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**Wareham Open Space  
and  
Recreation Plan  
2004 - 2009**

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**Fearing Hill Conservation Area**  
Watercolor by Wareham Artist Robert Scott

Town of Wareham  
54 Marion Road  
Wareham, MA 02571  
January 15, 2004



# TABLE OF CONTENTS

|      |  |    |
|------|--|----|
| I.   | Executive Summary                            | 1  |
| II.  | Introduction                                 | 1  |
|      | A. Statement of Purpose                      | 1  |
|      | B. Planning Process and Public Participation | 2  |
| III. | Community Setting                            | 4  |
|      | A. Regional Context                          | 4  |
|      | B. History of the Community                  | 4  |
|      | C. Population Characteristics                | 6  |
|      | i.) General Characteristics                  | 6  |
|      | ii.) Population Projections                  | 7  |
|      | iii.) Population Subgroups                   | 8  |
|      | iv.) Population Density                      | 9  |
|      | D. Economic Characteristics                  | 10 |
|      | i.) Employment in Wareham                    | 10 |
|      | ii.) Unemployment in Wareham                 | 11 |
|      | iii.) Income Characteristics                 | 11 |
|      | E. Growth and Development Patterns           | 12 |
|      | i.) Patterns and Trends                      | 12 |
|      | ii.) Infrastructure                          | 13 |
|      | a.) Highways                                 | 13 |
|      | b.) Rail Service                             | 14 |
|      | c.) Water Supply                             | 14 |
|      | d.) Sewage Disposal                          | 15 |
|      | iii.) Long-Term Development Patterns         | 16 |
|      | a.) Zoning                                   | 16 |
|      | b.) Build-out Scenario                       | 16 |
|      | iv.) Subdivisions and Growth                 | 17 |
| IV.  | Environmental Inventory and Analysis         | 19 |
|      | A. Geology, Soils and Topography             | 19 |
|      | i.) Topography and Geology                   | 19 |
|      | ii.) Soils                                   | 19 |
|      | iii.) Barrier Beaches                        | 23 |
|      | B. Landscape Character and Vegetation        | 25 |
|      | C. Water Resources                           | 25 |
|      | i.) Surface Water                            | 25 |
|      | ii.) Salt Marshes                            | 26 |
|      | iii.) Flood Hazard Areas                     | 26 |
|      | iv.) Freshwater Resources                    | 26 |
|      | v.) Plymouth Aquifer                         | 27 |
|      | D. Vegetation                                | 29 |
|      | i.) Forestland                               | 29 |
|      | ii.) General Inventory                       | 29 |

|       |   |    |
|-------|---|----|
| E.    | Fisheries and Wildlife                                    | 30 |
| i.)   | General Inventory   | 30 |
| a.)   | Shellfish   | 30 |
| b.)   | Finfish   | 31 |
| c.)   | Wildlife  | 32 |
| ii.)  | Rare, Threatened, and Endangered Species                  | 32 |
| F.    | Scenic Resources and Unique Environments                  | 35 |
| i.)   | Historic Structures                                       | 36 |
| G.    | Environmental Problems                                    | 37 |
| i.)   | Hazardous Waste Sites                                     | 37 |
| ii.)  | Landfill  | 38 |
| iii.) | Erosion   | 39 |
| iv.)  | Flooding  | 39 |
| v.)   | Sedimentation   | 39 |
| vi.)  | Development Impacts                                       | 40 |
| vii.) | Ground and Surface Water Pollution                        | 41 |
| vii.) | Other Issues  | 41 |
| V.    | Inventory of Lands of Conservation & Recreation Interest  | 42 |
| A.    | Introduction  | 42 |
| i.)   | Permanently Protected Public & Private Non-Profit Parcels | 42 |
| ii.)  | Unprotected Public Parcels                                | 42 |
| iii.) | Private Parcels   | 43 |
| B.    | Protected Public & Non-Profit Parcels                     | 44 |
| C.    | Unprotected Public Parcels                                | 54 |
| D.    | Private Unprotected Recreation Lands                      | 56 |
| E.    | Temporarily Protected Private Parcels                     | 57 |
| VI.   | Community Goals   | 73 |
| A.    | Description of Process                                    | 73 |
| B.    | Statement of Open Space and Recreation Goals              | 74 |
| VII.  | Analysis of Needs   | 75 |
| A.    | Summary of Resource Protection Needs                      | 75 |
| B.    | Summary of Community Needs                                | 75 |
| C.    | Management Needs and Potential Changes of Use             | 76 |
| VIII. | Goals and Objectives                                      | 78 |
| A.    | Progress Report from 1997 Open Space Plan                 | 78 |
| B.    | Recommended 2003 Action Plan                              | 78 |
| IX.   | Action Plan   | 81 |
| X.    | Public Comments   | 91 |
| XI.   | References  | 97 |
| XII.  | Appendices  | 99 |

*Appendix A: American Disabilities Act, Section 504 Self-Evaluation*

*Appendix B: Open Space Committee Survey – April 2003 and 2003 Wareham Open Space Survey Summary*

*Appendix C: Summary of April 2003 Open Space Survey*

**Tables:**

|  |    |
|--|----|
| Table 1: Wareham Population Growth, 1900-2000  | 6  |
| Table 2: SRPEDD REGION POPULATION, 1960-2020   | 8  |
| Table 3: Comparison of Populations by Age by Percent                                   | 9  |
| Table 4: Population Density (People Per Square Mile)                                   | 9  |
| Table 5: Employment Trends in Wareham  | 11 |
| Table 6: Income Characteristics Comparison Between 1990 – 2000                         | 12 |
| Table 7: State Designated Barrier Beaches in Wareham                                   | 24 |
| Table 8: Ponds Greater than 10 Acres in Size in Wareham                                | 28 |
| Table 9: Comparison of Shellfish Catch Data for Wareham, 1990-2002                     | 31 |
| Table 10: Rare Plants and Animals on the National Heritage and Endangered Species List | 33 |
| Table 11: DEP Listed Hazardous Waste Sites in Wareham, June 1, 2003                    | 37 |
| Table 12: Land Use in Wareham, 1971-1999   | 42 |
| Table 13: Conservation Restrictions in Wareham as of June 2003                         | 44 |
| Table 14: Protected Public and Non-Profit Parcels of Land in Wareham: May 2003         | 45 |
| Table 15: Unprotected Public Parcels Owned by the Wareham Parks Department             | 54 |
| Table 16: Unprotected Public Parcels Owned by the Wareham Maintenance Dept.            | 55 |
| Table 17: Private Unprotected Recreational Land in Wareham: May 2003                   | 56 |
| Table 18: Chapter 61, 61A, and 61B Lands in Wareham: May 2003                          | 59 |

***Maps:***

|  |     |
|--|-----|
| Map 1: Town of Wareham Land Use, 1999                                    | 12A |
| Map 2: Town of Wareham Aquifer Yields & Drinking Water Supply, July 2003 | 14A |
| Map 3: Town of Wareham Parcels and Municipal Sewer Service, July 2003    | 14B |
| Map 4: Town of Wareham Zoning Map, 1999                                  | 16A |
| Map 5: Town of Wareham General Soils Map, August 2003                    | 20A |
| Map 6: Town of Wareham Barrier Beaches, 2003                             | 24A |
| Map 7: Town of Wareham Water Resources & Coastal Watersheds, July 2003   | 26A |
| Map 8: Town of Wareham Critical Habitat Areas, 1999-2001                 | 32A |
| Map 9: Town of Wareham Scenic & Historic Resources, June 2003            | 36A |
| Map 10: Town of Wareham Protected Open Space, June 2003                  | 44A |
| Map 11: Town of Wareham Unprotected Open Space, June 2003                | 56A |
| Map 12: Town of Wareham Five-Year Action Plan, July 2003                 | 80A |



## **I. EXECUTIVE SUMMARY**

The Wareham Open Space and Recreation Plan is formulated on the premise that preserving parcels of land as open space and providing recreational facilities for town residents is an integral component of preserving town character, natural resource values, and the overall quality of life for Wareham residents. Wareham is blessed with not only a diverse and abundant natural landscape, but an extremely scenic one as well. From its fringing saltmarshes and estuarine systems, to the rivers that feed them, to the cranberry bogs which dominate Wareham's northern reaches, the town is connected and dependent upon water. Yet very little of the watershed land area supporting these areas has been preserved as permanent open space. In fact, of all the towns bordering on Buzzards Bay, Wareham has the least amount of protected open space, and the open space that may be permanently protected is disappearing rapidly. The next five years will be critical for preserving open space here.

Recognizing the preciousness of Wareham's resources and the encroaching forces of development that are threatening them, this plan urges the Town to accelerate its efforts to protect Wareham's river corridors, ponds, and coastline, and in Section IX of the plan suggests specific actions for doing so. The plan recommends that nitrogen-reducing septic systems be required for all building that takes place in the watersheds of the Wareham and Weweantic Rivers and in the Zone 2 areas of our drinking water aquifers.

While it is extremely important to protect Wareham's inland and coastal natural resources, it is also important for the public to have access to these areas. Accordingly, a primary objective of the Plan is to acquire selected parcels of land to facilitate resident access to Wareham's freshwater ponds and coastal areas. Among the parcels recommended for acquisition are those around Parker Mills Pond, Dick's Pond, Blackmore Pond, and Agawam Pond.

Hiking and biking trail systems are incorporated into the plan to connect the various sections of the town. It is planned to utilize abandoned railroad tracks in West Wareham as part of the trail system. A comprehensive trail network was formulated as part of the previous open space plan and has been expanded in this plan. This trail network will extend over adjoining conservation properties held by various conservation organizations, the town forest, and other available corridors. A key recommendation carried over from the last plan is to complete the hiking trail from Little Harbor Beach to Minot Forest. A prioritized list of recreation facilities, to be upgraded or constructed, is one of the recommended actions within the plan. Playgrounds and athletic fields throughout the town are included on this list.

The five-year action plan in Section IX outlines a timetable for the actions necessary to accomplish the goals of this plan.

## **II. INTRODUCTION**

## **A.) Statement of Purpose**

The purpose of this Open Space and Recreation Plan is to focus the efforts of all town organizations, agencies or individuals having an interest in open space and recreation in order to better orchestrate the preservation and enhancement of our natural resources in the face of our community's continued growth.

This Plan is a revision of the 1997-2002 Wareham Open Space and Recreation Plan. Wareham has a history of planning for its future and with each step we take, new visions for open space, water resource protection, protected wildlife habitat areas, and expanded recreation areas become part of the plan.

The 2004 Wareham Open Space and Recreation Plan will organize and prioritize these new visions so that future decisions concerning these issues will have the benefit of the forethought that went into this plan.

## **B.) Planning Process and Public Participation**

The Wareham Open Space and Recreation Plan was prepared by the town's Open Space Committee working with the town's Conservation Administrator, Recreation Director, and Planning Director. The members of the Open Space Committee are:

|                    |                     |
|--------------------|---------------------|
| Anne Campbell      | Donald Hall         |
| Ted DuMoulin       | Marjorie Teitelbaum |
| Nicholas Memoli    | Edward Pacewicz     |
| Cathleen Longfield |                     |

The data contained in this plan was obtained from a number of websites, including those of the Southeastern Regional Planning and Economic Development District, the U.S. Census Bureau, the State of Massachusetts, and various Town offices, including the Assessor's Office, the Selectmen's Office, the Water Departments, the Harbormaster's Office, and others. In addition, members of the committee consulted with experts in forestry, marine resources, watershed and coastal preservation efforts.

In the fall of 2001, the Community Preservation Act (CPA) was approved by 75 percent of Wareham voters who participated in a town referendum. To our knowledge, no other town in the Commonwealth has passed the CPA by a margin of this magnitude. This large mandate reflects an overwhelming desire of Wareham residents to protect Wareham's remaining precious open space before it is consumed by urban sprawl. At the fall town meeting following the approval of the CPA, a survey was conducted by the Community Preservation Committee to determine the specific wishes of residents for CPA expenditures. The Open Space Committee carefully reviewed this survey, which is included as Appendix A of this report. The survey indicates that the primary desire of town residents is to protect open space, followed by expenditures for historic preservation, and then affordable housing.

An Open Space Summit was held on April 5, 2003, at the Old Methodist Meeting House in Wareham. At this meeting were representatives of the Coalition for Buzzards Bay, the Wareham Conservation Commission, the Wareham Board of Selectmen, the Town Planner, the Wareham Community Preservation Committee, the Minot Forest Commission, the Onset Protective League, the Wareham and Onset Water Districts, the Wareham Land Trust, the Wildlands Trust of Southeastern Massachusetts, and the Manomet Center for Conservation Science. This meeting was held, in large measure, to obtain ideas and input for this plan. It was sponsored by the Wareham Land Trust and facilitated by the Coalition for Buzzards Bay. Fifty-nine individuals were invited to this meeting and approximately 45 attended.

A recurring theme of this summit was that Wareham, being a seaside community, needs to be protective of water: the groundwater that supplies the town with its drinking water, and the bay, tributaries, marshes, and ponds that are crucial to the environmental and economic health of the community. Many participants noted that shellfishing and water-related recreational activities are vital to the survival of Wareham. Other high priorities at this meeting were the protection of wildlife habitat and the need for more walking and biking trails. Participants also stressed that the town must continue to address the need to provide for open space with all future development.

At the town meeting held on April 28-29, 2003, the Open Space Committee asked meeting attendees to fill out another survey to help gauge resident thinking on open space issues in the community. One-hundred and fifty-nine people filled out the survey, which is included as Appendix A.

The results of the survey indicated that:

- The public is very concerned about protecting our water supply, waterways, and wildlife habitat.
- Most people would like to see additional recreational facilities for both adults and children.
- There is a great deal of support for protected conservation areas, not only for biking and hiking, but also for wildlife habitat. The areas most desired for protection are those areas along the coast and inland waterways, and those areas that are part of our aquifers. Most people favor a combination of public and private action to accomplish these goals.

Many informal discussions were also held throughout the process with friends, neighbors, town officials, and others interested in voicing their opinions. Information obtained from all sources was analyzed and incorporated into the plan. Every effort was made to involve as many citizens as possible in updating this plan.

In developing the five-year action plan, the committee relied upon assistance from various town boards and agencies for their recommendations. Since this was a town effort, as large a representation as possible was involved with the final result.

### **III. COMMUNITY SETTING**

#### **A.) Regional Context**

The Town of Wareham is located in southeastern Massachusetts, situated at the head of Buzzards Bay near the southern end of the Cape Cod Canal. While Wareham is part of Plymouth County, it also borders the Town of Bourne in Barnstable County. Wareham is about 17 miles to the northeast of New Bedford, 16 miles to the south of Plymouth Center, 50 miles to the south of Boston and 35 miles to the west of Hyannis.

Wareham is traversed by a number of major highways, including Routes 6, 28, I-195 and I-495/25, which funnel a large amount of Cape Cod-bound traffic through Wareham. This traffic is often funneled onto the combined Route 6/28 (Cranberry Highway) in Wareham and Bourne.

Wareham shares various resources with its neighboring towns. The river systems that flow through Wareham originate in other towns. The Weweantic River, for example, is utilized extensively by the Cranberry Industry in Carver and Wareham. The flow of water in this river is controlled to accommodate the needs of the cranberry growers during the different phases of the growing seasons. Communication is necessary among the growers along the river to ensure that water resources are managed properly. Because Wareham is downstream, pollutants introduced into the river in Carver are passed into Wareham.

#### **B.) History of the Community**

Native Americans were the first settlers of the Wareham area. It is probable that groups of Indians migrated to coastal areas during the spring and summer and returned to less exposed inland encampments during the winter. The first European settlement in Wareham occurred in the late seventeenth century in the vicinity of Agawam Cemetery (c. 1685). An additional settlement was established in South Wareham, near the junction of the Weweantic River and Mary's Pond Road, and scattered homes were established on Cromesett Neck and Great Neck. The town of Wareham was incorporated in 1739 as a result of the merger of a part of Rochester and the Agawam Plantation of Plymouth.

The economy of Wareham up to 1800 revolved primarily around agriculture and shipbuilding. The ships "Pocahontas," "Jubilee," "Wareham," "George Washington," and "Republic," and a number of smaller vessels for the coastal trade, were built here. Wareham resident, Captain John Kendrick, a significant historical figure, was in command of the "Columbia." On her maiden voyage, the "Columbia" opened trade with China via the Pacific Northwest. The whaling industry also grew during this period in Wareham, Plymouth and Dartmouth. In the early 19<sup>th</sup> century, the Industrial Revolution stimulated several diverse industries in the area, such as hollow ware, cotton and paper. Because of its plentiful bog iron, Wareham became the center for the production of nails and other iron products. By 1822, I & J Pratt & Co. had built a small rolling mill at the site of the present day Tremont Nail Company. At almost the same time, Bartlett Murdock established the Washington Ironworks on the Weweantic in West Wareham. The Tremont Nail Company is still a manufacturing firm in Wareham today. The peak of the nail industry appears to have been reached in 1855 when 860 men working in 7 to 8 mills produced over \$867,000 worth of nails, hoops, and

iron bar.

Iron from the bogs was also used to make hollowware. Hollowware was first manufactured in Wareham in blast furnaces. The first one was built in 1805 on the Weweantic River about a half-mile from the Tremont Dam.

Cranberry growing became an important industry in the latter half of the 19<sup>th</sup> century. One of the earliest known bogs was constructed on White Island (c. 1860). The Hayden Cranberry Separator Mfg. Co., a cranberry equipment manufacturer, was formed in 1895. An early example of a cranberry preserving factory was operated by R.C. Randall (1898-1901). By 1907, the year when Marcus Urann formed the United Cape Cranberry Company, 37 growers were listed in the town directory. Nine years later this had increased to 42 growers.

Onset's shores were much occupied with salt making (1775-1825), from which tradition says, it acquired its early name "Old Pan." This name probably came about because, when the industry was abandoned, some of the old pans were left where they happened to lie. Children of the 1860s and later delighted in picnicking at "Old Pan" (Shell Point).

The impetus for resort development in Wareham was provided by the establishment of the Onset Bay Grove Association in 1877. The association created a campground on Onset Bay and sold building lots for summer residences. In 1883-1884, 150 summer cottages were built.

## C.) Population Characteristics

### i.) General Characteristics

Throughout the 1900s, Wareham's population grew steadily, from 3,342 at the beginning of the century to more than 20,000 by its end. The population grew dramatically during the 1971-1980 diennial, when growth was more than 60 percent. The following diennial saw a significant drop in population growth to a mere 4 percent from 1980 to 1990. Table 1 below, shows the trend in population growth from 1900 to the present.

**Table 1: Wareham Population Growth 1900-2000**

| Year | Total Population | Numerical Change | Percent Change |
|------|------------------|------------------|----------------|
| 1900 | 3,432            |                  |                |
| 1910 | 4,102            | 670              | +19            |
| 1920 | 4,415            | 313              | +8             |
| 1930 | 5,686            | 1,271            | +29            |
| 1940 | 6,364            | 678              | +12            |
| 1950 | 7,569            | 1,206            | +19            |
| 1960 | 9,461            | 1,891            | +25            |
| 1970 | 11,492           | 2,031            | +21            |
| 1980 | 18,457           | 6,965            | +61            |
| 1990 | 19,232           | 775              | +4             |
| 2000 | 20,335           | 1,103            | +6             |

*Source: Southeastern Regional Planning And Economic Development District, 2003.*

Population change can be attributed to natural changes (the number of births in comparison to the number of deaths) and migration. In the decade from 1971-1980, Wareham experienced significant in-migration. It's apparent that the in-migration pattern changed from 1980 through 2000 with out-migration now equal to or exceeding in-migration.

Modest growth over the last decade may be attributed to a variety of economic and social conditions. The most prominent and likely cause was the completion of interstate highway linkage to Cape Cod. The highway once by-passed Route 6, Wareham's major commercial center, which caused many businesses to fail and tourists to seek newer destinations further out on Cape Cod.

Other factors which may have contributed to slow growth rate are the lack of an industrial

employment base, excessive commuting distance to Boston, a depressed cranberry industry, and the lack of undeveloped land near the ocean.

Overall, population density in Wareham is low to moderate. West Wareham is basically rural, with scattered subdivisions, as is the Great Neck area and almost the entire town north of Route 495. Wareham Center is a residential village of moderate density. One area of high density is Onset Village, in which most cottages are situated on lots of .1 acre or smaller. Onset was conceived as a summer community in the early part of the 20<sup>th</sup> century, but most dwellings are now occupied year-round. This change has precipitated a need for more recreational facilities in the area.

Other neighborhoods with fairly high population density include Swifts Beach, Rose Point, Weweantic Shores, and Parkwood Beach. The Shangri-La area, situated in the northeast corner of the community, is a large substandard subdivision platted in the 1940s. Many of the lots are undeveloped, and the growth potential of the neighborhood is controlled by the lack of municipal sewer. In recent years, small lots in Shangri-La that have been acquired through tax title have been sold to neighbors with covenants placed on them prohibiting building, except for a septic system, a garage, or a shed.

#### *ii.) Population Projections*

The Southeast Regional Planning and Economic Development District (SRPEDD) projects that Wareham's population will grow to 21,701 by the year 2010, and then increase to 23,068 by the year 2020 (See Table 2). The SRPEDD projections are land-use oriented. Population in 2010 was calculated based on land availability in the town of Wareham and recent growth trends.

**Table 2: SRPEDD Region Population, 1960-2020**

|                 | 1960    | 1970    | 1980    | 1990    | 2000    | 2010*   | 2020*   | 2030*   |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Acushnet        | 5,755   | 7,767   | 8,704   | 9,554   | 10,161  | 11,581  | 13,001  | 14,421  |
| Attleboro       | 27,118  | 32,907  | 34,196  | 38,383  | 42,068  | 46,088  | 50,108  | 54,128  |
| Berkley         | 1,609   | 2,027   | 2,731   | 4,237   | 5,749   | 7,109   | 8,469   | 9,829   |
| Carver          | 1,949   | 2,420   | 6,988   | 10,590  | 11,163  | 12,443  | 13,723  | 15,003  |
| Dartmouth       | 14,607  | 18,800  | 23,966  | 27,244  | 30,666  | 34,166  | 37,666  | 41,116  |
| Dighton         | 3,769   | 4,667   | 5,352   | 5,631   | 6,175   | 7,195   | 8,215   | 9,235   |
| Fairhaven       | 14,339  | 16,332  | 15,759  | 16,132  | 16,159  | 16,939  | 17,719  | 18,499  |
| Fall River      | 99,942  | 96,898  | 92,574  | 92,703  | 91,938  | 94,508  | 97,078  | 99,648  |
| Freetown        | 3,039   | 4,270   | 7,058   | 8,522   | 8,472   | 9,642   | 10,812  | 11,982  |
| Lakeville       | 3,209   | 4,376   | 5,931   | 7,785   | 9,821   | 11,741  | 13,661  | 15,581  |
| Mansfield       | 7,773   | 9,939   | 13,453  | 16,568  | 22,414  | 25,064  | 27,714  | 30,364  |
| Marion          | 2,881   | 3,466   | 3,932   | 4,496   | 5,123   | 5,953   | 6,783   | 7,613   |
| Mattapoisett    | 3,117   | 4,500   | 5,597   | 5,850   | 6,268   | 6,848   | 7,428   | 8,008   |
| Middleborough   | 11,065  | 13,607  | 16,404  | 17,867  | 19,941  | 22,401  | 24,861  | 27,321  |
| New Bedford     | 102,477 | 101,777 | 98,478  | 99,922  | 93,768  | 95,498  | 97,228  | 98,958  |
| N. Attleborough | 14,777  | 18,665  | 21,095  | 25,038  | 27,143  | 29,723  | 32,303  | 34,883  |
| Norton          | 6,818   | 9,487   | 12,690  | 14,265  | 18,036  | 20,266  | 22,496  | 24,726  |
| Plainville      | 3,810   | 4,953   | 5,857   | 6,871   | 7,683   | 8,553   | 9,423   | 10,293  |
| Raynham         | 4,150   | 6,705   | 9,085   | 9,867   | 11,739  | 13,809  | 15,879  | 17,949  |
| Rehoboth        | 4,953   | 6,512   | 7,570   | 8,656   | 10,172  | 12,262  | 14,352  | 16,443  |
| Rochester       | 1,559   | 1,770   | 3,205   | 3,921   | 4,581   | 5,741   | 6,901   | 8,061   |
| Seekonk         | 8,399   | 11,116  | 12,269  | 13,046  | 13,425  | 14,225  | 15,025  | 15,825  |
| Somerset        | 12,196  | 18,088  | 18,813  | 17,655  | 18,234  | 19,084  | 19,934  | 20,784  |
| Swansea         | 9,916   | 12,640  | 15,461  | 15,411  | 15,901  | 16,991  | 18,081  | 19,171  |
| Taunton         | 41,132  | 43,756  | 45,001  | 49,832  | 55,976  | 60,616  | 65,256  | 69,896  |
| Wareham         | 9,461   | 11,492  | 18,457  | 19,232  | 20,335  | 22,395  | 24,455  | 26,515  |
| Westport        | 6,641   | 9,791   | 13,763  | 13,852  | 14,183  | 16,513  | 18,843  | 21,173  |
| District Total  | 426,461 | 478,728 | 524,389 | 563,130 | 597,294 | 647,354 | 684,053 | 747,474 |

\* Note: Numbers for 2010 and 2020 are SRPEDD projections. (See [www.srpedd.org/Factbook.pdf](http://www.srpedd.org/Factbook.pdf))  
Source: U.S. Census

### *iii.) Population Subgroups*

The racial composition of Wareham's population, as of 2000, is predominantly white, with 2,063 non-whites (10%) identified by the SRPEDD Fact Book (See [www.srpedd.org/Factbook.pdf](http://www.srpedd.org/Factbook.pdf)). These include 910 Black or African Americans, 224 American Indian or Alaska Native, 148 Asians, and 1,528 others. This category is probably comprised mostly of Cape Verdeans since this group is classified by personal preference.

Change in the age structure of Wareham's population reflects both national and local trends. The proportion of population in Wareham under age 17 has decreased reflecting the decline in the birth rate. The population over 65 has decreased slightly to 16 percent of the total population while the

population aged 25 to 44 has increased, which is related to the in-migration of new families in town. Wareham has a larger elderly population than neighboring towns. The population of citizens over 65 is one-third higher in Wareham than in Plymouth County (i.e., 16 percent of the population for Wareham compared to 11.8 percent of the population for Plymouth County).

**Table 3: Comparison of Populations by Age by Percent**

|           | Wareham<br>1980 | Wareham<br>1990 | Wareham<br>2000 |
|-----------|-----------------|-----------------|-----------------|
| Under 17  | 30              | 28              | 25              |
| 18 to 24  | 10              | 9               | 6               |
| 25 to 44  | 22              | 24              | 28              |
| 45 to 64  | 21              | 20              | 25              |
| 65 & Over | 17              | 18              | 16              |

*Source: Southeastern Regional Planning and Economic Development District Fact book.*

*iv.) Population Density*

The population density in Wareham is 546 persons per square mile. The number of persons per square mile has been steadily increasing over the past quarter of a century throughout the region.

**Table 4: Population Density (People Per Square Mile)**

|               | Square<br>Miles | 1970 | 1980 | 1990 | 2000 |
|---------------|-----------------|------|------|------|------|
| Bourne        | 52.81           | 239  | 263  | 304  | 458  |
| Carver        | 42.98           | 56   | 163  | 246  | 281  |
| Marion        | 14.60           | 237  | 269  | 308  | 362  |
| Plymouth      | 133.98          | 189  | 365  | 443  | 536  |
| Rochester     | 33.82           | 52   | 95   | 116  | 100  |
| WAREHAM       | 37.34           | 308  | 494  | 515  | 546  |
| SRPEDD        | 780.3           | --   | --   | --   | 743  |
| Massachusetts | 8,123.83        | 705  | 706  | 741  | 810  |

*Source: SRPEDD Fact Book and U.S. Census Bureau*

## **D. Economic Characteristics**

### *i.) Employment in Wareham*

Wareham's economy derives from a mix of industrial, commercial, service, and agricultural activities. The total labor force in 2001 was 9,156 people, and 6,805 people were employed within the community. In this respect, Wareham is a sending community, meaning more people commute from Wareham to work than travel to the community for work.

Three industrial parks are located within the Town, employing more than 300 people. Wholesale and retail trade employed 2,654 people while the service sector employed 2,016, easily the largest employment sectors in the local economy. Jobs in retail and services are generally considered to be lower-paying types of employment. The cranberry industry accounts for nearly all of Wareham's agricultural employment. Indeed, the community has more than 1,500 acres of cranberry bogs, making it the second largest cranberry producer in Massachusetts after neighboring Carver. The cranberry industry has been depressed for the past 5 years and great uncertainty exists with respect to the future of the cranberry industry in Wareham. In recent years, the price to cranberry growers has not covered their production costs and some cranberry growers have left their bogs idle or gone out of business altogether. The largest cranberry grower in Wareham, the A.D. Makepeace Company, has proposed developing thousands of acres of land for both residential and commercial use. At the April 2004 Town Meeting, the A.D. Makepeace Company was given permission to develop a Business Development Overlay District which would allow the company to develop an office park and retail center on an 875-acre parcel located at the intersection of Routes 195 and 495 in West Wareham. The cranberry industry is very important to Wareham's open space plan. Cranberry growers provide much of the open space in the outskirts of Wareham. The inventory section of this report details open space protected by the cranberry industry. A rule of thumb for open space is a 2:1 open space to bog ratio; that is two acres of open space are protected for every acre of bog in production. Open space provided by the cranberry industry is not permanently deeded open space. Unless land is permanently deeded open space the owner can develop the property at any time.

**Table 5: Employment Trends in Wareham**

|   | <b>1980</b>  | <b>1990</b>  | <b>2001</b>  | <b>Change<br/>1990-2001</b> | <b>% Change<br/>1990-2001</b> |
|---|--------------|--------------|--------------|-----------------------------|-------------------------------|
| Agriculture, Fishing & Forestry             | 238          | 222          | 127          | -95                         | -43%                          |
| Contract Construction                       | 105          | 162          | 114          | -48                         | -30%                          |
| Manufacturing                               | 212          | 542          | 723          | 181                         | 33%                           |
| Transportation, Communications, & Utilities | 174          | 695          | 512          | -183                        | -26%                          |
| Wholesale & Retail Trade                    | 1,140        | 1,783        | 2,654        | 871                         | 49%                           |
| Finance, Insurance, & Real Estate           | 168          | 137          | 115          | -22                         | -16%                          |
| Services                                    | 712          | 1,511        | 2016         | 505                         | 33%                           |
| Government                                  | 685          | 562          | 542          | -20                         | -4%                           |
| <b>TOTALS</b>                               | <b>3,434</b> | <b>5,614</b> | <b>6,805</b> | <b>1191</b>                 | <b>21%</b>                    |

*Source: Southeastern Regional Planning and Economic Development District Factbook.*

*ii.) Unemployment in Wareham*

While unemployment is not a severe problem in Wareham, finding a well-paying job is. In 2001, the unemployment rate in Wareham was 4.5 percent. The seasonal nature of the tourist and agricultural industries causes unemployment to rise in the winter. For purposes of comparison, the annual average unemployment rate for the entire state was 3.7 percent in 2001. More recent data might actually show Wareham's employment situation has improved vis-à-vis the State, reflecting the loss of high-tech jobs in the State's metropolitan areas while Wareham's service and retail sectors have continued to grow.

*iii.) Income Characteristics*

Median family income grew between 1990 and 2000 from \$34,907 to \$45,750. This income level is 30 percent less than the median income for Plymouth County, and 26 percent less than the statewide median income. Wareham is economically disadvantaged, which makes it difficult to justify municipal expenditures for open space and recreation land acquisition.

Table 5 shows that the number of residents living below the poverty level in Wareham increased from 1990 to 2000. The figure increased from 8.8 percent of the population to 10.7 percent, which is

in noticeable contrast to county and statewide trends. During the same time period, the poverty level in Plymouth County decreased from 6.6 percent of the population to 4.9 percent, while in Massachusetts as a whole, the level went from 8.9 percent in 1990 to 6.7 percent in 2000. The inescapable conclusion is that Wareham contains more low-income households than the region generally and this dichotomy has grown more severe in the last decade.

**Table 6: Income Characteristics Comparison Between 1990 – 2000**

|               | <b>Median Family Income 1990</b> | <b>Median Family Income 2000</b> | <b>% Persons Below Poverty Level 1990</b> | <b>% Persons Below Poverty Level 2000</b> |
|---------------|----------------------------------|----------------------------------|---|---|
| Wareham       | 34,907                           | 45,750                           | 8.8                                       | 10.7                                      |
| Plymouth Co.  | 46,872                           | 65,554                           | 6.6                                       | 4.9                                       |
| Massachusetts | 44,367                           | 61,664                           | 8.9                                       | 6.7                                       |

*Source: Southeastern Regional Planning and Economic Development District Factbook*

## **E. Growth and Development Patterns**

### *i.) Patterns and Trends*

Wareham's land use pattern (See Map 1) is predominantly attributable to pre-zoning development. Wareham Center was settled in the Colonial period with a central business area and residential neighborhoods surrounding the village. Most homes in Wareham are situated on fairly sizable house lots ranging from .25 to 1 acre. Much of the town's formal recreation space is located in the Center, including Spillane Field, home of the Cape Cod League Wareham Gatemen baseball team.

Most of the densely settled neighborhoods of the town were originally designed as summer communities. Onset, Shangri-La, Rose Point, Weweantic Shores, Swifts Beach, and Indian Mound all fall into this category. Many of the house lots in these areas are quite small, some ranging down to 1,100 square feet. Little or no public open space was designed into these areas.

Congestion in the above neighborhoods was tolerable when they were used only during the summer months. However, over the years many homes have been converted to year-round dwellings. The year-round population living on small lots with little yard space has created a demand for community recreation areas and open space. In many cases, the town has managed to acquire property within the neighborhoods for future recreation. In others, there is a need to acquire property for both passive and active recreation.

Another factor that played a major role in Wareham's growth was the historic development of Cranberry Highway. For many years, virtually all Cape-bound traffic from the south had to pass

through the Cranberry Highway commercial strip. The high volume of traffic precipitated a preponderance of retail and service businesses. It also created a market for trailer parks along the highway. Today, though traffic has by-passed the highway, there are 17 mobile-home parks with more than 1,200 residents. Indeed, Wareham has more mobile-home parks than any other city or town in Massachusetts.

Mobile-home parks, like pre-zoning subdivisions, contain very small lots and little or no public open space. Though the parks are primarily occupied by single people and older couples, there are also a significant number of children living in these parks. Consequently, these parks place a burden on the town to provide the residents with town services, especially schools and services for the elderly, as well as open space and recreational opportunities. The mobile-home owners pay a modest personal property tax of \$12 per month for their homes while the mobile-home park landowner pays a real estate tax on the land. Given the density of these parks, the revenues collected from the park owners and mobile-home residents do not begin to cover the cost of services to these residents.

Town officials have tried repeatedly to convince the State that Wareham's mobile-homes should be included as part of its affordable housing inventory but to no avail. This has become a critical issue for Wareham because the inclusion of these mobile-homes as part of Wareham's affordable housing inventory would put the town above the 10 percent affordable housing threshold required by Chapter 40B. Without this inclusion, the town's affordable housing stock is only 5.5%, according to the 40B definition of affordable housing. In recent months, the town has been deluged with 40B housing proposals, many of which would pack numerous housing units on small lots in already densely-packed neighborhoods. These proposals would put further strain on town services and compete with objectives described in this plan to provide more open space and recreational opportunities for town residents.

## *ii.) Infrastructure*

### *a.) Highways*

Wareham is served by a number of interstate highways and major collector roads. Routes I-195 and 6 provide access to New Bedford, Fall River and Rhode Island. Routes I-495 and 28 provide access to northern and western parts of Massachusetts. Routes 6 and 28 merge and provide access to Cape Cod. Routes I-195 and I-495 merge to become Route 25, which also merges with Route 6/28. Because of its location, a substantial portion of the Cape Cod tourist traffic passes through Wareham. This causes considerable traffic congestion along portions of Route 25 and Route 6/28 during the summer months.

In addition to the numbered routes, several other roads serve as major collectors. Onset Avenue (including Depot Street) is a loop road which connects the Onset Bay neighborhoods with Routes 6 and 28. Fearing Hill Road provides access to Rochester. Finally, Minot Avenue, Narrows Road, and Main Street serve as connectors between Onset, Wareham Center, and West Wareham.

A number of other roads can be classified as minor collectors. These include: County Road/Route 58, a north-south road providing access to Carver and Marion; Great Neck, Crooked River, and

Indian Neck roads, linking shore areas with Wareham Center; and Glen Charlie Road, an access road from Routes 6/28 to the Wareham Lake district. Finally, Charge Pond Road is a minor collector that provides access to Plymouth and Myles Standish State Forest.

b.) Rail Service

There is presently no rail service in Wareham. The former Conrail line is the only rail line that passes through Wareham. This line runs from Middleborough Junction to Hyannis. It is presently owned by the Commonwealth of Massachusetts and leased to the Bay Colony Company, which hauls trash from the Cape to the SEMASS processing plant once each day.

c.) Water Supply

Water is supplied to residents of Wareham by private wells and the water departments of the Onset Fire District and the Wareham Fire District. Wareham's public aquifers and wellhead protection areas are shown on Map 2.

The Onset Fire District serves an area of approximately 5 square miles that includes Onset Village and adjacent land as far north as the Route 25 extension. As of December 31, 2002, the district had 3,377 active services and provided a total of 221.1 million gallons of water to its customers in 2002. Comparatively, the district provided 184.1 million gallons of water in 1995. Water use in Onset tends to be very seasonal in nature, with the most concentrated use occurring in the summer months.

The Onset Fire District is currently served by four wells. During 2002, 221.1 million gallons were pumped from these wells. The wells at Sand Pond are located in the northern part of the fire district between Sawyer Road/Red Brook Road and the Route 25 extension. The district has one standpipe, with a storage capacity of 1.2 million gallons, located on a golf course off of Cahoon Road.

Because of its geographical location, there is only a limited potential for the service area of the Onset Fire District to expand. Capital improvements for the water system are being focused on modernizing the facilities of the Department. In 1998, the standpipe was sandblasted and painted; in 2000, the Fire District purchased 11.0 acres of land in the watershed; and in 2001, a project was started to clean up stand pipe hill, which was completed in 2002. In addition, the distribution system is being updated constantly. Two new sewer projects were completed in the District in 1998: Onset Heights and Riverside. The Onset Water Department worked with the general contractors on all of these projects. The Department took advantage of the road openings to replace and upgrade the water mains in these areas.

The Wareham Fire District is fortunate to have an adequate supply of excellent quality water to serve its customers. The Wareham Fire District encompasses an area of approximately 20 square miles that includes land in many different parts of Wareham. In 2002, the district had 7,281 service connections (up from 6,306 in 1995) and provided 594 million gallons of water to its customers (up from 544 million gallons in 1995).

The water source for the district is two existing well fields located in northeastern Wareham. The Maple Springs well field has four active wells, while the Seawood Springs well field has two active

wells. A third well field, known as South Line, will have one well, and is expected to be operational in 2004. Together, the six active wells have a permitted capacity of 681 million gallons per year. The district's total withdrawal in 2002 equaled 87 % of its permitted allocation. Water storage for the district is provided by two standpipes: a 1.5 million gallon standpipe located off Route 28 near Charlotte Furnace Road in West Wareham and a 1.2 million gallon standpipe located off Indian Neck Road in the Bourne Hill area. The district meters all services.

The District has two corrosion control facilities designed to adjust the pH of the water. The facilities went on line in April 1996. The District continues to work to protect its water supplies. State programs sponsored by the Department of Environmental Protection help identify any potential threats to our sources of water supply.

d.) Sewage Disposal

The Wareham sewage treatment system serves 4,700 residential and 429 commercial customers. Areas served by the sewer system include Onset, Wareham Center, the Wareham Industrial Park, Swift's Beach, Pinehurst, Cranberry Highway, Point Independence, Indian Mound Beach, Jefferson Shores, Pinetree Estates, Onset Heights, Riverside and Sunset Island (See Map 3). The Board of Selectmen acting in its capacity as Sewer Commissioners approved a sewer expansion plan in December 2001. This plan will expand sewer services to 11 residential neighborhoods. Upon completion of the plan there will be no capacity left at the Water Treatment Plant.

The existing treatment facility is a 1.8 MGD (million gallons per day) secondary treatment facility with final effluent receiving tertiary treatment via sand filter beds prior to being discharged to the Agawam River. Construction of a \$24 million upgrade of this facility began in September of 2002 and was completed in January of 2006. This facility is being designed to not only remove all the parameters required in secondary treatment but will also remove nitrogen and phosphorous from the waste-stream as required by regulatory agencies. The proposed design flow of the new upgraded facility will be approximately 1.64 MGD. In addition to the treatment plant treating 800,000 gpd (winter average) and 1.2 mgpd (summer average) of wastewater, the facility also receives between 20,000 and 50,000 gallons of septage a day. The sewage system consists of approximately 50 miles of gravity and force main sewers and has 29 lift stations.

### iii.) *Long-Term Development Patterns*

#### a.) Zoning

Future growth and development in Wareham is primarily regulated under the provisions of the Zoning By-Law. The community has thirteen zoning districts, as well as provisions for well-head protection, wetland conservation, and protection of Buttermilk Bay. See Map 4 showing Wareham's zoning districts.

The Zoning By-Law favors development of single-family homes. More than half of Wareham's land area is located in the R-60 and R-130 districts. These districts require house lots to be 60,000 square feet and 130,000 square feet, respectively. Much of the land in the two districts is in agriculture or undeveloped.

There is significant potential for large subdivisions in the two aforementioned districts. However, large-lot zoning and the presence of numerous wetlands would reduce the overall number of future homes in the area. These areas are not served by municipal water or sewer services, so development would require private wells and adequate disposal of sewage.

Cranberry companies own many large tracts of land in the town. The viability of the cranberry industry is an important factor in controlling residential growth in the community. The depressed cranberry market of the past 5 years has caused many bog owners to cut back on production, leave their bogs idle entirely, or, in some cases, sell off the upland surrounding the bogs. If the cranberry market does not return to profitability in the near future, it could very significantly affect the pace of development in Wareham.

#### b.) Build-Out Scenario

Existing zoning regulations permit extensive future growth in the community, especially in northern and western areas. Building constraints such as wetlands, slopes, and soil conditions play an important role in controlling future growth, but are not numerous enough to preserve community character in and of themselves. Virtually all large forested areas that are not permanently protected are subject to development at any time.

Forest land, agricultural land, and open space/recreation land are given favorable tax treatment under Chapter 61, 61A, or 61B, respectively, of M.G.L. if the land is voluntarily enrolled in the program. Designation as Chapter 61 Land creates *temporary* land preservation in exchange for a lower tax assessment. In the event that this land is removed from the program and proposed for development, the municipality has a 120-day right of first refusal to match a prospective buyer's *bona fide* offer. This right of first refusal may be assigned to a nonprofit organization, which would have a similar opportunity to match a buyer's offer.

Because most undeveloped land north of Route 495/25 is owned by cranberry growers, the viability of the cranberry industry is of paramount importance in maintaining Wareham's open space. Should economic conditions in the cranberry industry continue to be depressed, growers may wish to divest themselves of excess property. Many parcels adjacent to, or near, cranberry bogs could be

developed without directly impacting agricultural operations. Because so much of the area has water access and water views, the value of the land for development could outweigh its value as farmland. The Town should recognize the temporary nature of "chapter lands" and take appropriate steps to maintain its most important open spaces in the north end of the community.

Under existing regulations, the town could accommodate hundreds of new housing units. A complete build-out analysis (i.e., an estimate of the community's potential growth based on existing zoning and land development regulations) was prepared by the Planning Department, working with SRPEDD, as part of the Town's 1998 Comprehensive Community Plan. The pace of development has quickened since the last open space plan was prepared and it is now critical for the town to pursue all desirable parcels of land before they are lost to development.

It is obvious without the aid of a build-out analysis that uncontrolled development has the potential to significantly alter the character of the community. Increased privatization of existing open space, combined with the continuous creep of development, has left Wareham in a vulnerable position. Acquisition of open space, combined with revised regulatory controls, is necessary to protect our waterways, ensure our future water supply, hold down the escalating cost of services to residents (e.g., education expenses), and preserve the rural quality which still characterizes much of the community.

#### *iv.) Subdivisions and Growth*

Wareham has experienced a dramatic increase in housing permits in the 1990s, from about 30 new permits annually in 1990 to 109 in 2000. There are 15 pending subdivision applications as of this writing, several of which are affordable housing plans which fall under Chapter 40B.

Problems with growth in Wareham have revolved around old subdivisions that were platted prior to the current Zoning Map. Seawood Springs is a 650-lot subdivision located in the north-central part of the community. Originally approved in the early 1970s, the subdivision was never constructed. The lots still exist on the Tax Assessors' maps, and if legal hurdles can be overcome, many of the lots could be developed. This scenario would create a large increase in residents who would expect municipal services.

Shangri-La is a subdivision from the 1960s which has been partially built. Lot sizes range down to 2,500 square feet. Expansion of the Wareham Water District system to the Shangri-La area has made most of the lots buildable. The Town has no intention to extend the sewer system to this area.

As noted above, in 1998 SRPEDD did a complete build-out analysis for the 1998 Comprehensive Community Plan. The Town relies on state and regional population projections to assess future growth impacts. The School Department is in the process of assessing the need for additional school facilities, and preliminary results indicate no need for expansion for at least the next five years.

The growth in Wareham's housing market is expected to accelerate in the next decade. There are a number of factors fueling this trend, including: (1) water connections to outlying areas; (2) the addition of major retailers, such as Home Depot and Staples, in Wareham; (3) the recent approval of a Business Development Overlay District at the intersection of Routes 195 and 495; and (3) an

increasing interest on the part of developers to build affordable housing units in Wareham. Because of these trends for increased growth, enhanced efforts will be needed to preserve open space and develop recreation facilities in the town.

## IV. ENVIRONMENTAL INVENTORY AND ANALYSIS

### A. Geology, Soils and Topography

#### *i.) Topography and Geology*

The land surfaces in Wareham are predominantly covered by glacial till, a reminder of the times when it was covered by glaciers during the Pleistocene era.<sup>1</sup> These glaciers also formed the topography of the area. The Wareham River Harbor is a drowned river valley.

The land rises gradually from sea level in the south to an altitude of approximately 70 feet in the north, with only a few hills above the 100-foot level. There were, and still are, numerous small ponds in the area. Some of these ponds were drained and filled to form cranberry bogs and others, over time, became swamps. Others remain today and provide recreation in the form of swimming, boating, and fishing. About 23% of Wareham's total land area is made up of wetlands or cranberry bogs.

Wareham has approximately 54 miles of salt-water coastal shoreline, including over 30 barrier beaches. These are predominantly bay barriers in which both ends of the barriers are attached to an upland area, which consists of a marsh or wetland. These barrier beaches are mainly undeveloped (See Map 6)

Good topsoil in Wareham is sparse, being of only a few inches in depth and containing a high percentage of sand. Aside from the town's wetlands, which are ideal for cranberries and blueberries, development of the land for agricultural use has been limited. Specifics of the soil makeup of the town follow.

#### *ii.) Soils*

Soils are classified according to a hierarchical system of classification, similar to the system used to classify plants and animals. A large percentage of Wareham is located in the Carver general soil association. This soil association is characterized by considerable variability, from nearly level areas to steep slopes, excessively drained soils formed in deep outwash sands, and very poorly drained organic soils in low areas.

A group of soils having the same runoff potential under similar storm and cover conditions are referred to as a Hydrologic Group. Soil properties that influence runoff potential are those that influence the minimum rate of infiltration for a bare soil after prolonged wetting and when not frozen.

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<sup>1</sup> The Pleistocene era designates the first epoch of the Quaternary Period in the Cenozoic era (approximately 500,000 BC to 2,000,000 BC). The Pleistocene era was characterized by the rise and recession of continental ice sheets and the appearance of man.

Soil series are placed into four hydrologic groups; A, B, C, and D. Definitions of the soil classes are as follows:

- A. Low runoff potential. Soil having high infiltration rates even when thoroughly wetted and consisting chiefly of deep, well drained to excessively drained sands and/or gravels.
- B. Soils having moderate infiltration rates when thoroughly wetted and consisting chiefly of moderately deep-to-deep, moderately well-drained to well-drained soils with moderately fine to moderately coarse textures.
- C. Soils having slow infiltration rates when thoroughly wetted and consisting chiefly of soils with a layer that impedes downward movement of water.
- D. High runoff potential. Soils having very slow infiltration rates when thoroughly wetted and consisting chiefly of clayey soils, soils with a permanent high water table, and shallow soils.

A hydric soil is a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. Soils must meet certain criteria to classify as hydric and they can present development limitations due to their wetness. Hydric soils present in Wareham include Mattapoisett, Freetown, Swansea, Berryland, Ipswich, and Pawcatuck. (See Map 5).

Below are descriptions of all the soil series found in Wareham:

### **Birchwood**

The Birchwood series consists of very deep, moderately well drained soils on uplands. They formed in sandy sediments overlying glacial till. Typically, these soils have a dark brown fine sandy loam surface layer 10 inches thick. The subsoil from 10 to 30 inches is strong brown and brownish yellow loamy fine sand and loamy sand with mottles below 18 inches. The mottled substratum from 30 to 60 inches is dark reddish brown, very firm and brittle gravelly loam. Slopes range from 0 to 15 Percent. Birchwood is not a hydric soil and it falls in hydrologic soils group C.

### **Poquonock**

The Poquonock series consists of very deep, well-drained soils on uplands. They formed in a sandy mantle overlying glacial till. In tilled areas, these soils typically have a dark brown loamy fine sand surface layer 8 inches thick. The subsoil from 8 to 28 inches is dark yellowish brown loamy fine sand and light olive brown loamy sand. The substratum from 28 to 60 inches is dark gray, very firm and brittle gravelly loam. Slopes range from 0 to 25 percent. Poquonock is not a hydric soil and it falls in hydrologic soils group C.

### **Mattapoisett**

The Mattapoisett series consists of very deep, poorly drained soils on ground moraines and toe slopes of drumlins. They formed in loose, sandy eolian or glacial fluvial sediments, underlain by loamy dense till. Mattapoisett is a hydric soil and it falls in hydrologic soils group D.

### **Carver**

The Carver series consists of very deep excessively drained soils on outwash plains, deltas and moraines. Typically, these soils have a dark grey or black coarse sand surface layer 7 inches thick. The subsoil from 7 to 25 inches is strong brown and yellowish-brown coarse sand. From 25 to 29 inches, the subsoil is brownish-yellow coarse sand. The substratum from 29 to 60 inches is light

yellowish-brown coarse sand. Slopes range from 0 to 45 percent. Carver is not a hydric soil and it falls in hydrologic soils group A.

### **Freetown**

The Freetown series consists of deep, very poorly drained organic soils that formed in more than 51 inches of highly decomposed organic material. These soils are in bogs that are on lake plains, outwash plains, till plains and moraines. Typically they have a dark reddish-brown muck surface layer about 2 inches thick over black and dark reddish-brown muck to a depth of 60 inches. Slopes range from 0 to 1 percent. Freetown is a hydric soil and it falls in hydrologic soils group D.

### **Swansea**

The Swansea series consists of very poorly drained organic soils that formed in 16 to 51 inches of highly decomposed organic material over sandy mineral material. These soils are in bogs that are on outwash plains, till plains and moraines. Typically, they have a dark reddish-brown muck surface layer about 2 inches thick over black muck to a depth of 26 inches. The substratum from 26 to 32 inches is light olive gray, loamy coarse sand and from 32 to 60 inches is light olive gray, gravelly coarse sand. Slopes range from 0 to 1 percent. Swansea is a hydric soil and it falls in hydrologic soils group D.

### **Berryland**

The Berryland series consists of deep, very poorly drained soils on uplands. They formed in coastal plain sediments typically these soils have a black sand surface layer 10 inches thick over 2 inches of gray sand. The subsoil from 12 to 20 inches is firm and weakly cemented dark reddish brown loamy sand. From 20 to 30 inches the subsoil is dark gray loose sand. The substratum from 30 to 72 inches is grayish- brown, stratified loose sand. Slopes range from 0 to 2 percent. Berryland is a hydric soil and it falls in hydrologic soils group D.

### **Hinckley**

The Hinckley series consists of very deep, excessively drained soils on terraces, outwash plains, deltas, kames and eskers. They formed in water-sorted material. Typically these soils have a very dark grayish-brown loamy sand surface layer 7 inches thick. The subsoil layers from 7 to 15 inches are strong brown and yellowish-brown gravelly loamy sand. From 15 to 18 inches the subsoil is yellowish-brown gravelly sand. The substratum from 18 to 65 inches is light olive brown stratified sand, gravel, and cobbles. Slopes range from 0 to 60 percent. Hinckley is not a hydric soil and it falls in hydrologic soils group A.

### **Windsor**

The Windsor series consists of very deep, excessively drained soils on glaciofluvial landforms. They formed in glacial outwash deposits of sands and loamy sands derived mainly from crystalline rocks. In undisturbed areas, these soils typically have a very dark grayish-brown loamy sand surface layer 2 inches thick. The subsoil from 2 to 20 inches is strong brown and yellowish-brown loamy sand and from 20 to 24 inches is light yellowish-brown sand. The substratum from 24 to 65 inches is pale brown and light brownish-gray, loose, stratified sand. Slopes range from 0 to 60 percent. Windsor is not a hydric soil and it falls in hydrologic soils group A.

### **Deerfield**

The Deerfield series consists of very deep, moderately well drained soils on terraces, deltas, and

outwash plains. They formed in thick deposits of sand derived mainly from granite, gneiss, and quartzite. Typically these soils have a very dark grayish brown loamy sand surface layer 9 inches thick. The subsoil from 9 to 19 inches is yellowish-brown loamy sand that is mottled. The subsoil from 19 to 27 inches is mottled sand. The substratum from 27 to 65 inches is olive gray sand. Slopes range from 0 to 15 percent. Deerfield is not a hydric soil and it falls in hydrologic soils group B.

### **Ipswich**

The Ipswich series consists of very deep, very poorly drained soils on tidal flats, subject to tidal flooding. They formed in organic material. Salt content in the soil layers ranges from 5000 to 35000 parts per million. Typically, the layers from 0 to 18 inches are dark grayish-brown fibric materials; from 18 to 42 inches are very dark grayish-brown hemic materials; and from 42 to 62 inches are very dark grayish-brown sapric materials. Slopes range from 0 to 1 percent. Ipswich is a hydric soil and it falls in hydrologic soils group D.

### **Pawcatuck**

The Pawcatuck series consists of very deep, very poorly drained soils on tidal flats subject to inundation by salt water twice daily. They formed in organic material 16 to 51 inches thick over sandy mineral deposits. Salt content in the soil ranges from 1,000 to 40,000 parts per million. Typically, the layers from 0 to 46 inches are very dark gray and black hemic materials. The substratum from 46 to 50 inches is gray, very fine sandy loam and from 50 to 60 inches is black loamy sand. Slopes range from 0 to 1 percent. Pawcatuck is a hydric soil and it falls in hydrologic soils group D.

### **Hooksan**

The Hooksan series consists of very deep, droughty, sandy soils. They occur as nearly level areas and dunes along the coast. Typically, these soils have grayish-brown sand surface layers underlain by pale yellow and light yellowish-brown sand. Slopes range from 0 to 35 percent. Hooksan is not a hydric soil and it falls in hydrologic soils group A.

### **Montauk**

The Montauk series consists of very deep, well drained soils on glacial moraines. They formed in loamy mantled ablation deposits underlain by firm glacial till. Typically these soils, in a wooded area, have a dark brown sandy loam surface layer 2 inches thick. The subsoil from 2 to 27 inches is yellowish-brown fine sandy loam. The substratum from 27 to 60 inches is a firm and brittle dark brown sandy loam and reddish-brown loamy sand. Slopes range from 0 to 35 percent. Montauk is not a hydric soil and it falls in hydrologic soils group C.

### **Scituate**

The Scituate series consists of very deep, moderately well drained soils on uplands. They formed in glacial till. Typically these soils have a black fine sandy loam surface layer 5 inches thick. The subsoil from 5 to 21 inches is strong brown fine sandy loam and from 21 to 27 inches is mottled, yellowish-brown sandy loam. The mottled yellowish-brown, dense substratum from 27 to 65 inches is firm very gravelly loamy sand. Slopes range from 0 to 25 percent. Scituate is not a hydric soil and it falls in hydrologic soils group C.

### **Plymouth**

The Plymouth series consists of very deep, excessively drained soils on sand plains. They formed in glacial outwash or lake-laid material. Typically these soils in a wooded area have a very dark grayish brown loamy sand surface layer 4 inches thick. The subsoil layers from 4 to 27 inches are yellowish brown and brown loamy sand. The substratum from 27 to 65 inches is yellowish-brown loose, gravelly coarse sand. Slopes range from 0 to 35 percent. Plymouth is not a hydric soil and it falls in hydrologic soils group A

Erosion problems are evident in varying degrees of magnitude in Wareham. The predominantly sandy soils of Wareham, Carver-core sands, tend to be fairly loose in nature and therefore do not hold well on sloped areas that have become exposed. This tends to be problematic primarily along the coast but can also be seen as a problem at certain inland locations. Areas of concern include sections of Onset Bluffs, Wickets Island, and the Little Harbor area. Erosion in these areas is caused primarily by coastal storms. At numerous sites along the coast in Wareham seawalls have been constructed to armor eroding coastal banks. Inland erosion is evident at locations along the Weweantic River where slopes have become exposed.

The loose nature of the sandy soils can also present problems during excavation activity. It is typical to require additional over-digging at most sites to account for collapsing side slopes of excavation holes. At the same time, the sandy soils are well drained, providing excellent conditions for the construction of septic systems in most areas.

### *iii.) Barrier Beaches<sup>2</sup>*

The Massachusetts Coastal Zone Management Program, which is an outgrowth of the Wetlands Protection Act (310 CMR 10.29), has defined a barrier beach as a narrow low-lying strip of land that generally consists of coastal beaches and coastal dunes extending parallel to the trend of the coast. A barrier beach is separated from the mainland by a narrow body of fresh, brackish or saline water or marsh system. It is a fragile landform that protects landward areas from coastal storm damage and flooding. Barrier beaches and the associated marsh-flat systems are also very important and productive habitat for fish and wildlife.

The Town of Wareham has over 30 federal or state designated barrier beaches, amounting to approximately 59 acres. (See Map 6.) These areas are listed in Table 7. The designations of barrier beaches in Wareham was based on the definitions contained in the Massachusetts Wetland Protection Act (MGL Chapter 131, s. 40), and the U.S. Coastal Barrier Resources Act of 1982 (p. r. 97-348). Barrier beaches in Wareham are predominantly bay barriers (i.e., both ends of the barrier are attached to an upland area) in which the landward area is a marsh or wetland system. They are also mostly undeveloped. Some development has occurred on two barrier beaches located on Swifts Neck in the Hamilton Beach area. However, this does not alter their designation as barrier beaches. The Commonwealth of Massachusetts discourages development from occurring on barrier beaches because of their sensitive nature, their importance for flood damage abatement, and their value as

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<sup>2</sup> Massachusetts Barrier Beaches, Massachusetts Coastal Zone Management Program (December 1982). See also Draft Report on Facilities Plan and Environmental Information for Wastewater Management (Wareham), Metcalf and Eddy (June 1986), pp. II-213, II-2-14.

wildlife habitat. Exclusive Order No. 181 (1982) discourages further development on barrier beaches by limiting state and federal funding for sewer lines, water lines, and coastal engineering structures, and by giving these areas priority status for Self-Help and other federal and state acquisition programs.

**Table 7: State Designated Barrier Beaches in Wareham**

| <b>Units</b> | <b>Name</b>                    |  | <b>Units</b> | <b>Name</b>                |
|--------------|--------------------------------|--|--------------|----------------------------|
| Wh-2         | Peter's Neck                   |  | Wh-20        | Stony Point, West          |
| Wh-3         | Jacobs Neck East               |  | Wh-21        | Little Harbor Beach        |
| Wh-4         | Pleasant Harbor, Inner Barrier |  | Wh-22        | Bourne Cove Barrier Spit   |
| Wh-5         | Pleasant Harbor, Southeast     |  | Wh-23        | Beach Rock                 |
| Wh-6         | Pleasant Harbor, Bay Street    |  | Wh-24        | Great Neck SW Coast West   |
| Wh-7         | Onset Island, West             |  | Wh-25        | Beach Point                |
| Wh-8         | Onset Island, East             |  | Wh-26        | Wareham River              |
| Wh-9         | Onset Bay                      |  | Wh-27        | Wareham River              |
| Wh-10        | Shell Point                    |  | Wh-28        | Wareham Small Spit         |
| Wh-11        | Hog Neck Tombolo               |  | Wh-29        | Barney's Point             |
| Wh-12        | Bass Cove, East Marsh          |  | Wh-30        | Swift's Neck (Angelo Road) |
| Wh-13        | Bass Cove, Middle Salt Marsh   |  | Wh-31        | Swift's Neck, E & W Spits  |
| Wh-14        | Bass Cove, West Salt Marsh     |  | Wh-32        | Swift's Beach, West        |
| Wh-15        | Windows Cove                   |  | Wh-33        | Mark's Cove                |
| Wh-16        | Windows Cove, South            |  | Wh-34        | Cromesett Neck, West       |
| Wh-17        | Seminary Barrier               |  | Wh-35        | Nobska Point Spit          |
| Wh-18        | Cedar Point, North             |  | Wh-36        | Weweantic River            |
| Wh-19        | Cedar Point, South             |  |              |                            |

*Source: Massachusetts Coastal Zone Management Barrier Beach Inventory Project, 1982; (No change as of 5/19/03)*  
*Note: Unit refers to the unit code system used by the Massachusetts Coastal Zone Management Barrier Beach Inventory Project.*

## **B. Landscape Character and Vegetation**

Wareham's forested land, its upland marshes, which support cranberry growing, and its seaside marshes which support marine life, give the town a varied landscape. A special attribute of the town is its coastal location with fine beaches and excellent small boat harbors both in Onset Bay and at the mouth of the Wareham River. These assets provide not only a desirable spot for the residents to call their home, but also provide an area which tourists have historically enjoyed. As the population of the town increases, both through new development and the refitting of summer cottages into year-round homes, it is necessary to ensure that over-development and over-use of our fragile coastal environment does not destroy the very things that attracted people here to begin with.

A few years ago, the Wareham River had the distinction of being the last spot, north of the Chesapeake Bay, where oyster spat grew naturally. Sadly, Wareham no longer enjoys this distinction because overuse has led to pollution. It is now fairly common to find most of our shellfish areas closed from time to time due to pollution.

Much of the town's 54 miles of coastline is in private hands. What is left for the overwhelming majority of residents is shared with tourists. While Wareham provides more public access to the coastal resources of Buzzards Bay than any other community on the Bay, the town itself also owns a smaller amount of this waterfront than any other community on the Bay. One of the goals of this Open Space Plan is to protect as much of the remaining undeveloped coastline as possible should opportunities arise to acquire privately-owned land and maintain it as open space.

## **C. Water Resources<sup>3</sup>**

### *i.) Surface Water*

The Town of Wareham has 54 miles of coastline, more than any other town in the Commonwealth. There are three major river systems that flow through the town and empty into Buzzards Bay. The Wareham River Basin is made up of the Wankinco and Agawam Rivers. These rivers, which originate in the Myles Standish State Forest, flow southward through a series of ponds, bogs, and swamps to a point where they combine to form the Wareham River. The Wareham River Basin drains an area of approximately 29,795 acres. The Weweantic and Sippican Rivers, along with their tributaries, drain an area of 55,438 acres. Tributaries to the Weweantic and Sippican Rivers include Beaverdam Creek, Cohacket Brook, Crane Brook and Patterson Brook. The drainage area for all three of these major river systems, which includes land in Middleborough, Carver, Rochester, and Wareham, has been extensively developed for cranberry bogs (See Map 7).

The meandering coastline creates numerous coves, bays, rivers, and estuaries, that have become known locally as specific waterbodies. Onset Harbor, located in the eastern most part of Wareham, has a drainage basin of 3,240 acres and is the largest and most important of the local waterbodies. Other smaller waterbodies include Mark's Cove, Bourne Cove, Butler Cove, Broad Cove, Shell Point Bay, Muddy Cove, Bass Cove, Widows Cove, Sunset Cove, Little Harbor, Buttermilk Bay, the

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<sup>3</sup> Wareham Master Plan Report, Environmental Protection (May 1976), pp. 3-6.

Broad Marsh River area, the Crooked River, and the East River. The town has a Harbor Management Plan which has been approved by the Massachusetts Coastal Zone Management.

One Outstanding Water Resource (ORW) in Wareham is White Island Pond, near the Plymouth-Wareham border. White Island Pond is a 294-acre natural pond that is an excellent warm water fishery and herring run.

Other OWRs in Wareham are the many vernal pools that can be found throughout the town. Unfortunately, only two of these vernal pools are certified with the State. One of the goals of this Open Space and Recreation Plan is to make a greater effort to certify these vernal pools so that they will not be lost to development.

#### *ii.) Salt Marshes*

Salt Marshes are extensive in Wareham and amount to approximately 917 acres. Salt marsh systems are very important to many different species of marine life both as a food source and as habitat. Many marine species require estuarine environments to carry out a portion of their life cycle. A variety of water birds also depend on salt marshes as habitat area. Salt marsh also filters and stores nutrients. Broad Marsh is the largest single expanse of salt marsh in the town and is approximately 65 acres in size.

#### *iii.) Flood Hazard Areas*

Wareham is a relatively low-lying coastal town and subsequently has a significant portion of its land in the 100-Year Flood Zone as determined by the Federal Emergency Management Agency (FEMA). Velocity zones, where the most damage occurs during coastal storm events, are of particular concern. There are several velocity zone areas in Wareham that have been developed, including Swifts Beach, Cromesett Point, and Onset Island. In 2001, the town adopted a bylaw which prevents any further development in these areas.

#### *iv.) Freshwater Resources*

Freshwater resources include the freshwater reaches of the rivers mentioned above and freshwater ponds and streams. Freshwater ponds include Blackmore Pond, Glen Charlie Pond, White Island Pond, Dicks Pond, Sand Pond, Sandy Pond, Bartlett Pond, Tremont Pond, Horseshoe Pond, Union Pond, Spectacle Pond, Tihonet Pond, Black Johnny Pond, and Agawam Mill Pond. Freshwater streams of interest include Gibbs Brook, Red Brook, Rose Brook, Cohacket Brook, and Stony Run. The freshwater resources in the town are used extensively by the public for a variety of recreational uses such as canoeing, swimming, boating, fishing, birdwatching, and others. Public access to the above-referenced water bodies is shown in Table 8. Water from the majority of all inland water bodies is utilized to some degree by the cranberry industry.

Two ponds in Wareham were evaluated in 1985 under the Massachusetts Lake Classification Program. Glen Charlie Pond was rated as oligotrophic and White Island was rated eutrophic.

Oligotrophic generally refers to deep, clear lakes that have low dissolved nutrient content, an

abundance of dissolved oxygen, limited communities of shore plants and relatively low plankton productivity. Eutrophic generally refers to highly productive lakes that are rich in dissolved nutrients and often with seasonal deficiencies in dissolved oxygen. The eutrophication of a body of water refers to the natural or artificial addition of nutrients and the effects of added nutrients. Problems associated with eutrophication include nuisance algal blooms (especially blue-green algae), excessive aquatic plant growths, low dissolved oxygen content, degradation of sport fisheries, low transparency, mucky bottoms, and changes in algal species composition and diversity. The Town approved a twenty-four million dollar (\$24,000,000) upgrade of the Water Pollution Control Facility. This upgrade will be finished soon and will dramatically improve the problem with phosphates in the Agawam and Weweantic Rivers.

v.) *Plymouth Aquifer*<sup>4</sup>

The Plymouth Aquifer, which is found on the Wareham outwash plain, has the largest potential for groundwater supplies in southeastern Massachusetts. The aquifer includes most of Plymouth, plus portions of Kingston, Plympton, Wareham, and Bourne. It is composed of sand and gravel deposits that range from 40 to 160 feet thick and that have potential groundwater yields of more than 30 gallons per minute per well. The coarse nature of the deposits results in a situation in which surface water runoff is very low and infiltration rates are high. There is an estimated 540 billion gallons of water stored within the aquifer.

The aquifer underlies the eastern portion of Wareham (See Map 2). The groundwater table in this portion of Wareham ranges from 40 feet below the surface in the north to 10 to 15 feet below the surface near the southern margin and near ponds. Both the Wareham Fire District and the Onset Fire District use the aquifer as their principal source of water.

The zoning in the area covering the aquifer is principally low density residential. The Agricultural-Watershed District covers the area north of the Route 25 extension and east of Charge Pond Road. The minimum lot size in this district is three acres. The area west of Charge Pond Road and north of the Route 25 extension is primarily in a Rural Residential District that has a minimum lot size of 60,000 square feet. While the current zoning will work to protect the groundwater resources of Wareham, there are several large residential developments that were approved prior to the adoption of the Agricultural Watershed District that have lot sizes ranging from 6,000 to 10,000 square feet. A recent zoning change has converted a portion of this residential zone to allow commercial uses. It is difficult to predict potential impacts to groundwater as a result of this zoning change until commercial projects are actually proposed.

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<sup>4</sup> Wareham Master Plan Report, Environmental Protection (May 1976), pp. 25-26. & Hydrological Atlas, HA-507, U.S. Geological Survey (1974).

**Table 8: Ponds Greater than 10 Acres in Size in Wareham**

| <b>Pond</b>                 | <b>Acreage</b> | <b>Description</b>   | <b>Access</b>                         |
|-----------------------------|----------------|--|---------------------------------------|
| Agawam Mill Pond            | 150            | Impoundment of Agawam River, good warm water fishery, herring run  | Informal access off Cranberry Highway |
| Bartlett Pond               | 10             | Bog Reservoir  |                                       |
| Blackmere Reservoir         | 25             | Bog reservoir, Beaverdam Creek   |                                       |
| Blackmore Pond              | 46             | Natural great pond   | No formal public access               |
| Cedar Pond                  | 12             | Apparent natural great pond  | No formal public access               |
| Dicks Pond                  | 40             | Apparent enlarged great pond, good warm water fishery, herring run                                       | Informal access off Cranberry Highway |
| Horseshoe Pond              | 85             | Impoundment of Weweantic River, herring run  |                                       |
| Glen Charlie Pond           | 185            | Impoundment of Agawam River, good warm water fishery, herring run, town land near gas pipeline crossing  |                                       |
| Little Long Pond            | 19             | Apparent natural great pond  | No formal public access               |
| Maple Springs Pond          | 16             | Bog reservoir  |                                       |
| Parker Mills Pond           | 105            | Impoundment of Wankinco River, good warm water fishery, herring run, town land south of Route 28         |                                       |
| Sand Pond                   | 15             | Apparent natural great pond, closed water supply   |                                       |
| Sandy Pond                  | 18             | Apparent natural great pond  | No formal public access               |
| Smalleys Bog Reservoir      | 30             | Bog reservoir, also in Carver  |                                       |
| Spectacle Pond              | 42             | Apparent natural great pond, good warm water fishery, State Cranberry Experiment Station                 | No formal public access               |
| Tihonet Pond                | 89             | Impoundment of Wankinco River, Wankinco Rod & Gun Club stocks, Makepeace Cranberry Co. owns entire shore |                                       |
| Tremont Mill Pond           | 50             | Impoundment of Weweantic River, town owned   | No formal public access               |
| Union Pond                  | 25             | Apparent natural great pond  | No formal public access               |
| West Glen Charlie Reservoir | 13             | Bog reservoir  |                                       |
| White Island Pond           | 294            | Great natural pond, good warm water fishery, herring run   | No formal public access               |

Another area of concern for the Wareham portion of the aquifer is the Tri-town Regional Landfill that is located in Carver, near the Wareham town line and on the fringe of the high-yield portion of the aquifer. The landfill is being taken over by the operators of the SEMass Regional Waste to Energy Plant. It will be used for back up when the SEMass plant is shut down for disposal of fly ash from the plant. Leachate from the landfill should be closely monitored to protect against pollution of the aquifer.

#### **D. Vegetation**

##### *i) Forestland<sup>5</sup>*

The undeveloped areas in Wareham are predominantly covered by forest land (61% of the total land area), wetlands (15%), and agricultural and open land (13%). Of the forested land, 53% is of mixed hardwood and softwood. Large coniferous forest stands account for 25% of the forest land and small coniferous forest stands account for 17%.

##### *ii.) General Inventory*

Hardwood forests found in Wareham, are generally made up of scarlet and black oak, sugar and red maple, white ash, American beech and blackgum. The softwoods include Eastern hemlock, Atlantic white cedar, pitch pine and white pine. The only commercially important wood is white pine.

The understory is composed of arrowwood, spicebush, greenbrier, wildgrape, wintergreen, partridge berry, pipsissewa, rosa acacia, sheep laurel, inkberry, sassafras, beachplum, huckleberry, blueberry, bayberry, witch hazel, blackberry, sarsaparilla, club moss and salt spray rose. In the spring, lady slippers, star flowers and trailing arbutus (mayflowers) are abundant on the forest floor.

The forest provides watershed land for our well-fields as well as hiking and nature viewing, and in some of the larger forested areas, hunting. Many varieties of song and game birds, as well as other animals, live in our forests.

A large area of land is also classified as wetlands. While this is primarily open water (about 50%), it also includes a nearly equal amount of freshwater and saltwater wetlands. The freshwater wetlands are varied and include shrub swamps, shallow and deep marshes, and seasonally-flooded flats. The vegetation is also varied. Shrub swamps commonly contain alder, buttonbush, dogwood, willow, and sedges. Shallow marshes generally contain emergent vegetation such as cattails, bulrushes, barreed, pickerelweed and arrowhead, in addition to grasses and sedges. Water lilies and the yellow cow lily also grow in these areas. Salt water wetlands are mostly salt meadows which support cordgrass, saltgrass and black rush.

Agricultural land in Wareham is primarily used for growing cranberries. Roughly two-thirds of land classified as agricultural and open is used for growing cranberries. The remainder of agricultural

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<sup>5</sup> Source: SRPEDD, 2002\*

\*1971 data = MacConnell, WP. *Planning & Development Series No. 23*, 1973.

\*1999 data = downloaded from MASSGIS website

land is pasture land, abandoned fields, open sand areas, and power lines.

There are many plant varieties in Wareham that are on the list of Rare Plants and Animals on the Natural Heritage and Endangered Species List. Among the rare/endangered plants found in Wareham are Purple Needlegrass, Long's Bittercress, Watler's Sedge, and many others. See Table 10 for the complete list.

## **E. Fisheries and Wildlife**

### *i.) General Inventory*

#### *a.) Shellfish*

The many small bays, coves, marshes, and rivers in Wareham provide excellent habitat for a variety of shellfish species, such as quahogs, softshell clams, oysters, and scallops. Wareham's shellfish resources support local commercial fishermen and numerous recreational shellfishing enthusiasts.

There are 6 shellfish grants in different locations throughout the town including Wareham River, Cohasset Narrows, Bourne Cove, and Little Harbor. Shellfish grants are analogous to underwater farms with the crop being shellfish. These grants are operated by individuals who obtained permits through the town's Board of Selectmen. Wareham also does a shellfish relay which involves purchasing quahogs from contaminated areas in New Bedford and transplanting them into cleaner waters of Wareham. Once the shellfish have had ample time to purify themselves they are available for consumption. Wareham also has a shellfish propagation program which involves planting shellfish as well as setting suitable substrate for shellfish spat to adhere to.

The majority of the shellfish beds are open to fishing during the winter months although there are areas that remain permanently closed to shellfishing due to poor water quality. Certain areas are classified as seasonal closure areas. These areas are closed to shellfishing during a specified portion of the year, generally in the warmer months. This is due to increased human activity around the waterfront and a climate which is more suitable for bacteria growth. The shellfish beds in Wareham are very productive. Table 9 outlines the number of shellfish licenses issued, amount of shellfish harvested, and estimated value of shellfish harvested for the years 1990-2002.

**Table 9: Comparison of Shellfish Catch Data for Wareham, 1990-2002**

|                            | 1990      | 1996      | 2002      |
|----------------------------|-----------|-----------|-----------|
| <b>Residential Permits</b> | 2,222     | 1,754     | 2,165     |
| Total Catch*               | 11,931    | 7,608     | 5,162     |
| Estimated Value            | \$595,250 | \$405,015 | \$412,960 |
|                            |           |           |           |
| <b>Commercial Permits</b>  | 51        | 64        | 41        |
| Total Catch*               | 4,117     | 4,783     | 3,401     |
| Estimated Value            | \$220,143 | \$313,021 | \$272,080 |

\*Total catch in bushels

Shellfish included in this data include: quahog, soft shell clam, oyster, bay scallop.

Source: Harbormaster’s Office, Town of Wareham, April 2003

b.) Finfish

Wareham has several anadromous fish runs within its boundaries. Herring, chad, and smelt return annually to the Weweantic River, Agawam River, Wankincko River, Gibbs Brook, and Red Brook. Smelt run primarily up the Weweantic River; however, they also occur in the Agawam in lesser numbers.

Herring run annually in April and May through the major river systems and several smaller brooks in Wareham. In season, herring are distributed to permit holders through the town Herring Agent who is the only person allowed to take herring. The town of Wareham issues an average 400 Herring permits annually to avid fishermen. The Herring run restoration project completed in 2002 has given the Town of Wareham the ability to rehabilitate one of the oldest and most productive herring runs within the Buzzards Bay watershed. The Agawam Herring Run was established in 1838, and has been in operation since 1632. The installation of new fish ladders has significantly improved the ability for river Herring to migrate along their 8-mile path to their freshwater spawning grounds within the towns of Wareham and Plymouth.

The numerous ponds and streams in Wareham contain many of the common freshwater fish species, including large-mouth bass, small-mouth bass, pickerel, yellow and white perch, sunfish, catfish, suckers, and minnows. Trout also inhabit freshwater streams in Wareham and are stocked annually by the Division of Fisheries and Wildlife.

Coastal areas contain a variety of fish species, including popular game fish, such as striped bass, bluefish, scup, flounder, and fluke. Each spring herring, alewives, and smelt migrate from the coastal waters into the fresh water ponds to spawn.

c.) Wildlife

The densely wooded areas are habitat for snowshoe hare, deer, cottontail rabbit, gray squirrel, flying squirrel, raccoon, ruffed grouse, woodchuck, opossum, skunk and fox. In his Open areas provide habitat for quail and occasionally pheasant. Nesting osprey can be observed at Little Harbor, Stony Point Dike, Burgess Point, along the Weweantic River, and at various other areas throughout town. Black ducks, mallards and wood ducks nest along the rivers, swamps, marshes and cranberry bogs. The coastal areas attract a great many migratory ducks and geese. Seagulls are observed in abundance. Swans nest on Mill Pond and many of the cranberry bog reservoirs.

In his 2003 study of the Fearing Hill Conservation Area, a 65-acre wooded parcel in South Wareham on the Weweantic River, David Kay found evidence of the following mammals, in approximate order of activity level seen (most to least): Gray fox (*Urocyon cinereoargenteus*), Deer (*Odocoileus virginianus*), Raccoon (*Procyon lotor*), Gray squirrel (*Sciurus carolinensis*), Fisher (*Martes pennanti*), Chipmunk (*Tamias striatus*), Skunk (*Mephitis mephitis*), Red fox (*Vulpes vulpes*), Mink (*Mustela vison*), and Red squirrel (*Tamiasciurus hudsonicus*). Although the focus of his study did not include wildlife other than mammals, Mr. Kay also reported hearing or observing wood frog, hawks (species uncertain), turkey vultures, rufous-sided towhees, chickadees, and oven birds.<sup>6</sup>

ii.) *Rare, Threatened, and Endangered Species*

In addition to the wildlife species that are common in Wareham, there are also species that the Massachusetts Natural Heritage Program classifies as “species of special concern.” This implies that the species could easily become threatened within Massachusetts. These species, which are shown in Table 10, include the Piping Plover, Osprey, and Eastern Box Turtle. A number of rare animal species are known only by their historical occurrence with no current observations on record. These species include the Marbled Salamander, the Northern Diamondback Terrapin (threatened), and the Southern Bog Lemming (special concern). Map 8 shows a concise view of Wareham’s critical habitat areas.

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<sup>6</sup> Kay, David C., Fearing Hill: Initial Natural History Evaluation, Spring 2003, Unpublished Manuscript, May 2003, p. 15.

**Table 10: Rare Plants & Animals on the National Heritage and Endangered Species List Observed in Wareham**  
As of 3/21/2003

| <b>Taxonomic Group</b> | <b>Scientific Name</b>            | <b>Common Name</b>          | <b>State Rank*</b> | <b>Federal Rank*</b> | <b>Most Recent Observation</b> |
|------------------------|-----------------------------------|-----------------------------|--------------------|----------------------|--------------------------------|
| Amphibian              | <i>Ambystoma opacum</i>           | Marbled Salamander          | T                  |                      | 1900                           |
| Reptile                | <i>Clemmys guttata</i>            | Spotted Turtle              | SC                 |                      | 1996                           |
| Reptile                | <i>Malaclemys terrapin</i>        | Diamondback Terrapin        | T                  |                      | 2000                           |
| Reptile                | <i>Pseudemys rubriventris</i>     | Northern Red-Bellied Cooter | E                  | LE                   | 1995                           |
| Reptile                | <i>Terrapene carolina</i>         | Eastern Box Turtle          | SC                 |                      | 2000                           |
| Bird                   | <i>Accipiter striatus</i>         | Sharp-Shinned Hawk          | SC                 | (PS)                 | 1988                           |
| Bird                   | <i>Charadrius melodus</i>         | Piping Plover               | T                  | (LE,LT)              | 1993                           |
| Bird                   | <i>Parula americana</i>           | Northern Parula             | T                  |                      | 1889                           |
| Bird                   | <i>Sterna dougallii</i>           | Roseate Tern                | E                  | (PS:LE,LT)           | 1990                           |
| Mammal                 | <i>Synaptomys cooperi</i>         | Southern Bog Lemming        | SC                 |                      | 1894                           |
| Mussel                 | <i>Alasmidonta heterodon</i>      | Dwarf Wedgemussel           | E                  | LE                   | 1866                           |
| Mussel                 | <i>Alasmidonta undulata</i>       | Triangle Floater            | SC                 |                      | 1999                           |
| Mussel                 | <i>Leptodea ochracea</i>          | Tidewater Mucket            | SC                 |                      | 1999                           |
| Dragonfly/Damselfly    | <i>Anax longipes</i>              | Comet Darner                | SC                 |                      | 1913                           |
| Dragonfly/Damselfly    | <i>Boyeria grafiana</i>           | Ocellated Darner            | SC                 |                      | 1912                           |
| Dragonfly/Damselfly    | <i>Enallagma laterale</i>         | New England Bluet           | SC                 |                      | 1987                           |
| Butterfly/Moth         | <i>Apamea mixta</i>               | Coastal Plain Apamea Moth   | SC                 |                      | 1975                           |
| Butterfly/Moth         | <i>Catocala herodias gerhardi</i> | Gerhard's Underwing Moth    | SC                 |                      | 1978                           |
| Butterfly/Moth         | <i>Cicinnus melsheimeri</i>       | Melsheimer's Sack Bearer    | T                  |                      | 1974                           |
| Butterfly/Moth         | <i>Cingilia catenaria</i>         | Chain Dot Geometer          | SC                 |                      | 1977                           |
| Butterfly/Moth         | <i>Hemileuca maia</i>             | Barrens Buckmoth            | SC                 |                      | 2001                           |
| Butterfly/Moth         | <i>Hypomecis buchholzaria</i>     | Buchholz's Gray             | E                  |                      | 1968                           |
| Butterfly/Moth         | <i>Itame sp 1 nr inextricata</i>  | Pine Barrens Itame          | SC                 |                      | 1978                           |
| Butterfly/Moth         | <i>Metarranthis pilosaria</i>     | Coastal Swamp Moth          | SC                 |                      | 1978                           |
| Butterfly/Moth         | <i>Papaipema appassionata</i>     | Pitcher Plant Borer Moth    | T                  |                      | 1971                           |
| Butterfly/Moth         | <i>Papaipema sulphurata</i>       | Water-Willow Stem Borer     | T                  |                      | 1987                           |
| Butterfly/Moth         | <i>Spartiniphaga inops</i>        | Spartina Borer Moth         | SC                 |                      | 1977                           |
| Vascular Plant         | <i>Aristida purpurascens</i>      | Purple Needlegrass          | T                  |                      | 1987                           |
| Vascular Plant         | <i>Cardamine longii</i>           | Long's Bitter-Cress         | E                  |                      | 2000                           |
| Vascular Plant         | <i>Carex striata var brevis</i>   | Walter's Sedge              | E                  |                      | 1986                           |

|                |   |                          |    |      |
|----------------|---|--------------------------|----|------|
| Vascular Plant | <i>Corema conradii</i>                            | Broom Crowberry          | SC | 2000 |
| Vascular Plant | <i>Crassula aquatica</i>                          | Pygmyweed                | T  | 1997 |
| Vascular Plant | <i>Crassula aquatica</i>                          | Pygmyweed                | T  | 1998 |
| Vascular Plant | <i>Cyperus houghtonii</i>                         | Houghton's Flatsedge     | E  | 1890 |
| Vascular Plant | <i>Dichantherium<br/>mattamuskeetense</i>         | Mattamuskeet Panic-Grass | E  | 1990 |
| Vascular Plant | <i>Elatine americana</i>                          | American Waterwort       | E  | 1980 |
| Vascular Plant | <i>Eriocaulon parkeri</i>                         | Estuary Pipewort         | E  | 1994 |
| Vascular Plant | <i>Eupatorium aromaticum</i>                      | Lesser Snakeroot         | E  | 1935 |
| Vascular Plant | <i>Liatrix borealis</i>                           | New England Blazing Star | SC | 2000 |
| Vascular Plant | <i>Linum medium</i> var<br><i>texanum</i>         | Rigid Flax               | T  | 1931 |
| Vascular Plant | <i>Prenanthes serpentaria</i>                     | Lion's Foot              | E  | 1933 |
| Vascular Plant | <i>Sabatia kennedyana</i>                         | Plymouth Gentian         | SC | 1989 |
| Vascular Plant | <i>Sagittaria subulata</i><br>var <i>subulata</i> | River Arrowhead          | E  | 1990 |
| Vascular Plant | <i>Sagittaria teres</i>                           | Terete Arrowhead         | SC | 2000 |
| Vascular Plant | <i>Setaria geniculata</i>                         | Bristly Foxtail          | SC | 2000 |
| Vascular Plant | <i>Spartina cynosuroides</i>                      | Salt Reedgrass           | T  | 1989 |
| Vascular Plant | <i>Symphotrichum concolor</i>                     | Eastern Silvery Aster    | E  | 1926 |
| Vascular Plant | <i>Utricularia subulata</i>                       | Subulate Bladderwort     | SC | 1975 |

Source: Massachusetts Division of Fisheries and Wildlife (<http://www.state.ma.us/dfwele/dfw/nhosp/townW.htm#Wareham>)

\* Definitions

"Endangered" (E) species are native species which are in danger of extinction throughout all or part of their range, or which are in danger of extirpation from Massachusetts, as documented by biological research and inventory.

"Threatened" (T) species are native species, which are likely to become endangered in the foreseeable future, or which are declining or rare as determined by biological research and inventory.

"Special concern" (SC) species are native species which have been documented by biological research or inventory to have suffered a decline that could threaten the species if allowed to continue unchecked, or which occur in such small numbers or with such restricted distribution or specialized habitat requirements that they could easily become threatened within Massachusetts.

LE: Listed Endangered; LT: Listed Threatened; PE: Proposed Endangered; PS: "PS" "Partial Status," indicating that the status applies only to a portion of the species' range.

## **F. Scenic Resources and Unique Environments**

Wareham has various types of scenic resources and unique environments, as shown on Map 10. One of the most prominent features of Wareham are the acres of cranberry bogs within the town. The cranberry industry is the largest economic business in Wareham but in recent years has fallen on hard times as cranberry prices have plummeted. Agricultural lands provide large expanses of undeveloped area both as bog and surrounding woodlands. Development pressure, as well as a decline in the profitability of the cranberry industry, has led to the recent sale of agricultural lands.

Onset Village overlooks Onset Bay from its elevated bluffs providing a visual panorama of the various activities associated with a coastal existence. Beaches, private piers, marinas, and fishing vessels coexist within this moderately protected embayment. The surrounding area is densely developed and becomes heavily populated in summer months.

The Narrows Bridge is the crossing point of the Agawam River near the downtown area. Besse Park is located along the edge of the river adjacent to the bridge and is used by recreational fishermen and sightseers. One can view expansive salt marsh along the Agawam River from the bridge.

The Parker Mills Bridge is up stream from the Narrows Bridge and is another scenic overlook. The Tremont Nail Co., which is a historic mill site, exists at this location. Views of the Narrows Bridge crossing can be seen to the south while views of the freshwater Parker Mills Pond are seen to the north. A fish ladder spans the difference in elevation between the Parker Mill Pond and the brackish tidewaters below. Herring utilize this ladder annually in making their run upriver to spawning grounds.

Little Harbor is a barrier beach system that offers excellent views of Buzzards Bay. A valuable estuarine community exists behind the low dunes of this barrier. Shellfish grants are situated in the protected waters of Little Harbor. Little Harbor beach is a popular summer destination for town residents and offers primarily shallow calm waters for swimming. The barrier beach has been overwashed in several areas during past storm events. Efforts have been made to reestablish beach grass on the overwashed areas to stabilize the dunes. Erosion problems are also evident along the coastal banks adjacent to Little Harbor Beach. The Little Harbor area is a unique environment in Wareham and provides wildlife habitat for a wide variety of local fauna.

Horseshoe Pond is an inland freshwater pond with a diversity of wetland habitat. Open water, shallow and deep freshwater marsh, and wooded swamps all exist in and around the pond. The pond was created when the Weweantic River was dammed for the creation of an iron works factory at the site. Remnants of the building foundations and the dam are still in place. The dam at the foot of Horseshoe Pond is in a state of disrepair and is not actively managed. Water levels in the pond fluctuate depending on rainfall conditions and cranberry industry activity. Town and privately held conservation land occupy frontage along the pond in several locations. The value of this pond is its natural undisturbed shores, which are aesthetically attractive and valuable wildlife habitat. The Natural Heritage and Endangered Species Program has identified a portion of the pond and surrounding land as estimated habitat of rare wetlands wildlife.

Tremont Dam is an earthen water control structure on the Weweantic River. Tremont Pond is above

the dam and town-owned property exists below the dam. The town-owned property, which was a mill site at one point and in more recent years was used as a recreational facility for children's programs, is now being converted into a park and conservation area. This property has frontage along the Weweantic River that allows canoe access.

### *Historic Structures*

Wareham has a number of historic structures and sites that have been catalogued by the Massachusetts Historical Commission. The most important structures are the Tremont Nail Complex and the Tobey Homestead, both of which are listed on the National Registry of Historic Places. Other historic resources include the Roland Hatcher House, Fearing Tavern, Prince Burgess House, Onset Avenue Bridge, and the Great Neck Cemetery. The Great Neck Road area contains a concentration of 14 structures of historical importance. Finally, Wareham has established local historic districts at Parker Mills, Center Park, and the Narrows, including Mary Besse Park. Other sites of particular interest are:

The Wigwam - The Wigwam is a structure in Onset built to honor the Spiritualists of the Indian tribes that inhabited the Wareham area. The Wigwam was constructed in 1894 by builder William Cairnes. The structure is an octagonal building 26' in height that can hold just under 200 people. There are various Indian artifacts within the Wigwam. The building is still used by the Spiritualists primarily in the summer months. The public is welcome to view the building during this time period.

The Kendrick House - This historic building was the home of Captain John Kendrick. The House is located at the Narrows behind Besse Park. Captain Kendrick is a significant historic figure due to his various exploits. A resident of Wareham, Captain Kendrick was the commander of the first U.S. expedition to open trade with China via the Pacific Northwest and to circumnavigate the world. He was also a privateer in the Revolutionary War. Kendrick spent the last years of his life on the west coast and in Hawaii. He was accidentally killed by canon fire during a ceremony in Hawaii.

## G. Environmental Problems

### i.) Hazardous Waste Sites

The following sites are listed by the Department of Environmental Protection, Bureau of Waste Site Cleanup, Site Management and Permits Section under the Massachusetts Contingency Plan (310 CMR 40.0000) and the MGL Chapter 21E:

**Table 11: DEP Listed Hazardous Waste Sites in Wareham, June 1, 2003**

| Site Name                | Address                   | Status/Chemical Type                    |
|--------------------------|---------------------------|---|
| Across from Fire Station | 274 Main Street           | Unclassified/Oil                        |
| Boat Dock                | Rt 195 East Rest Area     | RAO/Oil                                 |
| Bordered by Agawam River | 12-14 Knowles Avenue      | DPS/Oil                                 |
| BP Service Station       | 3037 Cranberry Highway    | RAO/Oil                                 |
| Bryant Oil               | 136 Sandwich Road         | RAO/Oil                                 |
| Burgess Point            | 50 Winship Avenue         | Def Tier 1B/Oil                         |
| Caped Cod Cartage        | 2381 Cranberry Highway    | RAO/Oil & Haz Material                  |
| Charlotte Furnace Road   | 2364 Cranberry Highway    | RAO/Oil                                 |
| Christy                  | 2196 Cranberry Highway    | RAO/Hazardous Material                  |
| Circle K Store           | 163 Main Street           | RAO/Oil & Haz Material                  |
| Corner Country Store     | 2196 Cranberry Highway    | RAO/Oil                                 |
| CVS Pharmacy             | 2992 Cranberry Highway    | RAO/Oil                                 |
| Decas Elementary School  | Marion Road               | RAO/Oil                                 |
| Franconia Hurley Corp    | 377 Main Street           | Tier 2/Oil                              |
| Gateway Buick            | 2400 Cranberry Highway    | DEF Tier B/Oil                          |
| Getty Service Station    | 307 Main Street           | Tier 2/Haz Material                     |
| Gibb Station             | 167 Main Street           | RTN Closed/Oil                          |
| Hudson Trailer Park      | 3036 Cranberry Highway    | DEF Tier 1B/Oil                         |
| Indian Mound Beach Area  | 28 Cohasset Road          | DEF Tier 1B Oil                         |
| Joe's Gas                | 341 Main Street           | Tier 2/Oil                              |
| John Nissen Bakery       | 2406 Cranberry Highway    | RAO/Oil                                 |
| La Casses BP Station     | 109 Onset Avenue          | RAO/Oil                                 |
| Lot 1065A & 1081         | 12-14 Knowles Avenue      | Tier 2/Oil                              |
| Maple Springs On Ramp    | Route 25, Exit 1          | RAO/Oil                                 |
| Maxi Gas                 | 3242 Cranberry Highway    | Tier 2/Oil & RAO/Oil                    |
| Mobil Station            | 2900 Cranberry Highway    | Tier 2/Oil & Haz Mat<br>DEF Tier 1B/Oil |
| Municipal Maint Bldg     | 95 Charge Pond Road       | RAO/Oil                                 |
| Mutual Gas Station       | 3199 Cranberry Highway    | RAO/Oil                                 |
| Nickelson Residence      | 162 Park Avenue           | RAO/Oil                                 |
| No Location Aid          | 65 Parkwood Drive         | Oil & Haz Material                      |
| No Location Aid          | 7 Hiawatha Drive          | DEF Tier 1B, Haz Mat                    |
| No Location Aid          | Independence Lane         | RTN Closed/Oil                          |
| No Location Aid          | 257 Onset Avenue          | RAO/Oil                                 |
| No Location Aid          | 34 Repose Lane            | RAO/Oil                                 |
| No Location Aid          | 6 13 <sup>th</sup> Street | RAO/Oil                                 |
| No Location Aid          | 31 Old Onset Road         | RAO/Oil                                 |
| No Location Aid          | 26 Pheasant Avenue        | RAO/Oil                                 |

| Site Name                | Address                | Status/Chemical Type   |
|--------------------------|------------------------|------------------------|
| No Location Aid          | 109 Onset Avenue       | RAO/Oil                |
| No Location Aid          | 65 Parkwood Drive      | RAO/Oil & Haz Material |
| No Location Aid          | 5 E. Central Avenue    | RAO/Oil                |
| NSTAR Vehicle Garage     | 7 Doty Street          | RAO/Oil                |
| Onset Bay Marina         | 18 Green Street        | RAO/Oil & Haz Material |
| Point Indepen Yacht Club | 7 <sup>th</sup> Avenue | RAO/Oil                |
| Pole 193/25              | 174 Glen Charlie Road  | RAO/Oil                |
| Pole 217/14              | Pinetree Drive         | RAO/Oil                |
| Produce Company          | 473 Main Street        | FAO/Oil                |
| Rochester Bituminous     | 83 Kings Highway       | RAO/Oil                |
| Rose Point Avenue (53)   | Weweantic River        | Adeq Reg/Oil           |
| Route 6 South            | 274 Marion Road        | RAO/Oil & Haz Material |
| Royal Crest Trailer Park | Unit 23, King Drive    | RAO/Oil                |
| SEMASS                   | 141 Cranberry Highway  | RAO/Oil                |
| Shell Gas Station        | 2997 Cranberry Highway | RAO/Oil & Haz Material |
| Summer Cottage           | 10 Willow Street       | RAO/Oil                |
| Sunoco Service Station   | 3016 Cranberry Highway | Tier 1B/Oil            |
| Sunoco Service Station   | 2893 Cranberry Highway | RAO/Oil                |
| Superior Fuel            | 136 Sandwich Road      | RTN Closed/Oil         |
| Texaco Station           | 377 Main Street        | Tier 2/Oil             |
| Tihonet Road             | Off Farm to Market Rd  | RAO/Hazardous Material |
| Town Pier                | Town Pier              | Adequate/Oil           |
| Tremont Nail             | 6-8 Elm Street         | RAO/Oil                |
| Umass Cranberry Exp Stat | State Bog Road         | Unclassified/Haz Mat   |
| Utility Pole 592/2       | 72 Minot Avenue        | RAO/Oil                |
| Wareham Plaza            | 127 Marion Road        | Tier 2/Haz Material    |
| Wareham Police Dept      | 2515 Cranberry Highway | RAO/Oil                |
| Wareham Texaco           | 2537 Cranberry Highway | RAO/Hazardous Material |
| WARRS Marina             | Lower Main Street      | RAO/Oil                |

Source: DEP, Bureau of Waste Site Cleanup, June 1, 2003, at <http://www.state.ma.us/cgi-bin/dep/wscreport.cgi>. See Appendix X of this report and BWSC website for Tracking Number, Status, and other information.

## ii.) Landfill

The Tri-Town landfill, which was closed to the public in 1993, contributes leachate to adjacent wetland areas, namely the Wankincko River, which flows south into Wareham. Water sampling from monitoring wells around the site has been ongoing. It is evident from the sampling program, which is overseen by the Division of Solid Waste Management of the Department of Environmental Protection (DEP), regional office in Lakeville, MA, that the landfill must be considered a potential pollution source to Wareham wetlands. It is difficult to anticipate the long-term affect the landfill will have on the environment. The water sampling program is overseen by the Division of Solid Waste Management of the Department of Environmental Protection (DEP) regional office in Lakeville, MA. At present, DEP states that water sampling data has not shown listed pollutants as having exceeded thresholds, which would trigger responsive actions. The landfill is being operated in accordance with state permits issued for the construction of the facility. Continued monitoring of ground water is currently the only action required by the DEP regarding this facility.

### *iii.) Erosion*

The extent of coastal erosion in Wareham is unknown and needs further studies.

### *iv.) Flooding*

As a waterfront community on Buzzards Bay, Wareham is subject to flooding problems during coastal storm events. The town has a significant number of low-lying areas and approximately one-third of the land area in Wareham is shown as being within the 100-year flood plain as determined by the Federal Emergency Management Agency (FEMA). The majority of this land has already been heavily developed. The result of this is ongoing erosion and damage to structures and property along the coast during hurricanes and winter storms. In the Swifts Beach area, there are several homes that have been reconstructed and elevated on concrete pilings after having been damaged during Hurricane Bob. The flood construction regulations require that new structures be elevated to the flood elevation as designated on the FEMA Firm Maps. Homes on pilings are also found in Onset and on Onset Island. Because of the extensive development in flood zones flooding will continue to be a problem as additional dwellings become damaged during future storm events.

Flooding also occurs along inland river systems but does not result in the level of damage to personal property as is seen along the coast. Flooding inland results from heavy rain events and does not necessarily coincide with storms that cause coastal damage.

### *v.) Sedimentation*

Sedimentation of Wareham's wetlands and waterways has also become a concern in many locations. It had become common practice over time to direct road runoff into nearby waterways. Sedimentation combined with other natural phenomena has caused certain waterways to become filled in. The poor water circulation may lead to degradation of wildlife habitat.

The cost associated with dredge projects has made the town dependent on aid from other governmental agencies for funding. Although Dredge projects may present environmental problems they can be essential to maintaining wildlife habitat

### *vi.) Development Impacts*

Water quality problems in Wareham have resulted in the intermittent closure of individual shellfishing areas. The water quality may be related to human activity and the impacts associated with that activity.

Wareham has undertaken several projects to reconstruct its road drainage systems to eliminate this environmental problem. Such reconstruction projects have taken place in the Pinehurst area, the Pilgrim Avenue area on Swift's Neck, O-ne-set Heights, Riverside, West Boulevard, and Broad Marsh River areas. Sedimentation and leaching basins have been installed under the roads in these areas to treat stormwater. Similar projects have been proposed and permitted for the Point Independence area and the Wabun - 11th Street areas in Onset. These projects are difficult due to

the lack of available space in which to build new drainage structures. Elimination of this pollution source, coupled with improvements to sewage treatment, should dramatically improve the water quality in current problem areas.

Nitrogen loading from activities in town's upstream from Wareham directly contributed to water quality degradation in Wareham's major river and estuarine systems. Eight years of water quality monitoring data for nitrogen analysis by the Buzzards Bay Project and Coalition for Buzzards Bay between 1992 and 2001 reveal that the Weweantic River, Broadmarsh River, and Wareham River each range from fair to poor water quality<sup>7</sup>. Onset Bay and Buttermilk Bay range from excellent to fair water quality over the same period. Nitrogen overloading is a complex management issue due to the size of the watersheds involved and the fact that much of the nitrogen emanates from communities outside of Wareham's municipal boundaries. The existing problems in the Wareham/Broadmarsh River will be solved through the enhanced waste water process through the upgrade of the Wareham Waste Water Treatment Plant. As land further upriver is developed, beyond the reach of municipal sewer lines, other solutions will be needed to control nitrogen loading. In its October 25, 2002, report entitled "Proposed Nitrogen Loading Limits for New Development in the Wareham River Estuary Watershed," the Buzzards Bay Project concluded that "left uncontrolled, nitrogen from future development (mostly septic system wastewater disposal) would overwhelm the Wareham river system, which is already considered eutrophic."<sup>8</sup> The Town recently agreed to participate in the Massachusetts estuary project which will focus on the problem of nitrogen loading as a regional issue.

#### *vii.) Ground and Surface Water Pollution*

Wareham currently utilizes a combination of ways of handling its sewage. Certain parts of the town are tied into the Wareham Water Pollution Control Facility which is a sewage treatment plant situated on the Agawam River. The main areas of town serviced by this facility include Onset, Pinehurst, Swifts Beach, Hamilton Beach, Indian Mound, Riverside, Onset Heights, Sunset Island and sections of Cranberry Highway. The Rose Point, Briarwood Beach, Parkwood, Agawam Beach and Weweantic Shores areas are the next sections of Town to be sewered. Treated effluent is discharged into the Agawam River. Currently, the plant treats an average of one million gallons of sewage a day. Other parts of Wareham utilize subsurface sewage disposal systems constructed on individual lots.

Areas such as West Wareham and Shangri-La all have private septic systems associated with the individual homes in these areas. Many of the homes in these areas were originally built as summer cottages on very small lots. These cottages were most often built in close proximity to water bodies to take advantage of the scenic value of these areas. With housing becoming less affordable, many of these summer cottages have been, and are continuing to be, converted into year-round homes. The increased use of these homes and the poor design of the original septic systems have resulted in scrutinization of this pollution source as a contributor to water quality problems in the surrounding areas. This problem is being addressed through septic system upgrades on individual sites which are

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7 See Baywatchers III – A Decade of Monitoring Buzzards Bay Embayments 1992-2001, The Coalition for Buzzards Bay, 2002.

8 See letter of January 13, 2003, to the Wareham Planning Board from Dr. Joseph Costa, Executive Director, Buzzards Bay Project.

required when it has been determined that a given system is failed or has not passed a Title V inspection. Problem areas have also been recommended for connection to the water pollution control facility. Extension of sewer to the areas identified in the plan will commence once the sewer plant upgrade is completed.

*viii.) Other Issues*

Wareham has a significant waterfowl population in the summer months consisting in large part of Canada Geese. In great numbers, these birds can produce large quantities of fecal matter and have been blamed for the destruction of lawns. There is also a considerable swan population in and around the Wankincko and Agawam Rivers. Currently, the MA Division of Fisheries and Wildlife allows extended hunting seasons and utilizes other management efforts to curb the Canada Geese population. With permits issued by the MA Division of Fisheries and Wildlife, egg addling may also be employed as a population management tool.

## V. INVENTORY OF LANDS OF CONSERVATION & RECREATION INTEREST

### A. Introduction

The table below details land use patterns in Wareham as compiled by the University of Massachusetts, Department of Forestry and Wildlife Management (Also see Map 1).

**Table 12: Land Use in Wareham, 1971-1999**

| Land Use                   | 1971 Acres | 1999 Acres | % Change |
|----------------------------|------------|------------|----------|
| Agriculture                | 3,260      | 2,863      | -12.2    |
| Forest, Wetland, Open Land | 15,887     | 13,941     | -12.2    |
| Recreation Land Use        | 361        | 288        | -20.2    |
| Urban                      | 4,237      | 5,597      | 32.1     |

Source: SRPEDD, 2002\*

\*1971 data = MacConnell, WP. *Planning & Development Series No. 23*, 1973.

\*1999 data = downloaded from MASSGIS website

The Town of Wareham has a current Inventory of Lands of Conservation and Recreation Interest which includes 573 parcels of land that amounts to over 8,980 acres. The following sections detail the category divisions of the 8,980 acres. A full parcel inventory follows.

#### *i.) Protected Lands*

Land is considered protected if it falls into one or more of the following categories:

- ◆ State land purchased with the use of federal funds, therefore covered by PL88-578
- ◆ State land owned by a state conservation agency, therefore covered by Article 97 of the Massachusetts Constitution
- ◆ Town land owned by or under the jurisdiction of:
  - a. Conservation Commission
  - b. Water Department
  - c. Any town department if dedicated to open space/conservation by a permanent deed restriction
- ◆ Private land:
  - a. Owned by a nonprofit organization dedicated to land conservation (i.e. land trust)
  - b. Protected in perpetuity by a conservation or deed restriction
  - c. Protected by the Agricultural Preservation Restriction (APR) program
  - d. Protected by a conservation restriction under the DEP's Wetland Restriction Program

#### *Permanently Protected Public and Private Non-profit Parcels*

|                                 |     |
|---------------------------------|-----|
| Private Conservation            | 563 |
| Wareham Conservation Commission | 170 |
| Parks & Municipal Maintenance   | 19  |
| Watershed Protection            | 610 |
| State Agencies                  | 280 |
| Minot Forest Committee          | 193 |
| Conservation Restrictions       | 48  |

Total Permanently Protected  
Parcels in Acres **1,883**

*ii) Unprotected Lands*

Land is considered unprotected if it falls into one or more of the following categories:

- ◆ Unrestricted federal land
- ◆ Unrestricted state land
- ◆ Town land:
  - a. Not owned by the Conservation Commission or otherwise restricted
  - b. Tax title properties
  - c. MGL Chapter 61, 61A, and 61B lands
  - d. Selected unrestricted privately owned open space

*Unprotected Public Parcels*  
Parks & Municipal Maintenance 301

Total Unprotected Parcels in Acres **301**

*iii.) Private Parcels*

|   |                     |
|---|---------------------|
| Forest Lands under Chapter 61   | 369                 |
| Agricultural Lands under Chapter 61A                                      | 6,273               |
| Private Recreation Lands under Chapter 61B                                | 297                 |
| <br>  |                     |
| Total Private Parcels in Acres  | <b>6,939</b>        |
| <br>  |                     |
| <i>Total Acreage of Lands of Conservation<br/>and Recreation Interest</i> | <b><u>9,123</u></b> |

**B. PROTECTED PUBLIC AND NON-PROFIT PARCELS**

Massachusetts Audubon Society  
 Wildlands Trust of Southeastern Massachusetts  
 Wareham Conservation Commission  
 Wareham Parks & Municipal Maintenance Departments  
 Wareham and Onset Watershed Protection Land  
 New England Forestry Foundation  
 Division of Fisheries and Wildlife  
 Conservation Restrictions

**TABLE 13: Conservation Restrictions in Wareham as of June 2003**

| <b>Map</b>   | <b>Owner</b>     | <b>Restriction Holder</b> | <b>Acres</b> | <b>Zoning</b> |
|--------------|------------------|---------------------------|--------------|---------------|
| 30 Lot A     | John W. Peirce   | Wildlands Trust of SE MA  | 2.9          | R-60          |
| 37 Lot B     | John W. Peirce   | Wildlands Trust of SE MA  | 34.6         | R-60          |
| 31 Lot A     | Samuel P.M. Gray | Wildlands Trust of SE MA  | 1.76         | R-60          |
| 31 Lot 2A    | Judith Gray      | Wildlands Trust of SE MA  | 2.01         | R-60          |
| 36 Lot 2A    | Baldwin Family   | Wareham Land Trust        | 4.27         | R-60          |
| 129 Lot 1018 | Doglas Truran    | Wildlands Trust of SE MA  | 12.95        | R-60          |
| 86 Lot 1000  | Town of Wareham  | Wareham Land Trust        | 66.3         | R-60          |
|              | Indian Neck Land | Wildlands Trust of SE MA  | 34.8         | R-60          |

**Table 14: Protected Public and Non-Profit Parcels of Land in Wareham: May 2003**

| Map | Block | Lot    | Owner's Name                                   | Location            | Acres  | Use Code | Use Descript | Zone |
|-----|-------|--------|--|---------------------|--------|----------|--------------|------|
| 125 |       | 1000   | COMM OF MASS                                   | 0 BARKER RD OFF     | 88.80  | 9050     | P/HOS CHAR   |      |
| 128 |       | 1010   | COMM OF MASS                                   | 0 BARKER RD OFF     | 190.93 | 9050     | P/HOS CHAR   | R130 |
|     |       |        | <b>COMM OF MASS Total</b>                      |                     | 279.73 |          |              | 0    |
| 33  |       | 2 4    | INDIAN NECK LAND CONSERVATION                  | 34 TOWHEE RD        | 2.43   | 9050     | CHAR ORG     | R60  |
| 33  |       | I3     | INDIAN NECK LAND CONSERVATION                  | 195 INDIAN NECK RD  | 5.23   | 9050     | P/HOS CHAR   | R60  |
| 33  |       | IA     | INDIAN NECK LAND CONSERVATION                  | 6 TOWHEE RD         | 4.99   | 9050     | CHAR ORG     | R60  |
| 33  |       | IB     | INDIAN NECK LAND CONSERVATION                  | 16 TOWHEE RD        | 5.00   | 9050     | CHAR ORG     | R60  |
|     |       |        | <b>INDIAN NECK LAND CONSERVATION Total</b>     |                     | 17.65  |          |              | 0    |
| 33  |       | I2     | INDIAN NECK LAND CONSERVATION LLC              | 185 INDIAN NECK RD  | 5.50   | 9050     | CHAR ORG     | R60  |
|     |       |        | <b>INDIAN NECK LAND CONSERVATION LLC Total</b> |                     | 5.50   |          |              | 0    |
| 27  |       | 1007   | MASS. AUDUBON SOCIETY INC                      | 2 GREEN GATE LN     | 35.80  | 9050     | P/HOS CHAR   | R60  |
|     |       |        | <b>MASS. AUDUBON SOCIETY INC Total</b>         |                     | 35.80  |          |              | 0    |
| 54  |       | 1010   | MASS. AUDUBON SOCIETY, INC                     | 0 CROMESETT RD OFF  | 3.00   | 9050     | P/HOS CHAR   | R30  |
|     |       |        | <b>MASS. AUDUBON SOCIETY, INC Total</b>        |                     | 3.00   |          |              | 0    |
| 54  |       | 1007   | MASS. AUDUBON SOCIETY, INC.                    | 0 CROMESETT RD OFF  | 1.50   | 9050     | P/HOS CHAR   | R30  |
| 54  |       | 1012   | MASS. AUDUBON SOCIETY, INC.                    | 0 CROMESETT RD OFF  | 6.00   | 9050     | P/HOS CHAR   | R30  |
| 54  |       | 1013   | MASS. AUDUBON SOCIETY, INC.                    | 0 CROMESETT RD OFF  | 4.00   | 9050     | P/HOS CHAR   | R30  |
| 54  |       | 1018   | MASS. AUDUBON SOCIETY, INC.                    | 0 CROMESETT RD OFF  | 2.65   | 9050     | P/HOS CHAR   |      |
|     |       |        | <b>MASS. AUDUBON SOCIETY, INC. Total</b>       |                     | 14.15  |          |              | 0    |
| 16  |       | 1006   | MASSACHUSETTS AUDUBON                          | 0 ONSET AVE OFF     | 1.75   | 9050     | P/HOS CHAR   | R30  |
|     |       |        | <b>MASSACHUSETTS AUDUBON Total</b>             |                     | 1.75   |          |              | 0    |
| 16  |       | B13    | MASSACHUSETTS AUDUBON SOCIETY                  | 328 ONSET AVE       | 1.46   | 9050     | P/HOS CHAR   | R30  |
| 16  |       | B45 A  | MASSACHUSETTS AUDUBON SOCIETY                  | 0 TRADE WINDS DR    | 0.03   | 9050     | P/HOS CHAR   | R30  |
| 16  |       | B48 A  | MASSACHUSETTS AUDUBON SOCIETY                  | 0 TRADE WINDS DR    | 0.01   | 9050     | P/HOS CHAR   | R30  |
| 16  |       | B119   | MASSACHUSETTS AUDUBON SOCIETY                  | 10 BAPTISTE AVE     | 0.17   | 9050     | P/HOS CHAR   | R30  |
| 23  |       | 1000   | MASSACHUSETTS AUDUBON SOCIETY                  | 0 BURGESS PT RD OFF | 3.27   | 9050     | P/HOS CHAR   | R60  |
| 24  |       | B      | MASSACHUSETTS AUDUBON SOCIETY                  | 17 BURGESS PT RD    | 52.30  | 9050     | P/HOS CHAR   | R60  |
| 51  |       | 1000   | MASSACHUSETTS AUDUBON SOCIETY                  | 232 CROMESETT RD    | 13.89  | 9050     | P/HOS CHAR   | R30  |
| 51  |       | 1008   | MASSACHUSETTS AUDUBON SOCIETY                  | 0 PROGRESS AVE OFF  | 4.00   | 9050     | P/HOS CHAR   | R30  |
| 51  |       | 1009   | MASSACHUSETTS AUDUBON SOCIETY                  | 0 PROGRESS AVE OFF  | 0.42   | 9050     | P/HOS CHAR   | R30  |
| 52  |       | 1006 B | MASSACHUSETTS AUDUBON SOCIETY                  | 0 CROMESETT RD OFF  | 6.40   | 9050     | P/HOS CHAR   | R30  |

|     |        |   |                    |       |      |            |      |
|-----|--------|---|--------------------|-------|------|------------|------|
| 52  | 1006 F | MASSACHUSETTS AUDUBON SOCIETY               | 0 CROMESETT RD OFF | 4.00  | 9050 | P/HOS CHAR |      |
|     |        | <b>MASSACHUSETTS AUDUBON SOCIETY Total</b>  |                    | 85.94 |      |            | 0    |
| 7   | 1003   | MASSACHUSETTS LAND                          | 101 RED BROOK RD   | 4.27  | 9050 | P/HOS CHAR | R30  |
| 7   | 1003 P | MASSACHUSETTS LAND                          | 101 RED BROOK RD   | 4.20  | 9050 | P/HOS CHAR | R30  |
| 128 | 1007   | MASSACHUSETTS LAND                          | 0 RED BROOK RD OFF | 2.40  | 9050 | P/HOS CHAR | R130 |
| 128 | 1008   | MASSACHUSETTS LAND                          | 0 RED BROOK RD OFF | 0.84  | 9050 | P/HOS CHAR | R130 |
| 128 | 1009   | MASSACHUSETTS LAND                          | 0 RED BROOK RD OFF | 3.10  | 9050 | P/HOS CHAR | R130 |
| 128 | 1013   | MASSACHUSETTS LAND                          | 0 ROUTE 25         | 45.77 | 9050 | P/HOS CHAR | R130 |
| 131 | 1006   | MASSACHUSETTS LAND                          | 0 RED BROOK RD OFF | 1.80  | 9050 | P/HOS CHAR | R130 |
| 131 | 1014 A | MASSACHUSETTS LAND                          | 58 RED BROOK RD    | 19.20 | 9050 | P/HOS CHAR | R130 |
| 131 | 1019 B | MASSACHUSETTS LAND                          | 36 RED BROOK RD    | 16.20 | 9050 | P/HOS CHAR | R130 |
|     |        | <b>MASSACHUSETTS LAND Total</b>             |                    | 97.78 |      |            | 0    |
| 36  | 8      | NEW ENGLAND FORESTRY FNDTN INC              | 11 BOURNE POINT RD | 39.83 | 9050 | P/HOS CHAR | R60  |
|     |        | <b>NEW ENGLAND FORESTRY FNDTN INC Total</b> |                    | 39.83 |      |            | 0    |
| 1   | 230    | ONSET FIRE DISTRICT                         | 5 E CENTRAL AVE    | 0.52  | 9030 | MUNICIPAL  | OVR  |
| 1   | 236    | ONSET FIRE DISTRICT                         | 9 E CENTRAL AVE    | 0.17  | 9030 | MUNICIPAL  | OVR  |
| 1   | 532    | ONSET FIRE DISTRICT                         | 240 ONSET AVE      | 0.12  | 9030 | MUNICIPAL  | OVC  |
| 2   | 1050   | ONSET FIRE DISTRICT                         | 0 LONG NECK RD OFF | 0.19  | 9030 | MUNICIPAL  | CNRC |
| 7 B | 3 73   | ONSET FIRE DISTRICT                         | 0 RED BROOK RD     | 0.08  | 9030 | MUNICIPAL  | R30  |
| 9   | 1000 B | ONSET FIRE DISTRICT                         | 0 LONG NECK RD OFF | 0.80  | 9030 | MUNICIPAL  | CNRC |
| 10  | 1013 B | ONSET FIRE DISTRICT                         | 0 LONG NECK RD     | 4.60  | 9030 | MUNICIPAL  | CNRC |
| 131 | 9 A    | ONSET FIRE DISTRICT                         | 0 CRAN HWY OFF     | 1.43  | 9030 | MUNICIPAL  | R130 |
| 131 | F5 B   | ONSET FIRE DISTRICT                         | 0 SHAWNEE DR       | 3.56  | 9030 | MUNICIPAL  | R130 |
| 131 | W5     | ONSET FIRE DISTRICT                         | 0 CRAN HWY OFF     | 0.23  | 9030 | MUNICIPAL  | R130 |
| 131 | 138    | ONSET FIRE DISTRICT                         | 8 SEMINOLE LN      | 0.07  | 9030 | MUNICIPAL  | R130 |
| 131 | LC7    | ONSET FIRE DISTRICT                         | 13 SHAWNEE RD      | 15.50 | 9030 | MUNICIPAL  | R130 |
| 131 | LC8    | ONSET FIRE DISTRICT                         | 16 SHAWNEE DR      | 4.35  | 9030 | MUNICIPAL  | R130 |
| 131 | W10    | ONSET FIRE DISTRICT                         | 0 WELCH'S ADDITION | 0.77  | 9030 | MUNICIPAL  | R130 |
| 131 | W15    | ONSET FIRE DISTRICT                         | 0 SEVENTH ST       | 1.01  | 9030 | MUNICIPAL  | R130 |
| 131 | W23    | ONSET FIRE DISTRICT                         | 0 SEVENTH ST       | 0.77  | 9030 | MUNICIPAL  | R130 |
| 131 | W33    | ONSET FIRE DISTRICT                         | 0 MAIN ST          | 0.08  | 9030 | MUNICIPAL  | R130 |
| 131 | W54    | ONSET FIRE DISTRICT                         | 0 WELCH'S ADDITION | 0.05  | 9030 | MUNICIPAL  | R130 |
| 131 | W62    | ONSET FIRE DISTRICT                         | 0 SIXTH ST         | 0.77  | 9030 | MUNICIPAL  | R130 |

|     |        |                                  |                      |                |      |           |            |     |
|-----|--------|----------------------------------|----------------------|----------------|------|-----------|------------|-----|
| 131 | W75    | ONSET FIRE DISTRICT              | 0 FIFTH ST           | 0.15           | 9030 | MUNICIPAL | R130       |     |
| 131 | W84    | ONSET FIRE DISTRICT              | 0 FIFTH ST           | 0.08           | 9030 | MUNICIPAL | R130       |     |
| 131 | W88    | ONSET FIRE DISTRICT              | 0 FIFTH ST           | 0.15           | 9030 | MUNICIPAL | R130       |     |
| 131 | W94    | ONSET FIRE DISTRICT              | 0 FIFTH ST           | 1.01           | 9030 | MUNICIPAL | R130       |     |
| 131 | 1003   | ONSET FIRE DISTRICT              | 0 ROUTE 25           | 48.30          | 9030 | MUNICIPAL | R130       |     |
| 131 | 1004   | ONSET FIRE DISTRICT              | 0 RED BROOK RD OFF   | 53.90          | 9030 | MUNICIPAL | R130       |     |
| 131 | 1009   | ONSET FIRE DISTRICT              | 0 SEVENTH ST         | 5.91           | 9030 | MUNICIPAL | R130       |     |
| 131 | 1010   | ONSET FIRE DISTRICT              | 0 MAIN ST OFF        | 3.60           | 9030 | MUNICIPAL | R130       |     |
| 131 | 1012   | ONSET FIRE DISTRICT              | 0 SHAWNEE DR OFF     | 21.90          | 9030 | MUNICIPAL | R130       |     |
| 131 | 1013 A | ONSET FIRE DISTRICT              | 0 RED BROOK RD OFF   | 62.50          | 9030 | MUNICIPAL | R130       |     |
| 131 | 1013 B | ONSET FIRE DISTRICT              | 0 RED BROOK RD OFF   | 1.42           | 9030 | MUNICIPAL | R130       |     |
| 131 | 1014 B | ONSET FIRE DISTRICT              | 0 RED BROOK RD OFF   | 7.90           | 9030 | MUNICIPAL | R130       |     |
| 131 | 1015 A | ONSET FIRE DISTRICT              | 0 CRAN HWY OFF       | 0.60           | 9030 | MUNICIPAL | R130       |     |
| 131 | 1017   | ONSET FIRE DISTRICT              | 0 CRAN HWY           | 82.00          | 9030 | MUNICIPAL | R130       |     |
| 131 | 1018   | ONSET FIRE DISTRICT              | 19 SHAWNEE DR        | 0.43           | 9030 | MUNICIPAL | R130       |     |
| 131 | 1019 A | ONSET FIRE DISTRICT              | 0 RED BROOK RD OFF   | 20.00          | 9030 | MUNICIPAL | R130       |     |
| 131 | 1022   | ONSET FIRE DISTRICT              | 4 CRAN HWY           | 1.40           | 9030 | MUNICIPAL | SC         |     |
| 131 | 1023   | ONSET FIRE DISTRICT              | 8 CRAN HWY           | 1.80           | 9030 | MUNICIPAL | SC         |     |
| 131 | 1024   | ONSET FIRE DISTRICT              | 10 CRAN HWY          | 0.76           | 9030 | MUNICIPAL | R130       |     |
| 131 | 1031   | ONSET FIRE DISTRICT              | 0 CRAN HWY           | 10.00          | 9030 | MUNICIPAL | R130       |     |
| 131 | 1047   | ONSET FIRE DISTRICT              | 0 ROUTE 25           | 11.00          | 9030 | MUNICIPAL | R130       |     |
| 131 | W103   | ONSET FIRE DISTRICT              | 0 FIFTH ST           | 0.62           | 9030 | MUNICIPAL | R130       |     |
| 131 | W125   | ONSET FIRE DISTRICT              | 0 FOURTH ST          | 0.46           | 9030 | MUNICIPAL | R130       |     |
| 131 | W128   | ONSET FIRE DISTRICT              | 0 FOURTH ST          | 0.77           | 9030 | MUNICIPAL | R130       |     |
| 131 | W143   | ONSET FIRE DISTRICT              | 0 THIRD ST           | 0.64           | 9030 | MUNICIPAL | R130       |     |
| 131 | W146   | ONSET FIRE DISTRICT              | 0 THIRD ST           | 0.08           | 9030 | MUNICIPAL | 130        |     |
| 131 | W148   | ONSET FIRE DISTRICT              | 0 THIRD ST           | 0.77           | 9030 | MUNICIPAL | R130       |     |
| 131 | W163   | ONSET FIRE DISTRICT              | 0 SECOND ST          | 0.32           | 9030 | MUNICIPAL | R130       |     |
| 131 | W167   | ONSET FIRE DISTRICT              | 0 SECOND ST          | 0.37           | 9030 | MUNICIPAL | R130       |     |
| 131 | W171   | ONSET FIRE DISTRICT              | 0 SECOND ST          | 0.08           | 9030 | MUNICIPAL | R130       |     |
| 131 | W181   | ONSET FIRE DISTRICT              | 0 FIRST ST           | 0.09           | 9030 | MUNICIPAL | R130       |     |
|     |        | <b>ONSET FIRE DISTRICT Total</b> |                      | <b>374.10</b>  |      |           | <b>130</b> |     |
| 7 B | 3      | 71                               | ONSET WATER DISTRICT | 0 RED BROOK RD | 0.13 | 9030      | MUNICIPAL  | R30 |

|    |   |        |                                     |                        |        |      |            |      |
|----|---|--------|-------------------------------------|------------------------|--------|------|------------|------|
|    |   |        | <b>ONSET WATER DISTRICT Total</b>   |                        | 0.13   |      |            | 0    |
| 78 | 3 | 1003   | THE WILDLANDS TRUST OF              | 20 ALFRED AVE          | 0.05   | 9030 | MUNICIPAL  | R30  |
| 12 |   | A1010  | THE WILDLANDS TRUST OF              | 0 COVE RD              | 11.50  | 9050 | P/HOS CHAR | MR30 |
| 30 |   | 1021   | THE WILDLANDS TRUST OF              | 0 ANCHORAGE DR OFF     | 0.84   | 9050 | P/HOS CHAR | R60  |
| 37 |   | C      | THE WILDLANDS TRUST OF              | 0 CROOKED RIVER RD OFF | 23.30  | 9050 | P/HOS CHAR | R60  |
| 54 |   | 1002   | THE WILDLANDS TRUST OF              | 0 CROMESETT RD OFF     | 49.24  | 9050 | P/HOS CHAR | R30  |
| 55 |   | 1011   | THE WILDLANDS TRUST OF              | 27 SHADY LN            | 16.85  | 9050 | P/HOS CHAR | R30  |
| 56 |   | 1013   | THE WILDLANDS TRUST OF              | 250 MARION RD          | 0.60   | 9050 | P/HOS CHAR | MR30 |
| 78 | 3 | 1004   | THE WILDLANDS TRUST OF              | 22 ALFRED AVE          | 0.09   | 9050 | P/HOS CHAR | R30  |
| 78 | 3 | 1008   | THE WILDLANDS TRUST OF              | 0 NELSON ST OFF        | 1.04   | 9050 | P/HOS CHAR | R30  |
| 80 |   | 1000   | THE WILDLANDS TRUST OF              | 0 BLACKMORE PD RD OFF  | 23.44  | 9050 | P/HOS CHAR | MR30 |
|    |   |        | <b>THE WILDLANDS TRUST OF Total</b> |                        | 126.95 |      |            | 0    |
| 16 |   | 1030   | TOWN OF WAREHAM                     | 0 ONSET AVE OFF        | 1.78   | 9030 | MUNICIPAL  | R30  |
| 18 |   | 1030   | TOWN OF WAREHAM                     | 96 GREAT NECK RD       | 0.09   | 9030 | MUNICIPAL  | R60  |
| 18 |   | 1032   | TOWN OF WAREHAM                     | 0 OFF GREAT NECK RD    | 3.20   | 9030 | MUNICIPAL  | R60  |
| 18 |   | 1039 A | TOWN OF WAREHAM                     | 0 GREAT NECK RD OFF    | 0.51   | 9030 | MUNICIPAL  | R60  |
| 20 |   | A      | TOWN OF WAREHAM                     | 8 OVER JORDAN RD       | 0.14   | 9030 | MUNICIPAL  | R60  |
| 39 |   | J      | TOWN OF WAREHAM                     | 0 INDIAN NECK RD OFF   | 6.67   | 9030 | MUNICIPAL  | R43  |
| 39 |   | L      | TOWN OF WAREHAM                     | 40 INDIAN NECK RD      | 10.74  | 9030 | MUNICIPAL  | R30  |
| 39 |   | 1001   | TOWN OF WAREHAM                     | 69 OAK ST              | 1.17   | 9030 | MUNICIPAL  | R30  |
| 39 |   | 1003   | TOWN OF WAREHAM                     | 0 OAK TER              | 0.85   | 9030 | MUNICIPAL  | R30  |
| 39 |   | 1005   | TOWN OF WAREHAM                     | 41 INDIAN NECK RD      | 13.72  | 9030 | MUNICIPAL  | R30  |
| 39 |   | 1006   | TOWN OF WAREHAM                     | 70 INDIAN NECK RD      | 38.01  | 9030 | MUNICIPAL  | R30  |
| 40 |   | 1011   | TOWN OF WAREHAM                     | 124 INDIAN NECK RD     | 21.94  | 9030 | MUNICIPAL  | R30  |
| 40 |   | 1019   | TOWN OF WAREHAM                     | 103 INDIAN NECK RD     | 5.59   | 9030 | MUNICIPAL  | R30  |
| 41 |   | P1     | TOWN OF WAREHAM                     | 16 MINOT AVE           | 25.82  | 9030 | MUNICIPAL  | R30  |
| 42 |   | A      | TOWN OF WAREHAM                     | 27 MINOT AVE           | 1.24   | 9030 | MUNICIPAL  | R30  |
| 42 |   | C      | TOWN OF WAREHAM                     | 63 MINOT AVE           | 0.34   | 9030 | MUNICIPAL  | R30  |
| 42 |   | 1000   | TOWN OF WAREHAM                     | 0 MINOT AVE            | 94.43  | 9030 | MUNICIPAL  | R30  |
| 48 |   | 1000   | TOWN OF WAREHAM                     | 48 MARION RD           | 0.76   | 9030 | MUNICIPAL  |      |
| 48 |   | 1046   | TOWN OF WAREHAM                     | 0 SWIFTS BCH RD OFF    | 3.25   | 9030 | MUNICIPAL  | MR30 |
| 48 |   | 1059 A | TOWN OF WAREHAM                     | 15 SWIFTS BCH RD       | 3.00   | 9030 | MUNICIPAL  | MR30 |
| 48 |   | 1061   | TOWN OF WAREHAM                     | 0 SWIFTS BCH RD OFF    | 0.30   | 9030 | MUNICIPAL  | MR30 |

|      |        |                 |                     |      |      |           |      |
|------|--------|-----------------|---------------------|------|------|-----------|------|
| 48   | 1063 A | TOWN OF WAREHAM | 0 SWIFTS BCH RD OFF | 1.00 | 9030 | MUNICIPAL | MR30 |
| 48   | 1067   | TOWN OF WAREHAM | 0 SWIFTS BCH RD OFF | 1.47 | 9030 | MUNICIPAL | MR30 |
| 48   | 1068   | TOWN OF WAREHAM | 0 SWIFTS BCH RD OFF | 1.02 | 9030 | MUNICIPAL | MR30 |
| 49   | 1009 B | TOWN OF WAREHAM | 0 MARSH AVE OFF     | 2.01 | 9030 | MUNICIPAL | MR30 |
| 50   | 1031   | TOWN OF WAREHAM | 0 CEDAR ST          | 8.05 | 9030 | MUNICIPAL | R30  |
| 50 A | C9     | TOWN OF WAREHAM | 0 BAYVIEW ST OFF    | 1.68 | 9030 | MUNICIPAL | R30  |
| 50 B | 2 B2   | TOWN OF WAREHAM | 0 SWIFTS BCH RD     | 0.20 | 9030 | MUNICIPAL | R30  |
| 50 D | 142    | TOWN OF WAREHAM | 26 BELMONT ST       | 0.09 | 9030 | MUNICIPAL | R30  |
| 50 D | 144    | TOWN OF WAREHAM | 22 BELMONT ST       | 0.09 | 9030 | MUNICIPAL | R30  |
| 50 D | 172    | TOWN OF WAREHAM | 2 WINDY ST          | 0.23 | 9030 | MUNICIPAL | R30  |
| 50 D | 191    | TOWN OF WAREHAM | 21 FLORENCE ST      | 0.09 | 9030 | MUNICIPAL | R30  |
| 50 D | 194    | TOWN OF WAREHAM | 20 FLORENCE ST      | 0.08 | 9030 | MUNICIPAL | R30  |
| 50 D | 197    | TOWN OF WAREHAM | 14 FLORENCE ST      | 0.08 | 9030 | MUNICIPAL | R30  |
| 50 D | 199    | TOWN OF WAREHAM | 10 FLORENCE ST      | 0.08 | 9030 | MUNICIPAL | R30  |
| 50 D | 234    | TOWN OF WAREHAM | 31 GRAHAM ST        | 0.08 | 9030 | MUNICIPAL | R30  |
| 50 D | 237    | TOWN OF WAREHAM | 37 GRAHAM ST        | 0.16 | 9030 | MUNICIPAL | R30  |
| 50 D | 240    | TOWN OF WAREHAM | 43 GRAHAM ST        | 0.08 | 9030 | MUNICIPAL | R30  |
| 52   | 1002   | TOWN OF WAREHAM | 0 CROMESETT RD OFF  | 1.53 | 9030 | MUNICIPAL | R30  |
| 52   | 1006 A | TOWN OF WAREHAM | 0 CROMESETT RD OFF  | 2.00 | 9030 | MUNICIPAL | R30  |
| 53   | 1002   | TOWN OF WAREHAM | 0 MADISON ST OFF    | 8.58 | 9030 | MUNICIPAL | R30  |
| 53   | 1009   | TOWN OF WAREHAM | 0 MUNROE PKWY OFF   | 0.18 | 9030 | MUNICIPAL | R30  |
| 53   | 1010 A | TOWN OF WAREHAM | 0 BRIARWOOD DR OFF  | 0.51 | 9030 | MUNICIPAL | R30  |
| 53   | 1019   | TOWN OF WAREHAM | 0 EISENHOWER AVE    | 1.78 | 9030 | MUNICIPAL | R30  |
| 54   | 1003   | TOWN OF WAREHAM | 0 CROMESETT RD OFF  | 1.40 | 9030 | MUNICIPAL | MR30 |
| 54   | 1008   | TOWN OF WAREHAM | 112 CROMESETT RD    | 1.50 | 9030 | MUNICIPAL | R30  |
| 54   | 1011   | TOWN OF WAREHAM | 0 CROMESETT RD OFF  | 2.50 | 9030 | MUNICIPAL | R30  |
| 58   | 1006   | TOWN OF WAREHAM | 381 MARION RD       | 2.15 | 9030 | MUNICIPAL | SC   |
| 58   | 1008   | TOWN OF WAREHAM | 391 MARION RD       | 2.00 | 9030 | MUNICIPAL | SC   |
| 61   | 24     | TOWN OF WAREHAM | 14 STONEY RUN DR    | 2.07 | 9030 | MUNICIPAL | MR30 |
| 61   | 31     | TOWN OF WAREHAM | 9 KRISABIL LN       | 2.42 | 9030 | MUNICIPAL | MR30 |
| 61   | 36     | TOWN OF WAREHAM | 20 STONEY RUN DR    | 0.47 | 9030 | MUNICIPAL | MR30 |
| 61   | 39     | TOWN OF WAREHAM | 31 STONEY RUN DR    | 3.22 | 9030 | MUNICIPAL | MR30 |
| 61   | 52     | TOWN OF WAREHAM | 30 STONEY RUN DR    | 5.68 | 9030 | MUNICIPAL | MR30 |

|       |        |                 |                       |               |      |           |           |  |
|-------|--------|-----------------|-----------------------|---------------|------|-----------|-----------|--|
| 80    | B8     | TOWN OF WAREHAM | 212 HATHAWAY ST       | 21.00         | 9030 | MUNICIPAL | MR30      |  |
| 81    | 1000 B | TOWN OF WAREHAM | 0 STATION ST          | 20.00         | 9030 | MUNICIPAL | MR30      |  |
| 100   | 1017   | TOWN OF WAREHAM | 1073 MAIN ST          | 1.89          | 9030 | MUNICIPAL | MR30      |  |
| 100   | 1022   | TOWN OF WAREHAM | 24 CARVER RD          | 2.63          | 9030 | MUNICIPAL | MR30      |  |
| 100   | 1029   | TOWN OF WAREHAM | 0 MAIN ST             | 35.28         | 9030 | MUNICIPAL | MR30      |  |
| 101   | 1000   | TOWN OF WAREHAM | 0 TREMONT MILL PD     | 22.30         | 9030 | MUNICIPAL | SC        |  |
| 105   | 1009   | TOWN OF WAREHAM | 0 CHARLOT FURN RD OFF | 15.50         | 9030 | MUNICIPAL | R60       |  |
| 105 A | 90     | TOWN OF WAREHAM | 4 WESTFIELD III       | 45.31         | 9030 | MUNICIPAL | MR30      |  |
| 108   | 1006 F | TOWN OF WAREHAM | 0 CRAN HWY OFF        | 0.27          | 9030 | MUNICIPAL | I         |  |
| 108   | 1006 P | TOWN OF WAREHAM | 0 KENDRICK RD         | 0.03          | 9030 | MUNICIPAL | I         |  |
| 109   | 1001 A | TOWN OF WAREHAM | 40 TIHONET RD         | 6.25          | 9030 | MUNICIPAL | R60       |  |
| 109   | 1003   | TOWN OF WAREHAM | 38 TIHONET RD         | 1.31          | 9030 | MUNICIPAL | R60       |  |
| 109   | 1004   | TOWN OF WAREHAM | 36 TIHONET RD         | 1.77          | 9030 | MUNICIPAL | R60       |  |
| 109   | 1005   | TOWN OF WAREHAM | 34 TIHONET RD         | 1.71          | 9030 | MUNICIPAL | R60       |  |
| 109   | 1007   | TOWN OF WAREHAM | 0 TIHONET RD OFF      | 0.10          | 9030 | MUNICIPAL | R60       |  |
| 109   | 1008   | TOWN OF WAREHAM | 0 TIHONET RD          | 0.06          | 9030 | MUNICIPAL | R30       |  |
| 109   | 1009   | TOWN OF WAREHAM | 30 TIHONET RD         | 0.79          | 9030 | MUNICIPAL | R60       |  |
| 109   | 1010   | TOWN OF WAREHAM | 0 TIHONET RD          | 0.06          | 9030 | MUNICIPAL | R60       |  |
| 109   | 1011   | TOWN OF WAREHAM | 0 TIHONET RD OFF      | 2.75          | 9030 | MUNICIPAL | R60       |  |
| 109   | 1012   | TOWN OF WAREHAM | 10 TIHONET RD         | 11.00         | 9030 | MUNICIPAL | R60       |  |
| 109   | 1014   | TOWN OF WAREHAM | 6 TIHONET RD          | 0.25          | 9030 | MUNICIPAL | R60       |  |
| 109   | 1016   | TOWN OF WAREHAM | 28 TIHONET RD         | 1.00          | 9030 | MUNICIPAL | R60       |  |
| 109 A | 1      | 1033            | TOWN OF WAREHAM       | 2514 CRAN HWY | 1.33 | 9030      | MUNICIPAL |  |
| 110   | 1042   | TOWN OF WAREHAM | 52 CHARGE POND RD     | 0.29          | 9030 | MUNICIPAL | R60       |  |
| 110   | 1043   | TOWN OF WAREHAM | 0 CHARGE POND RD      | 1.70          | 9030 | MUNICIPAL | R60       |  |
| 113   | 1023   | TOWN OF WAREHAM | 72 CHARGE POND RD     | 0.20          | 9030 | MUNICIPAL | R60       |  |
| 113   | 1029   | TOWN OF WAREHAM | 95 CHARGE POND RD     | 21.48         | 9030 | MUNICIPAL | R130      |  |
| 113   | 1029 P | TOWN OF WAREHAM | 95 CHARGE POND RD     | 7.40          | 9030 | MUNICIPAL | R130      |  |
| 119   | 363    | TOWN OF WAREHAM | 31 RESTFUL LN         | 0.16          | 9030 | MUNICIPAL | R130      |  |
| 119   | 370    | TOWN OF WAREHAM | 17 RESTFUL LN         | 0.15          | 9030 | MUNICIPAL | R130      |  |
| 119   | 441    | TOWN OF WAREHAM | 31 MAYFLOWER LN       | 0.15          | 9030 | MUNICIPAL | R130      |  |
| 119   | 1002   | TOWN OF WAREHAM | 21 SUNSET BLVD        | 1.50          | 9030 | MUNICIPAL | R130      |  |
| 121   | 231    | TOWN OF WAREHAM | 34 PLYMOUTH AVE       | 0.14          | 9030 | MUNICIPAL | R130      |  |

|       |   |        |                 |                       |       |      |           |      |
|-------|---|--------|-----------------|-----------------------|-------|------|-----------|------|
| 123   |   | 122    | TOWN OF WAREHAM | 254 PLYMOUTH AVE      | 0.07  | 9030 | MUNICIPAL | R130 |
| 123   |   | 1692   | TOWN OF WAREHAM | 51 LINCOLN AVE        | 0.27  | 9030 | MUNICIPAL | R130 |
| 124   |   | 21     | TOWN OF WAREHAM | 332 PLYMOUTH AVE      | 0.07  | 9030 | MUNICIPAL | R130 |
| 124   |   | 279    | TOWN OF WAREHAM | 239 PLYMOUTH AVE      | 0.07  | 9030 | MUNICIPAL | R130 |
| 124   |   | 280    | TOWN OF WAREHAM | 237 PLYMOUTH AVE      | 0.07  | 9030 | MUNICIPAL | R130 |
| 129   |   | 1162   | TOWN OF WAREHAM | 10 GLEN CHARLIE RD    | 0.15  | 9030 | MUNICIPAL | MR30 |
| 132   |   | 1075   | TOWN OF WAREHAM | 0 MAYFLOWER RIDGE DR  | 4.30  | 9030 | MUNICIPAL | MR30 |
| 133   |   | 1021 A | TOWN OF WAREHAM | 2759 CRAN HWY         | 1.00  | 9030 | MUNICIPAL | MR30 |
| 133   |   | 1021 B | TOWN OF WAREHAM | 2759 CRAN HWY         | 1.00  | 9030 | MUNICIPAL | MR30 |
| 133 A |   | D      | TOWN OF WAREHAM | 0 WHIPPOORWILL WAY    | 9.77  | 9030 | MUNICIPAL | MR30 |
| 3 A   | 5 | 1001   | TOWN OF WAREHAM | 40 CLEVELAND AVE      | 0.08  | 9039 | TAX POSS  | R43  |
| 123   |   | 569    | TOWN OF WAREHAM | 214 LAKE AVE          | 0.14  | 9039 | TAX POSS  | R130 |
| 124   |   | 281    | TOWN OF WAREHAM | 235 PLYMOUTH AVE      | 0.13  | 9039 | TAX POSS  | R130 |
| 128   |   | 1003   | TOWN OF WAREHAM | 0 GLEN CHARLIE RD OFF | 19.91 | 9039 | TAX POSS  | R130 |
| 129 A | 2 | 25     | TOWN OF WAREHAM | 2812 CRAN HWY         | 0.11  | 9039 | TAX POSS  | SC   |
| 129 B | 1 | 18     | TOWN OF WAREHAM | 42 LAKE VIEW DR       | 0.11  | 9039 | TAX POSS  | R130 |
| 131   |   | W8     | TOWN OF WAREHAM | 0 SEVENTH ST          | 0.23  | 9039 | TAX POSS  | R130 |
| 131   |   | W9     | TOWN OF WAREHAM | 0 SEVENTH ST          | 0.08  | 9039 | TAX POSS  | R130 |
| 131   |   | W14    | TOWN OF WAREHAM | 0 SEVENTH ST          | 0.08  | 9039 | TAX POSS  | R130 |
| 131   |   | W49    | TOWN OF WAREHAM | 0 SIXTH ST            | 0.08  | 9039 | TAX POSS  |      |
| 131   |   | W53    | TOWN OF WAREHAM | 0 SIXTH ST            | 0.01  | 9039 | TAX POSS  | R130 |
| 131   |   | W55    | TOWN OF WAREHAM | 0 SIXTH ST            | 0.15  | 9039 | TAX POSS  | R130 |
| 131   |   | W58    | TOWN OF WAREHAM | 0 SIXTH ST            | 0.23  | 9039 | TAX POSS  | R130 |
| 131   |   | W70    | TOWN OF WAREHAM | 0 SIXTH ST            | 0.39  | 9039 | TAX POSS  | R130 |
| 131   |   | W80    | TOWN OF WAREHAM | 0 FIFTH ST            | 0.08  | 9039 | TAX POSS  | R130 |
| 131   |   | W85    | TOWN OF WAREHAM | 0 FIFTH ST            | 0.23  | 9039 | TAX POSS  | R130 |
| 131   |   | 1000   | TOWN OF WAREHAM | 0 GLEN CHARLIE RD OFF | 5.73  | 9039 | TAX POSS  | R130 |
| 131   |   | 1001   | TOWN OF WAREHAM | 0 GLEN CHARLIE RD OFF | 5.08  | 9039 | TAX POSS  | R130 |
| 131   |   | 1048   | TOWN OF WAREHAM | 0 CRAN HWY OFF        | 2.60  | 9039 | TAX POSS  | R130 |
| 131   |   | 1049   | TOWN OF WAREHAM | 0 CRAN HWY OFF        | 1.43  | 9039 | TAX POSS  | R130 |
| 131   |   | W116   | TOWN OF WAREHAM | 0 FOURTH ST           | 0.08  | 9039 | TAX POSS  | R130 |
| 131   |   | W118   | TOWN OF WAREHAM | 0 FOURTH ST           | 0.32  | 9039 | TAX POSS  | R130 |
| 131   |   | W122   | TOWN OF WAREHAM | 0 FOURTH ST           | 0.47  | 9039 | TAX POSS  | R130 |

|       |        |                              |                       |               |      |           |           |  |
|-------|--------|------------------------------|-----------------------|---------------|------|-----------|-----------|--|
| 131   | W144   | TOWN OF WAREHAM              | 0 WELCH'S ADDITION    | 0.08          | 9039 | TAX POSS  | R130      |  |
| 131   | W169   | TOWN OF WAREHAM              | 0 SECOND ST           | 0.08          | 9039 | TAX POSS  | R130      |  |
| 131   | W170   | TOWN OF WAREHAM              | 0 SECOND ST           | 0.08          | 9039 | TAX POSS  | R130      |  |
| 131   | W180   | TOWN OF WAREHAM              | 0 FIRST ST            | 0.08          | 9039 | TAX POSS  | R130      |  |
| 133   | 1015   | TOWN OF WAREHAM              | 76 SANDWICH RD        | 6.50          | 9039 | TAX POSS  | MR30      |  |
| 133   | 1020   | TOWN OF WAREHAM              | 2759 CRAN HWY         | 0.14          | 9039 | TAX POSS  |           |  |
| 133 A | A      | TOWN OF WAREHAM              | 23 MEADOWLARK DR      | 1.27          | 9039 | TAX POSS  | MR30      |  |
|       |        | <b>TOWN OF WAREHAM Total</b> |                       | <b>528.34</b> |      |           | 0         |  |
| 36    | 61     | WAREHAM FIRE DISTRICT        | 10 BOURNE'S HILL RD   | 2.62          | 9030 | MUNICIPAL | R60       |  |
| 43    | 1070 B | WAREHAM FIRE DISTRICT        | 142 MINOT AVE         | 0.31          | 9030 | MUNICIPAL | MR30      |  |
| 46    | 1001   | WAREHAM FIRE DISTRICT        | 1 DRIFTWOOD LN        | 1.16          | 9030 | MUNICIPAL | R30       |  |
| 47    | 1150   | WAREHAM FIRE DISTRICT        | 269 MAIN ST           | 0.22          | 9030 | MUNICIPAL | WRVL      |  |
| 47    | 1151   | WAREHAM FIRE DISTRICT        | 271 MAIN ST           | 0.43          | 9030 | MUNICIPAL | WRVL      |  |
| 47    | 1154   | WAREHAM FIRE DISTRICT        | 311 MAIN ST           | 0.11          | 9030 | MUNICIPAL | WRVL      |  |
| 61    | 1171   | WAREHAM FIRE DISTRICT        | 0 TOWER TER OFF       | 0.23          | 9030 | MUNICIPAL | MR30      |  |
| 61    | LC16   | WAREHAM FIRE DISTRICT        | 0 TOWER TER           | 0.02          | 9030 | MUNICIPAL | MR30      |  |
| 61    | LC33   | WAREHAM FIRE DISTRICT        | 0 TOWER TER           | 0.02          | 9030 | MUNICIPAL | MR30      |  |
| 105   | B      | WAREHAM FIRE DISTRICT        | 0 CRAN HWY            | 2.18          | 9030 | MUNICIPAL | SC        |  |
| 105   | C      | WAREHAM FIRE DISTRICT        | 2374 CRAN HWY         | 0.21          | 9030 | MUNICIPAL | SC        |  |
| 105   | 1046   | WAREHAM FIRE DISTRICT        | 2368 CRAN HWY         | 2.23          | 9030 | MUNICIPAL | SC        |  |
| 109 A | 1      | A1                           | WAREHAM FIRE DISTRICT | 2550 CRAN HWY | 2.46 | 9030      | MUNICIPAL |  |
| 114   | 1007   | WAREHAM FIRE DISTRICT        | 0 CHARGE POND RD      | 26.92         | 9030 | MUNICIPAL | R130      |  |
| 114   | 1010 A | WAREHAM FIRE DISTRICT        | 0 CHARGE POND RD      | 69.54         | 9030 | MUNICIPAL | R130      |  |
| 114   | 1010 B | WAREHAM FIRE DISTRICT        | 0 CHARGE POND RD      | 55.36         | 9030 | MUNICIPAL | R130      |  |
| 117   | 1005 B | WAREHAM FIRE DISTRICT        | 0 GLEN CHARLIE RD OFF | 11.50         | 9030 | MUNICIPAL | R130      |  |
| 126   | A      | WAREHAM FIRE DISTRICT        | 0 MAPLE SPRINGS RD    | 5.29          | 9030 | MUNICIPAL | R130      |  |
| 126   | 1      | WAREHAM FIRE DISTRICT        | 0 PLYMOUTH RD OFF     | 4.90          | 9030 | MUNICIPAL | R130      |  |
| 126   | 4      | WAREHAM FIRE DISTRICT        | 0 PLYMOUTH RD         | 1.00          | 9030 | MUNICIPAL | R130      |  |
| 126   | 5      | WAREHAM FIRE DISTRICT        | 0 MAPLE SPRGS RD OFF  | 4.30          | 9030 | MUNICIPAL | R130      |  |
| 126   | C1 A   | WAREHAM FIRE DISTRICT        | 0 MAPLE SPRGS RD      | 1.90          | 9030 | MUNICIPAL | R130      |  |
| 126   | C1 B   | WAREHAM FIRE DISTRICT        | 0 MAPLE SPRGS RD      | 20.90         | 9030 | MUNICIPAL | R130      |  |
| 126   | 1001   | WAREHAM FIRE DISTRICT        | 0 MAPLE SPRGS RD OFF  | 0.20          | 9030 | MUNICIPAL | R130      |  |
| 126   | 1002   | WAREHAM FIRE DISTRICT        | 0 PLYMOUTH RD         | 4.53          | 9030 | MUNICIPAL | R130      |  |

|     |         |   |                      |         |      |            |      |
|-----|---------|---|----------------------|---------|------|------------|------|
| 126 | 1005 B  | WAREHAM FIRE DISTRICT                       | 0 MAPLE SPRGS RD OFF | 15.90   | 9030 | MUNICIPAL  | R130 |
| 126 | 1005 C  | WAREHAM FIRE DISTRICT                       | 0 MAPLE SPRGS RD OFF | 0.70    | 9030 | MUNICIPAL  | R130 |
| 128 | B2      | WAREHAM FIRE DISTRICT                       | 281 GLEN CHARLIE RD  | 0.93    | 9030 | MUNICIPAL  | R130 |
|     |         | <b>WAREHAM FIRE DISTRICT Total</b>          |                      | 236.08  |      |            | 0    |
| 132 | 1000 B1 | WAREHAM HISTORICAL SOCIETY INC              | 1 ELM ST             | 0.02    | 9030 | MUNICIPAL  | SC   |
| 132 | 1001    | WAREHAM HISTORICAL SOCIETY INC              | 8 ELM ST             | 0.15    | 9030 | MUNICIPAL  | SC   |
| 37  | 1016    | WAREHAM HISTORICAL SOCIETY INC              | 97 GREAT NECK RD     | 0.07    | 9050 | P/HOS CHAR | R60  |
| 37  | 1017    | WAREHAM HISTORICAL SOCIETY INC              | 95 GREAT NECK RD     | 0.08    | 9050 | P/HOS CHAR | R60  |
| 61  | 1013    | WAREHAM HISTORICAL SOCIETY INC              | 495 MAIN ST          | 0.42    | 9050 | P/HOS CHAR | MR30 |
|     |         | <b>WAREHAM HISTORICAL SOCIETY INC Total</b> |                      | 0.73    |      |            | 0    |
| 37  | 1032    | WILDLANDS TRUST OF                          | 36 CROOKED RIVER RD  | 2.13    | 9050 | P/HOS CHAR | R60  |
|     |         | <b>WILDLANDS TRUST OF Total</b>             |                      | 2.13    |      |            | 0    |
| 31  | C       | WILDLANDS TRUST OF                          | 0 BOURNE POINT RD    | 7.63    | 9050 | P/HOS CHAR | R60  |
| 31  | P1 C    | WILDLANDS TRUST OF                          | 8 MINK COVE LN       | 16.63   | 9050 | P/HOS CHAR | R60  |
| 34  | M1      | WILDLANDS TRUST OF                          | 41 TOWHEE RD         | 17.70   | 9050 | P/HOS CHAR | R60  |
| 35  | N       | WILDLANDS TRUST OF                          | 25 TOWHEE RD         | 11.83   | 9050 | P/HOS CHAR | R60  |
| 35  | 102     | WILDLANDS TRUST OF                          | 22 ALDEN RD          | 0.25    | 9050 | P/HOS CHAR | R30  |
| 35  | 103     | WILDLANDS TRUST OF                          | 24 ALDEN RD          | 0.25    | 9050 | P/HOS CHAR | R30  |
| 35  | 121     | WILDLANDS TRUST OF                          | 1 HIAWATHA PATH      | 0.87    | 9050 | P/HOS CHAR | R30  |
| 35  | 1005    | WILDLANDS TRUST OF                          | 20 ALDEN RD          | 3.80    | 9050 | P/HOS CHAR | R30  |
| 35  | 1006 B  | WILDLANDS TRUST OF                          | 0 HIAWATHA PATH      | 12.00   | 9050 | P/HOS CHAR | R60  |
| 35  | 1009    | WILDLANDS TRUST OF                          | 0 EDGEWATER DR       | 0.09    | 9050 | P/HOS CHAR | R30  |
| 35  | 1010    | WILDLANDS TRUST OF                          | 40 EDGEWATER DR      | 1.00    | 9050 | P/HOS CHAR | R30  |
| 35  | 1011    | WILDLANDS TRUST OF                          | 39 EDGEWATER WAY     | 2.05    | 9050 | P/HOS CHAR | R30  |
| 36  | E       | WILDLANDS TRUST OF                          | 0 BOURNE'S HILL RD   | 10.88   | 9050 | P/HOS CHAR | R60  |
| 36  | I5      | WILDLANDS TRUST OF                          | 184 INDIAN NECK RD   | 3.87    | 9050 | P/HOS CHAR | R60  |
| 37  | 1000    | WILDLANDS TRUST OF                          | 0 GREAT NECK RD OFF  | 43.63   | 9050 | P/HOS CHAR | R60  |
|     |         | <b>WILDLANDS TRUST OF Total</b>             |                      | 132.48  |      |            | 0    |
|     |         | <b>Grand Total</b>                          |                      | 2650.95 |      |            | 130  |

**C. UNPROTECTED PUBLIC PARCELS**

Parks Department  
Municipal Maintenance

152 Acres  
77 Acres

**Table 15: Unprotected Public Parcels Owned by the Town of Wareham Parks Department**

| MAP  | LOT   | ADDRESS            | ACRES | DESCRIPTION                   | FUNDS USED  | COND'N | REC POTNTL | PUBLIC ACCESS | ZONING      | DEGREE OF PROTECTION |
|------|-------|--------------------|-------|-------------------------------|-------------|--------|------------|---------------|-------------|----------------------|
| 1    | 1002  | Onset Avenue       | 3.57  | Prospect Park                 | Town        | Good   | Medium     | Yes           | C-Onset Vil | None                 |
| 1    | 1003  | Onset Avenue       | 0.03  | Prospect Park                 | Town        | Good   | Medium     | Yes           | C-Onset Vil | None                 |
| 1    | 1004  | Hotel St           | 0.05  | Prospect Park                 | Town        | Good   | Medium     | Yes           | C-Onset Vil | None                 |
| 1    | 1017  | Union Avenue       | 0.35  | Wabun Square                  | Town        | Good   | High       | Yes           | C-Onset Vil | None                 |
| 1    | 1022A | North Blvd         | 2.13  | Wabun Park                    | Town        | Fair   | Medium     | Yes           | R-Onset Vil | None                 |
| 1    | 1022B | East Blvd          | 0.42  | Wabun Park                    | Town        | Fair   | Medium     | Yes           | R-Onset Vil | None                 |
| 1    | 1024  | Crescent Avenue    | 0.61  | Crescent Park                 | Town        | Poor   | Medium     | Yes           | R-Onset Vil | None                 |
| 1    | 1031  | Onset Avenue       | 4.57  | Lopes Playground              | Town        | Good   | High       | Yes           | R-Onset Vil | None                 |
| 1    | 1048  | West Blvd          | 9.55  | Onset Band Stand              | Town        | Good   | Medium     | Yes           | R-Onset Vil | None                 |
| 1    | 1049  | Longwood Avenue    | 0.43  | Longwood Park                 | Town        | Fair   | Medium     | Yes           | R-Onset Vil | None                 |
| 1    | 1050  | Longwood Avenue    | 0.38  | Wabassa Park                  | Unknwn      | Fair   | Medium     | Yes           | R-Onset Vil | None                 |
| 2    | 1006  | Ft. Independence   | 2.3   | Pt. Ind. Beach                | Town        | Good   | High       | Yes           | R-Onset Vil | None                 |
| 3    | 1033A | Beach Street       | 0.37  | Pt. Ind. Beach                | Town        | Good   | High       | Yes           | MR-30       | None                 |
| 3    | 1033B | Beach Street       | 0.71  | Pt. Ind. Beach                | Town        | Good   | High       | Yes           | MR-30       | None                 |
| 3A-5 | 1000  | Cleveland Avenue   | 0.23  | Nemasket Beach                | Town        | Good   | Medium     | Yes           | R-Onset Vil | None                 |
| 3A-5 | 1001  | Cleveland Avenue   | 0.08  | Nemasket Beach                | Town        | Fair   | Medium     | Yes           | R-Onset Vil | None                 |
| 17   | 1000  | Great Neck Road    | 0.11  | Park at Onset Ave             | Town        | Good   | Medium     | None          | R-Onset Vil | None                 |
| 28   | 1004  | Little Harbor Road | 6.15  | Little Harbor Beach           | Town        | Fair   | High       | Yes           | R-60        | None                 |
| 29   | 1004  | Great Neck Road    | 21.7  | Little Harbor Wildland        | Town        | N/A    | High       | Yes           | R-60        | None                 |
| 47   | 1009  | High Street        | 2.68  | Little League Field & Parking | School Dept | Good   | High       | Yes           | MR-30       | None                 |
| 50   | 1031  | Cedar Street       | 8.5   | Swift's Beach Playground      | Town        | Good   | High       | Yes           | R-30        | None                 |
| 50A  | C-9   | Bayview St OFF     | 1.68  | Swift's Beach                 | Town        | Good   | High       | Yes           | R-30        | None                 |
| 50D  | 1036  | Shore Avenue       | 0.34  | Swift's Beach                 | Town        | Good   | High       | Yes           | R-30        | None                 |
| 50D  | 1037  | Shore Avenue       | 0.15  | Swift's Beach                 | Town        | Good   | High       | Yes           | R-30        | None                 |

| MAP | LOT   | ADDRESS           | ACRES | DESCRIPTION                               | FUNDS USED | COND'N | REC POTNTL | PUBLIC ACCESS | ZONING | DEGREE OF PROTECTION |
|-----|-------|-------------------|-------|---|------------|--------|------------|---------------|--------|----------------------|
| 61  | 1162  | Marion Road OFF   | 2.75  | Arruda Playground                         | Town       | Good   | High       | Yes           | MR-30  | None                 |
| 61  | 1163  | Marion Road OFF   | 0.17  | Arruda Playground                         | Town       | Good   | High       | Yes           | MR-30  | None                 |
| 61  | 1164  | Marion Road OFF   | 0.57  | Arruda Playground                         | Town       | Good   | High       | Yes           | MR-30  | None                 |
| 100 | 1016  | Main Street       | 0.75  | Park Corners of Carver Road & Main Street | Town       | Poor   | Low        | Yes           | MR-30  | None                 |
| 109 | 1014  | Tihonet Road      | 0.25  | Mary Besse Park                           | Town       | Fair   | Medium     | Yes           | MR-60  | None                 |
| 109 | 1016  | Tihonet Road      | 1.0   | Mary Besse Park                           | Town       | Fair   | Medium     | Yes           | MR-60  | None                 |
| 132 | 1005A | Cranberry Highway | 0.17  | Wing Park                                 | Town       | Good   | Medium     | Yes           | R-130  | None                 |

**Table 16: Unprotected Public Parcels Owned by the Town of Wareham Maintenance Department**

| MAP  | LOT  | ADDRESS              | ACRES | DESCRIPTION                         | FUNDS USED  | COND'N    | REC POTNTL | PUBLIC ACCESS | ZONING          | DEGREE OF PROTECTION |
|------|------|----------------------|-------|-------------------------------------|-------------|-----------|------------|---------------|-----------------|----------------------|
| 1    | 1020 | Highland Avenue      | 0.72  | Onset School Playground             | School Dept | Excellent | High       | Yes           | R-Onset Village | None                 |
| 1    | 1021 | Highland Avenue      | 0.72  | Onset School Playground             | School Dept | Excellent | High       | Yes           | R-Onset Village | None                 |
| 42   | 1001 | Minot Avenue         | 20.91 | Minot Forest School Playground      | School Dept | Excellent | High       | Yes           | R-30            | None                 |
| 44   | 1001 | Minot Avenue         | 1.72  | Minot Forest School Playground      | School Dept | Excellent | High       | Yes           | MR-30           | None                 |
| 48   | 1000 | Marion Road          | 0.76  | Jr./Sr. H.S. Track                  | School Dept | Good      | Medium     | Yes           | MR-30           | None                 |
| 48   | 1003 | Mariod Road          | 0.22  | Jr./Sr. H.S. Track                  | School Dept | Good      | Medium     | Yes           | MR-30           | None                 |
| 48   | 1003 | Mariod Road          | 10.96 | Jr./Sr. H.S. Track                  | School Dept | Good      | Medium     | Yes           | MR-30           | None                 |
| 82   | 1001 | Main St.             | 15.56 | Decas School Playground             | School Dept | Good      | High       | Yes           | Industrial      | None                 |
| 82   | 1002 | Station St.          | 0.06  | Decas School Playground             | School Dept | Good      | High       | Yes           | Industrial      | None                 |
| 82   | 1003 | Station St.          | 0.06  | Decas School Playground             | School Dept | Good      | High       | Yes           | Industrial      | None                 |
| 100  | 1017 | Main St.             | 1.89  | W. Wareham School Playground        | School Dept | Good      | High       | Yes           | MR-30           | None                 |
| 100  | 1022 | Carver Road          | 2.63  | Tremont Pond Access & Tennis Courts | Town        | Good      | High       | Yes           | MR-30           | None                 |
| 105  | 1009 | Charlotte Furnace Rd | 15.5  | Recreation Area                     | None        | Excellent | High       | Yes           | MR-60           | None                 |
| 105  | 1048 | Charlotte Furnace Rd | 4.55  | Recreation Area                     | Town        | Poor      | Medium     | Yes           | MR-60           | None                 |
| 105A | 90   | Westfield Drive      | 0.25  | Recreation Area                     | Town        | Poor      | High       | Yes           | MR-60           | None                 |

## D. PRIVATE UNPROTECTED RECTREATIONAL LANDS

**Table 17: Private Unprotected Recreational Land in Wareham: May 2003**

| Map | Block | Lot    | Owner's Name                              | Location             | Acres  | Use Code | Use Descript | Zone |
|-----|-------|--------|---|----------------------|--------|----------|--------------|------|
| 61  |       | 1206 A | ANNAWON COUNCIL INC                       | 0 BODFISH AVE OFF    | 13.33  | 9050     | P/HOS CHAR   |      |
|     |       |        | <b>ANNAWON COUNCIL INC Total</b>          |                      | 13.33  |          |              | 0    |
| 117 |       | 1004   | MOBY DICK COUNCIL INC                     | GLEN CHARLIE RD OFF  | 36.70  | 9050     | P/HOS CHAR   | R130 |
|     |       |        | <b>MOBY DICK COUNCIL INC Total</b>        |                      | 36.70  |          |              | 0    |
| 1   |       | 492 B  | ONSET YOUTH CENTER INC                    | 17 TENTH ST          | 0.17   | 9050     | P/HOS CHAR   | OVR  |
|     |       |        | <b>ONSET YOUTH CENTER INC Total</b>       |                      | 0.17   |          |              | 0    |
| 115 |       | 1018   | WAREHAM ATHLETIC ASSOCIATION              | 0 PLYMOUTH RD        | 7.00   | 9030     | MUNICIPAL    | R130 |
|     |       |        | <b>WAREHAM ATHLETIC ASSOCIATION Total</b> |                      | 7.00   |          |              | 0    |
| 110 |       | 1038   | WAREHAM LITTLE LEAGUE INC                 | 0 CHARGE POND RD OFF | 1.10   | 9030     | MUNICIPAL    | R60  |
| 110 |       | 1037   | WAREHAM LITTLE LEAGUE INC                 | 44 CHARGE POND RD    | 9.70   | 9050     | P/HOS CHA    | R60  |
|     |       |        | <b>WAREHAM LITTLE LEAGUE INC Total</b>    |                      | 10.80  |          |              | 0    |
|     |       |        | <b>WILDLANDS TRUST OF Total</b>           |                      | 132.48 |          |              | 0    |
| 110 |       | Y1     | YOUNG MEN'S CHRISTIAN                     | 0 CHARGE POND RD     | 0.82   | 9050     | P/HOS CHAR   | MR30 |
| 110 |       | Y2     | YOUNG MEN'S CHRISTIAN                     | 0 CHARGE POND RD     | 1.17   | 9050     | P/HOS CHAR   | MR30 |
| 110 |       | Y3     | YOUNG MEN'S CHRISTIAN                     | 19 CHARGE POND RD    | 14.91  | 9050     | P/HOS CHAR   | MR30 |
|     |       |        | <b>YOUNG MEN'S CHRISTIAN Total</b>        |                      | 16.90  |          |              | 0    |

## **E. TEMPORARILY PROTECTED PRIVATE PARCELS**

Chapter 61  
Chapter 61A  
Chapter 61B



**Table 18: Chapter 61, 61A, and 61B Lands in Wareham: May 2003**

| Map | Lot     | Owner's Name                   | Location              | Acres | Use Code | Use Description | Zone |
|-----|---------|--------------------------------|-----------------------|-------|----------|-----------------|------|
| 11  | 6 A     | KEYES DANA & GLEASON ELIZ      | 0 BARRETT WAY         | 2.70  | 6010     | CHAPTER 61      | R30  |
| 11  | 34 A    | KEYES DANA                     | 2 LINDEN ST           | 13.10 | 6010     | CHAPTER 61      | R30  |
| 31  | P1 B    | ELKINS WILLIAM L               | 20 BOURNE POINT RD    | 3.86  | 6010     | CHAPTER 61      | R60  |
| 31  | P1 D    | ELKINS WILLIAM L               | 3 MINK COVE LN        | 17.63 | 6010     | CHAPTER 61      | R60  |
| 31  | P5      | ELKINS WILLIAM L               | 22 BOURNE POINT RD    | 5.28  | 6010     | CHAPTER 61      | R60  |
| 51  | 1001    | GLEASON CROMESETT LND TRUST II | 227 CROMESETT RD      | 6.21  | 6010     | CHAPTER 61      | R30  |
| 51  | 1004 A  | GLEASON CHARLES S              | 245 CROMESETT RD      | 4.71  | 6010     | CHAPTER 61      | R30  |
| 51  | P1007 A | GLEASON ELIZABETH H            | 260 CROMESETT RD      | 3.55  | 6010     | CHAPTER 61      | R30  |
| 52  | P11 A   | GLEASON CHARLES S              | 190 CROMESETT RD      | 9.20  | 6010     | CHAPTER 61      | R60  |
| 52  | P1007   | GLEASON CROMESETT LAND TRUST   | 0 CROMESETT RD        | 19.03 | 6010     | CHAPTER 61      | R30  |
| 67  | 1012 P  | ROCKWELL JOHN                  | 0 BLACKMORE PD RD OFF | 3.23  | 6010     | CHAPTER 61      | R60  |
| 67  | 1013 P  | ROCKWELL JOHN                  | 0 BLACKMORE PD RD     | 2.67  | 6010     | CHAPTER 61      | R60  |
| 96  | 1005 P  | BARTHOLOMEW EDWARD L           | 0 MAIN ST OFF         | 20.40 | 6010     | CHAPTER 61      | MR30 |
| 97  | 1028 P  | BARTHOLOMEW EDWARD L           | 0 PIERCEVILLE RD      | 0.30  | 6010     | CHAPTER 61      | MR30 |
| 97  | 1029    | BARTHOLOMEW EDWARD L           | 0 PIERCEVILLE RD OFF  | 0.95  | 6010     | CHAPTER 61      | MR30 |
| 97  | 1030    | BARTHOLOMEW EDWARD L           | 115 PIERCEVILLE RD    | 0.68  | 6010     | CHAPTER 61      | MR30 |
| 97  | 1031    | BARTHOLOMEW EDWARD L           | 0 PIERCEVILLE RD      | 24.40 | 6010     | CHAPTER 61      | MR30 |
| 98  | 1004 P  | BARTHOLOMEW EDWARD L           | 0 COUNTY RD           | 7.87  | 6010     | CHAPTER 61      | MR30 |
| 98  | 1010    | BARTHOLOMEW EDWARD L           | 15 PIERCEVILLE RD     | 0.27  | 6010     | CHAPTER 61      | MR30 |
| 98  | 1011 P  | BARTHOLOMEW EDWARD L           | 0 PIERCEVILLE RD OFF  | 12.44 | 6010     | CHAPTER 61      | MR30 |
| 98  | 1012 P  | BARTHOLOMEW EDWARD L           | 0 PIERCEVILLE RD      | 0.70  | 6010     | CHAPTER 61      | MR30 |
| 98  | 1013 P  | BARTHOLOMEW EDWARD L           | 0 COUNTY RD           | 5.81  | 6010     | CHAPTER 61      | MR30 |
| 98  | 1014 P  | BARTHOLOMEW EDWARD L           | 0 COUNTY RD OFF       | 0.92  | 6010     | CHAPTER 61      | MR30 |
| 98  | 1015    | BARTHOLOMEW EDWARD L           | 0 COUNTY RD OFF       | 4.60  | 6010     | CHAPTER 61      | MR30 |
| 98  | 1016    | BARTHOLOMEW EDWARD L           | 0 COUNTY RD OFF       | 0.80  | 6010     | CHAPTER 61      | MR30 |
| 98  | 1017 P  | BARTHOLOMEW EDWARD L           | 0 PIERCEVILLE RD      | 0.08  | 6010     | CHAPTER 61      | MR30 |
| 98  | 1018 P  | BARTHOLOMEW EDWARD L           | 0 PIERCEVILLE RD      | 0.15  | 6010     | CHAPTER 61      | MR30 |
| 98  | 1031    | BARTHOLOMEW EDWARD L           | 37 PIERCEVILLE RD     | 6.31  | 6010     | CHAPTER 61      | MR30 |
| 104 | PT A    | SLOCUM-GIBBS CRANBERRY CO      | 0 CARVER RD           | 30.20 | 6010     | CHAPTER 61      | R60  |

|     |         |                            |                     |        |      |                         |      |
|-----|---------|----------------------------|---------------------|--------|------|-------------------------|------|
| 104 | PTC     | SLOCUM-GIBBS CRANBERRY CO  | 0 CARVER RD         | 6.90   | 6010 | CHAPTER 61              | R60  |
| 104 | PTD     | SLOCUM-GIBBS CRANBERRY CO  | 0 CARVER RD         | 0.50   | 6010 | CHAPTER 61              | R60  |
| 104 | PT E    | SLOCUM-GIBBS CRANBERRY VO  | 0 CARVER RD         | 1.20   | 6010 | CHAPTER 61              | R60  |
| 104 | PT F    | SLOCUM-GIBBS CRANBERRY CO  | 0 CARVER RD         | 2.20   | 6010 | CHAPTER 61              | R60  |
| 104 | PT G    | SLOCUM-GIBBS CRANBERRY CO  | 0 ROUTE 25 OFF      | 0.60   | 6010 | CHAPTER 61              | R60  |
| 104 | PT H    | SLOCUM-GIBBS CRANBERRY CO  | 0 ROUTE 25          | 0.10   | 6010 | CHAPTER 61              | R60  |
| 104 | PT I    | SLOCUM-GIBBS CRANBERRY CO  | 0 ROUTE 25          | 0.80   | 6010 | CHAPTER 61              | R60  |
| 104 | PT J    | SLOCUM-GIBBS CRANBERRY CO  | 0 CARVER RD         | 0.50   | 6010 | CHAPTER 61              | R60  |
| 104 | PT L    | SLOCUM-GIBBS CRANBERRY CO  | 0 ROUTE 25          | 0.60   | 6010 | CHAPTER 61              | R60  |
| 104 | PT M    | SLOCUM-GIBBS CRANBERRY CO  | 0 ROUTE 25          | 0.10   | 6010 | CHAPTER 61              | R60  |
| 104 | PT1 A   | SLOCUM-GIBBS CRANBERRY CO  | 0 CARVER ROAD       | 0.40   | 6010 | CHAPTER 61              | R60  |
| 104 | 1055 P  | SLOCUM-GIBBS CRANBERRY CO  | 0 ROUTE 25          | 0.46   | 6010 | CHAPTER 61              | R60  |
| 104 | PTK1    | SLOCUM-GIBBS CRANBERRY CO  | 0 CRAN HWY & RTE 25 | 3.25   | 6010 | CHAPTER 61              | SC   |
| 104 | PTK2    | SLOCUM-GIBBS CRANBERRY CO  | 0 ROUTE 25          | 23.36  | 6010 | CHAPTER 61              | R60  |
| 105 | 1000 P  | SLOCUM GIBBS CRANBERRY CO  | 0 CHARLOTTE FURN RD | 4.00   | 6010 | CHAPTER 61              |      |
| 105 | 1002    | MAKEPEACE CO A D           | 0 CHARLOT FURN RD   | 93.61  | 6010 | CHAPTER 61              |      |
| 105 | 1007    | SLOCUM-GIBBS CRANBERRY CO  | 0 ROUTE 25 OFF      | 0.23   | 6010 | CHAPTER 61              |      |
| 110 | 1036    | KEYES DANA & GLEASON E.R.  | 22 CHARGE POND RD   | 9.16   | 6010 | CHAPTER 61              | R60  |
| 110 | 1066    | GLEASON ROBERT C.          | 2644 CRAN HWY       | 1.10   | 6010 | CHAPTER 61              | SC   |
| 129 | 1138 P  | TRURAN DOUGLAS W           | 2994 CRAN HWY       | 11.60  | 6010 | CHAPTER 61              | SC   |
|     |         |                            |                     | 368.72 |      | <b>CHAPTER 61 Total</b> | 0    |
| 10  | 1012    | PISCITELLI PAUL J          | 0 LONG NECK RD      | 2.80   | 7100 | CRANBERRY               | MR30 |
| 37  | B       | RHODES MATTHEW N & CINDY C | 2 JACK'S MARSH LN   | 27.60  | 7100 | CRANBERRY               | R60  |
| 41  | 1012 A  | POPES POND CRANBERRY CO    | 45 GREAT NECK RD    | 22.72  | 7100 | CRANBERRY               | R30  |
| 57  | 1004 A2 | GRASSI ALAN A & JUDITH     | 0 SHADY LN          | 16.20  | 7100 | CRANBERRY               | MR30 |
| 58  | 1054    | MANN DAVID B TRUSTEE       | 0 MARION RD         | 13.10  | 7100 | CRANBERRY               |      |
| 59  | 1027    | MANN DAVID B TRUSTEE       | 269 HATHAWAY ST     | 83.91  | 7100 | CRANBERRY               |      |
| 62  | 1010    | ASHLEY HERBERT W           | 142 FEARING HILL RD | 28.20  | 7100 | CRANBERRY               | R60  |
| 63  | 1005 B  | KAASINEN PATRICIA          | 0 COUNTY RD OFF     | 9.67   | 7100 | CRANBERRY               | R60  |
| 63  | 1008    | KAASINEN PATRICIA          | 0 COUNTY RD OFF     | 2.17   | 7100 | CRANBERRY               | R60  |
| 63  | 1012    | WOLCOTT WALTER S           | 0 COUNTY RD OFF     | 3.60   | 7100 | CRANBERRY               | R60  |
| 64  | 1001    | WOLCOTT WALTER S           | 0 COUNTY RD OFF     | 4.60   | 7100 | CRANBERRY               | R60  |
| 64  | 1006    | HARJU ELLEN                | 0 COUNTY RD OFF     | 36.44  | 7100 | CRANBERRY               | R60  |

|    |        |                          |                       |       |      |           |     |
|----|--------|--------------------------|-----------------------|-------|------|-----------|-----|
| 65 | 1000 B | HARJU ELLEN              | 340 COUNTY RD OFF     | 3.68  | 7100 | CRANBERRY | R60 |
| 69 | A      | BOURNE RICHARD           | 179 BLACKMORE PD RD   | 19.08 | 7100 | CRANBERRY | R60 |
| 69 | 1004 A | BOURNE RICHARD           | 162 BLACKMORE PD RD   | 9.01  | 7100 | CRANBERRY | R60 |
| 70 | 1000   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 3.97  | 7100 | CRANBERRY | R60 |
| 70 | 1001   | EAGLE HOLT COMPANY INC   | 79 SQUIRREL IS RD     | 94.03 | 7100 | CRANBERRY | R60 |
| 71 | 1001   | EAGLE HOLT COMPANY INC   | 0 BLACKMORE PD RD OFF | 14.56 | 7100 | CRANBERRY | R60 |
| 71 | 1002   | EAGLE HOLT COMPANY INC   | 0 BLACKMORE PD RD OFF | 14.16 | 7100 | CRANBERRY | R60 |
| 71 | 1003   | EAGLE HOLT COMPANY INC   | 107 BLACKMORE PD RD   | 24.72 | 7100 | CRANBERRY | R60 |
| 71 | 1004   | EAGLE HOLT COMPANY INC   | 93 BLACKMORE PD RD    | 6.94  | 7100 | CRANBERRY | R60 |
| 71 | 1005   | EAGLE HOLT COMPANY INC   | 135 BLACKMORE PD RD   | 2.54  | 7100 | CRANBERRY | R60 |
| 71 | 1006   | EAGLE HOLT COMPANY INC   | 0 BLACKMORE PD RD     | 6.54  | 7100 | CRANBERRY | R60 |
| 71 | 1007   | EAGLE HOLT COMPANY INC   | 0 BLACKMORE PD RD OFF | 1.38  | 7100 | CRANBERRY | R60 |
| 71 | 1008   | EAGLE HOLT COMPANY INC   | 123 BLACKMORE PD RD   | 2.24  | 7100 | CRANBERRY | R60 |
| 72 | 1004 C | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 1.12  | 7100 | CRANBERRY |     |
| 72 | 1006   | EAGLE HOLT COMPANY INC   | 60 SQUIRREL IS RD     | 24.36 | 7100 | CRANBERRY | R60 |
| 72 | 1007   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 11.41 | 7100 | CRANBERRY | R60 |
| 72 | 1008   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 7.66  | 7100 | CRANBERRY | R60 |
| 72 | 1009   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 9.12  | 7100 | CRANBERRY | R60 |
| 72 | 1010   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 2.84  | 7100 | CRANBERRY | R60 |
| 72 | 1011   | ZIMMER PATRICIA H        | 0 SQUIRREL IS RD OFF  | 12.23 | 7100 | CRANBERRY | R60 |
| 72 | 1015   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 30.88 | 7100 | CRANBERRY | R60 |
| 72 | 1016   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 5.51  | 7100 | CRANBERRY | R60 |
| 72 | 1018   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 2.16  | 7100 | CRANBERRY | R60 |
| 72 | 1019   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 4.75  | 7100 | CRANBERRY | R60 |
| 72 | 1020   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 1.40  | 7100 | CRANBERRY | R60 |
| 72 | 1021   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD OFF  | 5.43  | 7100 | CRANBERRY | R60 |
| 72 | 1022   | EAGLE HOLT COMPANY INC   | 0 SQUIRREL IS RD      | 8.39  | 7100 | CRANBERRY | R60 |
| 73 | 1001   | EAGLE HOLT COMPANY INC   | 39 BLACKMORE PD RD    | 60.19 | 7100 | CRANBERRY | R60 |
| 77 | 1001   | BLACKMORE CRAN BOGS INC  | 122 BLACKMORE PD RD   | 9.16  | 7100 | CRANBERRY |     |
| 77 | 1005   | BLACKMORE CRAN BOGS INC  | 84 BLACKMORE PD CIR   | 6.68  | 7100 | CRANBERRY | R60 |
| 79 | 1000 B | CORWIN DONALD A          | 0 BLACKMORE PD RD OFF | 0.11  | 7100 | CRANBERRY | R60 |
| 92 | 1007   | TREMONT CRANBERRY CO LLC | 0 PAPER MILL RD OFF   | 30.04 | 7100 | CRANBERRY |     |
| 93 | LC A   | NIEMI ROBERT             | 580 COUNTY RD         | 5.35  | 7100 | CRANBERRY | R60 |

|     |        |                           |                      |       |      |           |      |
|-----|--------|---------------------------|----------------------|-------|------|-----------|------|
| 94  | 1014   | TWEEDY & BARNES COMPANY   | 26 DARTMOUTH RD      | 2.27  | 7100 | CRANBERRY | R60  |
| 94  | 1015   | TWEEDY & BARNES COMPANY   | 0 PAPER MILL RD      | 9.13  | 7100 | CRANBERRY | R60  |
| 95  | 1005   | TWEEDY & BARNES CO        | 722 COUNTY RD        | 0.52  | 7100 | CRANBERRY |      |
| 95  | 1006 P | TWEEDY & BARNES CO        | 114 COUNTY RD        | 4.41  | 7100 | CRANBERRY |      |
| 95  | 1007   | TWEEDY & BARNES CO        | 0 COUNTY RD          | 0.08  | 7100 | CRANBERRY | R60  |
| 95  | 1013   | TWEEDY & BARNES CO        | 70 PAPER MILL RD     | 20.00 | 7100 | CRANBERRY |      |
| 95  | 1013 P | TWEEDY & BARNES CO        | 0 PAPER MILL RD      | 30.36 | 7100 | CRANBERRY |      |
| 96  | 1007   | HEDIN E RICHARD           | PAPER MILL RD OFF    | 19.02 | 7100 | CRANBERRY | MR30 |
| 97  | 1028   | BARTHOLOMEW EDWARD L      | 1 MILL ST            | 3.30  | 7100 | CRANBERRY | MR30 |
| 98  | 1004   | BARTHOLOMEW EDWARD L      | 798 COUNTY RD        | 7.76  | 7100 | CRANBERRY | MR30 |
| 98  | 1012   | BARTHOLOMEW EDWARD L      | 17 PIERCEVILLE RD    | 9.62  | 7100 | CRANBERRY | MR30 |
| 98  | 1013   | BARTHOLOMEW EDWARD L      | 794 COUNTY RD        | 2.10  | 7100 | CRANBERRY | MR30 |
| 98  | 1014   | BARTHOLOMEW EDWARD L      | 76 COUNTY RD OFF     | 1.19  | 7100 | CRANBERRY | MR30 |
| 98  | 1017   | BARTHOLOMEW EDWARD L      | 0 PIERCEVILLE RD     | 3.80  | 7100 | CRANBERRY | MR30 |
| 98  | 1018   | BARTHOLOMEW EDWARD L      | 19 PIERCEVILLE RD    | 8.23  | 7100 | CRANBERRY | MR30 |
| 99  | 1023   | JOHNSON ROBERT E          | 0 MAIN ST            | 44.41 | 7100 | CRANBERRY | MR30 |
| 103 | 1019 A | RINTA PAUL E              | 31 - 39 N CARVER RD  | 25.01 | 7100 | CRANBERRY |      |
| 103 | 1019 B | RINTA PAUL E              | 0 CARVER RD OFF      | 1.68  | 7100 | CRANBERRY | R60  |
| 103 | 1032   | TALCOTT ROSALIN V TRUSTEE | 45 NORTH CARVER RD   | 18.80 | 7100 | CRANBERRY | R60  |
| 103 | 1034 B | RINTA PAUL E              | NO CARVER RD         | 11.67 | 7100 | CRANBERRY | R60  |
| 103 | 1035   | RINTA PAUL E              | 29 NORTH CARVER RD   | 5.29  | 7100 | CRANBERRY |      |
| 103 | 1038   | CROKE JAMES E             | 1-13 NORTH CARVER RD | 53.25 | 7100 | CRANBERRY | R60  |
| 103 | 1039   | CROKE JAMES E             | 0 CARVER RD OFF      | 5.98  | 7100 | CRANBERRY |      |
| 103 | 1053   | SHURTLEFF R & ALMA+D164   | 0 ROUTE 58 OFF       | 0.42  | 7100 | CRANBERRY | R130 |
| 104 | A      | SLOCUM-GIBBS CRANBERRY CO | 0 CARVER RD OFF      | 23.84 | 7100 | CRANBERRY | R60  |
| 104 | C      | SLOCUM-GIBBS CRANBERRY CO | 0 CARVER RD OFF      | 16.04 | 7100 | CRANBERRY | R60  |
| 104 | D      | SLOCUM-GIBBS CRANBERRY CO | 0 CARVER RD OFF      | 1.27  | 7100 | CRANBERRY | R60  |
| 104 | E      | SLOCUM-GIBBS CRANBERRY CO | 0 CARVER RD OFF      | 0.17  | 7100 | CRANBERRY | R60  |
| 104 | F      | SLOCUM-GIBBS CRANBERRY CO | 0 CARVER RD OFF      | 2.98  | 7100 | CRANBERRY | R60  |
| 104 | G      | SLOCUM-GIBBS CRANBERRY CO | 0 ROUTE 25 OFF       | 10.70 | 7100 | CRANBERRY | R60  |
| 104 | H      | SLOCUM-GIBBS CRANBERRY CO | 0 ROUTE 25 OFF       | 1.03  | 7100 | CRANBERRY | R60  |
| 104 | I      | SLOCUM-GIBBS CRANBERRY CO | 0 ROUTE 25 OFF       | 0.56  | 7100 | CRANBERRY | R60  |
| 104 | J      | SLOCUM-GIBBS CRANBERRY CO | 0 CARVER RD OFF      | 14.73 | 7100 | CRANBERRY | R60  |

|     |         |                                |                        |        |      |           |     |
|-----|---------|--------------------------------|------------------------|--------|------|-----------|-----|
| 104 | M       | SLOCUM-GIBBS CRANBERRY CO      | 0 ROUTE 25             | 15.31  | 7100 | CRANBERRY | R60 |
| 104 | 1 A     | SLOCUM-GIBBS CRANBERRY CO      | 0 CARVER RD OFF        | 6.88   | 7100 | CRANBERRY | R60 |
| 104 | 1 B     | SLOCUM-GIBBS CRANBERRY CO      | 0 CARVER RD OFF        | 1.31   | 7100 | CRANBERRY | R60 |
| 104 | VB      | TALCOTT ROSALIN V TRUSTEE      | 44 NORTH CARVER RD     | 10.50  | 7100 | CRANBERRY | R60 |
| 104 | K2      | SLOCUM-GIBBS CRANBERRY CO      | 0 ROUTE 25 OFF         | 12.01  | 7100 | CRANBERRY | R60 |
| 104 | 1039    | SLOCUM-GIBBS CRANBERRY CO      | 0 CRAN HWY OFF         | 15.40  | 7100 | CRANBERRY | SC  |
| 104 | 1046    | RINTA PAUL E                   | 41-43 NORTH CARVER RD  | 28.34  | 7100 | CRANBERRY | R60 |
| 104 | 1049 A  | RINTA PAUL E                   | 20 NORTH CARVER RD     | 37.81  | 7100 | CRANBERRY |     |
| 104 | 1049 B  | RINTA PAUL E                   | 26 NORTH CARVER RD     | 17.11  | 7100 | CRANBERRY | R60 |
| 104 | 1049 D  | CROKE JAMES E                  | 0 CARVER RD            | 18.82  | 7100 | CRANBERRY | R60 |
| 104 | 1055    | SLOCUM-GIBBS CRANBERRY CO      | 0 ROUTE 25             | 0.33   | 7100 | CRANBERRY | R60 |
| 105 | 1004    | BAPTISTE BROTHERS LTD          | 1 CHARLOT FURN RD OFF  | 10.51  | 7100 | CRANBERRY |     |
| 105 | 1005    | BAPTISTE BROTHERS LTD          | 0 CHARLOTTE FURNACE RD | 3.90   | 7100 | CRANBERRY |     |
| 105 | 1019    | PATTERSON BROOK CORP           | 2310 CRAN HWY          | 2.24   | 7100 | CRANBERRY |     |
| 105 | 1020 A  | PATTERSON BROOK CORP           | 2326 CRAN HWY          | 20.65  | 7100 | CRANBERRY | SC  |
| 106 | C       | MAKEPEACE ACQUISITION CORP     | 0 ROUTE 25             | 1.31   | 7100 | CRANBERRY | R60 |
| 106 | 1000 A  | MAKEPEACE/F-H ACQUISITION CORP | 0 CHARLOT FURN RD OFF  | 3.40   | 7100 | CRANBERRY | R60 |
| 106 | 1000 B  | MAKEPEACE CO A D               | 0 CHARLOT FURN RD OFF  | 21.40  | 7100 | CRANBERRY | R60 |
| 106 | 1002    | MAKEPEACE/F-H ACQUISITION CORP | 64 FARM TO MARKET RD   | 178.47 | 7100 | CRANBERRY | R60 |
| 106 | 1004    | SLOCUM-GIBBS CRANBERRY CO      | 107 FARM TO MARKET RD  | 6.97   | 7100 | CRANBERRY | R60 |
| 106 | 1005    | MAKEPEACE CO A D               | 0 TIHONET RD OFF       | 3.99   | 7100 | CRANBERRY | R60 |
| 106 | 1006    | MAKEPEACE/F-H ACQUISITION CORP | 0 ROUTE 25 OFF         | 1.78   | 7100 | CRANBERRY | R60 |
| 106 | 1007    | MAKEPEACE CO A D               | 0 TIHONET RD OFF       | 0.45   | 7100 | CRANBERRY | R60 |
| 106 | 1009    | MAKEPEACE CO A D               | 65 FARM TO MARKET RD   | 6.49   | 7100 | CRANBERRY | R60 |
| 106 | 1010    | MAKEPEACE CO A D               | 59 FARM TO MARKET RD   | 0.43   | 7100 | CRANBERRY | R60 |
| 106 | 1012    | MAKEPEACE CO A D               | 57 FARM TO MARKET RD   | 25.73  | 7100 | CRANBERRY | R60 |
| 106 | 1013    | MAKEPEACE CO A D               | 0 TIHONET RD OFF       | 20.38  | 7100 | CRANBERRY | R60 |
| 107 | 1000    | MAKEPEACE CO A D               | 0 TIHONET RD OFF       | 15.08  | 7100 | CRANBERRY |     |
| 107 | 1001    | MAKEPEACE CO A D               | 0 TIHONET RD OFF       | 17.75  | 7100 | CRANBERRY |     |
| 107 | 1007    | MAKEPEACE CO A D               | 0 ROUTE 25             | 5.61   | 7100 | CRANBERRY |     |
| 107 | 1009    | MAKEPEACE CO A D               | 0 TIHONET RD OFF       | 12.54  | 7100 | CRANBERRY |     |
| 108 | 1006 A1 | MAKEPEACE COMPANY A D          | 0 KENDRICK RD          | 19.95  | 7100 | CRANBERRY | IND |
| 109 | 1000    | MAKEPEACE CO A D               | 0 TIHONET RD OFF       | 52.61  | 7100 | CRANBERRY | R60 |

|     |        |                          |                      |        |      |           |      |
|-----|--------|--------------------------|----------------------|--------|------|-----------|------|
| 109 | 1001   | MAKEPEACE CO A D         | 60 TIHONET RD        | 154.63 | 7100 | CRANBERRY | R60  |
| 109 | 1002   | MAKEPEACE COMPANY A D    | 2548 CRAN HWY REAR   | 83.08  | 7100 | CRANBERRY | R60  |
| 109 | 1013   | MAKEPEACE COMPANY A D    | 8 TIHONET RD         | 1.01   | 7100 | CRANBERRY | R60  |
| 109 | 1038   | MAKEPEACE COMPANY A D    | 0 CRAN HWY OFF       | 2.08   | 7100 | CRANBERRY |      |
| 110 | 1068   | TWEEDY & BARNES COMPANY  | 2650 CRAN HWY        | 42.03  | 7100 | CRANBERRY | SC   |
| 110 | 1068 P | TWEEDY & BARNES CO       | 3650 CRAN HWY        | 12.37  | 7100 | CRANBERRY | SC   |
| 110 | 1070 B | TWEEDY & BARNES CO       | 0 CRAN HWY OFF       | 9.24   | 7100 | CRANBERRY | MR30 |
| 111 | 1000   | MAKEPEACE CO A D         | 169 TIHONET RD       | 644.20 | 7100 | CRANBERRY | R60  |
| 112 | 1000   | MEHARG ROBERT J JR       | 0 TIHONET RD         | 112.40 | 7100 | CRANBERRY | R60  |
| 113 | 1000   | MAKEPEACE CO A D         | 0 CHARGE POND RD     | 52.70  | 7100 | CRANBERRY | R60  |
| 113 | 1013 B | BAYSIDE AGRICULTURAL INC | 0 CHARGE POND RD OFF | 22.74  | 7100 | CRANBERRY | R130 |
| 113 | 1014   | BAYSIDE AGRICULTURAL INC | 0 CHARGE POND RD OFF | 54.60  | 7100 | CRANBERRY | R130 |
| 113 | 1015   | MAKEPEACE CO A D         | 0 CHARGE POND RD     | 8.50   | 7100 | CRANBERRY | R60  |
| 113 | 1016   | MAKEPEACE CO A D         | 0 CHARGE POND RD OFF | 2.10   | 7100 | CRANBERRY | R60  |
| 113 | 1018   | TWEEDY & BARNES COMPANY  | 0 CHARGE POND RD     | 61.20  | 7100 | CRANBERRY | R60  |
| 113 | 1020   | OCONNOR DANIEL F TRUSTEE | 168 CHARGE POND RD   | 156.41 | 7100 | CRANBERRY | R60  |
| 113 | 1021   | MAKEPEACE CO A D         | 0 CHARGE POND RD OFF | 37.00  | 7100 | CRANBERRY | R60  |
| 114 | 1000   | MAKEPEACE CO A D         | 0 TIHONET RD OFF     | 210.00 | 7100 | CRANBERRY | R60  |
| 114 | 1001   | MAKEPEACE CO A D         | 0 TIHONET RD         | 22.10  | 7100 | CRANBERRY | R60  |
| 114 | 1006   | BAYSIDE AGRICULTURAL INC | 0 CHARGE POND RD OFF | 16.60  | 7100 | CRANBERRY | R130 |
| 115 | LC6    | ASHLEY JAMES E           | 0 MAPLE SPRGS RD OFF | 1.96   | 7100 | CRANBERRY |      |
| 115 | 1001   | BAYSIDE AGRICULTURAL INC | 0 CHARGE POND RD OFF | 21.20  | 7100 | CRANBERRY |      |
| 115 | 1002   | BAYSIDE AGRICULTURAL INC | 0 CHARGE POND RD OFF | 34.50  | 7100 | CRANBERRY |      |
| 115 | 1005   | ASHLEY HERBERT W         | 0 MAPLE SPRGS RD OFF | 29.60  | 7100 | CRANBERRY |      |
| 115 | 1007   | BAYSIDE AGRICULTURAL INC | 0 ROUTE 25 OFF       | 6.80   | 7100 | CRANBERRY |      |
| 115 | 1008   | BAYSIDE AGRICULTURAL INC | 0 ROUTE 25 OFF       | 16.00  | 7100 | CRANBERRY |      |
| 115 | 1009   | BAYSIDE AGRICULTURAL INC | 0 CHARGE POND RD OFF | 6.20   | 7100 | CRANBERRY |      |
| 115 | 1011   | ASHLEY HERBERT W         | 0 MAPLE SPRGS RD OFF | 39.70  | 7100 | CRANBERRY |      |
| 115 | 1012   | ASHLEY HERBERT W         | 0 MAPLE SPRGS RD OFF | 41.30  | 7100 | CRANBERRY |      |
| 115 | 1013   | ASHLEY JAMES E           | 0 MAPLE SPRGS RD OFF | 29.30  | 7100 | CRANBERRY |      |
| 115 | 1015   | ASHLEY HERBERT W         | 0 MAPLE SPRGS RD OFF | 3.60   | 7100 | CRANBERRY |      |
| 115 | 1016   | ASHLEY HERBERT W         | 0 MAPLE SPRGS RD OFF | 2.20   | 7100 | CRANBERRY |      |
| 116 | 1000   | MAKEPEACE CO A D         | 0 MAPLE SPRGS RD     | 107.80 | 7100 | CRANBERRY | R130 |

|     |        |                            |                        |         |      |                            |      |
|-----|--------|----------------------------|------------------------|---------|------|----------------------------|------|
| 116 | 1005   | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD OFF   | 3.80    | 7100 | CRANBERRY                  | R130 |
| 116 | 1006   | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD OFF   | 14.50   | 7100 | CRANBERRY                  | R130 |
| 116 | 1007   | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD OFF   | 99.30   | 7100 | CRANBERRY                  | R130 |
| 116 | 1008   | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD OFF   | 4.20    | 7100 | CRANBERRY                  | R130 |
| 116 | 1009   | MAKEPEACE CO A D           | 0 MAPLE SPRINGS RD OFF | 2.80    | 7100 | CRANBERRY                  | R130 |
| 116 | 1010   | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD       | 81.30   | 7100 | CRANBERRY                  | R130 |
| 116 | 1012   | MAKEPEACE CO A D           | 0 MAPLE SPRINGS RD OFF | 69.40   | 7100 | CRANBERRY                  | R130 |
| 116 | 1013   | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD OFF   | 3.00    | 7100 | CRANBERRY                  | R130 |
| 116 | 1015   | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD OFF   | 2.60    | 7100 | CRANBERRY                  | R130 |
| 116 | 1016   | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD OFF   | 32.00   | 7100 | CRANBERRY                  | R130 |
| 117 | 1001   | MAKEPEACE CO A D           | 0 MAPLE SPRINGS RD OFF | 131.10  | 7100 | CRANBERRY                  | R130 |
| 117 | 1002   | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD OFF   | 60.30   | 7100 | CRANBERRY                  | R130 |
| 118 | 1002   | MAKEPEACE CO A D           | 0 MAYFLOWER LN OFF     | 48.80   | 7100 | CRANBERRY                  | R130 |
| 125 | 1017 B | MAKEPEACE CO A D           | 0 BARKER RD            | 2.45    | 7100 | CRANBERRY                  | R130 |
| 126 | 3      | MAKEPEACE CO A D           | 9 PLYMOUTH RD          | 139.20  | 7100 | CRANBERRY                  | R130 |
| 126 | 6      | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD       | 18.85   | 7100 | CRANBERRY                  | R130 |
| 126 | 1000   | MAKEPEACE CO A D           | 0 MAPLE SPRGS RD OFF   | 7.00    | 7100 | CRANBERRY                  | R130 |
| 126 | 1003   | MAKEPEACE CO A D           | 31 PLYMOUTH RD         | 0.80    | 7100 | CRANBERRY                  | R130 |
| 126 | 1004   | MAKEPEACE ACQUISITION CORP | 0 MAPLE SPRINGS RD     | 75.90   | 7100 | CRANBERRY                  | R130 |
| 130 | 1002   | ROUNSVILLE, HAMMOND &      | 157 GLEN CHARLIE RD    | 126.96  | 7100 | CRANBERRY                  | R130 |
| 130 | 1006   | ROUNSVILLE HAMMOND &       | 173 GLEN CHARLIE RD    | 26.70   | 7100 | CRANBERRY                  | R130 |
| 130 | 1016   | ROUNSVILLE HAMMOND &       | 27 OLD COUNTY RD       | 25.91   | 7100 | CRANBERRY                  | R130 |
| 131 | F      | ATWOOD WILLIAM F           | 0 CRAN HWY             | 3.10    | 7100 | CRANBERRY                  | R130 |
| 131 | 10 A   | ATWOOD WILLIAM F           | 0 CRAN HWY OFF         | 32.89   | 7100 | CRANBERRY                  | R130 |
| 131 | E1     | ATWOOD WILLIAM F           | 0 CRAN HWY OFF         | 2.40    | 7100 | CRANBERRY                  | R130 |
|     |        |                            |                        | 4708.14 |      | <b>CRANBERRY+H37 Total</b> | 0    |
| 103 | 1033   | TALCOTT ROSALIN V TRUSTEE  | 0 ROUTE 25             | 4.70    | 7140 | ORCHARDS                   | R60  |
| 104 | V C    | TALCOTT ROSALIN V TRUSTEE  | 48 NORTH CARVER RD     | 6.90    | 7140 | ORCHARDS                   | R60  |
|     |        |                            |                        | 11.60   |      | <b>ORCHARDS Total</b>      | 0    |
| 84  | 1024   | BOARN FREEMAN H            | 2507 CRAN HWY          | 1.40    | 7180 | PASTURE                    | SC   |
| 84  | 1028   | BOARN FREEMAN H            | 631 MAIN ST            | 3.03    | 7180 | PASTURE                    | SC   |
|     |        |                            |                        | 4.43    |      | <b>PASTURE Total</b>       | 0    |
| 10  | 1009   | PISCITELLI PAUL J          | 1 EVERY LN             | 0.89    | 7200 | 61A                        | MR30 |

|    |        |                         |                       |       |      |     |     |
|----|--------|-------------------------|-----------------------|-------|------|-----|-----|
| 11 | K132   | PISCITELLI PAUL J       | 0 BARRETT WAY         | 0.12  | 7200 | 61A | R30 |
| 62 | 1000   | NIEMI ROBERT            | 1 OLD FEARING HILL RD | 1.20  | 7200 | 61A | R60 |
| 63 | CA     | EAGLE HOLT COMPANY INC  | 0 COUNTY RD OFF       | 3.00  | 7200 | 61A | R60 |
| 63 | 1014 A | KAASINEN PATRICIA       | 0 COUNTY RD OFF       | 1.87  | 7200 | 61A | R60 |
| 63 | 1015 A | KAASINEN PATRICIA       | 0 COUNTY RD OFF       | 0.70  | 7200 | 61A | R60 |
| 63 | 1018   | ZIMMER PATRICIA H       | 0 COUNTY RD OFF       | 9.34  | 7200 | 61A | R60 |
| 64 | 1005   | EAGLE HOLT COMPANY INC  | 0 COUNTY RD OFF       | 2.99  | 7200 | 61A | R60 |
| 64 | 1008   | HARJU ELLEN             | 390 COUNTY RD         | 1.49  | 7200 | 61A | R60 |
| 65 | 1000 A | HARJU ELLEN             | 0 COUNTY RD OFF       | 0.31  | 7200 | 61A | R60 |
| 65 | 1001   | HARJU ELLEN             | 340 COUNTY RD         | 1.80  | 7200 | 61A | R60 |
| 65 | 1004   | EAGLE HOLT COMPANY INC  | 0 COUNTY RD OFF       | 0.08  | 7200 | 61A | R60 |
| 65 | 1006   | EAGLE HOLT COMPANY INC  | 320 COUNTY RD         | 47.10 | 7200 | 61A | R60 |
| 65 | 1007   | EAGLE HOLT COMPANY INC  | 0 COUNTY RD OFF       | 8.67  | 7200 | 61A | R60 |
| 65 | 1010   | EAGLE HOLT COMPANY INC  | 0 COUNTY RD OFF       | 0.75  | 7200 | 61A | R60 |
| 65 | 1011   | EAGLE HOLT COMPANY INC  | 0 COUNTY RD OFF       | 6.31  | 7200 | 61A | R60 |
| 68 | 1014   | EAGLE HOLT COMPANY INC  | 0 BLACKMORE PD RD     | 2.78  | 7200 | 61A | R60 |
| 69 | 1011   | EAGLE HOLT COMPANY INC  | 0 SQUIRREL IS RD      | 0.68  | 7200 | 61A | R60 |
| 70 | 1002   | EAGLE HOLT COMPANY INC  | 0 SQUIRREL IS RD      | 10.33 | 7200 | 61A | R60 |
| 70 | 1003   | EAGLE HOLT COMPANY INC  | 0 SQUIRREL IS RD      | 4.41  | 7200 | 61A | R60 |
| 71 | 1009   | EAGLE HOLT COMPANY INC  | 111 BLACKMORE PD RD   | 0.66  | 7200 | 61A | R60 |
| 72 | 1017   | EAGLE HOLT COMPANY INC  | 0 SQUIRREL IS RD      | 2.20  | 7200 | 61A | R60 |
| 73 | 1002   | EAGLE HOLT COMPANY INC  | 0 SQUIRREL IS RD      | 0.83  | 7200 | 61A | R60 |
| 73 | 1003   | EAGLE HOLT COMPANY INC  | 0 SQUIRREL IS RD      | 2.00  | 7200 | 61A | R60 |
| 73 | 1004   | EAGLE HOLT COMPANY INC  | 0 SQUIRREL IS RD      | 0.52  | 7200 | 61A | R60 |
| 73 | 1005   | EAGLE HOLT COMPANY INC  | 0 SQUIRREL IS RD      | 1.61  | 7200 | 61A | R60 |
| 75 | 1005   | EAGLE HOLT COMPANY INC  | 38 FEARING HILL RD    | 8.02  | 7200 | 61A | R60 |
| 76 | S1     | EAGLE HOLT COMPANY INC  | 62 BLACKMORE PD RD    | 0.17  | 7200 | 61A | R60 |
| 76 | 1000   | EAGLE HOLT COMPANY INC  | 32 BLACKMORE PD CIR   | 4.80  | 7200 | 61A | R60 |
| 76 | 1016 B | BLACKMORE CRAN BOGS INC | 0 BLACKMORE PD RD OFF | 0.21  | 7200 | 61A | R60 |
| 76 | 1028   | EAGLE HOLT COMPANY INC  | 0 BLACKMORE PD RD     | 0.09  | 7200 | 61A | R60 |
| 76 | 1030   | EAGLE HOLT COMPANY INC  | 84 BLACKMORE PD RD    | 0.32  | 7200 | 61A | R60 |
| 77 | 1002 P | CORWIN DONALD A         | 0 BLACKMORE PD RD     | 13.21 | 7200 | 61A | R60 |
| 77 | 1004   | BLACKMORE CRAN BOGS INC | 0 BLACKMORE PD RD OFF | 0.12  | 7200 | 61A | R60 |

|     |        |                           |                         |       |      |     |      |
|-----|--------|---------------------------|-------------------------|-------|------|-----|------|
| 77  | 1006   | EAGLE HOLT COMPANY INC    | 0 BLACKMORE PD RD OFF   | 15.17 | 7200 | 61A |      |
| 92  | 1009   | TREMONT CRANBERRY CO LLC  | 0 FARMER'S LN           | 17.30 | 7200 | 61A | R60  |
| 93  | C      | NIEMI ROBERT              | 584 COUNTY ROAD         | 0.25  | 7200 | 61A | R60  |
| 94  | 1001   | TWEEDY & BARNES COMPANY   | 0 COUNTY RD             | 5.41  | 7200 | 61A | R60  |
| 94  | 1003 A | TWEEDY & BARNES CO INC    | 688 COUNTY RD           | 5.70  | 7200 | 61A | R60  |
| 94  | 1011   | TWEEDY & BARNES COMPANY   | 0 COUNTY RD             | 2.98  | 7200 | 61A | R60  |
| 94  | 1012   | TWEEDY & BARNES COMPANY   | 0 COUNTY RD             | 3.02  | 7200 | 61A | R60  |
| 94  | 1013   | TWEEDY JOHN E & BARNES V  | 0 COUNTY ROAD           | 1.08  | 7200 | 61A | R60  |
| 95  | 1006   | TWEEDY & BARNES CO        | 720 COUNTY RD           | 1.59  | 7200 | 61A |      |
| 95  | 1009   | TWEEDY & BARNES CO+D233   | 0 COUNTY RD             | 0.24  | 7200 | 61A | R60  |
| 95  | 1012   | TWEEDY AND BARNES CO      | 710 COUNTY RD           | 9.35  | 7200 | 61A | R60  |
| 95  | 1014   | TWEEDY & BARNES CO        | 50 PAPER MILL RD        | 3.46  | 7200 | 61A |      |
| 95  | 1015   | TWEEDY & BARNES CO        | 42 PAPER MILL RD        | 1.50  | 7200 | 61A |      |
| 96  | 1001   | TWEEDY & BARNES CO        | 33 PAPER MILL RD OFF    | 4.65  | 7200 | 61A | MR30 |
| 96  | 1002   | TWEEDY & BARNES CO        | 0 PAPER MILL RD OFF     | 13.30 | 7200 | 61A | MR30 |
| 96  | 1003   | TWEEDY & BARNES CO        | 0 PAPER MILL RD REAR    | 0.16  | 7200 | 61A | MR30 |
| 96  | 1004   | TWEEDY & BARNES CO        | 0 PAPER MILL RD OFF     | 0.02  | 7200 | 61A | MR30 |
| 97  | 1032   | TWEEDY & BARNES CO        | 0 PAPER MILL RD OFF     | 3.55  | 7200 | 61A | MR30 |
| 97  | 1035 A | TWEEDY & BARNES CO        | 43 PAPER MILL RD        | 7.10  | 7200 | 61A | MR30 |
| 103 | 1037   | CROKE JAMES E             | 0 CARVER RD             | 0.87  | 7200 | 61A | R60  |
| 103 | 1042   | ERICKSON RICHARD A        | 0 CARVER RD OFF         | 7.49  | 7200 | 61A | R60  |
| 104 | L      | SLOCUM-GIBBS CRANBERRY CO | 0 ROUTE 25 OFF          | 0.92  | 7200 | 61A | R60  |
| 104 | K1     | SLOCUM GIBBS CRANBERRY CO | 2250 CRAN HWY           | 3.73  | 7200 | 61A | SC   |
| 104 | 1050 A | RINTA PAUL E              | NORTH CARVER RD         | 3.44  | 7200 | 61A | R60  |
| 104 | 1053   | SLOCUM GIBBS CRANBERRY CO | 0 ROUTE 25 OFF          | 1.11  | 7200 | 61A | R60  |
| 105 | A      | BAPTISTE BROTHERS LTD     | 0 CHARLOTTE FURN RD OFF | 0.40  | 7200 | 61A |      |
| 105 | 1000   | SLOCUM GIBBS CRANBERRY CO | 0 CHARLOT FURN RD       | 1.62  | 7200 | 61A |      |
| 105 | 1008   | PATTERSON BROOK CORP      | 1 CHARLOT FURN RD OFF   | 14.02 | 7200 | 61A |      |
| 105 | 1013   | MAKEPEACE CO A D          | 0 CHARLOTTE FURNACE RD  | 6.46  | 7200 | 61A |      |
| 105 | 1014   | MAKEPEACE CO A D          | 25 CHARLOTTE FURNACE RD | 27.20 | 7200 | 61A |      |
| 105 | 1016   | MAKEPEACE CO A D          | 0 CHARLOTTE FURNACE RD  | 0.08  | 7200 | 61A |      |
| 105 | 1018   | PATTERSON BROOK CORP      | 0 ROUTE 25              | 1.38  | 7200 | 61A |      |
| 105 | 1028 A | PATTERSON BROOK CORP      | 0 CRAN HWY              | 0.08  | 7200 | 61A |      |

|     |        |                            |                      |        |      |     |      |
|-----|--------|----------------------------|----------------------|--------|------|-----|------|
| 106 | A      | MAKEPEACE ACQUISITION CORP | 0 ROUTE 25           | 6.10   | 7200 | 61A | R60  |
| 106 | B      | MAKEPEACE CO A D           | 0 ROUTE 25           | 3.10   | 7200 | 61A | R60  |
| 106 | D      | MAKEPEACE CO A D           | 0 ROUTE 25           | 0.42   | 7200 | 61A | R60  |
| 106 | 1001   | MAKEPEACE ACQUISITION CORP | 0 FARM TO MARKET RD  | 0.03   | 7200 | 61A | R60  |
| 106 | 1003   | MAKEPEACE ACQUISITION CORP | 0 FARM TO MARKET RD  | 0.11   | 7200 | 61A | R60  |
| 106 | 1008   | MAKEPEACE ACQUISITION CORP | 89 FARM TO MARKET RD | 14.09  | 7200 | 61A | R60  |
| 106 | 1011   | MAKEPEACE CO A D           | 0 FARM TO MARKET RD  | 0.06   | 7200 | 61A | R60  |
| 106 | 1014   | MAKEPEACE ACQUISITION CORP | 56 FARM TO MARKET RD | 48.35  | 7200 | 61A | R60  |
| 107 | 1003   | MAKEPEACE CO A D           | 140 TIHONET RD       | 16.49  | 7200 | 61A |      |
| 107 | 1004   | MAKEPEACE CO A D           | 0 TIHONET RD         | 22.43  | 7200 | 61A |      |
| 107 | 1005   | MAKEPEACE CO A D           | 0 ROUTE 25           | 0.84   | 7200 | 61A |      |
| 107 | 1006   | MAKEPEACE CO A D           | 0 ROUTE 25           | 1.48   | 7200 | 61A |      |
| 107 | 1008   | MAKEPEACE CO A D           | 0 TIHONET RD REAR    | 7.47   | 7200 | 61A |      |
| 107 | 1010   | MAKEPEACE CO A D           | 0 TIHONET RD OFF     | 1.25   | 7200 | 61A |      |
| 107 | 1012   | MAKEPEACE CO A D           | 0 TIHONET RD         | 0.91   | 7200 | 61A |      |
| 108 | 1008 P | MAKEPEACE CO A D           | 0 CRAN HWY           | 6.63   | 7200 | 61A |      |
| 109 | 1051   | MAKEPEACE CO A D           | 62 TIHONET RD        | 1.57   | 7200 | 61A | R60  |
| 109 | 1052   | MAKEPEACE CO A D           | 66 TIHONET RD        | 0.23   | 7200 | 61A | R60  |
| 109 | 1053   | MAKEPEACE CO A D           | 0 TIHONET RD OFF     | 1.38   | 7200 | 61A | R60  |
| 109 | 1017 A | MAKEPEACE COMPANY A D      | 2472 CRAN HWY REAR   | 0.29   | 7200 | 61A |      |
| 110 | H3 A   | MAKEPEACE CO A D           | 37 TIHONET RD        | 0.36   | 7200 | 61A | R60  |
| 110 | 1000   | MAKEPEACE CO A D           | 3 TIHONET RD         | 1.50   | 7200 | 61A | R60  |
| 110 | 1008   | MAKEPEACE CO A D           | 47 TIHONET RD        | 1.60   | 7200 | 61A | R60  |
| 110 | 1014   | MAKEPEACE CO A D           | 65 TIHONET RD        | 1.10   | 7200 | 61A | R60  |
| 110 | 1015   | MAKEPEACE CO A D           | 67 TIHONET RD        | 129.80 | 7200 | 61A | R60  |
| 110 | 1016   | MAKEPEACE CO A D           | 0 PARKER MILL POND   | 25.70  | 7200 | 61A | MR30 |
| 110 | 1024   | MAKEPEACE CO A D           | 2586 CRAN HWY OFF    | 8.50   | 7200 | 61A | R60  |
| 110 | 1039   | TWEEDY & BARNES COMPANY    | 0 CHARGE POND RD     | 4.10   | 7200 | 61A | R60  |
| 110 | 1039 P | TWEEDY & BARNES CO         | 0 CHARGE POND RD     | 1.40   | 7200 | 61A |      |
| 110 | 1040   | MAKEPEACE CO A D           | 0 CHARGE POND RD OFF | 0.03   | 7200 | 61A | R60  |
| 110 | 1044   | TWEEDY & BARNES COMPANY    | 58 CHARGE POND RD    | 2.50   | 7200 | 61A | R60  |
| 110 | 1064   | TWEEDY & BARNES CO         | 0 CHARGE POND RD     | 0.03   | 7200 | 61A | MR30 |
| 110 | 1072   | BAYSIDE AGRICULTURAL INC   | 0 CRAN HWY OFF       | 9.00   | 7200 | 61A | MR30 |

|     |         |                          |                          |       |      |     |      |
|-----|---------|--------------------------|--------------------------|-------|------|-----|------|
| 111 | 1001    | MAKEPEACE CO A D         | 174 TIHONET RD           | 0.85  | 7200 | 61A | R60  |
| 111 | 1002    | MAKEPEACE CO A D         | 0 TIHONET RD             | 0.17  | 7200 | 61A | R60  |
| 113 | 1012    | BAYSIDE AGRICULTURAL INC | 0 CHARGE POND RD         | 15.90 | 7200 | 61A |      |
| 113 | 1013 C  | BAYSIDE AGRICULTURAL INC | 0 CHARGE POND RD         | 2.28  | 7200 | 61A | R130 |
| 113 | 1017    | MAKEPEACE CO A D         | 0 CHARGE POND RD         | 5.50  | 7200 | 61A | R60  |
| 113 | 1024    | TWEEDY & BARNES COMPANY  | 0 ROUTE 25               | 7.40  | 7200 | 61A | R60  |
| 113 | 1027    | BAYSIDE AGRICULTURAL INC | 75 CHARGE POND RD        | 1.00  | 7200 | 61A | R130 |
| 113 | P1013 B | BAYSIDE AGRICULTURAL INC | 1 CHARGE POND RD OFF     | 1.15  | 7200 | 61A | R130 |
| 114 | 1002    | MAKEPEACE CO A D         | 0 TIHONET RD OFF         | 20.80 | 7200 | 61A | R60  |
| 114 | 1008    | MAKEPEACE CO A D         | 0 CHARGE POND RD         | 12.30 | 7200 | 61A | R130 |
| 115 | 1001 P  | BAYSIDE AGRICULTURAL INC | 0 CHARGE POND RD OFF     | 1.80  | 7200 | 61A |      |
| 115 | 1003    | BAYSIDE AGRICULTURAL INC | 0 ROUTE 25 OFF           | 4.40  | 7200 | 61A |      |
| 115 | 1006    | BAYSIDE AGRICULTURAL INC | 0 ROUTE 25               | 5.60  | 7200 | 61A |      |
| 116 | 1001    | MAKEPEACE CO A D         | 0 MAPLE SPRGS RD OFF     | 23.00 | 7200 | 61A | R130 |
| 116 | 1002    | MAKEPEACE CO A D         | 0 MAPLE SPRGS RD OFF     | 67.30 | 7200 | 61A | R130 |
| 116 | 1004    | MAKEPEACE CO A D         | 0 MAPLE SPRGS RD         | 4.70  | 7200 | 61A | R130 |
| 116 | 1011    | MAKEPEACE CO A D         | 0 MAPLE SPRGS RD OFF     | 11.40 | 7200 | 61A | R130 |
| 116 | 1014    | MAKEPEACE CO A D         | 0 MAPLE SPRGS RD OFF     | 0.51  | 7200 | 61A | R130 |
| 117 | 1000    | MAKEPEACE CO A D         | 0 MAPLE SPRGS RD OFF     | 3.70  | 7200 | 61A | R130 |
| 117 | 1003    | MAKEPEACE CO A D         | 0 MAPLE SPRGS RD OFF     | 53.60 | 7200 | 61A | R130 |
| 117 | 1006    | MAKEPEACE CO A D         | 0 GLEN CHARLIE RD        | 1.00  | 7200 | 61A | R130 |
| 117 | 1007    | MAKEPEACE CO A D         | 0 GLEN CHARLIE RD        | 13.10 | 7200 | 61A | R130 |
| 117 | 1009    | MAKEPEACE CO A D         | 0 GLEN CHARLIE RD OFF    | 41.60 | 7200 | 61A | R130 |
| 125 | 1018    | MAKEPEACE CO A D         | 0 BARKER RD              | 4.40  | 7200 | 61A |      |
| 125 | 1019    | MAKEPEACE CO A D         | 273 BARKER RD            | 3.50  | 7200 | 61A |      |
| 126 | 2       | MAKEPEACE CO A D         | 0 MAPLE SPRINGS RD       | 46.44 | 7200 | 61A | R130 |
| 126 | 1005 A  | BAYSIDE AGRICULTURAL INC | 0 MAPLE SPRINGS RD       | 92.70 | 7200 | 61A | R130 |
| 127 | A1      | ROUNSVILLE HAMMOND &     | 205 GLEN CHARLIE RD REAR | 6.97  | 7200 | 61A |      |
| 127 | 1001    | MAKEPEACE CO A D         | 0 MAPLE SPRGS RD OFF     | 2.20  | 7200 | 61A | R130 |
| 127 | 1002    | MAKEPEACE CO A D         | 0 MAPLE SPRGS RD OFF     | 48.50 | 7200 | 61A | R130 |
| 127 | 1003    | MAKEPEACE CO A D         | 0 GLEN CHARLIE RD OFF    | 1.90  | 7200 | 61A | R130 |
| 127 | 1005    | MAKEPEACE CO A D         | 0 GLEN CHARLIE RD        | 6.60  | 7200 | 61A | R130 |
| 127 | 1016    | MAKEPEACE CO A D         | 0 MAPLE SPRINGS RD       | 3.70  | 7200 | 61A | R130 |

|     |        |                                 |                         |         |      |                         |      |
|-----|--------|---------------------------------|-------------------------|---------|------|-------------------------|------|
| 129 | 1000 A | MAKEPEACE CO A D                | 0 MAPLE SPRINGS RD      | 1.58    | 7200 | 61A                     | R130 |
| 129 | 1000 B | MAKEPEACE CO A D                | 0 MAPLE SPRINGS RD      | 4.74    | 7200 | 61A                     | R130 |
| 129 | 1003   | MAKEPEACE CO A D                | 0 GLEN CHARLIE RD OFF   | 0.17    | 7200 | 61A                     | R130 |
| 129 | 1006 A | TRURAN DOUGLAS W                | 162 GLEN CHARLIE RD     | 0.33    | 7200 | 61A                     | R130 |
| 129 | 1017   | MAKEPEACE CO A D                | 135 GLEN CHARLIE RD     | 0.11    | 7200 | 61A                     | R130 |
| 129 | 1161   | MAKEPEACE CO A D                | 0 SPECTACLE POND RD OFF | 328.62  | 7200 | 61A                     | R130 |
| 130 | 1005   | ROUNSVILLE HAMMOND &            | 210 GLEN CHARLIE RD     | 1.31    | 7200 | 61A                     | R130 |
| 131 | 1007   | ATWOOD WILLIAM F                | 0 CRAN HWY OFF          | 0.55    | 7200 | 61A                     | R130 |
| 131 | 1009 A | ATWOOD WILLIAM F                | 0 CRAN HWY REAR         | 0.23    | 7200 | 61A                     | R130 |
| 131 | 1009 B | ATWOOD WILLIAM F                | 0 CRAN HWY OFF          | 1.20    | 7200 | 61A                     | R130 |
| 131 | 1009 C | ATWOOD WILLIAM F                | 0 CRAN HWY REAR         | 0.30    | 7200 | 61A                     | R130 |
| 131 | 1015 B | ATWOOD WILLIAM F                | 0 CRAN HWY OFF          | 0.11    | 7200 | 61A                     | R130 |
|     |        |                                 |                         | 1478.28 |      | <b>61A Total</b>        | 0    |
| 17  | 1033 F | GIBBS HELEN B                   | 40 GREAT NECK RD        | 10.70   | 8030 | 61B NATURE              | R30  |
| 33  | 3      | BALDWIN ROSE W                  | 70 TOWHEE RD            | 5.40    | 8030 | 61B NATURE              | R60  |
| 33  | 1000   | BALDWIN R W ET AL TRUSTEES      | 20 WARREN POINT RD      | 24.29   | 8030 | 61B NATURE              | R60  |
| 34  | A      | HURD GEORGE N                   | 63 TOWHEE RD            | 15.31   | 8030 | 61B NATURE              | R60  |
| 36  | 9 A    | BALDWIN ROSE W ET ALS           | 170 INDIAN NECK RD      | 5.83    | 8030 | 61B NATURE              | R60  |
| 128 | 1006   | SAWYER TIMOTHY M                | 0 ROUTE 25              | 12.10   | 8030 | 61B NATURE              | R130 |
|     |        |                                 |                         | 73.63   |      | <b>61B NATURE Total</b> | 0    |
| 28  | 1 C    | LITTLE HARBOR COUNTRY CLUB      | 0 GREAT NECK RD         | 0.26    | 8050 | 61B GOLF                | R60  |
| 28  | B1     | LITTLE HARBOR COUNTRY CLUB      | 1 CHIPMUNK LN           | 3.13    | 8050 | 61B GOLF                |      |
| 28  | B8     | LITTLE HARBOR COUNTRY CLUB      | 12 LANTERN LN           | 1.95    | 8050 | 61B GOLF                |      |
| 28  | 1000   | LITTLE HARBOR COUNTRY CLUB      | 22 STOCKTON SHORT CUT   | 22.17   | 8050 | 61B GOLF                |      |
| 28  | 1009   | LITTLE HARBOR COUNTRY CLUB      | 27 STOCKTON SHORT CUT   | 0.13    | 8050 | 61B GOLF                |      |
| 28  | 1010   | LITTLE HARBOR COUNTRY CLUB      | 2 LITTLE HARBOR RD      | 5.17    | 8050 | 61B GOLF                |      |
| 28  | 1012 B | LITTLE HARBOR COUNTRY CLUB+D116 | 18 STOCKTON SHORT CUT   | 0.94    | 8050 | 61B GOLF                |      |
| 28  | 1014 B | LITTLE HARBOR COUNTRY           | 10 MARSH RD EXT         | 1.19    | 8050 | 61B GOLF                |      |
|     |        |                                 |                         | 34.94   |      | <b>61B GOLF Total</b>   | 0    |
| 38  | 1001   | PARKWOOD BEACH IMPROVEMENT      | 0 CRAB COVE TER OFF     | 1.74    | 8120 | 61B PICNIC              | R30  |
| 38  | 1002   | PARKWOOD BEACH IMPROVEMENT      | 0 PARKWOOD DR           | 2.21    | 8120 | 61B PICNIC              | R30  |
| 38  | 1003   | PARKWOOD BEACH IMPROVEMENT      | 0 PARKWOOD DR OFF       | 11.22   | 8120 | 61B PICNIC              | R30  |
| 38  | 1004   | PARKWOOD BEACH IMPROVEMENT      | 0 BAYSIDE AVE           | 2.07    | 8120 | 61B PICNIC              | R30  |

|    |      |                            |                  |         |      |                         |     |
|----|------|----------------------------|------------------|---------|------|-------------------------|-----|
| 38 | 1005 | PARKWOOD BEACH IMPROVEMENT | 0 INDIAN NECK RD | 2.23    | 8120 | 61B PICNIC              | R30 |
| 38 | 1006 | PARKWOOD BEACH IMPROVEMENT | 0 INDIAN NECK RD | 0.39    | 8120 | 61B PICNIC              | R30 |
|    |      |                            |                  | 19.86   |      | <b>61B PICNIC Total</b> | 0   |
|    |      |                            |                  | 6699.60 |      | <b>Grand Total</b>      | 0   |



## **VI. COMMUNITY GOALS**

### **A. Description of Process**

Since the last Open Space and Recreation plan was completed in 1997, Wareham residents have overwhelmingly supported efforts to conserve open space, increase recreational areas for town residents, and preserve the small-town character and historic areas in Wareham.

In the Fall of 2001, Wareham voters approved the Community Preservation Act by the greatest mandate—75 percent—of any town in the Commonwealth. Largely advertised as a vehicle for protecting open space from the onslaught of urban sprawl, the CPA provides matching State funds for historic preservation and affordable housing in addition to open space.

One year later, in October 2002, town voters further indicated support for these goals when they responded to a survey prepared by the town's Community Preservation Committee, a new town committee charged with receiving and recommending proposals for the expenditure of CPA funds. Survey respondents indicated by their votes that strongly agreed with the concepts of protecting Wareham's land and open space from development (84%), preserving land to protect Wareham's water supply (97%), and protecting land to preserve the health of Wareham's waterways and bays (93%).

Another indication of the increasing interest for land preservation in Wareham is reflected by the formation of the Wareham Land Trust in the summer of 2002. Introduced at a meeting of the Onset Protective League, the idea of a land trust for Wareham was the brainchild of president Mary McFadden spurred on by town planner, Chuck Gricus, members of the Open Space Committee, and a group of concerned citizens. As stated in its mission statement, the Wareham Land Trust was established to: (1) preserve open space through the donation of land and funds to purchase lands; (2) work with landowners to acquire conservation easements that limit development; (3) unite citizens, organizations and government entities in our shared goals of conservation and responsible land use for the benefit of present and future generations; and (4) educate the public about the environmental and economic benefits of conserving open space, and the need for sustaining development and growth management.

As noted in the Section I of this plan, many other efforts were made to gauge community sentiment and to reach out to public and private groups for their ideas and suggestions for this plan, including the Open Space Summit held on April 5, 2003, the Open Space Survey conducted on April 28-29, 2003, and many subsequent meetings held with the Board of Selectmen, the town planner and conservation officers, the recreation director, and various other appointed town bodies, including the town's Conservation Commission, the Minot Forest Committee, and the Planning Board. Many informal discussions were also held throughout the process with friends, neighbors, town officials, and others interested in voicing their opinions. Information obtained from all sources was analyzed and incorporated into the plan. Every effort was made to involve as many citizens as possible in updating this plan. Since this was a town effort, as large a representation as possible was involved with the final result.

Finally, the Committee is most appreciative of the support provided by the Buzzards Bay Project,

which prepared the maps for this plan and reviewed the entire plan, making many helpful suggestions. We also wish to acknowledge and thank the Coalition for Buzzards Bay and the Manomet Center for Conservation Science for their helpful suggestions.

## **B. Statement of Open Space and Recreation Goals**

The uniqueness of Wareham lies in the diversity, abundance, and scenic quality of its natural landscape. From its fringing saltmarshes and estuarine systems, to the rivers that feed them, to the cranberry bogs which dominate Wareham's northern reaches, the town is connected and dependent upon water. Yet very little of the watershed land area supporting these areas has been preserved as permanent open space. The sad fact is that, of all the towns bordering on Buzzards Bay, Wareham has the least amount of protected open space. Recognizing the preciousness of its resources and the encroaching forces of development that are threatening them, the Town is boldly marching forward with this plan to accelerate its efforts to protect Wareham's river corridors, ponds, and coastline.

In addition to protecting our natural resources, we are also mindful of the community's needs for hiking and biking trails, parks, ballfields, and other recreational facilities overwhelmingly desired by town residents. The goals outlined below seek to position Wareham for expanding and improving its open space and recreational programs over the next five years.

- Preserve and protect Wareham's unique natural, scenic, and historic open space resources.
- Increase access to, and management of, existing conservation areas.
- Provide and maintain recreational facilities and programs accessible to all citizens of Wareham, including elderly, young, and disabled citizens.
- Continue efforts to develop funding strategies, town initiatives, and public/private partnerships to meet the open space and recreational needs of Wareham.

## **VII. ANALYSIS OF NEEDS**

### **A. Summary of Resource Protection Needs**

Results of meetings, surveys, and other actions previously described indicate that Wareham residents are most concerned with preserving their watershed, waterways, and bays from encroaching development, overuse, and deterioration. The Town's water supply is from well fields in Onset and north of 495 in Wareham. More study is required relative to the Plymouth County Aquifer.

The rivers in Wareham are used extensively by the recreational community for various activities that include fishing, shellfishing, canoeing, and swimming. The cranberry industry is also closely tied to these water resources for irrigation purposes.

The protection of river systems is a high priority for open space and recreational planning in Wareham. Of critical concern for protection are the Weweantic, Red Brook, Agawam, and Wankinco Rivers. Estimated habitat of rare and endangered species exist along portion of all of these systems, all of which are anadromous fish runs. Along the Weweantic River, in particular, there has been continuous development pressure that could adversely affect this area. This pressure has been exacerbated in this past 5 years by depressed cranberry prices and pressure on cranberry growers to find more profitable uses for their land. Several housing developments have been built along the upper portions of the Weweantic and several others have been proposed. In 2002, one key 66-acre parcel of land along the Weweantic, known as the Fearing Hill Conservation Project, was saved through a joint effort of the Town and the Wareham Land Trust. However, much needs to be done along this vital waterway and efforts should be increased to find ways to preserve open space along the Weweantic River.

Acquisition and protection of coastal properties are also of vital concern in Wareham. Wareham has an extensive coastline that is subject to storm damage and erosion. Outright purchase of this land or protection through conservation restrictions would limit development of these areas and would ensure their continued vitality for future generations. Of specific concern is the coastal area from Bourne Point to Stony Point Dike and continuing from the Cape Cod Canal into Onset Harbor.

### **B. Summary of Community Needs**

There is a need for more hiking and biking trails in Wareham that are accessible, safe, and well-marked. Bike trail systems should connect various parts of town and also connect with existing bike paths. Efforts should be accelerated to work with the towns of Mattapoisett, Marion, and Bourne to achieve the longstanding goal of providing safe bike access to the Cape Cod Canal bike trail.

A bike trail also should be built along Charge Pond Road that will connect with the existing bike trail system in the Myles Standish State Forest. These projects, combined with other proposals, will allow cyclists more options in terms of terrain and accessibility to various locations. A map showing the proposed new bike trails is included on the 5-Year Action Plan Map (Map 13).

Hiking trail systems should connect contiguous parcels of open space. Easements may need to be obtained from private property owners for trail connections where direct connections of open space parcels do not exist. A project discussed in the 1997 plan, which would construct a hiking trail connecting Minot Forest to the Little Harbor area, has not been acted upon. However, additional land adjacent to the forest is in the process of being acquired and renewed efforts to plan this hiking trail are expected to resume in the near future.

Once the hiking and biking trails are constructed, they should be marked and catalogued in a brochure specifying the location, access points, and trail layout of these recreational resources for the public. In addition, a regular schedule for inspection and maintenance should be established to ensure that these trails continue to be safe, passable, and free of activities that would discourage their intended use.

According to responses on the surveys that were conducted, town residents would also like to see more parks, more recreational facilities for children, and more public access to the water for launching trailered boats.

Other recreational needs include the construction of athletic fields. Full support should be given to the construction of the multi-use recreational facility at 40-acre Westfield Park, which is now underway. The facility will include athletic fields for soccer and baseball, tennis courts, and a hiking trail system.

### **C. Management Needs and Potential Changes of Use**

The transformation of the former Camp Running River into a park and conservation area should be carried forward and seen to fruition. An important component of this plan includes repairs to Tremont Dam.

To ensure that recreational facilities meet the needs of town residents a comprehensive Recreational Facilities Management Plan should be completed.

## **VIII. GOALS AND OBJECTIVES**

### **A. Progress Report from 1997 Open Space Plan**

Some progress, but not enough, has been achieved since the publication of the 1997 Open Space and Recreation Plan. In particular:

- The town overwhelmingly adopted the Community Preservation Act;
- The Wareham Land Trust was established;
- The Prager Property (i.e., Fearing Hill Conservation Area) was protected;
- Six new conservation restrictions were established;
- The town gave its approval for a permanent Open Space Committee; and
- The Open Space Committee served as a catalyst to bring together various conservation organizations for the purpose of pooling ideas and resources to achieve common goals.

### **B. Recommended 2004 Goals and Objectives**

#### **Goal 1: Preserve and protect Wareham's unique natural open space resources**

##### **OBJECTIVES**

1. Protect Wareham's extensive water resources including coastal waters, river systems, drinking water supply, ponds and wetlands.
2. Acquire strategically located parcels of land to prevent development in inappropriate areas.
3. Permanently protect lands containing endangered or threatened species as identified by the Massachusetts Natural Heritage and Endangered Species Program.
4. Support the development of funding strategies, town action, and public/private partnerships to meet the open space needs of Wareham.
5. Suggest and support innovative ways to conserve open space in Wareham.

#### **Goal 2: Support access improvements, proper management, and awareness of existing Conservation Areas**

##### **OBJECTIVES**

1. Acquire selected parcels of land to facilitate resident access to Wareham's freshwater ponds and coastal areas.
2. Upgrade existing trails for walking and cross-country skiing and provide signage on conservation lands.
3. Increase public education for Wareham residents of town's open space resources.
4. Develop Wareham resident access improvement plan for coastal waters.

**Goal 3: Provide and maintain recreational facilities and programs accessible to all citizens of Wareham, including the elderly, the young, and the disabled**

**OBJECTIVES**

1. Support efforts of the Wareham Recreation Department to add and maintain playgrounds and ballfields in Wareham.
2. Develop an overall plan to construct a Multi-Purpose Bike Trail on abandoned railroad corridor throughout the town.
3. Upgrade and maintain existing recreational facilities in Wareham, including parks, fields, and beaches.
4. Provide improved means of access to town recreational areas and encourage access to private lands for walking.
5. Support the creation of a Sporting Field complex and Multi-Use Park at Camp Lakota.



## IX. ACTION PLAN

### Goal 1: Preserve and protect Wareham's unique natural open space resources

| OBJECTIVE   | ACTION   | YEAR      | RESPONSIBLE PARTY  |
|---|--|-----------|--|
| 1.a Protect Wareham's extensive water resources including coastal waters, river systems, drinking water supply, ponds and wetlands. | Support priority efforts to provide sewer to watershed areas and other sensitive areas.  | Ongoing   | Board of Selectmen , Sewer Commission, Board of Health, Zoning Board of Appeals, Planning Board  |
|   | Work with Wareham Water Department, private organizations, and other Town committees to have the Plymouth-Carver Aquifer studied to see if a designated as an Area of Critical Environmental Concern is necessary. | 2004-2008 | Open Space Committee, Wareham Water Department, Onset Water Department, Conservation Commission, Wareham Board of Health.                            |
|   | Introduce warrant and/or work with appropriate Town committees to increase the minimum lot size to 3 acres for land located in the watershed of any stream, river, pond, lake, wetlands or coastal water.          | 2004-2005 | Town Meeting, Board of Selectman, Planning Board, Zoning Board of Appeals, Conservation Commission, Open Space Committee, District Water Commissions |

| <b>OBJECTIVE</b> | <b>ACTION</b>   | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>  |
|------------------|---|-------------|---|
|                  | Introduce warrant and/or work with appropriate Town committees to require that all building which takes place in the watershed of any stream, river, pond, lake, wetlands or coastal water or in the Zone 2 area of any drinking water aquifer must install, at a minimum, nitrogen-reducing septic systems or alternative sewage treatment facilities. Include an annual certification by a competent authority that the system is working properly. Systems must be located in an area that would cause the least amount of environmental impact. | 2004-2005   | Town Meeting, Board of Selectmen, Planning Board, Board of Health, Zoning Board of Appeals, Conservation Commission, Open Space Committee |
|                  | Explore state law to prohibit the use of personal watercraft (jet skies) in any river, stream, pond or lake in Wareham .  | 2004-2005   | Town Meeting, Board of Selectmen, Conservation Commission, Open Space Committee   |
|                  | Catalog and certify as many vernal pools in   | 2004-2008   | Open Space Committee,   |

|   |  |             |   |
|---|--|-------------|---|
|   | Wareham as possible.   |             | Conservation Commission, Wareham Land Trust   |
| <b>OBJECTIVE</b>  | <b>ACTION</b>  | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>  |
| 1.b. Acquire strategically located parcels of land to prevent development in inappropriate areas. | <p>Introduce warrant and/or work with the appropriate Town committees to permanently protect, for current and future generations of Wareham residents, a 1,100-acre parcel of land located in Zone 2 of the Plymouth-Carver Aquifer by:</p> <ul style="list-style-type: none"> <li>(a) purchasing the land outright and adding it to the Miles Standish State Forest; or</li> <li>(b) purchasing the development rights for this land and maintaining it for agricultural use.</li> </ul> <p>It is suggested that this purchase of land or development rights be accomplished with funding from the Town's Community Preservation Fund, the Wareham Water District, a State-sponsored Self-Help grant, and solicitation of funds from other public and private conservation groups and from town businesses and residents.</p> |             | Town Meeting, Board of Selectmen, Open Space Committee, Community Preservation Committee, District Water Commissions, Wareham Land Trust, Board of Health, Conservation Commission, Conservation Consortium |

| <b>OBJECTIVE</b>   | <b>ACTION</b>  | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>   |
|--|--|-------------|--|
| 1.c . Permanently protect lands containing endangered or threatened species as identified by the Massachusetts Natural Heritage and Endangered Species Program | Acquire lands containing rare species in the following areas, and in other areas that may be subsequently identified as containing rare species: Harlow Brook Bogs, Agawam River, Upper Weweantic River, Horseshoe Pond, Spectacle Pond, Dick's Pond, and Long Beach Point | Ongoing     | Conservation Commission, Open Space Committee, Community Preservation Committee, Wareham Land Trust, and other Conservation Groups |
|  | Support Coastal Plain Ponds Program of The Wildlands Trust of Southeastern Massachusetts, highlighting Dick's Pond and Spectacle Pond.   | Ongoing     | Conservation Commission, Open Space Committee, Community Preservation Committee, Wareham Land Trust, and other Conservation Groups |

| <b>OBJECTIVE</b>   | <b>ACTION</b>  | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>   |
|--|--|-------------|--|
| 1d. Support the development of funding strategies, town action, and public/private partnerships to meet the open space needs of Wareham. | Review all parcels in tax title to see if they could be used for conservation or recreation. | Ongoing     | Assessors, Conservation Commission, Recreation Department, Open Space Committee, Community Preservation Committee, Wareham Land Trust, and other Conservation Groups |

| <b>OBJECTIVE</b>  | <b>ACTION</b>  | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>  |
|---|--|-------------|---|
| 1.e. Suggest and support innovative ways to conserve open space in Wareham. | Introduce warrant and/or work with appropriate Town committees to allow Planning Board and Zoning Board of Appeals to use cluster-housing model to conserve open space. The number of units developed with cluster housing would not exceed the number of units that could be built utilizing normal zoning. | 2004-2005   | Town Meeting, Board of Selectmen, Planning Board, Zoning Board of Appeals, Open Space Committee |
|   | Introduce warrant and/or work with appropriate Town committees to promote use of an Agricultural Subdivision Design modeled after Pardon Hill in Dartmouth and/or other innovative designs.  | 2004-2005   | Town Meeting, Board of Selectmen, Planning Board Zoning Board of Appeals, Open Space Committee  |

**Goal 2: Support access improvements, proper management, and awareness of existing Conservation Areas**

| <b>OBJECTIVE</b>   | <b>ACTION</b>   | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>  |
|--|---|-------------|---|
| 2.a. Acquire selected parcels of land to facilitate resident access to Wareham's freshwater ponds and coastal areas. | Acquire parcels of land around Parker Mills Pond, Dick's Pond, Blackmore Pond, Agawam Pond and other ponds having inadequate public access. | 2004-2009   | Town Meeting, Board of Selectmen, Planning Board, Conservation Committee, Open Space Committee, Community Preservation Committee, Wareham Land Trust, and other Conservation Groups |
|  | Work with the Cranberry Experiment Station to facilitate resident access to Spectacle Pond.   | 2004        | Board of Selectmen, Conservation Commission, Open Space Committee   |

| <b>OBJECTIVE</b>   | <b>ACTION</b>                                       | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>   |
|--|---|-------------|--|
| 2.b. Upgrade existing trails for walking and cross-country skiing and provide signage on conservation lands. | Complete Minot Forest to Little Harbor Beach Trail. | 2008        | Board of Selectmen, Recreation Department, Minot Forest Committee, Open Space Committee, Community Preservation Committee, Wareham Land Trust, and The Wildlands Trust of Southeastern Massachusetts |

| <b>OBJECTIVE</b>   | <b>ACTION</b>   | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>  |
|--|---|-------------|---|
| 2.c. Increase public education for town residents of Wareham's open space resources. | Develop a brochure showing and describing all existing conservation lands and walking trails. | 2004-2006   | Recreation Department, Planning Board, Open Space Committee       |
|  | Work with the Wareham School District to involve Wareham students in conservation projects.   | 2004-2007   | Open Space Committee, Wareham Land Trust, Conservation Commission |

| <b>OBJECTIVE</b>  | <b>ACTION</b>   | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>                                      |
|---|---|-------------|---|
| 2.d. Develop Wareham resident access improvement plan for coastal waters. | Research acquisition of land/right of way to provide resident access to coastal waters. | 2004-2007   | Planning Board, Open Space Committee, Conservation Commission |

**Goal 3: Provide and maintain recreational facilities and programs accessible to all citizens of Wareham, including the elderly, the young, and the disabled**

| <b>OBJECTIVE</b>   | <b>ACTION</b>                                      | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>                                     |
|--|--|-------------|--|
| 3.a. Support implementation of a Master Plan by the Wareham Recreation Department. | Rehabilitate Westfield and Shangri-La playgrounds. | 2004        | Board of Selectmen, Recreation Department, Finance Committee |

| <b>OBJECTIVE</b>   | <b>ACTION</b>   | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>   |
|--|---|-------------|--|
| 3.b. Develop an overall plan to construct a Multi-Purpose Bike Trail on abandoned railroad corridor throughout the town. | Explore the possibility of constructing a Bike Path, in conjunction with other towns, that will provide a safe access to the Cape Cod Bike Trail. Develop requests for funds through public/private grants and CPA funds. | 2004-2005   | Planning Board, Municipal Maintenance, Community Preservation Committee, Conservation Commission, Recreational Department and Open Space Committee |

| <b>OBJECTIVE</b>   | <b>ACTION</b>  | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>  |
|--|--|-------------|---|
| 3.c. Upgrade and maintain existing recreational facilities in Wareham, including parks, fields, and beaches. | Encourage municipal maintenance staff to improve maintenance at all public parks and open areas. | 2004-2005   | Recreation Department, Town Administrator, Finance Committee, Town Meeting, |

| <b>OBJECTIVE</b> | <b>ACTION</b>   | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>   |
|------------------|---|-------------|--|
|                  | Encourage appropriate safety measures and staffing at all recreational facilities | 2004        | Board of Selectmen, Fields and Grounds Committee, Recreation Department, Open Space Committee, Finance Committee, Town Meeting               |
|                  | Establish a regular inspection schedule for all hiking and biking trails.         | 2004        | Open Space Committee, Recreation Department, Department of Public Works, Minot Forest Committee, Wareham Land Trust, Conservation Commission |

| <b>OBJECTIVE</b>  | <b>ACTION</b>  | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>   |
|---|--|-------------|--|
| 3.d. Provide improved means of access to town recreational areas for physically-challenged individuals. | Provide/increase handicapped parking at all recreational facilities. | 2004-2005   | Recreation Department, Open Space Committee, Municipal Maintenance |

| <b>OBJECTIVE</b>  | <b>ACTION</b>                                   | <b>YEAR</b> | <b>RESPONSIBLE PARTY</b>  |
|---|---|-------------|---|
| 3.e. Explore the creation of a Sporting Field Complex and Multi-use Park at 45-acre Westfield Park. | Develop a phasing program                       | 2004-2009   | Board of Selectmen, Recreation Department, Open Space Committee, Fields and Grounds Committee |
|   | Seek Urban Self-Help and other available funds. | 2004-2009   | Recreation Department, Open Space Committee, Community Preservation Committee.                |
|   | Develop an Operations and Maintenance Program   | 2004-2009   | Recreation Department, Open Space Committee.  |

## **X. PUBLIC COMMENTS**

Insert SRPEDD, BOS, Planning Board and Conservation Commission comments here.



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## **XII. APPENDICES**

### **Appendix A: Americans with Disabilities Act, Section 504 Self-Evaluation**

#### **SECTION 504 SELF-EVALUATION**

##### **Introduction**

##### **Purpose of the Section 504 Self-Evaluation**

The purpose of the evaluation is to meet the requirements of Section 504. All communities in Massachusetts that prepare an open space plan are required to conduct a Section 504 Self-Assessment. The State Division of Conservation Services mandates this as part of the Open Space planning process. The Division of Conservation Services is a branch of the Executive Office of Environmental Affairs, and grants, on a competitive basis, various state and federal funds, on a partial reimbursement basis, to communities in Massachusetts. Without a Self-Evaluation as a part of the Open Space Plan, the community is not eligible to receive these funds.

##### **Part I: Administrative Requirements**

###### **1. Designation of a 504 Coordinator**

Mr. Theodore Misiaszek, who is the Director of Inspectional Services, is the Town of Wareham's acting Americans with Disabilities Act (ADA) Coordinator. This position has been designated to the Director since the ADA Coordinator position was vacated by Steven Long. Mr. Long had operated solely as the ADA Coordinator.

###### **2. Grievance procedures**

The ADA grievance procedures are included as Attachment A.

###### **3. Public Notification Requirements**

Public Notice of Nondiscrimination - Public notice is to be given to employees and the general public that the Town does not discriminate on the basis of disability. In Wareham, this has been partially satisfied through the Affirmative Action Plan, Attachment B. Recruitment and job advertisements do state that the town is an equal opportunity employer.

In order to comply with the requirements of the ADA and section 504, the town will translate any public notices into appropriate format to ensure proper communication with people with disabilities.

## Personnel Department

In all of its employment ads, recruitment materials, and employment postings, the Town of Wareham is advertised as an Equal Opportunity Employer. This serves as a notice of non-discrimination. This means that the Town adheres to standards for Affirmative Action, for the Americans with Disabilities Act, and the Equal Opportunity Employer law.

#### 4. Participation

The 504 report was made in conjunction with the Town Commission on Disabilities chairman Henry Fernandes. Information regarding ADA compliance has been provided by Mr. Fernandes. Assistance was also given in the preparation of Part II of this self evaluation, Program Accessibility. The public was invited to attend Open Space Committee meetings which were posted in public accessible locations. Meetings were held in locations that were handicap accessible.

#### 5. Technological Aids for the visual and hearing impaired.

Currently the town offers several forms of assistance for the purpose of communicating with the disabled.

At public meetings the town will, with advance notice, provide sign language interpreters for the deaf.

Documents can be translated into Braille by request for those with visual impairments. Information can also be reprinted into large print if so requested for those with visual problems.

### **Part II: Program Accessibility**

The Conservation Commission holds its meetings in the Wareham Memorial Town Hall. Its office is also within the Town Hall. These locations are handicap accessible. The Recreation Department is located in the Wareham Community Building. The Recreation department offers many programs that are held in this building to various age groups and abilities. The building was refurbished in 1996-97 and is now fully handicap accessible.

#### Transition Plan

The sites listed in the Facility Inventory are predominantly playground areas and beach parking facilities. Structures involved are parking lots and playground apparatus. A transition plan has been constructed for improvements to those sites listed within the inventory. From the inventory information it appears that there are several recreation areas that would need improvements to meet ADA standards. There is a list of minor improvements being compiled for the various playground sites but the nature of the improvements are not necessarily accessibility related. The inventory list provides details on the individual sites. The Inventory and Transition Plan is Attachment C.

### **Part III: Employment Practices**

#### 1. Recruitment

- A) All job announcements include a non-discrimination statement. Announcements are posted in accessible areas but are not available in an auditory form. See Attachment D.
- B) Questions asked during job interviews relate to job qualifications for the position being applied for. Since it is illegal to inquire about an applicant's disability and its severity this is not discussed in an interview.

2. Personnel Actions - The Town of Wareham Personnel Department does not discriminate in the recruitment, selection, promotion, hiring, or upgrading of employees.

3. Leave Administration - The Town does not discriminate in regard to leave administration. Personnel policies for such types of leave as sick time, leave of absence, or vacations are outlined in the various personnel agreements.

4. Training - Any training provided by the Town is administered so that employees with disabilities can participate.

5. Tests - Tests measure job skills and qualifications only. The State Department of Personnel Administration tests are used for Civil Service positions.

6. Medical Examinations/questionnaires - The Town requires a physical examination once a job offer has been made to an employee.

7. Social/Recreational Programs - Social and recreational programs sponsored by the community are made accessible to employees with disabilities.

8. Fringe Benefits - Employees with disabilities are offered the same fringe benefits as those employees without disabilities.

9. Collective Bargaining Agreements - The Town does not discriminate in this process. Qualified employees with disabilities may participate.

10. Wage and Salary Administration - Employees with disabilities are not offered different rates of compensation based on disability.

## ATTACHMENT C

### INVENTORY AND TRANSITION PLAN PUBLIC BEACHES - GUARDED

#### **Little Harbor Beach (Residents Only) (3 Guards)**

Located in Buzzards Bay, this quarter-mile rocky beach is well known for its shallow water and constant breezes. There is no surf in this protected area. The beach resumed a residents-only status in 1996. This is strictly enforced. There are no bathroom facilities at this time but the Town is looking into renting port-a-jons for this facility.

**Access:** Located at the end of Little Harbor Road off Great Neck Road. A large parking lot is adjacent to the beach. Residents only with sticker parking or pay as you go. Proof of residency is required. Handicap parking is provided.

**Activities:** Swimming and sunbathing. An area has been set aside for wind surfers. A limit of 24 wind surfing boards are allowed on weekends during the summer season. No weekday limit. Swimming lessons available through the Recreation Department.

**Transition:** No proposed changes.

#### **Onset Beach (9 Guards)**

Onset Beach is a beautiful three quarter mile stretch of smooth sandy beach. Behind the beach, the bluffs reach up to the Victorian style village of Onset. The beach lies on the inner side of Onset Bay, in a very protected area with no surf. Onset pier borders the beach on one side. A concession stand is located on the beach. A second one is on the other side of the pier. Canal tour boats. The harbor master and a dock are located on the pier. Bathroom facilities are also on the pier.

**Access:** The beach is located on Onset Avenue. Pier parking is \$1.00 per hour. Some street parking is available. Temple Theater parking lot, just up the street, is half free and half sticker parking. Handicap parking is provided.

**Activities:** Swimming and sunbathing, fishing boats and tour boats available at the pier. Swim lessons and sailing lessons available through the Recreation Department.

**Transition:** No proposed changes.

### **Pinehurst Beach (1 Guard)**

This small beach is less than one acre. It is located on a channel that runs briskly by the beach. The area is heavily populated and the beach sees a lot of use. The Pinehurst Beach Association meeting hall is adjacent to the beach. Bathrooms are not available.

**Access:** There is no parking lot at Pinehurst Beach. Very limited street parking is available along Pinehurst Drive. Foot or bicycle traffic is most prevalent.

**Activities:** Swimming and sunbathing. Swimming lessons available through the Recreation Department.

**Transition:** No proposed changes.

### **Shell Point Beach (3 Guards)**

Shell Point is a quarter mile area at the far end of Onset Beach. Two guards are posted at the point where several underwater drop offs are located. There is an unguarded section of beach between Shell Point and Onset beach. Nearest bathrooms are on Onset Pier.

**Access:** Shell Point has its own small parking area on South Avenue. Parking is free. Arrive early to get a space.

**Activities:** Swimming and sunbathing. Clamming by permit only. No clamming May 15-Sept.14.

**Transition:** No proposed changes.

### **Swifts Beach and Neck (6 Guards)**

Swifts Beach and Swifts Neck Beach make up a half-mile stretch of sandy beach with a small private beach located between the two. Located on protected Buzzards Bay there is no surf here. A playground adjacent to the Neck and benches along the beach make this a nice picnic area. Port-a-jons are brought in for the summer season at the Neck. In 2003, the Town acquired a small private beach between Swifts Beach and Swifts Neck. The Town's day camp, Camp Lakota, uses Swifts Neck for swim lessons and free swim daily. Wareham Child Care also utilizes Swifts Neck for free swim daily.

**Access:** Swifts Beach is located at the end of Swifts Beach Road. A parking lot is available on the Neck side at the end of Shore Avenue. A second lot is at the end of the Circle Drive. Both lots are sticker parking or pay as you go. A boat ramp is located at the Shore Avenue lot.

**Activities:** Boating, picnicking, swimming and sunbathing. Swimming lessons available through the Recreation Dept. at the Neck. Gym and swim classes are held at the playground and beach.

**Transition:** No proposed changes.

## **BEACH RULES (ALL BEACHES)**

- NO ALCOHOL
- NO BARBECUES
- NO UNSUPERVISED BALL PLAYING
- NO OBSTRUCTING GUARD STANDS
- NO SWIMMING IN BOAT CHANNELS
- NO DOGS ALLOWED
- NO IMPROPER LANGUAGE
- NO PARKING OUTSIDE OF DESIGNATED AREAS
- NO BATHING AFTER 9:00PM

## **PLAYGROUNDS**

The Wareham Recreation Commissioners did a playground tour on November 8, 2003 and re-assessed each playgrounds needs. The Town has not given the Recreation Department funds for playground improvements or repairs in approximately 5 years. This recommendation resulting from this assessment are included below.

### **Arruda Playground - Acres 0.4**

The Arruda Playground is a small site adjacent to the Wareham Library. A medium height wooden climb on structure in good condition and several other pieces are available. Plans are underway to add a youth size climb on piece as well as a drinking fountain.

**Access:** Off Marion Road. Use the Library entrance and parking. Playground is behind the Wareham Free Library. Pedestrian access from Gibbs Ave.

**Activities:** Playing and picnicking. Tot wood set climb on equipment with: 2 climbing platforms, bridge, fire pole, tire swing, 3 youth swings, hand loop trapeze, 2 benches, 2 slides steering wheel, 3 baby swings, trapeze bar, 3 chinup bars.

**Transition:** Paint the slide and 4 new youth swings to be installed.

### **Camp Running River Playground - Acres 12**

Camp Running River is located on 12 acres of field and woodland adjacent to the Weweantic River in West Wareham. The site is open for walk-in access during daylight hours year round with the exception of July and August (3 PM to dusk). A large pavilion with picnic tables is a great picnic spot. Trails wind through the property. A fishing bank on Tremont Pond is at the end of one trail. Three tire swings hang from an ancient tree. Tots will have fun on the small wooden climb on piece. There is a drinking fountain and port-a-jon at the camp.

**Access:** Mill Street. Left off of Main Street in West Wareham. Parking is available at the gate.

No drive in traffic please.

**Activities:** Playing, fishing, volleyball, picnicking, canoe and kayaking (carry in boats only) ball playing, archery and bird and wildlife watching. Summer Day Camp available through the Recreation Department. All activities are offered to handicapped individuals. Operates as the Wareham Recreation Department's Summer Day Camp (July & August). Has 2 youth swings, 1 baby swing, 1 pyramid climb, 3 tire swings, 1 tire climb, slide, monkey bars, ladder, rope climb, volleyball net, pavillion with 6 picnic tables, drinking fountain, 2 benches, canoe access to Weweantic River, small wooden climb on unit with 3 platforms, archery range, fishing bank with 2 benches, counsel area amphitheater with podium.

**Transition:** The location can be still utilized by the public. However the children's day camp is no longer located at this 12 acre site. New playground equipment can be found at this location: a rock climbing structure, a slide, a geo-dome, and slide track. Major repairs are needed at this location, such as rebuilding the pavilion, paving the main drive, and general lawn maintenance.

### **East Wareham Playground - Acres 1.5**

The East Wareham playground is adjacent to the East Wareham School. This open lot has a nice shady area in one corner. Swings are the main feature here. The small grassy field would be a great place for a game of kick ball.

**Access:** 9 Knowles Avenue.

**Activities:** Playing, picnicking and kick ball.

Other: 7 youth swings, 1 baby swing, 1 slide, 4 teeter totters, 1 bench

East Wareham Playground is adjacent to the East Wareham School, which re-opened as a kindergarten in 1997.

**Transition:** This playground is accessible although it does not have apparatus designed for the handicapped. No changes are proposed.

### **Ellis Playground – acres 0.4**

The Ellis playground is a small fenced in play area on the beach of Muddy Cove. Several benches and a picnic table are available. This is a nice spot to view the cove. The height of the climb-on piece makes this more suitable for older children. Plans are underway to add a tot sized piece and drinking fountain.

**Access:** North Blvd. Off Central Avenue in Onset.

**Activities:** Picnicking, playing, birdwatching, fishing and canoe/kayak access to Muddy Cove (carry in boats only - no trailer access). Clamming by permit only. No clamming May 15 - Sept 14. 1 picnic table, 2 baby swings, 1 slide, 5 benches, 2 youth swings 1 youth height wooden climb on structure with: 2 ladders, 1 wooden bridge, 2 platforms.

**Transition:** This playground is constructed on sandy terrain along a beach and thus is not wheelchair accessible. No proposed changes.

### **Indian Mound Playground - Acres 2.3**

Indian Mound playground was completely renovated in 1997 with grant funding. Along with new climb on structures, there are benches and picnic tables. The play area is fenced in. Handicap accessible equipment and a drinking fountain were added in 1998. A backstop and ball area are also available. Playing surface is clay.

**Access:** Shawnee Drive Off Red Brook Road. Ample parking provided.

**Activities:** Playing, picnicking and ball games.  
Wooden climb on equipment with: 2 platforms, clatter bridge, 2 fire poles, metal arch, slide.

Other equipment:  
tire swing, monkey bars, stand up round-a-bout

Handicap Accessible:  
sand table, tic-tac-toe board, round-a-bout, wheelchair swing, support swing

Other: 3 picnic tables, 4 benches, drinking fountain, softball backstop

**Transition:** This field has great potential for a little league practice field. Additions to this playground should be completing the fence around the baseball field, adding two benches and a basketball hoop. This site is fully accessible and has specialized handicap apparatus.

### **Lopes Playground – Acres 4**

The centerpiece of the Lopes playground is a \$50,000.00, wooden Bob Leather's Creative play area in the shape of a dragon. The structure was a community wide fund-raising and building project. This huge climb on piece has something for everyone and is handicapped accessible. Also on site is a large softball field in moderate condition, a drinking fountain and a shade pavilion. Two basketball courts at the playground are in need of repair. A better court close by is adjacent to the Hammond School. The Lopes playground opens onto a marsh at the rear, which is great for bird watching. Onset Village and Beach are within walking distance.

**Access:** Onset Ave. Parking available on site and across the street at Hynes field:

**Activities:** Birdwatching, softball, playing, picnicking, some basketball, soccer, and ball, playing. Summer playground program available through the Recreation Dept.

*Main Structure:* circular slide, 3 balance beams, swings, cable bridge, suspended balance beam, maze, large Bob-Leathers Creative play area in the shape of a dragon, amphitheater with benches, wooden bridge, overhead rings - wheelchair accessible, long slide, short slide, 1 tire crawl, stump hop, tire bridge, wooden suspension bridge, tire ladder, hand over hand rings, chin

up bars, parallel bars, wooden climb on truck, monkey bars, tire swing, 6 youth swings, 1 baby swing, 3 pyramids, ring bridge suspension bridge, fire pole.

*Other:* 7 benches, 2 picnic tables, pavilion with bench seating, 2 basketball courts, softball field, water fountain.

**Recommendation:** This is the most sought after little league practice field in Town. Lopes has a large play area, yet only a few parking spaces. Adding an additional basketball court or developing a small skate park would be ideal for this area in Onset.

**Transition:** This site is fully accessible. Specialized handicap apparatus is scheduled to be installed by the year 2000. This would include a wheelchair sandbox, roundabout, and tic-tac-toe board.

### **Oakdale Playground - Acres 3**

Oakdale playground is a 3-acre lot on the Agawam River. It is a sunny open, grassed area with lots of playground equipment in good condition. The basketball court is in very good condition. The ballfield is small (long fly ball will end up in the river).

Note: Water fountain is available. Borders a wildlife sanctuary on the river.

**Access:** Apple Street. Very little parking.

**Activities:** Playing basketball, volleyball, softball, picnicking, bird watching, canoeing and kayaking (carry in boats only - no trailer access).

Tot wooden climb on equipment: 3 slides, 1 ramp, 1 ladder, 2 steering wheels, 1 platform  
Tot wooden climb on ship: 3 levels - climb inside cabin, 1 tot animal bouncer (4 seats), 3 benches, volleyball net, baseball infield with back stop, 1 set monkey bars, slide, 13 youth swings, stand up roundabout, 2 teeter toters, 2 picnic tables, 2 baby swings, basketball court

**Transition:** This playground is accessible and has a paved path to the apparatus. Besides minor repairs and a fresh coat of paint, Oakdale is a beautiful play area. The only major issue at this playground is the limited parking since no lot is provided. Participants must now park along the road.

### **Shangri-La-Playground - Acres 1**

Shangri-La playground is a medium sized sand lot at the intersection of three roads. A basketball court, a small ball field with backboard, and a wooden play structure and swings are available. Located in a thickly populated area, the playground sees a lot of use.

**Access:** Peaceful Lane in the Shangri-La section of Town.

**Activities:** Basketball, softball, soccer, playing and picnicking.  
Small preschool climb on with: 1 ramp, 1 wooden bridge, 1 ladder

Small youth climb on with: tire crawl, barrel slide, tire swing, ladder  
Other Equipment: metal climb on spider with fire pole, 2 baby swings, 4 youth swings, 3 benches, 2 picnic tables, basketball court, softball field with backstop, 2 benches.

**Transition:** This playground is in desperate need of accessibility. The playground is located between three cross roads, however the playground rests in a lot in the shape of a bowl. A gradual slope and/or tiered stairs are needed for participants to access the playground. Playground is not handicap accessible. All equipment needs to be power washed and repainted.

### **Swifts Beach Playground - Acres 8**

Swifts Beach playground is a large sandy area adjacent to Swifts Neck Beach, which is a Town beach with lifeguards. The playground has a pavilion with picnic tables that provides shade. There is a basketball court and a variety of climb on equipment. The wooden train is a favorite. Port-a-jons are available in the parking lot area.

**Access:** Circle Drive off Swifts Beach Road. Parking lot is adjacent to the beach and is Sticker Parking Only.

Note: Boat ramp is available in adjacent parking lot. - Sticker Use Only.

**Activities:** Playing, picnicking, basketball and swimming. Summer Playground program available through the Recreation Department. Clamming by permit only. No clamming May 15 - Sept.14.

*Wood set - wooden equipment, low elements:* slide small, fire pole, tire climb, climb platform, steering wheel, barrel crawl climbing chain

*Higher elements:* tire crawl, slide large, tireclimb, tireswing, monkey bars, wooden climb on train, 2 climbing platforms.

*Swings:* 4 youth, 2 infant

*Other:* pavilion with 2 picnic tables, basketball court, swimming beach adjacent with boat ramp, 2 benches

**Transition:** This site is accessible. Upgrades are scheduled by the year 2000. Improvements to be made include the installation of specialized apparatus including a wheelchair swing, sandbox, round-a-bout, tic-tac-toe board, a paved path to the apparatus and rubber tiles under the swings.

### **Westfield Playground - Acres - part of 43 acre parcel**

The Westfield playground is a 2 acre sand lot carved out of 43 acres of woodland owned by the Town. At present a basketball court, swings, a small wooden climb on piece and a dirt ball field in poor condition comprise the play area. Long range plans for this site would make it the new Westfield Complex with baseball, soccer and football fields as well as new play equipment.

**Access:** Cataumet Way, off Charlotte Furnace Road, just before the Carver Town Line

**Activities:** Playing, picnicking, basketball and softball. Small climb on unit with: 2 platforms, barrel slide, ramp ladder, 3 swings, 1 picnic table, basketball court, tire crawl ladder tire climb, 1 baby swing, 1 bench, dirt softball area with backstop.

**Transition:** Westfield Playground is the new home to Camp Lakota, formerly known as Camp Running River. Westfield playground was invaded by campers during the Summer of 2002. The play fields at Westfield were leveled and rolled prior to camp opening. Currently there are 4 cabins at this site for camp use. The Recreation Director was awarded a grant in 2003 to construct a fence around the perimeter of the camp's occupied 4 acres. The goal of the fence was to keep vandalism at bay and to complete phase one of the plan to provide irrigation and grass seed. The Recreation Director has since written a second grant proposal to secure money to install a well, purchase loam, install an irrigation system, and have the 4 acres hydro-seeded. Electricity and a phone line were installed during the Summer of 2003.

#### **West Wareham Playground - Acres .5**

The small play area is adjacent to the West Wareham Kindergarten. Swings and monkey bars are scattered beneath the shade of pine trees. A nice spot for picnicking with young children.

**Access:** Main Street in West Wareham.

**Activities:** Playing and picnicking.

The Playground is adjacent to the West Wareham School which is a kindergarten-only facility. There are 5 youth swings, monkey bars, 1 baby swing, and a picnic table

**Transition:** There is no handicap equipment at this site but the apparatus that is there is accessible. No changes proposed.

#### **Weweantic Playground - Acres 4.2**

Weweantic has a large open grassy field which is often used for soccer. In addition two very nice climb on structures provide fun for tots and youths. Picnic tables and a drinking fountain make this a nice picnic and play area.

**Access:** Hathaway Street.

**Activities:** Soccer, picnicking and ball playing. Summer playground program available through Rec. Dept.

*Wooden Set Play Area* - wooden playground equipment includes: 2 slides (1 spiral), fire pole, 3 climbing platforms.

*2 Levels - preschool - lower/higher - older children:* round-a-bout, tic-tac-toe with paved wheelchair path wheel, chair swing with accessible matting, baby swing with wheelchair accessible matting, pavilion, 2 benches, 1 picnic table, soccer field, basketball hoop (dirt lot)

**Transition:** This playground is fully accessible and does have handicap apparatus.



## APPENDIX B

### 2003 Wareham Open Space Survey

The Wareham Open Space Committee is currently updating Wareham's Open Space and Recreation Plan. Your participation in this survey is greatly appreciated and will help guide the development of this long-range plan. Thank you for taking the time to give us your input.

#### 1. It is important to preserve:

|   | <b>Strongly Agree</b> | <b>Agree</b> | <b>Neutral</b> | <b>Disagree</b> | <b>Strongly Disagree</b> |
|---|-----------------------|--------------|----------------|-----------------|--------------------------|
| A. open space to protect wildlife habitat   | 1                     | 2            | 3              | 4               | 5                        |
| B. places & buildings of historic or architectural interest                       | 1                     | 2            | 3              | 4               | 5                        |
| C. open spaces to meet our recreational needs                                     | 1                     | 2            | 3              | 4               | 5                        |
| D. open space to protect our water supply   | 1                     | 2            | 3              | 4               | 5                        |
| E. open space to protect our waterways, bays, rivers, streams & ponds             | 1                     | 2            | 3              | 4               | 5                        |
| F. open space to protect Warehams natural resources from uncontrolled development | 1                     | 2            | 3              | 4               | 5                        |

#### 2. Are you satisfied with the places available in town for recreational use?

|           | <b>Very Satisfied</b> | <b>Satisfied</b> | <b>Somewhat Satisfied</b> | <b>Not Satisfied</b> | <b>No Opinion</b> |
|-----------|-----------------------|------------------|---------------------------|----------------------|-------------------|
| Adults:   | 1                     | 2                | 3                         | 4                    | 5                 |
| Children: | 1                     | 2                | 3                         | 4                    | 5                 |

**3. Please rank from 1 to 5, with 1 being the highest value, the top five (5) recreational facilities in order of importance that you feel Wareham need more of:**

- |       |                              |       |                          |
|-------|------------------------------|-------|--------------------------|
| A____ | Bike Trails                  | K____ | Recreation center        |
| B____ | Playing fields (sports)      | L____ | Ice skating rink         |
| C____ | Protected conservation areas | M____ | Swimming pool            |
| D____ | Public boat access/ramps     | N____ | Park with facilities     |
| E____ | Childrens play areas         | O____ | Tennis Courts            |
| F____ | Picnic areas                 | P____ | Wildlife habitat         |
| G____ | Neighborhood parks           | Q____ | Town common improvements |
| H____ | Golf courses                 | R____ | Scenic areas             |
| I____ | Outdoor amphitheater         | S____ | Other:                   |
| J____ | Biking & walking trails      |       | Where? _____             |

**4. Please rank what you feel to be the top three (3) priority objectives of the Wareham Open Space and Recreation Plan (1 = the highest value, 3 = lowest value)**

- |       |   |       |   |
|-------|---|-------|---|
| A____ | Acquisition of coastal properties, including beaches, salt marshes, etc. for permanent conservation | F____ | General improvements to ball fields, playgrounds, picnic areas, etc.                                      |
| B____ | Acquisition of land along the Agawam & Weweantic Rivers   | G____ | Development of bike path that would connect to Cape Cod Canal trail                                       |
| C____ | Acquisition of land in aquifer watershed to protect drinking water supplies                         | H____ | Outlining a process for designating the Plymouth Aquifer an Area of Critical Environmental Concern (ACEC) |
| D____ | Acquisition of land that will aid in the design of a hiking trail system                            | I____ | Other:  |
| E____ | Preservation of farm lands  |       |   |

**5. How important is it to you for the town to acquire and preserve conservation areas for wildlife habitat and nature trails?**

|                |                |                    |                    |               |
|----------------|----------------|--------------------|--------------------|---------------|
| Most important | Very important | Somewhat important | Not very important | Not important |
| 1              | 2              | 3                  | 4                  | 5             |

**6. What town actions do you favor to preserve land? Check all that apply.**

|   |  |
|---|--|
| A. _____ combination of public & private action                   | D. _____ requiring open space conservation in new Developments |
| B. _____ acquisition of conservation restrictions on private land | E. _____ use of Community Preservation Act funds               |
| C. _____ town purchase of land                                    | F. _____ other: _____  |

**The members of the Wareham Open Space Committee thank you for your participation**

## Appendix C

### 2003 Wareham Open Space Survey Summary

At the April 28, 2003, Town Meeting, attendees were asked to fill out a survey developed by the Open Space Committee.<sup>9</sup> One hundred and fifty-nine people took the time to fill out the survey. The results of the survey are summarized below.

- The public is very concerned about protecting our water supply, waterways, and wildlife habitat.
- Most people would like to see additional recreational facilities for both adults and children.
- There is a lot of support for protected conservation areas, not only for biking and hiking, but also for wildlife habitat. The areas most desired for protection are those areas along the coast and inland waterways, and those areas that are part of our aquifers. Most people favor a combination of public and private action to accomplish these goals.

#### 1. It is important to preserve open space to:

|  | <b>Strongly Agree</b> | <b>Agree</b> | <b>Neutral</b> | <b>Disagree</b> | <b>Strongly Disagree</b> |
|--|-----------------------|--------------|----------------|-----------------|--------------------------|
| A. Protect wildlife habitat  | 103                   | 41           | 8              | 1               | 0                        |
| B. Protect places & buildings of historic or architectural interest  | 74                    | 57           | 12             | 6               | 2                        |
| C. Meet our recreational needs                                       | 73                    | 45           | 21             | 1               | 2                        |
| D. Protect our water supply  | 129                   | 17           | 6              | 0               | 0                        |
| E. Protect our waterways, bays, rivers, streams & ponds              | 121                   | 25           | 6              | 0               | 0                        |
| F. Protect Wareham's natural resources from uncontrolled development | 107                   | 33           | 7              | 0               | 1                        |

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<sup>9</sup> Members of the Open Space Committee are Ted DuMoulin, Donald Hall, Anne Campbell, Marjorie Teitelbaum, Nicholas Memoli, Edward Pacewicz, and Cathleen Longfield.

**2. Are you satisfied with the places for adults’ and children’s recreational use?**

|                   | Very satisfied | Satisfied | Somewhat Satisfied | Not Satisfied | No Opinion |
|-------------------|----------------|-----------|--------------------|---------------|------------|
| Adults’ Places    | 10             | 38        | 75                 | 55            | 3          |
| Children’s Places | 14             | 27        | 37                 | 47            | 10         |

**3. Please rank from 1 to 5, with 1 being the highest value, the top five (5) recreational facilities in order of importance that you feel Wareham need more of:\***

|   | Catgeory                     | No. |   | Category                 | No. |
|---|------------------------------|-----|---|--------------------------|-----|
| A | Bike Trails                  | 29  | K | Recreation center        | 19  |
| B | Playing fields (sports)      | 20  | L | Ice skating rink         | 12  |
| C | Protected conservation areas | 74  | M | Swimming pool            | 15  |
| D | Public boat access/ramps     | 24  | N | Park with facilities     | 30  |
| E | Childrens play areas         | 28  | O | Tennis Courts            | 9   |
| F | Picnic areas                 | 17  | P | Wildlife habitat         | 61  |
| G | Neighborhood parks           | 38  | Q | Town common improvements | 40  |
| H | Golf courses                 | 6   | R | Scenic areas             | 26  |
| I | Outdoor amphitheater         | 8   | S | Other                    | 3   |
| J | Biking & walking trails      | 62  |   |                          |     |

\* With the benefit of hindsight, the Committee believes that this question was poorly designed. Many people misunderstood the instructions and inserted numbers in all of the categories, rather than their top 5 choices. These surveys had to be excluded with respect to this question; otherwise, these respondents would have been over-represented with respect to their choices in this question.

Also, some people misunderstood the weighting aspect of this question and simply put “1” in each of their 5 choices. In view of these shortcomings, the Committee decided that the best way to tabulate the results of this question was simply to count the number of times each category was selected, ignoring the weight given. It should also be noted that there was a lot of support for hiking and biking trails and that Category J probably should have specified only walking trails since “bike trails” is included in Category A.

**4. Please rank what you feel to be the top three (3) priority objectives of the Wareham Open Space and Recreation Plan (1 = the highest value, 3 = lowest value):\*\***

|   | Category  | No. |   | Category   | No. |
|---|---|-----|---|--|-----|
| A | Acquisition of coastal properties, including beaches, salt marshes, etc. for permanent conservation | 67  | E | Preservation of farm lands   | 12  |
| B | Acquisition of land along the Agawam & Weweantic Rivers   | 41  | F | General improvements to ball fields, playgrounds, picnic areas, etc.                               | 18  |
| C | Acquisition of land in aquifer watershed to protect drinking water supplies                         | 73  | G | Development of bike path that would connect to Cape Cod Canal trail                                | 39  |
| D | Acquisition of land that will aid in the design of a hiking trail system                            | 24  | H | Outlining a process for designating the Plymouth Aquifer an Area of Critical Environmental Concern | 33  |

\*\* This question suffered from the same flaws as Question #3. For this reason, we simply added the number of boxes selected with respect to those surveys that only selected 3 items, as instructed, again ignoring the weights given.

**5. How important is it to you for the town to acquire and preserve conservation areas for wildlife habitat and nature trails?**

| Most important | Very important | Somewhat important | Not very important | Not important |
|----------------|----------------|--------------------|--------------------|---------------|
| 72             | 57             | 27                 | 3                  | 3             |

**6. What town actions do you favor to preserve land? Check all that apply.**

| Combination of Public/Private Action | Acquisition of Conservation Restrictions on Private Land | Town Purchase of Land | Requiring Open Space Conservation in New Developments | Use of Community Preservation Act Funds | Other |
|--------------------------------------|--|-----------------------|---|---|-------|
| 112                                  | 86   | 88                    | 113   | 97                                      | 8     |