Open Space and Recreation Plan for the Town of Hamilton

Hamilton Open Space Committee Hamilton Conservation Commission Hamilton, Massachusetts May 2009

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SECTION 1 PLAN SUMMARY

Hamilton's history is that of a rural town, one in which the stewardship of land for agriculture, equestrian use, and passive enjoyment of nature and wildlife has been a primary factor in shaping its character. Although the town functions as a residential suburb to Boston and the North Shore and the Route 128 urbanized areas, preservation of its remaining rural character is a high priority which calls for continued attention to open space and recreation strategies in the face of unrelenting development pressures. This theme dominates both the original 1965 Master Plan for Hamilton, authored by the renowned planner Charles Eliot, and its recently updated version, as well as successive Open Space and Recreation Plans, including this one.

The preparation of this plan involved:

- Distributing town-wide questionnaires and holding public meetings, which validated the idea that town residents perceive and treasure this rural feel, and determined what they consider it important to accomplish in promoting open space and recreation opportunities;
- Updating inventory of open space resources, special natural features, and cultural resources of the town;
- Analyzing the challenges to maintaining these values as development pressure continues.
- Formulating a five-year action plan to evaluate priorities regarding current open space goals. This plan focuses on assuring real, durable protection for the valued open spaces most vulnerable to residential development.

Introduction:

Α

SECTION 2 INTRODUCTION

Statement of Purpose

In revising and articulating Hamilton's open space goals, the committee has acted with a certain understanding of what is intended by the term "open space." Various facets of that understanding are reflected in the protection the committee seeks for valued, though sometimes unarticulated, resources.

In answer to the often-asked question "What is open space?" the committee recognizes that the interests protected by Article 97 and guaranteed to the people of Massachusetts as constitutional rights should be considered in determining what parcels to prioritize for protection. These interests include biodiversity and habitat protection, water resources protection, preservation of working and historic farms, preservation of scenic vistas, and passive-use recreation. These priorities have been adopted pursuant to the constitutional provisions by the Executive Office of Environmental Affairs (EOEEA) and emphasize preservation of natural resources and the ability of the public to enjoy those preserved natural areas.

The committee supports the agency in its statement that "We must be careful, however, not to view open space solely as a mechanism against growth. In Massachusetts, our landscape encourages the natural and built environments to work in unison, not against one another. This model creates a unique, vibrant and healthy place to live, work, play and visit."

In evaluating open space parcels for preservation, it must be remembered that our town already has a great deal of open space that is permanently protected. In two areas of town, roughly at the eastern and western extremities, there are large amounts of open space that are contiguous to similar quantities of open space in neighboring towns. These form large wildlife corridors, provide significant watershed

Introduction:

protection, include several working farms and forests and provide exceptional passive recreational resources. While the above criteria may indicate suitability for protection, a further goal and consideration should be a parcel's ability to add to these substantial and relatively undeveloped tracts.

Hamilton's open space program is not intended to promote or prevent development, to provide municipal revenue, or to determine land use. Such considerations result in the pitting of economic interests against environmental ones, with the risk of the latter losing out. Rather, this plan is intended as a guide to preserving the various resources under the open space umbrella as Hamilton continues to grow and change.

B Planning Process and Public Participation

This update of the Hamilton Open Space and Recreation Plan was developed by an informal group of citizen volunteers. The initial impetus for the project came from members of the Conservation Commission in consultation with members of the Citizens' Action Planning Committee, particularly the Open Space and Recreation Subcommittee, Planning Board, Board of Health, other town boards, and the Hamilton-Wenham Open Land Trust, Essex County Greenbelt Association, Essex County Community Foundation, Essex County Trail Association and other nonprofits.

A questionnaire was prepared and distributed to town residents in cooperation with the Citizens Action Planning Committee. The results of these public opinion surveys were the subject of a series of public discussions.

The format of this plan conforms to the specifications set forth by the Commonwealth of Massachusetts Division of Conservation Services.

SECTION 3 COMMUNITY SETTING

A Regional Context

General Physical Location

Hamilton is located in Boston's North Shore region in Essex County, Massachusetts. The Ipswich River forms the northern boundary between Hamilton and the Town of Ipswich. Hamilton is bordered by Essex to the east, Wenham to the south and Topsfield to the west, with Manchester touching the southeast corner of Town. See "Location map of Hamilton", in the map section.

The center of Hamilton is approximately 27 miles by road from the State House in Boston. Routes 128 and I-95, important commuter highways in the Boston metropolitan region, are located a few miles from Hamilton's borders. The Newburyport line of the commuter rail system connects South Hamilton with Newburyport, Ipswich, Beverly, Salem, and Boston. Beverly Airport is convenient for recreational flying and corporate aircraft. Proximity to transportation corridors, scenic amenities and a reputation for fine schools have made Hamilton an attractive "bedroom community" for professionals working in Boston, Beverly, Salem, and Route 128 technical and industrial firms.

Though sections of Hamilton possess suburban characteristics, it would be inaccurate to classify Hamilton as merely another Boston suburb. The handsome Historic District and several large tracts of forest and agricultural lands contribute to Hamilton's "small town" New England feeling. Some of these open lands are protected from development by conservation restrictions or by inclusion in state parks or nature preserves owned by environmental organizations. However some of the town's remaining open land is fully developable should current private owners decide to sell.

The North Shore's trails, lakes, beaches and marinas afford many opportunities for outdoor recreation. Hamilton residents can make use of ocean beaches and marinas outside of Town borders. Hamilton's trail system is a recreational resource of immense value to horseback riders, hikers, crosscountry skiers and mountain bikers. Many of these trails connect and pass through large undeveloped tracts of land that are wholly or partially located within the boundaries of neighboring towns. The Massachusetts Audubon Society's Ipswich River Wildlife Sanctuary, located primarily in Topsfield and Wenham, extends into Hamilton. Bradley Palmer State Park is composed of Hamilton and Topsfield woodlands, wetlands, and meadows. Chebacco Woods and other open-space areas at the confluence of Hamilton Manchester and Wenham extend out along the backbone of Cape Ann to West Gloucester. The Manchester and Essex Open Land Trust refers to the area as "The Wilderness." There is a comprehensive trails system connecting all of the towns in the Wilderness, and that includes trails in Chebacco Woods and certain trails which begin behind house lots which front on Chebacco Road. Many of the Grass Rides (The Trustees of Reservations) trails overlook Hamilton's and Ipswich's scenic Appleton Farm. Chebacco Lake, a scenic and boating resource, lies within Hamilton and Essex. Finally, the network of trails connecting Gordon College and the ponds and lakes in southeastern Hamilton cross back and forth between Hamilton, Wenham and Manchester, has a total length of more than 100 miles.

The Ipswich River offers historical (the location of the old Willowdale mill , now an ECGA reservation), and recreational (canoeing, swimming and fishing) as well as natural (animal, plant and fish habitat) value. Other local waterways of interest are the Miles River, Wenham Swamp and Wenham Lake. While the plentiful freshwater supply undoubtedly aided the farmers in Hamilton's early history, the development of the town as a recreational area was dependent on the existence of these waters. Today the ponds and streams remain an integral part of the scenic quality which draws people to the area.

Resources Shared With Neighboring Towns

Natural resource areas, and particularly water resources, are no respecters of town boundaries, so although this document is centered on Hamilton, it is evident throughout that our resources and open spaces interact with those of neighboring towns, and in the case of the Ipswich River, even far away towns.

The Ipswich River is approximately 35 miles long and its watershed covers about 155 square miles, extending from the Wilmington-Reading area inland to the sea at Ipswich. The surface and groundwater resources of the basin are intensively used for public water supply (see Table 3-1 Towns Drawing Municipal Water From Ipswich River basin).

Table 3-1 Towns Drawing Municipal Water From Ipswich River basin

Beverly Danvers Hamilton Lynn Middleton North Reading Peabody Reading Salem Topsfield Wenham Wilmington

Chebacco Lake is a key recreation and water resource for Essex as well as Hamilton. Manchester owns and uses water resources in Hamilton. Hamilton, Wenham, and Topsfield all have parts of the Great Wenham Swamp wetlands system within their boundaries. Clearly, resource and recreation planning for our town must be to a great extent regional planning as well.

Hamilton shares many active and passive municipal resources with other North Shore communities. (Only a brief summary will be given here; for a more detailed account see the "2001

Recreation Master Plan".) Patton Park consists of 15.5 acres of open space located on Route 1A close to the police and fire station and business center of town. The following activities at the park are used by both Hamilton and Wenham residents and its out-of-town visitors.

- Regulation baseball diamond (Youth Leagues, men's softball, senior league baseball, girls' softball, women's softball, and intertown baseball)
- Little League diamond
- Horseshoe pit (multitown tournaments)
- Swimming pool (multitown meets)

Other Patton Park facilities that are shared by other communities include the small children's play area, the skating pond, the picnic area (which has grills and benches), the physical fitness course, the basketball court, and the tennis courts. Lastly, children of all ages come from all over to climb aboard the famous olive-drab Patton tank that sits in the middle of the Park.

At the Recreation Center, located adjacent to the Hamilton-Wenham Public Library on Union Street, programs held in the gym for Hamilton and Wenham residents of all ages include youth basketball, gymnastics, beano, badminton, senior citizens aerobics, and adult volleyball. The playing fields are used for Little League, football, and soccer (league play).

Summer concerts at the Patton Park bandstand are open to all.

Bradley Palmer State Park is an important regional recreation and open space resource that is partially in Hamilton. Likewise, the Ipswich River Wildlife Sanctuary crosses town lines and serves a much wider regional population. These tracts and many others are crossed by trails, including a section of the Bay Circuit trail system, which connect and serve a number of towns.

The management of the multi-town network of riding trails is largely undertaken by the Essex Country Trail Association, which has been in existence for over two decades. With more than six hundred members, ECTA maintains trails on public

and private land in the towns of Essex, Ipswich, Wenham, Topsfield, West Newbury and Hamilton. The Association publishes a newsletter informing members of rules, regulations, and trail "etiquette", communicating owners' wishes regarding permitted uses of their property. Members are issued badges for identification. Most boarding barns and the Myopia Hunt Club require their people to join the ECTA, and membership is regarded as a bargain for the privilege of the use of the land. The Trail Association is concerned with the preservation of trails and connecting links, and has recently started acquiring trail easements on both protected and unprotected land. ECTA's mission sometimes includes the difficult and contentious matter of helping new land owners understand their responsibilities under the trail easements that go with their properties. Some recommendations made by the Association are incorporated in later sections and maps of this Plan.

The interests of walkers and hikers are served by the Two-Town (Hamilton and Wenham) Walking Club, which organizes numerous events in Hamilton open space areas. The Club participates with the Hamilton Conservation Commission, the Essex County Trails Association, the Hamilton-Wenham Open Land Trust, the Road Safety Committee and other open space interest groups in an annual National Trails Day event in Bradley Palmer State Park. The "Discover Hamilton" trail (Figure 3-2), is a fine example of a Hamilton trail.

The Road Safety Committee has researched and made recommendations about trails and walkways in the town. The following summary of these findings and recommendations was provided by that group.

Bikepaths/Shoulders

The mandate of the Road Safety Committee is to determine where sidewalks, bikepaths or woodland paths would improve safety and access in Hamilton. A review of the Townwide questionnaire revealed that a critical link to this system was Bridge Street, which connects the neighborhoods of east Hamilton to the Route 1A schools, recreation facilities, and

shopping areas. It was decided that the Committee would analyze this area in detail to improve the bicycle/pedestrian access to Bridge Street.

An engineering firm was hired to perform a study of factors such as the roadway right-of-way, number of accidents, roadway alignments, and hazards in the roadway "clear zones", and a proposed design was developed. The proposed roadway safety improvements for pedestrians and bicycle traffic was presented to the residents of Bridge Street at a Public Meeting held at Town Hall on June 24, 1999. These recommendations were based on the standards of the American Association of State Highway and Transportation Officials (AASHTO) and the Massachusetts Highway Department, as well as site walks with members of the Committee.

The proposed design to widen the roadway in order to provide bicycle lanes would have eliminated roadside vegetation including some specimen trees. The Committee felt that the negative effect on the natural landscape would be unacceptable. One of the major reasons Hamilton is such a nice community is the country-style roadways which connect neighborhoods. It was determined by the residents and members of the Committee that the visual impacts of these improvements to adjacent properties and the neighborhood would be unacceptable. Residents supported the town's plan to reconstruct Bridge Street without bicycle lanes.

It was concluded by the Committee that the current approach to roadway reconstruction taken by the Department of Public Works should continue. That is, widen the roadway where impacts will be minimal, provide shoulder striping to better delineate the useable shoulder, and install "Share the Roads" signs where bicycle traffic is expected.

The selected corridors were as follows:

Corridor 1, Route 22 – Martin Street and Western Avenue in Essex to Essex Street and Woodbury Street in Hamilton to Rubbly Road, Grapevine Road and Essex Street in Wenham and, finally, Essex Street in Beverly to downtown, a distance of nine miles.

Corridor 2, Route 133 – John Wise Avenue in Essex to Essex Road, County Road, South Main Street and ending on Market Street in Ipswich, a distance of five and a quarter miles.

Corridor 3, Route 133 in Essex from Martin Street – Route 22 along Mail Street to Southern Avenue connecting to School Street in Manchester and continuing to the MBTA station via Central and Sumner Streets to Beach Street, a distance of five and a half miles.

The first step was to summarize information for each route as follows:

- Determine existing right-of-way
- Inventory existing sidewalk
- Inventory existing roadway width
- Compile available traffic counts

The second step for each corridor was to provide design recommendations for the inclusion of bike and pedestrian facilities, with cost estimates.

Governing standards for bicycle facilities were cited from the following sources:

American Association of State Highway and Transportation Officials (AASHTO) 1999 Guide for the Development of Bicycle Facilities.

Massachusetts Highway Department (MassHighway) 1995 Highway Design Manual (Metric Edition).

MassHighway Engineering Directive 98-003 in response to MGL. Chapter 87 Bicycle and Pedestrian Accommodation.

1998 Massachusetts Statewide Bicycle Transportation Plan.

MassHighway Policy Directive P-98-003 Bicycle Route and Share the Road Signing Policy.

Class I - Shared-Use Paths

Shared-use paths are defined in the 1999 AASHTO guidelines as "facilities on an exclusive right-of-way with minimal cross

flow by motor vehicles." Users may include bicyclists, pedestrians, in-line skaters, wheelchairs, etc.

AASHTO guidelines recommend a minimum 3 meters (10 foot) width with two 0.6 meters (2 foot) graded shoulders for shared-use paths on an exclusive right-of-way.

Class II - Bike Lanes

Bike lanes can be provided when it is desirable to delineate available road space for preferential use by motorists and bicyclists. For roadways with no curb and/or gutter, the minimum width of a bike lane should be 1.2 meters (3.9 feet). If parking is permitted, but there is no stripe for spaces a parking stripe for stalls are not utilized, the shared areas should be a minimum of 3.3 meters (10.8 feet) where there is no curb face and 3.6 meters (11.8 feet) adjacent to a curb face. If the parking demand/turnover is high, an additional 0.3 meters – 0.6 meters (1-2 feet) should be provided.

Class III – Signed Shared Roadways

Signed shared roadways are identified as preferred bike routes. According to the AASHTO guidelines, an important reason for designating/signing preferred bike routes is to provide continuity to other bicycle facilities.

Many jurisdictions have utilized edge striping on local streets to delineate shoulders where bicycle travel is expected. MassHighway policy discourages the use of edge lines on local streets unless the delineated shoulder is of adequate width for a parked vehicle (7-8 feet) or a parking prohibition is in place. Where on-street parking demand is minimal but allowed, some jurisdictions have chosen to delineate shoulders less than the width of a parked vehicle in order to define bicycle space. This technique is utilized to channelize motor vehicles toward the center of the roadway by narrowing perceived lane widths.

Shared roadways where bicycle traffic is expected are often supplemented with Share the Road signage. Share the Road signs can be posted without absolute conformance to the above Shared Roadway minimum width requirements.

A summary of minimum recommended pavement width (two lane roads, volume >2000 ADT) per AASHTO guidelines is as follows:

Class II Bike Lanes with no parking - 30 feet

Class II Bike Lanes with parking on one side - 40 feet

Class II Bike Lanes with parking on both sides - 48 feet

Class III Signed Shared Roadway with no parking – 28 feet (29.5 feet per MassHighway)

Class III Signed Shared Roadway with parking on one side – 37 feet (38 feet per MassHighway)

Class III Signed Shared Roadway with parking on both sides – 46 feet.

Roadway geometry data were collected at representative locations of each stretch, including lane configuration and pavement / shoulder widths, observed on-street parking demand and present of sidewalks and grass strips, and approximate right-of-way widths.

The results of this study along the Essex Street, Route 22 corridor in Hamilton are as follows:

- Existing Conditions: Pavement widths in this section vary from 26-30 feet. There is a short stretch of sidewalk on one side from Alan to Woodbury. Town Layout is 45-50 feet. There is no demand for on-street parking.
- Recommended Plan: Widen and overlay pavement to 32.8 feet (10 meters) with edge striping at a four foot offset to the edge of pavement. Post Bike Route signing. A formal on-street parking prohibition should be implemented. Estimated construction cost is \$600,000.

Sidewalks

The Road Safety Committee performed an extensive study to locate the existing sidewalks in Hamilton. This existing sidewalk system is shown on the Road Safety Master Plan . A review of this plan by the Committee shows there are several areas where new pathways need to be constructed and

existing sidewalks need to be reconstructed. A pathway, as defined by the Committee, is a 6-foot paved meandering walkway which blends in with existing topography and minimizes the physical and visual impact to the existing landscape.

The number one goal of the Committee for developing pathways is to provide children and pedestrians safe access to the Cutler, Winthrop, and Buker Elementary Schools; to the High School/Miles River Middle School; to Patton and Pingree Parks; and to the library. An extensive network of sidewalks exists in the neighborhoods adjacent to the three elementary schools and the library. The main connecting streets to these destination points are Union and Asbury Streets. The Union Street sidewalk has recently been reconstructed with a vertical granite curb. Asbury Street, from Route 1A to Highland Street, also has recently been reconstructed. This project created a new sidewalk on the easterly side of Asbury Street, the most heavily traveled pedestrian corridor in Town. The Committee has not proposed any additional sidewalks in this area.

The second area of concern is access from the populated areas of east Hamilton to the Route 1A sidewalk system. As mentioned in the bikepaths/shoulders section, Bridge Street is the critical link. Therefore, it was determined that a connection should be provided between Essex Street (Route 22) and Bridge Street. The three streets that were studied, which connect Bridge Street to Essex Street, are School Street, Woodbury Street and Miles River Road. Based on roadway alignment and width, available right-of-way and adjacent land use, it was determined that the Woodbury Street area would be best suited.

Since the completion of the original Road Safety Master Plan, the Town's Public Works Department has constructed a continuous sidewalk on the north side of Bridge Street from Route 1A to Woodbury Street. The Committee was awarded a \$150,000 grant from the Department of Environmental Management to construct the Woodbury Street pathway. An engineering firm was hired by the Town and has completed the design of the pathway. As of the date of this report, the

project is being advertised for construction and it is likely the pathway will be constructed from Bridge Street to the entrance of Gordon Conwell Seminary.

The following trail descriptions are based on the2000 Road Safety Master Plan. See maps and reports in the References for further information.

Discover Hamilton Trail.

The Discover Hamilton Trail is a 10-mile long trail that links a greenway in the Town of Hamilton with the Bay Circuit Trail in Ipswich and the Hamilton Historic District. Open space parcels include the Appleton Farms Grass Rides, Bradley Palmer State Park, Harvard Forest, Pingree Reservation, and Willowdale Mill Reservation. Developed by the Hamilton Conservation Commission, this marked trail is featured on the Two Town Trail Map. The plan is to extend the Discover Hamilton Trail from its current terminus at Town Hall down Bridge Street to Woodbury Street, across the new Woodbury Street Bike Path once constructed to Essex Street, down Essex Street to the "Pansy Field" at Chebacco Woods, and through Chebacco Woods to the town boundary. This will extend the distance well beyond 10 miles.

Regional Trail Networks

Bay Circuit Trail - Plum Island, Newburyport to Kingston Bay, Plymouth.

As stated by the Bay Circuit Alliance, the group developing this trail, it was "first proposed in 1937 as an outer 'emerald necklace', linking parks, open spaces, and waterways from Plum Island to Kingston Bay. The Bay Circuit idea – a precursor of today's national greenways movement – continues to take shape. Focused on a 200 mile corridor of 50 cities and towns, the Bay Circuit Trail is the string that connects the pearls of this green necklace. Community by community, the dream of connecting protected land in a greenway around Boston is now becoming a reality."

Hamilton has dedicated a portion of the "Discover Hamilton Trail" as part of the Bay Circuit Trail. The dedicated portion traverses Bradley Palmer State Park, the Pingree Reservation,

Harvard Forest and Appleton Farms. Future plans call for the extension of this trail from Appleton Farms to Crane Beach in Ipswich.

The East-West Greenbelt - Wenham to Rockport.

Developed for the North Shore Task Force (a regional MAPC subcommittee) by the staff of the Metropolitan Area Planning Council (MAPC), the goal of this project is to connect the Border to Boston Rail Trail and the Bay Circuit Trail in the coastal communities of Gloucester and Rockport. Hamilton's connection to this trail would be via the trail system in Chebacco Woods. The connection of the East-West Greenbelt to the Bay Circuit Trail is through Hamilton by way of the Discover Hamilton Trail.

The Border to Boston Rail Trail - Danvers to Salisbury.

The Border to Boston Rail Trail is a proposed multi-use railtrail connection from Danvers, Massachusetts, to the New Hampshire border. The 30-mile trail is along the former Eastern Railroad route which was the competitor to the Boston and Maine (B&M) railroad route. The B&M route was recently reconstructed to Newburyport. The trail passes through Danvers, Wenham, Topsfield, Boxford, Georgetown, Newbury, Newburyport and Salisbury. Hamilton's trail connection to the Border to Boston Rail Trail will be the planned East-West Greenbelt noted above.

The East Coast Greenway - Maine to Florida.

This ambitious project is to connect Florida to Maine with a continuous "green" route for users of all ages and abilities. The 2,300 mile trail winds through the cities and suburbs along the east coast and is being considered the inter-urban alternative to the Appalachian Trail. The Border to Boston Trail is the selected route for the East Coast Greenway on the North Shore. As mentioned earlier, Hamilton will be able to access the Border to Boston Rail Trail and thereby the East Coast Greenway via the proposed East-West Greenway.

Trail Maps

The Road Safety Master Plan map outlines the major trails network in Hamilton. Below is a list of free trail maps

available to the hiker to navigate the maze of trails through several properties:

Hamilton – Wenham Trails Map. Available at Town Hall and the Hamilton – Wenham Public Library.

Bradley Palmer State Park Trail Map. Available at Park Headquarters, located off Asbury Street.

Bradley Palmer State Park Self-Guided Nature Trail Map. Also available at Park Headquarters.

Appleton Farms – Hamilton and Ipswich, Massachusetts. Map available at the Highland Avenue Trail Head in Hamilton.

Chebacco Woods Trail Map. Available at the Trail Head located on Chebacco Road in Hamilton.

Border to Boston Rail Trail. Map available from MassBike/North Shore, P.O. Box 308, Hathorne, MA 01937.

Bay Circuit Trail. Map available from the Bay Circuit Alliance, 3 Railroad Street, Andover, MA 01810.

Socio-Economic Context

According to data from the 2000 US Census, most Hamilton adult residents (94.0%) have graduated from high school and 52.5% have earned a college diploma. A large percentage of employed persons (see Table 3-2, Employment) are employed in professional/managerial positions (53.9%). Median family income increased from \$28,272 (1980) to \$55,101 (1990) to \$72,000 (2000); 17.5% of households had an income of \$150,000 or more. Household characteristics reported: families (80.3%), with children under 18 (42.1%), persons over 65 (22.6%) and a poverty level of 5.3 percent.

3-2	Employment (U.S. Census 2000)		
	Employment	%	
	Professional/managerial	53.9%	
	Sales and office	23.8%	
	Service	12.0%	
	Production, transportation	5.2%	
	Construction, maintenance	4.3%	
	Self-employed	9.0%	
	Other	5%	
	Total number of employed persons	3,795	

Table 3-2Employment (U.S. Census 2000)

B History of the Community

The Town of Hamilton was settled by farmers who tilled the fields to the south of Ipswich. Early settlers in Hamilton asked that their local church be "set off" from Ipswich due to the distance that the community in the "Hamlet" had to travel to downtown Ipswich for church. The forty families within the town did not find enough room for them at the Wenham church located to the south and decided to build their own church in 1713. After the Revolutionary War, they petitioned to separate into their own community. Finally in 1793, Hamilton became a town. The farms were originally scattered along early roads.

A representative view of Hamilton in the early 19th century is given by the following figures from an agricultural census done by the state in 1831.

1831 Land use

Use	Acres	% of
		total
Tillage	483	5.97
English and upland mowing, Inclusive	724	8.95
of orchard mowing		
Fresh meadow	778	9.62
Pasture, inclusive of orchard pasture	4139	51.18
Wood-land, exclusive of enclosed	998	12.34
pasture lots		
Unimproved	470	5.81
Parsonage	30	0.37
Roads	120	1.48
Water	345	4.27
Total	8087	

The total is about 18% short of accounting for the actual area of the town, but the proportions are probably roughly correct. Note that pasturage plus land in the production of fodder is the predominant land use, totaling about 70%, and woodland, at 12%, is much less.

Population

Year	Population
1810	780
1820	802
1830	748

Structures, 1831

Dwelling Houses	116
Shops	50
Barns	114

Trades, 1831

Shopkeepers	3
Shoemaking establishments	About 35
Saw mill	1

Grist mill	1
Cabinet makers	2
Tannery	1
Blacksmith	1
Mason	2
Chairmakers	2
Wheelwrights	2
Carpenters	8
Weavers	1

1831 Agricultural produce

Grain

Crop	Bushels
Rye	425
Oats	1333
Corn	5006
Barley	67

Fodder

Crop	Tons
English and upland hay	354
Fresh meadow	416

Livestock

Horses > 1 yr	91
Oxen >= 4 yr	168
Cows >= 3 yr	399
Steers 1yr+	238
Sheep 6mo+	430
Swine 6mo+	139

This period represents roughly the peak of agricultural land use in southern New England. 1830 records at Harvard Forest in Petersham, MA show that nearly all of Hamilton was

deforested and in pasture or crops, except for the southeastern corner (around Beck Pond and Round Pond, present day Chebacco Woods and environs), the Great Wenham Swamp in the southwest of town, an area around Brown's Hill and an area near Cutler Pond. All the other forested parts of town are postagricultural.

By 1894, the railroad, (allowing easier access to information and traveling), the Industrial Revolution (encouraging the abandonment of rocky New England soils where machines were of little help), and the separation of church and state (decreasing community spirit) had all changed the fabric of many New England towns, but Hamilton managed to maintain its agricultural base. The early maps indicate that an increased number of smaller farms were now lining the roads. Many of these clustered farmsites also housed shoe shops which employed farm workers during the winter as well as full-time workers.

The town of Hamilton experienced the influence of industrial or mill life with the presence of the Willowdale Mill, located on the Ipswich River. When the mill closed due to a fire in 1884, the population of the town decreased by 100 people. A few of the mill dwellings were relocated to Mill Street near the center of town. Many of the farmers who abandoned their farms gained employment through millwork and were able to keep their farmsteads. Due to the loss of employment opportunities with the closing of the mill, many finally abandoned their farms and moved to the industrial cities or to richer farmland in the West.

By 1859, Asbury Grove, a 100 acre religious retreat, included 300 cottages, a chapel, tabernacle, hotel, spur railroad station and post office. Many of the gingerbread style cottages were burned in the fire of 1927 and were never replaced.

While Asbury Grove was the first summer community to locate in Hamilton, Myopia Hunt Club was certainly the most significant. After the near-sighted friends (hence the name) moved their club from Winchester to Hamilton in 1891, wealthy Victorians began purchasing declining agricultural land for their country estates and summer homes, thereby

preserving the rural quality of the area. Some moved the colonial homes back off the main street for privacy and added barns, pools and gardens. The land once cleared for farmland was beginning to be re-colonized by early-succession tree species. Sixty years after the separation of church and state, the town hall was built in 1897 down and across the road from the First Church in the Historic District. The Wigglesworth Cemetery, located near the First Church and across the street from the town hall was dedicated as Central Park after the interred remains had been relocated to the Hamilton Cemetery. This park was later renamed Cutler Park.

The Hunt Club and the associated estates employed the townspeople as caretakers, farmhands, gardeners, chauffeurs, grooms, kennel men, butlers, cooks, maids, housekeepers and laundresses. The blacksmith whose business had been on the decline was now specializing in polo mallets. By 1911, the variety of nonagricultural occupations far outweighed those of farmers. Carpenters, painters, paperhangers, masons, storekeepers, doctors, lawyers, animal brokers, milk dealers, horse trainers, florists, general contractors, railroad workers, and ice workers all worked in the town, and clerks and leather workers commuted to other towns for work. Women were employed as laundresses, clerks in stores, teachers, milliners, dressmakers, artists and bookkeepers.

The settlement of downtown Hamilton where the service workers lived, began around 1880. The square area between Union Street and Main Street to Linden Street and Asbury Street had been completely built up by 1910. While the estates maintained an agricultural and rural quality, with their pastures now in the front yard, the service-worker neighborhood developed into a series of blocks within blocks, with similar houses for like-minded citizens.

A separate town center developed in this area where Bay Road crossed the railroad tracks. A fire burned through a portion of Hamilton, destroying Dr. Cilly's farm located on the land at the northwest corner of Asbury Street and Bay Road across from the Community House. The farm was never restored, but was purchased by Myopia and used as a schooling field for their polo ponies until it was donated to the

town in 1941. The Community House itself, designed by Guy Lowell, was built as a gift of George and Emily Mandell in 1921.

As country places became too expensive to maintain, they too began to disappear with the infiltration of commuter neighborhoods during the 1950's. Much of what little agricultural land was left also fell prey to development. These housing tracts retained the names of the once lovely areas they destroyed, such as Harrigan's Meadow. The farmhouses, which were at one time moved back from the street when the summer residents bought the farm-land for estates, are now surrounded by half-acre, one acre, and two-acre house lots. A shopping center with a large parking lot is located at the railroad tracks in downtown Hamilton. The shopping center was renovated and expanded in 2002. Buildings along Railroad Avenue have been renovated and rebuilt in a more architecturally consistent manner, considering not only human scale, but regional architecture and color. The Historic District, located in the area where Cutler and Bay Roads meet, has remained true to its original character through restrictions.

A numeric snapshot of the land use changes in the last halfcentury can be seen in the summary figures of the University of Massachusetts "Map Down" analysis of aerial photographs (Table 3-3)

LAND USE TYPE (acres)	1951	1971	1980
Forest Land	5946	5678	4239
Agricultural or Open Land	2161	1265	1150
Wetland	888	666	1910
Water	196	254	205
Urban Land	579	1804	1875

Table 3-3	Land Use Changes 1951-1980 (University of Massachusetts
"Map Dov	vn" Project)

There are clearly some effects of changes in classification methods, but they do not obscure the strength of the shift from open land or farm land to residential development.

Thanks in great part to owners of large parcels, Hamilton has managed so far to preserve some of its visual character. Although zoning to protect such features as scenic vistas, hilltops, and steep slopes has been promoted by land use planners over the years, there are serious legal questions regarding these applications of zoning. Therefore, they have not yet been applied in Hamilton.

Population Characteristics

С

The composition and trend of population form the background for the analysis of the demand for recreational facilities and of the anticipated pressure to be expected for removing land from open space use to residential development.

Year	Population	Population Density (per square mile)
1950	2764	184
1960	5488	366
1970	6373	425
1980	6960	464
1990	7280	485
2000	8315	554

Population Density

Table 3-4Population Growth 1950-2000

In 2000, in an area of about 15 square miles, the population reached 8,315 persons, or 71% of development saturation levels, according to MAPC's full build-out analysis. Between 1950 and 1960, population very nearly doubled (98.6%) from 2,764 to 5,488 persons, an average growth rate of about 7.1% per year. 1990-2000 growth was a more modest 1.3% per year, but still a rate that makes a notable difference over a few years in the human "footprint" on the land.

The age profile of the population is important in assessing the need for different kinds of recreational facilities, as well as for projecting future population trends.

le 3-5	Population age profile (based on U.S. Census)				
	Age Group	1970%	1980 %	1990 %	2000
	0-4	7.4	6.4	6.9	6.9
	5-9	11.5	7.0	7.6	8.3
	10-14	12.5	11.1	6.4	8.1
	15-19	9.5	9.6	5.8	5.7
	20-34	15.7	25.1	22.4	18.5
	35-64	34.8	34.7	40.6	42.0
	65+	8.6	8.1	10.7	10.4
	Median age	29.0	30.0	35.6	36.5

Table 3-5Population age profile (based on U.S. Census)

Percent

The table above clearly indicates an "aging" population, suggesting increasing attention to forms of recreation that are enjoyed by older citizens, as well as the increasing importance of providing for people with mobility limitations.

Family Income

.Median family income in 2005 was \$83,500. By and large, incomes were earned by a married family couple (2,143 of 2,668 households). See Tables 3-6 through 3-9.

Table 3-6 Households (1980-2000 US Census)

Year	Households	% change
1980	2,248	
1990	2,437	+8.4
2000	2,668	+9.4

Table 3-7Household Size (2000 US Census)

2.87 persons per household

Table 3-8Households by Type (2000 US Census)

Household Type	Households	%
Married Couple Family	2143	74.8
Female Householder	195	6.8
Non-Family Household	525	18.4

Table 3-9Income Distribution (2000 US Census)

Income range	Number	%
Less than \$10,000	102	3.8
\$10,000 - \$24,999	64	2.4
\$25,000 - \$34,999	200	7.5
\$35,000 - \$49,999	352	13.2
\$50,000 - \$74,999	547	20.5
\$75,000 - \$99,999	421	15.8
\$100,000-\$149,999	391	14.7
\$150,000-\$199,999	218	8.2
\$200,000 or more	249	9.3

Table 3-10Income summary statistics (2000 US Census)

Median Household Income	\$72000
State rank (of 351 towns)	67
% of state average	142.6%
Per Capita Income	\$33,222
% of state average	128.0%

(2005 estimated median household income: \$83,500)

Table 3-11Poverty Status (2000 US census)

	Hamilton	Statewide
Number below poverty level	409	
Percent below poverty level	5.3%	9.3%

Table 3-12 Industry Groups of Residents (2000 US Census)

Industry Group	Number
Agriculture	71
Construction	166
Manufacturing	365
Transportation & Communication	122
Wholesale & Retail Trade	571
Finance, Insurance & Real Estate	412
Government	74
Services	1,455
Professional	431

Industries

There are currently no industries in Hamilton.

Employment trends

Since most residents are employed out of town, the employment trends are basically the same as those of the broader region. At the time of this writing, both long-term and short-term trends for the region have been reasonably favorable, and the town has not seen the negative effects of reduced industrial employment that have affected other areas of Massachusetts. (See Table 3-10 for statistics relevant to town residents.)

D

Growth and Development Patterns

The Land Use map shows the current status of property in Hamilton. The population of Hamilton more than doubled between 1940 and 1960. During this period the Town established a Planning Board and adopted its first zoning bylaw and subdivision regulations in 1954. The greatest number of new dwellings per year added to the Town housing stock came in the years 1954 to 1957. Since 1957, growth has been quite orderly, averaging 24 new homes per year with as few as six new dwellings one year and as many as 39 another. Almost all new construction in Hamilton is single family residences with accessory buildings. The fact that the Town relies totally on individual on-lot septic systems and that little change has occurred in the transportation system in the Town and surrounding area contribute to this development pattern. Hamilton is entirely dependent on groundwater for municipal water supply. This is a very significant factor in the Town's conservation planning; one of the major priorities is to prevent contamination of the Town's aquifers, through a combination of regulation and open space preservation.

A constant theme in Hamilton's development has been the maintaining the rural character of the Town. New developments are required to have street trees, and since 1990, utilities in new developments must be installed underground. The Town's adoption of pork chop zoning has added to development which preserves scenic vistas. A Groundwater Protection Overlay District based on mapping done to determine the Town aquifers has expanded lot sizes for new lots to 80,000 square feet in these sensitive land areas. In 1993 Hamilton established a Flood Plain District based on the Hamilton Flood Insurance Rate maps issued by the Federal Emergency Management Agency. Approximately 2,000 acres of Hamilton's total of 9,389 acres are wetlands, ponds, or streams.

The single most outstanding issue affecting Hamilton's future development is what will happen to about a dozen properties. These parcels represent much of the developable land left in Hamilton.

Table 3-13Housing Units, 2000 US Census

Туре	Number
total housing units	2825
owner occupied units	2188
renter occupied units	480
median value, single family home	\$285,000

(2005 estimated median value home: \$553,600)

Table 3-14	Building Permits for New Housing Units (Town of
Hamilton, P	lanning Board)

Year	New single- family	Demolish & rebuild	Ch. 40b	Total	Notes:
1986	29			29	
1987	17			17	
1988	15			15	
1989	14			14	
1990	7			7	
1991	24			24	Asbury Woods homes approx. through these years
1992	30			30	
1993	18			18	
1994	15			15	
1995	12			12	
1996	8			8	
1997	6			6	
1998	8			8	
1999	12			12	
2000	17			17	
2001	11		4	15	40B: 2 - 2 Family Units; Central & Harris
2002	8	4		12	"First year tracking Demo & Rebuildmay have occurred before, but not tracked"
2003	7	4		11	
2004	2			2	
2005	2	2		4	
2006	1	2	5	8	40B: Bldg 1 at Junction: 6 units
2007	1	1	10	12	"40B: Bldg 2 & 3 at Junction: 6 units each (as of Dec 31, foundation only installed at Bldg.3 site)"

Patterns And Trends

Hamilton was settled in the 17th Century, while part of Ipswich, as an agricultural community. In the late 19th Century wealthy residents of Boston and other major cities began to acquire large parcels of land and created many beautiful country estates. As the region's transportation systems improved and the cost of maintaining the large properties rose, land began to be sold off for house lots. Hamilton started off on the road to becoming a commuter community.

This trend has continued, with greater or lesser vigor, compromising Hamilton's unique rural character. Until the mid 1960s cheap land, relatively low mortgage rates, and little or no environmental controls or other land use regulations led to the proliferation of relatively high density subdivisions, primarily in east Hamilton and south Hamilton. As the planning process matured and the legal tools began to become available, the resulting political climate for protecting the environment improved. Minimum lot sizes increased, and wetlands were aggressively protected. Also, state and local regulations pertaining to placement, design and construction of onsite waste disposal systems began to be tightened and more aggressively enforced.

Today, tracts of marginal land are still being developed, though at a drastically reduced rate. And this slower pace will continue as long as regulatory agencies, both state and local, are diligent.

New housing tends to be a \$1 million-plus deluxe custom home on a 2 acre lot. There is little infill housing taking place.

As with the more mature and densely developed bedroom communities closer to Boston, it is possible that future development will occur on small pockets of land here and there.. Additionally, large tracts of estate land and religious/educational-use land will likely continue to come on the market due to market pressure for buildable lots. Given the price of land the task of preserving the unique rural quality of Hamilton is a formidable one.

Details regarding what is in store for Hamilton, assuming maximum buildout, are described in Section 3D(3) of this open space and recreation plan. The options are clear: let the full development option play out unrestrained, or make an attempt to preserve some of the open land that is left. We urge the town to preserve something of what remains for the benefit of those generations to come.

Infrastructure

Transportation System

By far, the largest volume of traffic in and through Hamilton is through the following primary routes:

Bay Road (Route IA) follows the line of the ancient Kings Highway connecting the earliest settlements of Boston, Salem, Beverly and Ipswich. From Exit 20 on Route 128 in North Beverly, Route 1A is the main road for traffic across Hamilton to and from Ipswich, Rowley and Newbury as well as for access to Crane Beach.

Highland Street in Hamilton (named Arbor Street in Wenham and Mill Road in Ipswich) provides a second primary route across Hamilton from Route 1A at Wenham Center to Topsfield Road in Ipswich. This route avoids the congestion at Hamilton's railroad grade crossing, and there are fewer developed properties along the way than along Route 1A. A major entrance to Bradley Palmer State Park is located on Highland Street. Unfortunately, the Highland Street bridge over the Ipswich River was damaged in the May flood of 2006 and subsequently closed. It is estimated that repairs will not be comleted for another year or two.

Essex Street (Route 22) now serves traffic between Route 128 and Essex, across North Beverly, East Wenham, and East Hamilton. It is a winding route with sharp corners in Wenham which gradually winds through Hamilton. In Hamilton, Route 22 follows Woodbury Street, which is a direct extension of Rubbly Road, to a right angle turn into Essex Street, and then follows Essex Street to the Essex Line. Just off Essex Street are reservations owned by the Hamilton-Wenham Open Land
Trust, Chebacco Lake, a boating and swimming resource, plus many east Hamilton trails.

Water Supply System

The Town of Hamilton presently obtains water from four production wells as described below (descriptions based on Five Town Water Study and the Water Department's 2006 Consumer Confidence Annual Drinking Water Report, see References). Note that all wells are located within town bounds and are in the Ipswich River Basin.

Site Description

The Idlewood Wellfield is located near Pine Tree Drive in Hamilton, on a small peninsula of land which extends approximately 1,300 feet into the Wenham Swamp. The wellfield is located east of the Idlewood Brook. Idlewood Brook originates at the outlet of Pleasant Pond on the Hamilton/Wenham town line, about 700 feet south of the Caisson Well. The brook discharges into the Ipswich River, approximately 4,700 feet northwest of Idlewood Well No. 1.

The existing Idlewood Wellfield consists of three wells (Idlewood Well No. 1, Idlewood Well No. 2, and the Caisson Well), each housing its own control and fluoridation facilities. The Caisson Well began operation in June 1964 and the Idlewood Well No. 1 came on-line in 1974. Idlewood Well No. 2, constructed in 1989, is located approximately 1,000 feet east of these two wells.

There are three other wells located near the Idlewood Wellfield which draw water from the same aquifer. The Patton Well in Hamilton is located about 5,200 feet north of Idlewood Well No. 1 on the northern edge of the Wenham Swamp and began operation in 1957. The Pleasant Pond Wellfield (Well Nos. 1 and 2), which is owned and operated by the Town of Wenham, is situated approximately 2,800 feet south of the Caisson Well along the southern edge of Pleasant Pond in Wenham. Well No. 1 was installed in 1953 and Well No. 2 in 1958.

Production Well Descriptions and Operating History

The following section provides a detailed description of the production wells.

Caisson Well

The Caisson Well is the southernmost well in the Idlewood Wellfield, and was installed in 1964 by Caisson Wells, Inc. The well is 100 inches in diameter, 39 feet deep, and has 3 feet of 84" diameter screen. The well utilizes a vertical turbine pump with a capacity of 500 gpm (0.72 mgd). Flow from the well is measured by a meter with a capacity of 1,200 gpm. The original specific capacity of the well was 170 gpm/ft. In 1990, the well was redeveloped to a specific capacity of 100 gpm/ft.

Idlewood Well No. 1

Idlewood Well No. 1 is a 48 x 24-inch diameter, 48 foot deep gravel-pack well with a 10 foot screen. The well is equipped with a vertical turbine pump having a capacity of 500 gpm (0.72 mgd). Flow from the well is measured by a meter with a capacity of 1,000 gpm. A twelve day pumping test was conducted at this location in 1973 using an 8 inch test well and five observation wells (Hoyle, Tanner and Associates, Inc., 1973). In 1980, a performance test by Layne New England Co. determined that the well was operating with a specific capacity of 54 gpm/ft. at 460 gpm.

Idlewood Well No. 2

Idlewood Well No. 2 is located approximately 1,000 feet east of Idlewood Well No. 1. It was constructed as a 30 x 24-inch diameter gravel-packed well, 45 feet deep with a 10-foot screen. Control facilities and chemical addition equipment are housed at the Idlewood Well No. 1 pumping station. The well operates with a specific capacity of 35.9 gpm/ft. at 400 gpm.

Patton Well

The Patton Well is located along the northern edge of the Wenham Swamp. Installed in 1957, the well is 24 inches in diameter and 41 feet deep with a 10-foot screen. The well uses a vertical turbine pump with a capacity of 200 gpm (0.29

mgd). Flow from the well is measured by a meter with a capacity of 350 gpm. There is not a well log nor pumping test data available for the Patton Well. Redevelopment of the well in 1980 indicated a specific capacity of 23 gpm/ft.

Bridge St. Well

Located across the street from the Gordon Conwell Seminary exit on Bridge Street. This source is currently inactive.

School St. Well

Located behind the School St. Park. This is an active year round source.

Water Treatment.

All sources are treated with chlorine for disinfection, fluoride for dental health and phosphates as a metal sequestering agent, to assure water quality leaving the stations. The Idlewood I and II wells and the Caisson well flow through the Gordon "Tiny" Thompson Water Filtration Plant, located at the end of Pine Tree Drive. The plant was built in 1999, and can remove the iron and manganese that had otherwise been accumulating in the distribution system. In order to get approval for this new plant, which also has a reserve well on site, DEP required rezoning of 624 acres as GPOD.

Hamilton water has emergency interconnections with the Towns of Ipswich at Waldingfield Road, Essex at Essex Street and Wenham at Woodbury Street and Highland Street.

Sewage Disposal Systems

There are no municipal sewers in Hamilton. With the exception of Gordon-Conwell Theological Seminary and the Middle and High Schools, which have their own collection and package treatment plants, Hamilton depends entirely on individual lot disposal of sanitary wastes.

On balance, onsite disposal is working well – even in the small lots of the densely populated downtown area. This area is underlain by coarse red sand that provides excellent percolation. Some commercial establishments also have holding tanks. However, the Board of Health in 1994 called the attention of the Board of Selectmen to the lack of available space for additional systems in the downtown business area, noting that this was an acute problem for any redevelopment plans. This has been a steady topic of discussion since then, but little concrete progress has been made. The Economic Development Committee is investigating options.

Since the last Open Space Plan, improvements near Chebacco Lake in individual septic systems and education on the reduction of lawn fertilizers have reduced the amount of Cabomba in the lake and have contributed to more successful spawning of the anadromous fish (specifically alewives). As the lake is shared by Essex and Hamilton, efforts towards preserving its health must be shared by both towns.

Long-term Planning Patterns

Zoning

Hamilton zoning districts

The Zoning Map shows the location of the various districts. Hamilton has four zoning districts and two overlay districts (conservancy and groundwater protection). All of the aquifer area in Hamilton is zoned residential, comprising a total of 3,322 acres (see Table 3-15).

Zone	Area (acres)	% of Area	Minimum lot size
R1a	1,434	41.2	20,000
R1b	583	16.8	40,000
RA	1,305	37.5	80,000
Water	157	4.5	
Total	3,479	100.0	

Table 3-15Hamilton Zoning Summary of Aquifer Area

Residential District

The residential districts, Rla, Rlb and RA cover 100% of the aquifer area. The uses permitted by these districts are single family dwellings, rooming houses of four persons, churches, schools, parks, playgrounds, private colleges, recreational activities and home occupations provided there are no offensive noises, storage of materials or more than two employees. Other uses are allowed by special permit.

Business District

The Business District in Hamilton allows for all uses permitted in Rla and Rlb as well as retail stores, service establishments, offices and banks, government buildings, parking lots and garages. The small business district located in Hamilton is found outside the GPOD.

Hamilton Overlay Protection Districts

Conservancy District.

The Conservancy District overlays parts of the three residential districts and is designed to conserve natural conditions, wildlife, and open spaces for the education, recreation and general welfare of the public. Permitted uses are passive recreation, agriculture, forestry, religious and educational uses. Other uses are allowed by special permit. Uses prohibited in the district are land filling, buildings, pavement, storage of materials, dams, drainage and watercourse changes, and alteration of terrain. (A list of

permitted uses can be found in Zoning Regulations, section V-22.)

Groundwater Protection Overlay District.

The purpose of the Groundwater Protection District is to protect, preserve and maintain the existing and potential groundwater supply, groundwater recharge areas, and municipal wellfields within Hamilton, as well as supply areas within Hamilton which serve the abutting towns of Ipswich and Manchester. In this district new underground installations of heating oil storage tanks and farm or residential tanks less than 1,100 gallons storing motor oil/fuel are prohibited. New lots must be equal to or greater than 80,000 square feet in area. This district covers the town's two aquifers defined by hydrogeologic studies, but it does not cover portions of the water study area related to the Gravelly Pond, Round Pond, and Essex River watersheds.

Other Zoning

Hamilton Open Space and Farmland Preservation Development

Hamilton had for some years a flexible plan subdivision provision, intended to provide the option of an alternative pattern of land development which preserves significant natural or agricultural open space and scenic views, but does not increase overall dwelling numbers. This was intended to create cluster development that is environmentally and visually preferable. It was relatively little used; developers said that its incentives were insufficient.

This was replaced in 2005 by the Open Space and Farmland Preservation Development Bylaw. This by-law is mandatory to the division of a site of ten or more acres into five or more lots, and provides for various possible housing types and 50% permanently protected open space. Parcels less than ten acres are also eligible. This is a complex bylaw and the reader is referred to the town website for the full text.

Inclusionary Housing Bylaw

The purpose of the inclusionary bylaw is to expand the range of housing available by requiring developers to provide a certain amount of affordable and low-income housing as part of any 10-unit or larger project. As this housing is added to the town's affordable housing stock, it helps Hamilton towards its goal of protecting itself from "unfriendly" 40B developments, which pose a huge threat to the town's open space and natural resources.

Accessory Apartment Bylaw

The accessory apartment by-law allows, with certain conditions and restrictions, the construction of small apartments accessory to an existing or new dwelling. Such apartments contribute to the range of housing available, and provide new housing in the already developed and exisiting housing stock, creating new dwellings while avoiding new construction on undeveloped lots. It remains unclear whether such apartments can be counted towards the affordable housing stock, which, if it were so, would enable this by-law to serve open space interests in a second way.

Hamilton Subdivision Regulations

Before making any division of land in Hamilton, the subdivider is required by law to secure approval or endorsement of the plan for the proposed division from the Hamilton Planning Board. This control law was enacted to protect the people of the town, to insure safety, sanitary conditions and compliance with zoning, and to secure adequate provision for water, sewage and drainage. However, the subdivision regulations do not specifically address potential impacts on groundwater resources.

Master Plan

The 2004 Town of Hamilton Master Plan includes numerous recommendations for Open Space planning and other aspects of the future of Hamilton. Among the most relevant are the formation of a Land Use Committee "to strengthen and sustain coordination" between town boards including the Conservation Commission, to acquire Geographic Information

Systems capability at Town Hall, to issue an open space bond, and to consider implementing a Transfer of Development Rights bylaw.

Maximum Buildout

As part of a statewide program, the MAPC analyzed conditions affecting potential future residential development in the town. More recently, as part of the town's master planning efforts, the town's consultants, Community Opportunities Group Inc. revised that estimate to reflect town meeting's rezoning of about 624 acres of R-1B land to R-A in connection with the 1999 construction of the new Thompson water treatment plant. It is shown in the table below.

Zone	Total area, A	% town	Maximum new single- family homes
RA	4851	50.7	647
R-1B	2505	26.2	545
R-1A	2186	22.8	154
В	26	0.3	0
Totals	9570	100.0	1346

Table 3-16	Estimated maximum	single-family	build-out potential
		- 0	

Ecological Impacts of Buildout

Assuming that individual on-site septic systems remain the method of sewage disposal, overall environmental loading from this source could more than double, leading to "hot spots" of localized pollution.

Problems of control of stormwater runoff and accompanying contaminants would reach a much higher level than the town has experienced, where in spite of careful application of regulations and guidelines (and indeed much wrangling between developers and the Conservation Commission), the

results are not satisfactory from either a wetlands protection point of view or a resident's point of view.

Erosion and sedimentation problems from construction sites may well to lead to demonstrable degradation of some wetland areas and of some of the streams tributary to the Ipswich River, based on what has already been seen at some sites.

If maximum buildout occurred, wildlife habitat area would be reduced by something over two-thirds, and corridors would be severely affected, in the end being essentially limited to the zone along the Ipswich River currently protected, with the complex formed by Chebacco Woods and the Town of Manchester-by-the-Sea water supply lands becoming more or less isolated because so much other land is unprotected in the eastern part of town.

SECTION 4 ENVIRONMENTAL INVENTORY AND ANALYSIS

A Geology, Soils, and Topography

Description

Maps relevant to this section are the USGS Topographical Map and the Soils Map.

Much of the town's land is level to gently sloping, with a few steeply sloped hilly areas, all at elevations from about 40 feet to a little over 200 feet above sea level.

If you take the really long (multi-billion year) view, eastern New England has had a very exotic history, having done a stint near Antarctica and been at the leading edge of multiple continental collisions (see references to find out more). However little evidence of this is visible within the scope of the town of Hamilton, which is at the level of bedrock fairly homogeneously made up of igneous rocks about 450 million years old of the general kind characteristic of Cape Ann. These are described as alkaline rocks (meaning relatively high in potassium and sodium).

Overlying the bedrock except in a few spots are deposits from the ice ages of recent geological history. The local reconstruction of the glacial age places Hamilton under many hundreds of feet of ice, and most of the surface of the town is made up of material left there by the ice. Some of the surface was covered with material that was pushed along underneath the glacier, or just dropped from the top of the glacier when the ice melted away (the "ground moraine" making up much of the flat areas of Hamilton). In places, the rocks and earth left in the channels which carried meltwater in or under the ice, were dropped in long, narrow, meandering mounds (eskers – good examples are on the Pingree Reservation in

northwest Hamilton and adjacent to Taft Woods Row in the eastern part of town). Hamilton's most notable hills have a long axis trending from northwest to southeast, in the inferred direction of flow of the glaciers, and are presumed to have been shaped by them ("drumlins").

Hamilton's geological surface can, for open space planning purposes, be roughly divided into:

- Swampy areas in topographic depressions and floodplains along watercourses, where sediments and plant matter accumulate over other materials deposited by glacial action. Some of the depressions are "kettleholes" where the melting of large pieces of remnant ice left a void now filled by a pond or vernal pool.
- Low, flat areas in the eastern half of town covered with sediments deposited in beach and nearshore environments during a period of higher sea level (or lower land level, or both) after the last glacial episode. Hard to envision now, but many Hamilton properties were at these times beachfront, or indeed, submerged.
- Low flat to rolling terrain covered a mixture of deposits laid down when the last glacial ice was wasting away. These areas include irregular, bumpy deposits like eskers and kames created in contact with the ice itself, contrasting with flat sandy areas made up of materials carried by moving outwash water running out from the ends of the glaciers. The sandy outwash areas drain quickly after rain, sometimes so much so that many kinds of plants and crops make poor growth on them. They tend to be left to pitch pine and oaks that do well on drier soils. The ice-contact deposits generally drain more slowly and support different vegetation.
- Drumlin hills and other high spots mantled in older glacial till deposited directly by the glacier, not reworked or sorted out in size by flowing water. Tills contain grains of all sizes (sometimes called "boulder clay" because they contains boulders, clay and everything in between), and tend to be relatively

impermeable and slow to drain, sometimes creating problems for those wanting to build septic systems in them.

Beneath all this, and in spots (scattered and mostly small) showing on the surface, is the "Cape Ann granite" bedrock already mentioned.

Each of these terrains has its own quite different characteristic soils, vegetation, visual qualities, land use patterns and potentials.

Geology and soils in Hamilton wetlands and floodplains

The most extensive area of swamp deposits is the Great Wenham Swamp, which extends into the southwest part of Hamilton near Asbury Grove. At several places nearby, uplands surround or nearly surround smaller areas of swamp (as north of Linden Street and near Day Avenue in South Hamilton). Similar conditions and soils prevail in flat areas bordering the Ipswich River and its larger tributaries such as the Miles River, Long Causeway Brook and Black Brook.

On the US Natural Resources Conservation Service maps, the characteristic soil shown is Freetown muck, made up chiefly of organic material to a depth of 5 feet or more. The water table is near or at the surface; consequently the soil is very poorly aerated and only supports vegetation particularly tolerant of wet conditions (red maple swamp, shrub swamp). The high organic content and lack of oxidation give the soil a very dark color.

Marine sediments

Post-glacial marine sediments are at the surface in a band a mile or two wide roughly parallel to Bay Road. The railroad line to Ipswich corresponds more or less to its western edge. These sediments are clayey to silty in texture, and develop soils that are typically classified as Merrimac soils on the soil map, therefore differing little from the soil characteristics of the ice contact-outwash deposits discussed below, except perhaps in being on the average in lesser slope categories.

Ice contact deposits and outwash

These deposits can have a complicated history of deposition in winding channels inside or underneath the glacier (giving the sinuous form of an esker, like those which give interest to the terrain in several parts of Hamilton) or between the side of a glacier and an adjacent hill, perhaps with subsequent slumping. There are sizeable areas of such deposits developed in contact with the ice of a wasting glacier in the low-lying areas of Hamilton outside of the area of marine deposits. These deposits are in many places thick enough and permeable enough to be important aquifers.

Sand and gravel outwash deposits accumulated downstream from a melting glacier, and will show the earmarks of having been deposited from moving water, typically including stratification. There is an area mapped by USGS geologists as outwash in the south central part of the town, west of Bay Road and south of Savin Hill.

All these processes around a waning glacier can give rise to complex patterns of grain size distribution, stratification and field relationships that can be deciphered with some subtlety (though not necessarily with certainty) by experts, but for our present purposes, most of these variations can be grouped together.

These parts of town are mapped by the US Natural Resource Conservation Service in the Merrimac-Hinckley-Urban land association. The Merrimac and Hinckley soils are characterized by a sandy subsoil underlain by sand and gravel.

Till uplands

Several drumlins (Brown's Hill, Vineyard Hill, etc.) make up the town's most conspicuous high ground. The highly characteristic material of these and adjacent areas is "till", with its widely varying assortment of particle sizes from sizeable rocks down to silt and clay. Till is distributed over a wider area than the drumlins in Hamilton, but it is often associated with "foothill" areas close to the drumlins, as in the area between Vineyard Hill and Willowdale Hill in the west of

the town. Another sizeable till area is near the lakes in East Hamilton.

Hamilton's till soils are mapped in the following soil associations :

1. Paxton-Montauk-Urban land association ("hills and sloping uplands" (US Natural Resource Conservation Service description); Willowdale-Vineyard Hill area, Brown's Hill area, and Sagamore Hill area; often with a relatively impermeable substratum).

2. Canton-Woodbridge-Freetown association ("low irregular hills"; Pigeon Hill area and the till area south of Sagamore Hill)

3. Chatfield-Hollis-Rock outcrop association ("low irregular hills, ridges and plains with frequent bedrock exposures"; eastern Lakes District from Gravelly Pond west to Route 22 and Essex Street; often shallow to bedrock)

Effects on Community

The glacial outwash sediments giving rise to Merrimac and related soils make Hamilton's best agricultural land, and it also is favorable for building residences and septic systems. Many of Hamilton's residential subdivisions are built on this type of material. The sandy texture makes for fast drainage (sometimes faster than a farmer would prefer from the point of view of keeping water in the root zone after rain).

In the glacial till areas, the matrix of superfine grains in till often makes for "tight", relatively impermeable soils, often creating problems in siting septic systems. Because of the frequent occurrence of till around bedrock hills and drumlins, high slope is also sometimes a limitation for residential development in the till areas. Additionally, many of the areas of Hamilton where soils have a shallow depth to bedrock are on glacial till.

Concerning the development potential for Hamilton's areas on wetlands and floodplain soils, the limitations for buildings and septic systems are obvious and severe using traditional septic system designs. However, many of the areas that were В

formerly considered undevelopable because of limitations for traditional septic systems become feasible (if expensive) to build on with recent advances in septic system technology and an increasing acceptance by state regulators of such systems.

Landscape Character

A visitor driving through Hamilton for the first time would likely get the sense that the essential character of the landscape is that of gentle rolling farmland. This first impression would be obtained from the large open fields which line some of the major thoroughfares, such as along Route 1A. If the visitor were to stop their car and spend some time hiking in some of the forested areas, such as Bradley Palmer State Park, Appleton Farms Grass Rides, or Willowdale Mill Reservation, they might get the impression that the essential landscape character of Hamilton is one of upland forests with numerous hiking and bridle paths. However, if the visitor, or even some long time town residents, were to fly over the town, they would probably be surprised to see that much of town consists of wetlands, lakes, and streams. They would also notice a number of drumlin hills with distinctive oval shapes, generally oriented northwest to southeast. The true character of the landscape in Hamilton is therefore one of diversity, ranging from large open fields, upland forests, lakes and streams, and wetlands.

All of these landscape characteristics are important and contribute to what makes living in the Town of Hamilton so enjoyable. However, it is easy to imagine how poorly planned development could degrade the landscape characteristics which give the Town of Hamilton its special character. The remaining large open fields could be subdivided into numerous house lots, and existing hiking and bridle trails could be blocked by poorly planned subdivisions. Wetlands, lakes and streams could all be degraded by not providing for their protection. Many of these impacts can already be seen. , though with proper planning, they can be minimized. Revised regulations and aggressive enforcement of existing regulations can prevent further degradation of lake and

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wetland resources. Lake protection and cleanup programs can restore the lakes in town that have been degraded.

Water Resources

The water resources in the Town of Hamilton consist of surface water and groundwater, and are used primarily for drinking water and recreation. There are no significant water resources being used for hydroelectric or irrigation. An inventory of groundwater and surface water resources is presented below. See the "Water Resource Map".

Surface Water

Rivers and Streams

Ipswich River

The Ipswich River has been classified a severely threatened local natural resource as a result of heavy use for town water supplies in the basin. This has caused frequent severe low flow conditions with consequent serious threats to the river as a biological system, and as a scenic and recreational resource. The Ipswich River Watershed Association is spearheading an effort to analyze and mitigate these problems.

Hamilton does not draw surface water from the River, but since most of the town's public and private wells are in the Ipswich River Basin (only the southeastern tip of the town is in the North Coastal Basin area rather than the Ipswich), human use of water in the town does contribute to the growing groundwater deficit in the Basin.

The Ipswich River serves as the boundary of Hamilton to the west with Topsfield, and to the north with Ipswich. The segment of the Ipswich River adjacent to Hamilton is proposed as a Massachusetts Scenic and Recreational River under the "Scenic and Recreational Rivers Act". Overall water quality in the Ipswich River Basin can be considered as ranging from good to excellent. According to the use classification promulgated by the Division of Water Pollution Control, the Ipswich River and its tributary streams are

meeting Class A and Class B. The Ipswich River is used for swimming, fishing, and canoeing. The Ipswich River is not used directly for drinking water in Hamilton. However, the river provides recharge for nearby wells in Hamilton and Ipswich.

Idlewild Brook

Idlewild Brook originates at Pleasant Pond and flows to the Ipswich River through Wenham Lake. Idlewild Brook provides partial drainage for the Wenham Swamp.

Black Brook

Black Brook originates at Cutler Pond and flows west to the Ipswich River. Black Brook provides drainage for wetland areas between Highland Street and Bay Road.

Miles River

The Miles River has its source in Longham Reservoir and the wetlands at the eastern end of Wenham. The Miles River flows to the Ipswich River in Ipswich. There are numerous minor tributaries entering the Miles River in Hamilton, the most important of which is Long Causeway Brook on the Hamilton-Ipswich line.

Although the Miles River is bordered by important habitat areas, it is very much under stress from direct and indirect human impacts, not the least of which is lawn fertilizer. The Essex County Trails Association, the Hamilton Conservation Commission, and others have worked successfully with beaver experts to manage the resurgence of beaver populations in the Miles River so that beavers may flourish without threatening economic uses.

The Miles River is also much impacted by profuse growth of invasive alien plants, particularly purple loosestrife, Lythrum salicaria. It is also likely that relatively recent sedimentation and control structures are influencing the state of the river unfavorably. A task force begun by the Hamilton and Wenham Conservation Commissions and the state watershed initiative is researching the needs of this subwatershed of the Ipswich River.

Lakes and Ponds

Chebacco Lake

Chebacco Lake is divided by the Essex-Hamilton boundary with approximately 83 acres located in Hamilton. Some of the recreational uses of Chebacco Lake include fishing, swimming, boating and water skiing. A state boat ramp providing public access to the lake is provided on Chebacco Road. Chebacco Lake has been experiencing unwanted alien aquatic vegetation and water quality problems. The Chebacco Lake and Watershed Association has been reinvigorated by new leadership and promises a strengthened program

Beck Pond

Beck Pond is approximately 34 acres. Public access to Beck Pond can be made from Chebacco Road, although parking is limited. Motorized boats are prohibited on Beck Pond.

Round Pond

Round Pond is approximately 36 acres. Well points along the shore of Round Pond are used to supply water to Gravelly Pond. The Town of Manchester has a permit to pump up to a million gallons per day (MGD) from the Round Pond well field. The water is treated to remove metals before being discharged to Gravelly Pond.

Gravelly Pond

Gravelly Pond is approximately 46 acres and is used as a drinking water supply by the Town of Manchester. The safe yield of Gravelly Pond is reported by the Town of Manchester to be 0.65 MGD per day. A 2.0 MGD water treatment plant near the shore of Gravelly Pond for the Town of Manchester has been built. As noted above, the flow into Gravelly Pond is supplemented by the Round Pond well field.

Pleasant Pond

Although Pleasant Pond is located primarily in Wenham, approximately 2 acres extend into Hamilton. Some of the recreational uses at Pleasant Pond include fishing, swimming, and boating. There is no public access to Pleasant Pond in

Hamilton. However, Hamilton residents are permitted by Wenham to use the public beach area in Wenham.

Weaver Pond

Weaver Pond is located in Patton Park. This one acre pond was originally created in the 1940's by dredging a lowland swamp. The pond is visually the centerpiece of Patton Park, and small children delight in trying to catch frogs and fish there. Attempts are made to keep it usable for skating, but excessive problems with exotic, non-native weeds required chemical treatment in 1994. The pond was dredged in 2004.

Cutler Pond

Cutler Pond has a surface area of approximately 5 acres and is located in Cutler Park. Cutler Park is located on a tiny slice of land in the Historic District of Hamilton. The park was originally a graveyard and is overgrown in parts and underused. There is a small, inconspicuous sign marking the entrance to the park from Route IA across from the Town Hall. Cutler Pond is the headwaters of Black Brook. There are presently no recreational uses of Cutler Pond.

Flood Hazard Areas

Seasonal flood hazards exist in the lowlands adjacent to Wenham Swamp, the Miles River, Black Brook, the Ipswich River and shores of the many lakes and ponds. Development is restricted and/or discouraged in these sensitive areas where surface waters can rise quickly and/or there is shallow depth to groundwater.

Wetlands

Wetlands constitute an integral part of the natural environment, and more specifically, the hydrologic system. In addition to diversifying the landscape, wetlands often play a significant role in the storage of water, flood control, and the maintenance of water quality. Wetlands also serve as habitat for a variety of wildlife species. Additionally, wetlands may serve as groundwater recharge or discharge areas.

The existence of wetlands depends on the relative stability of a variety of natural influences, including groundwater elevation, soil type, topography and surface waters. The alteration of one or more of these factors may result in profound changes in both the structure and function of wetland communities. For example, the lowering of the water table or the diversion of surface water away from a wetland may result in conditions suitable for upland vegetation, and thus the eventual loss of the wetland.

See map section for the locations of the wetlands in Hamilton. These maps are based on photointerpretation at a scale of 1:5000 and are subject to the caution that, although they are highly useful for town-scale planning purposes, since they are not based on observations on the ground they are not suitable for site-specific permitting use. The 1965 Master Plan noted there were about 1,870 acres of swamps and wetlands based on the following:

-	
Area	Acres
Wenham Swamp	637
South Hamilton	149
Ipswich River	4
Black Brook	827
Miles River	580
Long Causeway Brook	168
Total	1,866

Table 4-1Swamp and Wetland Areas

Aquifer Recharge Areas

The drinking water resources and associated aquifer recharge areas in the Town of Hamilton were analyzed and mapped in a report entitled "Report on Aquifer Planning Study, Hamilton Massachusetts" by Haley and Aldrich, Inc., Consulting Engineers and Geologists, 1981. The mapping of aquifer recharge area in this study formed the basis of the

Groundwater Protection Overlay Zoning District. As noted above, the Town of Manchester has two surface water drinking supplies in Hamilton: Round Pond and Gravelly Pond. Hamilton does not utilize any surface water for drinking water supplies. An inventory of the groundwater resources in current use follows.:

Well	Yield, GPM	Construction
Idlewood	500	40 ft., deep, gravel packed
Pine Tree	500	34 ft. deep, caisson
School Street	185	26.5 ft. deep, gravel packed
Patton	205	35 ft., deep, gravel packed

Table 4-2 Hamilton's Municipal Water Wells

The Idlewood and Pine Tree wells provide water to meet normal demands. Peak demands are met by supplemental pumping of Patton and School Street wells. There is also a well field of numerous small diameter wells and two gravel packed wells located adjacent to Bridge Street. This well field, however, has been abandoned.

The Chebacco Lake watershed also contains two groundwater wells in Essex which supply water for Essex. The Town of Ipswich has three wells north of the Ipswich River near the confluence of Black Brook. Although the Essex and Ipswich wells are not located in the Town of Hamilton, their cones of depression may extend into the town.

D Vegetation

Forest Land

Northern hardwoods, typified by red oak in well-drained areas, and red maple in wet or poorly drained areas are the predominant forest cover in Hamilton. Northern hardwoods include soft and hard maple, beech, birch, cherry, oak, hickory

and sassafras. Other dominant species of vegetation include white pine, red pine, eastern hemlock..

General Inventory

There is much work needing to be done in characterizing Hamilton's natural environment. Not much study that is specific to the town is available in the published literature, although there have been isolated observations by naturalists who have not shared their information for the public record. The Conservation Commission and interested participants in recent Biodiversity Days activities have made a modest start in compiling some lists of plant and animal species observed, but much more is needed. It is not realistic to think that Hamilton will anytime soon meet the EOEA Biodiversity program goal of listing all the organisms in each town bigger than one millimeter (after all, Connecticut worked for decades on identifying their three thousand plus flies, and never finished), but it's a noble and worthwhile, even if quixotic, effort. The Biodiversity Group is trying to recruit citizennaturalists with the argument that anyone who can use a field guide can make observations the Commission will be very grateful to add to the record. Amateur and student naturalists would have no trouble finding species not already listed just by walking about for an hour or two. The present writers are uncomfortably aware that some of the generalizations about to be made are based on woefully scanty field observation and may be naive or plain wrong. We hope these admissions will stimulate others to do better.

In addition to adding to species lists, state and nonprofit groups are making and refining classifications of habitats. The majority of Hamilton would fall outside the scope of these efforts as "altered habitats", as "post-agricultural" land, along with some agriculture and managed woodlots, and a good deal of woodland that is being largely ignored, left to make its own way back up the successional sequence.

Hamilton has a small range of elevations, not enough for elevational differences to make a material difference in habitats from the point of view of temperature. But since another effect of elevation is that on average, the surface at

higher elevations is farther away from the water table, the phrase "high and dry" exactly describes an important factor in plant communities.

Another easily observable and important factor in moisture availability is overall soil texture: the sandy soils of glacial outwash areas drain rapidly and plants growing in them are subject to drought conditions more frequent and severe than you see further down the slopes. Hamilton has relatively few areas with characteristic dry sandplain vegetation dominated by pitch pine, bear oak, as well as tree-sized oak species.

At the lower, wetter end of the range, Hamilton has large areas of forested swamp and shrub swamp with abundant red maple, arrowwood viburnum, sweet pepperbush, winterberry, highbush blueberry, and swamp azalea. Cinnamon fern, skunk cabbage and tussock sedge are characteristic of the lower layers. Along the Ipswich River, there are areas of floodplain with characterstic silvermaple dominated vegetation. Some wetland areas, notably on the Miles River floodplain, have been extensively invaded by purple loosestrife.

In upland areas, in addition to the encroachment of development, a major and growing threat to biodiversity is the proliferation of troublesome invasive plants, such as Japanese knotweed, buckthorn, Oriental bittersweet, multiflora rose, Japanese barberry, and Morrow honeysuckle and Japanese honeysuckle.

There are some fairly extensive areas of upland currently under cultivation, in some cases grading down into wet meadow and wetland. Of course the preponderance of the current woodland areas were formerly cultivated, and show characteristic New England "old field" vegetational patterns.

Although these habitat types are common and non-threatened state-wide, that does not mean that Hamilton is of low biodiversity interest. Hamilton has significant areas of particular habitat types that are relatively uncommon and declining in the face of development in the region: for example, floodplain forest, wet meadow, fresh water marsh, grassland and red maple swamp.

In the Massachusetts Biomap program, sizeable areas in both the western and eastern (Chebacco Woods and adjacent parts of the Meadowbrook Farm parcel) ends of the town (see map) are characterized as of high biodiversity preservation value.

Rare, Threatened and Endangered Species

The rare plant species recorded in the Hamilton area include the showy lady's slipper, pale green orchis, terrestrial starwort and the river-bulrush. The first two are orchid species and have been historically reported to occur in the area.

The terrestrial starwort is a rare plant likely to be found on muddy flats and trails near lakes in the area. The tidal river shore species, the river-bulrush, is rare but recorded in the vicinity.

E Fisheries and Wildlife

The Protected Open Space Map displays areas of terrestrial and aquatic habitat, and gives an indication of which areas should be a priority in securing contiguous undeveloped tracts for wildlife.

Inventory

Aquatic Habitats

The ponds, streams, and marshes provide habitat including food and cover for black duck, mallard duck and wood duck in addition to many migratory species of waterfowl.

Muskrat, otter, mink and raccoons may be found in wetland areas. Major game fish include brook trout, brown trout, rainbow trout, largemouth bass and chain pickerel. Chebacco Lake and Round Pond are spawning ponds for alewives, an anadromous fish species living in salt water but requiring special freshwater habitats for its breeding. Miles River is historically a spawning area for alewives and eels. Populations may now be very low or absent but the Army Corps of Engineers has determined that the river is very suitable for restoration to full habitat status.

Terrestrial Habitats

Songbirds indigenous to the area include various sparrows, wrens, chickadees, titmouses, cardinals, doves, woodpeckers, bluejays, juncos and mockingbirds. Whitetailed deer are the only large game animal found in Hamilton. Small game includes ring-neck pheasant, quail, ruffed grouse, woodcock, cottontail rabbits, raccoons, fisher, opossum, grey squirrel, red squirrel, coyotes, otters, grey fox and red fox.

Corridors

Protected corridors of open space for wildlife habitat are an important goal of Hamilton's planning process. Properly functioning wildlife habitat corridors require substantial contiguous open space, and require a site-specific and ecological community-specific analysis.

The Hamilton Conservation Commission's Discover Hamilton Trail project, the greenway extending from Patton Park and Myopia Hunt Club area through the Devon Glen Farm conservation restriction, the Harvard Forest, the Pingree Restriction and the Ipswich River conservation restrictions of the Arbella Land Company and G. Horne are a critically important wildlife corridor.

Continuous with this greenway is a section of the Hamilton bank of the Ipswich River extending from a portion of the Wenham Swamp within the Massachusetts Audubon Ipswich River Wildlife Sanctuary through Bradley Palmer State Park, with a side branch in Topsfield at Willowdale State Forest, through Essex County Greenbelt's Willowdale Dam reservation and through restrictions granted by the Winthrop family, and by George Horne almost to the Mill Street-Highland Street bridge. This corridor complex also connects to the Appleton Farms Grass Rides and adjacent open spaces.

On the eastern side of this complex, the corridor extends via the wooded parts of the Myopia Hunt Club to open spaces in East Hamilton, Wenham and Manchester in the "Lake District" including the wooded areas adjacent to Meadowbrook Farm, Chebacco Woods, the Town of Manchester water supply area surrounding Round Pond and Gravelly Pond, the Iron Rail area, and the wooded part of the

old landfill site on Chebacco Road. Although the Chebacco Woods acquisition is a tremendous help, this section is still in need of serious future vigilance since other parts of it have no durable protection and are vulnerable to sale for development.

Rare, Threatened and Endangered Species

The Massachusetts National Heritage Program (MNHP) considers several animal and four plant species recorded in Hamilton to be rare, uncommon, or ecologically sensitive.

Scarce plant species include featherfoil and the river-bulrush.

The rare blue-spotted salamander may occur near wooded swampy areas or moist woods. The spotted salamander, although more common, is considered ecologically sensitive and may be found in similar areas around Hamilton. The fourtoed salamander, a state Special Concern species, also occurs in the town.

The eastern box turtle is considered by some experts to be declining and threatened in Massachusetts. It prefers open woodlands and wet meadows and was sighted in Hamilton in 1977. Hamilton is also believed to provide habitat for Blanding's turtle, a threatened species,

The Massachusetts Division of Fisheries and Wildlife lists the golden-winged warbler as "State Rare." This species has been sighted infrequently in the area. It prefers overgrown fields of wet shrubby deciduous thickets.

The rare Coppery Emerald dragonfly occurs in Hamilton. The New England medicinal leech, a rare invertebrate, has been found in local vegetated freshwater ponds and streams within the coastal plain. Habitat alteration or pollution have severely threatened the status of this animal.

The special habitats, particularly grasslands, at Appleton Farms provide nesting areas for bobolinks and eastern meadowlarks, significant because of sharp declines in the populations of these species with habitat loss. This site is included in Massachusetts Audubon's Important Bird Area Program. This program also identifies an "Eastern Essex County Forests" Important Bird area that includes Ipswich River Wildlife Sanctuary and Bradley Palmer State Park, both partially in Hamilton.

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Scenic Resources and Unique Environments

Hamilton has an abundance of scenic resources and unique environments which blend together to give the town it diverse character. These resources include rivers, lakes, parks, reservations, wetlands and historic areas, as shown on the Unique Places Map.

Rivers

The portion of the Ipswich River adjacent to Hamilton is proposed for possible inclusion as a Massachusetts scenic and recreational river. The river is widely used for fishing, swimming and canoeing. The Ipswich River is susceptible to pollution from increased development. The river may also experience reduced flows in the future as upstream communities increase their drinking water supplies.

Lakes

Hamilton has several lakes and ponds which contribute to the scenic character of the town. Of these, Chebacco Lake is the largest and most important. It is also the most threatened.

Parks, Reservations and Open Space

Hamilton also has several parks and reservations which contribute to the scenic character of the town. The largest of these include Bradley Palmer State Park, Appleton Farms Grass Rides, Willowdale Mill Reservation and Patton Park. The parks and reservations are protected and are not at risk of being developed.

There are other open space areas in town which are very scenic but are unprotected. These include the Myopia Schooling Fields, Iron Rail, Gordon College lands and Pingree School lands.

These resources are mainly concentrated in the western part of the town, with a smaller number in the eastern part (including Chebacco Woods).

Wetlands

Hamilton has several very scenic wetland areas, most notably: Wenham Swamp, Miles River and Black Brook, and on the fringe of Chebacco Lake. Development pressure is constant in these areas. As the availability of buildable land decreases, house lots are put right on the very edge of the wetlands. This can have a negative impact on the function of wetlands because it may change sunlight or drainage patterns, or can interfere with wildlife which live on the edge of wetlands and need buffer zones. Development in wetland buffer zones is closely monitored by the Hamilton Conservation Commission.

Unusual Geologic Features

One of the most striking geologic features of Hamilton is its sharply rising hills, which afford spectacular views from their tops. Examples are Candlewood Island, Sagamore Hill (and surrounding hilltops such as Eveleth Hill), the Hamilton Ski Hill, and Cilly's Hill, which is close to the business center of town. Also attractive are the expansive bedrock outcroppings below and to the south of Sagamore Hill and the rock ledges and outcroppings in and around Chebacco Woods.

Historic Areas

Hamilton is fortunate to have a well defined and protected historic district. There are other historic features of the town which are protected, such as the burial site of Chief Masconomet on Sagamore Hill.

Areas of Critical Environmental Concern

There are currently no ACECs in Hamilton, as defined by the state ACEC process.

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Environmental Problems

Hazardous Waste Sites

Presently, there is only one DEP certified hazardous waste site in Hamilton. The site is on town property behind the town hall where diesel and gasoline fuel tanks are stored. The tanks store 5,000 gallons each. There was leakage from the original tanks and they were replaced in 1986. In addition monitoring wells were put down. Shortly thereafter a plume of hydrocarbons was discovered on the surface of the groundwater. In 1987, a vapor recovery system was installed as a precaution. The town has an on-going contract with Zecco for monitoring the tanks and the groundwater. The site should be decertified in the next few years.

Landfills

Hamilton's town landfill, located at the end of Chebacco Road in the Gravelly Pond watershed, was closed in 1983. The landfill is monitored and tested four times a year for leachate: it currently tests clean. The Landfill Steering Committee is looking into possible future commercial use of the site.

Erosion and Sedimentation

Where bare earth is exposed, for example at construction sites, storms are liable to wash loose silt downhill and eventually into streams and water bodies where the silt dirties the water, harming fish and other organisms and eventually accumulating and interfering with water flow. This harm can be greatly reduced by relatively simple measures, such as minimizing the amount of land disturbed at one time in construction, putting down straw or fabric to stabilize the soil, and putting up lines of hay bales or fabric silt fences downhill from the work. These engineering best practices are straightforward and well-known but seldom applied if regulations do not require it. In Massachusetts only the Wetlands Protection Act provides a legal basis state-wide for requiring these precautions, but the Act is only applicable within 100 feet of a wetlands resource area protected under the law.

There are several sites in Hamilton where substantial erosion is taking place, but because they are more than 100 feet from a resource area subject to protection on the Wetlands Protection Act, they are outside of the jurisdiction of the Conservation Commission. Therefore it is difficult to mandate preventative measures without the town adopting an Erosion and Sedimentation Control bylaw. It is a recommendation of this Plan that the town adopt a bylaw requiring proper measures for erosion and sedimentation control on all sites where, because of site specific conditions of slope, this problem may be significant.

Chronic Flooding

Seasonal flooding is a concern in an area surrounding Highland Street, Howard Street and Linden Street where water overflows from a small stream which is shallow and has a large bordering wetland. Houses on Howard Street are known to be set on wooden pilings. However, areas of the streets are settling.

There have been episodes of flooding associated with beaver dams in streams crossing roads in the eastern part of town, for example on Moulton Street.

The Hamilton FEMA flood maps indicate in a general way numerous other areas subject to flooding, most of which have fortunately not been built upon.

Water Overuse

The Ipswich River watershed is becoming increasingly overused. The river basin currently serves about a dozen communities. In the last few years, Hamilton water use has averaged between 50 and 90 gallons per person every day, a level that is often excessive. The communities of Ipswich, Manchester, Hamilton and Wenham could be facing chronic and severe water shortages in the next thirty years. At one point in the summer of 1994, there was a draw of a million gallons in a ten hour period, leaving only 100,000 gallons in the reservoir. When the reservoir gets below a certain level mud starts entering the system.

Lawn watering is the chief cause of much of this. The Water Department has had to make frequent use of watering bans, but in the longer term, measures to convince people of the destructiveness of traditional landscaping practice will become more and more essential. Citizens seem to be grasping this, as Town Meeting voted unanimously to expand the Selectmen's ability to prohibit or limit outdoor water use (irrigation, filling pools, etc) during certain times of day and year. The standard pattern of development in Hamilton, the large single family home with much lawn is simply not sustainable. A major goal of this Open Space Plan is to find ways to get this message across. We haven't the water, and we can't afford the loss of diverse and relatively intact biologically functioning areas to this pretty but dysfunctional, biologically devastating use of land. It's time to realize that what is suitable to rainy, cool England is foolhardy to try to maintain in hotter, dryer New England summers.

Wetlands Resource Impacts

As the contiguous built-up area of town fills in, the development of new subdivisions and individual lots is more and more constrained to be near wetlands and in adjacent upland areas formerly providing wildlife habitat and corridors. The Conservation Commission has been disturbed by the number of applications for construction of single family homes which, although they do not actually fill wetlands resource areas directly, include structures or grading that are so close as to almost certainly affect the functioning of the wetland microenvironment and which leave wildlife no effective "wetlands fringe" area that has been shown to be as essential to many species as the wetland itself.

In response to this the Commission promulgated Regulations under the town Conservation Bylaw (Chapter 17) in 1995 which set guidelines for new construction including a 50-foot "no-build", and a 25-foot "no-impact" adjacent to wetlands. Additionally the regulations have redefined the 100 foot buffer zone as Associated Upland Resource Area (AURA). Proposed projects within the AURA are considered in light of the ecological function of the AURA in its entirety. The

regulations also included among wetlands protectable under the Bylaw isolated areas which, though not necessarily statecertified as vernal pools, showed significant biological signs of functioning as vernal pools and the 100-foot zone around such vernal pools.

Surface Water and Groundwater Pollution: Point and Non-point

Hamilton is completely dependent on groundwater for its drinking supply. In addition, Gravelly Pond and Round Pond, which are used as a drinking water supply for the town of Manchester, is located in Hamilton. The loss of these water resources would have devastating consequences for the towns of Hamilton and Manchester. Therefore the primary environmental problems facing the town are those which could potentially impact these drinking water resources. These include underground storage of fuel, floor drain discharges, septic systems, agricultural practices, household hazardous waste, leachate from the town's landfill and road salting.

Educating landowners on best practices for manure managementis one of the goals of the DPW in response to the National Pollutant Discharge Elimination System mandate.. To some it seems convenient and natural to stockpile manure in "back" areas which may be closely adjacent to wetland resource areas and surface water resources, but this can clearly cause problems for the wetlands and waters. Proper placement of stockpiles, and use of vegetated buffer strips can greatly reduce adverse impacts. Likewise best practices for fertilizer use can be helpful.

Stormwater Management Bylaw and Illicit Discharge Detection and Elimination By;aw

As federally mandated, Hamilton adopted the Storwater Management Bylaw, along with the Illicit Discharge Detection and Elimination Bylaw, the purpose of which is to protect ground and surface water from degradation through pollution, sedimentation, and other effects.

Underground Storage of Fuel (not allowed in GPOD)

Leakage of tanks or piping that are subject to corrosion or puncturing can lead to contamination of water resources. Underground storage tank leaks are caused by a number of factors including defects in tank materials, improper installation, corrosive soils, problems with piping systems, weather conditions or tank fatigue. Unprotected steel tanks have an average life expectancy of 15 years in corrosive soils which are characteristic of much of Massachusetts. Once tanks leak, contents can move through the ground and contaminate large volumes of water, since concentrations as minute as several parts per billion in drinking water are considered unsafe.

Petroleum fuels are mixtures of hydrocarbons. If a fuel such as gasoline is released into the subsurface, the more water soluble components such as benzene dissolve into the groundwater and move with the ground water flow. The drinking water limit for benzene is 5 parts per billion. This problem can also occur to releases of oil, but to a lesser degree. Once an aquifer has become contaminated, it is very difficult and expensive to clean it up. Typically, a groundwater remediation system would be installed to intercept and treat the contaminant plume. If the contaminant plume were to reach the drinking water wells, the town would have to construct a water treatment plant or find a new water source. The cost of either of these alternatives would likely be in the millions of dollars. Therefore, it is important to take whatever steps are necessary to protect the aquifer from contamination.

In addition, residences and institutions are storing fuel oil in 15 underground tanks throughout the study area. The total volume of fuel oil stored underground in Hamilton's water study area is approximately 68,050 gallons. The records do not indicate the ages of these tanks, but many are likely to be at least 20 years old. Almost all of them are unprotected steel tanks.

Floor Drain Discharge

Floor drains are often tied to a leaching structure such as a dry well or a septic system. Poor management practices and

accidental and/or intentional discharges may result in petroleum and other hazardous materials being released into the subsurface. Once the contaminants enter the subsurface they can cause aquifer contamination as described above.

Septic Systems

With the exception of Gordon Conwell Theological Seminary and the Middle and High Schools, which utilize packaged treatment plants before discharging the treated water to the subsurface, Hamilton relies on septic systems to treat sanitary wastes. A septic system consists of a septic tank and leaching system. The tank is a watertight structure designed to allow settling of solids and digestion of organic material. The leaching system allows the effluent from the tank to discharge into the underlying soil. In older systems, a cesspool is used instead of a septic tank and leaching field. Cesspools provide less treatment than a properly designed and operating septic system. As part of Title 5, the Massachusetts Department of Environmental Protection has promulgated new regulations concerning cesspools. Among other criteria, cesspools must be replaced by a septic system under the following conditions:

1) The system has failed.

2) The system is located less than 50 feet from a wetland.

3) The bottom of the cesspool is located in the water table.

4) A two year review of water usage indicates the holding time is less than 12 hours.

5) There is an increase in living space, such as a house addition.

Some of the ways in which cesspools and septic systems can contribute to groundwater contamination include allowing poorly treated water to enter the groundwater. This poorly treated water may contain pathogens, such as viruses or harmful bacteria, and increased levels of nutrient such as nitrogen and phosphorus. These nutrients, in turn, can contribute to eutrophication if the groundwater enters a surface water.

Another way in which septic systems can contribute to groundwater contamination is through the use of septic system cleaners. According to DEP, septic systems contain a variety of hazardous chemicals. Many hazardous chemicals are resistant to biodegradation and pass through septic systems, harming beneficial bacteria and contaminating groundwater. Six of the most commonly found chemicals in septic system cleaners are:

Table 4-3Chemicals found in septic system cleaner implicated ingroundwater pollution

Trichloroethylene 1,1,1, Trichloroethane Tetrachloroethylene Methylene Chloride Dichloromethane Napthalene

These chemicals have been involved in the closure of over 40 public water supplies in Massachusetts.

Agricultural Processes

Pesticides: The term pesticides includes insecticides, fungicides, herbicides and rodenticides. They are all chemical compounds used to control unwanted organisms such as insects, weeds and rodents. Since the compounds vary depending on their target organisms, their potential effects on water resources vary greatly. Pesticides may enter the ground by direct infiltration through the ground or by way of runoff. Additional impacts on water can occur with improper storage and/or disposal of agricultural products and wastes. Pesticides in ground and surface water pose a risk to aquatic and wetland plants and animals and increase public health risks.

Hamilton has two important rights of way, the Boston and Maine Railroad and a gas pipeline owned and maintained by Tenneco, Inc. Tenneco's easement is hand cut and no herbicides are used. The railroad utilizes herbicides to control all vegetation along the track since plant growth may cause

degradation of the tracks and/or can lead to fires. In most cases treatment extends 12 feet either side of the center of the track. (Within 100 feet of a resource area state regulations restrict application.) The railroad does not run through Hamilton's water supply study area.

There are currently several hundred acres of agricultural cropland and orchards in Hamilton, of which 238 acres is in the aquifer area. The amount of pesticide application this land is subject to is unknown. There are no local controls of pesticides in Hamilton.
SECTION 5 INVENTORY OF LANDS OF CONSERVATION INTEREST

Preserving open space in Hamilton is important for several reasons, and of value regionally as well as locally.

Historically and culturally, Hamilton has been a rural town, agriculture and equestrian use being the primary uses of open space. In recent decades, more attention has been given to open space preservation for the public benefits of habitat and resource protection and for passive recreational use.

Hamilton's open spaces provide the opportunity for residents of our region, many of whose towns have been heavily developed, to connect with the natural environment through various forms of recreation, and even through the simple experience of driving down country roads, along woods and open fields. Given its relative abundance of open space, Hamilton has a local and regional responsibility to preserve undeveloped lands in order to maintain balance with ever increasing development.

While Hamilton has many areas that are worth protecting for their own sake, it has a considerable amount of land which, while under various ownership, is part of a large contiguous area of sparsely developed or undeveloped land which stretches from(Georgetown to the sea, through Boxford, Rowley, Topsfield, Hamilton and Ipswich). This area provides great recreational opportunities, and more importantly is vital in terms of wildlife habitat and biodiversity.

"Protected land" as described here includes all state (none federal) lands, all conservation restrictions, and some town and private lands which for one reason or another are understood not to be developed. These are categorized as permanently protected.

The many parcels under agricultural restriction are not permanently protected, but are shown on the protected spaces map for two main reasons: 1. to show their relationship to adjacent protected lands and 2.

because they assumed to be potential candidates for permanent protection. Many of the goals and objectives of this plan are particularly relevant to these lands.

A Protected Parcels

The inventory tables associated with this chapter and in the appendices list main characteristics of parcels in Hamilton which are protected by the state, by municipal water departments, or nonprofit land trusts. The Protected Open Space Map shows their distribution throughout the town. Brief descriptions of some of the major parcels follow; see also the "Bay Circuit Guide to Walks in Hamilton and Wenham" for more details.

Bradley Palmer State Park

The former Bradley Palmer estate, partly in Hamilton, was donated to the state and is a major regional recreational resource. It is used intensively for walking, riding, bicycling and cross country skiing as well as for its picnic areas and wading pool.

Willowdale Mill

The Essex County Greenbelt Association's 25-acre Willowdale Mill reservation adjoins Bradley Palmer State Park on the north, and its trails connect with those of the park. It protects 1500 feet of the east bank of the Ipswich River, and links the river bank and the park with Winthrop Street. Its features include the ruins of the 19th century mill, a fish ladder (unfortunately in disrepair and not functioning), and walks through forested areas.

Appleton Farm

The Trustees of Reservations manage this farm, which dates from 1638, partly for recreation and partly for agriculture. The Appleton Grass Rides section has a network of wide grassy avenues built for carriage driving but now used by cross country skiers, snow shoers, and walkers. The rest of the site has a multipurpose trail network.

Ipswich River Wildlife Sanctuary

Another huge turn-of-the-century estate, that of Thomas Proctor in Wenham, Topsfield, and Hamilton became in the 1950's the

Massachusetts Audubon Society's Ipswich River Wildlife Sanctuary. The Society uses the property in an active program of nature education. Like the Bradley Palmer Park and the Harvard Forest, it bears the imprint of the former owner's very ambitious ornamental horticulture projects (as for example in the remarkable pondside "Rockery"). It protects a very large section of the banks and floodplain of the Ipswich River and includes walking trails through a range of wildlife and plant habitats from pond, swamp, and marsh to upland forest.

Fee-simple lands of Essex County Greenbelt Association

The Essex County Greenbelt Association, in addition to actively working with landowners in Hamilton as well as the rest of the county to put land under Chapter 187 Conservation Restrictions, owns some lands outright – Willowdale Mill has been mentioned but there are several other parcels of varying sizes listed in the tables, the largest being over 150 acres, acquired from J. Pingree.

Hamilton-Wenham Open Land Trust

The Hamilton-Wenham Open Land Trust, which in addition to seeking traditional donations of lands for open space, has worked to facilitate the protection of open space in conjunction with new residential developments.

H.WOLT Reservations, Jan. 2007

Name of Reservation	Location	Acres	Map/Lot
Pondview	Boardman Lane	2	31/23
Helen Warren Richardson	Woodbury Street	2	69/25
Riverside Gardner Street		9	17/4
Whipple	Candlewood Island	2	35/3
Taft Woods	Taft Woods Row	4.4	65/154
Ted & Ella Johnson	Candlewood Island	7	35/2
Tarr/Chute	Bridge St. at Essex St.	9	52/63
Michaela's Woods	Off Appleton Ave.	16.9	64/7.

Hamilton is grateful to the Winthrops, Pingrees, the heirs of Francis Whipple, Ted Johnson, the Catlins, Fred Richardson, the Fords, and others who in recent years have donated land for conservation and recreation. Their generosity and demonstration of concern for the future are appreciated. The town also recognizes the generosity of the Clark, Sears, Donovan and other families who have permitted riders and walkers access to their lands.

Town of Hamilton Water Supply Lands

The town owns relatively small parcels surrounding their several water supply wells: Pine Tree (7 acres), Idlewood No. 2 (38 acres), Bridge street (17 acres), Patton (4 acres), School Street and one acre at the reservoir site on Brown's Hill.

Chebacco Woods

These extensive tracts in Wenham, Manchester and Hamilton which were formerly part of the country estate of Frederick Henry Prince were

later owned by Gordon College. Approximately 115 acres are now protected open space jointly managed by the towns of Hamilton and Manchester, having been bought from the College in a major resource protection coup that involved multiple state agencies and nonprofits as well as the two towns. In southeast Hamilton, they include areas adjacent to Gravelly Pond, Round Pond, and Beck Pond. In this irregular terrain, made up of hummocky glacial till often thinly overlaid on rough bedrock, with large ponds as well as smaller water bodies and vernal pools in kettleholes, a variety of habitats and scenery can be found, including between Beck Pond and Woodbury Street, hemlock forest reminiscent of cool rocky ravine microenvironments of further north in New England. This has long been an important regional recreational resource, with its unspoiled lakeside forests and extensive trail network.

Town of Manchester-by-the-Sea Lands

Gravelly Pond and Round Pond are used by Manchester-by-the-Sea for water supply. Manchester also maintains a sizeable area in that part of southeast Hamilton for water supply protection which serves valuable resource and habitat protection purposes. As part of the Chebacco Woods land acquisition, a conservation restriction was granted by Manchester-by-the-Sea providing durable protection and public access to these lands, effectively forming an extension of Chebacco Woods and a total protected area of approximately 365 acres.

The adjacent open space in Wenham and Manchester owned by Gordon College, and the Meadowbrook Farms property in Hamilton remain unprotected.

Harvard Forest

This property straddles the Boston-Ipswich commuter rail right of way in the center of Hamilton, and is land formerly planted with hundreds of groups of exotic trees and shrubs and donated by Nathaniel Martin to Harvard College. It is under the management of the Harvard Forestry School headquartered at Petersham, Massachusetts. There are periodic managed harvests of trees. It has trails that are used for riding, hiking and cross-country skiing. This property forms part of the greenway extending from the Ipswich River in the east to Bay Road and the old town center. Essex County Greenbelt Association less-than-fee interests

The Essex County Greenbelt Association (ECGA) has been very active in seeking donations of Chapter 187 Conservation Restrictions and other less-than-fee interests in land which are listed in the inventory. Some examples are the Patton and Totten restrictions, and the Devon Glen Farm restriction.

Public Lands protected by Conservation Restrictions

Area	Owned By	Managed By	Current Use	Condition	Recreation Potential	How Acquired	Degree of Public Access	Zoning	Degree of Protection
Idlewild Brook Well Area	Town of Hamilton	Board of Selectmen	Well Only	Good	None	Town Land	None	R 1 A	
Bridge Street Well Area	Town of Hamilton	Board of Selectmen	Well Only	Good	Unknown	Town Land	None	R 1 A	
School Street Well Area	Town of Hamilton	Board of Selectmen	Well & Recreation	Good	Already Being Used	Town Land	Full	R 1 A	
Asbury Street/ Patton Well Area	Town of Hamilton	Board of Selectmen	Well Use Only	Excellent	Possible	Town Land	None	R 1 A	
Patton Park	Town of Hamilton	Board of Selectmen	Recreation/ playing fields, tennis, basketball, playground, concert area, etc.	Excellent	Already Being Used	Gifted	Full	R1B	In Perpetuity
Chebacco Woods	Towns of Hamilton & Manchester	Chebacco Woods Land Management Association	Recreation	Natural State with Trails	Already Being Used	Self- Help,Town Conservati on Funds, Contributio ns	Full	R A	In Perpetuity

Area	Owned By	Managed By	Current Use	Condition	Recreation Potential	How Acquired	Degree of Public Access	Zoning	Degree of Protection
Moulton Street Conservation Area	Town of Hamilton	Conservation Commission	Habitat Protection	Good	Already Being Used	Gifted	Full	R 1 B	Conservati on Restriction
Cutler Park	Town of Hamilton	Board of Selectmen	Habitat	Needs Maintenance	Biodiversity Study	Gifted	Full	R1B	In Perpetuity
Winthrop Elem School	Town of Hamilton	Regional School District	Education	Poor	Playgrounds	Gifted	Full	R 1A	Lease Expires in 2015
Cutler Elem	Town of Hamilton	Regional School District	Education	Fair	Playgrounds	Partially Gifted & Partially eminent domain	Full	R 1A	Lease Expires in 2015

	Grantor	CR Holder	Location	Acres	Date	Notes	Book/Page	Map/Lot
1	F. Winthrop (Arbella Land Co.)	ECGA	Off Highland and Winthrop St.	84	1971 Apr	Along Ipswich River and Black Brook	5492/777	8/1
2	G. Horne (M. Massey)	ECGA	Off Highland St.	11.7	1977 Mar	Two pieces along Ipswich R.	6107/257	4/15(2.7) 4/9(9.0)
3	G. Horne (M. Massey)	ECGA	Off Highland St.	10	1977 Mar	Woodland near Ipswich R.	6302/463	4/16
4	G. Horne (M. Massey)	ECGA	Off Highland St.	10	1977 Mar	Woodland near Ipswich R	6351/102	4/13
5	E C Trust	ECGA	Boardman Lane	25.3	1978 Dec	Sears Park	6550/529	23/2
6	D. & S. Bradford (J. Donovan)	ECGA	Cutler Rd.	36.6	1982 Dec	Cilly Hill, abuts Harvard Forest	7023/563	48/12 (57/109)
7	G. & R. Patton	ECGA	Asbury St.	59.3	1987 Dec	Vineyard Hill (rest if CR in Topsfield)	9339/558	19/2
8	G. & R. Patton	ECGA	Between Asbury and Highland Sts.	72.7	1987 Dec	Totten Farm	9339/558	20/4
9	S. L. Phippen	ECGA	Essex Street	2.9	1993 Dec	Rest of CR is in Wenham	11728/290	68/1
10	Arbella Land Co. (Winthrop)	ECGA	Highland Street	84.3	1994 Nov	Winthrop Fields	12866/20	13/9(40.6) 8/7 (7.3)

Private Lands protected by Conservation Restrictions

	Grantor	CR Holder	Location	Acres	Date	Notes	Book/Page	Map/Lot
			(both sides)					14/2(8.1) 13/3(28.3)
11	R.E.P. Totten	ECGA	Off Highland	58.5	1993 Nov		12215/189	20/4.5.11. 12
12	G. Horne	ECGA	Highland St.	18.2	1995 12		13311/51	4/12
13	F. & B. Sears	ECGA	Gardner St.	56	1999	1800 ft. along Miles R.	16023/25	24/26 24/36
14	J. & D. Pirie	ECGA	Off Bay Road	31.88	1997 Dec	2 pcs. 1530 ft along Miles R.	14512/288	49/21 (26.6) 49/22B (5.28) 49/52
15	S., F., & F. Colloredo- Mansfeld	ECGA	Winthrop St.	11.9	2002 Nov	Adj. Bradley Palmer	19748/169	6/5
16	Joshua Lerner	ECGA	108 Moulton St.	12.47	2002 Dec	Miles R.	19794/409	32/7
17	Kevin Donovan Michele Stecyk	HWOLT	494 Essex St.	9.09	2003 Dec		22222/64	59/39 59/99
18	F.F. Colloredo- Mansfeld	ECGA	Winthrop St.	5.79	2004 Sep	Lot F	23345/212	13/11
19	S. Lawrence Nominee Trust	ECGA	Winthrop St.	12.7	2004 Sep	Lot G	23345/226	13/12
20	S. Colloredo- Mansfeld & S. Lawrence Nominee Trust	ECGA	Winthrop St.	8.48	2004 Sep	Lot H.	23345/240	13/13
21	D. Lawrence Nominee Trust	ECGA	Winthrop St.	8336 sq. ft.	2004 Sep	Parcel A	22345/199	7/1
22	Colloredo- Mansfeld	ECGA	Winthrop St.	1.8 3.16	2004 Sep		7021/558	13/10
23	Osgood	ECGA	675 Bay Rd.	5.18	2005 Dec		24040/502	40/31
24	Shane	ECGA	Essex St.	14.68	2006		5801/44	69/1
25	Colloredo- Mansfeld	ECGA	Winthrop St.	9.48	2007 Sep	Lot 1-A	25712/115	6/2.4.7.8

	Grantor	CR Holder	Location	Acres	Date	Notes	Book/Page	Map/Lot
26	Richey	ECGA	Bridge St.	14.2	2007 Sep	Miles River	10350/95	57/13
27	Clark	ECGA	823 Bay Rd.	20.5	2007 Nov	Miles River	12155/86	32/16
28	Moseley	ECGA	861 Bay Rd.	61.2	2007 Nov	Miles River	5369/127	32/15
29	Winthrop	ECGA	Winthrop & Highland	83 new	2007 Nov		23811/347 24055/71	8/1.8.13

Unprotected parcels

Β

Miscellaneous town holdings

Many parcels, mostly quite small, are held by the Town of Hamilton for various purposes. One of the larger and more significant pieces is the inactive town landfill site in the extreme southeast corner of the town, on the Manchester town line and across Chebacco Road from the Manchester town water supply land around Gravelly Pond. The process of closing the landfill to the standards of the Department of Environmental Protection is not yet complete. Landfill and sand and gravel mining operations have substantially denuded the western part of the site, but the hilly and forested eastern part and adjacent wetlands have open space and wetlands value worth preserving.

U.S. Air Force

The Air Force site on Sagamore Hill is not open to the public.

Other significant unprotected parcels

Institutions including Pingree School and Gordon-Conwell Theological Seminary have significant amounts of undeveloped land which is not protected. Private recreational land, notably the Myopia Hunt Club and Myopia Schooling Field Trust land may not have as assured a future as would be desirable.

There are about 35 unprotected privately owned parcels of at least 20 acres in Hamilton plus substantial acreage with temporary protection

under Chapter 61 (forestry), 61A (agriculture) and 61B (recreation and wildlife).

The maps accompanying this report identify areas which, because of their resources, position in relation to greenways, importance as aquifer recharge areas, etc., are of particular priority to keep as open space. The appendix has lists of owners, areas, and map and lot locations for many parcels, to serve as a resource for future planning about potential open space targets in addition to those already identified in this plan.

Chapter 61, 61A and 61B Lands – As of Jan. 2007, assessors records show an additional 270 acres for which a simplified list as below has not yet been compiled.

	yerbeen	complica.			
	OWNER	LOCATION	TYPE	ACRES	MAP/LOT
1	D. Pirie	Off Bay Road	Ch. 61	27.6	49/52
			Forestry		
2	P & B Britton	466 Highland	Ch. 61	127.2	20/11
		Street	Forestry		
3	Arbella Land Co.	Winthrop Street	Ch. 61 A	50	2/4
		_	Agriculture		
4	Arbella Land Co.	Highland Street	Ch. 61 A	7.3	8/7
_			Agriculture		
5	Arbella Land Co.	Highland Street	Ch. 61 A	36	8/13
			Agriculture		4.0.10
6	Arbella Land Co.	Highland Street	Ch. 61 A	28	13/3
7		Liberta de Otra et	Agriculture	40.0	40/0
7	Arbella Land Co.	Highland Street	Ch. 61 A	40.6	13/9
0	Arballa Land Ca	Cutlar Dood	Agriculture	0.1	11/0
8	Arbella Land Co.	Cutler Road	Ch. 61 A	8.1	14/2
9	John Donovan	Sagamore Hill	Agriculture Ch. 61 A	29.7	26/2
9	John Donovan	Sayamore mil	Agriculture	29.1	20/2
10	John Donovan	Sagamore Hill	Ch. 61 A	10.6	26/4
10	Sonn Bonovan	Ougamore min	Agriculture	10.0	20/4
11	P&M Clark	Off Bay Road	Ch. 61 A	~15	32/22
••		on bay noud	Agriculture	10	02,22
12	Focus Focus R.T.	Sagamore	Ch. 61 A	104.5	26/1
		Street	Agriculture		
13	M. Plum, ML Cabot	27 Woodland	Ch. 61 A	1.1	47/222
	,	Mead	Agriculture		
14	M. Plum, ML Cabot	112 Woodland	Ch. 61 A	2.7	47/223
	·	Mead	Agriculture		

15	Devon Glen L.P.	482 Bay Road	Ch. 61 A	8.8	48/11
16	John Donovan	Sagamore Hill	Agriculture Ch. 61 A Agriculture	24	34/2
17	Patton Family L. P.	650 Asbury Street	Ch. 61 A Agriculture	89.7	19/2
18	J. Culverwell	336 Bridge Street	Ch. 61 A Agriculture	9.5	51/32
19	Devon Glen L. P.	Bay Road	Ch. 61 A Agriculture	2.9	48/10
20	D. Pirie	Off Bay Road	Ch. 61 A Agriculture	7.3	49/53
21	J. Lawrence	Winthrop Street	Ch. 61B Recreation	26	6/5
22	D. Lawrence	Winthrop Street	Ch. 61B Recreation	14.6	7/1
23	F. Colloredo- Mansfeld	Highland Street	Ch. 61B Recreation	5.7	13/11
24	S. Colloredo- Mansfeld	Winthrop Street	Ch. 61B Recreation	12.9	13/12
25	S. Colloredo- Mansfeld	Winthrop Street	Ch. 61B Recreation	8.3	13/13
26	J. & J. Moseley	Moulton Street	Ch. 61B Recreation	9.7	13/11
	Total			~708 Acres	

SECTION 6 COMMUNITY GOALS

A Description of Process

As a means of obtaining public opinion on open space issues, the Open Space Committee cooperated with the Hamilton Citizens' Action Planning Committee, a town committee working on preparing a new Master Plan for the town, in a town-wide mailing of a surveydesigned to meet the needs of both groups. The open space and recreation portion was modeled closely on the survey used in the 1997 Open Space and Recreation part of the Master Plan, which in turn was based closely on the Deerfield questionnaire used as an example in the EOEEA Division of Conservation Services Open Space Planner's Workbook.

A copy of the form is attached, also showing a numerical summary of the results, to serve as the basis for the following discussion.

Much information more specifically targeted to determining recreation needs, particularly for active recreation for all age groups, is closely analyzed in the separate 2001 Hamilton-Wenham Recreation Master Plan, which the reader is urged to study closely. It contains a great deal of invaluable information that it would be redundant to repeat here but which is enthusiastically endorsed by this group and is included by reference in this Open Space and Recreation Plan.

В

Statement of Open Space and Recreation Goals

The town of Hamilton has in its remaining undeveloped space an array of agricultural and woodland landscapes which are highly valued by the residents of the town and by visitors, and which in addition provide protection for water resources and biological diversity for the future. Preserving and

COMMUNITY GOALS:

enhancing these features will require well-planned and coordinated action on the part of individual citizens, local and regional land preservation groups, and town government. It is the purpose of this plan to contribute to this effort.

SECTION 7 ANALYSIS OF NEEDS

The "Community Goals" section has discussed the state of affairs the people of town would like to see in the future for protected open space. This section analyzes in detail the problems and challenges that face the town in meeting these goals as time goes on.

Α

Summary of Resource Protection Needs

A key physical challenge to the town is to maintain its supply of clean drinking water. For a groundwater-dependent town served by individual-site underground sewage disposal systems, the challenges of increasing density are fairly obvious. Recharge areas must be maintained in a functioning condition, groundwater contamination must be avoided, and additional sources of water meeting quality standards must be sought. Due attention must be paid to the fact that the town's surface waters are public water supplies for adjacent towns and may in the future play such a role for Hamilton as well. As will be seen in the discussion of questionnaire results below, the great importance of open space for water resource protection was one of the areas of strongest agreement among the townspeople responding.

Further, for the good of the town and the wider environment, the other resource functions of open space in maintaining habitat for a diversity of animal and plant species must be maintained and enhanced. It is of great importance that our resources be managed with attention to the connections and spatial relations among them, and their relation to resources in adjacent communities.

Β

Summary of Community's Needs

Compared to the Statewide Comprehensive Outdoor Recreation Plan (SCORP) defined Northeast region as a whole, Hamilton is more rural than average. Like much of the area, it experiences the effects of water withdrawal and seasonal drought. It has a fair amount of woodlands, wetlands and agricultural lands available for hiking, mountain biking, trail riding and such, and according to the open space survey, there is demand for still more, and such activities are already valued by a greater percentage of respondents than in the SCORP survey. The demand for true bicycle paths or lanes is far greater than what currently exists in town. Compared to the region, there is many times greater than average appreciation for bridle trails. Though Hamilton has no coast line, it is partly bordered by the Ipswich River, and has several ponds, some shared with neighboring towns, which seem to satisfy the need for canoeing, fishing and boating.

Because it still retains a considerable amount of contiguous open space, along with neighboring towns, it forms part of one of what the SCORP calls "critical ecoregions," and special attention should be given to that status in planning for future development. While a similar percentage of respondents said they especially valued conservation areas as recreational fields, more felt that public funds should be used to preserve open space, while fewer felt public funds should be used to acquire more recreational land.

The following analysis is based on the findings of the open space questionnaire. A summary of the main points of the responses will be followed by a full reproduction of the questionnaire, with summary statistics of the responses.

Open space

The survey results tables in Section 6 give the percentages "of", "for", "against", and "no opinion" responses to questions about development and open space planning. For the purposes of this study, in most cases only the percentage of positive responses and the ratio of negative to positive will be reported. The percentage of "no opinion", usually around

15%, will be noted only when the percentage is high enough to suggest a the result should not be taken at face value. We will for example point up the few cases where the "don't knows" approached 30%, an indication either of a confusing question or an unusual degree of apathy.

Strong sentiment favoring open space preservation in town is clearly demonstrated by the 74% "yes" to 14% "no" (5.3 to 1) of respondents who said Hamilton should put more effort into protecting open space. 82% favored working with nonprofits to acquire open space land; 55% felt that town financial resources should be expended on this. 36% favored spending town funds to acquire land for recreation; and 90% thought that new developments should include a percentage of permanent open space.

Growth management strategies

81% said the town should restrict new development through zoning

59% respondents would use zoning to encourage market-rate housing for elderly (19% no)

Respondents were almost evenly divided on using zoning to encourage multifamily with zoning (41% yes/43% no)

Many feel strongly that the single-family house on a large lot is the defining land use of Hamilton: the proposition of zoning for a mix of single and multifamily housing received 38% for and 48% against.

A plurality of 51% would encourage infill housing versus 27% against.

Two thirds of respondents would increase minimum lot size (68% yes/24% no).

Percent favoring particular types of recreational enhancements for the town: bike trails 61%, conservation areas 57%, sports fields 56%, children's play areas 53%, hiking and skiing trails 50%, swimming pool 50%, improvements to Patton Park 47%, tennis courts 46%.

Action on housing

Respondents were no more than lukewarm to most propositions that the town should take action in the housing market. While 72% thought that the town should sponsor or encourage housing for senior citizens living on fixed incomes and 56% thought some special provisions should be made to help seniors already living in the town, most other interventions were favored by half or less: 49% wanted the town to sponsor or encourage affordable housing for people with low and moderate income, and a surprisingly low 43% thought the town should sponsor or encourage housing affordable for town employees. In general it seems respondents considered the town to have little or no responsibility for being part of the solution to the Massachusetts housing crisis, an attitude you can consider either "laissez-faire" or "mean-spirited" according to your leanings, but which is certainly at odds with the laws and goals the state has set for affordable housing and injurious to open space goals.

Other town actions

66% for and 25% against bicycle lanes on key connector roads

81% for and 8% against the town being more proactive on securing additional water supplies

75% for and 15% against the town being more proactive about encouraging or enforcing more water conservation

60% for and 28% against encouraging private wells for irrigation

Table 7-1	Spend	ling of tax dollars
	More:	
	66%	drinking water supply and quality
	47%	more bicycle and walking paths
	43%	land acquisition for conservation or passive recreation
	38%	planning and growth management
	Less:	
	27%	public schools
	21%	land acquisition for affordable or senior housing

Public spending – relative importance of goals

Respondents were asked to say how important to them, even if it may involve public spending, to:

Spending purpose	Importance score (see note)
Preserve open space to protect wetland and water resources	4.34
Maintain current recreational areas and facilities	4.27
Preserve open space to protect wildlife habitat	4.10
Preserve farmlands	4.06
Preserve buildings of historical or architectural interest	3.59
Acquire land for recreational needs	3.28

Table 7-2Town needs, average importance scores given by surveyrespondents

Average score assigning a value of 1 to very unimportant, 2 to not important, 3 to neutral, 4 to important and 5 to very important

Reproduction of the Questionnaire, with summary of responses

Hamilton Open Space & Master Plan Survey Results

Below are the survey results of responses received as of April 10th, 2002. The survey results will also be presented at the April 22nd workshop (Miles River Middle School at 7:30 PM) and on the CAPC's web site http://www.hamiltonmasterplan.com. The survey results will also be made available to the Hamilton-Wenham Chronicle for publication.

We received 543 responses, out of 3,200 delivered to each household. The percentages presented tallied here are based on the number of people who answered individual questions, since not every respondent answered every question. In certain instances, the percentages are of the entire 543 responses (Part I, Questions 4 & 5; Part III, Question 11; Part VI Question 11).

<u>Part I. Information</u>	Part I. Information about you and your household.							
1. How long hav	ve you lived in Ha	milton?						
<u>13 %</u> < 5 yrs	<u>18 %</u> 5-10 yrs	<u>26 %</u> 11-25 yrs	<u>33 %</u> 26-50 yrs	<u>10 %</u> 51+ yrs				
2. How old are y	you?	-	-					
<u>1 %</u> 20-24 yrs	<u>6 %</u> 25-34 yrs	<u>48 %</u> 35-54 yrs	<u>18 %</u> 55-64 yrs	<u>28 %</u> 65+ yrs				
3. How many pe	eople are in your h	nousehold?						
<u>14 %</u> 1	<u>36 %</u> 2	<u>15 %</u> 3	<u>31 %</u> 4-5	<u>3 %</u> 6+				
4. Does your ho	usehold include (o	heck all that apply)):					
<u>41 %</u> Children <1	.8 <u>4</u> % An	elderly parent who	lives $\underline{6\%}$ A	person with a				
years old	with you	1	disabilit	у				
5. Do you (check	<pre>k all that apply):</pre>							
<u>96 %</u> Own your	<u>3 %</u> Rent you	r <u>8 %</u> Work i	n <u>6 %</u> C	wn a business in				
home	home	Hamilton	Hamil	ton				

<u>Part II. Living in Hamilton</u>. For each statement, check <u>one</u> item that most closely reflects your opinion.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	No Opinion
1.	I am satisfied with the level of town services in Hamilton.	<u>2 %</u>	<u>11 %</u>	<u>18 %</u>	<u>50 %</u>	<u>17 %</u>	
2.	Hamilton has experienced too much residential growth.	2 %	<u>11 %</u>	<u>25 %</u>	<u>28 %</u>	<u>29 %</u>	<u>3 %</u>
3.	My property taxes have risen too quickly.	<u>2 %</u>	<u>6 %</u>	<u>21 %</u>	<u>23 %</u>	<u>46 %</u>	<u>3 %</u>
4.	Hamilton has enough recreation space.	<u>5 %</u>	<u>20 %</u>	<u>16 %</u>	<u>42 %</u>	<u>15 %</u>	<u>1 %</u>
5.	Hamilton's roads are adequately maintained.	<u>4 %</u>	<u>22 %</u>	<u>16 %</u>	<u>50 %</u>	<u>7 %</u>	<u>0 %</u>
6.	Hamilton has done enough to address the supply and quality of our drinking water.	<u>15 %</u>	<u>31 %</u>	<u>19 %</u>	<u>27 %</u>	<u>4 %</u>	<u>4 %</u>
7.	Hamilton provides adequate facilities and services for teens.	<u>7 %</u>	<u>22 %</u>	<u>26 %</u>	<u>17 %</u>	<u>5 %</u>	<u>23 %</u>
8.	I am satisfied with Hamilton's public safety services.	<u>1 %</u>	3 %	<u>12 %</u>	<u>58 %</u>	<u>24 %</u>	<u>2 %</u>
9.	Hamilton provides adequate facilities and services for seniors.	<u>7 %</u>	<u>19 %</u>	<u>27 %</u>	<u>18 %</u>	<u>5 %</u>	<u>24 %</u>
10.	I am satisfied with the quality of our public schools.	<u>2 %</u>	<u>9 %</u>	<u>12 %</u>	<u>41 %</u>	<u>28 %</u>	<u>8 %</u>
11.	The Town of Hamilton (excluding land preservation organizations and private citizens) has taken adequate steps to prevent the development of important open space.	<u>13 %</u>	<u>23 %</u>	<u>23 %</u>	<u>28 %</u>	<u>6 %</u>	<u>7 %</u>

Part III. Preservation

Open Space, Recreation & Historic

Page 2

Should the Town of Hamilton:			No
	Yes	No	Opinion
1. Put more effort into protecting open space?	<u>74 %</u>	<u>15 %</u>	<u>11 %</u>
Use taxes or other local revenue to buy land or development rights in order to preserve open space?	<u>55 %</u>	<u>34 %</u>	<u>12 %</u>
Use taxes or other local revenue to acquire more recreation land?	<u>36 %</u>	<u>50 %</u>	<u>13 %</u>
4. Seek grants or work with existing land preservation organizations to buy land or development rights in order to preserve open space?	<u>82 %</u>	<u>10 %</u>	<u>8 %</u>
5. Put more effort into protecting the historic district and historically significant properties ?	<u>55 %</u>	<u>27 %</u>	<u>19 %</u>
Require that large new developments include a percentage of permanent open space?	<u>90 %</u>	<u>6 %</u>	<u>5 %</u>
Develop more bicycle paths and/or bicycle lanes?	<u>67 %</u>	<u>20 %</u>	<u>13 %</u>
Develop more trails for passive uses such as horseback riding, walking, and cross country skiing?	<u>59 %</u>	<u>27 %</u>	<u>14 %</u>
9. Increase the number of scenic roads which have restrictions on tree cutting, changing stone walls and fence building?	<u>56 %</u>	<u>28 %</u>	<u>16 %</u>
10. Adopt the Community Preservation Act in order to finance open space land acquisitions, affordable housing and historic preservation?	<u>49 %</u>	<u>23 %</u>	<u>28 %</u>

11. Check up to <u>10</u> recreational facilities that you think are <u>important to the community</u>, and circle the <u>two</u> that are <u>most important to you</u>.

<u>61</u>	a. Bike trails or bike lanes	<u>53</u>	k. Children's play areas
<u>%</u> <u>51</u>	b. Local neighborhood parks	<u>%</u> <u>22</u>	l. Public access to water bodies for
<u>%</u> 25	c. Family picnic areas	<u>%</u> 34	boating m. Public access to water bodies for
<u>%</u> 57	d. Conservation areas	<u>%</u> 56	swimming n. Fields for soccer, softball, baseball and
<u>%</u>		%	football
<u>50</u>	e. Swimming pool	<u>36</u>	o. Recreation center building

<u>%</u>	
18	f. Skateboard park
<u>%</u>	
<u>50</u>	g. Hiking and skiing trails
<u>%</u>	
<u>%</u> <u>30</u> <u>%</u> <u>46</u>	h. Ice skating rink
<u>%</u>	
<u>46</u>	i. Tennis courts
<u>%</u>	
<u>1 %</u>	j. Other
	(list)

- p. Teen center
- q. Patton Park improvements
- r. Horse trails

 $\frac{\frac{9}{32}}{\frac{9}{6}}$ $\frac{47}{\frac{9}{6}}$ $\frac{20}{\frac{9}{6}}$ $\frac{33}{\frac{9}{6}}$

s. Cultural, arts and crafts facilities

Part IV. **Growth Management**

Should the Town of Hamilton:			No
	Yes	No	Opinion
 Restrict new development through zoning? 	<u>81 %</u>	<u>12 %</u>	<u>8 %</u>
2. Use tax revenue or bonds to buy land for the purpose of reducing Hamilton's future growth potential?	<u>52 %</u>	<u>34 %</u>	<u>14 %</u>
Adopt zoning to encourage market-rate housing for the elderly?	<u>59 %</u>	<u>19 %</u>	<u>22 %</u>
4. Adopt zoning to encourage townhouse or multi-family units in order to accommodate one-person and small households?	<u>41 %</u>	<u>43 %</u>	<u>16 %</u>
5. Increase the minimum lot size required for new homes to reduce the potential number of lots in town?	<u>68 %</u>	<u>24 %</u>	<u>8 %</u>
 Adopt special zoning that allows planned, residential and commercial development in exchange for open space preservation on large estates – as Ipswich did recently? 	<u>66 %</u>	<u>16 %</u>	<u>18 %</u>

Sh	ould the Town of Hamilton:			No
		Yes	No	Opinion
1.	Sponsor or encourage housing Fdu to senior citizens living on fixed incomes?	<u>72 %</u>	<u>16 %</u>	<u>11 %</u>
2.	Sponsor or encourage housing affordable to low- or moderate-income people of all ages?	<u>49 %</u>	<u>37 %</u>	<u>14 %</u>
3.	Sponsor or encourage housing affordable to town and school employees?	<u>43 %</u>	<u>43 %</u>	<u>13 %</u>
4.	Buy land for the purpose of developing affordable housing?	<u>28 %</u>	<u>55 %</u>	<u>17 %</u>
5.	Sponsor the development of elderly housing exclusively for seniors already living in Hamilton or whose adult children live in Hamilton?	<u>56 %</u>	<u>28 %</u>	<u>16 %</u>
6.	Adopt zoning that requires the inclusion of some affordable housing units in new residential developments?	<u>54 %</u>	<u>34 %</u>	<u>12 %</u>
7.	Apply for grants to buy existing homes and sell or rent them as affordable housing?	<u>47 %</u>	<u>39 %</u>	<u>15 %</u>
8.	Adopt zoning that encourages "infill" housing in existing developed areas <u>and</u> discourages development on large tracts of open space?	<u>51 %</u>	<u>27 %</u>	<u>22 %</u>
9.	Adopt zoning providing for a mix of housing by allowing two-unit or multi-family homes, subject to design review?	<u>38 %</u>	<u>46 %</u>	<u>15 %</u>
10	. Should the town relax existing zoning so as to permit a rental unit in a single family home?	<u>49 %</u>	<u>40 %</u>	<u>11 %</u>

Part VI. Community Facilities and Services

Sh	nould the Town of Hamilton:			No
		Yes	No	Opinion
1.	Sponsor or develop bicycle lanes on key connector roads?	<u>66 %</u>	<u>25 %</u>	<u>9 %</u>
2.	Provide more services and programs for youth?	<u>45 %</u>	<u>27 %</u>	<u>28 %</u>
3.	Provide more services and programs for senior citizens?	<u>50 %</u>	<u>21 %</u>	<u>29 %</u>
4.	Provide services and facilities for cultural activities (art, theatre, music, crafts, etc)?	<u>50 %</u>	<u>28 %</u>	<u>22 %</u>
5.	Be more pro-active about investigating and securing			
	••	<u>81 %</u>	<u>8 %</u>	<u>12 %</u>
3. 4.	Provide more services and programs for senior citizens? Provide services and facilities for cultural activities (art, theatre, music, crafts, etc)?	<u>50 %</u>	21 %	29 %

6. Be more pro-ac water conserva	ctive about encouraging or ation?	enforcing	more	<u>75 %</u>	<u>15 %</u>	<u>11 %</u>
.	vate wells for lawn watering er to reduce the use of tow		r	<u>60 %</u>	<u>28 %</u>	<u>12 %</u>
8. Increase annua drainage?	al spending on road mainte	enance and	d	<u>31 %</u>	<u>46 %</u>	<u>23 %</u>
•	s for persons with disabiliti uildings, parks or other pul			<u>19 %</u>	<u>31 %</u>	<u>50 %</u>
10. Build more sid where?	ewalks in residential neigh	borhoods?	? If yes,	<u>27 %</u>	<u>45 %</u>	<u>28 %</u>
	n more aggressively enfor nding residents from home		ions to	<u>54 %</u>	<u>28 %</u>	<u>19 %</u>
If Yes, for what issues:	a. Noise	<u>40 %</u>	d. Parki Zone	ng in Re	sidential	<u>37</u> <u>%</u>
	b. Traffic	<u>37 %</u>	e. Inven	tory stor	age	<u>30</u> %
	c. Aesthetics / Signage	<u>37 %</u>	f. Hours	of opera	ation	$\frac{37}{\frac{9}{6}}$ $\frac{30}{\frac{9}{6}}$ $\frac{33}{\frac{9}{6}}$

12. Please also tell us:	Yes	No
Do you have a private well?	<u>16 %</u>	<u>84 %</u>
a. If you have a private well, approximately how deep is it?		feet
b. If you have a private well, for what purposes is it used? (chee	ck all tha	at apply)
43 A gricultural /		

Landscaping	<u>43</u> <u>%</u>	Agrıcultural / equestrian	<u>4 %</u>	Home Water	<u>23 %</u>
Landscaping & Agr	<u>13</u> <u>%</u>	Landscaping & Home	<u>14</u> <u>%</u>	ALL	<u>3 %</u>

Part VIII. Trade-Offs	Page 5
A. How important is it to you, <u>even if may involve public</u> spending, to:	Very Important Important Not Important Very Unimportant
 Preserve buildings of historical or architectural interest? 	$\underline{23 \%} \ \underline{33 \%} \ \underline{28 \%} \ \underline{12 \%} \ \underline{4 \%}$
2. Preserve farmlands?	$\underline{39\ \%}\ \underline{37\ \%}\ \underline{17\ \%}\ \underline{5\ \%}\ \underline{2\ \%}$
3. Preserve open space to protect wetland and water resources?	56 % 30 % 8 % 4 % 2 %
4. Preserve open space to protect wildlife habitat?	$\underline{45\ \%}\ \underline{31\ \%}\ \underline{15\ \%}\ \underline{7\ \%}\ \underline{2\ \%}$
5. Maintain current recreational areas and facilities?	$\frac{42\%}{45\%} \frac{45\%}{10\%} \frac{10\%}{3\%} \frac{3\%}{10\%} \frac{1\%}{10\%}$
6. Acquire land for recreational needs?	$\underline{16\ \%}\ \underline{29\ \%}\ \underline{29\ \%}\ \underline{20\ \%}\ \underline{5\ \%}$
7. Increase the supply of parking in downtown	
Hamilton?	$\underline{10\ \%}\ \underline{26\ \%}\ \underline{32\ \%}\ \underline{25\ \%}\ \underline{7\ \%}$
Hamilton? B. If you could determine how your tax dollars were spent would you allocate more, less or the same amount to the	
Hamilton? 3. If you could determine how your tax dollars were spent, would you allocate more, less or the same amount to the ollowing areas?	t. 0
Hamilton? B. If you could determine how your tax dollars were spent, vould you allocate more, less or the same amount to the ollowing areas? I. Active recreation facilities, e.g., athletic fields, tennis courts	More ^{t,} Same Less No Dpinio
 Hamilton? B. If you could determine how your tax dollars were spent, would you allocate more, less or the same amount to the ollowing areas? I. Active recreation facilities, e.g., athletic fields, tennis courts Planning and growth management 	t, opinio Dpinio <u>53 % 61 % 12 % 4 %</u>
 Hamilton? B. If you could determine how your tax dollars were spent, yould you allocate more, less or the same amount to the ollowing areas? I. Active recreation facilities, e.g., athletic fields, tennis courts Planning and growth management Maintenance of streets, sidewalks, and parks 	t, 38% $47%$ $9%$ $60%30%$ $65%$ $4%$ $2%$
 Hamilton? B. If you could determine how your tax dollars were spent, would you allocate more, less or the same amount to the ollowing areas? I. Active recreation facilities, e.g., athletic fields, tennis courts Planning and growth management B. Maintenance of streets, sidewalks, and parks I. Land acquisition for conservation or passive recreation 	t, $310 \times 10^{10} \times 10^{$
 Hamilton? B. If you could determine how your tax dollars were spent, would you allocate more, less or the same amount to the ollowing areas? I. Active recreation facilities, e.g., athletic fields, tennis courts Planning and growth management Maintenance of streets, sidewalks, and parks Land acquisition for conservation or passive recreation Build more bicycle and walking paths 	t, $\begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $
 Hamilton? B. If you could determine how your tax dollars were spent, would you allocate more, less or the same amount to the ollowing areas? I. Active recreation facilities, e.g., athletic fields, tennis courts Planning and growth management Maintenance of streets, sidewalks, and parks Land acquisition for conservation or passive recreation Build more bicycle and walking paths Drinking water supply & quality 	t, $310 \times 10^{10} \times 10^{$
 Hamilton? B. If you could determine how your tax dollars were spent, would you allocate more, less or the same amount to the following areas? Active recreation facilities, e.g., athletic fields, tennis courts Planning and growth management Maintenance of streets, sidewalks, and parks Land acquisition for conservation or passive recreation Build more bicycle and walking paths Drinking water supply & quality Senior services Public Safety: Staff and Facilities 	t, $\begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $
 Hamilton? B. If you could determine how your tax dollars were spent, would you allocate more, less or the same amount to the following areas? Active recreation facilities, e.g., athletic fields, tennis courts Planning and growth management Maintenance of streets, sidewalks, and parks Land acquisition for conservation or passive recreation Build more bicycle and walking paths Drinking water supply & quality Senior services 	t, 30% $61%$ $12%$ $4%38%$ $47%$ $9%$ $6%30%$ $65%$ $4%$ $2%4%$ $2%47%$ $31%$ $16%$ $6%47%$ $2%47%$ $31%$ $16%$ $6%47%$ $2%$
 Hamilton? B. If you could determine how your tax dollars were spent, would you allocate more, less or the same amount to the ollowing areas? I. Active recreation facilities, e.g., athletic fields, tennis courts Planning and growth management Maintenance of streets, sidewalks, and parks Land acquisition for conservation or passive recreation Build more bicycle and walking paths Drinking water supply & quality Senior services Public Safety: Staff and Facilities 	t, $\frac{23 \%}{W}$ $\frac{61 \%}{S}$ $\frac{12 \%}{V}$ $\frac{4 \%}{S}$ $\frac{23 \%}{O}$ $\frac{61 \%}{S}$ $\frac{12 \%}{V}$ $\frac{4 \%}{O}$ $\frac{38 \%}{30 \%}$ $\frac{47 \%}{65 \%}$ $\frac{9 \%}{4 \%}$ $\frac{6 \%}{2 \%}$ n $\frac{43 \%}{37 \%}$ $\frac{37 \%}{15 \%}$ $\frac{15 \%}{5 \%}$ $\frac{47 \%}{47 \%}$ $\frac{31 \%}{16 \%}$ $\frac{16 \%}{6 \%}$ $\frac{6 \%}{6 \%}$ $\frac{33 \%}{44 \%}$ $\frac{10 \%}{10 \%}$ $\frac{13 \%}{13 \%}$ $\frac{19 \%}{67 \%}$ $\frac{5 \%}{9 \%}$ $\frac{5 \%}{5 \%}$

С

Management Needs, Potential Change of Use

Management needs

Management of "active" recreation in the town has at the present an energetic and effective recreation committee and supporting paid staff. "Passive" recreation in protected open space is something the town government has little involvement in at present, since almost all such areas are under state (DCR) or private management.

As for the management of long-term general goals, there is agreement among the great majority of Hamilton residents, also shared by the largely volunteer town government organization, about what the landscape of the town should look like in the future — as much like it looks today as is consistent with social justice and practicality. There is general agreement that recreational opportunities should be developed and improved continually, with special attention to making them more available to the handicapped and those who don't live in the east-central area where they are currently concentrated.

Ongoing attention to open space and recreation concerns tend to fall to several departments of town government: the volunteer boards (the Recreation Committee, the Conservation Commission and the other land use boards), the public works director and the 'executive branch' of selectmen and professional town staff. All of these interest groups share the characteristic of having a lot of other things to pay attention to, and limited time to talk together. In spite of the best of mutual goodwill, it has sometimes been difficult to get 'quality time' for dialog on open space.

The Open Space Committee is appointed by the Conservation Commission and plays a vital role in defining and advocating for the open space public interest in cooperation with the Planning Board as additional measures are taken to promote

Smart Growth. Further, the Open Space Committee deals with various non-wetlands functions authorized by the Conservation Commission statute, Ch. 40, Sec. 8C of the General Laws.

Close cooperation with local land trusts is essential. These partnerships have been very successful in the past, but one additional strategy to investigate would be pre-planning for Chapter 61, 61A, and 61B lands. The time frame for the option to purchase these lands after conversion is almost always impractical for the town to act on, with Town Meeting votes typically needed, but the right of first refusal could be assigned to the land trust which might be in a position to act faster. In 2005, Town Meeting adopted the Community Preservation Act, which can provide funds enabling the town to buy chapter lands as they come on the market.

As mentioned elsewhere, the Open Space Committee should advocate for a land clearing bylaw and an erosion and sedimentation bylaw before the Selectmen and Town Meeting to help with environmental problems that regularly arise.

The current effort to create a geographic information capability in town hall is vital to progress in open space concerns and every effort should be made to promote and accelerate it.

A specific management challenge is the maintenance of the quality of Chebacco Lake. The Chebacco Lake Association, the Selectmen, the Board of Health, the Conservation Commission and the Harbormaster have all frequently expressed concern about poor septic systems on small lots adjacent to the lake, pathogen threats, nutrient overload and nuisance aquatic weeds, inappropriately intensive boating use of the lake, petroleum product releases, noise pollution, interference with access by anadromous fish, and related problems. A variety of task forces and study groups have come and gone, but the problems need more extensive and intensive work than they have so far received. This may be beyond what can be expected from volunteer efforts. Furthermore, the town faces the political difficulty of being able to spend considerable

funds on a project which other residents may view as being of benefit only to lakeside residents.

Currently a task group including Selectmen and other town board members from Essex and Hamilton and the Lake Association, coordinated by the Essex County Planner's Office, planning and seeking funding for a long-term project to develop a lake management plan and to undertake dredging of Chebacco Lake. The goals include developing programs to mitigate the immediate financial impact of sewage disposal system upgrading on lakeside residents. This will be a long and arduous project to complete, but if it is successful it will improve one of the region's significant environmental problems.

Potential change of use

The priority open space challenges lying ahead are to influence development in a way that preserves those lands most valued for their scenic, recreational, wildlife and natural resource qualities. In other words, to ensure that "potential change of use" of natural areas occurs where it is most compatible with smart-growth type development, and is avoided in high-quality open space areas.

The Hamilton Reconnaissance Report undertaken as part of DCR's Heritage Landscape Inventory Program identifies many areas – be they routes, civic spaces, private residences, scenic vistas, historic buildings – which give Hamilton its character and whose protection should therefore be given priority consideration as future development takes place.

SECTION 8 GOALS AND OBJECTIVES

The broad goals of this plan are similar to those stated in the last Open Space and Recreation Plan, with changes in wording and emphasis to reflect new conditions and ideas about the most urgent needs.

The town's strategy for active recreational facilities such as playing fields have been very fully laid out elsewhere in the Recreation Master Plan, and will not be discussed here.

Since the last Open Space Plan for the Town of Hamilton was published, there have been changes - some of them accomplishments, some of them new challenges.

As discussed in Section 5, undoubtedly the biggest positive achievement in open space preservation for the town was the acquisition from Gordon College of the Chebacco Woods parcel by Hamilton, together with Manchester-by-the-Sea, state Self-Help funds and the participation of several nonprofit organizations and numerous private individuals. This was a major goal of the last Open Space and Recreation Plan. Together with new rights in the Manchester water lands and a set of interlocking conservation restrictions, this puts a major portion of the southeast corner of the town under durable protection.

Other parcels of undeveloped land that have been protected include 10 conservation restrictions totaling just under 100 acres, with 44+ acres protecting lands adjacent to the Miles River. Another 44+ acres protect lands sandwiched between Bradley Palmer State Park on one side, and on the other, properties currently under restriction or anticipated to become so. 9+ acres are

adjacent to a group of parcels comprised of undeveloped, but as yet unprotected, wetlands and woodlands.

Work continues by the Chebacco Lake Association and others to improve the quality and usability of Chebacco Lake as a recreational and ecological resource.

Although little has changed at the abandoned town landfill, this site continues to be a focus of inquiry concerning a potential brown-fields reclamation project for multi-use development including commercial space as a main elements, with the possibility of additional other uses. The Landfill Steerin Committee has been making good progress in their assessment of the site.

The town, with the consulting firm Community Opportunities Group, has completed a Master Plan for the first time since the 1960s. This undertaking involved many citizen volunteers with Open Space subcommittee overlapping in membership with the Conservation Commission-sponsored Open Space Committee preparing this Open Space and Recreation Plan. (Those interested in a complete summary should consult the Master Plan). Its sections dealing with Open Space are an important source of ideas and plans in this document.

A major product of the Master Plan process was the creation of the Agricultural and Equestrian Committee. No sooner had this been done than the Commonwealth began to actively encourage the formation of local and/or regional Agricultural Commissions as a quasi-official tool for facilitating advocacy and supporting towns' agricultural interests. Hamilton's Agricultural Commission officially came into being by Town Meeting vote in May of 2005. The Conservation Commission and the Open Space Commission consider this an important step forward in giving proper attention to an extremely important aspect of town character and town life, particularly in regard to open space, and look forward to productive cooperation with the new Agricultural Commission.

In May 2005, voters also chose to adopt the Community Preservation Act at the surcharge rate of 2%, and the Community Preservation Committee has been appointed to investigate and recommend projects for Town Meeting consideration. Even at the required minimum 10% dedication level, open space interests will benefit directly.

Hamilton is currently facing two main forces threatening open space protection. The first is sprawl, resulting from conventional development patterns that favor single-family houses, typically with large lawn areas. Such development negatively affects open space and natural resources. The second is poor preparation for what the town will be required to do as its part in alleviating the state's affordable housing crisis. With so much unprotected land and so little affordable housing (roughly 3.3%, compared to the required 10%), it will be extremely challenging to increase the availability of affordable housing while minimizing impact on Hamilton's scenic and natural qualities.

Developers can be expected to take advantage of Chapter 40B's provisions for bypassing many local land-use regulations when a town hasn't met affordable housing requirements. There is a 40B affordable housing proposal currently under construction. The authors of this Plan believe that intelligent management of this issue is, or should be, a top priority for all town boards and residents, and that the level of attention it has received up to the present is seriously deficient. Some town residents have assumed that the town can disregard this matter and somehow avoid the effects of the state's affordable housing laws. This attitude is extremely unrealistic and dangerous. One of the key objectives of this plan will be to work on applying Smart Growth principles and best practices to the town.

At Special Town Meeting in January 2005, voters approved the Open Space and Farmland Preservation Development by-law, the primary function of which is to offer density bonuses as an incentive to developers in exchange for clustering building and preserving at least 50% of the parcel as open space.

Following are the goals and objectives considered to be of greatest importance and urgency, concentrating here primarily on actions that are possible with resources known to be available, mainly volunteer effort. It is obvious that the range of possibilities becomes greater the more financial resources can be brought to bear, i.e. as would be the case through an Open Space bond issue, but this is a very uncertain political endeavor and we will not make it a precondition for further planning and action.

Town of Hamilton Open Space Plan Goals and Objectives

Goal 1: Preserve and Enhance Open Space and Scenic Qualities

- Objective: *Improve cartography of Hamilton with open space overlays,* including protected open space, steep slopes, prime agricultural lands, scenic vistas. Provide map as resource to planners and property owners in creation of town no-build zones.
- Objective: *Educate owners of large parcels* on advantages of preserving open space. Hold workshop/informational seminar on tax advantages, etc. Meet with individual landowners to discuss conservation strategies.
- Objective: *Facilitate Smart Growth.* Conduct forums with other town boards, including Planning Board, Board of Selectmen, Finance Committee, Housing Authority, Board of Health and Board of Appeals to influence development to preserve open space, contribute to affordable/senior housing options. I.
- Objective: *Coordinate open space initiatives*. Hold yearly meetings with CPA Committee, Hamilton-Wenham Open Land Trust, Essex County Greenbelt, etc. to accomplish specific conservation goals and to

develop policies for long term acquisition strategies.

Goal 2: Protect Water Resources

- Objective: *Prepare overlay map* showing town well site, aquifers, rivers, streams, and wetlands.
- Objective: *Promote education of residents* on sustainable use and seasonal watershed conditions. Hold informational workshop and write newspaper articles. Encourage school programs about local water resources.
- Objective: *Coordinate with IRWA and adjacent towns* to stay current with condition of watershed and water resources.
- Objective: Prioritize watershed protection and water conservation in development planning. Conduct forums with Planning Board to further low impact development to reduce runoff and increase groundwater recharge. Investigate "Water Bank" demand mitigation program.
- Objective: *Foster individual water conservation use.* Investigate the feasibility of the following: meters for private wells, natural lawn care program, acquisition strategies.

Goal 3: Protect Wildlife Habitat

- Objective: *Prepare overlay map* showing bio-core areas, wildlife corridors, vernal pools, significant plant communities and other ecologically vital areas. Work with wildlife professionals to identify wildlife habitat areas.
- Objective: *Support school programs* to educate youth about local ecology and wildlife.

- Objective: *Promote interpretive education.* Coordinate with land trusts and other open space managers to promote passive recreation and provide interpretation of natural areas to educate residents as to their importance.
- Objective: *Propose programs to reduce wildlife habitat degradation.* Develop programs to minimize non-point pollution from field and lawn applications of pesticides and fertilizers. Propose by-law that would limit land clearing in new development.

Goal 4: Support Agricultural and Forestry

- Objective: *Prepare overlay map* showing parcels in current agricultural and forestry use and those that are potentially suited for such practices.
- Objective: *Coordinate with town boards and committees*, especially the Agricultural Commission, to develop incentives to landowners with current and potential agricultural/equestrian lands.
- Objective: *Provide information for local landowners* regarding land use restrictions, sound environmental practices, state programs, and local by-laws.
- Objective: *Foster public understanding* and appreciation of the inter-reaction of open space protection and agricultural/forestry practice.

Goal 5: Preserve, Maintain and Enhance Trail System and Passive Recreation Facilities

- Objective: *Prepare overlay map* showing all trails and existing areas for passive recreational use.
- Objective: *Promote public use of passive recreational areas.* Hold walks where appropriate with local wildlife interpreters on the town's protected trail

system.

- Objective: *Protect and manage existing trails.* Coordinate with Essex County Trail Association and Hamilton Road Safety Committee to develop trails protection and management policy.
- Objective: *Enlarge inventory of passive recreational areas.* Identify landowners with land suitable for seasonal recreational use and provide assistance regarding options for public use.
SECTION 9 TOWN OF HAMILTON OPEN SPACE FIVE-YEAR ACTION PLAN

The following action plan restates the goals and objectives outlined in Section 8. The five-year action plan for the Town of Hamilton Open Space Plan establishes priorities and various tasks to be undertaken for each year. If a certain task is not completed in the designated year, it will be carried forward to the following year. By implementing this action plan, the Town of Hamilton can improve the status of open space conservation, water resource protection, wildlife habitat, and passive recreation opportunities. Its adoption will also allow the town to preserve its rural character in the face of inevitable growth and change.

Year 1

Goal 1: Preserve and Enhance Open Space and Scenic Qualities

Objective: Improve cartography of Hamilton with open space overlays, including protected open space, steep slopes, prime agricultural lands, scenic vistas. Begin assembling data for creation of overlays.

Objective: *Implement Smart Growth.* Conduct a forum with Planning Board, Board of Selectmen to introduce concept of Smart Growth.

Goal 2: Protect Water Resources

Objective: *Prepare overlay map* showing town well site, aquifers, rivers, streams, and wetlands. Begin assembling data for creation of overlays.

Objective: *Coordinate with IRWA and adjacent towns* to stay current with condition of watershed and water resources. Contact representative of IRWA for initial meeting.

Goal 3: Protect Wildlife Habitat

Objective: *Prepare overlay map* showing bio-core areas, wildlife corridors, vernal pools, significant plant communities and other ecologically vital areas. Identify groups and coordinate with them to locate and identify significant plant communities and wildlife habitat areas.

Goal 4: Support Agricultural/Forestry and Equestrian Land Use

- Objective: *Prepare overlay map* showing parcels in current agricultural and forestry use and those that are potentially suited for such practices.
- Objective: *Coordinate with town boards and committees*, especially the Agricultural Commission, to develop cooperation between boards, committees and landowners.

Goal 5: Preserve, Maintain and Enhance Trail System and Passive Recreation Facilities

Objective: *Prepare overlay map* showing primary trails and existing areas for passive recreational use.

Year 2

Goal 1: Preserv	e and Enhance Open Space and Scenic Qualities
Objective:	Improve cartography of Hamilton with open space overlays. Refine overlays.
Objective:	Educate large landowners on advantages of preserving open space. Hold second workshop/informational seminar on tax advantages, etc.
Objective:	Implement Smart Growth. Hold presentation of successful Smart Growth projects. invite pertinent Town Boards, including Planning Board, Finance Committee, Housing Partnership Committee.
Objective:	Coordinate open space initiatives. Meet with CPA Committee to discuss requirements for acquisitions.
Goal 2: Protect	Water Resources
Objective: Pr	repare overlay map showing important water resources. Refine overlays.
Objective: Pr	<i>comote education of residents</i> on sustainable use and seasonal watershed conditions. Hold information seminar with representative of IRWA.
Goal 3: Protect	Wildlife Habitat
Objective:	<i>Prepare overlay map</i> showing significant wildlife habitats. Refine overlays.
Objective:	Support school programs to educate youth about local ecology and

wildlife. Encourage out of classroom programs.

Objective: *Promote interpretive education.* Meet with land trusts and other open space managersto provide interpretation of natural areas to educate residents as to their importance. Coordinate with Essex County

Goal 4: Support Agricultural/Forestry and Equestrian Land Use

- Objective: *Prepare overlay map* showing parcels in current agricultural and forestry use. Refine overlays.
- Objective: *Coordinate with town boards and committees*. Encourage laws, permitting, practices and local taxes that support agriculture/forestry.
- Objective: *Provide information for local landowners* regarding land use restrictions and their benefits.

Goal 5: Preserve, Maintain and Enhance Trail System and Passive Recreation Facilities

Objective: *Prepare overlay map* of trails and passive recreation areas. Refine overlays.

Objective: *Promote public use of passive recreational areas*. Meet with land trusts, ECGA and other open space holders to create inventory of passive recreational areas.

Year 3

Goal 1: Preserve and Enhance Open Space and Scenic Qualities

Objective: Educate large landowners on advantages of preserving open space.

Meet with individual landowners to discuss conservation strategies.

Objective: Implement Smart Growth. Obtain state grant money to implement smart growth objectives, i.e. downtown revitalization, commercial development at landfill site, affordable housing, etc.

Goal 2: Protect Water Resources

- Objective: *Foster water conservation use.* Investigate the feasibility of the following: meters for private wells, natural lawn care program, etc.
- Objective: *Prioritize watershed protection and water conservation in development planning.* Meet with Planning Board to further low-impact development to reduce runoff and increase groundwater recharge.

Goal 3: Protect Wildlife Habitat

Objective: *Propose programs to reduce wildlife habitat degradation.* Develop programs to minimize non-point pollution from field and lawn applications of pesticides and fertilizers. Propose by-law that would limit land clearing in new development and prevent introduction of genetically modified species.

Goal 4: Support Agricultural/Forestry and Equestrian Land Use

- Objective: *Provide information for local landowners* regarding state programs that offer assistance to landowners. Educate horse farm owners regarding sound environmental management of equestrian lands.
- Objective: *Foster public understanding.* Sponsor public events that show the interreaction of open space protection and agricultural/forestry practice.

Goal 5: Preserve, Maintain and Enhance Trail System and Passive Recreation Facilities

Objective: *Protect and manage existing trails.* Meet with Essex County Trail Association and Hamilton Road Safety Committee to develop a trail protection and management policy.

Year 4

Goal 1: Preserve and Enhance Open Space and Scenic Qualities

Objective: *Implement Smart Growth.* Use map of Hamilton with series of overlays in discussions with Planning Board to facilitate smart growth development and discourage development that is wasteful or damaging to natural resources.

Goal 2: Protect Water Resources

Objective: *Prioritize watershed protection and water conservation in development planning.* Use map of Hamilton with overlays to create water protection zones. Continue working with Planning Board to encourage low-impact development. Identify land for water resource acquisitions.

Goal 3: Protect Wildlife Habitat

Objective: *Propose programs to reduce wildlife habitat degradation*. Use map of Hamilton with overlays to protect critical areas from development. Continue working with Planning Board to limit land clearing in new development. Meet with Agricultural Commission to minimize non-point pollution from field applications of fertilizers and pesticides.

Goal 4: Support Agricultural/Forestry and Equestrian Land Use

Objective:	<i>Provide information for local landowners</i> regarding land use restrictions, and assist those interested in pursuing restrictions.
Objective:	<i>Foster public understanding</i> . Develop program to provide public education concerning the advantages of organic agricultural and land care.
Goal 5: Preserv	e, Maintain and Enhance Trail System and Passive Recreation Facilities
Objective:	<i>Protect existing trails.</i> Use map of Hamilton with overlays to protect existing areas of trails and passive recreational areas.
Objective:	<i>Enlarge inventory of passive recreational areas.</i> Identify landowners with land suitable for seasonal recreational use and provide assistance regarding options for public use.
Year 5	

Goal 1: Preserve and Enhance Open Space and Scenic Qualities

Objective: *Implement Smart Growth*. Continue to use map of Hamilton with series of overlays in discussions with Planning Board to create Town facilitate smart growth.

Goal 2: Protect Water Resources

Objective: *Prioritize watershed protection and water conservation in development planning.* Continue to use map of Hamilton with overlays to create water protection zones. Continue working with Planning Board to encourage low-impact development.

Objective: *Coordinate with IRWA and adjacent towns* to investigate "water bank" demand mitigation program.

Goal 3: Protect Wildlife Habitat

Objective: *Propose programs to reduce wildlife habitat degradation.* Continue to use maps of Hamilton with overlays to protect critical areas from development. Continue working with Planning Board to limit land clearing in new development. Work with Agricultural Commission to minimize non-point pollution from field applications of fertilizers and pesticides.

Goal 4: Support Agricultural/Forestry and Equestrian Land Use

- Objective: *Coordinate with town boards and committees.* Assess recent changes in land ownership, by-laws and land use to maintain preservation and promotion of agriculture.
- Objective: *Foster public understanding*. Work with school system to develop programs to foster understanding of agriculture and its importance.

Goal 5: Preserve, Maintain and Enhance Trail System and Passive Recreation Facilities

- Objective: *Protect existing trails.* Continue to use map of Hamilton with overlays to protect existing areas of trails and passive recreational areas.
- Objective: *Enlarge inventory of passive recreational areas.* Continue discussions with landowners with land suitable for seasonal recreational use and provide assistance regarding options for public use.

Public Comments:

SECTION 10 PUBLIC COMMENTS

Letters of comment from town boards and regional planning agency follow

Public Comments:

ECONOMIC DEVELOPMENT COMMITTEE Hamilton, Massachusetts

17 July 2008

To:	Hamilton Open Space Committee
	Hamilton Conservation Commission
	Hamilton Board of Selectmen
	Hamilton Planning Board
From:	Hamilton Economic Development Committee
Subject:	Comments on the Open Space and Recreation Plan for the Town of
Hamilton,	
	Dated March 18, 2008

The Hamilton Economic Development Committee applauds the drafting of the most recent Open Space and Recreation Plan for the Town of Hamilton, dated March 18, 2008 (Open Space Plan). We support the preservation of open space and agriculture and recreation land use for Hamilton as laid out in the Town of Hamilton's most recent Master Plan, dated February 24, 2004 (Master Plan).

A major point of the Master Plan is the criticism of Hamilton's then existing land-use regulation where 99.7% of Hamilton's land area was zoned for single-family homes as a matter of right. The Master Plan said, "... the town may effectively force the owners of farms and old estates to subdivide their property. Large lot, low-density zoning regulations do not save open space and agricultural land. Instead, they create an illusion of open space (page x)." The Master Plan recommended several land-use and zoning initiatives, but three were major zoning bylaw initiatives to help preserve open space and agricultural use while accommodating growth. Unfortunately, the Open Space Plan essentially ignores these [] Master Plan recommendations that would help to preserve open space in Hamilton while reducing the sprawl brought about by zoning which only allows single-family homes.

First, the Master Plan recommended, "Adopt an open-space residential cluster bylaw that requires open space design in developments over an agreed-upon size threshold... (page xiii)" The Open Space Plan, page 3-35, merely mentions the 2005 Open Space and Farmland Preservation Development Bylaw. Unfortunately, this cluster housing bylaw has not been used even though it is an important tool in the preservation of open space. We believe that the Open Space Plan should make it a priority to monitor and promote the use of this bylaw and recommend improvements to this important zoning bylaw if it is not being used.

Public Comments:

Second, the Master Plan recommended a multi-use zoning bylaw (page 52) to,

"Establish a mixed-use development overlay district that allows alternatives to single-family home development on large land holdings and agricultural land by special permit from the Planning Board:

- a) Within the overlay district, allow certain commercial uses such as conference, hospitality, recreation, agri-tourism, office and accessory uses, and consider integrating them with residential uses.
- b) Allow assisted living facilities, independent elderly housing and age restricted housing, and combinations thereof.
- c) Require substantial open space and farmland protection, including mandatory agricultural preservation restrictions on farmland in planned development projects.
- d) Require preservation and extension, or new interconnections where appropriate, to existing networks of equestrian and walking trails, and require appropriate public access."

We believe that the promotion of a multi-use zoning bylaw should be an important part of this Open Space Plan.

Third, the Master Plan recommended that zoning regulations should be revised to "... provide for independent elderly housing, retirement and assisted living facilities by special permit from the Planning Board." (page xiii) The Senior Housing Bylaw, which was approved at the 2008 Annual Town Meeting, contains a matrix of density bonuses with one of the key criteria being the preservation of open space. It would seem appropriate for the Open Space Plan to acknowledge and promote this Bylaw.

In its current form, the Open Space Plan is missing a significant opportunity to support the existing Hamilton Master Plan. By championing three Master Plan bylaw recommendations, the Open Space Plan could better preserve open space and agricultural land while accommodating growth and helping with Town revenue by providing alternatives to the sprawl of single-family home development.

The Economic Development Committee appreciates the work that the Open Space Committee has done in the past and is continuing to do to foster open space and agriculture and recreation land in Hamilton, especially in promoting conservation restrictions on important parcels of land in Hamilton.

ECONOMIC DEVELOPMENT COMMITTEE

William Gisness, Chair	Robert Bullivant
Peter Gourdeau	David Lemons
Carl Swanson	

SECTION 11 MAPS

The following maps are included in this section:

Protected Open Space Map (see also MassGIS 1:25000 Open Space Map)

Land Use/Land Cover Categories

Unique, Scenic, and Special Places

US Geographical Survey Topographic Map of Hamilton & the Surrounding Communities

Water Resources and Regulated Areas

Hydrographic Features

NRCS SSURGO Soil Types

Zoning Map















Zoning Districts





RTINS RO

Single Residential District 20,000 Sq. ft., 125' Frontage

Single Residential District 40,000 Sq. ft., 175' Frontage

Residence - Agriculture 80,000 Sq. ft., 175' Frontage

Business District

SECTION 12 REFERENCES

OPEN SPACE

The Bay Circuit Guide to Walks in Hamilton and Wenham. The Hamilton and Wenham Bay Circuit Committee. 1989.

Passport to Greenbelt: A Guide to Open Space in Essex County. Essex County Greenbelt Association, Inc. Essex, MA. 1988.

Massachusetts Scenic Landscape Inventory. 1981 Department of Environmental Management.

Statewide Outdoor Comprehensive Recreation Plan (SCORP).

North Shore trails study. Metropolitan Area Planning Council for the North Shore Task Force, 1995

Dealing with Change in the Connecticut River Valley: a design manual for conservation and development. R D Yaro et al Center for Rural Massachusetts. Lincoln Institute of Land Policy and Environmental Law Foundation. Much thoughtprovoking material on development for minimum adverse impact on scenery and open space. Fascinating graphic comparisons of traditional and improved development design practices.

LAND USE AND PLANNING

Town of Hamilton Master Plan, February 2004. Prepared for Hamilton Planning Board and Citizen's Action Planning Committee by Community Opportunities Group, Inc., Boston, Massachusetts.

Planning for Hamilton Massachusetts, Report for Hamilton Planning Board, prepared by Charles W. Eliot, Planning Consultant, July 1965. "The Master Plan" Comprehensive General Development Plan. HCC. Charles W. Eliot, who died in 1993, was head of the Harvard Graduate School of Design

and a major figure in American planning. His master plan for Hamilton is a perceptive and thoughtful work and should be studied carefully by anyone interested in land use and development in the town

Zoning By-law, Town of Hamilton, adopted 1954, with amendments. Contains many provisions relevant to resource protection. See especially Sections I.A. Limitations on land subject to flooding, I.B. Limitations on ways across wetlands and floodplains, V.C. Use regulations, Conservancy District, V.D. Groundwater Protection Overlay District, Open Space and Farmland.

Subdivision Regulations, Hamilton Planning Board, adopted July 1955, with amendments to September 2005.

Hamilton Conservation Bylaw and Regulations.

Conservation and Recreation Plan, Town of Hamilton, sponsored by the Hamilton Conservation Commission, June 1982

Conservation and Recreation Plan, Town of Hamilton, sponsored by the Hamilton Conservation Commission, August 1987.

Conservation and Recreation Plan, Town of Hamilton, sponsored by the Hamilton Conservation Commission, 1997.

WATER RESOURCES

Report on Aquifer Planning Study, Town of Hamilton, by Haley and Aldrich, Inc., May 1981. A very important information resource, both for its text and tables on Hamilton's water resources, and its maps, which the ConCom map case has large-format prints of, covering surficial geology, depth to bedrock, aquifer recharge areas, etc.

Hamilton, Massachusetts 201 Facilities Planning Study. Camp, Dresser and McKee, Inc. 1982. HCC, HPL. Valuable source on water resources and more general background information.

Metropolitan Area Planning Council, North Shore Water Supply Protection Study: Beverly, Essex, Hamilton,

Manchester, Wenham. June 1988. Metropolitan Area Planning Council, 110 Tremont Street, Boston, MA 02108.

Inventory and Analysis of Current and Projected Water Use. Vol. 1, Ipswich River Basin, Massachusetts Water Resources Authority, by Massachusetts Department of Environmental Management, Division of Water Resources, June 1987.

Preliminary Report Relative to Round Pond, Manchester, Massachusetts, Town of Manchester, by Whitman and Howard, Inc. July, 1987.

Guide to Lawn and Landscape Water Conservation. Massachusetts Water Resources Commission. April 2002.

SOILS

Soil Survey of Essex County, Southern Part. USDA Soil Conservation Survey, 1983. Available from the U.S. Natural Resource Conservation Service office in Amherst. Comprehensive descriptions and tabulations of properties of soils, along with a set of 1:15840 maps of soil boundaries overlaid on aerial photographs. The areas mapped as having hydric soils are a good guide to wetlands resource areas.

GEOLOGY AND NATURAL HISTORY

The Physical Geography, Geology, Mineralogy and Paleontology of Essex County, Massachusetts. Salem, MA: Essex Institute, 1905. Quite out of date, of course, but still an interesting view, including comments on many geological features now obscured by development.

Bedrock Geology of the Salem Quadrangle and Vicinity, Massachusetts. P. Toulmin, 3rd, USGS Bulletin 1163-A, 1964.

Surficial Geology of the Salem Quadrangle, Massachusetts. Robert N. Oldale, 1964, Department of the Interior, USGS Geologic Quadrangle Map GQ-271. A 1:24000 scale map of the Quaternary glacial and marine deposits of part of the town, with a brief overview of the most recent million years of Hamilton geologic history.

Surficial Geology of the Ipswich Quadrangle, Massachusetts. E. A. Sammel, 1963, USGS Geologic Quadrangle Map GQ-189. The same, for the northeast part of town.

Surficial Geologic Map of the Georgetown Quadrangle, Essex County, Massachusetts. Norman P. Coppels, 1969, USGS Geologic Quadrangle Map GQ 850.

Roadside Geology of Massachusetts. Skehan, James W. 2001 Missoula, Montana: Mountain Press Publishing Co. A nontechnical summary of Massachusetts geology centered around evidence you can see traveling on the highway.

Written in Stone: a Geological History of the Northeastern United States. Raymo, C. and M.E. Raymo 1989 Old Saybrook, Conn.: The Globe Pequot Press. A very readable popular account of regional geologic history.

Core Habitats of Hamilton. 2004. Biomap and Living Waters, Natural Heritage and Endangered Species Program.

NON-POINT SOURCE POLLUTION

Minimum Requirements for the Subsurface Disposal of Sanitary Sewage, State Environmental Code, Title 5. 310 CMR 15.00.

Chapter VI of the Rules and Regulations of the Board of Health. Town of Hamilton, June 1, 1982.

Non-point Source Management Manual: A Guidance Document for Municipal Officials. Massachusetts Department of Environmental Management, Office of Watershed Management. Revised May 1994.

EROSION AND SEDIMENTATION CONTROL

Erosion & Sedimentation Control in Site Development, Massachusetts Conservation Guide, Volume I. USDA Soil Conservation Service, Amherst, MA, 1983. HCC. Erosion management recommendations for construction.

Vegetative Practices in Site Development, Massachusetts Conservation Guide, Volume II. USDA Soil Conservation

Service, Amherst, MA. HCC. Detailed planting methods for erosion management.

Guidelines for Soil and Water Conservation in Urbanizing Areas of Massachusetts. USDA SCS, 1977. HCC. The predecessor to the above series, still worthwhile for its additional information on estimating runoff and soil loss.

GENERAL REFERENCES

Better Not Bigger: how to take control of urban growth and improve your community. Eben Fodor. Stony Creek, CT, New Society Publishers. Though aimed at more urbanized areas, many good observations and suggestions applicable more widely.

The Tragedy of the Commons. Garrett Hardin. Science 162:1243-4. December 1968. Influential classic exposition of the problems of resources held in common

Does farmland protection pay? The cost of community services in Three Massachusetts Towns. American Farmland Trust. Northampton, MA 1992.

Cost of Sprawl Revisited: the evidence of sprawl's negative and positive impacts. Burchell, Robert W et al Washington DC National Transportation Research Board and National Research Council, 1998

Redesigning the American Lawn: a search for environmental harmony. F.H.Bormann et al.1993 Yale University Press.

Preserving Family Lands: essential tax strategies for the landowner. Stephen J. Small Boston: Landowner Planning Center. 2nd ed. 1992

Conservation and Land Use Planning with Massachusetts' Chapter 61 Laws: a primer for cities, towns, and conservation organizations. Mount Grace Land Conservation Trust, Inx.1990 Warwick,, MA

BioMap: Guiding land conservation for biodiversity in Massachusetts. Natural Heritage and Endangered Species

Program, Massachusetts Division of Fisheries and Wildlife. 2001

SECTION 13 TOWN OF HAMILTON AMERICANS WITH DISABILITIES ACT INFORMATION

A Town Office of Disabilities Commission

Leigh Keyser (chair) David Cooper

B Town Section 504 Coordinator

Candace Wheeler

Town does not currently have any disabled employees

Changes since 1997 Open Space and Recreation Plan in handicapped access to town-owned recreational facilities: Town Swimming Pool at Patton Park has had a handicapped access lift and accessible bathroom facilities installed.

C Documentary exhibits on Americans With Disabilities Act Compliance in Town of Hamilton

Document	Reference
Town of Hamilton Americans With Disabilities Act Section 504 Equal Access to Facilities and Activities Grievance Policy (adoption pending)	Exhibit 1
Leave Policy: See attached Personnel By-law sect follows:	ions as

Section 13.01 Occupational Sick Leave	Exhibit 2
Section 13.02 Non-occupational Sick Leave	Exhibit 3
Section 13.05 Family Medical Leave	Exhibit 4
Section 14.01 Death in the Family	Exhibit 5
Example of employment announcements/advertisements showing no discriminatory content.	Exhibit 6
Statement from personnel bylaw about medical examinations. See Section 5.03 attached.	Exhibit 7
Sample Employment application.	Exhibit 8
Sections relating to (1) grievance procedures and Americans with Disabilities Act compliance from Labor Contracts	
Personnel Board By-law Section 15.01: Personnel Grievances	Exhibit 9
Department of Public Works - ACSFME labor contract Article 3 Discrimination and Coercion	Exhibit 10
Article 12 Grievance and Arbitration Procedure	Exhibit 11
Police Union labor contract. Article 18 Grievance Procedure	Exhibit 12
Town Hall Union contract. Article 11 Grievance and Arbitration Procedure	Exhibit 13
Article 26 Compliance with the Americans With Disabilities Act	Exhibit 14
Emergency Center Dispatcher contract. Article 10 Grievance and Arbitration Procedure,	Exhibit 15
Article 25 Compliance with Americans with Disabilities Act	Exhibit 16

Exhibit 1 - TOWN OF HAMILTON ADA SECTION 504

EQUAL ACCESS TO FACILITIES AND ACTIVITIES GRIEVANCE POLICY

Maximum opportunity will be made available to receive citizen comments, complaints, and/or to resolve grievances or inquiries. The Town of Hamilton's recreation and open space resources are managed by several departments and boards. Therefore/ any complaints should be directed to the Town Administrator, who will forward the complainant to the appropriate person.

LEVEL 1: The Town Administrator will be available to meet with citizens and employees during business hours. Please contact Candace Wheeler, Hamilton Town Hall, 978-468-5572.

When a complaint, grievance, and/or request for program policy interpretation or clarification is received, either in writing or through a meeting or telephone call, every effort will be made to create a record which will include the name, address and telephone number of the person making the complaint, grievance, or request. If the person desires to remain anonymous, they may.

A complaint, grievance, and/or request for program policy interpretation or clarification will be responded to within ten (10) working days (if the person is identified) in a format that is sensitive to the needs of the recipient (i.e., verbally, enlarged type face, etc.)

Copies of the complaint, grievance, and/or request for program policy interpretation or clarification and the response will be forwarded to the Town Administrator who will forward to the appropriate managing official or department. If the issue is not resolved at this level, it will be progressed to the next level.

LEVEL 2: A written grievance will be submitted to the Town Administrator.

Assistance in writing the grievance will be available to all individuals. All written grievances will be responded to within ten (10) working days by the Town Administrator in a format that is sensitive to the needs of the recipient (i.e.,

verbally, enlarged type face, etc.). If the issue is not resolved at this level, it will be progressed to the next level.

LEVEL 3: If the grievance is not satisfactorily resolved, citizens will be informed of the opportunity to meet with and speak to the Board of Selectmen, with whom local authority for final grievance resolution lies.

Exhibit 2 - PERSONNEL BYLAW SECTION 13.01: Occupational Sick Leave

Each employee, subject to Chapter 152 of the General Laws Pertaining to Workmen[^] Compensation, shall be entitled to receive the same benefits as for employees under this section. If such period exceeds thirty (30) days, continued payment beyond such period shall be subject to approval by the department head which may require periodic written medical testimony supporting the claims of continued incapacity as a condition precedent to its approval.

Exhibit 3 - SECTION 13.02: Non-Occupational Sick Leave

The granting of non-occupational sick leave and the payment of compensation to persons on non-occupational sick leave shall be subject to the following provisions:

A. The head of each department shall investigate and ascertain the validity of any request for non-occupational sick leave made by an employee of his department and shall approve the same if he is Satisfied as to the validity of such request. A certificate may be required by the department head or by the Personnel Board in the case of non-occupational sick leave claimed hereunder.

B. Non-occupational sick leave without pay may be granted to any temporary or part-time employee, but no such employee shall be entitled to non-occupational sick leave with pay.

C. A full-time employee who has more than one (1) year service may be granted non-occupational sick leave with full pay for fifteen (15) days a year. A full-time/part-time employee may be granted same on a pro-rated basis. All

unused authorized non-occupational sick leave may be accumulated to a maximum of one hundred fifty (150) days.

D. A full-time employee may be granted non-occupational sick leave wit] full pay during the first year employment at the rate of two (2) days for every three (3) months worked for a maximum of six (6) days. A full-time/part-time employee may be granted the same on a pro rated basis. Unused non-occupational sick leave during the first year shall not be accumulated.

E. Payment of non-occupational sick leave benefits under this section, shall not be initiated until the claim thereto by the employee shall have been approved by the department head. If the period of a non-occupational sick leave granted under this section shall exceed fifteen (15) days, a physician's certificate may be required by the department head or by the Personnel Board.

F. Any dispute as to the eligibility of an employee for nonoccupational sick leave payments or as to the amount of such payments, may be taken to the Personnel Board by the employee concerned, by the employing authorities or by the Town Accountant, and the decision of the Personnel Board as to such dispute shall be final.

G. The donation of accrued sick leave by a Town employee to another Town employee will only be allowed when the employee receiving the donation has exhausted his/her accrued sick time and has been on sick leave for an extended period of time (for purposes of this Section, "extended"' is a month). The donation of accrued sick leave requires

the approval of the responsible Board, and the Department Head of the employee donating the time and the Personnel Board. If either the donor or the recipient is a member of a union, the union representative must approve in writing the donation and receipt of the sick leave. Any employee who has used all accrued sick leave and is using donated sick leave from an other employee is on special status and not accruing either benefits or seniority toward step increases.

H. Accrual and payment for non-occupational sick leave for Full-Time/Part-Time employees will be based on the number of hours normally worked on the day and used for sick leave. Please note that part time employees are not entitled to paid sick leave.

As an example, if an employee worked four hours on Tuesday, has accrued vacation time, and was out on vacation that day, they would be paid for four hours. If no hours were normally worked on Thursday and the employee was out on vacation that day, they would receive no pay.

Exhibit 4 - Personnel By-law SECTION 13.05: Family Medical Leave

The Family Medical Leave Act (FMLA) requires the Town to provide up to twelve (12) weeks of unpaid leave to "eligible" employees for certain family and medical reasons. Employees are eligible if they have worked the Town for at least one year and for 1,250 hours over the previous twelve months. Employee rights are summarized in the U.S. Department of Labor publication available at Town Hall or from a supervisor.

As an employer of more than 50 employees, the Town of Hamilton is a covered employer under the Act. An employee who has worked for the Town for at least one year and for 1,250 hours over the previous 12 months is entitled to up to 12 weeks of unpaid, job protected leave for certain family and medical reasons in a fiscal year. Under the Act, leave must be granted for any of the following reasons:

To care for an employee's child after birth or placement for adoption or foster care.

To care for an employee7 s spouse, son, daughter or parent who has a serious health condition: or

For a serious health condition that makes an employee unable to perform the employee's job.

The following is a summary of the key points of the Act as adopted by the Town of Hamilton. This is a summary only.

Employees should contact their supervisor or the Personnel Board for additional information.

When the leave is foreseeable, the Town requires .advance notification, normally 30 days (employee illness would be an exception to the 30 day notice requirement) and appropriate certification to support the need for leave may be required. The Town may require a second or third opinion (at the employer's cost) and a fitness for duty report to return to work. .

The Town of Hamilton or the employees may elect to apply any unused paid vacation or personal leave toward any part of the 12 week leave. A Town employee may also apply accrued sick days toward a leave necessitated by the employee's serious health condition or for maternity leave. Applied vacation, personal days, and sick leave run concurrently with FMLA leave, not in addition to it. In all cases the maximum amount of combined unpaid and/or paid leave under the FMLA will be 12 weeks.

Upon return from leave, most employees are guaranteed the same or similar job and will return with no loss of seniority rights or benefits accrued prior to going on FMLA leave. The employee will not continue to accrue seniority rights, vacation or sick leave benefits while out on FMLA leave.

The Town will continue health insurance benefits during the leave under the same conditions as of an employee remained at work; however, if an employee does not return to work after the 12 week period, the Town may be able to recapture health insurance premiums paid during the period.

A husband and wife employed by the Town will have their unpaid 12 weeks apportioned between the husband and wife in a manner which the employees wish to use the time but not to exceed 12 weeks in total in the event of the birth or adoption of a child or the care of a sick parent.

Under certain circumstances, employees may be entitled to intermittent leave or may work a reduced leave schedule.

Exhibit 5 - Personnel By-law Section 14.01 Death in the Family: Paid Leave

In case of the death of a member of the immediate family of an employee, he or she shall have a reasonable time out from work with pay; three continuous working days being considered a reasonable maximum time, the last day being the day of the funeral. For the purpose of this article a member of the immediate family shall be restricted to the employee's wife, husband, child, mother, or father, brother, sister, or grandparent or a member of his family living under his roof.

In the case of a mother-in-law or father-in-law of an employee, such employee will have one day off with pay to attend the funeral provided it is a scheduled workday.

Exhibit 6 - Text of Sample Employment Announcement/Advertisement

RESERVE POLICE OFFICERS

Join the Hamilton Police Department as a Reserve Officer and build a career in community policing. Serve as a call-in for regular shifts. Estimated start dates are October, January, April and July.

To be fully qualified, you should have a bachelor's degree in criminal justice or a related Held, a Mass. certification as an EMT (because the HPD runs the ambulance service) and a Reserve Intermediate Certification from the Mass. Criminal Justice Training Council (this will be required before you can start active duty).

Email your resume to: mhickey@town.hamilton.ma.us or mail to Town Hall, P.O. Box 429, 577 Bay Road, Hamilton, MA 01936 to the attention of Maureen Hickey. The selection process will begin two weeks after the date of this notice.

An Equal Opportunity Employer

Exhibit 7 - Personnel By-law Section 5.03: Medical Examination of Job Applicants

Applicants for appointive employment by the Town, other than office-only clerical and administrative positions and

emergency help, shall after a Town offer of employment, be .certified by a practicing physician as to his or her physical fitness to perform the duties of the position.

The Certification required hereunder, shall be in such form as the said Board shall determine. The cost of any physical examination required by this Section shall, be paid for by the Town, and shall, be charged to the appropriate department, or shall be charged to such special appropriation as the Town may make for the purpose of this Section.

Exhibit 8 - Employment Application

TOWN OF HAMILTON APPLICATION FOR EMPLOYMENT

PERSONAL INFORMATION

Last First Middle Phone No.:		1			Middle		
Phone No.:		-	First		110016		
Present Address: Street City State ZiP Permanent Address:				Social Security	No.:		
Street City State ZIP Parmanent Address:							
Permanent Address:	Present Address:						
(if different) Street City State ZIP Are you under 18? Yes [] No [] Are you a United States Citizer? Yes [] No [] [No, are you a permanent resident of the United States or otherwise authorized to work by the United States Immigration and Naturalization Service? (You may be required to present your 1-151 "Green Card", 1-94 Arrival-Departure Card or other immigration papers showing work authorization.) Have you ever been convicted of a felony? Yes [] No [] If Yes, describe in full: Have you ever been convicted of a misdemeanor within the last five years? (Do not include a first conviction for drunkeness, simple assault, speeding, minor traffic violations or disturbance or the peace.) Yes [] No [] If Yes, describe in full: Have you ever been denied a fidelity bond? Yes [] No [] If Yes, please explain:				City	State		ZIP
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Check: Full time Part time Permanent Temporary Have you previously been employed by the Town? Yes [] No [] If yes, give dates and reasons for leaving: Are you aware of any circumstances which would affect your ability to perform all aspects of the job for which you are applying? Yes [] No [] If yes, please describe:	Position(s) desired:					<u></u>	
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TURN TO PAGE TWO

EMPLOYMENT RECORD

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	Date started:	
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Reason for leaving:		
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Signature: __

Exhibit 9 - Personnel By-law Section 15.01: Personnel Grievances

Any employee of the Town may, upon written application, be heard by the Personnel Board and be given a decision by said Board, on any subject such employee feels is within the provisions of this By-law and by which he is aggrieved. Any supervisory employee or official shall have the same right to bring grievances to the Personnel Board for adjudication and decisions with respect to individual workers.

Exhibit 10 - Department of Public Works - ACSFME labor contract Article 3 Discrimination and Coercion

Section 1 Neither the Town nor the Union shall discriminate against any employee because of such employee's race, color, religion, sex, sexual orientation, age or national origin.

Section 2 There shall be no discrimination by agents of the Town against any employee because of activity or membership in the Union. The Town further agrees that there will be no discrimination against any employee for adherence to any provisions of this agreement.

Section 3 The Union agrees that neither its officers, members, nor persons employed by the Union, shall discriminate against or coerce any employees for nonmembership in the Union.

Section 4 Enforcement of this article shall exclusively be by the filing of a charge of discrimination or prohibited practice with the state's Commission Against Discrimination or Labor Relations Commission, but not as a grievance.

Exhibit 11 - Department of Public Works - ACSFME labor contract Article 12 Grievance and Arbitration Procedure

ARTICLE 12 - GRIEVANCE AND ARBITRATION PROCEDURE

Section 1 An employee's grievance arising out of a claim of an alleged violation of the terms of this agreement shall be

adjusted in accordance with the following procedure. The grievance procedure shall be confidential at all time.

Step 1. The Union steward or representative, with or without the aggrieved employee, shall take up the grievance or dispute orally with the employee's immediate supervisor outside the bargaining unit. The supervisor, after receipt of the grievance, shall attempt to adjust the matter in an informal manner.

Step 2. If the grievance has not been settled, is shall be presented in writing to the department head within fifteen (15) days of the alleged violation. The Department Head shall hear the grievance within seven (7) management working days of receipt of the grievance and shall respond to the steward or representative in writing within seven (7) management working days after the close of hearing.

Step 3. If the grievance still remains unadjusted it may be presented to the Board of Selectmen. The Board of Selectmen shall hear the grievance and respond in writing within twenty (20) working days.

Step 4. If the grievance is still unsettled, either party may, within fifteen (15) working days after the reply of the Board of Selectmen, by written notice to the other, request arbitration. The grievance shall be submitted to the Massachusetts Board of Conciliation and Arbitration within twenty (20) working days after notice has been given.

Exhibit 12 - Police Union labor contract. Article 18 Grievance Procedure

Section 1. The purpose of the Grievance Procedure shall be to settle employee grievance on as low a level as possible, so as to insure efficiency and employee morale. An aggrieved employee may have an Association representative and/or attorney present at, and participating in; any level of the Grievance Procedure.

An employee's grievance arising out of a claim of an alleged violation of the terms of this Agreement shall be adjusted in

accordance with the following procedure. The grievance procedure shall be confidential at all times.

Step 1. Grievances shall be first presented orally by the employee, with or without his Association representative and/or his attorney, to the Chief of Police, and an earnest effort shall be made to adjust the grievance in an informal manner.

Step 2. If the grievance is not resolved in Step 1, it shall be presented, in writing, by the Association and presented to the Chief of Police within fifteen (15) days of the alleged violation or knowledge thereof. The Chief of Police shall meet with the Grievance Committee within seventy-two (72) hours after the presentation.

Step 3. If the grievance is not resolved in Step 1, the Grievance Committee shall refer the complaint to the Board of Selectmen within five (5) days from the receipt of the Step 2 answer, exclusive of Saturdays, Sundays, and Holidays. The Board of Selectmen shall meet with the Grievance Committee within fourteen (14) days to discuss the grievance, and will answer the grievance in writing within seventy-two (72) hours after the meeting ends.

Step 4. If the grievance is not adjusted satisfactorily in Step 3, it may thereafter be submitted within forty-five (45) days to the American Arbitration Association for arbitration in accordance with its rules. The parties hereto shall share equally in the cost of the arbitration proceedings. However, each party shall be responsible for compensating his own representatives and witnesses. The dispute as stated in the request for arbitration shall constitute the sole and entire subject matter to be heard by the Arbitration, unless the parties agree to modify the scope of the hearing. The award of an Arbitrator shall be final and binding upon the parties covered in this Agreement, provided that no Arbitrator shall have any authority or jurisdiction to add to, detract from, in any way alter the provisions of this Agreement.

Section 2. Grievances shall be presented, in writing, through all the steps of the grievance and arbitration procedure and

shall state in reasonable detail the nature of the grievance and the remedy requested.

Section 3. Any of the time limits outlined in this Agreement may be changed at any time by mutual agreement of the parties.

Section 4. Each party shall have the right to employ a public stenographer or use a mechanical recording device at any step in the procedure.

Section 5. The Association shall be entitled to submit grievances which affect the entire Association in the name of the Association in the same manner as provided herein initially by at least one employee.

Section 6. Any incident which occurred or failed to occur prior to the signing of this Agreement shall not be the subject of any grievance procedure under this contract. However, any employee may pursue any remedy that he was entitled to prior to the signing of this Agreement.

Exhibit 13 - Town Hall Union contract. Article 11 Grievance and Arbitration Procedure

11.1 An employee's grievance arising out of a claim of an alleged violation of the terms of this agreement shall be adjusted in accordance with the following procedure. The grievance procedure shall be confidential at all times, unless otherwise required by law.

Step 1. The union representative, with or without the aggrieved employee, shall promptly take up the grievance with the employee's immediate supervisor outside the bargaining unit within five (5) working days of the occurrence of the matter giving rise to the grievance. The supervisor, after receipt of the grievance, shall attempt to adjust the matter in an informal manner consistent with the supervisor's authority and responsibility.

Step 2. If the grievance still remains unadjusted it may be promptly presented by the Union representative to the Board of Selectmen in writing within five (5) working days of the completion of the procedures under Step 1 above. The Board

of Selectmen shall hold a hearing on the grievance, within ten (10) working days after their next regularly scheduled meeting. The Union and aggrieved employee shall prepare for presentation at the meeting a statement of the grievance, the facts and circumstances surrounding the occurrence of the grievance and the proposed resolution. The Board of Selectmen will provide a written response within ten (10) working days after the conclusion of the hearing.

Step 3. If the grievance is still unsettled, the Union may, within thirty (30) days after the reply of the Board of Selectmen, by written notice to the other, request arbitration. The grievance shall be submitted to the Massachusetts Board of Conciliation and Arbitration for processing according to their rules.

11.2 The decision of the arbitrator shall be final and binding upon the parties.

11.3 The expenses for the arbitrator's service and the proceedings shall be borne equally by the Town and the Union. Each party shall be responsible for compensating its own representatives and witnesses.

11.4 In the case of a grievance, the function of the arbitrator is to determine the interpretation and application of specific provisions of this Agreement. The dispute as stated in the request for arbitration shall constitute the sole and entire subject matter to be heard by the arbitrator. There shall be no right in arbitration of a grievance to obtain, and no arbitrator shall have any authority or power to award or determine, any change in, modification or alteration of, addition to, or detraction from, any of the provisions of this Agreement.

11.5 Any incident, which occurred or failed to occur prior to the signing of this agreement shall not be the subject of any grievance procedure under this contract. However, any employee may pursue any remedy that he was entitled to prior to the signing of this Agreement.

Exhibit 14 - Town Hall Union contract. Article 26 Compliance with the Americans With Disabilities Act

26.1 As of July of 1992 all provisions of collective bargaining agreements must conform to the requirements of the Americans with Disabilities Act. The parties have attempted to assure that no part of this Agreement will result in unlawful discrimination. In keeping with the recommendation of the Report of the House Committee on Education and Labor (Report No. 101-485), the Town shall take all action necessary to comply with the Act, notwithstanding any discriminatory past practice or provision of this Agreement not in compliance with the Act, which, if maintained or enforced could subject both the Town and the Union to the penalty provisions of the ADA.

Exhibit 15 - Emergency Center Dispatcher contract. Article 10 Grievance and Arbitration Procedure

10.1 An employee's grievance arising out of a claim of an alleged violation of the terms of this agreement shall be adjusted in accordance with the following procedure. The grievance procedure shall be confidential at all times, unless otherwise required by law.

Step 1. The union representative, with or without the aggrieved employee, shall promptly take up the grievance with the employee's immediate supervisor outside the bargaining unit within five (5) working days of the occurrence of the matter giving rise to the grievance. The supervisor, after receipt of the grievance, shall attempt to adjust the matter in an informal manner consistent with the supervisor's authority and responsibility.

Step 2. If the grievance still remains unadjusted it may be promptly presented by the Union representative to the Board of Selectmen in writing within five (5) working days of the completion of the procedures under Step 1 above. The Board of Selectmen shall hold a hearing on the grievance, within ten (10) working days after their next regularly scheduled meeting. The Union and aggrieved employee shall prepare for presentation at the meeting a statement of the grievance, the facts and circumstances surrounding the occurrence of the

grievance and the proposed resolution. The Board of Selectmen will provide a written response within ten (10) working days after the conclusion of the hearing.

Step 3. If the grievance is still unsettled, the Union may, within thirty (30) days after the reply of the Board of Selectmen,-by written notice to the Board of Selectmen, request arbitration. The grievance shall be submitted to the Massachusetts Board of Conciliation and Arbitration for processing according to their rules.

10.2 The decision of the arbitrator shall be final and binding upon the parties, so long as it is not in conflict with applicable law, rule or regulation .

10.3 The expenses for the arbitrator's service and the proceedings shall be borne equally by the Town and the Union. Each party shall be responsible for compensating its own representatives and witnesses.

10.4 In the case of a grievance, the function of the arbitrator is to determine the interpretation and application of specific provisions of this Agreement. The dispute as stated in the request for arbitration shall constitute the sole and entire subject matter to be heard by the arbitrator. There shall be no right in arbitration of a grievance to obtain, and no arbitrator shall have any authority or power to award or determine, any change in, modification or alteration of, addition to, or detraction from, any of the provisions of this Agreement.

10.5 Any incident, which occurred or failed to occur prior to the signing of this agreement shall not be the subject of any grievance procedure under this contract. However, any employee may pursue any remedy that he was entitled to prior to the signing of this Agreement.

Exhibit 16 - Emergency Center Dispatcher contract. Article 25 Compliance with Americans with Disabilities Act

25.1 As of July of 1992 all provisions of collective bargaining agreements must conform to the requirements of the Americans with Disabilities Act. The parties have attempted to assure that no part of this Agreement will result in

unlawful discrimination. In keeping with the recommendation of the Report of the House Committee on Education and Labor (Report No. 101-485). the Town shall take all action necessary to comply with the Act, notwithstanding any discriminatory past practice or provision of this Agreement not in compliance with the Act, which, if maintained or enforced could subject both the Town and the Union to the penalty provisions of the ADA.