



**TOWN
OF
WINCHESTER**

PROFILES FOR PLANNING

Revision 01
July 15, 2005

Prepared by:
John Connery, Planning Consultant
and
Winchester Department of Engineering and Planning

for
Winchester Planning Board

1.0 Introduction

1.1 Overview

The following report is intended to provide a brief overview of the people, places, infrastructure, and municipal services that combine to create the Winchester of today. It is intended to assist the Planning Board and any member of Town Government to more readily attain information or to determine where new information may need to be assembled.

The document is divided into four broad categories as follows:

- Geographic and Demographic Profile
- The Natural and Built Environments
- Municipal Infrastructure
- Municipal Capacity

For each general category, a number of representative examples of the information surveyed is outlined, followed by a listing of readily available sources. Examples of extant maps and charts are included as part of each section. It should be noted that said maps can in most instances be readily reproduced at various scales, and in some instances integrated to generate additional maps. The most important survey finding regarding graphic representation of information is that the Town has a considerable Geographic Information System (GIS) capacity both in terms of hardware and staff capacity. Linking of said system to the assessor's data base, in terms of the underlying parcel base map is a current capability, but linking the full assessors data base (field card per lot) by parcel block and lot number has not yet been achieved, but is anticipated in the next three months. Completion of said task would allow the community to generate detailed current land use maps that could be linked to a variety of infrastructure and environmental data bases, essentially generating a local capacity to prepare detailed and up to the moment land use analysis maps that include fiscal, building condition, historic, and special conditions representations.

1.2 Summary Comments

Most likely public officials will view this summary profile from the perspective of his or her departmental needs or concerns and that is certainly an appropriate response. However, we feel that the Planning Board has a broader responsibility that includes the need to understand how the existence of local data sources and maps comes together, or not as the case may, to assist in community development analysis and decisions in a timely matter. We find that considerable information is readily available for local decision makers and with the advent of the internet, not only has more information become readily available but the ability to undertake comparisons of community data and conditions with other communities or the region is now a reality. However, what is lacking is the ability to generate and integrate information from various internal departments in an updated and timely manner. The issue is not one of staff capacity but one that relates to a clear assignment of community development data management responsibilities.

In terms of a depository of data and map generation capacity it is clear that the Winchester Engineering Department is the logical repository of said capacity and responsibility. However, in recent years due to level of staffing issues its ability to function as a central information and graphic information provider has been minimized. We find that an integrated, efficient, and effective data management system requires the Engineering Department to play a central role in day-to-day collection, updating and distribution of community development data.

Finally, during the development of this summary report it became most obvious that Winchester is essentially a built-out community in primarily an infill and maintenance mode. Unfortunately, the attainment of this status does not come with a reward but with significant challenges. Infrastructure and services will not only need to be maintained and replaced but in a manner that recognizes the overall land use characteristics that many residents find desirable. For example, schools, recreation and athletic facilities will reach obsolescence, and in a community without large tracks of open land, except for public open space and conservation areas, it will be a challenge to reconcile the needs of both land use interests. The same can be said of affordable housing. The demand will not abate, nor will land become readily available. Most likely the Town will need to work within the framework of the existing built environment to find ways to accommodate new affordable housing objectives. To meet said challenges and many others, updated, integrated, and readily available information about the people, built environment, infrastructure, and municipal capacity will be necessary on a timely basis.

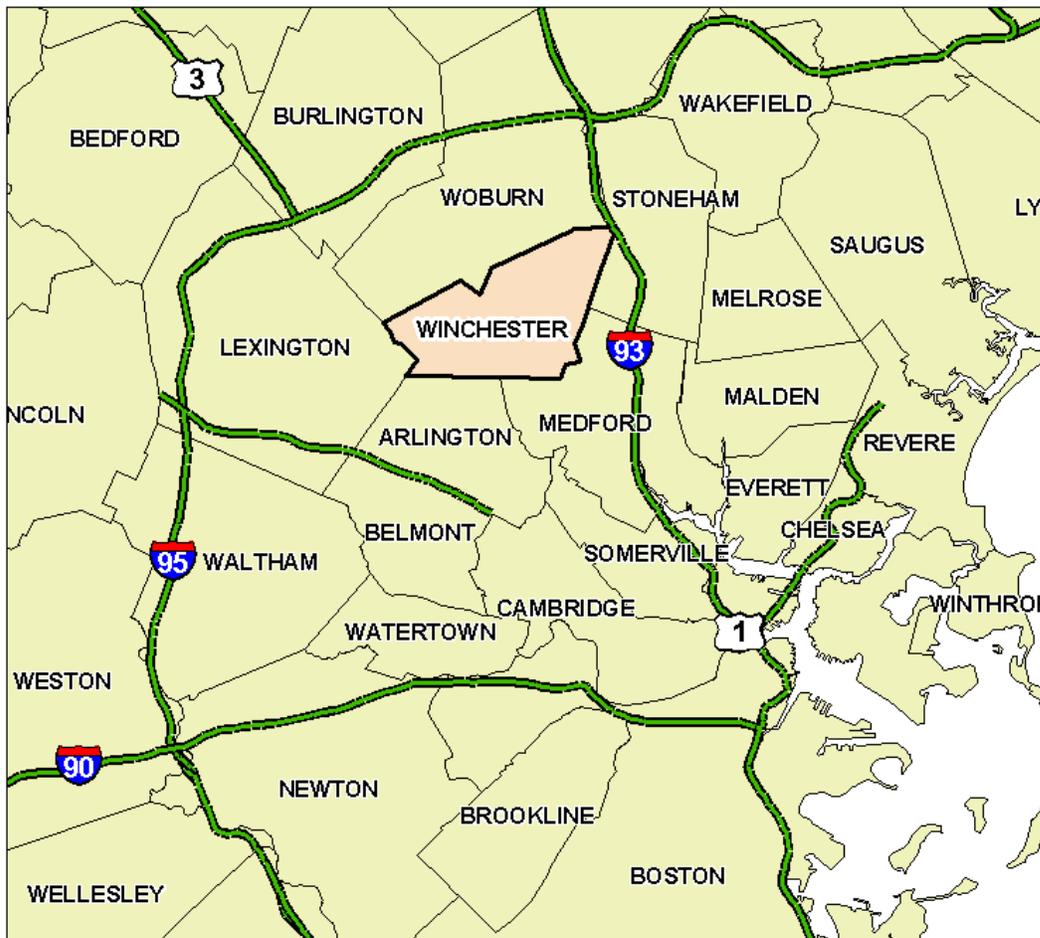
2.0 Geographic and Demographic Profile

2.1 Geography

The Town of Winchester is a primarily residential town located approximately eight miles northwest of Boston. The Town covers an area of approximately 6.3 square miles; it is bordered by Woburn to the north, Stoneham and Medford to the east, Arlington and Medford to the south, and Lexington to the west, as shown in Figure 2-1. The Town of Winchester is governed by a Board of Selectman, Town Manager, and representative Town Meeting form of government.

State Route 38 and US Route 3 run through Town in a north-south direction, as does the Boston-Maine rail line, which services both commuter rail and commercial freight lines. An approximately 300 to 400-foot section of Interstate 93 passes through the far northeastern portion of town, as well; there are no access points to the interstate in this section.

Figure 2-1: Town Locus Map



2.2 Demographics

Winchester's population is overwhelmingly white, with income levels placing at the 95th income percentile in the Commonwealth and 98th percentile in the nation.

The average resident of Winchester is 41.1 years old, as compared to the state average of 35 years old.

The education attainment level of Winchester residents is in the upper 5% of the Commonwealth and upper 98% of the nation.

Winchester is a community of homeowners with more than 80% of the households owning a home, considerably more than the state average of 59%.

Winchester's demographic character has been relatively unchanged during the past 50 years and is anticipated to remain stable in all aspects for the foreseeable future.

Figure 2-2 provides a summary of the 2000 US Census Block data for the Town of Winchester.

Demographic Sampling

Population:

2000: 20,810

2025 Estimate: 21,300

Race:

White 93.1%

Asian 4.6%

African American 0.07%

Others: 2.3%

Median Age:

41.1 years

Housing Stock:

Total Household Units: 7,910

Average household Size: 2.65 (State average 2.78)

Average family Size: 3.13 (State average 3.21)

Homeowner vacancy rate: less than 1%

Owner occupied 80.5 % (State average 59%)

Rental occupied: 19.5%

Income:

95% percentile in Massachusetts

98% percentile in the United States

Readily Available Sources of Demographic Information

US Census

All census data and all published census tables from 1950 to 2000 are available at the Winchester Public Library and Boston Public Library. Note that in 1980 the composition of the Standard Metropolitan Area was altered, therefore long term comparison of regional data need to be reconstructed on a community by community basis.

Winchester Home Page (<http://www.winchester.us/>)

Winchester Information Links to Community Information. The Winchester Home Page provides summary tables for a wide variety of population, housing and income data. It is well presented and easily accessible.

American Factfinder (http://factfinder.census.gov/home/saff/main.html?_lang=en)

A US Census sponsors on line free service offering a very wide array of census related reports and summaries. The site also has the ability to generate regional data and comparison tables. This webpage is a comprehensive demographic resource.

Executive Office of Environmental Affairs

(http://commpres.env.state.ma.us/community/cmt_main.asp?regionID=bost®ionName=Boston+Metropolitan&communityID=344&communityName=Winchester)

On line at EOEIA Community Preservation Initiative. Community Buildout Studies providing statistical summaries and projections. This data has not been updated since 1999, but the quality of the work and associated estimates is very competent.

Executive Office of Housing and Community Development (www.mass.gov/dhcd)

On line at Massachusetts DHCD. Community profiles and summary of community facilities and transportation options.

Strategic Plan Winchester 2004 (<http://www.winchester.us/Selectmen/Strategic%20Plan.pdf>)

On line Winchester Home page. Data tables and general census information, including use of some of EOEIA build-out data referenced above.

LEGEND

2000 Census Block Data

Total Population

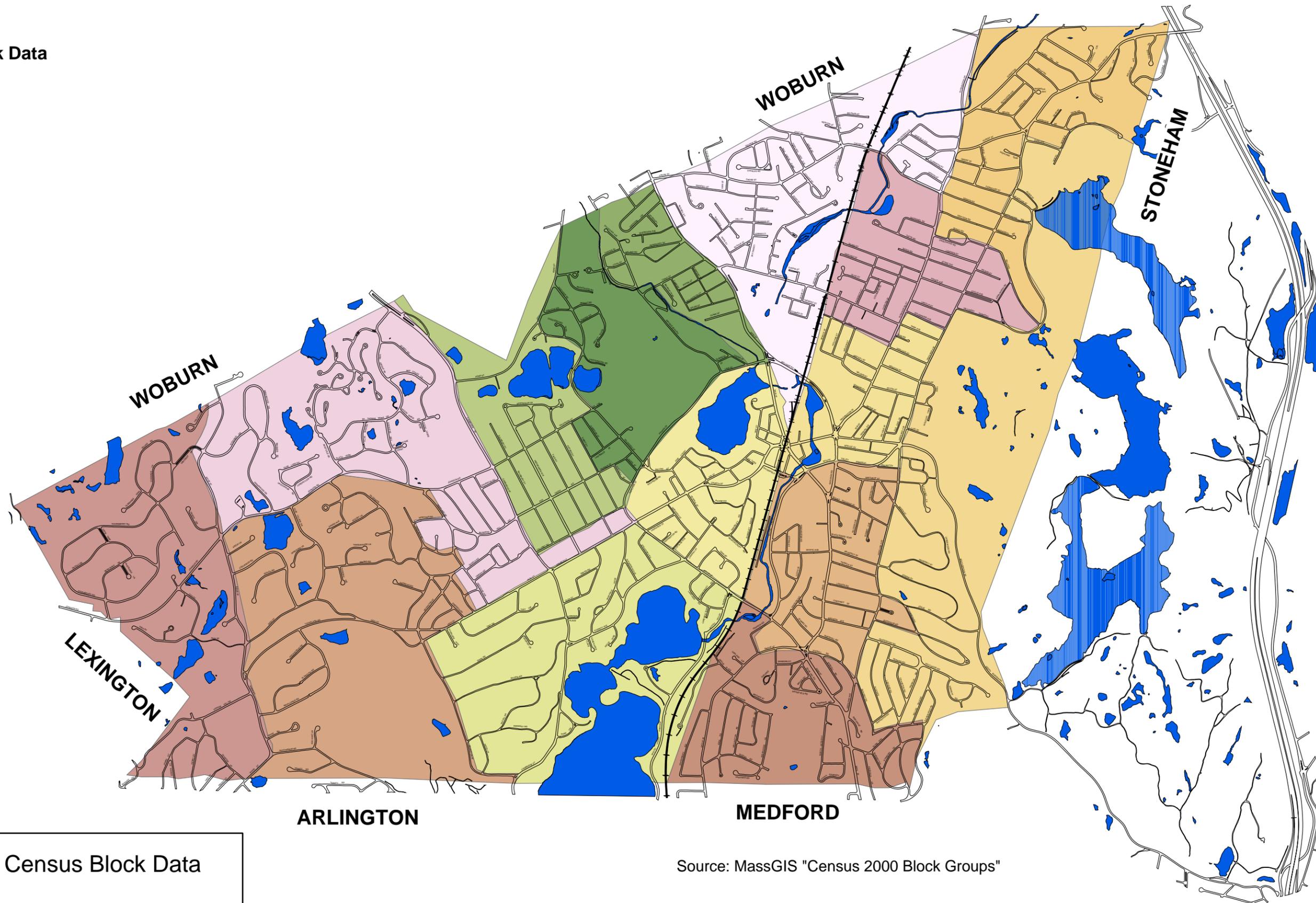
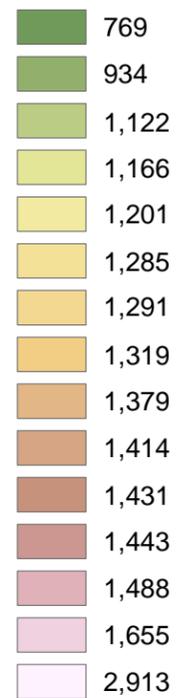


Figure 2-2: Census Block Data
June 2005

Source: MassGIS "Census 2000 Block Groups"

3.0 The Natural and Built Environments

3.1 Overview

Winchester is essentially a built out community considering that the relationship of available land and development regulations significantly limits new commercial and residential growth to very few sites. Accordingly, Winchester has moved into the maintenance and infill development phase in terms of land development. As the source materials list below indicates, Winchester is an overwhelmingly residential community. The significant industrial base of the mid 19th to early 20th the century has all but disappeared. For various transportation, zoning and traditional reasons Winchester has not generated traditional strip commercial development along its key roadways, in this it is somewhat unique among suburban communities. Winchester Center clearly remains the center of commerce and government, a commercial land use pattern more reminiscent of the 19th century than the 21st century. In recent years the Planning Board has continued a Winchester tradition of minimizing traditional commercial strip development by creating new zoning districts to encourage more mixed use along North Main Street.

As indicated in the summaries below, Winchester has a considerable architectural, open space, and historic heritage that contributes significantly to the character of the community. As time precedes the effective use and preservation this physical resource and heritage will most likely more sharply define Winchester's physical image.

The primary regulation controlling the built environment is the Winchester Zoning Bylaw. While the current bylaw is a comprehensive document, it is very poorly formatted and in a number of instances difficult to interpret. Further, items such cluster zoning are essentially moot due to the lack of suitable land in the community and the economic and legal barriers contained in the existing regulation. With approximately 65 acres of developable or marginally developable land remaining in the community, it is most likely that the community will experience considerable infill development, focused primarily on commercial land uses. It is highly probable that Winchester would be well served to consider a comprehensive reorganization and updating of its zoning bylaw that encourages reuse of properties that address community supported design and public amenity objectives.

Readily Available Sources

The Plan to Preserve Winchester's Architectural Heritage, March 2004

A comprehensive analysis of architectural heritage and preservation issues. The key recommendations include the need to perform additional professional surveys and adopt additional local historic district bylaws.

Winchester Open Space and Recreation Plan (in progress)

A comprehensive survey of public lands, water resources. One of the more valuable features of this report is the numerous maps, such as: Handicapped Accessibility Inventory, Historic

Districts Maps, Special Landscapes, Land of Recreation and Conservation Interest Map, Water Resources Map, General Soils Map, Groundwater Protection Map, Forest Lands Map, Location of 21E Hazardous Waste Releases Map. As of this printing, the Open Space Plan has not been approved by the Board of Selectman.

Winchester Strategic Plan 2004

Includes overviews of utility, transportation, recreational and cultural facilities.

Triangle Area Master Plan, April 1997

Master Plan for the “Triangle Area”, an approximately 585-acre triangular shaped area of land in the northeast part of the Town. The Master Plan laid out a long-range vision for the Triangle Area that provided a balance between the retention of the area’s commercial and industrial economic base and the protection of the existing residential areas, while simultaneously expanding and enhancing the area’s greenway/riverway system.

Facilities Condition Assessment, April 2004

Report summarizing the detailed facilities condition assessment (FCA) completed for Winchester’s educational facilities and the town buildings. The report provides a baseline assessment of the building systems, establishes funding requirements necessary for reducing deferred maintenance and optimizing ongoing capital management activities, and demonstrates the decision support capabilities of the capital planning and management software.

3.2 Land Use

The most recent land use statistics available for the town of Winchester were developed by the Resource Mapping Project at the University of Massachusetts for Massachusetts Geographic Information System (MassGIS). The land use data is based on 1:25,000 aerial photography collected by the Executive Office of Environmental Affairs (EOEA) in 1999. Additional information on how the datalayer was developed is available at <http://www.mass.gov/mgis/lus.htm>.

The MassGIS datalayer contains a total of 37 individual land use categories, or 21 aggregated land use categories. Table 3-1 provides a summary of the acreage and percentage of total land area for the 21 aggregate land uses; land use patterns are also presented graphically in Figure 3-2.

Table 3-1: 1999 Land Use Summary Statistics for the Town of Winchester

Land Use Code	Category	Area (acres)	Percent of Total
1	Cropland	15.7	0.4%
2	Pasture	1.4	0.03%
3	Forest	666	16.4%
4	Wetland	28.8	0.7%
5	Mining	---	---
6	Open Land	20.2	0.5%
7	Participation Recreation	174	4.3%
8	Spectator Recreation	---	---
9	Water-based Recreation	17.4	0.4%
10	Multi-family Residential	72.2	1.8%
11	Residential (<0.25-acre lots)	329	8.1%
12	Residential (0.25 to 0.5-acre lots)	1757	43.1%
13	Residential (>0.5-acre lots)	399	9.8%
14	Salt Marsh	---	---
15	Commercial	87.0	2.1%
16	Industrial	75.5	1.9%
17	Urban Open	224	5.5%
18	Transportation	10.2	0.3%
19	Waste Disposal	---	---
20	Water	175	4.3%
21	Woody Perennial	22.7	0.6%

Source: MassGIS, 1999 (www.mass.gov/mgis/massgis.htm)

A review of these land use statistics paints a telling picture of the general composition and dominant community priorities in the town of Winchester. The data shows that approximately 63% (2560 acres) of the total land area in Winchester is made-up of residential land uses, with roughly 43% alone being comprised of residential lots between 0.25 and 0.5-acres. The second largest land use category is forest at 16.3% (666 acres). Commercial and industrial land uses

make-up approximately 4% of the total land area, which is comparable with the percent of land within the town that is covered by water.

LEGEND

Land Use Category

- 1- Cropland
- 2- Pasture
- 3- Forest
- 4- Wetland
- 6- Open Land
- 7- Participation Recreation
- 9- Water-based Recreation
- 10- Multi-family Residential
- 11- Residential (<0.25-acre lots)
- 12- Residential (0.25 to 0.5-acre lots)
- 13- Residential (>0.5-acre lots)
- 15- Commercial
- 16- Industrial
- 17- Urban Open
- 18- Transportation
- 20- Water
- 21- Woody Perennial

NOTE: No land use area exists for category 5 (mining), 8 (spectator recreation), 14 (salt marsh) or 19 (waste disposal).

Land Use Summary Statistics

Category	Area (acres)	Percent of Total
Cropland	15.7	0.4%
Pasture	1.4	0.03%
Forest	666	16.3%
Wetland	28.8	0.7%
Open Land	20.2	0.5%
Participation Recreation	174	4.3%
Water-based Recreation	17.4	0.4%
Multi-family Residential	72.2	1.8%
Residential (<0.25-acre lots)	329	8.1%
Residential (0.25 to 0.5-acre lots)	1757	43.1%
Residential (>0.5-acre lots)	399	9.8%
Commercial	87.0	2.1%
Industrial	75.5	1.9%
Urban Open	224	5.5%
Transportation	10.2	0.3%
Water	175	4.3%
Woody Perennial	22.7	0.6%
TOTAL	4075	100%

NOTE: Land use data for the Town of Winchester was obtained from MassGIS. The MassGIS land use datalayer contains 21 general land use classifications interpreted from 1:25,000 aerial photography flown during 1999.

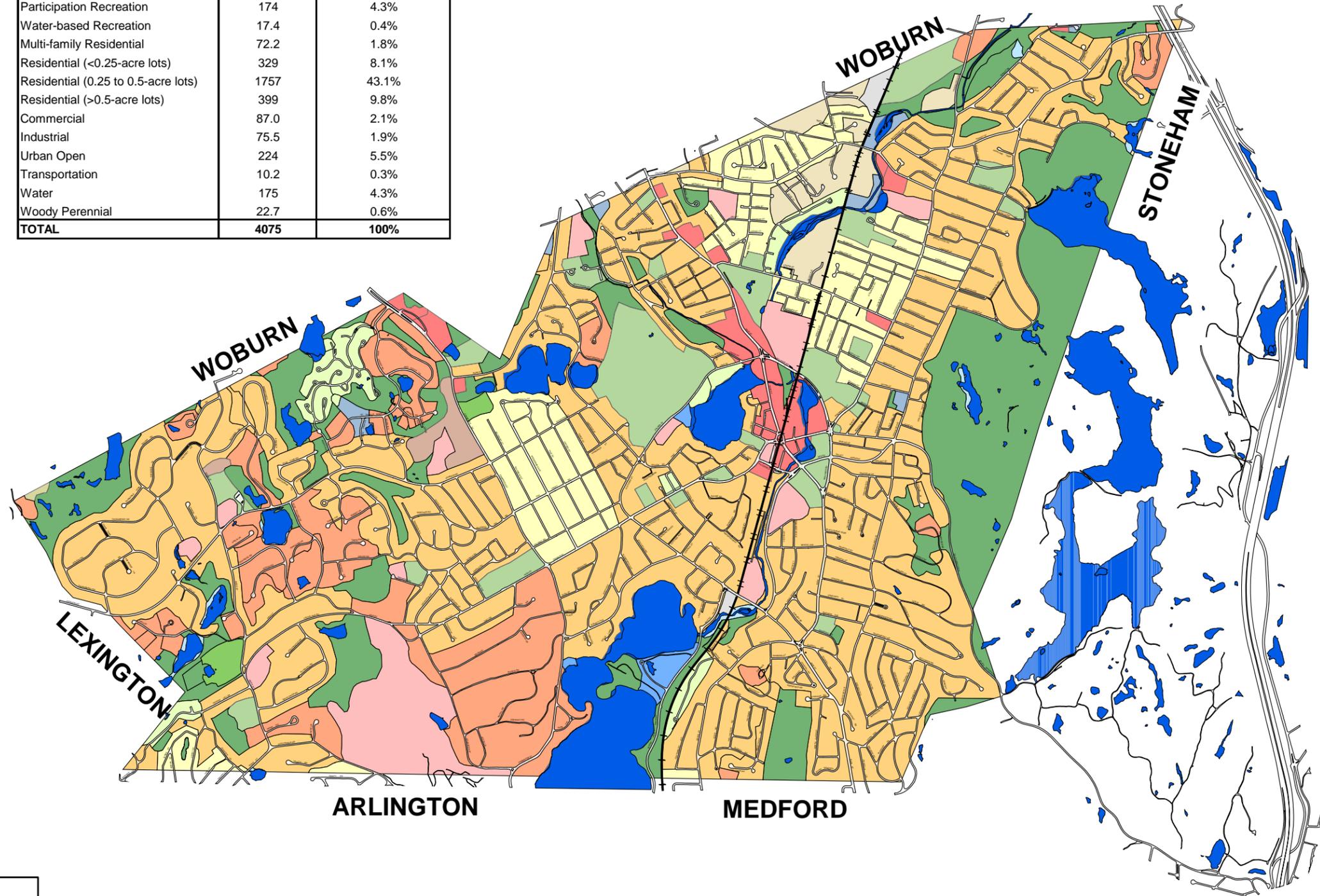


Figure 3-1: Land Use Map
June 2005

3.3 Open Space and Recreation

The effect of Winchester's almost full development has made the preservation of open space an important item on the Town's agenda. The residential nature and demographic profile (25.7% under 18 and 17.1% over 65) of the community dictates the need for numerous active and passive recreational facilities, such as playing fields, walking trails, and paths. The town's limited undeveloped land indicates that the acquisition of open space will be critical to future habitat preservation and the residential quality of life. Greater use of existing land will also be a priority in the upcoming years given the need and desire for increased recreational and natural spaces.

3.3.1 Open Space and Recreation Plan (in progress)

Given the inherent value and increased pressure on the use of the Town's existing open space and recreational areas, the Town of Winchester recently began the development of an "Open Space and Recreation Plan". The goal of this Plan is to provide a status of the Town's natural environment, including an identification of any natural resource issues and an assessment of the present and future need for recreation facilities. As of this printing, the Plan has not been approved by the Board of Selectman.

3.3.2 Existing Open Space and Recreational Facilities

The draft "Open Space and Recreation Plan" provides a comprehensive review of the existing agricultural land, forest land, and public and private-owned recreational facilities throughout Town. A general overview of these facilities is provided below.

Private Agricultural Land

- **Pansy Patch-** An approximately 9.5-acre parcel located at the corner of Cambridge Street and Pond Street. The land is currently zoned RDB and has a Chapter 61A designation, which, under state law, allows the Town right of first refusal within 120 days of a notification of a sale. This property is expected to go to auction in fall 2005, with a minimum bid of \$10million
- **Hamilton Farm/Locke Farm-** A approximately 19.5 acre parcel of farmland containing a single-family home, barn, and shed. The property is zoned RDA and has a Chapter 61A designation. This parcel is contiguous with Winchester conservation land.

Private Forest Land

- **General Foods Corporation-** An approximately 20-acre parcel zoned RDB located off of Sunset Road, currently used as a wellfield by General Foods.
- **Marotta Property-** An approximately 7.5 acre parcel located off of Cross Street along the Aberjona River. It is zoned RDB and is listed as a M.G.L. Chapter 21E (brownfields) site. A Chapter 40B development of approximately 116 units has been proposed on this site.
- **Winning Farm-** An approximately 45-acre parcel located off Thornberry Road, 12.5-acres of which is proposed to for development, with the remainder serving as conservation land. The site is zoned SCI with a portion having an elderly housing overlay district.

- **Shannon Property-** A 9.15-acre parcel located off Forest Circle, which is currently zoned RDB. This property will likely be developed as residential housing, possibly as a 40B development.
- **(Former) Bill Mark Realty Trust-** A 4.6-acre parcel located off of North Border Road. The property is currently zoned RDB. This property is contiguous with the Shannon Property listed above.

Private Recreation Lands

- **Winchester Country Club-** A 122.4-acre piece of land located off of Arlington, Cambridge, and High Streets (part of it is located in Arlington). The property is zoned SCI.
- **Winchester Boat Club-** An 89,935 square foot parcel located on Cambridge Street along the Upper Mystic Lake. The parcel is zoned RDB.
- **Winchester Swim and Boat Club-** A 5.2-acre site located on Johnson Road; zoned RDA.

Town-Owned Properties

The following table provides a summary of the town-owned open space and recreational facilities, along with the parcel area, jurisdiction, and location. Additional information is available for each site in the draft “Open Space and Recreation Plan”.

Table 3-2- Town-owned Open Space and Recreation Properties

Designation	Location	Jurisdiction	Area (acres)	Use	Zone
Locke Farm	High St	Con/Com	9.46	Passive Rec	SCI
Smith Pond	Ridge St & Johnson Rd	Con/Com	6.4	Passive Rec	SCI
Vinson-Owen School	Johnson Rd	School Committee	9.29	School, Playground	SCI
Vinson-Owen Science Park	Johnson Rd	School Committee	7.53	Science Park	SCI
Sachem Swamp	Johnson Rd & Old Village Dr	Con/Com	8.0	Passive Rec	SCI
Fire Station	Ridge St & Lockeland Rd	Selectman (Fire Dept)	1.02	Community Gardens	SCI
Mullen Field	Lockeland Rd & Ridge St	Selectman (DPW)	9.52	Playfields	?
Mt. Pisgah	Andrews Rd	Con/Com & Selectman	11.4	Park	SCI
Parkhurst School	Andrews, Samoset, & Emerson Rd	Selectman	4.10	School	SCI
Sucker Brook	Amberwood Dr & Old Lyman Rd	Con/Com	13.8	Passive Rec	SCI
West Side Field	Wildwood St	Selectman (DPW)	7.5	Playfields	SCI
Ambrose School	High St & Cambridge St	School, Playfields	9.25	School	SCI

Designation	Location	Jurisdiction	Area (acres)	Use	Zone
Glen Green Plot	Glen Green & Glen Rd	Selectman	1.81	Open Space	SCI
Well Field (abandoned)	Horn Pond Brook Rd	DPW	3.97	Open Space	SCI
Lynch School	Brantwood Road & Horn Pond Brook Rd	School	25.3	School Playfield	SCI
Wildwood Cemetery	Palmer St	Selectman (DPW)	70.5	Cemetery	SCI
Wedge Pond Beach & Tennis	Palmer St	Selectman (DPW)	5.3	Beach & Tennis	SCI
Town Forest	Chardon, Sussex, & North Gateway	Selectman	28.5	Forest	SCI
Former Mystic School	Main St & Madison Ave	School Committee	2.52	School	SCI
Dennett Park	Dennett Rd	Selectman (DPW)	1.6	Passive Play	SCI
Manchester Field	Main St & Mystic Valley	School	13.1	School Playfields	SCI
Town Common	Church St	Selectman	1.3	Park	SCI
Lincoln School	Mystic Valley Parkway & Main St	School Committee	2.8	School Playground	SCI
Library	Washington St	Library Trustees	0.87	Library	SCI
Open Space	Mt Vernon & Mystic Valley Parkway	Comm. Of Massachusetts	0.28	Passive Rec	SCI
Chefalo Park	Washington & Myrtle St	Selectman (DPW)	0.65	Open Space	SCI
Elliott Park	Main & Lake St	Selectman (DPW)	1.9	Park	SCI
Bicycle Path	Horn Pond Brook Rd	Selectman (DPW)	4.2	Park	SCI
Noonan Plot	Canal & Hemingway St	Selectman (DPW)	0.49	Passive Rec	SCI
Woburn Loop	Main St	Selectman	10	Open Space	IL, GBD, SCI, CBD
McDonald Field	Wendell & Hill St	Selectman (DPW)	5.04	Playfield	SCI
Ciarcia Field	Skillings Rd	School Committee	16.0	Playfield	SCI
High School	Skillings Rd	School Committee	10.8	School	SCI
Highland Lot	Highland Ave	Selectman (DPW)	2.3	Park	SCI
Muraco School	Bates, Tufts, & Irving St	School Committee	11.0	School	SCI
Leonard Field and Beach	Washington & Cross St	Selectman (DPW)	11.6	Playfield	SCI
Davidson Park	Cross St	Selectman (DPW)	9.59	Park	SCI
Washington Park	Washington St	Selectman (DPW)	3.8	Park	SCI
22 Highland Ave & 10 Alben St	Highland Ave & Alben St	Selectman (DPW)	5.95	Open Space	?
A. Griffin Center	Skillings Rd	Selectman (DPW)	3.9	Museum, Park	?
Ginn Field	Bacon St	Selectman (DPW)	6.2	Playfield, Playground	?

Designation	Location	Jurisdiction	Area (acres)	Use	Zone
Middlesex Park	Middlesex & Lake St	Selectman (DPW)	1.5	Park	?
North Reservoir	Hillcrest Parkway	Selectman (DPW)	42	Water Supply	?
Lots 351, 353, 354	Skyline Dr	Con/Com	0.26	Open Space	?
Lot 35	Eugene Dr	Con/Com	0.51	Open Space	?
Lot 40	Eugene Dr	Con/Com	0.22	Open Space	?
Mary's Pond					
Lot 113	Horn Pond Brook Rd	Con/Com	0.46	Open Space	?
Parkland	Nelson St	Selectman (DPW)	0.84	Park	?

Figures 3-2 provides a summary of the significant Conservation Areas and Parks; significant Fields and Recreational Area are shown in Figure 3-3.

LEGEND

-  Conservation Areas and Parks
-  Waterbodies
-  Roads

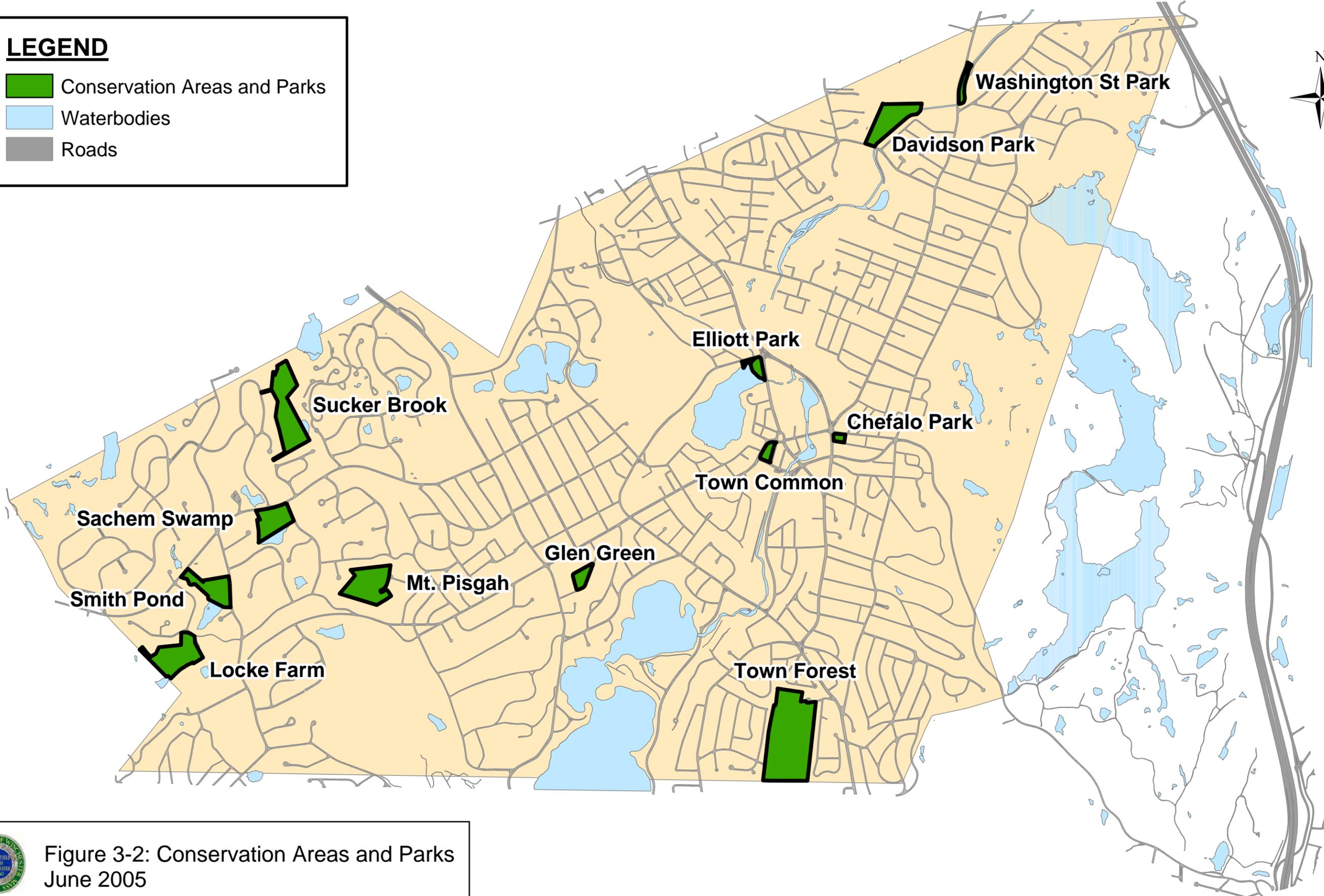


Figure 3-2: Conservation Areas and Parks
June 2005

LEGEND

- Fields and Recreational Areas
- Waterbodies
- Roads

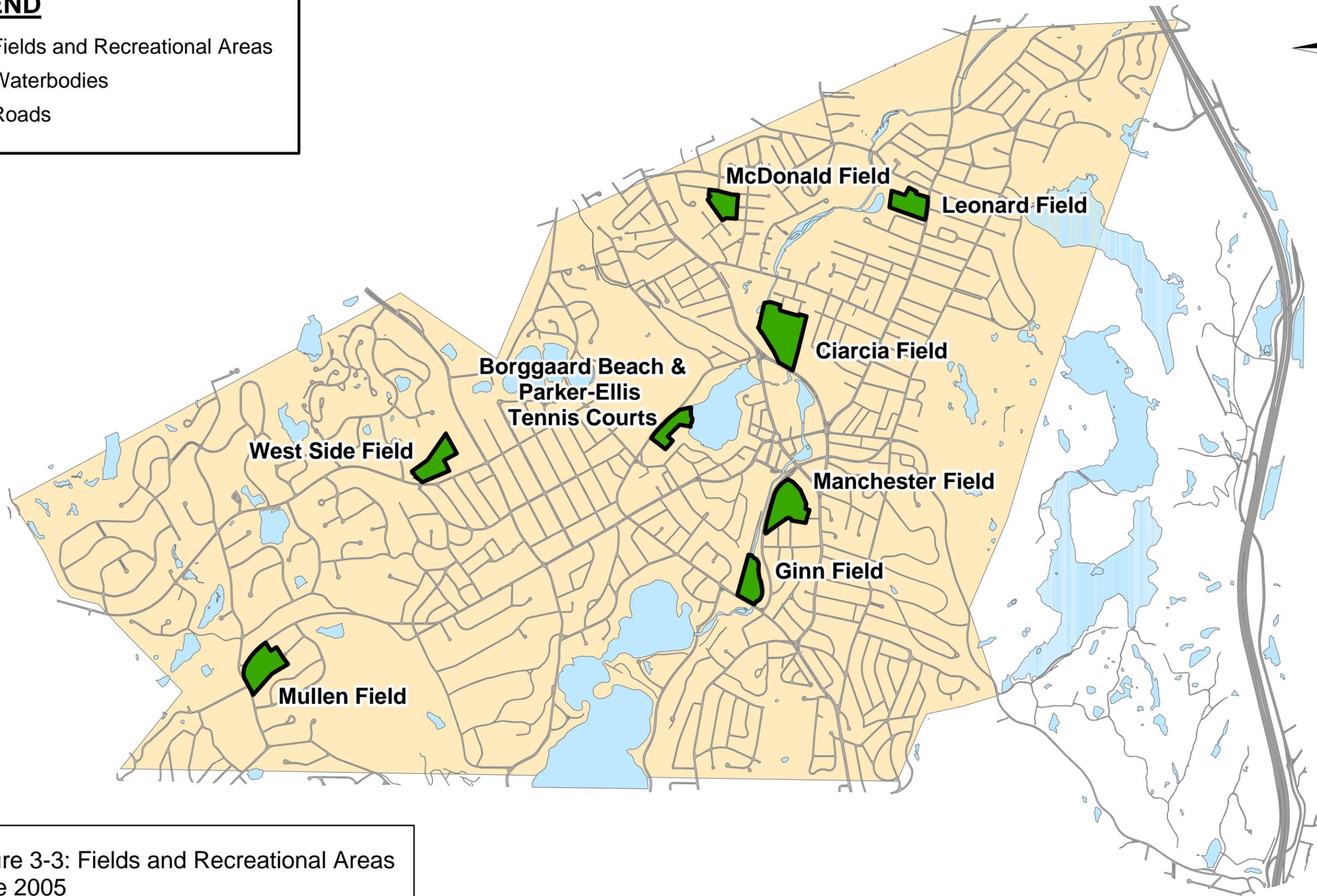
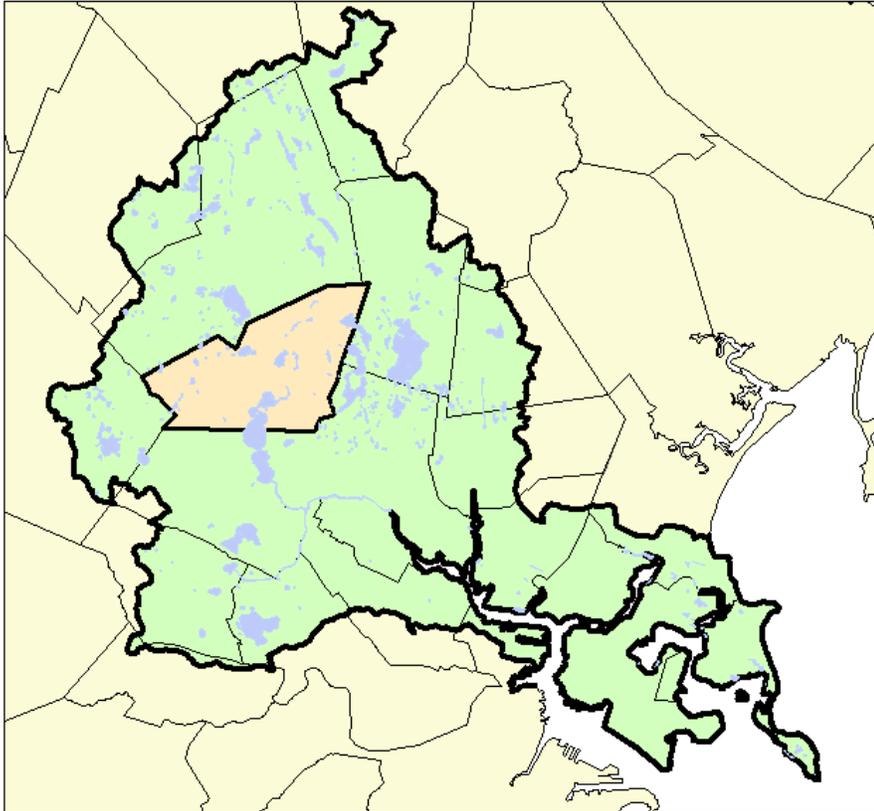


Figure 3-3: Fields and Recreational Areas
June 2005

3.4 Water Resources

The Town of Winchester is wholly located within the Mystic River watershed, as shown in Figure 3-4. The headwaters of the Mystic River originate in Reading, forming the Aberjona River, which flows through Winchester into the Upper Mystic Lake. The Mystic River then flows from its outlet in the Lower Mystic Lake through Arlington, Medford, Somerville, Everett, Charlestown, Chelsea, and East Boston before emptying into the Boston Harbor.

Figure 3-4: Mystic River Watershed



3.4.1 Surface Water Resources

Winchester's surface water resources played a significant role in the historic land use and growth patterns within the town and greater Mystic River watershed. Today, these water resources serve a variety of uses, including public water supply, recreational, and industrial uses. Figure 3-5 provides a summary of the major surface waterbodies in Winchester; a general description of each is provided below.

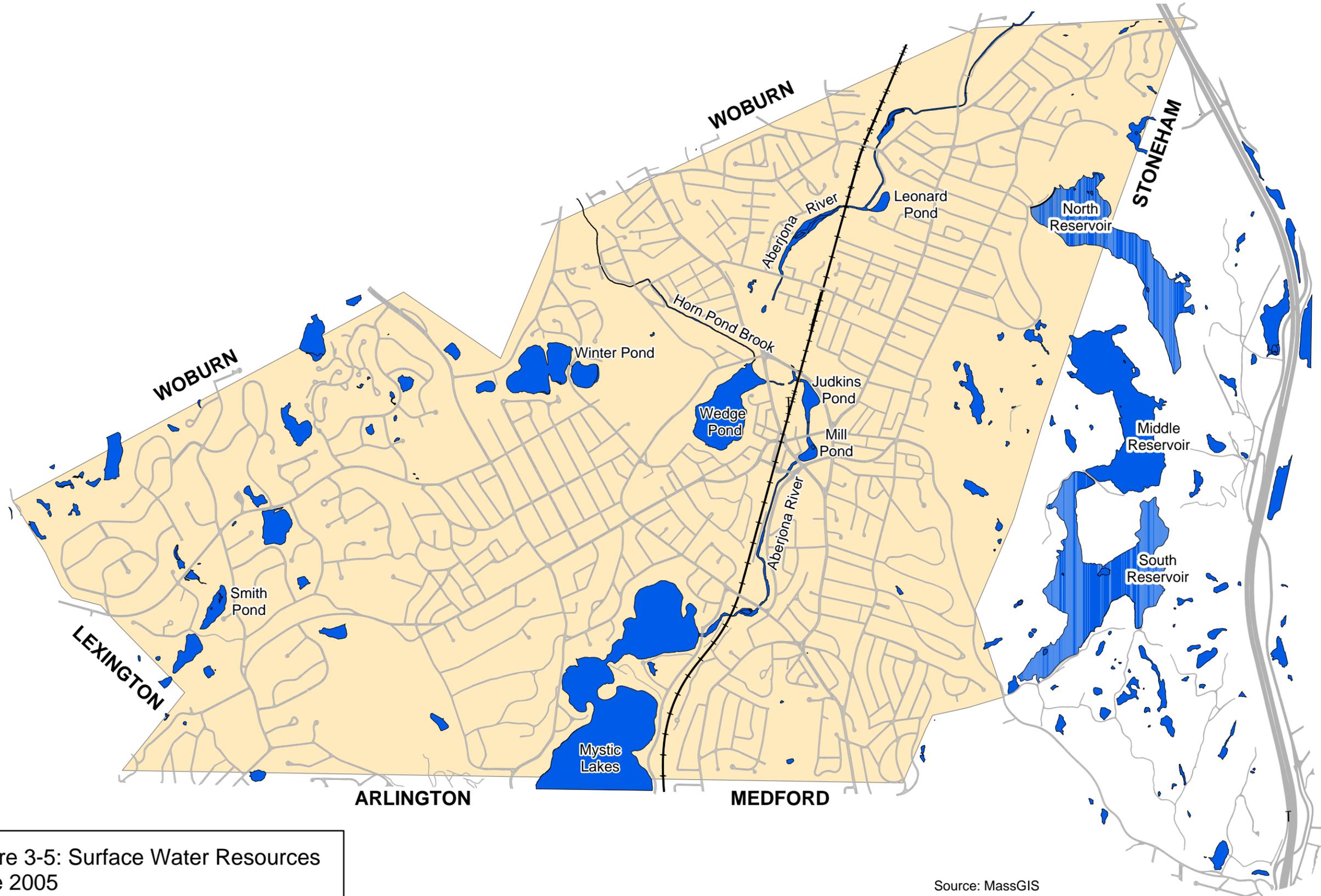


Figure 3-5: Surface Water Resources
June 2005

Source: MassGIS

Aberjona River

The Abjerona River runs in a north-south direction through the center of Winchester. It enters the Winchester Highlands area from Woburn, where it winds through Davidson Park, forms Judkins and Mill Ponds, and then flows into the Upper Mystic Lake.

The United State Geological Society (USGS) maintains a streamflow monitoring station on the Aberjona River that has been in operation since 1939. The gage is located just upstream of the mouth of the Upper Mystic Lake. The average annual streamflow recorded at this site based on 64 years of data is approximately 30 cubic feet per second.

The water quality and hydrology of the Aberjona River, and wider Mystic River watershed, has been compromised by the long history of industrial pollution, wetland alteration, stream channelization, and increased urbanization and impervious area. The Aberjona River has consistently been listed as one of the most polluted waterbodies in the Commonwealth. According to the “Massachusetts Year 2004 Integrated List of Waters- Proposed listing of the condition of Massachusetts’ waters pursuant to Sections 303(d) and 305(b) of the Clean Water Act”, dated April 2004, the entire 9.2 mile length of the Aberjona River from its headwaters in Reading to the inlet of the Upper Mystic Lake, is categories as “Waters requiring a TMDL” (Category 5). The pollutants needing a Total Maximum Daily Load (TMDL) are as follows: unionized ammonia, nutrients, organic enrichment/low DO, pathogens, and other habitat alterations. Many of the most dangerous pollutants, however, are trapped in the River’s sediments, particularly in deposition zones upstream of impoundments.

The USGS has historically collected and analyzed discrete surface water samples at its gaging station for a variety of parameters. Water quality data, as well as historic and real-time streamflow data, for this station may be obtained from the USGS at <http://nwis.waterdata.usgs.gov/nwis/>. Since 2000, additional water quality monitoring has been performed throughout the Mystic River watershed by volunteers from the Mystic River Watershed Association on the second Wednesday of each month. Specifically in Winchester, samples have been collected at the Aberjona River at Washington Street and at the USGS gaging station. Additional information regarding this sampling program may be obtained from the Mystic River Watershed Association at <http://www.mysticriver.org/mmn/index.html>.

Horn Pond Brook

Horn Pond Brook drains the area contributing to Horn Pond, located just across the Winchester town line in Woburn. Discharge from Horn Pond is controlled by the Scalley Dam outlet structure, which can be raised or lowered to maintain a given water level in the pond. The town of Winchester and the City of Woburn work collaboratively to adjust the water level in the Pond prior to forecasted rainfall and/or snowmelt events to provide additional storage capacity for stormwater runoff. The general operating protocol was laid out in the 2003 CDM report entitled “Horn Pond Brook Flood Control Evaluation”. Once it crosses into Winchester, the Horn Pond Brook passes through a densely populated neighborhood in the northern section of Winchester and flows to its outlet at Wedge Pond.

Middlesex Fells Reservoirs

The town of Winchester operates a series of three reservoirs- North, Middle, and South Reservoirs- in the Middlesex Fells Reservation for the purpose of public water supply. The reservoirs and associated watershed area are located partially in Winchester and partially in Stoneham.

Mystic Lakes

A portion of the Upper Mystic Lake lies in the southern end of Winchester along the Medford-Arlington border. As previously mentioned, this Lake is fed by the Aberjona River. The upper lake discharges to the Lower Mystic Lake over a dam located in Medford and Arlington. The Mystic Lakes are controlled by the Department of Conservation of Recreation (DCR) at the state level, and are managed as a regional resource. The Lakes serve as a significant recreational resource in the area, including use by the Winchester Boat Club on the west side of the Upper Mystic Lake and by the Tufts sailing team on the east side. DCR also maintains and operates a public beach- Sandy Beach- along the Upper Mystic Lake in Winchester. Water quality monitoring for bacterial counts is performed by DCR at this location during summer months.

Leonard Pond

Leonard Pond is a man-made area located between the Leonard Field and Muraco School. Once used as a public swimming area, it is now closed.

Wedge Pond, Judkins Pond and Mill Pond

Wedge Pond is located near the intersection of Lake Street, Main Street, and Skillings Road. The Pond receives runoff from Horn Pond Brook and discharges through a culvert under Main Street and Shore Road before emptying into Judkins Pond. Judkins Pond, located in the triangle formed by the intersection of Skillings Road, Shore Road, and Mt. Vernon Street, also accepts runoff from the Aberjona River. Judkins Pond discharges through a culvert under Mt. Vernon Street into Mill Pond, which borders Town Hall and the Library. Mill Pond flows over the Center Falls Dam located upstream of the Main Street Bridge, and continues flowing downstream through the center of Winchester, regaining its form as the Aberjona River.

Winter Pond

Winter Pond, located west of the town center, covers approximately 17 acres. It is divided into two sections, known as Big and Little Winter Pond, by Woodside Road. The Pond is fed almost completely by surface runoff and has historically had issues maintaining a sufficient water level necessary for water quality and aquatic habitat. As a result, Winter Pond has been the subject of numerous studies over the years, the most recent of which was completed by ENSR in 2000 and entitled "Diagnostic/Feasibility Study of Winter Pond Winchester, Massachusetts". ENSR conducted a "diagnostic assessment" of Winter Pond, which included a multi-faceted monitoring and assessment program conducted in 1999. The report also laid out a range of management options and recommended strategy for future lake management.

As part of its capital Drainage Improvement Program, the town of Winchester has allocated funds in its FY2006 budget to further study options to increase the surface water flows entering Winter

Pond. It is anticipated that the design and construction of such a project would be funded in FY2007 or 2008.

The Friends of Winter Pond, a citizen's group, has worked for over 20 years to preserve and protect Winter Pond. Currently, there are over 125 members supporting the group. They maintain a website at <http://www.winterpond.org/>. In recent years, this group has been active in raising money to assist with improvements to the Pond. In the summer of 2002, the group and the Town of Winchester raised funds to perform hydroraking of the Pond to help control the nuisance growth of aquatic plants and algal blooms.

Hills Waterbodies

There are several ponds, brooks, and associated wetlands scattered throughout the western hills portion of Winchester, a historically agricultural section of Town. Most notable are Smith Pond and Locke Farm Pond. These waterbodies are generally part of the Winchester greenbelt, and large portions are contained within conservation areas.

Wetland Resources

Winchester contains pockets of freshwater wetlands throughout town. The larger ones are located along the Aberjona River and Smith Pond, and in Winning Farm, Sachem Swamp, and the Sucker Brook Conservation Area. In addition, there are numerous smaller wetland areas that border small, unnamed streams and creeks that run down the hillsides.

Vernal Pools

Vernal pools, and seasonal pools without fish, are essential breeding habitat for some species of frogs and salamanders. According to the National Heritage and Endangered Species Program 1999-2001 datalayer from MassGIS, there are a number of certified vernal pools in Winchester. One is located within conservation land, one is protected under a conservation restriction, one is located in Winning Farm, one is located on the Winchester Country Club property, and four are located within the Middlesex Fells Reservation. In addition, MassGIS shows ten potential vernal pool sites within the Middlesex Fells.

3.4.2 Groundwater Resources

Groundwater from Winchester serves a baseflow for the Abjerona River, Upper Mystic Lake, town reservoirs in the Middlesex Fells, and numerous smaller surface water features and wetlands throughout the Town. Additionally, groundwater from Winchester contributes to the public wells in the City of Woburn in the vicinity of Horn Pond. A limited number of industrial and residential users maintain private wells in Winchester. The most significant of which are the Parkview Condominiums, which uses well water for its heating and cooling system, and the Kraft Food Company located in Stoneham, which operates a wellfield for industrial uses on the east side of the Aberjona River along Washington Street.

3.5 Historic Preservation

The Town of Winchester has a strong and well-preserved architectural heritage, which tells the community's story from farming to manufacturing to suburbanization. This heritage is the pride of its residents and is often cited as a reason to live in Winchester. Two groups are currently active in preservation-related issues around town, the Winchester Historical Society and the Winchester Historical Commission and Archival Center, located in Town Hall.

In 2004, the Winchester Planning Board and Historical Commission, acting as the Architectural Heritage Committee of the Strategic Plan Task Force, developed and published "A Plan to Preserve Winchester's Architectural Heritage", which contained the following:

- Summary of historical development in Winchester
- Summary of historical preservation in Winchester
- Inventory of historic assets
- Summary of national register and state register programs
- Potential preservation strategies
- Analysis of municipal policies and regulations affecting historic resources
- Proposed action plan

This report also included several informative maps showing the location of properties included in Winchester historic inventory list, properties listed in the National Register of Historic Places, and properties subject to the Town's demolition delay by-law.

3.6 Housing Stock

According to the 2000 US Census, the Town of Winchester has 7908 housing units, including a broad range of residential use types from single-family homes to larger apartment complexes. Table 3-3 provides a summary of the Winchester Housing inventory, as reported in the Town's Strategic Plan.

Table 3-3: Winchester Housing Unit Inventory

Unit Type	1990 Units	2000 Units	%2000	Net Change (1990 to 2000)
Single Family	5,812	6,054	76.6%	4.2%
Two Family	816	827	10.5%	1.3%
3 to 4 Units	142	167	2.1%	17.6%
5+ Units	712	851	10.8%	19.5%
Other	77	9	0.1%	-88.3%
Total	7,559	7,908	---	---

Source: US Census 2000 (repeated from Town's Strategic Plan)

According to the Town's Strategic Plan, almost 70% of the Town's current housing stock was built before 1960. Only 6% of all dwelling units were built after 1980, which is indicative of an area approaching build-out conditions. Further, approximately 75% of Winchester's housing stock is more than 50 years old, which indicative of potential historic significance and of a potential for tear-downs are reconstruction.

3.6.1 Housing Stock and Value

The annual Building Inspectors report is maintained on a monthly basis and is an excellent source of on going development issues and trends in the community. Further, the on line service, The Warren Group, a free service of Banker and Tradesman provides housing type and value data for the current and previous 10 years. The service provides the ability generate regional reports for comparison purposes. A fee service of Banker and Tradesman is also available for more detailed reports and commercial development analysis.

3.6.2 Affordable Housing

Massachusetts Department of Housing and Community Development provide an online service listing of all affordable housing resources and housing assistance programs. In terms of compliance with the 10% affordable housing requirement Winchester is at approximately 4% affordable housing. Winchester should anticipate one or more 40B proposals in the coming years, since local ability to generate large numbers of affordable housing units is minimal.

3.7 Developable Land

As previously noted, the Town of Winchester is close full build-out conditions, based on minimum lot size and density requirement laid out in the current zoning by-laws.

A general overview of the Town's build-out capacity was performed in 2000 as part of a statewide analysis undertaken by the Executive Office of Environmental Affairs (EOEA). The results of this analysis for the Town of Winchester are available on the web at

http://commpres.env.state.ma.us/community/cmt_main.asp?communityID=344#Absolute.

While this analysis was useful to provide a broad assessment of the potential build-out development impacts in Winchester, its scope and analysis methodology was generally too broad to accurately identify the available open space and developable land remaining in Town.

The EOEA build-out analysis, and subsequently the draft "Open Space and Recreation Plan", which was based on the former, lists 129 potentially developable acres in Winchester (see Figure 3-6 for EOEA's Developable Land and Partial Constraints Map). However, many of the sites are poorly shaped and impacted by wetlands and or waterways. In reality, closer to 65 acres of land could be developed by traditional methods. Our general review indicates that the Purcell Property (Pansy Patch) on Cambridge Street (10 acres), the Hamilton Farm on Ridge Street (20 acres), the often referenced Marrota site off Cross Street (12 acres) are the three largest and most important potential development sites in the community. All sites are zoned residential and the maximum development capacity, given current zoning, is approximately 160 units of housing, assuming the Marrota site is developed as a 40B.

LEGEND

-  Waterbodies
-  Absolute Development Constraints
-  Partial Development Constraints
-  Future Developable Land

NOTE: The flood hazard zones are based on FEMA Q3 data obtained through MassGIS. The data has horizontal control consistent with 1:24,000 maps. Due to the horizontal inaccuracies, the location of flood hazard areas presented on these maps should be considered approximate. Further, significant differences have been documented between the mapped flood elevations/ flood hazard areas and observed flooding conditions. As a result, FEMA is in the process of revising the FIS and FIRMs for Winchester and surrounding towns; revised maps are expected in late 2005.

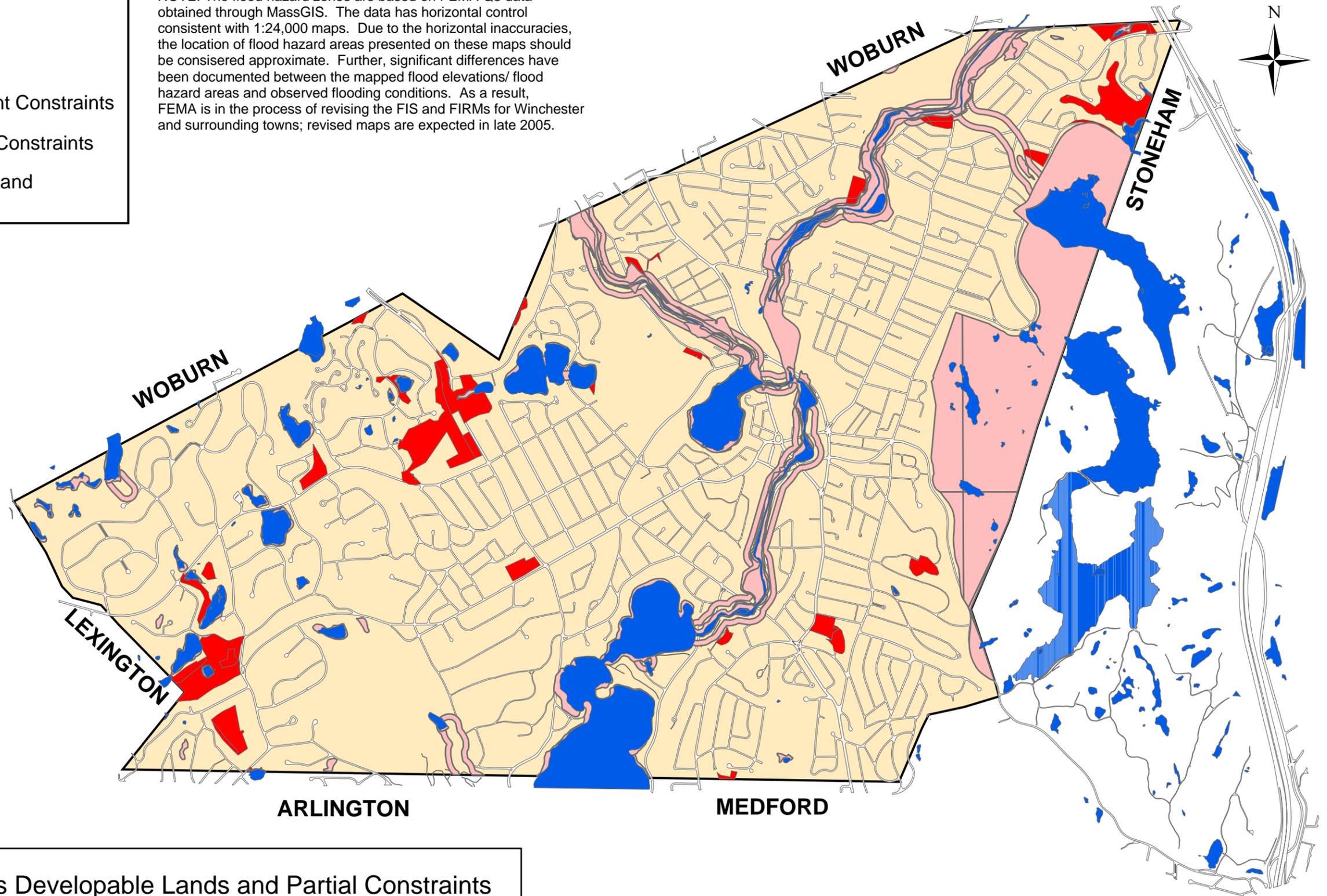


Figure 3-6: EOEAs Developable Lands and Partial Constraints
June 2005

4.0 Municipal Infrastructure

4.1 Public Utilities

Public utilities in the Town of Winchester are under the care of both public and private entities. Table 4-1 provides a general summary of the various responsibilities; additional information is provided in the subsequent sections for water, sewer, and cable services.

Table 4-1: Winchester Public Utilities

Utility	Responsible Party
Water and Sewer	DPW- Water and Sewer Division
Electric (including utility poles)	NSTAR
Natural Gas	Keyspan
Cable TV & Internet	Comcast
Telephone	Verizon

4.1.1 Water System

The Town of Winchester utilizes two major sources for its public water supply, including a municipally-operated reservoir system and a supply connection to the Massachusetts Water Resource Authority (MWRA). The Town maintains and operates three reservoirs- North, Middle, and South Reservoir (see Figure 3-5) in the Middlesex Fells Reservation along the Winchester-Stoneham town line. Water from the reservoir system is treated in a town-owned and operated Water Treatment Facility, designed by CDM and built in 1996, located off South Border Road.

The Town's water distribution system is divided into three major separate service areas, which have the geographical reference West High, Middle Low, and East High Service Systems. The East High and Middle Low Service Systems, is supplied primarily by water from the town-owned reservoir system. The West High Service System is supplied exclusively by the MWRA system. During the fall, winter, and spring, the Town's reservoir system provides sufficient water supply for approximately two-thirds of the town residents. During the summer months, however, that number drops to approximately one-third of the town. The difference is made-up by water purchased from the MWRA. The Town also uses the MWRA Spot Pond Reservoir to supplement the Town reservoirs when they are low. Water is pumped from Spot Pond to the Middle Reservoir.

The Department of Public Works (DPW) maintains the municipal distribution system in accordance with industry standards promulgated by the American Water Works Association and all applicable state and federal regulations. Like many communities in the metropolitan Boston-area, the town of Winchester is faced with the task of maintaining miles of aging distribution pipes on increasing limited budgets. This includes maintenance and repair of 105 miles of water mains, 7039 service connections and meters, 1100 hydrants, and 2000 valves. The diminished staffing capacity of the Town's Water and Sewer Division requires that most large-scale projects

be contracted to outside consultants and contractors for design and construction services. Funding for such projects requires approval by Town Meeting.

Historically, the Town has evaluated the adequacy of its water supply and distribution system to insure that it will provide the quantity and quality of water required to meet the future needs of the Town. These studies include the following:

- “Water System Study”, 1979, prepared by Weston and Sampson
- “Water System Study”, October 1987, prepared by Weston and Sampson

4.1.2 Sewer System

The town of Winchester contains approximately 86 miles of sewer mains and 1500 manholes, which are owned and maintained by the Town. Approximately 70% of the Town’s sewer lines were built prior to 1940, and therefore require increased maintenance. There is an additional 15 miles of major sewer interceptors within the Town that are owned and maintained by the MWRA. The MWRA interceptors receive and transport sewage from Winchester and other surrounding communities to the Deer Island Treatment Plant for treatment and ultimate discharge into the Atlantic Ocean. The MWRA is rehabilitating its Cummingsville Branch Sewer, which crosses through the northwest quarter of Town, during the summer and fall of 2005. This branch was built in about 1894 and primarily transports sewage from the upstream communities of Woburn and Burlington. It is anticipated that in future years the MWRA will undertake similar improvements on other interceptors lines, as many of similar age and condition to the Cummingsville Branch.

The town of Winchester has performed several comprehensive studies of its sewer system to assess its condition and identify potential upgrades and improvements. These studies include the following:

- “The Town of Winchester Infiltration/Inflow Study”, November 1978, performed by Coffin & Richardson
- “Infiltration/Inflow Sewer System Evaluation Report”, February 1983, performed by Coffin & Richardson

Little expansion of the Town’s existing sewer system is expected in future, since over 99% of the Town’s population is currently connected to the sewer system and little developable land remains in the Town. Therefore, it is expected that future improvements to the sewer system will be generally limited to routine maintenance and updates in accordance with state and federal regulations.

The town of Winchester maintains an aggressive inflow and infiltration program aimed at eliminating groundwater entering the sewer system through means such as defective pipes, pipe joint connection, and manhole walls, as well as water entering the sewer system from illicit connections such as roof leaders and area drains. The infiltration and inflow program is generally funded through sewer connection fees and grants from MWRA.

4.1.3 Cable TV

Cable TV and internet access is provided to the Town of Winchester residents by Comcast. A 10-member Cable Advisory Committee made up of community representatives advises the Board of Selectman on cable television services and contract issues. The member term is three-years.

4.2 Drainage and Flooding

4.2.1 Riverine Flooding Concerns

The town of Winchester has long been plagued by flooding of the Aberjona River, which runs through the eastern portion of town in a north-south direction from the Woburn border to its outlet at the Upper Mystic Lake. The River passes through several densely populated residential neighborhoods and the major business center in Winchester Center. Significant flood problems have also occurred along Horn Pond Brook, which drains the area contributing to Horn Pond in Woburn. The Brook passes through a densely populated neighborhood in the northern section of Winchester and flows to its outlet at Wedge Pond near the intersection of Lake Street, Main Street, and Skillings Road.

Over the past 20 to 30 years, the Aberjona River and Horn Pond Brook watersheds have experienced significant development, particularly in the areas upstream of Winchester and north of Route 128. The resulting increase in impervious surface and stormwater contributions has combined to produce a general increase in streamflow in the Aberjona River and Horn Pond Brook, particularly during storm events. These impacts were felt keenly during recent flooding events in Winchester, including the severe rainstorms of October 19-20, 1996 and June 13-14, 1998, and the combined rain/snowmelt event of March 21-23, 2001. These flooding events severely damaged homes and town infrastructure around the Aberjona River and Horn Pond Brook, including property around Ginn Field, businesses in Winchester Center and along Cross Street, the High School and its associated playing fields, and bridges along Canal Street and Sylvester Avenue.

Figure 4-1 shows the location of significant waterbodies throughout the Town and the corresponding flood hazards zones, as defined by the effective FEMA Flood Insurance Rate Maps (FIRMs) for the Town of Winchester, dated June 18, 1980. This map was produced using FEMA's Q3 data, which is available from MassGIS. The data has horizontal control consistent with 1:24,000 maps. Due to horizontal inaccuracies, the location of the flood hazard zones should be considered approximate. Further, high water marks recorded throughout the Town during recent flooding events have called into question the accuracy of existing FIRMs, indication that the base flood elevations may be underestimating the true 100-year flood profiles by two to three-feet in some areas. As a result, FEMA is in the process of updated the FIRMs for the Town of Winchester and the wider Mystic River watershed; revised maps are anticipated in late 2005.

LEGEND

FEMA Flood Hazard Zone

-  **AE**
Area inundated by 100-year flooding for which BFEs have been determined.
-  **ANI**
Area located in a community that is not mapped on any published FIRM.
-  **X500**
Area inundated by 500-year flooding; area inundated by 100-year flooding with average depths of less than 1-ft or with drainage areas <1 sq mi; or an area protected by levees from 100-year flooding.

NOTE: The flood hazard zones are based on FEMA Q3 data obtained through MassGIS. The data has horizontal control consistent with 1:24,000 maps. Due to the horizontal inaccuracies, the location of flood hazard areas presented on these maps should be considered approximate. Further, significant differences have been documented between the mapped flood elevations/ flood hazard areas and observed flooding conditions. As a result, FEMA is in the process of revising the FIS and FIRMs for Winchester and surrounding towns; revised maps are expected in late 2005.

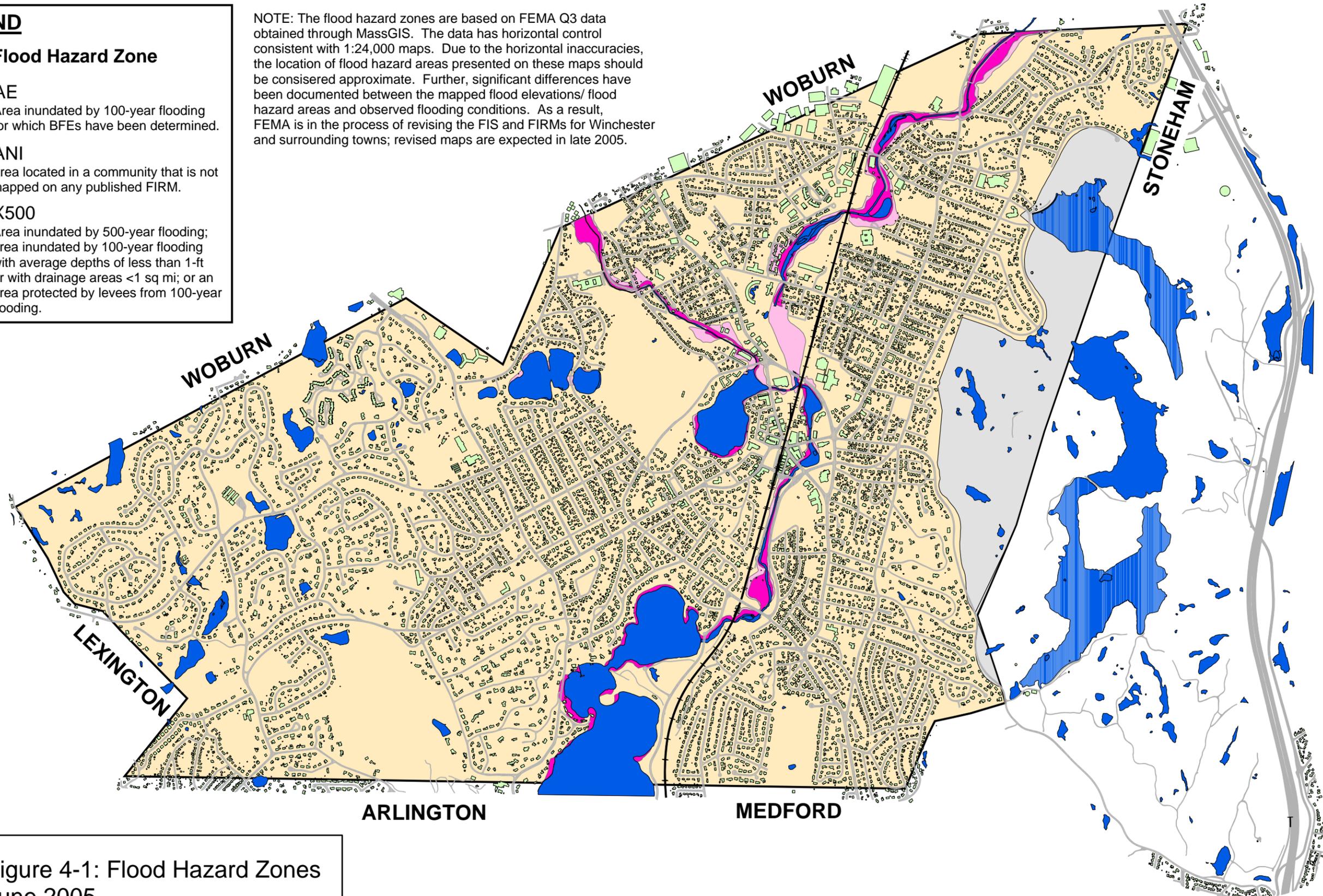


Figure 4-1: Flood Hazard Zones
June 2005

Following the significant flooding events in October 1996 and June 1998, the Town of Winchester contracted the services of the engineering consulting firm CDM to evaluate the potential causes of flooding along the Aberjona River and to develop a comprehensive solution to mitigate flooding problems. The result of this study was the “Aberjona River Flood Study-Final Report”, dated July 1999, which proposed 16 modifications to the Aberjona River for the purposes of flood control and mitigation. CDM estimated the design and construction for these projects to be between \$7.9 and \$13.4 million. Two of the 16 proposed projects were completed by the Town in 2002; a third project, the installation of a relief culvert under Cross Street, will be completed during summer 2005.

Due to the significant impact that the proposed 16 improvements would have on the Aberjona River, the Town was required to file under the Massachusetts Environmental Policy Act (MEPA). The original application prepared by CDM was denied by MEPA, who ruled that the Town was required to file a full Environmental Impact Report (EIR), which would include an assessment of various alternative scenarios and an evaluation of stormwater controls, water quality, watershed management, and regional planning issues.

In fall 2004, the Town of Winchester contracted with the consulting firm ENSR International to prepare the EIR. ENSR has also been independently contracted by FEMA to reevaluate the FIRMs for the Aberjona River, and as such has significant knowledge and technical resources associated with flooding concerns in Winchester. A revised EIR is expected to be submitted to MEPA in fall 2005. Design and construction of the remaining projects is contingent upon approval of the EIR by MEPA and security of the funding sources to complete the work.

In addition to the proposed structural flood mitigation measures, the Town of Winchester has several policy-related restrictions on development in flood-prone areas in accordance with the requirements of the National Flood Insurance Program and the Wetlands Protection Act. The Town also recently adopted a Floodplain Overlay District as part of the Zoning By-laws to further restrict development within the flood hazard zone.

4.2.2 Localized Flooding Concerns

The DPW’s Water and Sewer Division is responsible for the general operation and maintenance of the Town’s drainage system, which consists of a network of catchbasins and stormdrains that collect and transport stormwater runoff. The stormdrain system typically discharges to the nearest waterbody with little or no water quality treatment.

The Town of Winchester’s drainage and culvert system only functions at maximum capacity when properly maintained. Therefore, routine maintenance and repair of the system is critical to help reduce localized and riverine flooding throughout Town. The Winchester DPW is responsible for all such work, which includes bi-annual street sweeping, trash rack cleaning and repairs, catchbasin cleaning, and other critical drainage repairs. Additionally, the Town is currently implementing a Drainage Improvement Program aimed at repairing and upgrading the Town’s drainage system to improve localized flooding problems. This program is expected to be completed in three phases and funded through Chapter 110 residential real estate taxes and

commercial water/sewer uses. Phase I improvements were completed in Fiscal Year (FY) 2003-2005; Phase II will be completed during FY06 and FY07; Phase III is expected to begin in FY08.

The Town is currently participating in the EPA's Phase II Stormwater program, which is required for all communities nationally meeting the specified population density. As part of this program, the Town of Winchester is implementing a series of Best Management Practices (BMPs) aimed at address the following six minimum control measures, as specified by EPA:

- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention/ Good Housekeeping for Municipal Operations

4.3 Transportation

4.3.1 State and Local Roads

The roadway infrastructure in the Town of Winchester is comprised primarily of primary and secondary public roads, followed by private roads (approximately 20%), state roads, including Washington Street and Cambridge Street (Route 3), and DCR (formerly MDC) roads, such as Mystic Valley Parkway. A small portion of Route 93 also passes through the northeast corner of Town; however, there are no access or exits from the highway in Winchester.

The DPW Maintenance Division is responsible for the operation and maintenance of the public roads and sidewalks, including snow removal, and traffic light and sign maintenance. The FY2006 budget allocates approximately \$600,000 for road and sidewalk maintenance. The primary funding source is Chapter 90 money from the Town's stabilization account. Currently, the Maintenance Division is installing approximately 40 new ADA-compliant handicapped ramps per year, with priority given to areas around the town center and schools.

The DPW also performs snow removal on the private roads in Town in the interest of public safety. The Town is not responsible, however, for routine maintenance and repaving of these roads; as a result, many are in poor condition. Under extreme circumstances, the Town may repair and/or repave the roads through a "betterment", which allows the Town to assess homeowners with the bill for completion of this work. This scenario was played out during 2003 and 2004 on Myopia Street. In this case, the Town determined that the road was in sufficiently poor condition as to adversely impact and endanger public safety. The road was redesigned and repaved by the Town, with the cost of the improvements assessed to the residents.

Several improvements are also slated or underway for the town roads under the control of the Massachusetts Highway Department. MassHighway, in coordination with the Town, is currently undertaking a massive upgrade of Washington Street from the Mt. Vernon Street intersection to the Aberjona River crossing. This work, which was cost-shared by the Town, includes upgrading the road to current state standards, installation of traffic signals, drainage improvements, and repaving. Work on this project is expected to be completed by fall 2005. Additionally, MassHighway is 75% complete with design plans for the installation of new traffic signals at three intersections on Cambridge Street.

4.3.2 Public Transportation

The Town of Winchester is serviced by the Lowell Commuter line, which provides service to North Station. The town has two commuter rail stations- the Town Center Station located near the intersection Church and Main Streets and the Wedgemere Train Station located near the intersection of Bacon Street and Mystic Valley Parkway. Parking near the Winchester Center station is provided in several surface parking lots maintained by the Town- the Waterfield, Jenks, and Aberjona lots. Town residents are eligible to purchase annual or quarterly parking pass at a cost of \$15 per month to park in these lots. Parking is available free of charge at the Wedgemere Train Station.

The MBTA also operates two bus lines through Winchester:

- Bus Route 134 provides service to North Woburn and Wellington Station via Medford Square. The bus runs from along Main Street (Route 38) in Winchester between the Medford and Woburn lines, stopping at the Winchester Center Commuter Rail Station parking lot.
- Bus Route 350 provides service to North Burlington and Alewife Station. The bus runs along Cambridge Street (Route 3) between the Woburn and Arlington lines.

Additional route information is available at

http://www.mbta.com/traveling_t/schedules_buses_findbustown.asp.

The commuter rail and bus lines that service the Town of Winchester provide access to the wider MBTA system. For example, the Lowell commuter rail line terminates in Boston at North Station, which provides access to both the Green and Orange subway lines. The 134 bus provides access to the Orange line at Wellington Station in Medford. The 350 bus provides access to the Red line at Alewife Station in Arlington. The MBTA is also evaluating the feasibility of extend the Green line from the Lechmere Station through Medford and Somerville. If this plan comes to fruition, it is anticipated that the extension may be accessible by the commuter rail station in West Medford.

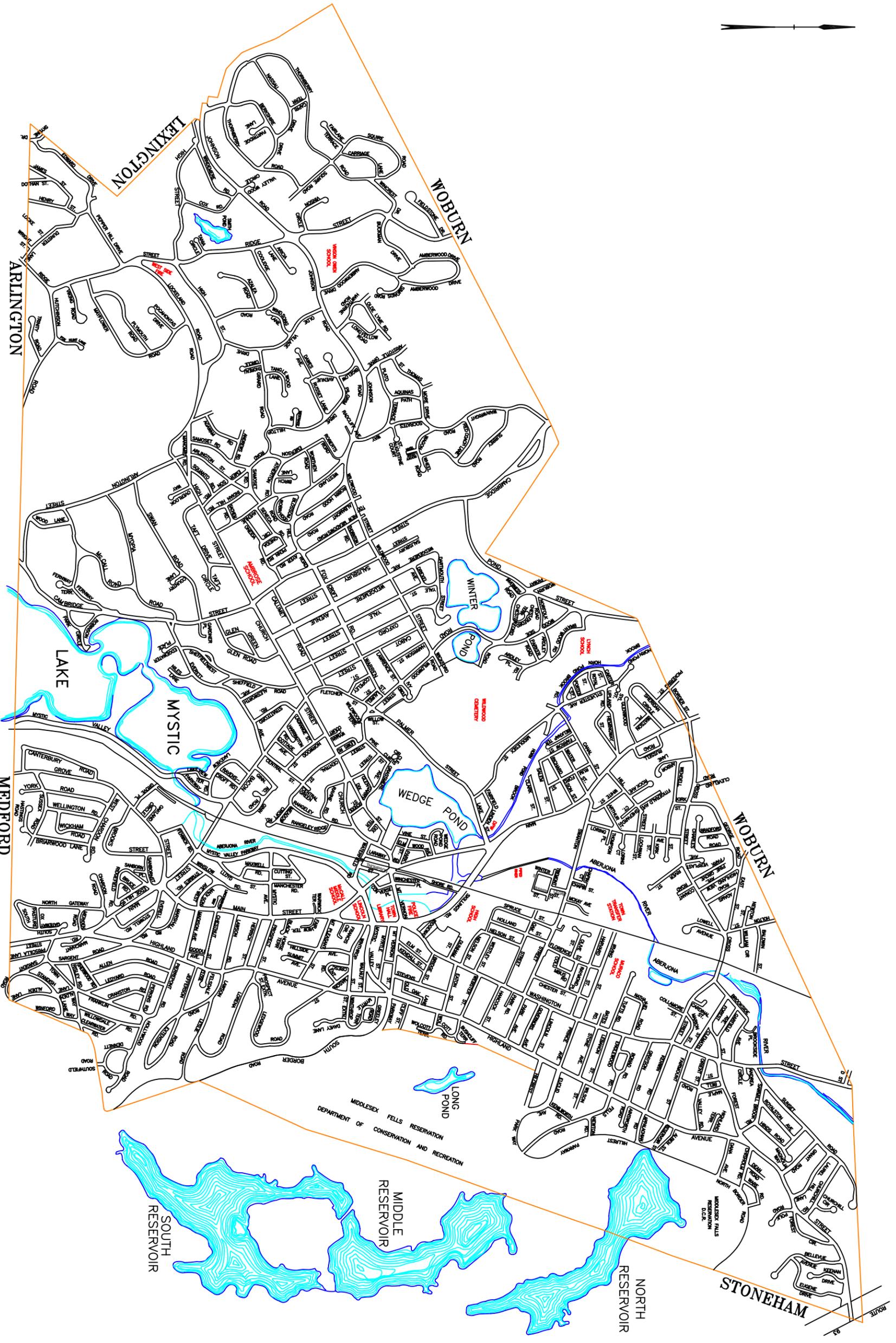
4.3.3 Bikeways

Currently, the Town of Winchester has two bike paths. The first is the Horn Pond Brook greenway/bikeway, which runs from the Woburn town-line to Wedge Pond. This trail provides access to the larger Horn Pond recreation area in Woburn. The second path begins near the Woburn town line and continues down Washington Street, following the Aberjona River into Davidson Park.

The Town of Winchester, Town of Stoneham, and City of Woburn are jointly pursuing the development of an approximately 5.7-mile “Tri-Community Bikeway/Greenway” that would provide bicycle and pedestrian access between the three communities. In Winchester, the bikeway would approximately follow the Aberjona River corridor from the Woburn line to its terminus at the Upper Mystic Lake. The path would provide access to various schools, recreational areas, and the Town center. The Tri-Community Bikeway project is currently in the preliminary design phase; construction is expected to begin in 2008.

4.3.4 Pedestrian Routes

While the major pedestrian routes in Winchester need to be analyzed further, the routes to and from the public schools, parks, rail and bus stops, and the Town Center clearly form the underling pattern of use. A more through analysis of these and other routes will be part of further planning efforts.



TOWN OF WINCHESTER

FIGURE 4-2: STREET MAP AND MUNICIPAL BUILDINGS
JUNE 2005

4.4 Municipal Facilities

The Town of Winchester operates and maintains various municipal buildings consistent with its size, demographics, and level of service necessary to protect public health and safety. Table 4-2 provides a summary and address for all municipal buildings; this information is also shown in Figure 4-2.

Table 4-2: Location of Primary Municipal Buildings

Category	Name	Address
Municipal Offices	Town Hall	71 Mt. Vernon Street
	DPW	15 Lake Street
Public Safety	Police Department	30 Mt. Vernon Street
	Fire Department	30 Mt. Vernon Street
	West Side Fire Station	
Schools	Ambrose Elementary	27 High Street
	Lincoln Elementary	161 Mystic Valley Parkway
	Lynch Elementary	19 Brantwood Road
	McCall Middle	458 Main Street
	Muraco Elementary	33 Bates Road
	Vinson-Owen Elementary	75 Johnson Road
	Winchester High School	80 Skillings Road
Other	Library	80 Washington Street
	Wildwood Cemetery	
	Transfer Station	McKay Avenue
	Sanborn House	Adjacent to Ambrose School
	Winchester Train Station	Intersection of Church and Main Streets

The DPW Maintenance Division is responsible for the maintenance and repair of school and town buildings, as well as for custodial services at all school and most municipal buildings.

In 2004, the Town contracted the services of a professional assessment team from Tappe Associates to conduct a detailed facilities condition assessment (FAC) of all the educational facilities and town buildings in Winchester. The primary goals of the assessment were:

- To provide a baseline condition assessment of the building systems of the Town of Winchester facilities so that future teams following the same methodology can compare results to establish and identify trends in improvement or decline
- To establish funding requirements necessary for reducing deferred maintenance and optimizing ongoing capital management activities
- To demonstrate the decision support capabilities of *VFA.facility*, VFA’s capital planning and management software program (CPMS)

This work was completed in April 2004, with the results summarized in the report “Facilities Condition Assessment for Town of Winchester”. The study included the assessment of 23

municipal facilities and provided a detailed building summary, deficiency description, and cost estimate for each. The Town is currently planning to purchase the *VFA.facility* software to track completed repairs, pending work, and cost estimates.

4.5 Mapping Resources

4.5.1 Geographic Information System

In 2000, the town of Winchester contracted the engineering and mapping services of the CDM to assist with the development of the Town's Geographic Information System (GIS). Table 4-3 provides a summary of the data layers that were planned for development under this contract, as well as the status of this work at the time of printing.

Table 4-3: GIS Datalayer Availability

Data Layer	Status
Landbase information, including town boundary, hydrography, topography, and transportation	Completed
Assessor's parcel delineations, including the digitization of property lines, right-of-way, property ID numbers, and map borders as depicted on the Town's existing tax maps	Draft completed Final maps expected in Fall 2005
Zoning Map	In progress- requires completion of parcel's information first
MassGIS datalayers, including orthophotography, open space, state protected wetlands, contours, floodplains, scanned USGS quadrangles, and areas of environmental concern	Completed
Stormwater facilities, includes approximate location of pipes, manholes, and other stormwater related features	Under development
Water system, including approximate location of pipes, hydrants, valves, and other water system features	Under development
Sewer system, including approximate location of manholes, sewer pipes, force mains, and pump stations	Under development
Historic Resources, including properties included in Winchester Inventory, properties listed in the National Register of Historic Places, properties subject to demolition delay by-law, and house demolitions	Under development

As part of this effort, the Town of Winchester and CDM will also develop a GIS internet application to allow public access to pertinent GIS layers through a web browser-based interface,

query and retrieval of parcel information, and basic manipulation and query of GIS layers, such as measurements, buffers, and feature identification.

4.5.2 Aerial Photography

An aerial flyover of the town was completed by James Sewall Company in Spring 2001 as part of the CDM contract. The results of this flyover were compiled in a report entitled “Control Report, Prepared for CDM, Report No. C7-07”, dated July 5, 2001.

The aerial mission resulted in the collection of color aerial photography at a scale of 1”=400’ for the entire town and waterworks property. From this, planimetric mapping for the study area was developed, including buildings, roads, swimming pools, fences, wet areas, streams, ponds, sidewalks, driveways, decks/porches, poles, visible street signs, visible manholes, visible catchbasins, visible fire hydrants, recreation areas, and retaining walls. The planimetric maps met all applicable 1”=40’ scale mapping accuracy standards. Digital data was developed on the Massachusetts State Plane Coordinate System NAD83. Two-foot topographical contour lines were also developed for the town and waterworks property; the vertical datum used for this data was NAVD 88.

In addition to the Town’s own aerial photography, the state of Massachusetts has funded several aerial missions in the past, including flights in 1971, 1985, and 1999. Land use statistics for the town of Winchester are available from MassGIS for these three years to provide a historical perspective on land use trends over the past 30-years. Additionally, in April 2001, MassGIS, EOE, and the Massachusetts Highway Department jointly funded the collection of 1:5,000 color orthophotography across mainland Massachusetts. These images are available from MassGIS at <http://www.mass.gov/mgis/colororthos2001.htm>.

5.0 Municipal Capacity

The concept of municipal capacity includes the fiscal capacity as well as the operational and management resources of the community. Winchester has historically enjoyed a stellar fiscal reputation, and this fact has been reflected by a Triple A bond rating for many years. However, like all communities in Massachusetts Winchester has been impacted by reduced state aid to municipalities. Since 2002 state aid has declined from 12.6% of the local operating budget to 8.8%. The shortfall, has been exacerbated by increasing personnel costs particularly health insurance which has increased 65.2 % in only five years. Winchester is not alone in facing what is becoming the a long term fiscal problem, but the fact that Winchester generates not more than 5% of its total property tax levy from commercial /industrial properties has put significant stress on the residential tax base as a means to address the fiscal shortfalls. Winchester residents have rejected overrides to proposition 2.5 on two recent occasions and, as a result, the five-year trend of reducing the overall employee head count is anticipated to continue. Unless state aid rebounds to levels experienced in the 1990's the stress on the residential tax base will continue. As precarious as the overall fiscal condition may be, if a downturn in residential values occurs, or simply a slowing of residential property values, Winchester will encounter additional fiscal problems that most likely translate into reduced municipal capacity, i.e. additional staff cutbacks.

Winchester has a full array of traditional town departments, boards, and commissions. However, given recent budget restraints the DPW is essentially in a maintenance mode relative to roadways, sewers, and water systems. There is no capacity to entertain extensive new capital projects without state or federal grants. An obvious shortfall in municipal capacity is the fact that the Town does not have a Town Planner or Community Development Coordinator. As a result, the day to day management of community development issues may not occur and the significant amount of personnel, written and mapped material available to Town decision makers cannot be effectively managed to address emerging or long standing problems, except on an ad hoc basis. By either designating an existing town employee or by hiring an individual to serve as Town Planner will the Town be able to effectively address on going community development issues. Further, without a staff member assigned to assist the various boards affecting community development, the commitment and expertise found on many of the Town's boards, particularly the Planning Board, which is charged with community development oversight, will not be effectively employed.

The Winchester Public School System is recognized as one of the best in the region and Commonwealth, certainly with the top five to ten-percent by the various means of measurement. The school system should be considered the primary support of local property values, as it is for most communities. While the school system is an attractive amenity to families with school aged children the essentially built out nature of the community and the minimal amount of developable acreage clearly suggests that overall enrollment levels will be relatively stable. Further, the recent improvements to the elementary and middle school components will be able to serve said school needs well into the foreseeable future. The High School, however, is showing signs of age and most likely will demand improvements in the mid term, including potential improvements to the athletic facilities and fields.

Readily Available Resources

Finance Committee Reports and Recommendations FY06

A comprehensive examination of town fiscal capacity and prospects.

Massachusetts Department of Revenue

On line, the Community Comparison Reports provide detailed fiscal reports that can be combined into regional comparisons.

Massachusetts Department of Education

On line, school budget and state school aid analyses and financial history. Winchester enrollment patterns and regional projections are also provided.

Executive Office of Housing and Community Development (www.mass.gov/dhcd)

On line, Massachusetts DHCD . Community profiles and summary of all community facilities (police, fire, libraries) and transportation options.