slightly different order:

- Access to the beach (59%);
- Access to the water for boating (49%);
- Trails for hiking, etc. (49%);
- Athletic fields (37%);
- Playgrounds (36%).

With the purchase of two open space parcels in Byfield in 2000, one suitable for active recreation and one suitable for both active and passive recreation, much of the recreation need identified in the 1999 Survey has been met. At this time most youth sports groups have sufficient field space to operate a program that meets current demand. Field shortages affect Newbury Little League and Newbury Girl's Softball. Space is available for two more fields at the Kent Way site

and further development at the Central St. Recreation Area is possible. Funding for improvements at both sites is currently the primary need for active recreation.

Newbury is endowed with a number of open space areas available for passive recreation, including the beaches on Plum Island, the Parker River Wildlife Refuge, the Martin Burns and William Forward Wildlife Management Areas, the Old Town Hill Reserve, the F. William/Henry Gray Reserve, and the salt marshes. Some of these areas appear to be underutilized, either because people are not aware that they are available as a resource or because access points or permissible uses are unclear. Increasing public awareness of these areas could be an important step in addressing the need for passive recreational resources. A more complete description of these resources is found in Section 5.

Access to the beach remains important to Town residents. A 2006 study, the “Plum Island Beach Access Plan,” details all public rights-of-way and recommends improvements at the main access point at Plum Island Center. The plan does not cover the need for free parking for Town residents, including handicapped accessibility, to replace parking lost as a result of the recent construction of public water and sewer systems on the island.

Public access to rivers and waterways, especially for non-powered portable watercraft, is an area of concern for residents and visitors. Access to the tidal portion of the Parker River is limited and could be improved with additional launch sites at the Central St. Recreation Area, the Route 1A Bridge as proposed by the Massachusetts Public Access Board, and with improvements at the Plum Island Turnpike Bridge.

Massachusetts Outdoors 2006: Statewide Comprehensive Recreation Plan (SCORP 2006)

Massachusetts Outdoors 2006: Statewide Comprehensive Recreation Plan (SCORP 2006), developed by the Massachusetts Executive Office of Environmental Affairs, Division of Conservation Services, assessed the recreational needs of the state by region. The intent of the document is to direct investment decisions in a manner that best meets the needs of the Commonwealth's citizens. Within SCORP 2006, Newbury is considered part of the northeastern region.

According to the report, the most popular recreational activities within the region include swimming, walking, sightseeing, hiking and fishing. In addition, baseball, sunbathing, horseback riding, off-road vehicle driving, and snowmobiling, were identified as being more popular in the northeast region than in other areas of the state. Soccer, tot lots, and pond hockey were also found to be popular; these preferences reflect the abundance of water resources and conservation areas throughout the region.

According to the survey conducted for SCORP 2006, northeast region residents strongly support improving access to recreational facilities for persons with disabilities, and support prioritizing funding for maintenance of existing facilities and new open space acquisitions. Survey respondents also identified the following recreational needs for the region:

- Biking Facilities 14.1%
- Playgrounds 13.8%
- Swimming 12.6%
- Walking 11.8%
- Golfing 9.1%
- Baseball 8.3%
- Tennis 7.6%
- Fishing 6.5%
- Mountain Biking 6.1%

With a high percentage of its land area classed as protected publicly accessible open space, Newbury has many locations suitable for the passive recreational activities highlighted in the SCORP 2006 report. Walking, mountain biking, hiking, cross-country skiing opportunities are abundant.

The Plum Island bike lanes and the Parker River Refuge roadway offer excellent biking facilities. Connections to the Clipper City Rail Trail and the Border-to-Boston are regional facilities in the planning stages. Newbury has many lightly travelled roadways that are ideal for recreational cycling.

There are two playgrounds of limited size in Newbury. Feedback from the public on playgrounds indicates that residents find Newbury playgrounds adequate when coupled with playgrounds available in adjoining towns.

Newbury has a golf course which is open to the public on weekdays. Tennis is available at Triton Regional High School and at the Governor's Academy.

With Plum Island Beach and the Parker River Wildlife Refuge, ocean beach access is good, providing swimming, fishing, birding, and other summer activities along the shoreline. Development of access points to the Parker River could add additional opportunities for these activities, as well as for boating and kayaking.

Newbury has tremendous recreational resources. As noted elsewhere in this plan, improving public awareness of these resources and opportunities, and managing existing facilities more effectively, will go a long way toward meeting both local and regional needs identified in SCORP 2006.

Groups with Special Needs

Meeting the requirements of groups with special needs, including the elderly and those with disabilities, was not identified by residents as a priority during the Plan update process. However, the Newbury Council on Aging (COA) was asked to provide input on ways in which these populations could be better served in the community. Transportation for people with disabilities was mentioned as one service which is lacking – the COA provides van transportation for elders for grocery shopping and errands, medical appointments, recreation/education trips, and lunch outings, but no equivalent service currently exists for younger people with disabilities.

The COA offers a variety of recreational and social activities for elders, including yoga, tai chi/energy healing, cribbage, bridge, quilting, book club, guest chef luncheons, bean suppers, and men’s breakfasts. In addition, the COA staff provides information and referrals on health care options, day care programs, housing, home care programs, nursing homes, money management and tax preparation, legal assistance, fuel assistance and utility discounts, and health insurance. Services are also available from the Aging and Disability Resource Consortium (ADRC), which is a resource for any elder who is at least 60 years of age or any person over the age of 14 who is living with a disability.

A number of facilities in Newbury provide good opportunities for elders and people with special needs to engage in outdoor activities. For example, the Parker River National Wildlife Refuge has several trails, wildlife observation areas, and overlooks which are wheelchair accessible. The Central Street Recreation Area also offers easy access to gentle walking areas. In addition, Newbury is actively pursuing multi-use, accessible recreational paths (Border to Boston and Clipper City Rail Trail). From a regional standpoint, there are also excellent facilities nearby in neighboring towns.

Preservation of Agriculture

Over 55% of those who responded to the 1999 Survey indicated “great need” for the Town to increase its efforts to encourage active farming. As detailed in Section 4, 11.9% of the total land area of Newbury is classified as agricultural. Some of this land is protected conservation land; however, much is still privately owned and unprotected. Of the privately owned properties, some are subject to Chapter 61 restrictions and as such provide significant opportunities for the Town to acquire open space in the future. The rest of the properties remain at high risk of purchase and development, especially as the current owners approach retirement; sale of the land for development may become more economically attractive for the owners and/or their heirs than continued agricultural use.

The presence of farmland and active farming activity is a “defining characteristic of the community.” Any efforts to preserve the rural character of the Town must include efforts to maintain the economic viability of agricultural land use for the Town’s farmers.

An important aspect of protecting the rural nature of the Town is preservation of land currently used for agriculture in a way that allows for permanent agricultural use, such as by Agriculture Preservation Restriction (APR) or Conservation Restriction (CR). Related to protecting the rural nature of the Town is protection of visual landscapes. As noted in the Essex National Heritage Area Scenic Byway designation, many of the views along route 1A in the Town have been classified as of significant quality.

Preservation of Open Space

With the increasing number of completed OSRD projects and other permanently protected open space, it is becoming necessary for the Town to maintain an inventory of protected open space areas. This inventory should include access arrangements, unique features, and other notes. If public access is allowed, signage should be developed and posted where practicable.

As the number of large unprotected open space parcels continues to dwindle, the Town should place a high priority on identifying 40B development threats on parcels that have high quality resources.

C. Management Needs, Potential Change of Use

Of those who responded to the 1999 Survey, 83% affirmed that they are concerned about the rate of growth in the Town. To address this concern:

- 35% favor no new residential development until the Town’s Master Plan is revised;
- 29% favor development at a reduced or restricted rate;
- 18% favor no new residential development at all;
- 9% favor no changes to current policy (i.e. no restrictions other than current zoning).
- 9% of respondents expressed no opinion on residential growth policy.

The majority of respondents favored or strongly favored the following actions or measures on the part of the Town to acquire and preserve open space:

- Work with developers and land owners who are developing land to set aside public land and open space (83%);
- Accept state funds for the acquisition of open space (72%);
- Appropriate funds on a regular annual basis for the purchase of open space and recreation space when available (68%);

- Change Zoning to promote open space conservation (e.g. cluster zoning) (63%);
- Form a land bank to hold and manage land (54%).

Fewer than half of the respondents (40%) favored appropriating money only for specific parcels as opportunities arise.

With the formation of a separate Town-wide Recreation Committee, the Open Space Committee's focus has changed more toward looking at needs for all types of open space and maintaining the quality of resources within the Town, with input from the Recreation Committee on Active/Passive Recreation space needs.

There may be a need for better communication with the Conservation Commission, particularly as Town-wide Wetlands and Stormwater Management Bylaws are developed.

There may also be a need for better communication with the Town's Highway Department as projects involving signage for Town-owned open space, other preserved open space, and control of resource threats get under way. There is a need to coordinate with the Highway Department on mowing schedules for grassland areas, such as Great Meadows Farm, for the purpose of minimizing disturbance to nesting birds and to butterflies.

Section 8 - Goals and Objectives

Using the goals described in Section 6 and the analysis of needs in Section 7, the Committee worked to develop a number of objectives for each goal.

Goal #1: Protect the Town’s Rural Character

- Objective 1-1: Conserve, protect, and enhance the Town’s Strategic open space resources, with a focus on strengthening open space corridors for wildlife habitat and human recreation.
- Objective 1-2: Address growth and growth management strategies.
- Objective 1-3: Encourage new and continued agricultural uses in Town.
- Objective 1-4: Identify and preserve scenic views and historic sites.

Goal #2: Protect natural resources, rivers, coastal areas, wetlands, marshland, and wildlife.

- Objective 2-1: Protect water supplies (present and future) and their associated watersheds.
- Objective 2-2: Protect the river and associated marshland.
- Objective 2-3: Protect coastal areas and wetlands.
- Objective 2-4: Provide connected and more continuous spaces for wildlife through preservation of open space.
- Objective 2-5: Preserve, protect, and maintain the upland resources and habitats critical to the survival of local wildlife.

Goal #3: Meet the demand for active recreation.

- Objective 3-1: Develop athletic fields at Kent Way site.
- Objective 3-2: Evaluate and improve existing recreational facilities.
- Objective 3-3: Meet the need for more athletic facilities due to growth.

Goal #4: Enhance passive recreation opportunities.

- Objective 4-1: Provide information to Town residents about available existing resources.
- Objective 4-2: Develop new passive recreational opportunities within existing public open space lands.
- Objective 4-3: Participate in regional trail planning and development efforts.
- Objective 4-4: Improve public access to Plum Island Beach Resources.
- Objective 4-5: Maintain and enhance existing recreational use of Town Roadways.

Objective 4-6: Increase public access points to rivers and estuaries for portable watercraft.

Goal #5: Maintain ongoing responsibility for open space and recreation concerns.

Objective 5-1: Monitor progress of the Open Space and Recreation Plan.

Objective 5-2: Develop annual management plans for existing resources.

Objective 5-3: Permanently protect Town-owned open space, conservation land, and historic properties.

Objective 5-4: Initiate and support enactment of the Community Preservation Act.

Section 9—Seven-Year Action Plan

To support the goals and objectives outlined in Section 8, the Committee developed the following Action Plan, which includes proposed actions to help realize each objective, identifies the body or bodies to be responsible for that action, and sets a timeframe in which the action should be carried out. We have recommended that that the Open Space Committee (OSC) meet regularly to oversee progress of the action items and to provide assistance to other Boards and Commissions as needed (see Goal #5 in Section 8) to implement the Plan.

#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
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Goal #1: Protect the Town’s Rural Character

Objective 1-1: Conserve, protect and enhance the Town’s strategic open space resources, with a focus on strengthening open space corridors for wildlife habitat and human recreation.

1.1.a	Identify, inventory and prioritize existing unprotected properties that are strategic to the objectives of the Open Space and Recreation Plan or that have underutilized potential for passive or active recreation.	OSC	Year 1-2	Started/Master Plan Strategy: Natural Resources 4.2	
1.1.b	Continue to educate landowners, public officials, and citizens about relevant land conservation options and tools.	OSC	Years 1-7	Done once; need to do again	Grants, non-profits
1.1.c	Develop a strategy for tracking and managing conservation restrictions acquired by or granted to the Town	OSC, PB, CC, BoA	Years 1-7	/Master Plan Strategy: Natural Resources 4.2, 4.4	
1.1.d	Identify Town-owned properties with open space or recreation value and develop/review long term management strategies to maximize use for conservation or recreation.	OSC, BoS, CC, PB, RC	Ongoing	Priority	
1.1.e	Explore the establishment of a funding mechanism to enable the Town over the long term to acquire land, development rights, easements or conservation restrictions that conserve, protect and enhance open space resources (CPA, Town Endowment Fund, Bond Issue, etc.)	OSC, BoS	Years 3-7	/Master Plan Strategy: Natural Resources 4.3	CPA, if adopted

Objective 1-2: Address growth and growth management strategies.

1.2.a	Support and encourage strategies outlined in the Master Plan that encourage enhancement of village centers and redevelopment of Route 1 industrial and highway-commercial zones	PB	Years 1-7	Partially done, reevaluate/ Master Plan Strategy: Natural Resources 6.1	
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#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
1.2b	Investigate and support Transfer of Development Rights Program	PB	Years 3-7		
1.2c	Encourage continued use of Open Space Residential Development (OSRD)	PB	Years 1-7		
1.2.d	Examine the need for and feasibility of public water and sewer in some locations and the impact of growth on those needs.	BoS	Years 1-3		
Objective 1-3: Encourage new and continued agricultural uses in Town.					
1.3.a	Obtain technical assistance from MA Dept. of Food and Agriculture, Agricultural Preservation Restriction (APR) Program, and US Natural Resources Conservation Service.	PB	Years 1-7		
1.3.b	Inform property owners of the benefits of 61A tax status and Agricultural Preservation Restriction protection.	BoA	Years 1-7		Minimal cost, budget
1.3.c	Ensure that agricultural properties are taxed as they are used, not for their development potential.	BoA, BoS	Years 1-7		
1.3.d	Facilitate Purchase of Development Rights to Preserve Farmland	BoS, OSRC	Years 1-7	/Master Plan Strategy: Natural Resources 5.3	DAR APR Program, Land Trusts
1.3.e	Establish a Local Agricultural Commission	BoS	Done	Approved at Town Meeting, May 2008/Master Plan Strategy: Natural Resources 5.4	
1.3.f	Work with area Towns to investigate larger-scale regional solutions to issues facing farmers.	BoS, OSC, AC	Years 1-7		
1.3g	Investigate and Support "Buy Local" and Consumer Supported Agriculture Initiatives	BoS, OSC, AC	Years 1-7		

#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
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Objective 1-4: Identify and preserve scenic views and historic sites					
1.4.a	Identify and inventory unprotected sites and properties that are of scenic or historic significance; inform owners of protection options and/or recommend selected sites for potential purchase by Town.	OSC, HC	Years 1-7		Minimal cost, budget
1.4.b	Develop a scenic roads bylaw; this bylaw should include provisions for safety-related roadway improvements and allow for ordinary maintenance and repair of stone walls.	PB	Years 2-5	/Master Plan Strategy: Cultural and Historic Resources 1.1 and 1.2	
1.4.c	Participate in the development of a management plan for the Route 1A Scenic Byway.	OSC, HC, BoS	Years 1-3	Started; in process	
1.4.d	Evaluate the need for a public shade tree management/ planting program. Locate resources to adequately fund such a program.	BoS	Year 1		Grants, donations
1.4.e	Develop strategies to protect stone walls.	PB	Year 1		
1.4.f	Create up-to-date inventory of historic sites and make relevant Boards aware of sites of historic interest.	HC	Year 1	/Master Plan Strategy Cultural and Historic Resources 2.1	
1.4.g	Consider creation of Neighborhood Conservation Districts to encourage appropriate construction and renovation in historically significant neighborhoods.	HC	Years 1-4	/Master Plan Strategy Cultural and Historic Resources 2.2, 3.4 : Historic District and Neighborhood Conservation District	
1.4.h	Create Management Program for historic burial grounds	HC, BoS	Years 3-5	/Master Plan Strategy Cultural and Historic Resources 3.5	Donations

#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
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Goal #2: Protect natural resources, rivers, coastal areas, wetlands, marshland, and wildlife.

Objective 2-1: Protect water supplies (present and future) and their associated watersheds.

2.1.a	Identify future well sites and protect those sites in advance from development and contamination; identify sources for funding this study.	WB, BoH, PB	Years 1-5	Initiated; needs completion	
2.1.b	Develop strategies for protecting existing water supplies and watershed.	WB	Year 1		
2.1.c	Review zoning bylaws regarding protection of water supplies and revise as appropriate to provide protection needed.	PB	Year 1		
2.1.d	Support Building Inspector in enforcement of current zoning bylaws regarding water supply protection.	PB	Ongoing		
2.1.e	Evaluate the need for a reserve fund to allow the Town to purchase properties on which future well sites are located.	BoS, FC	Years 1-5	/Master Plan Strategy Natural Resources 2.2	EOEEA grant, MVPC tech assistance
2.1.f	Identify potential pollution sources for possible future action.	CC		/Master Plan Strategy Natural Resources 2.4	

Objective 2-2: Protect the river and associated marshland.

2.2.a	Evaluate the need for a Town-wide Wetlands Protection Bylaw.	CC, BoS	Years 1-2	/Master Plan Strategy Natural Resources 4.5	
2.2.b	Continue to work, collaborate, and coordinate with regional and state agencies to protect river and marshland resources.	CC	Years 1-7		
2.2.c	Encourage cooperation with existing environmental groups as appropriate.	OSC	Years 1-7		
2.2.d	Establish ongoing environmental monitoring procedures.	CC, OSC with DMF, MBL	Years 1-7	/Estuary Plan #18: Monitor Marsh Degradation	Volunteers, non-profits

#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
2.2.e	Develop funding sources to support implementation of Newbury’s Phase II Storm water Management Plan and Best Management Practices (BMPs) as required jointly by EPA’s NPDES Permit and the Massachusetts DEP	CC, DPW	Years 1-7	/Master Plan Strategy Natural Resources 3.1	Funding may be needed for monitoring and enforcing BMPs
2.2.f	Educate the public about the proper use and maintenance of septic tank systems.	BoH	Years 1-2	/Master Plan Strategy Natural Resources 3.3	Minimal cost; budget
2.2.g	Educate the public about the proper disposal of hazardous waste.	BoH	Years 1-2	/Master Plan Strategy Natural Resources 3.4	Minimal cost; budget
2.2.h	Certify Vernal Pools.	CC, non-profits	Years 1-5	/Master Plan Strategy Natural Resources 4.6	Volunteers, non-profits
2.2.i	Adopt Town Stormwater Management Bylaw and Stormwater Regulations	CC, DPW, BoS, PB	Completed	Completed/Master Plan Strategy Natural Resources 3.5	
Objective 2-3: Protect coastal areas and wetlands.					
2.3.a	Have relevant Boards and officials review the Newbury Estuarine Management Plan, understand the recommendations, and revise existing bylaws, etc., as appropriate.	CC, PB, BI, HM, BoH	Years 1-2		
2.3.b	Establish ongoing environmental monitoring procedures.	CC	Years 1-5		
2.3.c	Implement the recommendations of the Plum Island Beach Management Plan	CC, DCR	Years 1-5		
Objective 2-4: Provide connected and more continuous spaces for wildlife through preservation of open space.					
2.4.a	Identify existing wildlife corridors, such as riparian forests, fence rows, etc.	OSC	Years 1-3		
2.4.b	Identify isolated patches of core habitat that need connecting wildlife corridors.	OSC	Years 1-3		
2.4.c	Work with State agencies and environmental organizations to prioritize corridors for protection and restoration.	OSC, CC	Years 1-7		

#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
2.4.d	Review and revise subdivision bylaws and regulations to increase opportunities to protect and create wildlife corridors.	PB	Years 1-7		
2.4.e	Provide information to the public about the importance of wildlife corridors.	OSC	Years 3-7		Minimal cost; budget
Objective 2-5: Preserve, protect, and maintain the upland resources and habitats critical to the survival of local wildlife.					
2.5.a	Work with State agencies (DFG) and environmental organizations to target populations of wildlife for protection.	OSC; CC	Years 1-7		
2.5.b	Identify and inventory critical habitats in upland areas.	OSC	Years 1-7		
2.5.c	Evaluate and update this inventory on an ongoing basis.	OSC	Years 3-7		
2.5.d	Target specific areas for protection and possible purchase.	OSC; PB	Years 4-5	/Master Plan Strategy Natural Resources 4.2	
2.5.e	Create a critical habitat and upland resources map.	OSC	Years 3-5		
2.5.f	Provide information to the public about the necessity of protecting and maintaining the identified critical habitats/upland resources.	OSC	Years 3-7		Minimal cost; budget

Goal #3: Meet the demand for active recreation.					
Objective 3-1: Develop athletic fields at Kent Way site.					
3.1.a	Finalize plans for buildout of facilities at the Kent Way site.	RC, BoS	Years 1-3		Donations; in-kind services; Rec. budget
3.1.b	Establish funding source(s) for construction of the planned facilities and complete development of the site.	RC, BoS	Years 2-3		

#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
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Objective 3-2: Evaluate and improve existing recreational facilities.

3.2.a	Complete facilities development at the Central St. recreational property.	BoS, RC	Years 1-3		Donations; non-profits; Rec. budget
3.2.b	Develop realistic short and long term management plans for all Town-owned recreation facilities.	BoS, RC	Years 1-2		
3.2.c	Complete a self-evaluation of handicap access needs for facilities and develop funding to correct deficiencies	OSC, ADA Coordinator	Years 1-2		Volunteers
3.2.d	Ensure that there are adequate resources available to maintain and repair all Town-owned fields and facilities	BoS, RC	Years 1-5		General Fund; user fees

Objective 3-3: Meet the need for more athletic facilities due to growth.

3.3.a	Identify suitable properties that may be available for purchase, lease, or gift.	RC, BoS, OSC	Years 1-7		
3.3.b	Evaluate properties on a case-by-case basis.	RC, BoS, OSC	Years 1-7		
3.3.c	Advocate for regional planning of active recreation facilities development.	BoS, RC	Year 1		
3.3.d	Periodically evaluate demand for active recreation facilities relative to capacity of facilities.	BoS, RC	Ongoing		

Goal #4: Enhance passive recreation opportunities.

Objective 4-1: Provide information to Town residents about available existing resources.

4.1.a	Prepare a resource map or brochure of existing passive recreation sites.	OSC	In progress		
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#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
4.1.b	Involve students and/or scouts in publicizing existing resources.	OSC, PB	Ongoing		
4.1.d	Inventory private lands open for passive recreation.	OSC	Years 1-2		
Objective 4-2: Develop new passive recreational opportunities within existing public open space lands.					
4.2.a	Work with open space managers to meet residents' needs.	OSC, BoS	Ongoing		
4.2.b	Support and expand the Trails Committee as a subcommittee of the OSC for the purpose of developing and maintaining trails in the Town, including the Bay Circuit Trail.	BoS, OSC	Year 1	Committee formed 2008	Volunteers
4.2.c	Improve current trail system, establishing connections and bridging gaps where possible.	TC	Ongoing		Volunteers; EOEEA grants
Objective 4-3: Participate in regional trail planning and development efforts.					
4.3.a	Pursue improvements to the Bay Circuit Trail and the Merrimack River Trail.	TC	Ongoing		
4.3.b	Connect where possible with trail initiatives in neighboring communities.	TC, BoS, OSC, B2BC	Ongoing	/Border to Boston Trail Plan	
4.3.c	Cooperate with ongoing regional trail planning at Merrimack Valley Planning Commission	BoS, PB	Ongoing		
4.3.d	Participate in planning and implementation of the Border to Boston Rail Trail.	TC, BoS, PB, B2BC	Ongoing		Fed. funding; Grants and Donations
4.3.e	Support completion of the Clipper City Rail Trail in Newburyport and Newbury.	OSC, BoS, DPW, TC	Years 1-5		
Objective 4-4: Improve public access to Plum Island beach resources.					
4.4.a	Reevaluate the recommendations of the PI Beach Access Plan and continue to pursue improved visitor facilities and beach access on Plum Island	BoS, PITA	Year 1	/Plum Island Beach Management Plan	PITA; DCR grant

#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
4.4.b	Monitor implementation of the PI Beach Management Plan, improving both public access and environmental protection	CC, PITA	Years 1-3	/Plum Island Beach Management Plan	PITA; DCR grant
4.4.c	Evaluate roadside parking and provide additional resident parking as needed to improve beach access.	BoS, CC, DPW	Years 1-7		
4.4.d	Support efforts to stabilize beach erosion.	BoS, CC, DPW	Years 1-7		PITA; DCR grant
Objective 4-5: Maintain and enhance existing recreational use of Town roadways.					
4.5.a	In cooperation with Newburyport, pursue improved connections to accommodations for pedestrians and bicycles on the Plum Island Turnpike and maintain those facilities.	BoS, DPW	Years 1-7	Lanes installed; regular maintenance needed	TIP; DPW budget; grants and donations
4.5.b	Improve pedestrian and bicycle access to the Newburyport MBTA station.	BoS, DPW	Years 2-7		
4.5.c	Ensure that, wherever possible, Town roadway planning, maintenance, and improvements follow the requirements of MGL Chapter 90E, Section 2A, and MassDOT Engineering directives for bicycle and pedestrian accommodation	BoS, DPW	Ongoing		TIP; Chapter 90
Objective 4-6: Increase public access points to rivers and estuaries for portable watercraft.					
4.6.a	Seek State assistance and investigate the feasibility of new launch facilities at the downstream side of the Central St. dam and at the Central St. recreation area.	OSC	Years 3-6		DFW Public Access Board
4.6.b	Work with MassDOT to complete the planned launch facility at the reconstructed Route 1A bridge or at other locations on the tidal portion of the Parker River	BoS, OSC	Years 1-5		DFW Public Access Board
4.6.c	Evaluate the feasibility of access improvements at the approaches to the old Plum Island River bridge, south of the present bridge.	BoS, OSC	Years 2-7		

#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
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Goal #5: Maintain ongoing responsibility for open space and recreation concerns.

Objective 5-1: Monitor implementation of the Open Space and Recreation Plan

5.1.a	Maintain a regular Open Space Committee meeting schedule.	OSC	Ongoing		
5.1.b	Identify and develop an understanding of funding vehicles available for land acquisition, active recreation facilities development, and passive recreation improvements. Apply for funding where available and applicable.	OSC	Years 1-7		
5.1.c	Pursue opportunities for participation in regional and statewide initiatives consistent with the goals and objectives of the Open Space and Recreation Plan.	OSC	Years 1-7		Planning Dept.
5.1.d	Produce yearly report on the progress of the implementation of the Open Space and Recreation Action Plan.	OSC	Annually		

Objective 5-2: Develop annual management plans for existing resources.

5.2.a	Locate funding for plan development.	PB, BoS, FC	Year 2		
5.2.b	Create/review management plans for Town Recreation properties, including maintenance procedures and funding issues.	RC, BoS, FC	Years 3-6		
5.2.c	Create/review management plans for Town Conservation/Open Space Properties, including maintenance procedures and funding issues.	CC, BoS, FC	Years 3-6		
5.2.d	Evaluate Town-owned parcels proposed for sale as surplus properties to ensure that Open Space or recreation value is recognized.	OSC, RC, FC	Years 1-7		

#	Action	Responsibility	Timing	Status/Cross reference with other planning documents	Funding Source
Objective 5-3: Permanently protect Town-owned open space, conservation land, and historic properties.					
5.3.a	Undertake a comprehensive evaluation of all Town-owned parcels for open space/conservation/historic value.	OSC, CC, BoS, HC	Year 1		
5.3.b	Transfer control and management of all Town-owned lands of open space/conservation value deserving protection to the Conservation Commission by Town Meeting vote.	CC, BoS	Years 2-4		
5.3.c	Place protective easements on Town-owned parcels of historic value.	BoS, HC	Years 2-4		
Objective 5-4: Initiate and support enactment of the Community Preservation Act in Newbury.					

Abbreviations used for Responsibility:

- AC Agricultural Commission
- B2BC Newbury Border to Boston Trail Committee
- BI Building Inspector
- BoA Board of Assessors
- BoH Board of Health
- BoS Board of Selectmen
- CC Conservation Commission
- DPW Department of Public Works
- FC Finance Committee
- HC Historical Commission
- HM Harbormaster
- OSC Open Space Committee
- PB Planning Board
- PITA Plum Island Taxpayers Association
- RC Recreation Committee
- TC Trails Committee
- WB Water Board

Section 10 - Public Comments

This section is to be completed pending receipt of final public comments and letters of support. Letters should be addressed to the Newbury Planning Board, 25 High Road, Newbury.

Section 11 – References

Documents/Written Materials

DeNormandie, James; Resolutions (2005), Newbury Estuarine Management Plan.

Essex National Heritage Commission (2005), Newbury Reconnaissance Report: Essex County Landscape Inventory.

Massachusetts Department of Housing and Community Development (1998), Community Profiles – Newbury, Massachusetts, www.magnet.state.ma.us/dhcd/profile/demographics.

Massachusetts Division of Fisheries and Wildlife (2006), A Guide to Invasive Plants in Massachusetts.

Massachusetts Executive Office of Environmental Affairs (March 2008), Open Space and Recreation Planner’s Workbook.

Massachusetts Executive Office of Environmental Affairs (March 2008), Open Space and Recreation Plan Requirements.

Massachusetts Wetlands Restoration and Banking Program, EOE, and Natural Resource Assessment Groups with support from the US Fish and Wildlife Service (Dec. 1996), Atlas of Tidally Restricted Marshes, Northshore of Massachusetts.

Merrimack Valley Planning Commission (1991), Windshield Survey of Selected Lots 10 Acres and Larger, Newbury, Massachusetts.

Parker River Committee and the Massachusetts Scenic Rivers Program (undated), Parker River Management Plan/Draft.

Parker River National Wildlife Refuge (1998), Refuge Information and Map: Visitor Information Sheet.

Parker River National Wildlife Refuge (1984), Final Environmental Impact Statement, Master Plans, Parker River National Wildlife Refuge, Essex County, Massachusetts.

Putnam Conservation Institute and The Trustees of Reservations , co-sponsors (2004), Open Space Priorities in Essex County’s North Coastal Communities.

Town of Newbury, Assessor’s Property Data Base.

Town of Newbury, Assessor’s General Information Report.

Town of Newbury (2006), Master Plan.

The Trustees of Reservations (1998), Parcel Information Sheet, Old Town Hill Reservation.

United States Department of Agriculture, National Resources Conservation Service (1981), Soil Survey of Essex County, Massachusetts, Northern Part.

Vine Associates, Inc. (2006), Plum Island Public Access Plan.

Map Resources

Essex County Greenbelt Association (1996), Protected Open Space of Essex County.

Massachusetts GIS (1998), Community Water Supply Map: Parker River Basin.

Massachusetts GIS (1998), Land Use: Newbury, MA.

Massachusetts GIS (1998), Protected Open Space, Newbury, MA, base map.

Massachusetts GIS (1998), Protected and Recreation and Open Space Mapping Project.

Massachusetts GIS (1998), Surficial Geology Map of Newbury, Massachusetts.

Massachusetts GIS (1998), Community Water Supply Map: Parker River Basin.

Personal Communications

2000 Plan

Arnold, Andrea; Environmental Review Assistant, Massachusetts Natural Heritage and Endangered Species Program.

Callum, John; Department of Environmental Protection.

Creighton, Sarah; Town of Newbury Planning Board (former member).

Dash, Robert; Town of Newbury Planning Board and Staff Member, Byfield Water District.

Kennedy, Jeff; Department of Marine Fisheries.

Leonard, Tim, and Fournier, Budd; Town of Newbury Highway Department.

MacIntosh, Alan; Boundy, Vicky; and Whitten, Jerrard; Merrimack Valley Planning Commission.

MacDougall, Jim, and Becker, Ed; Essex County Greenbelt Association.

Melvin, Deborah A.; Wildlife Biologist, Parker River Wildlife Refuge.

Mountain, David; Parker River Watershed Association.

Noyes, Verne; Byfield Fire Department.

Packer, Douglas E.; Town of Newbury Conservation Commission.

Richard, Earl; Byfield Water District.

Prichard, John; Newburyport Water District.

Turbide, Paul; Port Engineering Associates, Inc.

2009 Plan Update

Manter, Warren; Chair, Newbury Recreation Committee

Appendix A -- Maps

1. Regional Context
2. Zoning
3. Zoning Overlays
4. Water Resources
5. Surficial Geology
6. Special Features
7. Open Space
8. Action Plan

Appendix B – Public Workshops

Newbury Open Space Committee
2007 Open Space and Recreation Plan
Public Input Meeting

Newbury Town Hall
 Newbury, MA
 May 30, 2007; 7:00 PM

Meeting Minutes

Introduction:

Committee Chair Dan Streeter welcomed all of the meeting attendees and provided a background description of the creation of the Open Space Committee (OSC), its membership, and the mission of the OSC. He further provided a brief description of the reason why the OSC has begun the process of updating the Open Space and Recreation Plan, the contents of the plan, and plan requirements outlined by the state.

Straw Poll

Committee member David Powell presented a number of questions to the attendees in order to get them to begin to think about goals and strategies related to Newbury open space. The results are tabulated below.

- How important is the preservation of farmland?

High	18
Medium	3
Low	0

- How likely are you to support increased density in some areas in exchange for open space in others?

Very Likely	14
Likely	6
Not Likely	0

- Is the town doing enough to maintain and protect its natural resources and wildlife habitat?

Yes	0
Undecided	14
No	9

- Which do you support more - improving/maintaining existing recreation facilities or acquiring conservation lands for recreation?

Improve/maintain	16
Acquire lands	5

- If the choice was between conservation areas and fields for active recreation, which would you support?

Conservation areas	18
Recreation fields	2

- Should Newbury adopt the Community Preservation Act (to provide funding for open space acquisition and facilities improvements)?

Yes	17
Undecided	1
No	2

- What is, or will be in the next five years, Newbury’s most pressing open space or recreation need?
 - a) More protected open space; 15
 - b) More space for organized recreation; 2
 - c) More public access to resources (beach, rivers, open space, trails, etc); 5
 - d) Other (list)

Goals and Objectives

Committee member David Powell walked the audience through a presentation of the five goals established by the OPC for the Open Space Plan Update. He mentioned that while these goals and their related objectives could be revised, many of them are obvious and have been reaffirmed in recent years during other planning processes (Master Plan, etc.).

Goal #1: Protect the Town’s Rural Character

- 1-1: Conserve, protect and enhance the Town's strategic open space resources, with a focus on strengthening open space corridors for wildlife habitat and human recreation
- 1-2: Address growth and growth management strategies
- 1-3: Encourage new and continued agricultural uses in Town
- 1-4: Identify and preserve scenic views and historic sites
- 1-5: Protect "special places" in town, i.e., The Upper and Lower Greens, Great Meadow, Parker River mill sites, and others

David Powell described Goal #1 and the five related objectives. Dan Streeter asked the attendees if there was anything missing from this list. One attendee asked if Objective 1-3 would include working with the Triton School District to encourage them to buy school lunch goods from local farms. Dan Streeter mentioned that this was an interesting thought and that the OSC had discussed in detail the possibility of working with area towns to develop a “buy local” campaign. Residents in Newburyport have recently started a similar program. Another attendee asked if the OSC had considered a tree planting program. Committee member Martha Taylor said that this strategy was discussed during the creation of the original Open Space Plan in 2001, but the current OSC thought that this was not a high priority initiative. The attendee mentioned that the Newbury 350th Committee was considering starting such a program.

Goal #2: Protect natural resources, rivers, coastal areas, wetlands, marshland, and wildlife

- 2-1: Protect water supplies (present and future) and their associated watersheds
- 2-2: Protect the rivers and associated marshlands
- 2-3: Protect coastal areas and wetlands

This goal was briefly presented. This was followed by a detailed presentation about “Phragmites and Saltmarsh Restoration” by Committee member Geoff Walker and Eight Towns and a Bay representative Peter Phippen. They described the field mapping project they have undertaken which aims to identify and track the expansion of phragmites and other invasive plant species in the salt water marsh lands of Newbury. Geoff Walker described that one quarter of the Great Marsh (which stretches from Gloucester to Hampton, NH) is located in Newbury. The Great Marsh represents a tremendous environmental and scenic resource in Newbury. This area is under attack by phragmites and other recently introduced invasive species, which are crowding out native marsh plants, like patens. A typical healthy marsh contains about 75% patens. The phragmites have thrived and taken over other areas of the Great Marsh. Salisbury has been particularly hit hard. Expansion of phragmites and other invasives is an indicator of a marsh in transition with a manipulated hydrology. It is thought that the increase in invasives is caused in large part by tidal restriction—man-made structures like the Plum Island Bridge prevent tidal water from filling the marshes adequately.

Geoff and Peter are making trips out to map the extent of invasives in the marsh. They are finishing their catalogue of the Parker River Refuge area. They hope that this information will attract grant funds that can be used to eradicate emergent strands. They are working with the Parker River National Wildlife Refuge to control juvenile phragmites stands and are working to investigate the causes of the emerging strands.

One attendee asked if there is anything one can do to help. Geoff and Peter explained that once phragmites and other invasives take hold in a marsh, they are nearly impossible to remove. Only a coordinated, strategic and expensive marsh restoration program can return the marsh to its original makeup. Sea level rise associated with climate change might help. Cutting and mowing of the marsh can help, but these actions require permits and therefore might be unrealistic for a single landowner to do.

One attendee commented that a lot has been presented about wetlands. What is being done about upland resources?

Another attendee mentioned that the challenge in Newbury is to get all of the various property owners, including private land trusts, private citizens, state and federal agencies to work together to address these issues that large resource areas, like the Great Marsh.

Goal #3: Meet the demand for active recreation

- 3-1: Develop athletic fields at Kent Way site
- 3-2: Evaluate and improve existing recreational facilities
- 3-3: Link active recreation space with passive recreation and other compatible public needs
- 3-4: Identify suitable properties that may be available for purchase, lease, or gift

David Powell and Dan Streeter described how the focus in the next five years should be to build out existing facilities, particularly the Kent Way site in Byfield. Dan mentioned that it is probably unreasonable to expect the Town to purchase new land for active recreation needs.

They also described the high level of usage of the Central Street complex. In times where usage is particularly high, like the recent weekend where the site hosted a youth lacrosse tournament, there is a conflict between active and passive users. Particularly, there was not a place to park if you wanted to use the walking trails.

One attendee asked if we could reuse the old transfer station (capped landfill). Dan and David mentioned how this is a strategy pursued by other municipalities.

Dan asked the attendees if there is a need for more playgrounds for young children. Some saw a conflict between playgrounds (a suburban icon) and a rural landscape. Another attendee mentioned that most families utilize the ample playgrounds in neighboring Newburyport.

Goal #4: Enhance passive recreation opportunities

- 4-1: Provide information to Town residents about available existing resources
- 4-2: Develop new passive recreational opportunities within existing public open space lands
- 4-3: Maintain and enhance existing recreational use of Town roadways
- 4-4: Participate in regional trail planning and development efforts
- 4-5: Improve public access to Plum Island Beach Resources
- 4-6: Increase public access points to rivers and estuaries for watercraft

Goal #4 and the associated objectives were presented by David Powell and Dan Streeter. They described the various initiatives, both locally and regionally, to create trail systems, bike trails, expand public access to Plum Island Beaches and create non-motorized boat launch points.

One attendee expressed concern about the impact on the salt water marshlands caused by additional paddlers. While some limited impact would likely occur, well planned access points can minimize impacts to the marsh.

Goal #5: Continue to actively maintain and enhance open space and recreation resources for all Town residents

- 5-1: Produce a yearly Open Space and Recreation Plan Status Report to the Town
- 5-2: Develop an annual management plan for existing recreational resources
- 5-3: Permanently protect those Town owned open space resources necessary for provision of recreational opportunities and/or preservation of natural/visual/cultural/historic resources
- 5-4: Initiate and support efforts to enact the Community Preservation Act in the Town

Goal #5 was presented. David Powell expressed how there needs to be a means of tracking progress related to open space on a yearly basis. Perhaps an annual report could be issued or a presentation could be provided at the yearly Town meeting.

Straw Poll (Second Time)

Committee member David Powell presented the same straw poll as before to see if opinions have changed over the course of the meeting. The results are tabulated below.

- How important is the preservation of farmland?

High	16
Medium	2
Low	0

- How likely are you to support increased density in some areas in exchange for open space in others ?

Very Likely	15
Likely	5
Not Likely	0

- Is the town doing enough to maintain and protect its natural resources and wildlife habitat?

Yes	0
Undecided	12
No	9

- Which do your support more - improving/maintaining existing recreation facilities or acquiring conservation lands for recreation?

Improve/maintain	11
Acquire lands	7

- If the choice was between conservation areas and fields for active recreation, which would you support?

Conservation areas	20
Recreation fields	1

- Should Newbury adopt the Community Preservation Act (to provide funding for open space acquisition and facilities improvements)?

Yes	20
Undecided	0
No	2

- What is, or will be in the next five years, Newbury’s most pressing open space or recreation need?
 - a) More protected open space; 16
 - b) More space for organized recreation; 0
 - c) More public access to resources (beach, rivers, open space, trails, etc); 3
 - d) Other (list)
 - Reduce impacts of artificial light at night (light pollution)
 - Seek regional solutions: new recreation resources, like playgrounds should be shared with other Towns.
 - Increase awareness of drinking water resources
 - Present research related to the economic value of open space. Offer examples from other towns concerning the value of open space and how it helps to reduce the fiscal impacts of growth.
 - Keep in mind the impact open space/wetlands can have on flood protection/mitigation.
 - Identify areas for land swaps or transfer of development rights (related to concentrating development in smart growth areas and away from open space).

Closing

Dan Streeter described how the OSC would focus efforts over the course of the next couple of months on strategies to implement the goals and objectives. The next meeting of the OSC would be on June 27th (typically, meetings are held on the fourth Wednesday of the month). All are welcome to attend and contribute to the discussion. Another larger public forum would be planned in the fall (September) to present the strategies.

Minutes prepared by Tom Galligani



Town Of Newbury
Office of
The Planning Board
Newbury, MA 01951-4799
978-463-3516
Fax: 978-465-3064
Planningboard@townofnewbury.org

Press Release - For Immediate Release

Newbury To Hold Open Space Plan Public Workshop

On Wednesday, May 30, 2007 the Newbury Open Space Committee will be sponsoring a **Community Planning Workshop** to solicit citizen participation and input for the update to the Newbury Open Space Plan. All Newbury residents are invited and encouraged to attend the workshop which will be held at Newbury Town Hall from 7:00 to 9:00 PM. The meeting will focus on updating the action plan and discussing the town's priorities with regard to open space issues.

There will also be a pre-meeting demonstration of a Geographic Information System (GIS) from 6 - 7 PM for those residents who are interested in learning more about this interactive mapping tool. In addition, environmental planners from the North Shore's Eight Towns and The Bay organization will be on hand to present basic information on Newbury's natural resources and to help facilitate the community discussion.

For further information, contact Judy Tymon, Newbury Town Planner (978-463-3516 or email planningboard@townofnewbury.org)

Website Announcement
www.townofnewbury.org

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There will also be a pre-meeting demonstration of a Geographic Information System (GIS) from 6 - 7 PM for those residents who are interested in learning more about this interactive mapping tool. Using GIS, residents will be able to view their own property in the context of the town's protected open space. Residents will also be able to see the town's entire inventory of natural resources including forestland and farms, fresh and salt water wetlands, scenic hilltops and country roads, wildlife corridors, shellfish beds, and rare and endangered species habitats. With this information, residents will be better prepared to discuss goals and priorities with regard to open space resources.

Members of the Open Space Committee will discuss the process of updating the plan and will present the progress that has been made to date. In addition, environmental planners from the North Shore's Eight Towns and The Bay organization will be on hand to present basic information on Newbury's natural resources and to help facilitate the community discussion.

For further information, contact Judy Tymon, Newbury Town Planner (978-463-3516 or email planningboard@townofnewbury.org)

Newbury Open Space Committee
Open Space and Recreation Plan Update
Public Input Meeting #2

Newbury Town Hall
Newbury, MA
June 11, 2008, 7:00 p.m.

Meeting Minutes

A. Introduction:

Committee member David Powell opened the meeting. He provided an overview of the following:

1. Timeline of the Open Space and Recreation Plan update;
2. Why an OSRP?
 - Approved plan qualifies Town for grants and funding
 - More detailed than the Master Plan on environmental issues
3. Recent efforts at preservation of open space, including:
 - Village at Little River:
 - High density housing in trade for more Open Space
 - Proposed Open Space Residential development across from State Police Station on Scotland Road:
 - Approximately 30 acres, ½ of which would be conserved, thereby providing a vital link to the Martin Burns WMA

A question was asked about public access in relation to the beaches and such. Is public access for Newbury residents only? Or is it for everyone?

B. Maps and Priorities:

1. A break from the discussion was provided for members of the audiences to review the Open Space Plan maps and develop a list of priorities.
(Insert priority list)

C. Next Steps:

1. Review of final draft and letters of approval from Planning Board, Selectmen, MVPC for authorization of OSRC plan;
2. Final Map and Action Plan edits.

D. Moving Forward/Implementation:

1. Ideas for getting residents involved with implementing the Action Plan and raising awareness of the work the Open Space Committee is doing:
 - a. Coordinate with other organizations such as Greenbelt/Audubon
 - b. “Marketing” and outreach to invite participation with OSC.
2. Assignment of priorities items from Action Plan.

PUBLIC NOTICE POSTING REQUEST
TO OFFICE OF TOWN CLERK

ORGANIZATION Open Space Committee - Public Workshop
MEETING PUBLIC HEARING (please circle)

DATE: June 11, 2008

DAY: Wednesday

TIME: 7PM

LOCATION: Town Hall

PURPOSE: Public Workshop to discuss the updated Open Space Plan.

REQUESTED BY: _____

Town Planner
Title

Date Received Office of Town Clerk: _____

Bulletin Number: _____ Posted: _____

ALL MEETING NOTICES MUST BE FILED AND TIME STAMPED IN THE TOWN CLERK'S OFFICE AND POSTED ON THE MUNICIPAL BULLETING BOARD 48 HOURS PRIOR TO THE MEETING. (in accordance with Chapter 303 Acts of 1975).



Town Of Newbury
Office of
The Planning Board
Newbury, MA 01951-4799
978-463-3516
Fax: 978-465-3064
Planningboard@townofnewbury.org

May 27, 2008

Press Release - For Immediate Release

Newbury To Hold Open Space Plan Public Workshop

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The Open Space Committee has been working on the final draft since the last public workshop was held in May 2007. The draft includes an updated inventory of the town's open space parcels, a summary of the community's needs regarding open space and recreation, as well as an updated five-year action plan. The Committee is looking for input from residents regarding all aspects of the plan, especially the goals and objectives and the action plan.

For further information, contact Judy Tymon, Newbury Town Planner (978-463-3516 or email planningboard@townofnewbury.org)

Website Announcement
www.townofnewbury.org

Newbury To Hold Open Space Plan Public Workshop

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For further information, contact Judy Tymon, Newbury Town Planner (978-463-3516 or email planningboard@townofnewbury.org)

Appendix C – Section 504 Self-Evaluation

**APPENDIX C:
Handicapped Access to Municipally-Owned Open Space and Recreation Facilities
Section 504 Self-Evaluation**

This appendix documents existing handicapped accessibility to open space and recreation facilities owned by the Town of Newbury and provides a plan for improving accessibility over time.

Part I: Administrative Requirements

1. Designate a 504 Coordinator:

The Town's Building Inspector was designated the Town's ADA Coordinator by the Board of Selectmen in 2005. See attached letter dated January 11, 2005.

2. Grievance Procedures:

Grievance procedures for non-union employees are outlined in the Town of Newbury Personnel Policy, Chapter 24 of the Town of Newbury Code. Grievance procedures for police union employees are included in the collective bargaining agreement that has been entered into between the Town and the police union.

There are no formal grievance procedures for the general public. Grievances from the public are received by the Town's ADA coordinator, who handles the grievance or refers it to the Board of Selectmen. The Town's ADA coordinator works with the Board of Selectmen and with other Town boards to improve the accessibility of public buildings for persons with disabilities and serves as a general source of information on disability issues.

3. Public Notification Requirements:

The Town makes available public information notices from governmental and private organizations that promote nondiscriminatory practices. The Town of Newbury is an Affirmative Action/Equal Opportunity Employer.

4. Participation of Individuals with Disabilities or Organizations Representing the Disabled Community:

The Town of Newbury's ADA Coordinator works with the State's Disability Board to determine the Town's compliance with ADA regulations.

Part II: Program Accessibility

The following facilities are either managed by the Town's Department of Public Works or by the Conservation Commission:

- Upper Town Green
- Lower Town Green
- Town Boat Ramp
- Plum Island Center Beach

- Great Meadow
- Father Sears Park
- Central Street Recreation Area
- Lunt Street Baseball Field and Playground

For each of the above facilities, there is a description of the current state of the facility and a recommendation as to the work that needs to be done to bring the area into compliance with current accessibility standards.

Part III: Employment Practices

1. Recruitment:

Employment opportunities in the Town of Newbury are open to all segments of society. The Town's job openings are posted in an accessible area in Town Hall.

2. Personnel Actions:

The Town of Newbury does not discriminate in recruitment, hiring, or upgrading positions.

3. Leave Administration:

The Town of Newbury's leave of absence policy does not adversely affect qualified employees with disabilities.

4. Training:

The training programs that are sponsored by the Town of Newbury are administered in a manner that allows equal participation by qualified employees with disabilities.

5. Tests:

Tests that are administered by the Town of Newbury are a measure of job requirements only. Tests are job-related and nondiscriminatory towards persons with impaired communications abilities.

6. Medical Examinations/Questionnaires:

Pre-employment medical examinations are only allowed after an applicant has received a conditional employment offer. Medical history questionnaires do not request information as to the nature or severity of an applicant's disability.

7. Social/Recreational Programs:

Social and creational programs sponsored by the Town of Newbury are accessible to employees with disabilities.

8. Fringe Benefits:

Employees with disabilities are given the same employee benefits as non-disabled employees.

9. Collective Bargaining Agreements:

Terms and practices of collective bargaining agreements do not contain provisions that limit the participation of qualified employees with disabilities.

10. Wage and Salary Administration:

Employees with disabilities are not offered different rates of compensation solely on the basis of disability.



Town Of Newbury

Office of
The Board of Selectmen
Newbury, MA 01951-4799
978-465-9241
Fax: 978-465-3064

January 11, 2005

Town of Newbury Open Space Committee
Town Hall
25 High Road
Newbury, MA 01951

Dear Committee Members,

The Newbury Board of Selectmen has designated the position of Building Inspector as the ADA Coordinator for the Town of Newbury. Our present Building Inspector, Sam Joslin, will serve as the Coordinator.

As such, any inquiries on the American with Disabilities Act, including accessibility of Town facilities, program and services, or any other matter relating to the Act, may be directed to his attention at Town Hall. He can be reached at 978-462-8311.

Please do not hesitate to call me if you have any further questions.

Sincerely,

Vincent J. Russo, MD
Chair, Newbury Board of Selectmen

ADA SELF –EVALUATION/TRANSITION PLAN**1. Upper Green, High Road**

This triangular shaped site is bounded by High Road, a state highway, Hanover and Green Streets and is diagonally across from the Town Hall. It is a relatively level parcel used for both active and passive recreation. The northwest portion includes a pond surrounded in part by a stone dust path, a monument area, and benches. The rest of the area is dominated by a multi-purpose field with a ball infield and backstop at one end. A second monument is located adjacent to the infield and the whole park is surrounded by shade trees. The pond is used for fishing, model boat sailing, ice-skating and passive enjoyment. The field is heavily used for softball, field sports, fairs and festivals. Parking is informal in the level grass areas at the edge of the site and abutting the streets. There are no buildings and no plumbing on site. From time to time a portable toilet is there which has not been handicapped accessible; no toilet is there at the present time.

Transition Plan:

There is adequate space on High Road close to the stone dust path to accommodate a vehicle with a wheelchair lift space beside it. This change could happen immediately with signage at the direction of the Board of Selectmen. Whenever events provide temporary portable toilets, it should be required that at least one be wheelchair accessible. Braille translations of the historical and commemorative markers could be installed.

Responsible Board: Board of Selectmen

2. Lower Green/Old Schoolhouse, High Road

Located at the southwest corner of High Road, a state highway, and Newman Road, this site was originally a common pasture for livestock, and is the oldest town-owned space. An unnamed gravel town road passes around the rear of the property. It is used for both passive and active recreational purposes and includes an historic one-room schoolhouse, monument to the first settlers, open shaded areas, and an open field used informally for active recreation and occasionally for festivals. Parking is informal in the level grassed areas adjacent to the roads surrounding the site. The one-story schoolhouse has no plumbing and is not handicapped accessible. There are no toilet facilities and no drinking fountains.

Transition Plan:

One handicapped parking space should be designated between the unnamed gravel road and the schoolhouse. The building itself could probably be made handicapped accessible by installing a proper ramp at the rear door which has a width of 36 inches. The Green itself is nearly level and accommodates wheelchairs at the present time.

Responsible Board: Board of Selectmen

3. Plum Island Center Beach

Located on the ocean at the junction of Northern and Southern Boulevards and Plum Island Turnpike, this beach has suffered severe recent erosion, threatening to cut the center of Plum Island in two. Plans to re-nourish the beach are currently underway by the Conservation Commission, the State DEP, and the Army Corps of Engineers. The ultimate beach configuration and future public access are unknown at this time. At this time there are 14 parking spaces on a paved surface, with one of them designated as handicapped, but without properly painted markings. There are currently 8 portable toilets, none handicapped accessible. The future presence of portable toilets at this location is unclear at this time due to financial restraints. Access to the beach is presently a sharp drop-off, and the future access configuration is unclear.

Transition Plan:

Until plans have been finalized regarding the stability and accessibility of the beach, it is not feasible to make transitional plans.

Responsible Board: Board of Selectmen

4. Town Boat Ramp, High Road at Parker River

This facility is located on the north bank of the Parker River off High Road and diagonally across from the Lower Green. It is open only to Newbury residents with sticker permits. The site consists of a paved boat launching ramp, dock, small harbormaster shack with space for one or two people, and a sloping gravel parking lot. In addition there is a small grassy area with a picnic table which is not handicapped accessible. One unpaved handicapped parking space is in close proximity to the ramp and wharf. There is no plumbing on site, but there is a single portable toilet which is handicapped accessible. The ramp from the stationary wharf to the floats does not meet handicapped requirements.

Transition Plan:

Due to the 8+ tidal rise and fall it is not possible to make the ramp to the floats handicapped accessible. The handicapped parking space has a mud surface which could be paved.

Responsible Board: Board of Selectmen/Harbormaster

5. Great Meadow, Orchard Street

This large property, off Orchard Street, is a natural area of varying topography, marsh wetland, and river frontage. Paths and parking for 2-3 cars are primitive off a rutted mud road. The purpose of the property is to preserve it in a natural state. There are no structures or plumbing present.

Transition Plan:

With some difficult modification, a short stone dust path to the base of the first hill might be possible; a small viewing platform (engineering assessment required) might also be possible. Any significant improvement to this site would compromise the purpose for which it was protected.

Responsible Board: Conservation Commission

6. Father Sears Park

This tiny park area, located at the corner of Sunset Drive and Jackson Way, was donated by the late Father Sears to the Town for residents to enjoy and reflect on the natural beauty and sunsets overlooking the scenic and expansive vista of marshes directly across Sunset Drive. The sandy and stony area slopes > 5% to the west with a ground covering of native vegetation and is not suitable for wheel chairs. There are no paths, fountains, parking, or sanitary facilities. Access is by foot from either Sunset Drive or Jackson Way. A memorial sign, two small stone benches, and a rustic arbor are present. Wild birds can be viewed on the flowering vegetation and the marshes adding to the peaceful ambience.

Transition Plan:

The park is maintained by a volunteer committee supported by donations. Plans include improving the native vegetation as donations allow.

Responsible Board: Board of Selectmen; Father Sears Park Committee

7. Central Street Recreation Area

This property on Central Street was acquired by the Town a few years ago for both active and passive recreation. The site is currently partially developed. At this time 4 soccer fields and a large, level, gravel parking area have been established. No handicapped parking spaces have been specifically designated. There are no plumbing or toilet facilities at this time.

Transition Plan:

There are proposed plans for restrooms, connecting walkways, and water fountain facilities which will all be ADA compliant. It is possible at this time to establish an appropriate number of designated handicapped parking places. It may not be physically possible to make access to passive recreation in the natural or environmentally sensitive areas fully ADA compliant.

Responsible Board: Board of Selectmen; Recreation Committee

8. Playground and Little League Baseball Field, Lunt Street:

An important and heavily used active recreational facility, this property, off Lunt Street, contains Little League baseball fields, and a small playground. It is adjacent to the Town library where handicapped accessible restrooms and drinking fountains are available when the library is open. A parking lot is shared by the library and the recreational facility and contains 46 spaces, 3 of which are handicapped accessible. Both play areas and parking lot are level and handicapped accessible.

Transition Plan:

This site is compliant.

Responsible Department: Board of Selectmen; Little League

Facility Inventory #1

LOCATION: UPPER GREEN

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities		Park benches for seating, but no picnic tables
Trails		Stone dust walking path along the edge of the pond
Swimming Facilities		N/A
Play Areas (tot lots)		N/A
Game Areas: Ballfield	Backstop	No spectator seating
Boat Docks		N/A
Fishing Facilities		N/A
Programming		N/A
Services and Technical Assistance		N/A

PARKING

Note: Informal parking is at edge of Green along the street, which is at same level as Green and has no curbs. Parking indications are not designated for anyone.

<i>Specification for Accessible Spaces</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
Accessible Space Located closest to accessible entrance		X	Possible if space were designated
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	Same as above
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		X	Same as above
Van space – minimum of 1 van space for every accessible space, 8 ft. wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	Same as above
Sign with international symbol of accessibility at each space or pair of spaces		X	Possible
Sign minimum 5 ft, maximum 8 ft to top of sign		X	N/A
Surface evenly paved or hard-packed (no cracks)	X		
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present			N/A – street and Green are level and contiguous; no curb present
Curbcut is a minimum width of 3 ft., excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow			N/A – no curb present

RAMPS			N/A – no ramps present
--------------	--	--	------------------------

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
SITE ACCESS			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		Path of travel is not marked, but is level and ample
Disembarking area at accessible entrance	X		Same as above
Surface evenly paved or hard-packed	X		Same as above
No ponding of water	X		
PATH OF TRAVEL			
Path does not require the use of stairs	X		Area is level
Path is stable, firm, and slip resistant	X		Packed ground level; stone dust path around the pond
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50)	X		
Continuous common surface, no changes in level greater than ½ inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	X		
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	X		
Curb on the pathway must have curb cuts at drives, parking, and drop-offs			N/A – no curbs
ENTRANCES			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and <i>not</i> be the service entrance	X		Grassy green area is level and can be utilized by wheelchairs
Building entrance requirements			N/A – no buildings on site
STAIRS AND DOORS			
Stair and door requirements			N/A – no stairs or doors on site

SWIMMING POOLS			N/A
SHOWER ROOMS			N/A
PICNICKING			N/A
FLOORS, DRINKING FOUNTAINS, TELEPHONES			N/A
SIGNS, SIGNALS, AND SWITCHES			N/A

RESTROOMS		N/A – nearest toilet and water fountain are across the street in Town Hall, which has a ramp for accessibility. Single portable toilet on site during ball season.
------------------	--	--

NOTE:

Facility Inventory #2 **LOCATION: LOWER GREEN**

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities		N/A
Trails		N/A
Swimming Facilities		N/A
Play Areas (tot lots)		N/A
Game Areas		N/A
Boat Docks		N/A
Fishing Facilities		N/A
Programming		N/A
Services and Technical Assistance		N/A

PARKING

Note: Informal unmarked parking is on grassy area around Green and on gravel road to west of Green – level, hard-packed at same level as street.

<i>Specification for Accessible Spaces</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance		X	Would be possible if accessible space were designated
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	Same as above
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle.		X	Same as above
Van space – minimum of 1 van space for every accessible space, 8 ft. wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	Same as above
Sign with international symbol of accessibility at each space or pair of spaces		X	Same as above
Sign minimum 5 ft, maximum 8 ft to top of sign		X	N/A
Surface evenly paved or hard-packed (no cracks)	X		
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present			N/A – street and Green are level and contiguous; no curb present
Curbcut is a minimum width of 3 ft., excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow			N/A – no curb present

RAMPS			N/A – no ramps present
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SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
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<i>Specification</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
----------------------	------------	-----------	----------------------------------

SITE ACCESS			
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Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		Path of travel is not marked, but is level and ample
--	---	--	--

Disembarking area at accessible entrance	X		Same as above
--	---	--	---------------

Surface evenly paved or hard-packed	X		Same as above
-------------------------------------	---	--	---------------

No ponding of water	X		
---------------------	---	--	--

PATH OF TRAVEL			
-----------------------	--	--	--

Path does not require the use of stairs	X		Area is level
---	---	--	---------------

Path is stable, firm, and slip resistant	X		
--	---	--	--

3 ft wide minimum	X		
-------------------	---	--	--

Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50)	X		
--	---	--	--

Continuous common surface, no changes in level greater than ½ inch	X		
--	---	--	--

Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	X		
--	---	--	--

Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	X		
--	---	--	--

Curb on the pathway must have curb cuts at drives, parking, and drop-offs			N/A – no curbs
---	--	--	----------------

ENTRANCES			
------------------	--	--	--

Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and <i>not</i> be the service entrance	X		Grassy area is level across Green and can be utilized by wheelchairs
---	---	--	--

Building entrance requirements			One room historic school house has 3 steps and no handicapped access. Has wooden doors, old locks, and handles.
--------------------------------	--	--	---

STAIRS AND DOORS			
-------------------------	--	--	--

Stair and door requirements			Stairs and doors at historic school house do not meet specifications
-----------------------------	--	--	--

SWIMMING POOLS			N/A
-----------------------	--	--	-----

SHOWER ROOMS			N/A
---------------------	--	--	-----

PICNICKING			N/A
-------------------	--	--	-----

FLOORS, DRINKING FOUNTAINS, TELEPHONES			N/A
---	--	--	-----

SIGNS, SIGNALS, AND SWITCHES			N/A
RESTROOMS			N/A

NOTE:

Facility Inventory #3 **LOCATION: PLUM ISLAND BEACH ACCESS**

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities		N/A
Trails		N/A
Swimming Facilities	Beaches	Current and recent severe erosion has significantly affected this area for public use and access. Plans to restore beach by Town, Army Corps of Engineers, and Mass. DEP are underway. Ultimate configuration and access are unknown at this time.
Play Areas (tot lots)		N/A
Game Areas		N/A
Boat Docks		N/A
Fishing Facilities		N/A
Programming		N/A
Services and Technical Assistance		N/A

PARKING

Note: 14 parking spaces for Newbury residents are provided, with one accessible space, which is not properly configured.

<i>Specification for Accessible Spaces</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance	X		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle.		X	No aisle marking
Van space – minimum of 1 van space for every accessible space, 8 ft. wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	No aisle marking
Sign with international symbol of accessibility at each space or pair of spaces	X		
Sign minimum 5 ft, maximum 8 ft to top of sign	X		
Surface evenly paved or hard-packed (no cracks)	X		
Surface slope less than 1:20, 5%		X	Parking area is on back side of dune and slopes
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk			N/A – no curb present

(curb) is present			
Curbside is a minimum width of 3 ft., excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow			N/A – no curb present

RAMPS			N/A – no ramps present
--------------	--	--	------------------------

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
SITE ACCESS			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed	X		
No ponding of water	X		
PATH OF TRAVEL			Severe beach erosion has adversely affected the path of travel – accessibility is not possible at this time
Curb on the pathway must have curb cuts at drives, parking, and drop-offs			N/A – no curbs
ENTRANCES			N/A – no building entrances
STAIRS AND DOORS			N/A – no stairs and doors

SWIMMING POOLS			N/A
SHOWER ROOMS			N/A
PICNICKING			N/A
FLOORS, DRINKING FOUNTAINS, TELEPHONES			N/A
SIGNS, SIGNALS, AND SWITCHES			N/A
RESTROOMS		X	8 portable toilets provided during the summer season, none accessible

NOTE:

Facility Inventory #4

LOCATION: TOWN BOAT RAMP

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities	1 table; no grills or picnic shelters	Located adj. to access. path: No
		Access to Open Spaces: No
		Back and Arm Rests: No
		Adequate Number: No
Trails		N/A
Swimming Facilities		N/A
Play Areas (tot lots)		N/A
Game Areas		N/A
Boat Docks	Access Routes	Located adj. to access. paths: Yes
		Handrails: No
Fishing Facilities		N/A
Programming		N/A
Services and Technical Assistance		N/A

PARKING

Note: 25 parking spaces provided, with one accessible space.

<i>Specification for Accessible Spaces</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance	X		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	X		
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle.	X		
Van space – minimum of 1 van space for every accessible space, 8 ft. wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		The single accessible space can accommodate a van
Sign with international symbol of accessibility at each space or pair of spaces	X		
Sign minimum 5 ft, maximum 8 ft to top of sign	X		
Surface evenly paved or hard-packed (no cracks)	X		Dirt surface – hard-packed and level
Surface slope less than 1:20, 5%	X		
Curbcut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present			N/A – no curb present
Curbcut is a minimum width of 3 ft., excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and			N/A – no curb present

textured or painted yellow			
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RAMPS			Due to the 8 ft +/- tidal rise and fall, it is not possible to make the ramp to the floats accessible
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SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
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<i>Specification</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
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SITE ACCESS			
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Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
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Disembarking area at accessible entrance	X		
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Surface evenly paved or hard-packed	X		
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No ponding of water	X		
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PATH OF TRAVEL			
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Path does not require the use of stairs	X		
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Path is stable, firm, and slip resistant	X		
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3 ft wide minimum	X		
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Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50)	X		
--	---	--	--

Continuous common surface, no changes in level greater than ½ inch	X		
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Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	X		
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Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	X		
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Curb on the pathway must have curb cuts at drives, parking, and drop-offs			N/A – no curbs
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ENTRANCES			
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Building entrance requirements			N/A – no building entrances
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STAIRS AND DOORS			
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Stair and door requirements			N/A – no stairs and doors
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SWIMMING POOLS			N/A
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SHOWER ROOMS			N/A
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PICNICKING			
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Minimum of 5% of the tables must be accessible		X	There is 1 standard picnic table
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For tables without toe clearance, the knee space must be at least 28" high, 30" wide and 24" deep		X	
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Top of table no higher than 32" above		X	
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ground			
Surface of the clear ground space under and around the table must be stable, firm and slip-resistant, and evenly graded with a maximum slope of 2% in all directions		X	
Accessible tables, grills and fire rings must have clear ground space of a least 36" around the perimeter		X	
FLOORS, DRINKING FOUNTAINS, TELEPHONES			N/A
SIGNS, SIGNALS, AND SWITCHES			N/A
RESTROOMS			There is one portable toilet, which is wheelchair accessible and so marked.

NOTE:

Facility Inventory #5 **LOCATION: GREAT MEADOW**

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities		N/A
Trails		Surface Material: Natural ground cover and hilly
		Dimensions: Many acres
		Rails: No
		Signage for visually impaired: No
Swimming Facilities		N/A
Play Areas (tot lots)		N/A
Game Areas		N/A
Boat Docks		N/A
Fishing Facilities		N/A
Programming		N/A
Services and Technical Assistance		N/A

PARKING			
Note: 2-3 parking spaces provided			
<i>Specification for Accessible Spaces</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance		X	
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle.		X	
Van space – minimum of 1 van space for every accessible space, 8 ft. wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	Muddy, rutted surface
Surface slope less than 1:20, 5%	X		
Curbscut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present			N/A – no curb present
Curbscut is a minimum width of 3 ft., excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and			N/A – no curb present

textured or painted yellow			
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RAMPS			N/A
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SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
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<i>Specification</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
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SITE ACCESS			
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Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	
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Disembarking area at accessible entrance		X	
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Surface evenly paved or hard-packed		X	
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No ponding of water		X	
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PATH OF TRAVEL			
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Path does not require the use of stairs	X		
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Path is stable, firm, and slip resistant		X	
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3 ft wide minimum	X		
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Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50)	X		
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Continuous common surface, no changes in level greater than ½ inch		X	
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Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	X		
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Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	X		
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Curb on the pathway must have curb cuts at drives, parking, and drop-offs			N/A – no curbs
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ENTRANCES			
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Building entrance requirements			N/A – no building
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STAIRS AND DOORS			
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Stair and door requirements			N/A – no stairs and doors
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SWIMMING POOLS			N/A
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SHOWER ROOMS			N/A
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PICNICKING			N/A
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FLOORS, DRINKING FOUNTAINS, TELEPHONES			N/A
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SIGNS, SIGNALS, AND SWITCHES			N/A
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RESTROOMS			N/A
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NOTE: This is a primitive, natural area of rolling hills, forests, and meadows with no improvements of any sort – no structures, water, or sanitary facilities.

Facility Inventory #6		LOCATION: FATHER SEARS PARK
ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities		N/A
Trails/Walking surface	Area intended for viewing of wildlife and scenic landscape (marsh views)	Surface Material: Natural cover
		Dimensions: N/A
		Rails: None
		Signage (for visually impaired): None
Swimming Facilities		N/A
Play Areas (tot lots)		N/A
Game Areas		N/A
Boat Docks		N/A
Fishing Facilities		N/A
Programming		N/A
Services and Technical Assistance		N/A

PARKING			
Note: No parking provided; site is a tiny corner lot, walk-on only, located at intersection of Sunset Blvd. and Jackson Way			
<i>Specification for Accessible Spaces</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
Parking Space Requirements			N/A

RAMPS			
			N/A

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
SITE ACCESS			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance			N/A – no disembarking area
Disembarking area at accessible entrance			N/A – no disembarking area
Surface evenly paved or hard-packed			N/A
No ponding of water			N/A
PATH OF TRAVEL			
Path does not require the use of stairs		X	
Path is stable, firm, and slip resistant		X	
3 ft wide minimum		X	
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50)		X	Maximum slope > 5%
Continuous common surface, no changes in level greater than ½ inch		X	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane			N/A

Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"			N/A
Curb on the pathway must have curb cuts at drives, parking, and drop-offs			N/A
ENTRANCES			
Building entrance requirements			N/A – no building entrances
STAIRS AND DOORS			
Stair and door requirements			N/A – no stairs and doors
SWIMMING POOLS			N/A
SHOWER ROOMS			N/A
PICNICKING			N/A
FLOORS, DRINKING FOUNTAINS, TELEPHONES			N/A
SIGNS, SIGNALS, AND SWITCHES			N/A
RESTROOMS			N/A

NOTE: This area is a tiny corner lot on Sunset Boulevard facing the marsh. It was left to the Town by the late Father Sears to be used for reflection and viewing of the marsh and sunset. It has sloping, natural vegetation and ground cover of sand, gravel, rocks, 2 small stone benches, and a rustic arbor seat.

Facility Inventory #7 **LOCATION: CENTRAL ST. RECREATION AREA**

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities		N/A
Trails		Surface Material: Natural, primitive
		Dimensions: 18"-24" path
		Rails: No
		Signage (for visually impaired): No
Swimming Facilities		N/A
Play Areas (tot lots)		N/A
Game Areas: Soccer	Access Routes	Located adj. to access. paths: yes, hard gravel Berm cuts onto courts: N/A, no berms
	Equip.: Soccer Nets	Spectator seating: N/A
Boat Docks		N/A
Fishing Facilities		N/A
Programming		N/A
Services and Technical Assistance		N/A

PARKING			
Note: 101-150 parking spaces provided; required number of accessible spaces not provided			
<i>Specification for Accessible Spaces</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance		X	Accessible spaces could be designated and marked
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	Accessible spaces could be designated and marked
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle.		X	Compliant space possible
Van space – minimum of 1 van space for every accessible space, 8 ft. wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	Compliant space possible
Sign with international symbol of accessibility at each space or pair of spaces		X	Could be provided
Sign minimum 5 ft, maximum 8 ft to top of sign		X	N/A
Surface evenly paved or hard-packed (no cracks)	X		Hard-packed gravel surface contiguous to grass playing area
Surface slope less than 1:20, 5%	X		
Curbscut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present			N/A – no curb present

RAMPS			N/A – no ramps
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
SITE ACCESS			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	Possible – spaces need to be marked and signage provided
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed	X		
No ponding of water	X		
PATH OF TRAVEL			
Path does not require the use of stairs	X		
Path is stable, firm, and slip resistant	X		
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50)	X		
Continuous common surface, no changes in level greater than ½ inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	X		
Objects protruding more than 4” from the wall must be within 27” of the ground, or higher than 80”	X		
Curb on the pathway must have curb cuts at drives, parking, and drop-offs			N/A – no curbs
ENTRANCES			
Building entrance requirements			N/A – no building on site
STAIRS AND DOORS			
Stair and door requirements			N/A – no stairs and doors
SWIMMING POOLS			N/A
SHOWER ROOMS			N/A
PICNICKING			N/A
FLOORS, DRINKING FOUNTAINS, TELEPHONES			N/A
SIGNS, SIGNALS, AND SWITCHES			N/A
RESTROOMS			There is one portable toilet, which is wheelchair accessible and so marked.

NOTE: This area is only partially developed. It contains four soccer fields with nets. Plans are proposed for further development; any new facilities will be compliant. No water or sanitary facilities are present. Triton Regional High School has created a narrow, primitive path through the natural, undeveloped area at the lower end of the site near the river frontage. Vegetation is approximately 5’ high and dense.

Facility Inventory #8

LOCATION: LUNT ST. BASEBALL FIELD/PLAYGROUND

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities		N/A
Trails		
Swimming Facilities		N/A
Play Areas (tot lots)	All Play Equip, i.e. swings, slides	Same experience provided to all: Yes
	Access Routes	Located adj. to access. paths: Yes Enough space betw. equip. for wheelchair: Yes
Game Areas: Ballfield – Little League	Access Routes	Located adj. to access. paths: Yes Berm cuts onto courts: N/A, no berms
	Equip.: Diamonds, backstop, etc.	Spectator seating: N/A
Boat Docks		N/A
Fishing Facilities		N/A
Programming		N/A
Services and Technical Assistance		N/A

PARKING			
Note: 46 parking spaces provided; 3 accessible spaces provided			
<i>Specification for Accessible Spaces</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance	X		Relative to Town Library, which is adjacent to ballfield; field shares parking with Library
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	X		
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle.	X		
Van space – minimum of 1 van space for every accessible space, 8 ft. wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		
Sign with international symbol of accessibility at each space or pair of spaces	X		
Sign minimum 5 ft, maximum 8 ft to top of sign	X		
Surface evenly paved or hard-packed (no cracks)	X		Asphalt surface
Surface slope less than 1:20, 5%	X		

Curbscut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	X		
Curbscut is a minimum width of 3 ft., excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow	X		

RAMPS			N/A – no ramps
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SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
SITE ACCESS			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		
No ponding of water	X		
PATH OF TRAVEL			
Path does not require the use of stairs	X		
Path is stable, firm, and slip resistant	X		
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50)	X		
Continuous common surface, no changes in level greater than ½ inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	X		
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	X		
Curbs on the pathway must have curbs cuts at drives, parking, and drop-offs	X		
ENTRANCES			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and <i>not</i> be the service entrance		X	Access to field for players is not accessible. Gated entry to outfield is wheelchair accessible
Signs at non-accessible entrance(s) indicate direction to accessible entrance		X	
Other entrance requirements			N/A

STAIRS AND DOORS		
Stair and door requirements		N/A – no stairs and doors
SWIMMING POOLS		
		N/A
SHOWER ROOMS		
		N/A
PICNICKING		
		N/A
FLOORS, DRINKING FOUNTAINS, TELEPHONES		
		Fountain in adjacent Town Library is available and is ADA compliant; other requirements N/A
SIGNS, SIGNALS, AND SWITCHES		
		N/A
RESTROOMS		
		Restroom in adjacent Town Library is available and is ADA compliant

NOTE:

Appendix D – Trail Resources

**Internet and Printed Resources:
Trails and Other Public Access Sites and Organizations
in Newbury and Essex County**

Most of these websites and books contain locations, directions, and descriptions with maps of trails (some downloadable from websites).

NEWBURY

<http://www.historicnewengland.org/visit/homes/little.htm>
Spencer-Peirce-Little Farm

http://www.thetrustees.org/pages/347_old_town_hill.cfm
Old Town Hill, The Trustees of Reservations

ESSEX COUNTY

<http://www.essexheritage.org/visiting/index.shtml>
Essex National Heritage Area

<http://www.8tb.org/>
Eight Towns and the Bay

<http://coastaltrails.org/xoops/>
Coastal Trails Coalition: guides

<http://www.ecga.org>
The Essex County Greenbelt Association

STATE

http://www.mass.gov/dfwele/dfw/recreation/recreation_home.htm
M Burns WMA, William Forward WMA, Crane Pond WMA

<http://www.mass.gov/czm/coastguide/index.htm>
Massachusetts Coastal Guide to Boston and the North Shore
On line version

http://www.massaudubon.org/Nature_Connection/Sanctuaries/Joppa_Flats/index.php
Joppa Flats Education Center & Wildlife Sanctuary

<http://www.baycircuit.org/>
Bay Circuit Trail

FEDERAL

<http://www.fws.gov/northeast/parkerriver/>

Parker River National Wildlife Refuge

<http://www.parkerriver.org/index.htm>

Friends of Parker River NWR

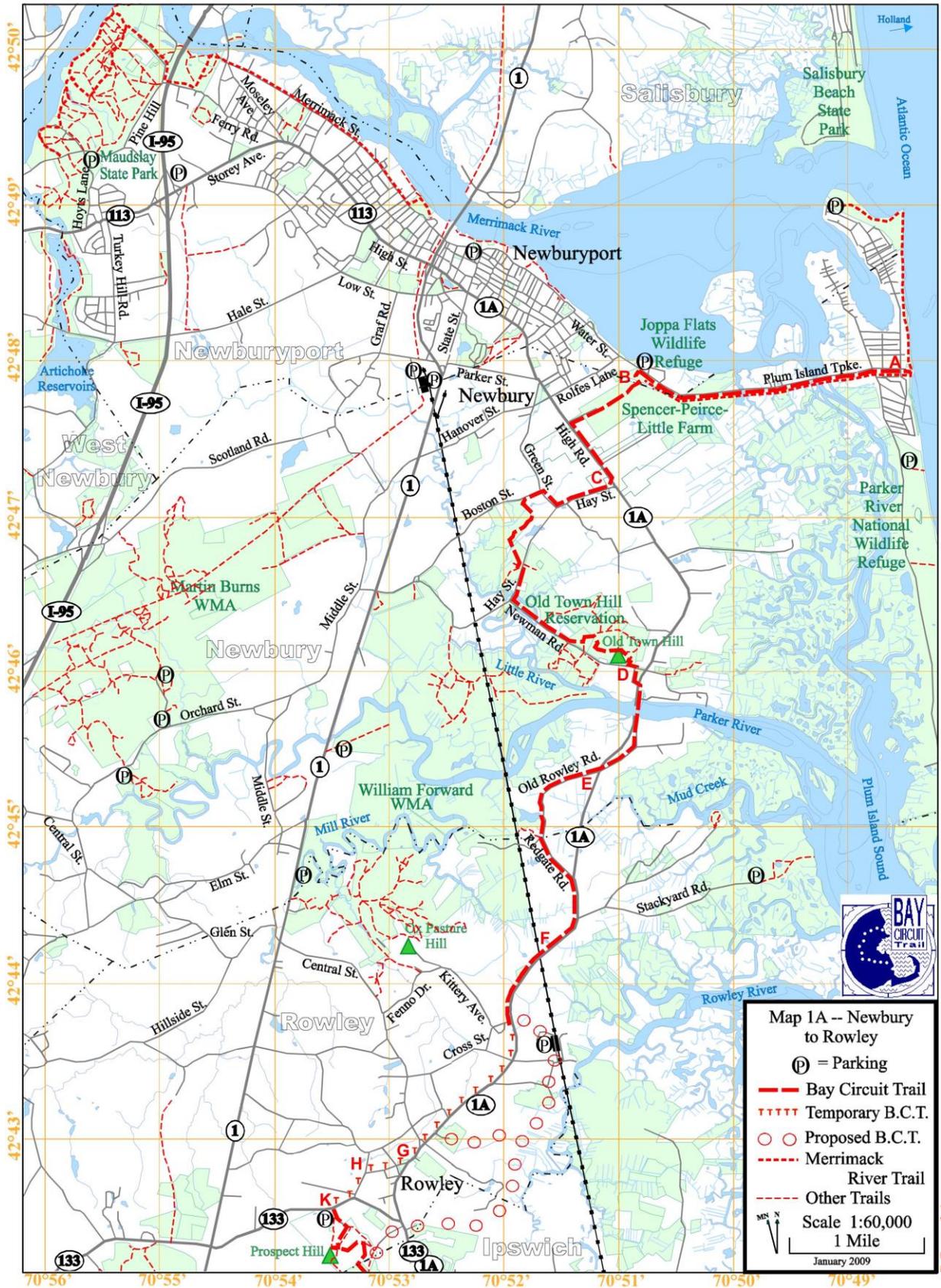
BOOKS

<http://amcstore.outdoors.org/amcstore/>

Appalachian Mountain Club: *Nature Walks along the Seacoast*

Right Here: 52 Places to Visit North of Boston; Liz Nelson

Along the Coast of Essex County: The Junior League of Boston, Inc.[out of print]



Welcome to Newbury

A Resource Guide To Walking Trails

There are many areas in Newbury that offer opportunities for walking, be it in upland woods, beside the rivers or along the seashore.

The trails offer a variety of terrain, from an easy afternoon stroll to a more active hike through dense and sometimes wet ground.

This introductory sheet shows each area location on the map on the reverse. Each area is listed here with street location, a brief description and web site information. Many of the web sites provide more detailed information about the site, the organization, descriptions of the trails and maps to be print out.

Sites own by the Town of Newbury do not currently have separate information available

A. *The Bay Circuit Trail.*

This is not a location but rather a trail running through Newbury. The off road sections are primarily at Old Town Hill, Newman Rd/Hay St area –see item I. .
www.baycircuit.org

B. *Central St. Playing Fields*

There are areas to walk and parking. No dogs on playing field area. Located on Central St, just east of the Parker River.

C. *Coffin's Island*

Small island on the edge of the Common Pasture. ½ mile trail. Good birding. Parking on street. Off Scotland Rd, east of State Police facility.

D. *Crane Pond WMA. ***

Area open to hunting. Rugged terrain. Wet. Off Forest St. in Byfield.

E. *Great Meadow Farm.*

Open field and woodland by Parker River. Limited parking. Off Orchard St., ½ mile from Central St.; look for sign board.

F. *Martin Burns WMA ***

Area open to hunting. Large area woodland and rough open areas. Gravel loop road and many side trails. Off Orchard Street, 1+ mile from Central St.

G. *Parker River NWR*

Internationally known wildlife refuge. Road and parking areas. Several trails. Most beach access closed April to August Entry Fee. Check web site for status.
www.fws.gov/northeast/parkerriver

H. *Plum Island Beach*

Town beach. Off-season best time. No dogs in summer. Parking difficult. (Best by bike via Plum Island Tpk ?)

I. *Old Town Hill*

Large area with several miles of trails. Best views in town from top. Trail along Little River. Off road parking. Located on Newman Rd, Hay St. and Boston Rd.
www.thetrustees.org/pages/347_old_town_hill.cfm

J. *Spenser-Pierce-Little Farm*

Farm with unique historic house, short trails, maple avenue. Some parking.

On Little's Lane, off High Rd , on the right, ¼ south of Newbury Upper Green.

www.historicnewengland.org/visit/homes/little.htm

K. *Wm. Forward WMA ** (Kent's Island)*

Area open to hunting. Large area of marsh and islands between Parker and Little rivers. Fields. Trails.

Off Boston Rd, about ½ mile from Route 1. Very limited parking

** These three areas are managed by the State for hunting. Caution is advised during hunting season –wear orange clothing, control dogs.

www.mass.gov/dfwele/dfw/recreation/recreation_home.htm

Please:

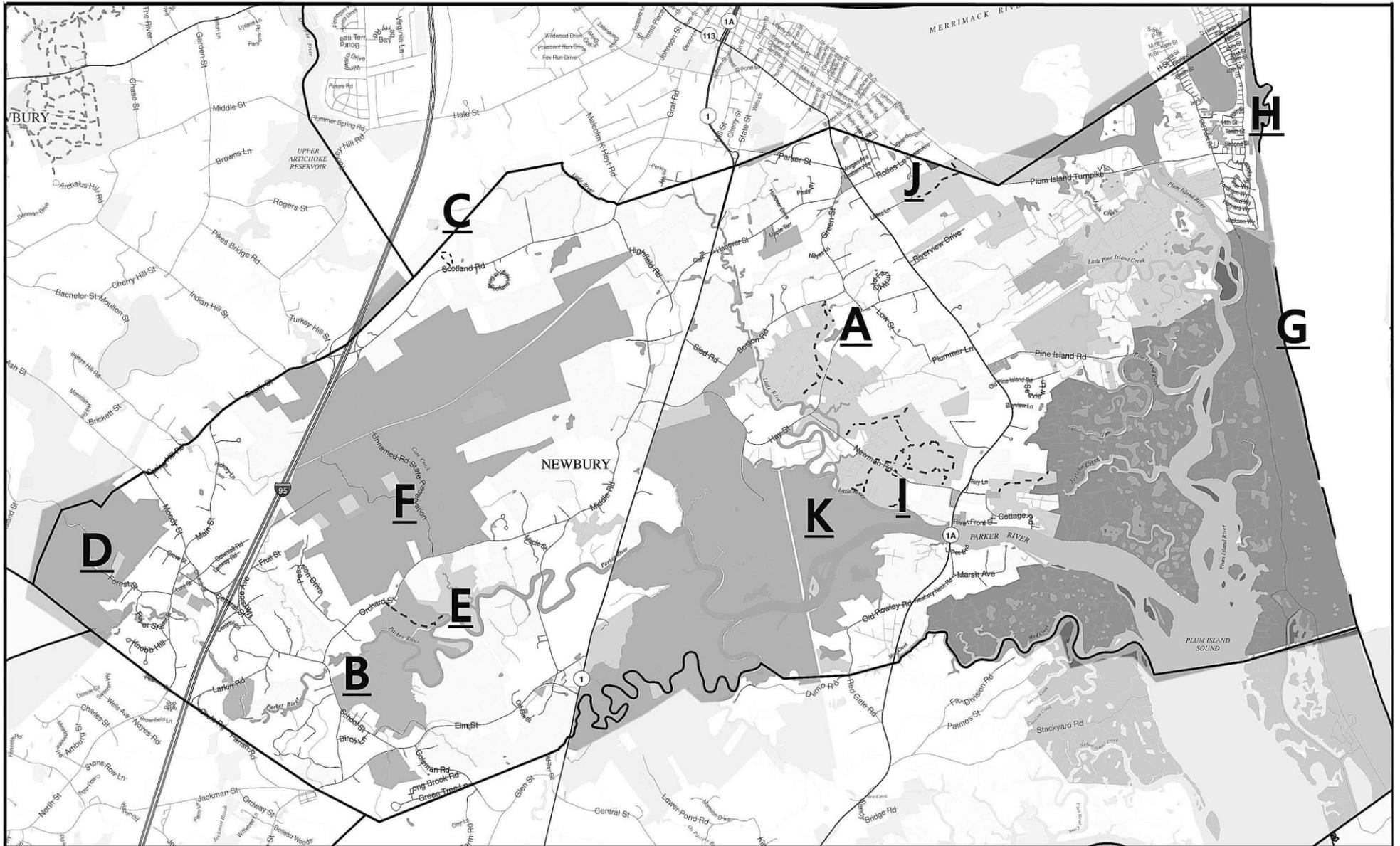
**Guard against fire.
Protect water resources.
Leave only footprints.
Take only pictures.**

THANK YOU !

© Newbury Open Space Committee 2009

- A. Bay Circuit Trail B. Central St. Playing Fields C. Coffins Island D. Crane Pond WMA E. Great Meadow
F. Martin Burns WMA G. Parker River NWR H. Plum Island Beach I. Old Town Hill J. Spenser-Pierce-Little Farm
K. Wm. Forward WMA (Kent's Island)

For more information about each area see: www.townofnewbury.org or the web site from the list on the other side



Newbury Walking Trail Locations