# **Open Space and Recreation Plan** Marion, Massachusetts *Prepared for:* **The Marion Open Space Planning Committee** The Town of Marion 2 Spring Street **Marion, MA 02738** Prepared by: Beals and Thomas, Inc. **Reservoir Corporate Center** 144 Turnpike Road (Route 9) Southborough, MA 01772-2104 May 31, 2005

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Section 1 Plan Summary

#### 1.0 **PLAN SUMMARY**

The 2005 Marion Open Space and Recreation Plan (hereon referred to as "the Plan") is an update of the 1998 Marion Open Space and Recreation Plan. The 1998 Plan outlined several open space goals, including increasing the use of conservation restrictions to protect open space and using zoning to facilitate open space preservation. This plan looks to extend these goals, as well as revisit goals from the 1998 plan that have yet to be achieved.

This Plan outlines existing environmental, demographic, open space and recreation conditions within the Town of Marion. Demographic and environmental data assist in determining specific need areas regarding open space acquisition or recreational opportunities. Additionally, Marion's proximity to water resources provides unique opportunities and challenges to meeting open space and recreation needs of residents and visitors alike.

Crucial to the development of this plan is maintaining the Town's character, protecting a diversity of natural resources, balancing use and protection of the harbor areas, and providing recreational opportunities for everyone. This will be accomplished through implementation of the Five-Year Action Plan (Section 9), which details specific suggestions for accomplishing the goals and objectives of the community.

Specific goals and objectives of this Plan include:

- continued acquisition of open space land and use of conservation restrictions;
- access improvements to recreation destinations;
- evaluation and improvements in storm water pollution mitigation;
- encouragement of the use of open space; and
- collaboration with planning and open space resources to determine opportunities related to the potential sale or conversion of Chapter 61 lands.

Section 2 Introduction

# 2.0 INTRODUCTION

# 2.1 Statement of Purpose

This Open Space and Recreation Plan (OSRP) will help the residents of Marion to plan for the future and guide decisions on open space preservation and recreation opportunities. In doing so, this Plan identifies and analyzes factors such as physical and cultural assets, land use, and socioeconomic trends that are relevant to the protection of important resources. This plan inventories the Town's present supply of open space and recreation lands and determines future conservation and recreation needs by outlining a series of recommendations for safeguarding and expanding resources. The recommendations are prioritized in a five-year action plan to be implemented by the Town over this period (Section 9).

The development of this Plan is part of a continuing effort by Marion to plan for and protect its unique community characteristics. The Town previously prepared an Open Space Plan in 1998. This current Plan update has been prepared in order to fulfill necessary eligibility requirements for the reimbursement of land purchases and development costs through state and federal grant programs.

## **Progress Since 1998 OSRP**

Since the Open Space Plan was adopted in 1998, the Town of Marion, working with local lands trusts to meet Goal 1, "To have 24% of the Town of Marion in permanently protected open space," has increased the amount of permanently protected open space from 9% to 23 %. This has been done by meeting Objective 1: "Have town or Sippican Land Trust (SLT) acquire fee simple interest or Conservation Restrictions (CRs) on important open space parcels," Objective 2: "Encourage conservation restrictions on private open space parcels that provide a public benefit," and Objective 3: "Modify Zoning bylaws to require/encourage open space in residential, commercial, and industrial development."

Goal 2: "To keep the recreational opportunities we have, and improve access to them," has proved more elusive with only the first step of Objective 1 being completed in the development of plans for bike paths. Some work, including replacement of the basketball court at Silvershell beach, placing sand on the Planting Island Causeway Beach, and refurbishing of the Point Road playground, was performed pursuant to Objective 5, and Objective 6 is ongoing with good communication between the Open Space Acquisition Commission and the Recreation Committee.

The lack of action on Goal 3, "To maintain the current mix of uses for Marion's waters." has been particularly disappointing due to the importance of the harbor water quality to the town. No work has been done to reduce nitrogen pollution in Marion waters. Two storm water remediation projects have been undertaken by the Harbormaster's Office but there has been a lack of coordination and concern by other town boards or agencies. The

elimination of boat discharges (Objective 2) was brought about by the EPA designation of Buzzards Bay as a "No Discharge Zone" in 2000. However, little work has been accomplished relative to Objective 3 " Avoid future storm water pollution problems," or Objective 4 "Develop plan that will identify and protect critical shellfish, scenic, recreational areas."

Some progress on Goal 4 "To keep/improve the "curb appeal" of Marion's roads," has been made. The tree committee has made progress by a continual program of tree planting (Objective 2). Design criteria have been developed by the Planning Board for commercial projects (Objective 5), and underground wiring is required for all new subdivisions (Objective 6).

# 2.2 Planning Process and Public Participation

The Marion Open Space Acquisition Commission, Buzzards Bay Project National Estuary Program, Trustees of Reservations and Beals and Thomas, Inc. worked together to compile this update to Marion's Open Space and Recreation Plan.

As part of this Open Space and Recreation Plan, a survey was conducted in the Town of Marion. The Marion Open Space and Recreation Survey results were obtained from a sample of the registered voters. Surveys were sent to every tenth voter: the sample size was 340 voters. The response rate was 197 returned surveys. The response provided a statistically valid prediction of the attitudes of the larger sample, i.e. all of the registered voters in Marion. Please see Appendix C for the survey questions and results.

The consulting firm of Beals and Thomas, Inc. was hired by The Trustees of Reservations to assist in the preparation of the Open Space and Recreation Plan for the Town. Beals and Thomas, Inc. (BTI) assisted The Buzzards Bay Project by preparing certain sections of the document, assisting with the analysis of needs, assisting in the conduction of the Section 504 evaluation, providing technical information and editing of the Plan to be consistent with Division of Conservation Services (DCS) guidelines and other planning documents.

A public hearing was held on May 11, 2005. A presentation of the Open Space & Recreation Survey and the Goals and Objectives of the draft Plan was provided prior to the public comment period.

Draft Plans were distributed to the Library, Board of Selectmen, Board of Health, Conservation Commission, Planning Board, Marine Resources Commission, Recreation Committee, Zoning Board of Appeals, Sippican Lands Trust, and the Southeast Regional Planning and Economic Development District (local RPA). Written comments are enclosed in Appendix.

Section 3
Community Setting

# 3.0 COMMUNITY SETTING

# 3.1 Regional Context

Incorporated in 1852, Marion was previously a village of Rochester. It has a town meeting form of government with a three-member Board of Selectmen (elected) and an Executive Secretary (appointed). Elected town officials are complemented by various appointed boards and commissions in a classic New England form of local government.

The Town of Marion is located on Buzzards Bay, between New Bedford and the Cape Cod Canal. The Town is located within the Buzzards Bay Watershed. With an area of slightly over 14 square miles, Marion is physically one of Plymouth County's smallest towns, although its irregular coastline gives it 25.6 miles of tidal shorefront. Sippican Harbor and adjacent coves continue to attract boaters and other marine enthusiasts (See Map 1, Locus.).

Marion is bordered by two other coastal towns; on the northeast by Wareham and on the southwest by Mattapoisett. In the northwest, it is bordered by Rochester, a rural inland Town with which Marion shares its coastal resources. New Bedford is the closest city to Marion located approximately fifteen (15) miles to the southwest. New Bedford is a former whaling port and mill Town, so in comparison, Marion is a suburb of New Bedford. Like other seaside towns, Marion's population fluctuates seasonally, increasing in size during the summer months. The increase in population in summer months directly impacts the open spaces such as beaches and ball fields.

Marion shares its marine resources with other neighboring towns. Shellfish and cranberries are a huge commodity in Marion. Other communities to the north of Town find that it is convenient to share their agricultural resources in return for the seaside products from the marine resources of Marion. Surrounding markets and restaurants in landlocked towns such as Rochester obtain much of their shellfish from their neighboring seaside towns.

Marion is served directly by Interstate Highway Route 195, which traverses southwest/northeast through the northern portion of the Town, and provides access to New Bedford, Fall River, Providence and, via the intersection of Interstate Highway Route 495, Boston. Many commuters travel through Marion day after day on trips back and forth to work. This highway serves as the primary transportation corridor from southeastern Massachusetts to Rhode Island. The highway passes through the northern portion of the Town, thus keeping the traffic out of the more developed historic downtown area and away from the less developed coastal areas. U.S. Route 6, which until the late 1960's was the former traffic access from Cape Cod to Connecticut and New York, traverses Marion southwest/northeast through the center of Town. This road

provides the only access to some parts of Town, and links Marion to Mattapoisett and Wareham.

Marion's socio-economic status can be characterized as middle class. With this in mind, residents of the Town might find it beneficial to preserve more open space for future enjoyment. Uses in the future for this open space could result in hiking trails, bike trails, scenic areas, or simply remaining in its natural state.



Photo 3-1: Town Beach and Harbormaster's office.

# 3.2 History of the Community

The Europeans first settled the area around Sippican Harbor in the late 1600's. Marion's first European settlement was on Little Neck.

From the early 1500's until the 1830's, the ground transportation network for the area was a series of native trails, which were little improved upon during this period. The topography and north/south orientation of the harbors and necks of the area caused the major regional trails and ancient ways to bypass Marion. Because Marion was literally "off the beaten path," its transportation and commercial center became focused on Sippican Harbor and the sea beyond.

The harbors and riverfront areas have played an important role throughout the history of Marion. Like most New England towns, the settlement pattern was based on the most convenient transportation network of the time, which was the water. Shipbuilding was

common in the area. Commercial activity centered around the commercial wharfs at Old Landing and Island Wharf. A building originally used as a sail loft in 1806 still exists near Island Wharf.

An industrial practice in early 19th century Marion was the production of salt from seawater. Windmills located along the shallow and flat west side of Sippican Harbor were used to pump seawater into shallow vats to hasten evaporation. These windmills were one of Marion's distinctive features, and, in fact, one still remains at the corner of Spring Street and Ryder's Lane.

When Ralph Waldo Emerson published his *Essay on Nature* in 1836, transcendentalism was launched, and its effects would ultimately touch the Town of Marion. The basic tenets of this movement were: God was in nature; the closer one was to nature, the closer one was to God, and; the soul of man had the inherent ability to know the truth. Transcendentalism rocked the art world and laid the foundation for the Hudson River School and Romanticism. The New York art community sought a spiritual rebirth and yearned to return to nature. Ultimately, some of them found what they were searching for in Marion and either vacationed or permanently settled here in the nineteenth century.

By the 1880's Marion was known as a Romantic Art Colony. The elegant formation of the inner and outer harbor surrounded by acres of protective marshes enhanced both the visual beauty of the area, and the area's ability to support a variety of wildlife. At the turn of the century, the village as well as the outer regions seemed to be surrounded by a seemingly endless forest of pines and oaks. It was the protective quality of its all-encompassing natural beauty that influenced a wide range of artists to live and work in Marion in the late nineteenth century, one of whom was Henry James.

In *The Bostonians* (1886), Henry James described a walk in Marion: "He walked some distance without encountering a creature or discerning an inhabitation; but, he enjoyed the splendid starlight, the stillness, the shrill melancholy of the crickets, which seemed to make all the vague forms of the country pulsate around him. The whole impression was a bath of freshness". Of the harbor, he wrote that: "The hazy shores on the other side of the water . . . (they seemed powered with silver, a sort of midsummer light), suggested to him a land of dreams, a county in a picture."

With the appearance of the railroad in Marion in 1854, residents from as far away as Philadelphia or New York could now easily travel to Marion. At this same time, changes in the transportation network and economic structures of Rochester (agriculture-based) and Marion (maritime-based), laid the foundation for the two to become separate entities in the 1850's. When the rails supplanted water as a transportation network, the very nature of Marion changed. Instead of being the means of travel, water became the reason for travel. Marion had now become a resort community.

# 3.3 Population Characteristics

In order to develop an open space plan that addresses the future open space needs, the Town must consider its population now and into the future. The total population, from 1990 to 2000, increased from 4,496 to 5,123, an increase of fourteen (14) percent. The following table, Population in Marion, 1960-2000, shows that between the years 1990 and 2000 population increased at a percentage consistent with the previous decades.

Table 3-1: Population Growth and Projection in Marion, 1940 – 2020

Year	Population in Marion	Percent Change from Previous Ten Years
1960	2881	
1970	3466	20%
1980	3932	13%
1990	4496	14%
2000	5123	14%
2010	5846	14%
2020	6829	17%

Source: Marion Open Space and Recreation Plan (1997); U.S. Bureau of the Census (2000) and Massachusetts Institute for Social and Economic Research (MISER) (2004)

The Town of Marion's 2004 Annual Census recorded that the year round population is approximately 5,372 people. This results in a five percent (5%) increase from the 2000 census.

As with many of the coastal towns along Buzzards Bay, Marion actually has two populations, a summer and a year-round population. These seasonal residents increase the population by approximately 795 in the summer months (2004, Town of Marion Register's Office). This is a small increase from the 1995 figures of 739 seasonal residents.

The average household in Marion in 2000 was composed of 2.51 people, while the average family size was 3.00 people. Population per square mile in 2000 was 380 (in 1995 it was 331 and in 1990 it was 337, compared with 721 for Bristol and Plymouth counties combined). These data indicate that even though the density of the Town of Marion has been increasing year to year, compared to the county and surrounding towns, Marion has a relatively low density. Because of Marion's relatively low density, the open space facilities should be spread out to accommodate residents needs from all points in the Town. If the open spaces were all concentrated in one area, this could cause access problems for younger people, handicapped or the elderly who either cannot drive or have trouble driving.

Population census numbers since 1960 indicate that Marion's population has experienced slow but steady growth. For each ten (10)-year period from 1960 to 1990, Marion's population increased approximately 12-20%. Population projections for 2010 and 2020

predict the population will continue to grow, estimated to be 5,846 and 6,529 people respectively but at the consistent pace of 14-20% every ten (10) years (MISER 2004) (see Table 3-1). During that same study period, the estimated pace for the entire state of Massachusetts is only 5-6%. Therefore, Marion has experienced a growth rate consistently higher than the statewide average. As growth continues, preserving resources and establishing recreational facilities will become imperative.

The Town of Marion is similar in density to surrounding towns, perhaps due to similar development patterns. The Town of Fairhaven located four (4) miles to the west of Marion is considerably denser than the other surrounding towns. Fairhaven has a more dense population because the Town prospered as a mill town, and had a significant shipbuilding and commercial fishing industry. Fairhaven also is in close proximity to New Bedford and Fall River, other more industrialized cities in southeastern Massachusetts.

Table 3-2: Population per Square Mile for Marion and the Surrounding Communities (2000)

1						
Town	Population per Square Mile					
Acushnet	553					
Fairhaven	1304					
Marion	351					
Mattapoisett	380					
Rochester	135					
Wareham	545					

Source: U.S. Bureau of the Census

# 3.3.1 Future Population

Completed population projections for 2010 and 2020 were found through MISER. The estimated population for Marion in 2010 is projected to be 5846; a 14% change from 2000. The estimated population in 2020 is projected to be 6829; only a 17% change from 2010 (Table 3-1).

## 3.3.2 Age Distribution

In Marion (as in the rest of the U.S.), the elderly population (60+ years) has been increasing over the last few years. At the same time, the population under fourteen (14) has also been increasing, whereas the population of young adults 15-24 has dropped significantly in the last decade. In 1990, the elderly population in Marion was comprised of 484 people; in 2000 that number had increased to 962 people. For those age 15-24, their population dropped from 637 in 1990 to 414 in 2000. The following chart illustrates this change (Figure 3-1).

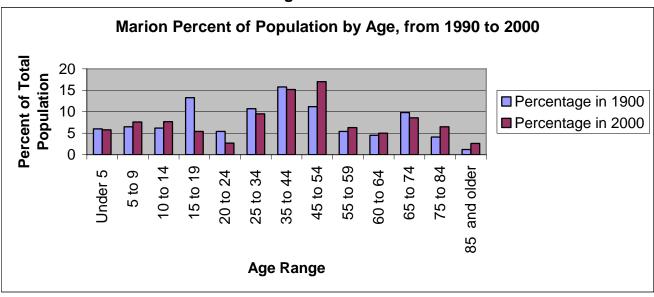
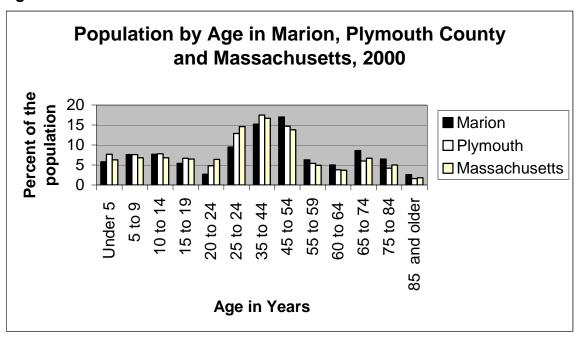


Figure 3-1

The following table, Population by Age in Marion, Plymouth County and Massachusetts in 2000, illustrates Marion's population by age compared to the county and state. When compared to the state and county, Marion has a larger proportion of residents that are 85 and older, two and six-tenths (2.6%), compared to one and six-tenths percent (1.6%) for Plymouth County and one and eighttenths percent (1.8%) for the State. The proportion of 65 and older in Marion is seventeen and seven-tenths percent (17.7%), compared to eleven and eight-tenths percent (11.8%) for Plymouth County and thirteen and five-tenths percent (13.5%) for the State.

These figures suggest that any OSRP will need to consider the needs of the changing demographics and growing under 15 and over 45 year old population when creating new recreation opportunities or acquiring additional open space.

Figure 3-2



## 3.3.3 Household Income

The median household income in Marion of \$61,250 is higher than the county or state median income. The unemployment rate in 2002 was four and two-tenths percent (4.2%) of the workforce compared to the state unemployment rate of five and three-tenths percent (5.3%). (Source: Commonwealth of Massachusetts Division of Employment and Training, Southeastern Regional Planning and Economic Development Data Center (SRPEDD) Region, 2002).

The cost of living is higher in Marion then surrounding towns (U.S. Census Bureau 2000), Plymouth County and the state of Massachusetts as a whole. The population in Marion may be able to have the luxury of setting aside more land for open space and recreation. The recreational facilities in Marion can be tailored to the particular needs of the people who live in the Town based on the cost of living.

Table 3-3: Median Household Income (2000)

	Median Household Income (\$)
Marion	61,250
Plymouth County	55,615
Massachusetts	50,502
United States	41,994

# 3.3.4 Special Populations

Marion's 1989 Open Space Plan noted that in 1980, one percent (1%) of the population over age 16 had a transportation disability. Figures from the 1990 census show that number increasing to three and seven-tenths percent (3.7%). Figures from the 2000 census show that that number has increased again to four and five-tenths percent (4.5%). This increase, combined with the growing elderly population, indicates that Marion's recreational plans should include providing more passive forms of recreation such as walking trails as well as ensuring handicap access to its recreational offerings.

Marion's racial diversity is fairly low. In 2000, Blacks comprised five and fourtenths percent (5.4%) of the population, while other groups (Asian, Hispanic, Latino) comprised almost ten percent (10%) of the population. Of this second group, many are of Cape Verdean ancestry.

#### 3.3.5 Education

Within the cities and towns that comprise Plymouth County, Marion had the highest percent of college-educated residents in 2000. 49.3% of Marion's citizenry had completed 4+ years of college (the state average was 33.2%). Over 93.7% of residents had completed high school, compared to the state average of 84.8%.

# 3.3.6 Housing

Information from the U.S. Census indicates that of the 2,439 housing units in Marion in 2000, approximately 81.8% (1,996 units) were occupied, 79% (1,570 units) of which were owner-occupied and 21.3% of the units were rented. It is unclear whether or not these numbers are for the year round population, or also include the seasonal population. The state of Massachusetts has approximately 93.2% of total housing units occupied. Sixty-one and seven-tenths percent (61.7%) of these occupied units are owned, compared to 38.3% of units occupied that are rented. Data from SRPEDD shows that an average of 27 building permits

were issued annually in between 1999-2001, while only thirteen (13) single-family homes were built in 2002 and thirteen (13) were built in 2003. The main reason why the number of building permits has decreased if because of the lack of land to build on. Some residents believe that there is a moratorium set in place, but this is not true. A local bylaw states that no more than twenty-eight (28) building permits can be issued per year on lots created after 2001. Per the Marion Building Inspector, many of the lots in Town were created well before 2001.

Marion's "affordable housing trigger" is approximately \$155,000<sup>1</sup>. The median cost of a single-family home was around \$325,000, according to the Town assessors in 2003. The median value of a single-family home in Plymouth County was valued at \$179,200 in 2000. From this data, it can be concluded that the people who live in Marion have homes that are higher priced that the surrounding towns and cities. People who reside in Marion can afford to pay more for their homes than the people who live in the surrounding areas. (Source: Marion.SouthCoastToday.com)

The Town of Marion also includes a rental population on top of a homeowner population. The average median gross monthly rent in Marion for 2000 was between \$682-872. In the State of Massachusetts in 2000 the median gross monthly rent was \$605. The median gross monthly rent Town of Marion is significantly higher that the State average. The median gross monthly rent and the median cost of a single-family home in Marion are both greater than the medians for the State of Massachusetts. Again, because the cost of housing is more in Marion, the Town may require different open space or recreation areas than in a town that may have lower housing costs.

The Town of Marion's Register has reported that there are approximately 795 seasonal residents (Town of Marion Register's Office, 2004). The summer resident's recreation needs may differ slightly from the year round residents. Seasonal residents may not be concerned about baseball fields or tennis courts, but may wish to ride bicycles on a rail trail, enjoy sandy beaches, or hike on nature trails. The Town must take into account the year round resident's recreational needs as well as the needs of the seasonal population.

This figure is based on the house that can be purchased with an income of no more than 80% (\$49,000) of the Marion median income (Marion MSA Median Household Income, 2004 Affordable Housing Plan, Marion, Massachusetts).

Occupied Units Number Percent
Owner 1570 81.8
Rental 426 78.7

Table 3-4: Marion Housing (2000)

2439

# 3.3.7 Income and Employment

**Total Households** 

Average per capita income in the New Bedford Metropolitan Statistical Area in 2000, which Marion is a part of, was \$37,265; median family income in the Town of Marion was \$74,265, while the Plymouth county average was \$65,554 according to the U.S. Census Bureau. Only four and six-tenths percent (4.6%) of individuals fell below the poverty level, compared to the county average of six and six-tenths (6.6%) and the state average of nine and three-tenths (9.3%).

21.3

Table 3-5: Employment of Residents in Marion by Industry (1990 –2000)

Compared to Fall River and New Bedford (2000)

	19	90	2000						
	# In Marion	Marion %	# In Marion	Marion %	# In Fall	Fall River	# In N. Bedford	N. Bedford	
					River	%		<b>%</b>	
Manufacturing	182	8	244	9	9,652	24	7,983	21	
Wholesale and	383	18	355	14	6,412	16	6,372	19	
Retail Trade									
Misc. Services	69	3	87	3	1,706	4	1,950	5	
All Other	1,528	71	1,906	74	21,904	56	22,177	55	
Total	2,162		2,592		39,674		38,482		

U. S. Bureau of the Census (1990 & 2000)

The table above shows employment by industry in Marion. The majority of the people who reside in Marion in 2000 were employed in sectors other than Manufacturing, Wholesale and Retail Trade, and Miscellaneous other services. This is only a slight change from the 1990 census when there were a few more residents of Marion were employed in Wholesale and Retail Trade. Overall, the numbers have not changed significantly. The nearby cities of Fall River and New Bedford have a much higher percentage of people who work in manufacturing jobs, and less people who work in other industries. The employment needs for the people of Marion are different from the employment needs of the people who live in the cities of Fall River and New Bedford.

# 3.4 Growth and Development Patterns

#### 3.4.1 Patterns and Trends

Over time, the Town of Marion has transformed from a sail-making center and seaport to a seaside retreat with local businesses. The development of single-family homes on the coastline and along other Marion roadways has led to the increase in needs for open space for recreation as well as for areas for wildlife. The population of the Town is growing at a faster rate than the County or the State average. While considered a seaside retreat, more people reside in Marion as primary residents than as seasonal residents.

#### 3.4.2 Infrastructure

Marion is served directly by Interstate Highway Route 195 and by U.S. Route 6. Route 6 was the former traffic access from Cape Cod to Connecticut and New York, and now provides the only access to some parts of Town, and links Marion to neighboring Mattapoisett and Wareham. There is no rail service directly available in Marion. A van service is available for both the elderly and handicapped.

Most of the Town's water is provided by a public water supply coming from five well sources, one in Marion and the others in Rochester. Public sewer is provided for approximately 40% of the Town (the village area has been sewered since the early 1900's). A long-range waste treatment plan, including an on site wastewater management program is in process under the leadership of the Selectmen and the Board of Health. In the short term, the expansion of the current sewer system is being planned, as well as expansion/improvement of the current wastewater treatment plant. Because the village area has been sewered for so long, the densest development in Marion has occurred in this area. Larger lots on the outskirts of Town have on site sewer systems.

Prior to the appearance of the railroad in Marion, ground transportation to and from Marion was limited due to topography and the shape of the harbors. As a result, the Town's transportation and commercial center developed around Sippican Harbor, with the industry focus being on shipbuilding and related marine trades.

Today, Marion's business base still retains some of its early marine focus. Each summer, Marion's population swells with an influx of summer residents, many of them attracted by the beauty and recreational potentials of Sippican Harbor. The seasonal influx of residents also leads to the increased use of the harbor for boating recreation. Boat yards abound, as do small industries catering to the needs of recreational sailors. [Yes, sails are still made in Marion.] Shops in the small "old New England village style" business district near the harbor also attract summer tourists.

The majority of the open space in Marion is located on the western portion of Town. Other open space is located in the north central portion of the Town. There is minimal open space on the southeastern portion of the Town and the southwestern portion of the Town. The current infrastructure has little impact on the "green space" of the Town. Both Interstate 195 and Route 6 are adjacent to open space.

# 3.4.3 Long-Term Development Patterns

Residential and commercial development was initially located in and around the current limited business district and the Old Landing area. As the Town population grew, homes were sited farther out from the center of Town. In recent years, some businesses and industries have located on both sides of Route 6.

with residential of Compared zoning, the amount land zoned commercial/industrial is very small in Marion (167 acres in 2004) (Buzzards Bay Project). Marion's three business districts are classified as general, limited and marine. General business districts are located along Route 6 from Point Road to Route 105, and in two other locations on Route 6 (one west of the Routes 6 and 105 intersection and the other east of Route 6 before Converse Road). Some of this development is located in business parks. Marine businesses (boat yards) are found at the inlet of Hammett's Cove on Route 6, and at the corner of Front Street and Route 6 on Sippican Harbor. Limited business or shops are designated for the village center on both sides of Front Street.

Most of Marion is zoned residential. Approximately 75% of Marion is classified as forest (including forested wetland), wetland and open land. Most of the more desirable upland along town roads has already been developed as frontage lots, leaving little in the way of easily accessible buildable land.

The Massachusetts Executive Office of Environmental Affairs (EOEA) compiled a buildout analysis summary for the Town of Marion in 2000. At that time, the Town had an additional 4,360 acres of developable land. If this land were to be developed, the additional water demand would approach one million gallons per day. At buildout, forty-seven (47) additional miles of roadway could be constructed in the Town. If the land were developed, the water lines were constructed, and the roadways were built to achieve maximum buildout, the landscape of Marion would change dramatically. In order to preserve open space, the Town and other environmental management agencies must purchase land and control building in a manner that preserves community character (See Appendix D).

In 1995, at the request of the Board of Selectmen, the Marion Growth Management Committee was formed and given the task of determining ways for

Marion to "protect what is important to the community, while encouraging development that fits into the needs of the community." Their final report was submitted in January 1996. In reviewing current zoning laws, the Committee found that Marion's zoning potentially allows for "the development of commercial strips on Route 6, sprawl development and the conversion of open space into residential subdivisions." In other words, suburban-style growth rather than that of the traditional New England village is being encouraged. Some of the primary recommendations of the report are to:

- Revise the cluster residential housing bylaw to preserve more open space and encourage more compact development patterns;
- Limit the number of residential building permits per year;
- Encourage development of housing for elderly, young families and lower income households;
- Promote and expand the village business district and waterfront marine businesses in an effort to maintain Marion's character, while controlling business development along Route 6 (i.e., no fast food chains, encourage nodal or cluster rather than strip development, require vegetated buffer zones to enhance aesthetics):
- Require larger set-asides of open space for all new residential and commercial development to achieve open space objectives; and
- Expand Town services in proportion to population growth (specifically the sewer and school systems).

These recommendations are designed to be acted upon by the Board of Selectmen and the Planning Board (through various subcommittees) (See Map 2, Zoning).

Section 4
Environmental Inventory and Analysis

Marion, Massachusetts

# 4.0 ENVIRONMENTAL INVENTORY

# 4.1 Topography, Geology and Soils

# **Topography**

Surface drainage, ground water, geologic resources, and vegetation are all interrelated. Because much of Marion is formed from ground moraines and outwash deposits, the Town of Marion is generally low and flat with a mean elevation of twenty (20) feet above sea level. The highest elevation is 124 feet above sea level at Great Hill in the southeastern portion of town. While there are some ridges and stony hills along the coast, the interior is dominated by wetlands and irregular drainage patterns (see Map 4b, Wetland Zones). Forested land comprises approximately two-thirds of Marion's landmass (much of this is forested wetland). Cranberry bogs, salt marshes, salt meadows, and tidal flats are also found in Marion. Annual precipitation levels average 47 inches, while average temperatures in January are 29° F, and 72° F in July.

# Geology

The physical features of Marion are a direct result of continental glaciation occurring during the Pleistocene Ice Age, which ended in Marion about 12,000 years ago after lasting approximately 65,000 years. The ice was thickest (approximately 500 meters) about 18,000 years ago. As the ice retreated, it revealed landforms that had been created under the ice sheet, such as drumlins and recessional moraine segments, which are visible today. Areas of glacial boulders or stones on the land surface are telltale signs of these features. The more prominent drumlins in Marion are Great Hill, Little Neck, Allen's Point, and Charles Neck (see Map 5; Unique Features). The drumlins and ground moraine deposited by the ice sheet are composed of glacial till; these areas are often problematic for septic systems due to the dense nature of the underlying soil that was compressed by the ice sheet with a resulting seasonal high water table.

As the ice sheet left southeastern Massachusetts, the torrent of melting water carried with it an enormous volume of cobbles, sand and silt. Kame deposits, eskers, and outwash plains were the resultant landforms of this meltdown. In areas where the meltwater was ponded temporarily, "glacial lakes" were created (Bear swamp is one such area). A layer of fine silt can be found under these former lakes.

As the ice sheet retreated, the sea slowly rose to near its present level. The coastal areas have undergone constant reshaping by erosion and deposition from the sea. This ongoing process removes sediments from areas of high energy and deposits them in areas of low energy. Promontories, such as Butler's Point, Converse Point, and Great Hill, are gradually washed away, while the lee side of a feature often fills with sediments.

Provided with a constant sediment source, the beaches are repeatedly washed away and reformed.

In those harbor areas protected from the direct wave action and onslaught of storms, vegetation became established and salt marshes formed. While many of the salt marshes in Sippican Harbor were historically filled, large salt marshes still exist in Aucoot Cove and Hammett's Cove.

#### Soils

According to a report titled "Soils and Their Interpretation For Various Land Uses" (U.S. Department of Agriculture, Soil Conservation Service, 1973), roughly 44% of the Town of Marion consists of soils of the Brockton-Norwell-Peat Tidal Marsh Association, which form narrow bands oriented southeasterly (See Map 3; Soils). These soils are associated with wetlands and have severe limitations for residential, commercial, or industrial use.

Gloucester series soil occupies approximately 36% of the Town, and is found in ridges of the recessional moraine throughout Marion, often forming higher relief features. These upland soils comprised of glacial till are primarily used for residential purposes and woodlands, most of which support stands of oak and pine. This soil group once had moderate limitations for development because of stoniness. This has largely been overcome due to the common use of large machinery for residential development. Its low moisture-holding capacity contributes to its relative dryness.

In the northern region of Marion, 11% of the Town is composed of the Carver-Gloucester-Windsor-Merrimac series soil. These surfaces are nearly level plains of glacial outwash deposits bordered by large swampy depressions. Their coarse and sandy nature means they will rapidly transmit pollutants and are typically associated with aquifers and water resources sensitive to nitrogen loading.

The remaining nine percent (9%) of soils is of the Scituate Association, which is severely limited for on-site sewage due to a hardpan at two and one half feet and seasonal high ground water table. This soil is generally located in the southwest section of Town.

Open space in the Town of Marion should be maintained or acquired in areas of Town where soils are poor. Dense residential development should not occur in soils of the Carver-Windsor-Merrimac series that have underlying aquifers because the nature of this soil rapidly transmits pollutants. Consequently, their soils are ideal for open space.

## **Landscape Character**

The character of Marion's landscape reflects its seaside location and its maritime past. Its distance from major metropolitan areas has allowed the Town to maintain a small town feeling with its quaint downtown area with a general store and the post office right across the street and its beautiful coastline with one of the "prettiest harbors in Buzzards Bay" (Sippican Harbor). Tree lined streets and white picket fences characterize Marion as a true New England town. This once small fishing village has now become an attraction for summer vacationers as well as a retreat for year round residents.

#### 4.2 Water Resources

#### 4.2.1. Surface Water

Marion has several valuable surface water resources that provide recreation opportunities for residents as well as adding to the aesthetic qualities of the community. The ocean provides vast opportunities for fishing, sailing, swimming and other water based recreation. The ocean also provides a habitat for wildlife. There are also small streams that flow through Marion which provide riparian habitat for flourishing wildlife.

#### **Lake and Ponds**

The Town of Marion does not contain any major lakes or ponds. However small unnamed ponds are scattered throughout the Town associated with cranberry bogs.



Photo 4-1 Aucoot Cove

Marion, Massachusetts

#### **Rivers and Brooks**

Small brooks such as Benson Brook and Hales Brook flow through Marion. The Weweantic River flows into Buzzards Bay along Marion's easterly boundary with the Town of Wareham. The Sippican River, located in the northern portion of Marion, flows into the Weweantic River. Sandy beach areas dot the Weweantic River. Residents can enjoy fishing in the and picnicking along the river banks with public access from Weweantic Beach.

#### Flood Hazard Areas

Most floodplains in Marion are associated with local waterways, the ocean and wetlands. Flood hazard areas subject to the 100-year flood have a one percent chance of flooding in any particular year, and are classified as "Zone A" on the latest version of the Flood Insurance Rate Maps (FIRM) for Marion, dated February 17, 1988. Areas subject to the 500-year flood are also shown on the map, and are classified as "Zone X".

The most substantial area subject to flooding in Town is northern section of Town located by the Weweantic River. Other core wetland resources located in the northern portion of the Town are subject to flooding (see Map 9; Flood Zone Map).

## 4.2.2 Wetlands

Due to the flat topography of the town, fresh water wetlands make up a large portion of remaining undeveloped land. While activity in wetlands may be subject to regulation under the state Wetlands Protection Act and the federal Clean Water Act, that regulation is not translated into absolute protection. Recent wetland change maps produced by the Massachusetts Wetland Conservancy Program show a seven acre loss of wetlands in the last five years. Protection of these important natural resources can best be done by fee acquisition or conservation restriction.

## 4.2.3 Aquifer Recharge Areas

Most of the Town's water is provided by a public water supply coming from five well sources. One is located in Marion west of Interstate 195 (See Map 4; Water Resources) and the others are all located in Rochester. The resource recharge areas are located around the one well in Marion as well as the other wells in Rochester. The demand on the Marion water supply is based on the premise that demand in Rochester will be restricted to the houses along the Marion distribution system. The Rochester Planning Board has approved two densely developed residential projects along the route of the water main. Both projects have connected to the existing water line. There is a need to reevaluate the basic premises that were used to predict Marion's future water needs.

Marion has one public water source in Town, located on a sub-watershed basin adjacent to the Sippican River Valley in North Marion. Recognizing the need to protect this fragile resource, the Town designated a Water Supply Protection District on April 28, 1980, at the Annual Town Meeting. While the passage of this article was considered a step forward at the time of passage, a review of the bylaw reveals several problems. The bylaw restricts house lots to a size of one acre<sup>2</sup> (to accommodate individual septic systems since this area is not served by town sewer), however, 95% of the district is zoned RC and RD (2 acre minimum). Thus, the bylaw effectively has no role in the reduction of housing density in this area. While the Protection District is centered around the Zone II of the well, there are no greater controls in terms of prohibited uses in the Zone II than in the larger Watershed Protection District. Moreover, the Zone II designation in the Zoning Bylaw was based on a 1988 letter from the town engineer. In 2000, DEP prepared a more accurate mapping of the Zone II (see Figure). The current regulations are ambiguous and repeat some of the provisions of the Site Plan Review process and Subdivision Rules and Regulations. Instead of the existing permit process administered by the Board of Selectmen, clear, enforceable allowed and non-allowed uses with clear regulations in line with DEP aquifer protection recommendations would improve protection of this resource and be more understandable to landowners. While the Protection District protects the well located in Marion, it does little to protect the four wells located in Rochester. Clearly an effort from both towns is needed to maintain the quality of water from all five wells.

The Town of Marion is proposing to buy land in close proximity to Eastover Farm associated with a High Yield Aquifer.

# 4.3 Vegetation

Marion's vegetation is a reflection upon its coastal area and sandy soils. The topography of the area is characterized by low, flat to gently rolling plains.

The soils in the northern part of town are often so low in nutrients that the forests often appear scraggly. The Northern Pine Oak forest is common in this area. These forests are sometimes known as "Pine Barrens". Vegetation in these forests consists of Pitch Pine, Eastern Red Cedar, blueberry, huckleberry, Butterflyweed, and Poverty Grass. The Massachusetts BioMap characterizes the Pitch-Pine-Scrub Oak community as "home to

<sup>&</sup>lt;sup>2</sup> One acre = 43,560 square feet. BEALS AND THOMAS, INC.

several species that have adapted to the windy, dry, open ridgetops. Pitch Pine depends on periodic fire to keep out competitor species, allowing it to persist over the long term."

Cranberry bogs are also very common in the area of Marion. Most of Massachusetts' cranberry bogs are found in the Buzzards Bay watershed. Heath vegetation exists in bog areas. The cranberry bogs in Marion comprise of a large percentage of the town's agricultural land.



Photo 4-2: Vegetation along Wing's Cove.

Located in the northwestern portion of Marion is the Haskell Swamp Wildlife Management Area. This swamp extends into Mattapoisett and Rochester. The total area of the swamp is 2,712 acres. The total area of the swamp within the Town of Marion is 506 acres. Bear Swamp is the formal name given to the area in northwestern Marion, which is part of the Haskell Swamp Wildlife Management Area.

The Natural Heritage and Endangered Species Program has recently released their BioMap analysis showing areas significant wildlife habitat areas. Please see Section 4.5.4, which explains the BioMap more in detail specifically relating to the Town of Marion.

In addition to the common plant species in Marion, there are several endangered species thought to occur within its borders. According to the most recent list (March 1, 2003) of

rare species within Marion, the following plants have been designated a state status of "Threatened"(T):

Table 4-1: Rare Plant Species in Marion

Taxonomic Group	Scientific Name	Common Name	State Rank	Federal Rank	Most Recent Observation
Vascular Plant	Aristida	Purple	T		1929 <sup>3</sup>
	purpurascens	Needlegrass			
Vascular Plant	Crassula	Pygmyweed	T		1998
	aquatica				
Vascular Plant	Panicum	Long-Leaved	T		$1928^{3}$
	rigidulum var.	Panic-Grass			
	Pubescens				

Source: Natural Heritage and Endangered Species Program, March 1, 2003

#### 4.4 Fisheries and Wildlife

Wildlife in Marion is typical of coastal Massachusetts, with different local natural areas supporting a high diversity of wildlife and fish species. Virtually all of the species common to this area of the state are permanent or occasional residents in local forests, bogs and wetlands. The waterways and coastal areas of Marion are home to many types of fish and aquatic life commonly found in the region.

Wildlife common to the Marion area include mammals such as; eastern cottontail, opossum, river otter, muskrat, long-tailed weasel, red fox, striped skunk, gray squirrel, and raccoon, eastern mole, masked shrew, short-tailed shrew, little brown bat, big brown bat, red bat, eastern chipmunk, woodchuck, white-footed mouse, Gapper's red-backed mouse, meadow vole, Norway rat, and meadow jumping mouse.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, shore birds, muskrat, frogs, and tree swallow.

As mentioned above, the Haskell Swamp Wildlife Management Area is located in the northwestern portion of Marion. Species common to this area are red shouldered hawks,

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<sup>&</sup>lt;sup>3</sup> Only those rare species records that are less than 25 years old are used in Natural Heritage project review associated with the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00) and the Massachusetts Endangered Species Act Regulations (321 CMR 10.00).

woodpeckers, hermit thrushes and other song birds. Snowshoe hare are stocked when they are available.

Most of the coastal areas off Marion are designated shellfish growing areas. The growing areas consist of places such as Sippican Harbor, Aucoot Cove, North Buzzards Bay and Wings Cove depicted on MassGIS maps from the Massachusetts Division of Marine Fisheries. In the designated shellfish growing areas of Marion, the species consist of blue crab, lobster, bay scallop, conch, oyster, quahog, sea scallop, soft shell clam, and surf clam. The waters off the coast of Marion contain bluefish, flounder, black sea bass, striped bass, Atlantic cod, and skate. The brackish ponds, lagoons, and inlets in the area are inhabited by: common starfish, sand dollars, fiddler crabs, blue crabs, rock crabs, oysters, bay scallops, and softshell clams. Areas in Marion near Hammett's Cove are permanently closed to shellfishing due to bacteria. Other areas are closed due to an oil spill that occurred in Buzzards Bay, April 27, 2003. Currently, some shellfish beds in Marion are still closed due to this oil spill. This area includes portions of Sippican Harbor (Buzzards Bay Project).

The Natural Heritage Atlas, 2003 Edition indicates that there are no certified vernal pools listed within the Town of Marion. However, on the town line of Marion and Rochester, there is a certified vernal pool located in the northern portion of Bear Swamp. Also a map of "potential vernal pools" issued in August 2000 reveals numerous areas in Town that have the potential characteristics of a vernal pool. These potential vernal pools are widespread throughout the Town, with specific concentration in the northern most portion of the Town where Rochester, Wareham and Marion meet, as well as the western portion of Town on the Mattapoisett border.

According to the Massachusetts Natural Heritage and Endangered Species Program, there are seven (7) species of fish or wildlife that are considered endangered (E), threatened (T), or of special concern (SC) in Marion by the State of Massachusetts. One bird species is listed as endangered and threatened Federally. These include:

**Table 4-2: Rare Animal Species in Marion** 

Taxonomic	Scientific	Common	State	Federal	Most Recent
Group	Name	Name	Rank	Rank	Observation
Reptile	Clemmys guttata	Spotted Turtle	SC		2000
Reptile	Malaclemy terrapin	Diamondback Terrapin	Т		2000
Reptile	Terrapene Carolina	Eastern Box Turtle	SC		2000
Bird	Sterna dougallii	Roseate Tern	Е	PS: LE, LT	1998

Marion, Massachusetts

Bird	Sterna hirundo	Common Tern	SC	 1998
Butterfly/Moth	Papaipema	Water-Willow	T	 2000
	sulphurata	Stem Borer		

Source: Natural Heritage and Endangered Species Program, March 1, 2003.

# 4.5 Scenic Resources and Unique Environments

# 4.5.1. Scenic Landscapes

Twenty-five (25) miles of tidal shorefront provide its citizens and visitors with a myriad of scenic vistas. Inland vistas are primarily a consequence of the cranberry bogs. However what the Town lacks in scenic inland landscapes (due to its fairly flat topography and abundance of forested cover), it makes up for in its coastal panoramas. Views of the eastern side of the inner Sippican Harbor, from the village area, reveal a natural setting, dotted with majestic summer homes. Aucoot Cove, Wings Cove and Great Neck all offer spectacular views of Marion's shoreline, and, in some areas, of Cape Cod as well. The presence of fresh and saltwater marshes along the shoreline add to the beauty of the area.

# 4.5.2 Major Characteristics or Unusual Geologic Features

Minister's Rock is a 0.1 acre historic site, jointly managed by the DPW and the Ecumenical Council, that contains a large erratic once used as a pulpit by colonists of Marion's first European settlement. This parcel is located close to one of Marion's historic cemeteries, and consideration should be given to linking the two sites.

#### 4.5.3 Cultural and Historic Areas

The above-mentioned cemetery provides a look into Marion's past ancestry. Homes in Marion's informal historic district date as far back as 1780 and enhance the "old New England village" atmosphere. Buildings along lower Main Street, from Front Street to the water, served as cooperages, ships chandleries, and lofts during the 19th century. Long Wharf, built in 1806, was used by whalers and commercial transport vessels. Some of Marion's older public buildings are still in use, such as the Music Hall (1892) and the Town Hall (1876). The lighthouse on Bird Island is listed in the National Register of Historic Places.

## 4.5.4 Unique Environments

The Natural Heritage and Endangered Species Program has recently released their BioMap analysis showing areas significant wildlife habitat areas. There are areas in Marion that stand out as important wildlife habitat due to their vegetation and landscape composition. In Marion, there are areas of BioMap Core Habitat, BioMap Supporting Natural Landscapes and Permanently Protected Open Space.

Core Habitat consists of rare animal habitat, rare plant habitat and natural community. Supporting Natural Landscape serves to buffer and link Core Habitat patches. It identifies the most intact lands adjacent to and near Core Habitat areas. Marion is located in the Bristol Lowlands ecoregion of Massachusetts. About 27% of this area considered BioMap Core habitat while another 15% is Specific areas of BioMap Core considered Supporting Natural Landscape. Habitat in Marion are along Sippican Harbor and Aucoot Cove. Also, the majority of the area along Marion's western boundary is designated as BioMap The north and northeastern portion of Marion is designated BioMap Supporting Natural Landscapes. An area north of Aucoot Cove is also designated a BioMap Supporting Natural Landscape. Also north of Aucoot Cove is land designated as Permanently Protected Open Space. Along Route 195 in the northwestern portion of Marion are additional areas deemed Permanently Protected Open Space. Some of this open space is associated with the Haskell Swamp Wildlife Management Area. The Permanently Protected Open Spaces on the BioMap overlap with the BioMap Core Habitat areas. However, only sections of the Permanently Protected Open Spaces on the BioMap overlap with the BioMap Supporting Natural Landscapes, such as the area northwest of Aucoot Cove. With this in mind, a greater effort should be put forth to ensure that all Permanently Protected Open Space in Marion overlap with the BioMap Supporting Natural Landscapes. These supporting natural landscapes are a very important part of maintaining the vast wildlife in the Town.

The Town of Marion does not contain any Outstanding Resource Waters (ORW's) or Areas of Critical and Environmental Concern (ACEC's) according to the Massachusetts Department of Environmental Protection. However, Marion contains several shellfishing areas. According to 314 CMR 4.06, the Weweantic River and the Sippican River are class SA<sup>4</sup> areas. Sippican Harbor, Aucoot Cove and Country Road to confluence are also included in this classification. It is required in the DEP Stormwater Management Policy that stormwater discharge to these critical areas (shellfish beds) utilize specific stormwater management Best Management Practices (BMP's).'

<sup>&</sup>lt;sup>4</sup> These waters are designated as an excellent habitat for fish, other aquatic life and wildlife and for primary and secondary contact recreation. In approved areas they shall be suitable for shellfish harvesting without depuration (Open Shellfish Areas.) These waters shall have excellent aesthetic value (314 CMR 4.06).

## 4.5.5 Regional Open Space

The Town of Marion has worked on several open space acquisitions that span the borders of the Town. Regional non-governmental agencies such as the Coalition for Buzzards Bay and The Trustees of Reservations have coordinated purchases of properties that span town lines. The Buzzards Bay Project National Estuary Program produces open space maps of the region, which keep the Open Space Acquisition Commission abreast of the efforts by neighboring towns.

## 4.6 Environmental Challenges

### 4.6.1 Hazardous Waste Sites

According to data maintained by the Massachusetts Department of Environmental Protection, there is one property in Marion that is a confirmed hazardous waste site currently under review by the DEP; a Tier 1D site in a residential area. Other sites have historically been confirmed as spill sites regulated under the Massachusetts Contingency Plan, but as of the September 13, 2004 list, they have reached a Response Action Outcome Status. A comprehensive list of areas of chemical releases and spills in Marion can be found in Appendix B.

#### 4.6.2 Landfills

Marion's trash is now transported to the SEMASS facility in Rochester, and is no longer dumped in the Town landfill located in the western section of Town. There is outflow from this dump, but it is filtered as it flows through Bear Swamp, thereby reducing its pollution potential. The uncapped landfill is in the process of obtaining approval from the DEP Division of Solid Waste to permanently cap and close the old landfill site.

### 4.6.3 Erosion

Because Marion is generally flat, little damage is caused by precipitation-related erosion. Two beaches are the exception to this: Silvershell Beach and Weweantic Beach-1. These beaches experience erosion because they are without vegetation and both have stormwater runoff flowing onto them. Erosion is also occurring at Point Road (northwest of Planting Island Causeway) due to foot traffic up this steep hillside. Overall, the presence of swamps and marshes along the shoreline, with their buffering, filtering and absorption qualities, generally help to reduce erosion along Marion's waterfront.

## 4.6.4 Chronic Flooding

Much of Marion is within the 100-year flood zone, due in part to its fairly flat topography, and low mean elevation of 20 feet above sea level. The abundance of

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salt marshes along Marion's shoreline serves to protect the Town from the destructive energy of a flood-inducing storm. Very little of the developed portion of Marion is subject to flooding every year.

### 4.6.5 Sedimentation

No major sedimentation problems exist due to the general lack of erosion and agricultural land uses other than cranberry bogs.

## 4.6.6 Development Impact

Marion's rate of growth over the last few years has been rather slow when compared to other communities. It is difficult to determine if the low rate of residential development is due to the building permit cap, which will expire in 2007, or some other factor. However, future residential development will occur and zoning can be an effective strategy to reduce open space loss from new subdivision projects. Transferable Development Rights and mandatory clustering is recommended to maintain an economically sustainable development pattern.

### 4.6.7 Ground and Surface Water Pollution

Over the years, failed septic systems have caused isolated areas of shellfish closure due to bacterial contamination. Added to this are areas closed by stormwater runoff. In 1990, 290 acres of shellfishing areas were closed due to bacterial pollution (Source: EOEA, Division of Marine Fisheries).

Pollution of the many Sippican Harbor coves and inlets has been a problem in the past; specifically due to nitrogen and fecal coliform. High levels of coliform bacteria have periodically been found, especially in those coves with discharges from roads. Nitrogen pollution is found in coves with restricted openings. These tidally restricted coves are unable to flush out nitrogen as effectively as coves subject to the cleansing effect of the twice daily tide. This problem is of special concern in the summer, with the added seasonal population. In recent years, Marion has taken steps to reduce the threat of coliform pollution through the implementation of septic system bylaws requiring annual pumping of septic systems near the harbor, through its purchase of a pump-out station for boats, and the planned expansion of the waste water treatment plant collection system.

Pollution from excess nitrogen can cause eutrophication of water bodies. Hammett's Cove is one of the ten worst sites in Buzzards Bay for nitrogen pollution. Sources of nitrogen include septic systems, fertilizers, and stormwater runoff. Sewer expansion to areas of small lots should be considered in the Hammett's Cove Watershed.

Currently, approximately sixty-four (64) acres of shellfishing areas are closed. These areas include Aucoot Cove, Water Street, Hammett' Cove, Jobs Cove, Holmes Brook, Burr Brothers and the Weweantic River (Marion Shellfish

Officer).



Photo 4-3: Notice on Weweantic Beach (Photographed September 7, 2004).

# 4.6.8 Impaired Water Bodies

Three water bodies are on the state list of water bodies requiring Total Maximum Daily Load (TMDL's); all for pathogens: Aucoot Cove, Sippican Harbor, and Sippican River.

Aucoot Cove is the recipient of the Town waste water effluent. If the new waste water treatment plant does not improve the current situation the Town should consider discharging the effluent through surface discharge.

Sippican Harbor is a major anchorage, but it also is the discharge point for most of the impervious surface storm water discharges in Marion. Open space purchases have been available for the siting of storm water treatment systems and that practice should continue to improve water quality in Sippican Harbor.

Sippican River is a shared water body with the Town of Wareham. Pathogen sources should be determined to determine the correct strategy for remediation.

Section 5
Inventory of Lands of Conservation and Recreation Interest

## 5.0 LANDS OF CONSERVATION AND RECREATION INTEREST

The goal of this section is to identify and map all protected and unprotected land of interest for conservation or recreation use. This inventory has been developed by reviewing the files of lands held by the Town and lands with special tax-exempt or tax-reduced status. Each parcel was then identified on a map categorized by the level of protection afforded the parcel. Open space protection is critical to maintaining habitat diversity, Marion's rural character and providing opportunities for recreation. While permanently protected open space is best, as it allows for better planning and ensures that certain vistas and habitat will maintained in their current state in perpetuity, open space under Chapter 61 programs is also beneficial to the community as a whole. Open space allows for the creation of wildlife corridors, watershed protection and other environmental services that cannot be readily provided in a built environment. Recreation lands provide for gathering places amongst the community, facilitate tourism, and meet the activity based needs of both younger and older populations.

Table 5-1 summarizes the State owned open space and recreation lands that are presently protected in Marion; Table 5-2 lists Town-owned property. The inventory categorizes the conservation, recreation and significant vacant lands in Town and identifies the name, location, lot area, owner, and level of protection and also includes available details about parcels such as public access. Parcels that are publicly owned or that are protected under Chapter 61, 61A and 61B are included in this chapter. It is important to recognize that parcels subject to Chapter 61 restrictions are not necessarily protected in perpetuity, they are vulnerable to development and the protection offered to the community is minimal. Tables 5-3 – 5-6 indicate the location of state owned and Chapter 61 lands in Marion.

The zoning of each parcel is classified below:

- RA -Residence A
- RB- Residence B
- RC- Residence C
- RD- Residence D
- RE- Residence E
- LB- Limited Business
- GB- General Business
- MB- Marine Business
- LI- Limited Industrial

### Inventory Classifications are as follows:

- CR- Conservation Restriction
- PR- Temporary Restriction
- PB- Private Water Access
- PS- Private Schools
- PWA- Private Water Access
- POS- Private Open Space

- CC- Conservation Commission
- MA- Commonwealth of Massachusetts
- MC-Municipal Conservation
- MB- Municipal Beach
- MWA- Municipal Water Access
- MR- Municipal Recreation
- MOL- Municipal Open Land
- SW- Sewerage or Water
- T- Town Miscellaneous
- S- School

## Use and Funding source indicators are below:

- A-Access
- ATM-Annual Town Meeting Purchase
- B-Beach
- C-Conservation
- CC-Conservation Commission
- DPW-Department of Public Works
- G-Gift
- MRC-Marine Resources Commission
- N-None
- R-Recreation
- RC-Recreation Committee
- S-Selectmen
- SD-School Department
- SLT-Sippican Lands Trust
- STM-Special Town Meeting Purchase
- T-Trail
- W-Wildlife Habitat
- X-Tax Title

**Table 5-1: State Owned Property in Marion** 

Name	Address/Zoning	Size (Acres)	Owner/ Manager	Protect Status	Potential Use and Condition
MA1 Commonwealth of Massachusetts	Off Interstate 195/ RD Plan 27, Lot 11	7.4	None	N	This parcel should be transferred to the Open Space Acquisition Commission or the Massachusetts Department of Fish and Game
MA2 Haskell Swamp Wildlife Management Area	Parlowtown Road/ RD Plan 23, Lots 42, 55 & 56 Plan 25, Lots 1, 1A, 1B, 2, 3, 4, 5, 24 & 26	506 in Marion	Massachusetts Department of Fish and Game	Y	Walking and hunting, home to a wide range of wildlife

**Table 5-2: Town Owned Property in Marion** 

Name	Address/Zoning	Size (Acres)	Owner/ Manager	Protect Status	Potential Use and Condition
CC1 Bird Island	Island in Sippican Harbor/RD Plan 3, Lot 79	3	Conservation Commission	Y	Bird sanctuary, restricted landing. Lighthouse is listed on National Register of Historic Places.
CC2 Planting Island Causeway	Planting Island Cove/ RC Plan 3, Lot 74	4	Conservation Commission	Y	Swimming, walking, parking for shell fishing, and fishing. Should be kept as low impact.
CC3 Aucoot Cove Parcels	Off Converse Road/ RC Plan 18, Lots 25, 27, 28, 30, 31B, 35, 36 & 37	26	Conservation Commission	Y	Picnicking, swimming, sunbathing, walking, shell fishing, birding.
CC4 Hammett's Cove	Point Road/ RD Plan 8, Lot 40	15	Conservation Commission	Y	Trails for walking.
CC5 Walker Lot	Off Cross Neck Road/ RD Plan 6, Lot 1	4	Conservation Commission	Y	Area for wildlife habitat.

# **Table 5-2: Town Owned Property in Marion**

Name	Address/Zoning	Size (Acres)	Owner/ Manager	Protect Status	Potential Use and Condition
CC6 Andrew Weeks Land	Front Street/ RC Plan 22, Lot 11 Plan 23, Lot 1	2	Conservation Commission	Y	Red Maple Swamp, no current use.
CC7 Smellie & Stinson Land	Off Route 195/ RD Plan 24, Lots 24 & 24A	103	Conservation Commission	Y	Wooded uplands and red maple swamp. No current use.
CC8 Frank Briggs Land	Off Point Road/ RD Plan 5, Lot 34	12	Conservation Commission	Y	Wildlife habitat.
CC9 Brown Land	Off Route Six/ RC Plan 11, Lot 124	1	Conservation Commission	Y	Wildlife habitat.

**Table 5-2: Town Owned Property in Marion** 

Name	Address/Zoning	Size (Acres)	Owner/ Manager	Protect Status	Potential Use and Condition
OSAC1 Creek & Quail	Off Quails Crossing/ RD Plan 23, Lot 88- 89 Creek Road/ RC Plan 8, Lot 1	2.7	Open Space Acquisition Commission	Y	Wildlife habitat and aquifer protection; heavily wooded.  Walking and birding, a trail from Creek Road to Route 6 is planned.
OSAC2 Route 6 Lot	Route 6/ RD Plan 18, Lot 46	4	Open Space Acquisition Commission	Y	Wooded with parking area.
OSAC3 Washburn Park Extension	Washburn Park/ RC Plan 11, Lots 32A, 32B & 32C	100	Open Space Acquisition Commission	Y	Trails and ponds, largely wooded, additional access being sought.
OSAC4 Grassi Bog	Route 6/ RD Plan 26, Lot 1A	36	Open Space Acquisition Commission	Y	Trails around bog, parking area.

**Table 5-2: Town Owned Property in Marion** 

Name	Address/Zoning	Size (Acres)	Owner/ Manager	Protect Status	Potential Use and Condition
OSAC4 Marion Rail Trail	Starts at Industrial Park Drive, Mattapoisett/ RD Plan 24, Lot 30 Plan 25, Lot 32 Plan 27, Lot 13	20	Open Space Acquisition Commission	Y	Old abandoned railroad route, rail trail is planned for this location.
OSAC6 West Land	Point Road/ RC Plan 7, Lot 1 Plan 7A, Lot 64	17	Conservation Commission	Y	Former cranberry bog, no current use. Could be used as wet meadow for bird habitat.
OSAC7 Mecke Land	Behind Joanna Drive Subdivision/ RC Plan 7B, Parcels A, B & C	73	Conservation Commission	Y	Loop trail, wooded swamp, and storm water basins.
MC1 Clapp's Island	Wing's Cove/ RC Plan 2, Lot 183	1	Conservation Commission	N	Island is almost non-existent at high tide, shell fishing is the only activity held here.

**Table 5-2: Town Owned Property in Marion** 

Name	Address/Zoning	Size (Acres)	Owner/ Manager	Protect Status	Potential Use and Condition
MB1 Silvershell Beach	Front Street/ RB/RC Plan 16, Lots 95- 97 Plan 17, Lot 30	13	Recreation Committee/ Marine Resources Commission	Y N	Beach area has parking lot, picnicking, swimming, sunbathing, basketball, viewing lunch spot. Has beach house with amenities.
MB2 Oakdale Avenue Beach	Oakdale Avenue/ RD Plan 12, Lot 14A	0.25	Recreation Committee	Y	Small beach; in poor condition.
MB3 Weweantic Beach-1	River Road/ RC Plan 9, Lot 20L	0.9	Recreation Committee	Y	Small sandy beach with no lifeguard, in need of rehabilitation.
MB4 Weweantic Beach-2	River Road/ RC Plan 9, Lot 20K	0.4	Recreation Committee	Y	Wooded lot next to beach, no improvements necessary.

**Table 5-2: Town Owned Property in Marion** 

Name	Address/Zoning	Size	Owner/	Protect	Potential Use and Condition
		(Acres)	Manager	Status	
MB5 Town Landing at Island Wharf	Front Street/ RC Plan 14, Lot 76	3.6	Board of Selectmen/ Marine Resources Commission	N	The beach should receive sand.
MWA1 Wings Cove	Delano Road/ RD Plan 2, Lot 1C	1.85	Marine Resources Commission	Y	Boat ramp is not generally usable at low tide.
MWA2 Point Road	Point Road/ RD Plan 1, Lot 12	0.5	Board of Selectmen	Y	A wooden stairway would prevent erosion on the steep bank.
MWA3 Old Landing	Front Street/RC Plan 13, Lots 12 & 13A	1	Department of Public Works, Marine Resources Commission and Marine Veterans	N	Boat ramp cannot be used at low tide, dredging should be considered.

**Table 5-2: Town Owned Property in Marion** 

Name	Address/Zoning	Size	Owner/	Protect	Potential Use and Condition
MWA4 Holmes Lane	Front Street/ RC Plan 14, between lots 10 and 71	(Acres) 0.5	Manager Department of Public Works	Status Y	Lane should be marked for town residents to find access to water.
MWA5 County Road/ Sippican River	County Road/ N/A Plan, Lot N/A	N/A	None	N	Widening of the road may provide for canoe access.
MWA6 Planting Island Cove Access	Point Road/ RD Plan 2, Lot 19G	3	Department of Public Works	N	Access should be abandoned as a town way to avoid ANR proposals on adjacent properties.
MR1 Washburn Park	Off Front Street/ RC Plan 11, Lots 39, 40, 42, 49 & 50	46.37	Recreation Committee	Y	The Conservation Commission and Recreation Commission should govern ownership of the park, a field for girls softball should be top priority.
MR2 Point Road Park	Point Road/ RD Plan 10, Lot 12	1	Recreation Committee	Y	Tennis courts should be maintained. It needs to be determined if adjacent vacant land is suitable for a park expansion.

**Table 5-2: Town Owned Property in Marion** 

Name	Address/Zoning	Size (Acres)	Owner/ Manager	Protect Status	Potential Use and Condition
MR3 Bicentennial Park	Spring Street and Main Street/ RA Plan 14, Lots 43A & 49	0.5	Friends of Bicentennial Park	N	The area is very well maintained; no changes are necessary.
MR4 Holmes Woods	Spring Street/ RC Plan 14, Lots 11 & 12B	15	Board of Selectmen/ School Committee	Y	The property should be planned for future use.
MR5 Washburn Park Lane	Washburn Park Lane/ RA Plan 11, Lot 21B	N/A	Department of Public Works	Y	No improvements have been mentioned.
MR6 Joanna Drive Park	Joanna Drive/ RC Plan 7B, Lot 57	0.3	Recreation	Y	Storm water basin should be fenced.

**Table 5-2: Town Owned Property in Marion** 

Name	Address/Zoning	Size (Acres)	Owner/ Manager	Protect Status	Potential Use and Condition
MOL1 Aucoot Cove Parcels	Off Converse Road/ RC Plan 18, Lots 22, 23, 29, 31A, 32- 34, 74-84, 97-103 & 105-116	43	None	Y	The Conservation Commission should manage all parcels in Aucoot Cove.
MOL2 Briggs Land	Off Point Road/ RC Plan 11, Lot 26	4	None	N	Parcel should be located and marked to prevent encroachment.
MOL3 Route 6 Parcel	Route 6/ GB Plan 11, Lot 94	1	None	N	Parcel should be located and marked to prevent encroachment.
MOL4 Holmes Brook/ Tabor Hall	Spring Street/ RC Plan 14, Lot 37F	1	None	N	Town access has been turned into a private driveway.
MOL5 Hiller Land	Off RR Row/ RC Plan 24, Lot 23	28	None	N	Parcel should be transferred to the Open Space Acquisition Commission.

**Table 5-2: Town Owned Property in Marion** 

Name	Address/Zoning	Size (Acres)	Owner/ Manager	Protect Status	Potential Use and Condition
MOL6 Bessie & Hiller Land	Off Interstate 195/ RD	4	None	N	Parcel should be transferred to the Open Space Acquisition Commission.
	Plan 25, Lots 18 & 19				
MOL7 Henley-	Off Interstate	22	None	N	Parcel should be transferred to the Open Space
Lungren Lots	195/ RD				Acquisition Commission.
	Plan 25, Lots 27-31,				
	Plan 23, Lots 41A & 54				
MOL8 Parlow Land	Off Interstate 195/ RD	2.5	None	N	Parcel should be transferred to the Open Space Acquisition Commission.
	Plan 25, Lot 25				
MOL9 Delano Land	Off Rt. 6/ GB	0.25	None	N	Parcel should be transferred to the Open Space
	Plan 8, Lot 1C				Acquisition Commission.
MOL10 Barnabas Trade	Benson Brook Road/ LI	3.8	None	N	Parcel should be transferred to the Open Space Acquisition Commission.
	Plan 24, Lot 10D				

## 5.1 Land Protected From Development

Protected land owned by the Town and the Commonwealth of Massachusetts in Marion totals approximately 1,406 acres. Although it is entirely possible for governmental agencies to remove land from public ownership, this scenario is unlikely and would require considerable public scrutiny if proposed. Public land is identified by State land use codes to differentiate between the level of government that owns the property: Commonwealth of Massachusetts (901), Counties (902) and Municipalities (903). These codes are helpful when reviewing assessor's records.

Beyond privately held land, less than fee interests in land can keep land in an open state in perpetuity. For example, a property owner might be willing to sell or donate a conservation easement or restriction, which would prevent future development on the land. As is true in most places, this land is preserved but not available for public access. The use of these easements and restrictions is helpful in maintaining community character.

#### 5.1.1 Town Owned Land

Conservation Land – managed by the Conservation Commission and the Open Space Acquisition Commission.

Permanently protected Town lands include Conservation Commission and Open Space Acquisition holdings totaling approximately (eight hundred and forty-four) 844 acres.

Recreation Land- managed by the Recreation Committee.

Permanently protected Town lands include Recreation Committee holdings totaling approximately (forty-seven) 47 acres.

Department of Public Works- managed by the Town of Marion's Department of Public Works.

Protected Town lands include Department of Public Works holdings totaling approximately four and one half (4.5) acres

### 5.1.2 State Owned Land

The Commonwealth of Massachusetts owns roughly 514 acres of land in Marion. Five hundred and six (506) acres of this land is managed by the Department of Fish and Game. Approximately seven (7) acres are not managed.

## 5.1.3 Agricultural Preservation Restrictions

The Agricultural Preservation Restriction program is a way for farmland to be protected from future development. The APR program pays farmers the difference between the "fair market value" and the "agricultural value" of their farmland in exchange for a permanent deed restriction, which precludes any use

of the property that will have a negative impact on its agricultural viability. No Agricultural Preservation Restrictions currently exist in the Town of Marion.

### 5.1.4 Conservation Restrictions

Conservation Restrictions can be placed on a parcel of land for a specified number of years or in perpetuity. The conservation restriction (or easement) is a restriction to particular specified uses or from development. The restriction runs with the land and is recorded in a deed instrument. This tool functions to retain the property in its natural state or in agricultural, farming, or forest use; to permit public recreation; or to restrict development activities. Conservation restrictions, sometimes called development restrictions, must be granted voluntarily, however, the Conservation Commission and/or Planning Board can encourage this mechanism as a way of maintaining privately owned land in a natural state. There are 17 parcels in Marion that contain conservation restrictions, totaling approximately 556 acres. Some of the larger lots include Aucoot Cove, Little Marion Golf Course, Eagle Holt bogs and Hiller Brothers Bog.

## 5.2 Lands Not Protected from Development

Private open lands can be offered various levels of protection. The designation of private parcels as Forest lands (Chapter 61), Farm lands (Chapter 61A), or Private Recreation lands (Chapter 61B) restricts the use of land in exchange for significant reduction in taxes. Land that is currently taxed under the exemptions allowed by M.G.L. Chapters 61, 61A, or 61B has very little protection. Currently, there are nearly 2,675 acres of land in Marion that are classified as temporarily protected under this tax abatement program.

Property under these designations allow the Town a right of first refusal to purchase the land should the property owner intend to take the land out of the restricted status. Land may be taken out of Chapter 61, 61A or 61B classification by notifying the Town and paying a withdrawal penalty tax. However, such land may not be sold for, or converted to, residential, commercial or industrial use while taxed under the classification without written notification of the municipality in which it is located. The Town has 120 days to exercise its right of first refusal option to purchase the land. Should this time period pass and/or the Town states in writing that it will not act on its option, the land may be developed for alternative use(s), removing it from its "open" status as forest, farm or recreation land. See Map 10, Forestry and Agriculture, for the location of these lands.

## 5.2.1 Chapter 61 Forest Lands

Forest Lands require a minimum of ten contiguous acres under a minimum 10-year management plan certified by the State Forester. Once the application has been received and approved, the classification statement functions as a lien upon the land for taxes levied under the provisions of M.G.L. Chapter 61. The landowner must refile every ten years or the land is removed from classification by the Town Assessor. A tax is payable on stumpage income for the two years

prior to management and a much reduced property tax is payable once per year during the management period. Approximately 1202 acres in Marion are classified as Chapter 61 Forest Lands.

## 5.2.2 Chapter 61A Farm Lands

Farm land requires a minimum of five contiguous acres "actively devoted" to agricultural or horticultural use. These classifications include animals, fruits, vegetables, and forest products. To qualify as "actively devoted" a minimum of 500 dollars in gross sales income during the prior two years is required. One must apply to the Town Board of Assessors for consideration, and the status must be renewed every year. A reduced property tax is applied if approved. There are approximately 1207 acres of land classified under Chapter 61A Farm Lands in Marion.

## 5.2.3 Chapter 61 B Private Recreation

Private Recreation land must have a minimum of five acres that is left wild and/or maintained for wildlife habitat or used for recreational purposes by the public or a private non-profit group. One must apply to the Town Board of Assessors for consideration and the status must be renewed every year. A reduced property tax results if approved. There are 266 acres of lands in Marion that are classified as Chapter 61B Recreation Lands.

# Table 5-3 CH-61 Forest Land

# OF ACRES	LOCATION	OWNER	MAP/LOT#
287	Old Trail & Mill Street	Acushnet Saw Mills	Plan 27, Lots 6- 8, 17 Plan 28, Lots 1, 9-12A, 13
20	Point Road	Coolmar Limited Partnership	Plan 6, Lots 13, portion lot 31
239	Off 195, Parlowtown Road & Ridge Hill Road	D. Mahoney & Sons	Plan 27, Lots 1, 4, 5, 10, 10A Plan 28, Lots 2, 3 & 8
489	Great Hill Farm & Delano Road	Great Hill Trust	Plan 4, portions lots 1, 2 Plan 5, portion lot 21 Plan 6, Lot 12
19	County Road	Hambly	Plan 21, Lots 6C & 6E
38	Wareham Street	Hemitage Trust	Plan 12, Lot 28B, portion lot 28A
10	Delano Road	Puffin Realty Trust	Plan 7, Lots 57, 58, portion lot 43
16		Parlow Mill Farm	Plan 9, Lots 1, 2, 5, 6A, 6B, portion lot 6
84	Off RR Row	Solomon Trust	Plan 27, Lot 3
Total = 1202			

# Table 5-4 CH-61A Agricultural Land

# OF ACRES	LOCATION	OWNER	MAP/LOT#
14	County Road	Barboza Bogs	Plan 21, Lot 14A
15	Road & 7		Plan 21, Lots 1 & 7 Plan 22, Lot 2
10	Cross Neck Road	Cerkovitz	Plan 5, Lot 39
65	County Road & Point Road	Eagle Holt Co.	Plan 11, Lots 32, 32D & 32E
12	County Road	Farrell	Plan 22, Lot 25
144	Great Hill Farm & Delano Road	Great Hill Trust	Plan 4, portion lot 1 Plan 5, portion lot 21
251	Rochester Road	Hiller Bros. Bogs	Plan 22, Lots 1, 7, 8 & 10
23	Point Road	Howland Wood Lot	Plan 2, Lot 19
272	Perry Road	MCLT	Plan 21, Lot 2 Plan 22, Lots 3, 4, 9, 10 & 41
7	Front Street	Magnolia Bogs	Plan 23, portion lot 52
50	Converse Road	Merrow Farm	Plan 17, Lot 25
2	Point Road	Pina Bog	Plan 10, portion lot 11
10	County Road	RH Bogs	Plan 21, lot 6H, 6Z
5	Point Road	Rockwell CSA	Plan 9, Lot 6A & portion lot 6
6	Point Road	Stev. Briggs Bog	Plan 11, Lots 28, 28A & 29
67	Point Road	Tweedy & Barnes Bog	Plan 9, Lot 16
248	Route 195	White Eagle Bog	Plan 25, Lots 7 & 8 Plan 26, Lots 8 & 9 Plan 27, Lots 9, 15A & 16
6	County Road	Zimmer Bog	Plan 21, Lot 17
Total = 1207			

# **Table 5-5 CH-61B Recreation Land**

# OF ACRES	LOCATION	OWNER	MAP/LOT#
197	Point Road	Kittansett Club	Plan 1, Lots 1,
			1A, 1B, 1C, 1D,
			2, 3, 4, 5, 6, 7,
			8, 8A, 8B & 32
9	Bay Road Beach &	Piney Point Beach	Plan 2, Lots 1A
	Piney Point Road	Club	& 46
60	South Drive	Little Marion Golf	Plan 6, Lot 18
		Course	
Total Acres = 266			

# **Table 5-6 Chapter Lands Summary**

<u>Program</u>	Acreage
Chapter 61	1202
Chapter 61A	1207
Chapter 61B	266

**Total Chapter Lands = 2675 acres** 

# 5.2.4 Private Tax Exempt Land

While publicly owned property is the most highly protected from future development, private tax-exempt land does offer some protection. Types of private tax-exempt lands include those lands owned by not-for-profit corporations, such as housing authorities, religious institutions and charitable organizations. Although these uses are tax exempt, the land is privately owned, and the owners have the right to sell or develop this property for other uses. Currently in Marion, there are no tax-exempt land parcels.

# 5.3 Opportunity Areas

The existing Chapter lands represent a major portion of undeveloped land in Marion. The larger parcels represent both a large positive impact to the town if protected as open space, and a large negative impact if utilized for development. The Open Space Acquisition Commission should work with the Sippican Lands Trust and The Trustees of Reservations to develop a plan to acquire these properties given the 120-day notice period in the Chapter 61 statutes.

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Section 6
Community Goals

## 6.0 COMMUNITY GOALS

## 6.1 Description of Process

The Open Space Acquisition Commission has been working to update the 2004 Marion Open Space Conservation and Recreation Plan. Beals and Thomas, Inc. has assisted in the process by providing population statistics and wildlife and vegetation information in Marion. The Buzzards Bay Project has provided other information such as environmental concerns, the Town land inventory and other necessary information for this Open Space and Recreation Plan. Resident input was seen as crucial to developing a plan that would reflect the needs and desires of the people of Marion. To this end, a 10% random sample of all residents was mailed a "Marion Open Space and Recreation Survey" that focused on issues related to recreational facilities, environmental protection, town planning/zoning, and funding for open space and recreation projects. The response rate was approximately 60%. Preserving open space was identified as a priority issue for Marion residents. The data from the survey will be used to prioritize open space needs for the Town.

A public hearing was held May 11, 2005 to discuss the Open Space and Recreation Survey and the Draft Open Space and Recreation Plan. Copies of the draft Plan were sent to the Board of Selectmen, Town Library, Conservation Commission, Planning Board, Recreation Committee, Marine Resources Commission, Board of Health, Zoning Board of Appeals, Sippican Lands Trust and the regional planning agency, SRPEDD.

The general goals described below in this section, as well as the more refined "Goals and Objectives" (Section 8), and the "Five Year Action Plan" (Section 9), are the result of individual and collective efforts of members of the above listed groups.

## 6.2 Statement of Open Space and Recreation Goals

Based on the results of the Open Space and Recreation Survey from 2004, MOSAC identified seven general goals that are the focus of Marion's Open Space and Recreation Plan. They are as follows:

- **Goal 1:** Preserve 65% of Marion as permanently protected open space. (Currently, only 2% is protected. To achieve this goal, 3,600 acres must be added through various protection strategies, to the existing 2,300 open space acres.)
- **Goal 2:** Maintain current recreational opportunities and improve access where necessary.
- **Goal 3:** Maintain the current mix of uses for Marion's waters.
- **Goal 4:** Keep/improve the "curb appeal" of Marion's roads. (This involves ensuring an adequate vegetative buffer to maintain the aesthetic properties of Marion along roads and in commercial areas.)

**Goal 5:** Develop an Open Space Ethic for all Town board decision making.

**Goal 6:** Develop a plan for encouraging use of protected open space.

**Goal 7:** Further develop land acquisition plan.

Goals 4 and 5 are similar in character to recommendations put forth in the report submitted by the Marion Growth Management Committee. Except for the amount of open space desired by residents, the present goals mimic past goals. Marion residents still feel strongly about open space and recreation. There is a strong feeling among residents that Marion should maintain its current village character and overall aesthetic appeal, while at the same time protect open space and encourage appropriate commercial and residential development.

Those issues most important to the Town of Marion are prioritized in the "Five Year Action Plan" (Section 9), which will be used to implement the Plan's "Goals and Objectives" (Section 8).

Section 7 Analysis of Needs

# 7.0 ANALYSIS OF NEEDS

One section of the Massachusetts Executive Office of Environmental Affair's "Statewide Comprehensive Outdoor and Recreation Plan" (SCORP) identified planning issues considered important by administrators, but which were not being effectively addressed. The top five for southeastern Massachusetts are (in order of importance): "Development and expansion of recreation facilities; maintenance of recreation facilities; acquisition and protection of water supply areas; acquisition and protection of recreation areas; and acquisition and protection of conservation areas." Even though Marion's Open Space and Recreation Survey focused on issues specific to the Town, items identified as important by survey respondents are in line with the five items identified in the SCORP.

Many of the 2004 survey items identified as being important have appeared in past planning documents and citizen surveys. The results of the survey indicate that the top three activities that families enjoy in Marion are walking, swimming and enjoying views. Walking, swimming and jogging are the top three activities that families do the most of. Residents of Marion feel that the Town needs more permanently protected space, bike paths and sidewalks. These three entities were also marked as areas that need the most improvement in the Town. Residents indicated that the top three facilities in Town that need upgrading are Washburn Park, Sippican School Playground and the Town Hall Tennis courts. Also included in this list was the Point Road playground. A recreation entity that should be given the greatest attention indicated by the residents was a Town-to-Town bike bath. Residents also indicated that they would be willing to pay to use a year round swimming pool, a roller-skating rink, and a teenage center. Residents of Marion would be willing to support Town-to-Town bicycle paths, a sidewalk system in Town and a swimming pool through local taxes. Residents saw that the biggest problems facing marine resources are pollution from boats, pollution from septic systems, and pollution from runoff.

A comparison was made among the various planning documents and surveys produced in Marion since 1974 to determine recurring conservation/recreation themes, and what, if anything has been done to address those issues (the results can be found in Appendix C). Documents examined include the 1974 Master Plan and accompanying survey, the 1986 League of Women Voters survey, the 1989 Land Use Plan and accompanying survey, the 1989 Open Space Plan and accompanying survey, the 1998 Open Space Plan and accompanying survey, and the 2004 Open Space and Recreation Survey. Several issues have continued to crop up with each new plan or survey.

- 1. The two issues that have appeared more often than any others are the creation of bike paths and the creation of walking/hiking trails. Since the 1974 survey, Marion residents have consistently ranked bike paths as the Town's number one recreation need.
- 2. With each planning document and/or survey since 1974, restricting or prohibiting development in wet and flood hazard/high velocity wave zones has been proposed/supported.

- 3. The establishment of an historic district was proposed in 1974, 1986, 1989, 1998, and is again proposed in this plan.
- 4. Planting buffers along Route 6 and the establishment of a land bank and/or an open space commission have been supported over the years.

To date, Town action on these issues has been slow. Unfortunately, while Marion has adopted part of the above listed Master Plans, Land Use Plans, and Open Space Plans, they have only implemented a few ideas from each plan. A Town-sponsored growth management plan cited "lack of follow-through" and "rejection of specific bylaws at Town Meeting" as reasons for the deficiency in implementation (Marion Growth Management Committee, 1996).

Of the 65 issues identified in the comparison study, only eight are mentioned in the 1996 plan. Of the remaining 57 issues, only 25 have been implemented over the years, 11 of which involved water-based protection/recreation. However, of these 16, 12 have appeared only once or twice since 1974. In comparison, the bike path issue has appeared in eight of the nine 1974-1998 documents, and restricting development in wetland or flood hazard areas have been in seven of the nine documents.

The comparison study makes it clear that there are issues important to Marion residents and will continue to surface until they are addressed. The public forum associated with this Plan update will be beneficial for gathering input in the future.

## 7.1 Summary of Resource Protection Needs

Marion has many valuable land and water resources that should be carefully managed to ensure their long-term protection. The abundant acreage of forests, wetlands, waters and open space succinctly define the community and give it unique characteristics that set it apart from other places.

#### 7.1.1 Land Resources

### **Conservation Land**

Survey respondents strongly agreed that Marion should set aside funds to identify and preserve environmentally sensitive areas, such as wetlands, marine and endangered species habitats, woodlands and natural open spaces. They also indicated their support for placing restrictions on, or prohibiting altogether, future building in the floodplain zone. Requiring open space in all future developments was also strongly supported.

### **Recreation Land**

Several beach areas are in need of rehabilitation: Weweantic Beach-1 has been severely eroded by storm water runoff, and the beach area at Town Landing at Island Wharf should receive sand to improve its condition. Erosion on the steep bank of Point Road (after Planting Island Causeway) is a problem that could be

Marion, Massachusetts

rectified by the installation of a wooden stairway. Beach quality should be periodically monitored and preventive maintenance measures taken as necessary.

## 7.1.2 Water Resources

Survey results indicate that residents are concerned with water pollution issues, specifically pollution of the harbor from boats. While Marion has the fewest closures of marine areas due to pollution in Buzzards Bay, pollution is still an issue. Higher boat traffic in the summer results in precautionary seasonal harbor closings ("closed safety zones"). While Marion does have a pump-out station, grey water continues to be discharged directly into the water.

## **Water Supply**

Residents indicated in the survey that pollution from failed septic systems was the second most important environmental issue in the Town. Failed septic system contamination plus storm water runoff contamination have caused closure of the entire Sippican River to shellfishing. Two-thirds of the Weweantic River is subject to seasonal closure. Water in Marion's Water Supply Protection District in the northwest section of Town drains into the Sippican River. While this District is designed to protect Marion's only public water source, Town purchase of available land in this area (and implementation of subsequent conservation restrictions on such land) would also serve to protect the water supply, reduce pollution to the Sippican River and add to Marion's protected open space.

#### 7.1.3 Recreation

Marion is a coastal community, so the needs of the residents consist of the use of the water, beaches, and bike trails. The Town would benefit from the expansion and upgrading that could be done to these facilities. Results from the survey indicate that the residents need more walking paths, bike trails, and swimming facilities be it at the community's beaches or at a swimming pool.

# 7.2 Summary of Community's Needs

As with the rest of the U.S., Marion's elderly population segment (60+ years) is growing faster than its other age groups. Recreation needs of this group tend to be of a passive nature, such as walking, biking or enjoying nature. In fact, walking was listed in the survey as being the activity enjoyed most by people. The population under the age of fourteen is also growing. Needs specific to this age group also needs to be addressed such as youth and summer programs. Other top-listed popular activities were swimming, sunbathing, biking and walking in the woods. When asked to list the top five recreational facilities most in need of improvement, bike paths received the most votes, followed by open space with public access, wildlife habitat, sidewalks, and quiet seashore areas. Respondents indicated that top priority should be given to establishing nature and hiking trails, town to town bike paths and a sidewalk system in Marion, and said they would be willing to support those facilities though local taxes. (Results from a 1986 survey produced by the local League of Women Voters also indicated that these same items were

a high priority for Marion residents.) Both bike paths and the preservation of open space are addressed in the Five-Year Action Plan section.

The need for safe and adequate biking and walking areas is supported by the SCORP document: "Statewide, there is particular concern for biking and walking. Both activities have seen dramatic increases in popularity and will need additional, safe facilities to an increasing extent, particularly within areas that are close to the homes of participants."

Survey respondents also strongly supported the upgrading of three existing recreational facilities (out of 29 listed): the Point Road basketball courts, the tennis courts behind Town Hall, and the Point Road playground. However, when asked to rank the top three facilities "in greatest need of expansion or repair," they listed (in order) Sippican School Playground (now under construction), Planting Island Causeway beach, the tennis courts behind the library and Silvershell Beach. This Plan's Five-Year Action Plan addresses refurbishing both the tennis courts behind Town Hall and the addition of sand to Silvershell beach in 2008.

According to Section 504 of the Americans with Disabilities Act, some portion of programs or facilities offered under the jurisdiction of both the Conservation Commission and the Recreation Department should be accessible to those with disabilities. Recreation and conservation areas in Marion are generally without specific facilities or programs for the handicapped, and while this does not seem to have been an issue for the Town's population in the past, the percentage of Marion's disabled population over age 16 has risen from 1% in 1980 to 3.7% in 1990. This combined with the growing elderly population suggests that Marion should address this issue. Improving access for people with disabilities could be done through providing level pathways for wheelchairs in parks or on hiking trails, installing guardrails and access to beaches, or by establishing special recreation programs. The initiation of a bike path network that uses a smooth paved surface and removes curbs as obstacles should be the first step in this process.

Both the American Society of Planning Officials and the National Recreation Association have set national standard recommendations for recreation facilities, based on population size and density. The table below applies these national standards to Marion's recreation offerings (Source: Rochester Open Space Plan, 1989). (Marion's 1995 population was 4643.)

Table 7-1 Marion's Recreational Offerings, as Compared to National Requirements

Recreation	Activity Type	Minimum Standard	Applied to Marion Population	Facility
Beach	Swimming Picnic Boating	3 linear ft per 3% of population using at one time	420 linear ft	Planting Island Causeway, 1,100 linear ft Silvershell Beach, 900 linear ft Aucoot Cove, 1,200 linear ft Town Landing, 200 linear ft
Ballfield	All baseball	1 baseball and 2 softball fields per 6,000	1 baseball and 2 softball fields	Washburn Park, 4 ballfields Sippican School, 1 ballfield
Tennis Court	Tennis	1 court per 2,000	2 courts	Point Road Park, 1 court Sippican School, 2 courts
Athletic	Team Play and Practice	1.25 acres per 1,000	5.75 acres	Sippican School, 3 acres

(Marion residents also use many of the private beaches in town- some of which are small neighborhood beaches, other are beaches whose owners have never restricted property access for this site.)



**Photo 7-1:** Playground at Sippican School.

# 7.3 Management Needs, Potential Change of Use

### 7.3.1 Management

It is important for the various town bodies to work together on issues, to communicate properly among themselves. It is often the case that multiple committees/offices will be dealing with different aspects of the same issue without being aware of the others' involvement. Projects would proceed more smoothly, and more expeditiously, if Town committees/officials would strive for joint action among related groups. This could be facilitated through the adoption of the open space goals by the Town boards as part of their decision making process. In every action the boards take, the question of how each decision meets the open space goals of the town must be asked. When conflicts arise, the resolution must be based on a shared sense of the value provided by open space, and by communication. The problems associated with communication and interaction among the various Town boards is not peculiar to Marion or Town government. As with any corporation that wishes its employees to behave in a certain manner, training must be given to the employees to provide them with the skills to be successful. Job evaluations must also be performed to determine if this training is being utilized.

Marion is in need of a coordinated water quality monitoring effort. Water

quality and pollution is a major concern of the residents. A successful water quality strategy starts with monitoring. What the problems are, their severity and the possibility for remediation start with dipping a sampling bottle into the water. Currently the Board of Health, Shellfish Officer, and the Massachusetts Division of Marine Fisheries are performing this function. There has been no effort to pinpoint pollution sources and develop remediation plans since the disbanding of the group Save Our Seas. Monitoring could be accomplished a number of ways, either through a volunteer board, the hiring of a permanent full/part-time or seasonal person, or through the employment of an intern. Recurrent high nitrogen and fecal coliform levels in both fresh and salt water justify filling this position.

- To encourage long-term land ownership, the assessors should encourage enrollment in programs, such as Chapter 60, 61A, 61B or conservation restrictions. These programs lower taxes to the owner and provide benefits to the Town that the present under evaluation strategy does not provide.
- There are several parcels of land that may each benefit from the development of a management plan: Town Forest, Parlowtown Road, Smellie and Stinson Land, Frank Briggs Property and Brown Land. Natural resource inventories should be undertaken [perhaps by interns or volunteers] to determine if these parcels warrant management plans. A management plan was drafted, but never implemented for the Planting Island Causeway; this plan should be reviewed and executed, if feasible.
- When it is the Town purpose to use a parcel of land for passive, non-facility related, recreation or wildlife habitat, management responsibility should be given to the Open Space Acquisition Commission or the Conservation Commission. It was for this purpose that conservation commission and Acquisition Commission were created by the General Court and established by town meetings.
- There are some Town owned parcels not currently protected through either conservation or other restrictions; 32 of the 48 Town owned public parcels listed in the *Inventory of Lands of Conservation and Recreation Interest* are without conservation or recreation restriction. While it is assumed by many that some Town owned parcels fall under the category of open space simply because they lack development, without specific legal designation their protection in the future is not assured. Steps should be taken to correct this. These Town owned parcels are addressed later in this plan.

### 7.3.2 Threatened Areas

Threatened areas include those parcels with existing road frontage, due to the often unplanned (from a Town's perspective) ability to develop these parcels under the Approval Not Required provisions of the Subdivision Control Law, or through traditional subdivision approval processes. Sometimes these parcels

remain undeveloped for years and subsequent to change in ownership they become developed in a rather expeditious fashion. Additionally, Marion contains a substantial amount of Chapter 61 lands. While transfer or removal of these lands allows for the first right of refusal by the Town, an influx of Chapter 61 conversions and the funds necessary to purchase key open space parcels may leave the Town vulnerable to further development of these presently undeveloped lands.

## 7.3.3 Special Opportunities

Parcels noted in the inventory tables suggest that management to be transferred to the Open Space Acquisition Commission (or Conservation Commission) for Hiller Land, Bessie & Hiller Land, Henley-Lungren Lots, Parlow Land, Delano Land and Barnabas Trade.

The Town of Marion accepted the Community Preservation Act (CPA) at Town meeting last April. A Town-wide vote is anticipated on May 31, 2005 to see if the Town will vote to adopt the CPA. Marion presently has assesses a fee for contribution to the Land Bank. Under current conditions the amount provided to open space protection is approximately \$200,000 per year. If the CPA passes, the 2% tax levy for CPA funds will replace the Land Bank 2% tax levy, thereby maintaining current funding efforts.

Section 8
Goals and Objectives

# 8.0 GOALS AND OBJECTIVES

The following general goals are those identified in "Community Goals" (Section 6), and are followed by objectives that will drive the development of more specific recommendations in the "Five Year Action Plan" (Section 9). These goals and objectives were composed on the basis of the "Analysis of Needs" (Section 7) and broad public input received from local residents, through the Town-wide survey and during meetings of the MOSP Committee.

Goals	Objectives		
1. To have 65% of the Town of Marion as permanently protected open space.	a) Have Town or Sippican Land Trust (SLT) acquire fee simple interest or Conservation Restrictions (CRs) on important open space parcels.		
	b) Encourage conservation restrictions on private open space parcels that provide a public benefit.		
	c) Modify Zoning bylaws to require/encourage open space in residential, commercial, and industrial development.		
2. Keep the recreational opportunities we have, and improve access to them.	a) Encourage alternative transportation to recreational facilities.		
	b) Acquire and/or publicize neighborhood beaches.		
	c) Actively manage some areas to maintain specialized bird habitat.		
	d) Resolve management issues at Washburn Park.		
	e) Improve existing facilities.		
	f) Identify future facility needs.		
	g) Encourage the establishment of neighborhood pocket parks in the subdivision process.		
3. Maintain the current mix of uses for Marion's waters.	a) Reduce the greatest extent possible existing non-point pollution.		
	b) Eliminate grey water boat discharges to Sippican Harbor.		
	c) Avoid future storm water pollution problems.		
	d) Develop a plan that will identify and protect critical shellfish, scenic and recreational areas.		

4. Keep and improve the "curb	a)	Implement a planted buffer for new development.
appeal" of Marion's roads.	b)	Plant trees along main roads of the Town to soften the road edge, decrease road noise and add privacy to landowners.
	c)	Establish an historic district in the area of Old Landing and the lower village.
	d)	Adopt design criteria for commercial development.
5. Develop an Open Space Ethic for all Town board decision making.	a)	Communicate Open Space Survey results to Town boards.
	b)	Teach Town boards how to communicate within their own group.
	c)	Institute management structure to require communication between Town boards.
	d)	Appoint authority to review open space ethic/communication in the appointment process.
6. Develop a plan for encouraging use of protected open space.	a)	Include nature and hiking trails in each property management plan
	b)	Work with Circulation Committee to link properties with bike paths/sidewalk system
	c)	Link trails to planned Marion/Mattapoisett/Fairhaven bike path
	d)	Complete Rail trail from Mattapoisett to Washburn Park
	e)	Increase awareness of open space by publication of open space guidebook with SLT
7. Further develop land acquisition plan	a)	Work with SLT, TTOR, and MLCT to develop acquisition agreements to acquire temporarily hold properties that require immediate action (i.e. Chapter 61 properties).
	b)	Stay current with regional open space maps prepared by the Buzzards Bay Project Nation Estuary Program.
	c)	Work with the Mattapoisett Lands Trust, Rochester Lands Trust and Wareham Lands Trust on joint projects on town borders.

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d) Continue to look for acquisition opportunities to increase shore access.
e) Continue to look for acquisition opportunities in Aucoot Woods.
f) Continue to work with the Recreation Committee to find locations for future facilities

Section 9
Five-Year Action Plan

# 9.0 FIVE YEAR ACTION PLAN

This action plan builds on the "Goals and Objectives" (Section 8) by developing specific strategies to be completed by responsible parties, and assigning each a time frame in which to be completed in. The actions listed below are essentially steps that need to be taken to accomplish the outlined objectives, developed through input received from broad public outreach efforts by the Open Space and Recreation Planning Committee.

# May 2005:

- o Establish design criteria for commercial development.
- o Develop "road map" for establishment of CRs.
- o Communicate Open Space Survey results to town boards.

## June 2005:

- o Produce open space resource map on GIS.
- o Develop SLT & OSAC expertise in CR process for advice to landowners.
- o Establish & Coordinate funding mechanism between town and non-governmental organizations (SLT & TTOR).
- o Meet with SLT to discuss Transferable Development Rights (TDRs).
- o Meet with Housing Committee to discuss TDRs.
- o Meet with the Planning Board to discuss TDRs
- o Review and update acquisition criteria in 1998 plan.
- o Review Criteria Ranking.
- o Construct LID storm water demonstration site at Island Wharf.

# July 2005:

- o Establish priority list of land to acquire.
- o Identify receiving areas for TDRs.
- o Identify sending areas for TDRs.

## **August 2005**:

- o Apply for rail trail construction grant.
- o Complete plan for location and design of bike paths on County, Converse Point, Delano Route 6 and Route 105.
- o Have Open Space Acquisition Committee send mailings on CRs to targeted landowners when tax bills are sent, followed by personal contact.

## **October 2005:**

- o Do the following at a Special Town Meeting:
  - o Modify existing Zoning to allow for TDRs.
  - o Rewrite cluster bylaws so that people don't object to being next to them, etc.
  - o Change the percent wetland requirement in the existing cluster bylaw to a maximum lot size requirement (30,000 sq feet) to protect quality open space.

- o Provide incentives in the cluster bylaw to protect endangered species habitat.
- o Require cluster proposals when the lots developed exceeds 6 lots.
- o Require landscaped areas in all commercial/industrial developments through plan and site review by using a limit on the percent impervious.
- o Establish a Historic District in the Lower Village.

## 2006:

- o Identify top five inputs of bacterial contamination into Marion's waters.
- o Adopt uniform LID storm water controls for residential and commercial development through the Conservation Commission, Board of Health, and Planning Board.
- o Develop an Open Space ethic as part of the "corporate culture" of the Town.
- o Teach Town boards how to communicate within their own group.
- o Institute management structure to require communication between Town boards.
- o Appointing authority review open space ethic/communication in appointment process.
- o Adopt construction schedule for sidewalk system.
- o Send flier to homeowners about nitrogen pollution and organic lawn care alternatives.
- o Refurbish Point Road Playground.
- o Prepare resource map for Washburn Park showing wetland resources.
- o Prepare management plan for Washburn Park with Recreation Committee, Open Space Acquisition Commission and Washburn Park Trustees.
- o Identify ownership issues on town properties that require town meeting action.
- o Seek tree easements from landowners along Front Street, Route Six, Converse Road, Point Road, County Road, and Delano Road.
- o Do the following at a Special Town Meeting:
  - o Amend subdivision zoning and cluster development zoning to allow for recreation lots with no loss of development potential.
  - o Encourage, through density credits, the construction of playgrounds, tennis courts and basketball courts on recreational parcels.
  - o Accept subdivision road only if park is included.
  - Reduce density of housing in coastal floodplain through Floodplain Overlay District.
  - o Adopt land use regulations that limit the amount of impervious area in residential projects to 20%.
  - o Adopt Wetland Protection Bylaw to require setbacks from wetlands.

## 2007:

- o Mark shore access points.
- o Send bulk mailing to residents regarding location of shore access points.
- o Clean debris from skating pond at Washburn Park.
- o Identify specialized habitats in need of management.
- o Write management plan and apply for environmental permits.
- o Find steward through SLT or Mass Audubon to implement plan.
- o Determine causes of low dissolved oxygen level in Sippican Harbor and Hammett's Cove.

- o Develop and implement remediation plan.
- o Prepare management plan for Washburn Park with Recreation Committee, Open Space Acquisition Commission and Washburn Park Trustees.
- o Refurbish tennis courts behind Town Hall or find alternative site.
- o Plant trees along the main roads of the Town to soften the road edge, decrease road noise, and add privacy to landowners.

## 2008:

- o Identify future recreational facility needs.
- o Develop and implement remediation plans for bacterial contamination source to Marion waters that is most cost effective to control.
- o Develop resource map that will identify critical shellfish, scenic, and recreational resources.
- o Identify resource protection needs.
- o Inventory existing protection measures.
- o Plant trees along the main roads of the Town to soften the road edge, decrease road noise, and add privacy to landowners.
- o Add sand to Silvershell beach.

## 2009:

- o Develop protection measures where needed to for critical shellfish, scenic, and recreational resources.
- o Add sand to Planting Island Causeway Beach.
- o Expand the existing sewer system throughout the Hammett's Cove Watershed.

Section 10 Public Comments

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# 10.0 PUBLIC COMMENTS

Letters of review from state agencies and local groups follow.

Section 11 References

# 11.0 REFERENCES

314 CMR 4.00 "Surface Water Quality Standards";

Commonwealth of Massachusetts Division of Water Resources. Hydrologic DEP Waterways

Regulation Program;

Department of Housing and Community Development Community Profiles;

Executive Office of Environmental Affairs Buildout Analysis;

Marion Open Space and Recreation Plan, 1988;

Marion, Massachusetts; 2004 Affordable Housing Plan

Marion Shellfish Officer

Massachusetts Department of Environmental Protection;

Massachusetts Department of Revenue, Division of Local Services;

Massachusetts Division of Employment and Training;

MassGIS:

Massachusetts Institute for Social and Economic Research (MISER);

Natural Heritage and Endangered Species Program - Division of Fisheries and Wildlife;

Southeastern Regional Planning & Economic Development District;

Town of Marion, Assessor's Office;

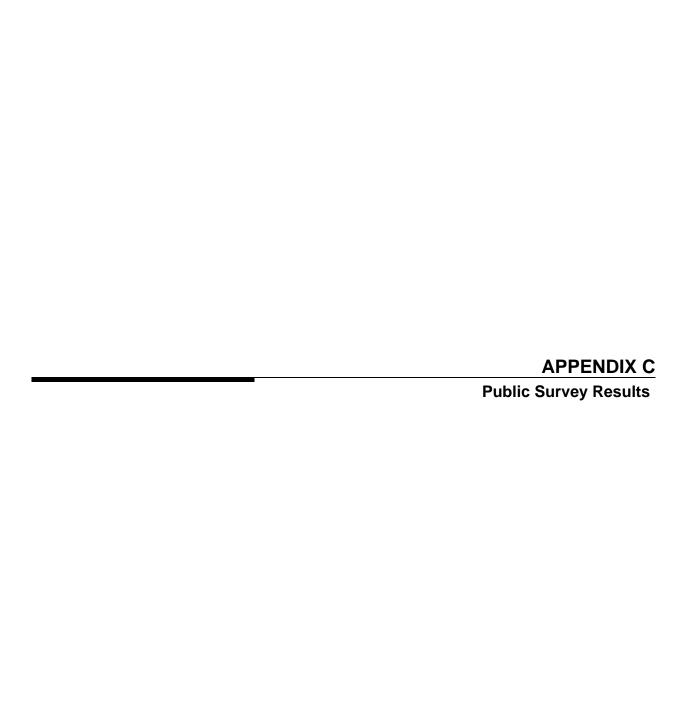
Town of Marion, Clerk's Office;

United States Bureau of the Census

Section 12 Figures









APPENDI	ΧE
Section 504: Handicapped Accessibil Self Evaluati	

ADA Access Self-Evaluation (Inventory of properties under the jurisdiction of recreation department or conservation commission):

Specific properties within the Town of Marion were evaluated for compliance with Section 504 standards in October 2004. Additionally, areas for improvements at certain sites were investigated. Certain sites have limited opportunities for improvements for persons with disabilities due to steep topography, geographic location or other impediment. Evaluation forms for each site reviewed have been included in this report.

The following sites were evaluated in conjunction with this report:

- Bird Island (CC1)
- Planting Island Causeway (CC2)
- Grassi Bog (OSAC)
- Silvershell Beach (MB1)
- Washburn Park (MR1)
- Point Road Park (MR2)

Also enclosed within this report is a copy of letter from Marion's Town Administrator and ADA Coordinator stating that Town employment practices comply with the Americans with Disabilities Act regulations and requirements.