

# OPEN SPACE & RECREATION PLAN



## 2017 - 2024

Prepared by:

**The Open Space and Recreation Planning Committee**

Fairhaven, MA

With Technical Assistance from:

**Southeastern Regional Planning & Economic Development District (SRPEDD)**

Taunton, MA



**TOWN OF FAIRHAVEN  
OPEN SPACE AND  
RECREATION PLAN**

**2017-2024**

**Prepared by the Open Space and  
Recreation Planning Committee:**

**Louise Barteau  
Ann Richard  
Vincent Furtado  
Barbara Grota  
Susan Spooner  
Warren Rensehauser  
William D. Roth, Jr.**

**Technical Assistance provided by  
SRPEDD**

**Special thanks to the many individuals,  
organizations, and agencies who gave  
their time and shared their knowledge of  
the Town and its surroundings.**

## Table of Contents

| <b><u>Section</u></b>   | <b><u>Page</u></b> |
|---|--------------------|
| <b>Section 1 – Plan Summary</b>   | <b>1</b>           |
| <b>Section 2 – Introduction</b>   | <b>3</b>           |
| Statement of Purpose  | 3                  |
| Planning Process and Public Participation                                       | 3                  |
| Enhanced Outreach   | 3                  |
| <b>Section 3 – Community Setting</b>  | <b>5</b>           |
| Regional Context  | 5                  |
| History of the Community  | 6                  |
| Population Characteristics  | 6                  |
| Economic Characteristics  | 13                 |
| Growth and Development Patterns   | 18                 |
| Long-Term Development Patterns  | 20                 |
| <b>Section 4 – Environmental Inventory and Analysis</b>                         | <b>22</b>          |
| Geology, Soils, Topography, Climate, Water Resources                            | 22                 |
| Wetlands, Natural Communities, Plants, Wildlife, and Rare Species               | 27                 |
| Scenic Resources and Unique Environments  | 36                 |
| Environmental Challenges  | 38                 |
| Species Lists (Common to Fairhaven)   | 43                 |
| <b>Section 5 – Inventory of Lands of Conservation &amp; Recreation Interest</b> | <b>52</b>          |
| Conservation and Recreation Lands   | 53                 |
| Farm Preservation   | 59                 |
| <b>Section 6 – Community Goals</b>  | <b>61</b>          |
| Description of Process  | 61                 |
| Progress Report from the 2008 Open Space and Recreation Plan                    | 61                 |
| Open Space and Recreation Goals   | 62                 |
| <b>Section 7 – Analysis of Needs</b>  | <b>63</b>          |
| Summary of Resources Protection Needs   | 63                 |
| Summary of Community’s Needs  | 63                 |
| Management Needs and Potential Changes of Use                                   | 65                 |
| <b>Section 8 – Goals and Objectives</b>   | <b>67</b>          |
| <b>Section 9 – Action Plan</b>  | <b>70</b>          |
| <b>Section 10 – Maps</b>  | <b>75</b>          |
| <b>Section 11 – Public Comments</b>   |                    |
| Board of Selectmen  |                    |
| Fairhaven Conservation Commission   |                    |
| Fairhaven Planning Board  |                    |
| Southeastern Regional Planning & Economic Development District                  |                    |
| <b>Section 12 – References</b>  |                    |



## **Appendices**

|  |  |
|--|--|
| Appendix A - Section 504 ADA Transition Plan Update              |  |
| Appendix B – Protecting Coastal Wetlands                         |  |
| Appendix C – Mattapoisett River Valley Water Supply Protection   |  |
| Appendix D – BioMap 2 (Summary)                                  |  |
| Appendix E – Chapter Lands and Protected Lands                   |  |
| Appendix F – PPA-PDA: Fairhaven Community Priority Areas Summary |  |

## **Figures**

|           |  |    |
|-----------|--|----|
| Figure 1  | Fairhaven Population Growth, 1960-2010                       | 7  |
| Figure 2  | Population Age Distribution, 2000-2014                       | 8  |
| Figure 3  | Median Age: Fairhaven/Neighboring Towns/State                | 9  |
| Figure 4  | Educational Attainment of Population 25+ Years, 2000-2014    | 11 |
| Figure 5  | Educational Levels Compared, 2014                            | 11 |
| Figure 6  | Percent Below Poverty Level, 2000-2014                       | 13 |
| Figure 7  | Comparative Employment by Industry, Fairhaven, 1990 and 2013 | 14 |
| Figure 8  | Unemployment Rates Compared, 2000-2014                       | 15 |
| Figure 9  | Total New Residential Building Permits, 2000-2014            | 16 |
| Figure 10 | Median Sales Price for Single Family Homes                   | 16 |

## **Tables**

|         |  |    |
|---------|--|----|
| Table 1 | Comparative Population Growth & Densities, 1960-2010     | 7  |
| Table 2 | Percent Change in Race & Ethnic Composition, 2000-2014   | 9  |
| Table 3 | Household Types, Fairhaven, 2000-2014                    | 10 |
| Table 4 | Income Levels Compared, 1990 and 2014                    | 12 |
| Table 5 | Housing Characteristics, 1990-2014                       | 15 |
| Table 6 | Percent Change in Cost of Single Family Homes, 1990-2014 | 17 |
| Table 7 | Coastal Land Form Types                                  | 25 |



## I. PLAN SUMMARY

The 2017 Open Space and Recreation Plan update represents the Open Space Committee's attempt to create a plan with great utility, focused on real needs, and conscious of the resources available to the town to help it address its goals and objectives. This plan also acknowledges the incredible amount of partnership based work and planning that has been undertaken since 2010 in Fairhaven, and the Buzzards Bay Watershed area, to preserve our natural and cultural resources

The work, analysis and vision that has helped to produce this plan has resulted in an action plan agenda which addresses such items as: the need to continue to look at the role of the town in a regional context; the need to prioritize areas of the town for conservation, preservation (both natural and historical resources), recreation and related needs; the need to plan for the responsible management of our watersheds and water resources; the need to integrate natural resource management (including the retention of native vegetation) and growth management planning as standard practice, and; the need to continue to improve the management and awareness (including wayfinding signage) of all of our community assets in order to work more efficiently with the public to implement the goals and objectives of our various plans.

The 2017 Open Space and Recreation Plan was created not only as a “stand alone” document, but with the town's upcoming Master Plan update and Hazard Mitigation Plan in mind. The Open Space and Recreation Plan is one of the key elements of a comprehensive Master Plan, and as such, functions in a complementary fashion in several areas of community planning. The Open Space and Recreation Plan can help to promote the community character, resources, and quality of life elements of the town so necessary to the “planning for growth” measures prescribed in the Master Plan.

The 2017 Open Space and Recreation Plan considers “open space” in a broad sense, where not only are fields, forests, marshes, river corridors, parks, and public and private conservation areas part of the discussion, but lands that can be reclaimed or repurposed as well (brownfields, vacant lots).

In terms of “passive” and “active” recreation, the 2017 Plan was developed in accordance with the most recent state definitions of each, as follows:

*Passive Outdoor Recreation: Any outdoor activity that occurs in a natural setting with minimum disturbance of the natural and cultural resources, and that is consistent with quiet enjoyment of the land, including, but not limited to: hiking, nature study, outdoor education, cross country skiing, snowshoeing, horseback riding, trail bicycling, hunting, fishing, picnicking, canoeing, ice-skating, community gardening in existing fields, swimming in a natural water body with minimal site development, or informal sports activities on an open natural field. Facilities necessary to support passive recreation with a minimum of disturbance to the natural and cultural resources such as natural surface trails and wood roads, and appropriately-scaled parking areas, bathrooms, and nature centers are considered consistent with passive outdoor recreation. Passive outdoor recreation areas may also be managed for sustainable forestry and farming, including community farms and forests.*

*Active Outdoor Recreation: Outdoor recreation that occurs in parks and requires significant alteration of the natural landscape to provide playground or active sports facilities such as tennis, basketball, or other sport courts, ball fields, swimming pools or spray pads, paved bike or walking trails, golf courses, marinas, enclosed dog parks, boat rentals, concession stands, community gardens, outdoor skating rinks, bathroom buildings, bleachers or stands or other developed facilities needed for outdoor recreation.*

## **SECTION 2. INTRODUCTION**

### **A. STATEMENT OF PURPOSE**

The purpose of this Open Space and Recreation Plan is to provide a blueprint by which local, state and federal officials, organizations, agencies, and private citizens, might best focus their energies and resources to address the conservation, open space, and recreation needs of the Town of Fairhaven over the next seven years. The Open Space and Recreation Committee also hopes that in reading this plan, the public will become acquainted, or reacquainted, with the unique natural resources and cultural assets that are such an important a part of the history and character of the Town of Fairhaven.

### **B. THE PLANNING PROCESS AND PUBLIC PARTICIPATION**

In the summer of 2016, the Town of Fairhaven's Planning Board initiated a process to update the 2008 Open Space and Recreation Plan. At the same time, the Director of Planning and Economic Development asked the Southeastern Regional Planning and Economic Development District (SRPEDD) to provide technical assistance to the newly appointed Open Space and Recreation Committee in order to complete the update of the 2008 plan.

The Open Space and Recreation Committee, appointed by the Board of Selectmen, included: Louise Barteau (Conservation Commission), John Farrell, Vincent Furtado (Superintendent, Board of Public Works), Barbara Grota, Susan Spooner, Warren Rensehauser (Recreation Director), and Bill Roth (Director of Planning and Economic Development). The Committee adopted a monthly working meeting schedule beginning in July of 2016 and running through May of 2017. All meetings were held in the Fairhaven Town Hall and were open to the public. The meetings were also filmed live and presented on local cable access television.

SRPEDD, with input from the Open Space and Recreation Committee, drafted an open space survey. The Open Space Survey was made available to the public online through Survey Monkey, with a link provided on the Town of Fairhaven's website (home page). Hard copies of the survey were made available at Town Hall, the Public Library, the Recreation Center, the Board of Public Works, and the Council on Aging. The survey's availability was advertised on local cable, in the local press, and at open/televised meetings of the Planning Board, Selectmen, and Conservation Commission, and through the Recreation and Board of Public Works offices.

The survey was conducted between 8/30/2017 and 9/30/2017. Information about the survey was distributed via post cards sent to residents, as well as through local cable access and local print and online media. A total of 430 online and hard copy responses to the survey were received.

### **C. ENHANCED OUTREACH**

The Open Space and Recreation Committee determined that the Town Hall would provide the drop-off point for paper copies of the survey. This decision was made in consideration of the

needs of the Environmental Justice (EJ), elderly, and ADA populations. Town Hall is completely accessible to citizens of all ages and abilities and is ADA access compliant.

The information obtained in the 430 total survey responses was used as the principal source of gauging the public's conservation, recreation, and open space concerns. In addition to the surveys and regular working meetings, the Open Space and Recreation Committee also held an issue-specific public meeting, in the Town Hall in December of 2016, for the purpose of formulating the "Goals and Objectives" and "Action Plan" sections of the Open Space and Recreation Plan.

## **Section 3: Community Setting**

### **A. Regional Context**

Fairhaven is a coastal town along Buzzards Bay in the extreme southeastern corner of Bristol County, Massachusetts. It is located 56 miles south of Boston and 35 miles southeast of Providence, Rhode Island. Fairhaven is bounded by the town of Acushnet to the north, Mattapoisett (Plymouth County) to the east, and the City and Harbor of New Bedford and Acushnet River to the west. Its coastal location and more than 29 miles of coastline is a great determinant of the town's history, open space character, and regional development. (see Section 10, Maps, Regional Context)

Two parallel east-west highways serve Fairhaven: Interstate Route I-195, run between Cape Cod and Providence, and U.S. Route 6 or GAR Highway, an older major commercial route. In addition, State Route 240 provides a short north-south connection between I-195 and Route 6. These major routes provide residents of Fairhaven with convenient access to employment and recreation opportunities to the east and west, as well allow easy movement of shoppers and visitors through the town.

The region is rich in both cultural and natural history. Fort Phoenix in Fairhaven dates from the Revolutionary War. Across the harbor, New Bedford boasts the largest fishing fleet on the East Coast and an historic port district with lively ethnic flavor, primarily due to its large Portuguese population. The shoreline also offers numerous coves, tide flats, and expanses of salt marsh.

Inland areas consist of quaint farms on rolling terrain with numerous freshwater marshes and wooded swamps, such as the Acushnet Cedar Swamp, a 575-acre wooded swamp dominated by Atlantic White Cedar. Directly to the north, the town of Acushnet, a former center for cotton industry, has become a center for apple and peach orchards. The neighboring town of Mattapoisett also serves as a summer playground for seasonal residents and visitors alike, with its unspoiled beaches, harbor, and housing developments.

Fairhaven Center, a picturesque 19<sup>th</sup> century community, is situated around the waterfront on the Acushnet River, while North Fairhaven extends upriver. Modest homes dot the northern end and continue down the Neck, interspersed with expanses of fields and salt marshes. Although Fairhaven has 1,314 acres of protected open space and recreation land or 16.3% of its total area, regional open space maps reveal that New Bedford, Acushnet, and Mattapoisett have more successful conservation efforts than does Fairhaven. Athletic leagues in the area congregate in Fairhaven for their active recreational activities, underlining the limited recreational facilities available in the area, as well as Fairhaven's centrality in the region.

Fairhaven's connection to Buzzards Bay and the ocean has played a major role in its history, and continues to positively influence its open space, recreational and natural character. The working waterfront is an on-going reminder of days of shipbuilding, whaling, rum running, and fishing. A few of these traditional water-dependent activities have survived. The waterfront is often a destination for local residents in search of the services of new businesses. Moreover, Fairhaven waterfront serves as a haven for visitors and residents seeking places to enjoy the beach, sand, and sun, with scenic views amidst attractive historic and natural areas.

## **B. History of Community**

The area now known as Fairhaven was purchased from Wampanoag Chief Massasoit in 1652 by a group of colonists from Plymouth town. Settlement began about 1659. The first settlers were primarily engaged in agriculture and coastal trade like ship building and whaling. In 1775, Fairhaven men fought the first naval engagement of the Revolutionary War in the outer harbor. [Fort Phoenix](#), helped protect the harbor through the Civil War. In September 1778 the harbor came under attack when about 4,000 British troops undertook a two-day raid resulting in burned homes and sunken ships.

After the community separated from the city of New Bedford due to political differences concerning the War of 1812, the town of Fairhaven was incorporated on February 22, 1812.

In the 1800s, the whaling industry and its related marine trades contributed greatly to the town's growth. Whaling brought Fairhaven in contact with people from around the world. During this time, a retired sea captain, Joseph Bates Jr., wrote a religious treatise that became the foundation of the Seventh Day Adventist Church. Also, a famed sailor Captain Joshua Slocum rebuilt a small sloop, *Spray*, before sailing it around the world alone from 1895 to 1898.

Between 1885 and 1906, Fairhaven benefited greatly from the gifts of magnificent European revival style architectural buildings donated by [Henry H. Rogers](#), a native son and multimillionaire, from his career in the Standard Oil Company in Pennsylvania. A grammar school, library, town hall, high school, Unitarian Church, Masonic Hall, and the public water system, were among the structural gifts from Rogers.

Fairhaven's open landscape of farm fields and pastures is a product of a historically strong agricultural economy. Its coastal location provided a ready source of seaweed and fish as fertilizer contributing to the town's agricultural success in the past. After World War I, dairy farming became the major economic activity in Fairhaven. The climate was more favorable to cows than crops and the markets for milk and other dairy products were accessible by both land and water. The town has a good location for the distribution of farm produce mainly due to the connections with available transportation provided by the harbor and local roads. By the 1980's, farmers were being encouraged to sell their herds and get out of the dairy business because of an excess of milk supply. Descendents of farmers who preferred to get out of farming eventually decided to sell their family farms to residential and commercial developers offering prime prices for coastal land.

## **C. Population Characteristics**

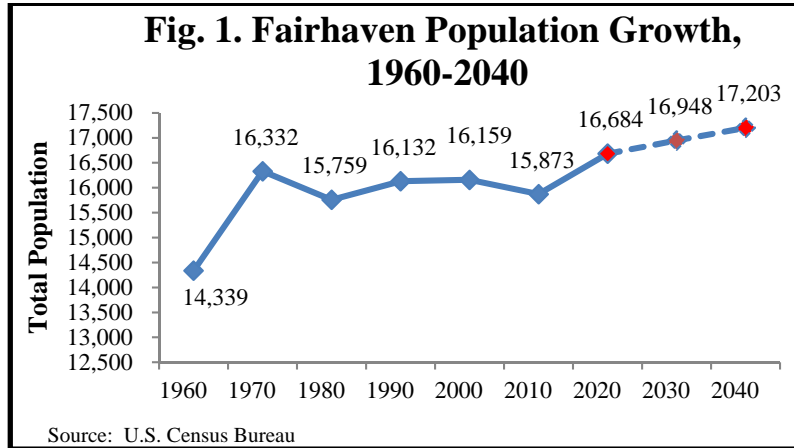
Fairhaven's population growth, the changes in its demographic profile, as well characteristics of households in the town are examined in this section.

### **Population Growth Trend**

The growth of Fairhaven's total population from 1960 to 2010 is presented in Fig. 1.

As shown in the data, the town's population grew rapidly between 1960 and 1970, dipped slightly in 1980, before leveling off to 2010. Fig. 1 also shows the area's projected population to the year 2040.





The regional population projections assume a positive growth for Fairhaven in the next decades. Such a trend will hinge mostly on the town's residential and economic development, including its capability to draw younger childbearing couples and active workers into the area. Along with this assumption is the anticipated demand for open space and recreational offerings that the town will have to meet.

### Population Change and Density

In Table 1, the changes in population and population density of Fairhaven and its neighboring communities during the last five decades are compared.

| <b>Table 1. COMPARATIVE POPULATION GROWTH &amp; DENSITIES, 1960-2010</b> |             |             |              |             |
|--|-------------|-------------|--------------|-------------|
| <i>Total Population, 1990-2010</i>                                       |             |             |              |             |
|  | Acushnet    | Fairhaven   | Mattapoisett | New Bedford |
| 1960   | 5,755       | 14,339      | 3,117        | 102,477     |
| 2010   | 10,303      | 15,873      | 6,045        | 95,072      |
| <b>% Change</b>  |             |             |              |             |
| <b>1960-2010</b>   | <b>79.0</b> | <b>10.7</b> | <b>93.9</b>  | <b>-7.2</b> |
| <i>Population Density, 1960-2010</i>                                     |             |             |              |             |
| <i>(Number of persons per square mile)</i>                               |             |             |              |             |
|  | Acushnet    | Fairhaven   | Mattapoisett | New Bedford |
| 1960   | 516         | 1,301       | 355          | 4,971       |
| 2010   | 561         | 1,281       | 349          | 4,769       |
| <b>% Change</b>  |             |             |              |             |
| <b>1960-2010</b>   | <b>8.7</b>  | <b>-1.5</b> | <b>-1.7</b>  | <b>-4.1</b> |
| Source: U.S. Census Bureau, MA DOR                                       |             |             |              |             |

The data reveal that show between 1960 and 2010, Fairhaven's population rose modestly while Acushnet's and Mattapoisett's increased in population rapidly. On the other hand, New Bedford's population declined during these decades.

Even while the adjacent town of Acushnet became more densely populated between 1960 and 2010, Table 1 also demonstrates that Fairhaven maintained a slower rate of decrease in its number of persons per square mile during the same period.

Conserving available natural and scenic treasures of Fairhaven will be a challenge to planners facing the pressure for the buildup of high density districts.

## Population Age Profile

In planning for the future of Fairhaven, the target population deserves the center of attention. The town's population growth trends signals where the town is headed, hence a major part of the Open Space Plan. Fairhaven's population breakdown by age group for the past fifteen years is featured in the population pyramids below (Fig. 2).

**Fig. 2. Population Age Distribution, 2000-2014**

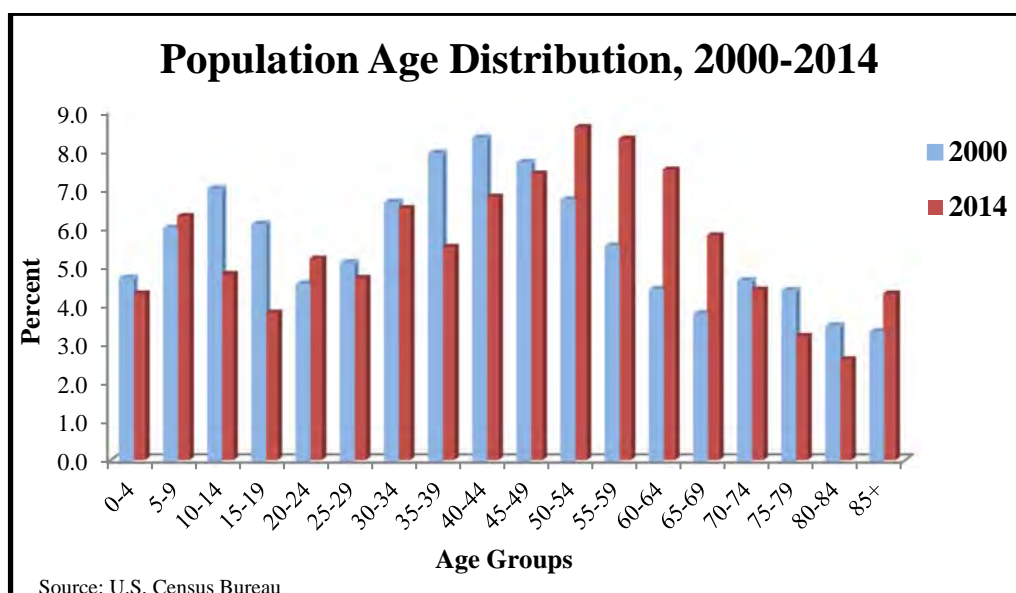
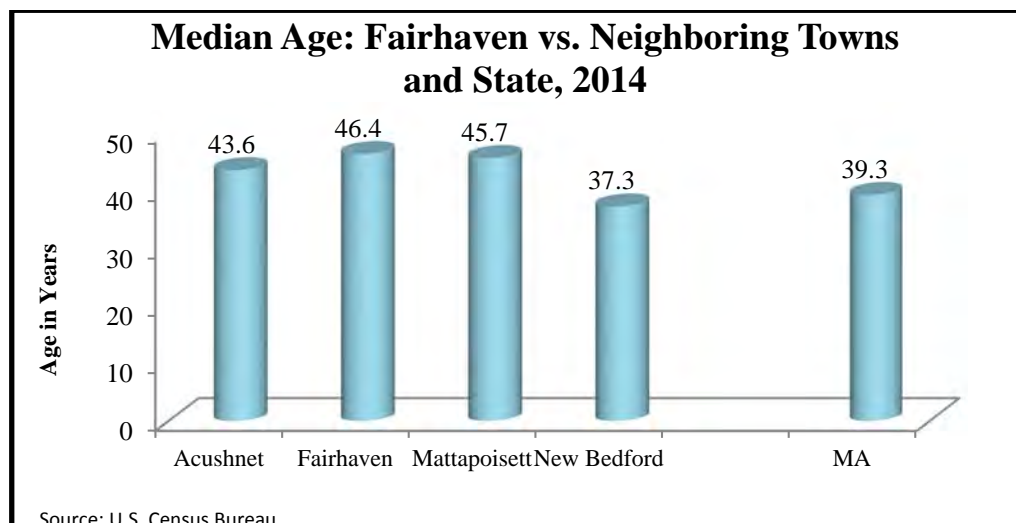


Fig. 2 demonstrates Fairhaven's declining proportion of young people (under 25 years old) and a marked increase in the upper age groups, from 2000 to 2014. The younger working age groups (25 to 44 years old) are gradually declining, while those in the older sets (45 to 64) are on the rise. While it is reassuring that the town's labor force still remain robust in the immediate years ahead, this might not be the case in the longer term, i.e. decades ahead.

To gain a better perspective on the aging of the town's population compared to its neighbors and the state, Fig. 3 shows the median ages of these areas as of 2014.

**Fig.3. Median Age: Fairhaven vs. Neighboring Towns and State, 2014**



As the data underscore, Fairhaven had a higher median age in 2014 compared to its neighboring communities and the state. Meanwhile, the adjacent city of New Bedford maintains a younger population in 2014.

Confronted with Fairhaven's decreasing number of young children, its rising number of elderly, and the overall aging of its labor force population, it is inevitable that open space planners will have to seek suitable choices ahead.

### **Race and Ethnic Composition**

Over a 15-year period, some transformation in Fairhaven's racial and ethnic population composition had occurred. Table 2 displays the changes in the categories of race and ethnicity in the town's population from 2000 to 2014.

| Table 2. Percent Change in Race & Ethnic Composition, 2000-2014 |               |               |                 |
|---|---------------|---------------|-----------------|
|   | 2000          | 2014          | 2000-2014       |
|   | <i>Count</i>  | <i>Count</i>  | <i>% Change</i> |
| White   | 15,565        | 15,260        | (2.0)           |
| Black   | 97            | 149           | 53.6            |
| American Indian, Eskimo   | 42            | 34            | (19.0)          |
| Asian or Pacific Islander                                       | 71            | 462           | 550.7           |
| Other race  | 192           | 310           | 61.5            |
| Hispanic  | 135           | 155           | 14.8            |
| <b>TOTAL</b>  | <b>15,970</b> | <b>15,971</b> | <b>0.01</b>     |
| Source: U.S. Census Bureau                                      |               |               |                 |

Table 2 shows that Fairhaven remains predominantly White from since 2000. While the Black population rose between 2000 and 2014, the Asian population dramatically increased in the town during the same period. The category called “Other race” includes those with mixed or combined races/parentage. Like other places in the country, Fairhaven” share of a rising Hispanic population remains modest.

### Households

In Table 3, the various types of households in Fairhaven are shown for 2000 and in 2014.

As the data show, Fairhaven households are changing along with the rest of country. Between 2000 and 2014, the number of family households declined, while living alone had become popular in the town. Nevertheless, it is noteworthy that there is a growing elderly population (specifically the population aged 65+ years) living during the 15-year interval.

As in most of the country, a shrinking family size is also true in Fairhaven, as Table 3 reveals.

| <b>Table 3. Household Types: Fairhaven, 2000-2014</b>        |              |              |                               |
|--|--------------|--------------|-------------------------------|
| <b>Household Types</b>                                       | <b>2000</b>  | <b>2014</b>  | <b>%Change,<br/>2000-2014</b> |
| <b>Total households</b>                                      | <b>6,622</b> | <b>6,764</b> | <b>2.1</b>                    |
| Family households  | 4,251        | 3,935        | <b>-0.7</b>                   |
| Female householder, no husband<br>with < 18 yrs old children | 730          | 732          | <b>0.0</b>                    |
| Householder living alone                                     | 2,017        | 2,241        | <b>1.1</b>                    |
| Householder 65+ years living alone                           | 2,120        | 2,246        | <b>5.9</b>                    |
| <b>Household size</b>  | <b>2.38</b>  | <b>2.31</b>  | <b>-2.9</b>                   |

Source: U.S. Census Bureau

The changes in the type of households in Fairhaven for over more than two decades imply that planning for open space has to accommodate the requisites of new households – such as those elderly living alone who might require safer and more accessible recreational areas for walking, running, jogging or biking paths and other needs.

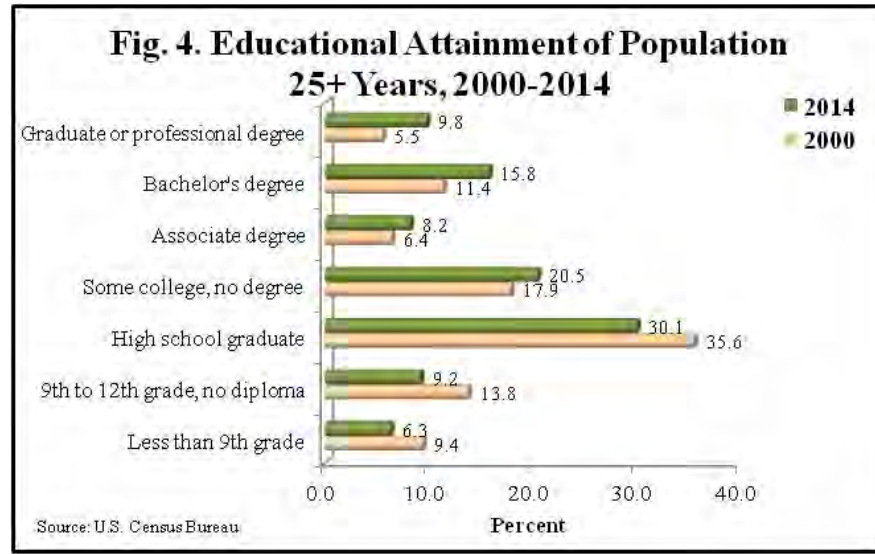
### D. Socio-Economic Characteristics

Here, Fairhaven residents’ education, income, and poverty status are examined.

#### Education

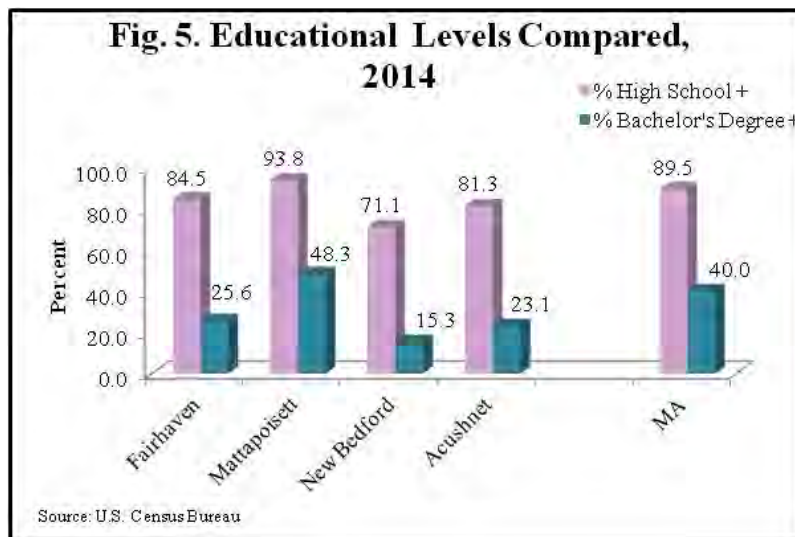
As a rule, the people’s tastes and preferences for their chosen lifestyles are mostly traceable to their socio-economic status, notably, education and income. There is no reason why Fairhaven residents should be any exception.

Fig. 4 presents the educational attainment of Fairhaven adults aged 25+ years for 2000 and 2014.



It is quite reassuring to observe the great improvements in educational attainment achieved by Fairhaven adults from 2000 to 2014. Of particular interest are the high rates of change among those who finished or attained degrees beyond high school. This encouraging change will be most helpful for planning open space and recreation alternatives in the years ahead for the town.

How Fairhaven adults' (population 25 years+) educational achievement compare with those of the neighboring communities, and the state figures can be seen in Fig. 5.



It evident in Fig. 4 that in 2014, the city of New Bedford ranked the lowest in educational achievement at both levels followed by Acushnet. Fairhaven's achievement were higher at both levels than these two areas, but not quite as high as neighboring Mattapoisett's or the statewide levels.

The educational levels of the town's adult population is vital for Open Space and Recreation planning

inasmuch as there they reflect the variability in preferences and tastes for facilities among residents of Fairhaven and its surrounding communities.

### **Income**

A comparison of median household income, median family income, and per capita income of Fairhaven residents to the state for the years 2000 and 2014, are presented in Table 4.

| <b>Table 4. Income Levels Compared, 2000 and 2014</b> |                  |             |                      |             |
|---|------------------|-------------|----------------------|-------------|
|   | <b>FAIRHAVEN</b> |             | <b>MASSACHUSETTS</b> |             |
|   | <b>2000</b>      | <b>2014</b> | <b>2000</b>          | <b>2014</b> |
| Median Household Income                               | \$41,696         | \$60,445    | \$50,502             | \$67,846    |
| Median Family Income                                  | \$52,298         | \$76,266    | \$61,664             | \$86,132    |
| Per Capita Income                                     | \$20,986         | \$31,006    | \$25,952             | \$36,441    |
| Source: U.S. Census Bureau                            |                  |             |                      |             |

The data clearly show that Fairhaven income levels remained lower than statewide levels in both 2000 and 2014.

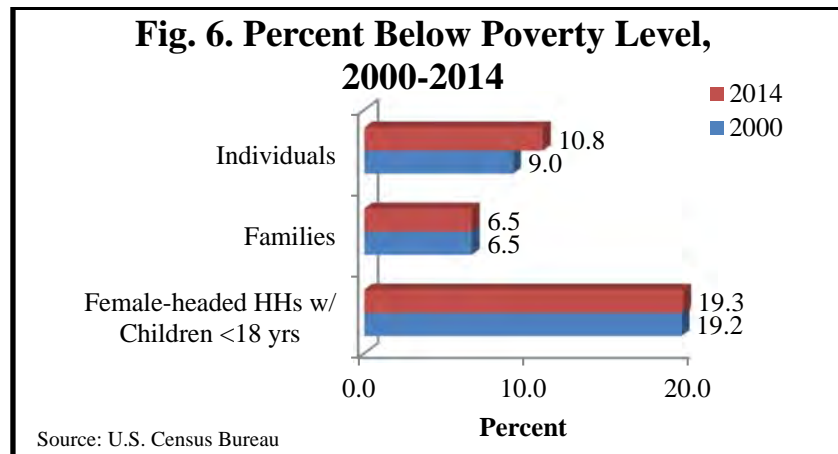
Meeting the preferences for certain athletic outdoor and indoor sports activities for the various age and income groups in the town calls for ingenuity among Open Space and Recreation planners.

### **Environmental Justice**

Although some residents had higher income than the state average, most were not, and others were worse off financially. A close examination of median household income for all block groups in Fairhaven, relative to Environmental Justice eligibility (having 25% minority population and below 65% of the state's median household), revealed that three block groups met the criteria in 2014, BLOCK GROUPS 6552-3, 6552-4, AND 6552-5 (see Section 10, Maps, Environmental Justice Map).

### **Poverty Status**

Poverty status as determined by the Census Bureau indicates the percent falling above and below the poverty line. In Fig. 6, the percent falling below poverty level among Fairhaven residents are shown by household structure for the years 2000 and 2014



It is obvious from Fig. 6 that more than ten percent of Fairhaven residents belonged to the income category below the poverty line in 2014, slightly more than the rate in 2000. During the same time period, the rate of female-headed households with no husband present and with children under 18 years old, in the same economically-deprived category, stayed constant.

Overall, income levels have much impact on the residents' choice of open space and recreational usage. Familiarity with the segment of the population having financial difficulties, and poverty status, will give planners useful insights into possible options and alternatives for recreation or leisure that can be offered given the town's space constraints.

## E. Economic Characteristics

Fairhaven has an important working waterfront, including ship repair and outfitting, and fish processing. Although the depletion of fishing stock and increased federal government fishing limits had dampened the fishing industries, replacement activities such as servicing recreational boating with a wage levels higher than retail or service jobs, makes Fairhaven's economic future quite dependent on its working waterfront, alongside New Bedford Harbor. Additionally a growing tourism industry has become significant to the town.

Fairhaven used to serve as the home base of certain big companies such as American Telephone and Telegraph (AT&T), and the Atlas Tack Company, but these entities have since closed or moved out of town. The Acushnet Company, maker of golf balls like Titleist (albeit foreign-owned), remains as the major employer in the town to date.

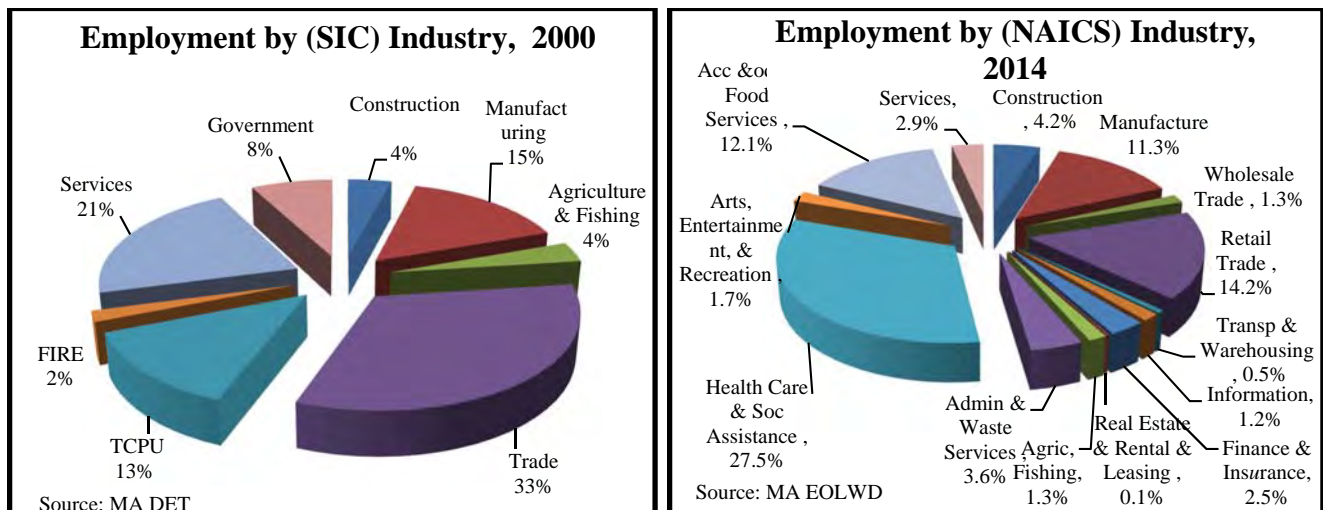
In recent years, development along U.S. Route 6, especially in the area adjacent to its intersections with State Route 240 and Alden Road, has become a major shopping area for Fairhaven residents, and surrounding towns.

The trend in unemployment rates in Fairhaven is also tracked in this section.

## Employment by Industry

Categorization of industries changed from Standard Industry Classification (SIC) to North American Industry Classification (NAICS) in 2000. In Fig. 7, the breakdown the industry types for both categories are separately featured: for 2000 using SIC, and for 2014 using NAICS.

**Fig. 7 Comparative Employment by Industry in Fairhaven: 1990 and 2013**



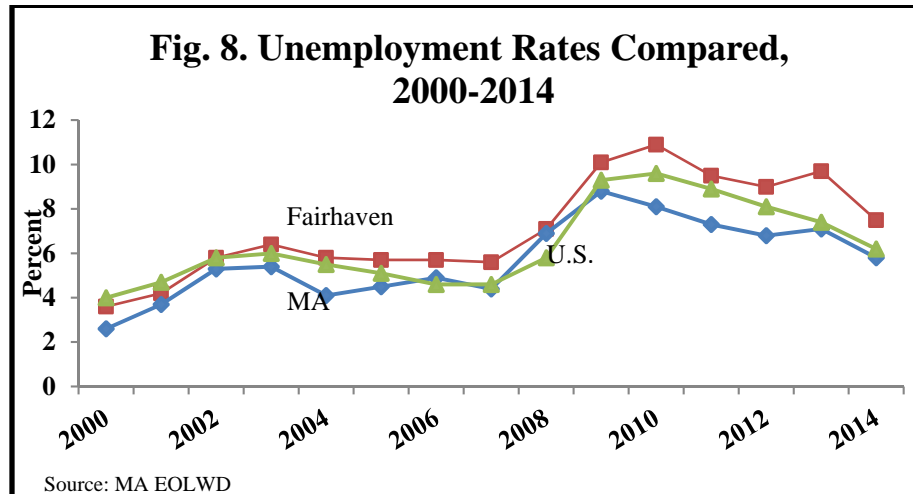
It is apparent from the charts that Trade (Wholesale and Retail) was the major source of employment in Fairhaven as of 2000. By 2014, the Health Care and Social Assistance sector had superseded Trade. Meanwhile, manufacturing employment declined in the town in 2014 compared to it's the sector's share in 2000.

## Unemployment

Fig. 8 shows the trend in unemployment rates from 2000 to 2014 for Fairhaven, the state, and the nation.

Unemployment trends before and during the economic recession are reflected in Fairhaven's situation where rates remained relatively stable up to pre-recession years, then soared to double-digit levels soon after the economic downturn (Fig. 8). More recently, a modest decline was observed. Compared with the state and the country, the town's unemployment rates were higher throughout the mid-2000s to 2014.





The type of jobs available and the kind of industries located in Fairhaven will have some impact on the planning process of the town's Open Space and Recreation. Likewise, the trend in unemployment rates among the town's labor force compared to the state and nation is a vital factor in gaining some insights on how the sports facilities or open space parks will be utilized. Definitely, the economic status of the residents bears heavily on their choice and preferences for recreational time and leisure.

## F. Housing Characteristics

A town's direction for growth is mostly limited by its land area and population density. This section looks at the Fairhaven town's housing stock, the issuance of building permits for residential housing, as well as the cost of housing in the town and neighboring communities.

### Housing Stock

Table 5 presents the housing stock in Fairhaven from for two decades: from 1990 to 2010.

| <b>Table 5. Housing Characteristics, 1990-2014</b> |             |             |             |
|--|-------------|-------------|-------------|
|  | <b>1990</b> | <b>2000</b> | <b>2014</b> |
| Housing Units                                      |             |             |             |
| Total  | 7,093       | 7,266       | 7,532       |
| % Occupied   | 89.7        | 91.1        | 89.8        |
| Housing Tenure                                     |             |             |             |
| Total Occupied                                     | 6,359       | 6,622       | 6,764       |
| % Owned  | 70.1        | 72.5        | 72.5        |

Source: U.S. Census Bureau

As the data suggest (Table 5), Fairhaven had a seemingly controlled number of housing units: only about five percent increase in two decades. The same is true for house ownership. Additionally, the ratio of owners and renters remained stable from 1990 to 2014.

### Issuance of Building Permits

How the town prefers to utilize its land for residential purposes is usually reflected in the number of residential permits they issue annually. Fairhaven's trend in issuance of residential building permits from 2000 to 2014 is shown in Fig. 9.



Clearly, the peak year of housing growth in Fairhaven was around 2005 when 98 permits were issued. Moreover, Fig. 9 underlines the town's response to the housing downturn when very few permits were issued.

### Single Family Residential Home Costs

The price of single family homes in Fairhaven from 2000 to 2014 is shown in Fig. 10.



Following the housing bubble across all geographic levels, Fig. 10 presents the dip in cost of a single family house in Fairhaven around the years 2008 to 2011. The data also suggest a slow recovery of the housing market by 2014.

Using a comparative perspective should help determine how Fairhaven housing costs stand with other towns in the area. Table 6 presents the median selling price of single residential houses in three adjacent communities with corresponding percent changes within a 20-year period.

| <b>Table 6. Percent Change in the Cost of Single Family Homes, 1990-2014</b> |  |             |                                |
|--|--|-------------|--------------------------------|
|  | <b>Median Sales Price<br/>(One-Family Homes)</b> |             |                                |
|  | <b>1990</b>                                      | <b>2014</b> | <b>% Change,<br/>1990-2014</b> |
| Fairhaven  | \$108,000  | \$226,000   | 109%                           |
| Acushnet   | \$105,000  | \$218,500   | 108%                           |
| Mattapoisett   | \$150,000  | \$365,000   | 143%                           |
| New Bedford  | \$ 99,900  | \$174,929   | 75%                            |
| Source: The Warren Group   |  |             |                                |

It is quite clear from the data that the price of a single family house in Fairhaven is not as high as Mattapoisett's, nor as low as New Bedford's. Furthermore, the cost of such houses in the town between 1990 and 2014 had increased quite dramatically.

The importance of considering housing conditions in an Open Space and Recreation in terms of the residents' needs for escape from home or their immediate environs, or their desire for seeking escape and refuge from the daily grind, should not be overlooked. Whereas the global economic downturn controlled the construction of additional houses, a recent indication of a recovery was detected, hence a cause for some economic optimism.

## **G. Growth and Development Patterns**

### *Patterns and Trends*

The Massachusetts Audubon Society's Losing Ground: Planning for Resilience report (2014), contains a statistical profile of land use trends in all 351 cities and towns in Massachusetts between 2005 and 2013. In the context of the Audubon report, natural land is defined as forest, wetland, and water; open land is defined as agricultural areas, bare soil, or low vegetation, and; developed land includes low density residential and commercial/industrial/high density residential development. Most of this recent development centered around Fairhaven's town center and west side towards New Bedford Harbor. Historically, the 46 acres developed between 2005-2013 pales in comparison to the amount of land consumed by development in Fairhaven and along the South Coast during the previous economic boom periods during the late 1980's and late 1990's.

Presently, about 40% of the land in Fairhaven (3,183 acres) has been developed for residential, commercial, industrial, or other purposes. Forest, wetlands, and open space presently account for about 58% of the land in Taunton (4,580 acres). Of Fairhaven's total of 7,942 acres, 1,529 are protected.

The decline in the amount of active agricultural land in Fairhaven and communities throughout southeastern Massachusetts, reflects the region's aging farming population and the trends in the lifestyle choices of their heirs. Many older farmers are retiring and their farms are not being retained for agricultural purposes by their heirs. For those who do continue to farm the land, diversification, value-added products, and specialty crops have made agriculture an economically viable pursuit. In Fairhaven, significant amounts of long-time, family owned and operated farmland, have been preserved, through significant local and partnership efforts, particularly in the last fifteen years.

Finally, Fairhaven municipal departments, along with regional conservation partners, were able to protect, in perpetuity, an additional 428 acres between 2005 and 2013, according to Mass Audubon's Losing Ground, data, in addition to the 135 preserved in Fairhaven through the multi-partner Nasketucket Bay Conservation Project in 2014.

### *Infrastructure*

#### **a) Transportation**

Several important transportation routes and systems either traverse or skirt Fairhaven. State Routes 240 (running north-south) and 6 (running east-west) are major bisectors of the Town. Interstate 195 (running east-west) also passes through north Fairhaven, with an interchange located in the northern part of the town (at Route 240). These routes all make Fairhaven very accessible to motorists throughout the region. The Fairhaven Highway Department maintains approximately 105 miles of roadway.

The MBTA, since the mid 1990's, has engaged in a very long, studied, and at times, controversial planning process to restore commuter rail service between Fall River, New

Bedford, and South Station in Boston. This process took shape in the form of the South Coast Rail Corridor Plan (2009). The route alignment plan has been vetted publicly through two extensive federal, state, and local review processes. The preferred alignment would bring the rail from Boston, through Stoughton, Easton, and Taunton before splitting off to New Bedford and continuing on to Fall River. Some preparation work for the proposed rail expansion has been done in New Bedford and Fall River, at the ends of the line, but the entire project may not be realized (pending funding) until 2029 or later.

The Southeastern Regional Transit Authority, SRTA, headquartered in neighboring New Bedford, is the local transit agency, and provides direct service to the Route 6 commercial center. SRTA also provides pick-up/demand ride services based upon eligibility.

Fairhaven is one of the most bicycle friendly communities in southeastern Massachusetts. Biking opportunities exist throughout the town, and have been constantly expanded and improved whenever possible since the completion of the Phoenix Bike Path in 1997 (the first bike path designed and built under the regional Transportation Enhancements Program in the SRPEDD region). The Phoenix Bike Path provides a connection from the commercial center of Fairhaven to some of its most scenic natural areas, including coastal areas via the Little Bay loop. The Phoenix Bike Path also connects to the Mattapoisett Bike Path at the town line (as part of a long-range effort to Fairhaven, Mattapoisett, Marion, and Wareham as part of the South Coast Bikeway). This connection also affords Mattapoisett residents access to the Route 6 commercial area in Fairhaven.

#### b) Water

The BPW's Water division provides 1.3 million gallons per day to approximately 6,700 customers. All of Fairhaven's drinking water is purchased from the Mattapoisett River Valley Water District (MRVWD), of which Fairhaven, Mattapoisett, Marion, and Rochester are members. The MRVWD system consists of eight (8) groundwater wells, four (4) of which are Fairhaven wells, that pump directly to the MRVWD Treatment Facility in Mattapoisett.

The Mattapoisett River Valley Aquifer Water Supply Protection Committee, working in conjunction with federal, state, local, and regional partners (the Buzzards Bay Coalition, in particular), have protected 1,468 acres of land critical to water supply protection in the Mattapoisett River Valley, since 2001. This figure translates to approximately 17% of the Valley, including 28% of the Zone II (state approved wellhead protection area) for the wells. (see Appendix C).

#### c) Sewer

The Fairhaven BPW's Sewer/Wastewater Division operates two Water Pollution Control Facilities in town. The principal facility is located on Arsene Street, and services approximately 5,700 customers, and has a design flow of 5 million gallons per day, with an average daily flow of 2.7 million gallons (10% of which comes from Mattapoisett).

The second facility is located on West Island. The West Island facility has a design flow of 100,000 gallons per day, with an average daily flow of only 18,000 gallons. The West Island facility serves 366 homes.

The wastewater infrastructure maintained by the Sewer/Wastewater Division includes seventy-five (75) miles of sewer lines and fifteen (15) pumping stations.

### *Long-Term Development Patterns*

#### a) Zoning

In July of 2009, and again in July of 2014, Fairhaven passed amendments to its Floodplain and Nasketucket River Basin Districts in order to comply with the new Federal Emergency Management Agency (FEMA) Draft (2009) and Final (2014) Flood Insurance Rate Maps (FIRM) for the town (**see Section 10, Maps, Zoning and Land Use Maps**). The adaptation of supplemental language relevant to the updated maps and reconfigured flood zones provides an additional planning tool for flood prone/at risk areas as well as keeps local homeowners eligible for the state and federal flood insurance programs.

Another effort undertaken by the town, in conjunction with the South Coast Rail Project, and tied to local zoning and planning protocol, is the designation and mapping of Priority Development (PDA) and Priority Protection Areas (PPA) within the community. This community driven planning exercise was originally conducted in 2008 by the three regional planning agencies serving the thirty-one (31) communities addressed in the South Coast Rail Corridor Plan. In 2013, the regional planning agencies, including SRPEDD, revisited the original process and choices as part of a five-year update process.

PDAs are areas that are appropriate for increased development or redevelopment due to several factors, including: good transportation access; available infrastructure (primarily sewer and water); an absence of environmental constraints, and; local support. PDAs can range from a single parcel to many acres, and can include small scale infill, commercial, industrial, mixed-use, transit facilities, or other such projects.

PPAs are areas that are important to protect due to the presence of significant natural or cultural resources, including, but not limited to: rare and endangered species habitats; areas critical to water supply; historic areas; scenic vistas, and; agricultural areas. PPAs can also vary greatly in size, from small species dependent areas, to large expanses of intact habitat. These sites may be candidates for protection through acquisition, conservation restriction, or other means.

A community's Priority Area designations can guide municipal decisions about zoning revisions, infrastructure investments, and conservation efforts. In addition, these Community Priority Area designations are used as the foundation for developing Regional and State Priority Area designations. Finally, in the fall of 2010, the Patrick Administration issued Executive Order 525 (E.O. 525) providing for the implementation of the South Coast Rail Corridor Plan and Corridor Map (including PPAs and PDAs) through state agency actions and investments. These state actions have the potential to help leverage local and private investments in the priority areas. (see PPA-PDA: Fairhaven Community Priority Areas, Appendix F)

## b) Build-Out Scenario

Existing zoning and planning regulations, in combination with the town's current annual growth rate and amount of available land, are all considered in predicting what Fairhaven could look like at full build-out (meaning, if all potentially developable land was built upon; see Section 10, Maps, Zoning Map and Land Use Map).

The potential build-out impacts for Fairhaven have been updated by the Planning Department to account for 2010 data, and are summarized below. It is important to note that the full build-out has no time frame associated with it, but reveals conditions when full build-out (consumption of all developable land) is finally achieved.

### *Summary of Build-Out Impacts*

|   |             |
|---|-------------|
| Additional Developable Land Area (sq. ft.)                      | 148,343,537 |
| Additional Residential Units*                                   | 5,624       |
| Additional Residents  | 14,060      |
| Additional Commercial/Industrial Buildable Floor Area (sq. ft.) | 4,262,935   |
| Additional School Children at Build-Out                         | 3,937       |
| Additional Water Demand at Build-Out (total, gallons/day)       | 1,374,190   |
| Additional Residential Water Demand at Build-Out                | 1,054,470   |
| Additional Commercial and Industrial Water Demand at Build-Out  | 319,720     |
| Additional Municipal Solid Waste (tons/year)                    | 7,213       |
| Additional Roadway at Build-Outs (miles)**                      | 64          |

These build-out projections are based on the consumption of all developable land (numbers are based on areas calculated, including wetlands) with no definite time frame. There will undoubtedly be changes made to zoning, planning, and conservation regulations over time. There will be improvements made to the infrastructure that may well be accompanied by restrictions that limit growth potential (sewerage capacity, available water supply, etc.). The build-out's ultimate value is that it presents us with a worst case scenario while we still have time to make beneficial regulatory and policy changes.

\* Assumes that number of lots is equal to number of units

\*\* Assumes that all lots require 100 feet of frontage

## **Section 4: Environmental Inventory and Analysis**

### **Overview**

Fairhaven's environmental inventory is determined by its geology, soils, diverse natural communities of plants and animals, and includes important coastal and inland water resources. These elements form the character of its landscapes and the richness of its bio-diverse natural communities. The town and its residents reside in a mosaic of important natural community systems of plants and animals.

### **Eco-regions**

Eco-regions contain geographically distinct assemblage of species, natural communities and environmental conditions and help to inform conservation strategies. Climate, hydrology, and species distribution locates the majority of Fairhaven in the Narragansett-Bristol Lowlands eco-region (as described by the MA NHESP), which is characterized by flat gently rolling plains, hardwood forests, wetlands, croplands/pasture and river drainage. West Island, however, is part of the Cape Cod and the islands eco-region, which was formed by the advances and retreats of the Wisconsin ice sheet, and is characterized by sandy beaches, bays, marshes and oak-pine forests. Fairhaven shares characteristics from both eco-regions, more specifically described below.

### **Geology, Soils, Topography, Climate, and Water Resources**

#### **Geology**

Fairhaven is located on a coastal plain which was formed as outwash from the last glacier over 10,000 years ago. The meltwater from the glacier deposited soil, sand, stone and gravel over till from earlier glacial advances and left many small valleys that are now the courses of brooks, small streams, and rivers that flow into Buzzards Bay, such as the Acushnet and Nasketucket Rivers. Low areas between the hills deposited by the glaciers also became wetlands as they filled with sediment and developed the specialized flora that could stand developing in wet soils. Fort Phoenix and Sconticut Neck are two of the few places in Town where the underlying bedrock is near the surface or exposed. At 700+ million years of age, this pre-Cambrian metamorphic rock is among the oldest in New England. (see **Section 10, Maps, Surficial Geology Map**)

#### **Soils**

Fairhaven's soils are the result of the geological and glacial history of the area, the underlying bedrock, surface and subsurface water, and the interaction of these factors with the flora and bacteria that live on or in the soil. These factors result in soils with different characteristics that influence land use and open space character. For example, soils that have high groundwater levels may preclude the development of conventional underground septic systems for the disposal of human wastes. Soils that are extremely stony and have many large boulders can present difficulties for construction and increase the cost of development. Deep, loamy soils are generally good for agriculture. (see **Section 10, Maps, Prime, Hydric, and Farmland Soils Maps**)



The accompanying maps delineate broad areas of soil types found in Fairhaven. The following are the predominant soils:

**Hinckley** (HgB, HgC) and **Merrimac** (MeB): These soils are deep, moderately steep or hilly and deep and moderately level. They are excessively drained and well-drained soils that have formed in deep deposits of sand and gravel. They are moderately to rapidly permeable in the upper part of the soil and rapidly to very rapidly permeable in the lower part. Water tables are generally greater than 6 feet. These soils are generally favorable for development.

**Gloucester** (GcB, GhC) and **Paxton** (PfB, PgB, PhB): These soils are deep, very stony and extremely stony, rolling and hilly. This material is underlain at a shallow depth, 1 ½ to 3 feet, by firm compact material referred to as hardpan. The permeability of these soils is moderate to moderately rapid in the upper part and slow to very slow in the lower part. Water tables are generally at a depth greater than 6 feet in these soils. These soils are moderately to severely limited for many forms of development.

**Carlton** (CtC): Well-drained soils that have formed in complex area of both deep, stony and bouldery material, and shallow to bedrock with areas of rock outcrop. In areas of thick unconsolidated soil material, the permeability is moderate to moderately rapid throughout. Water tables are generally to depths greater than 6 feet in areas of these soils. These soils are moderately to severely limited for many forms of development.

**Woodbridge** (WrB, WsB, WtB, WrA): Fine sandy and very stony fine sandy loam. This soil is deep, gently sloping and moderately well-drained. Soil is underlain at a shallow depth, 2 to 3 feet by a firm, compact material referred to as hardpan. The permeability of these soils is moderate in the upper part and slow to very slow in the lower part. Water tables in areas of these soils are at a shallow depth, usually 1.5 to 4 feet, during the wet periods of the year. These soils are moderately to severely limited for many forms of development.

**Ridgebury** (ReA, ReB, RdA, RdB) and **Whitman** (WgA, WhA): Fine sandy loam and extremely stony fine shady loam. These soils are found in depressions, drainage ways and low areas on the uplands. These are poor and very poorly-drained mineral soils that have formed in materials ranging from sand and gravel to silt and clay. Permeability of these soils varies greatly depending upon what material they have formed over. These soils are wet and have a water table at or near the surface during wet periods of the year. These soils are severely limited for many forms of development.

### **Development Limitations and Agricultural Soils**

Many of the soils found in Fairhaven have significant limitations for development such as large stones, wetness, slow perc rates, and frost action. However, it is important to note that many of these generalized soil types occur in very intricate patterns and most land parcels will have areas with few limitations. Many of the limitations can also be overcome by skillful design and added costs for construction. Many of the undeveloped parcels that contribute to the Town's character are potentially available for development.

There are several areas in Town that have soils that are good for agriculture and several other areas with good agricultural soils that have been or are being developed. Some of the agricultural lands also have moderate or moderate to slight limitations for development and as such could be easily lost as open space.

### **Topography**

Fairhaven occupies an area of approximately 12.5 square miles or 8017 acres. Its topography is mostly gently rolling, ranging in elevation from sea level to 90 feet. Its open land includes pasture and meadowland, fresh water wetland, low, wooded hills and areas of tide flats, salt marsh and sandy beaches.

The town has a total shoreline of approximately 29.4 linear miles according to the Massachusetts Coastal Zone Management Program. The coastline consists of intermittent bays and coves formed by the meltwater from the last ice age.

### **Climate**

Fairhaven's climate is similar to that of its southeastern coastal neighbors. Extremes of heat and cold, which are felt in more inland locations, are tempered by the Town's proximity to Buzzards Bay. Winter temperatures average 30 degrees Fahrenheit and range to an average of 70 degrees in summer.

The average annual precipitation is approximately 42 to 45 inches, depending on the location within the Town. Prevailing winds are westerly with more northwesterly winds in the winter and southwesterly winds in the summer. The average growing season in Fairhaven is approximately 200 days per year.

### **Surface Waters**

The most notable water resource in Fairhaven is its 29.4 miles of coast on Buzzards Bay, New Bedford Harbor and the Acushnet River. Sconticut Neck and West Island, which juts 4.5 miles from the mainland into Buzzards Bay, form most of the coast along this area. Localized water bodies have been formed by the interplay of land and water. These are Shaw's Cove, Stony Cove, Little Bay, Nasketucket Bay, and Priests Cove. **(see Section 10, Maps, Water Resource Map)**

Freshwater resources consist of the Nasketucket River, which rises in northeast Fairhaven and flows south through several small ponds into an estuary in Little Bay. Its watershed is important as a reserve source of groundwater for drinking. A water resource protection overlay zoning district has been established in the watershed. The Swift Brook watershed, which lies east of New Boston Road, feeding southeastward into the Mattapoissett River Estuary in Mattapoissett is important as a drainage feature.

Fairhaven's coastal area consists of the following landform types, shown in Table 7, according to a 1985 report issued by the Lloyd Center for Environmental Studies and the Massachusetts Office of Coastal Zone Management.

**Table 7**  
**Coastal Land Form Types**

| <u><b>Type</b></u> | <u><b>Acres</b></u> |
|--------------------|---------------------|
| Salt Marsh         | 607.5               |
| Tidal Flats        | 582.1               |
| Marine Flats       | 442.0               |
| Estuarine Flats    | 140.1               |
| Barrier Beach      | 86.3                |
| <b>Total:</b>      | <b>1,858.0</b>      |

Storms and natural beach building activities have resulted in several more barrier beaches being created since 1985. Coastal lands are quite extensive, accounting for about 23% of total acreage in Fairhaven. These coastal lands serve a number of important functions including recreation, shell fishing, provision of habitats for wildlife, storm impact abatement, filtering of contaminants, nutrient storage, supplying beach building materials and erosion control. Barrier beaches, of which there are 23 segments in Fairhaven, abate storm waves, lessen flooding, ease erosion of other coastal areas, provide materials for beach-building, and provide feeding and breeding grounds for coastal and migratory birds.

### **Shellfishing**

Shellfishing is a long established activity in Fairhaven. Its waters have historically produced an abundant harvest of scallops, quahogs, soft-shelled clams and oysters. Industrial and domestic pollution have caused a number of shellfish beds to be closed. Closed areas include the Acushnet River, New Bedford Harbor and waters of Buzzards Bay and Priests Cove west of Sconticut Neck to the southern tip of Rickerson's Point in Dartmouth. Sewage outfalls and PCB discharges have been the cause of these shellfish beds closures. In 1988 the loss of shellfish in the closed area west of Sconticut Neck (not including New Bedford Harbor) was estimated by the Conservation Law Foundation to be 186,784 bushels. Since the 1995 plan some of the above mentioned areas are now open on a conditional basis based on a rain schedule. This conditionally approved area is south of a line from Baxter Avenue to Egg Island.

### **Drainage**

Fairhaven has three drainage areas; coastal, estuarine and inland. The coastal area includes Shaw's Cove, Little Bay, Sconticut Neck, West Island, and the area from Sconticut Neck to Fort Phoenix. Runoff in this area flows into small coastal streams or directly into the coastal waters. The estuarine area includes lands draining westward into New Bedford Harbor and the Acushnet River. The river begins north of the route 6 (Huttleston Avenue) Bridge. Most of the natural drainage of this area has been altered by development over a 300-year period. Several small ponds and streams in the area have been filled and captured in drainage pipes that flow into New Bedford Harbor or the Acushnet River.

The inland areas of Fairhaven, including East Fairhaven and the interior wetland areas are drained primarily by the Nasketucket River system, which flows into Little Bay. A small portion of the northeast section of Fairhaven is drained by Swift Brook flowing into Mattapoisett and the Mattapoisett River Estuary. Floodplain development, where it has occurred in Fairhaven, is primarily residential and recreational.

### **Flooding**

The major flooding threat in Fairhaven occurs on low-lying coastal lands. These are subject to periodic flooding and wave damage resulting from coastal storms. Most storms cause damage only to boats, low coastal roads, beaches and seawalls. The northern portion of Sconticut Neck Road (between Norton Street and Grape Street), a part of the Southern portion of Sconticut Neck Road (south of Camel Street) and the causeway to West Island are all about 15 feet above mean sea level. High storm waters have flooded these road segments and surrounding residential areas. Storms that pushed water levels to between 12 and 13 feet above mean sea level were recorded in 1938 and 1954. Waters pushed by high winds, large waves and tidal action can regularly exceed the 15-foot level, resulting in coastal flooding of these areas.

A hurricane barrier has been constructed across the mouth of the New Bedford Harbor. Another barrier has been extended in the form of a dike across the tidal marshes at the head of Priest's Cove. These structures provide protection from coastal storms to the developed areas in Fairhaven Center. Other protective structures exist that have been built by the Town and by private parties, but they are smaller and provide only localized protection.

Some flooding can occur along New Bedford Harbor and the Acushnet River when run-off is high and storm surge activity is strong at the gate of the hurricane barrier. (see **Section 10, Maps, FEMA National Flood Hazard Map**)

### **Aquifer Recharge Areas**

The aquifer recharge area is located in the Nasketucket River Basin in the northeast quadrant of Fairhaven. The zoning that protects it runs from U.S. Route 6 (or just 200 feet north of it) for part of the southern boundary, to the Acushnet Town Line. As noted, this area is largely undeveloped and contains large areas of forested swampland. This aquifer provides water for a Town well that is currently unused. It is an emergency water supply, and was the Town water supply until wells were developed in the Mattapoisett River watershed in Mattapoisett. (see **Section 10, Maps, Water Resources, and Appendix C**)

An overlay water protection-zoning district does not protect the Swift Brook area of Fairhaven because it does not provide any public drinking water. It is zoned for rural residence, with a 30,000 sq. ft. minimum lot size. There is a very small area at the intersection of New Boston Road and Charity Stevens Lane zoned for business. The entire area is composed primarily of forested wetlands. The only developments in this area are a few homes on large lots along New Boston Road.

## **Wetlands, Natural Communities of Plants, Animals, and Rare Species**

Fairhaven's wetlands occur in a variety of settings, from coastal to wooded swamp. The Wetlands Protection Act [Massachusetts General Laws (MGL) Chapter 131, Section 40] protects wetlands and the public interests they serve, including flood control, prevention of pollution and storm damage, and protection of public and private water supplies, groundwater supply, fisheries, land containing shellfish, and wildlife habitat. Fairhaven contains all 18 interests protected by the Act. Fairhaven's wetlands are in coastal systems, including barrier beach, coastal beach, open water, tidal flats, salt marshes, as well as freshwater wetlands including interior forested and shrub wetlands.

Fairhaven's wetlands are home to a variety of natural communities of native plants and animals, including some vulnerable natural coastal communities, such as maritime shrublands, saltmarsh, and maritime forests, as well as communities that are uncommon but not rare (yet) such as coastal forests and riverine wetlands. Some of the most at risk communities in the state are where coastal wetlands change to freshwater in estuaries.

Natural communities are formed by environmental conditions including vegetation, soil, conditions of wetness and/or dryness, nutrients, the presence of salt, and proximity to bodies of water. For conservation purposes, they are ranked from S1 to S5, with S1 communities identified as critically imperiled in Massachusetts to S5, common and widespread.

Conservation, management and restoration of the following Fairhaven wetlands, and natural communities of native plants and animals should be considered an important and ongoing conservation goal.

### **Coastal Wetlands and Natural Community Systems**

Fairhaven's 29.4 mile coastline is home to coastal bank, coastal beach, coastal dune, open water, rocky intertidal shore, salt marsh, barrier beach, tidal flats, maritime shrublands, maritime forest/woodlands, and coastal forest/woodlands. Many of these are identified as home to vulnerable natural communities of plants and animals.

### **Communities of Beach Plants and Animals**

Beaches are subject to storms, winds, and daily tides. This constant change creates a demanding physical environment for plants and animals. Where the beach meets the water is known as the swash zone, the top of the beach can build up into dunes or unstable sand ridge. Natural communities of plants and animals exist in the intertidal area, above the wrack line, and in the dunes.

NHESP recognizes three natural maritime beach communities that occur in Fairhaven: **intertidal gravel/sand beach community** (S4 –secure), **maritime beach strand community** (S3 – vulnerable), and **maritime dune community** (S-3 – vulnerable). Each community occupies a

specific zone below or above the high tide wrack line. The Maritime Dune Community is usually associated with barrier beaches in a mosaic with other communities.

Barrier beaches are narrow low-lying strips of beach (and dunes) that are roughly parallel to the main coast. They are often attached to the mainland at one or both ends often separated by a wetland or body of water. Types of Barrier Beach wetlands identified by the DEP in Fairhaven include, coastal beach, coastal dune, deep marsh, marsh, open water, shrub swamp, wooded swamp deciduous, coniferous, and mixed trees.

Barrier beaches are extremely important in absorbing energy from nor'easters and other weather events. According to the 1982 Massachusetts Coastal Zone Management's website, Fairhaven has approximately 23 segments of barrier beaches, consisting of 86.3 acres. These figures are subject to change with increasing erosion, sea level rising, and continued storm surge activity.

Examples include West Island Town Beach, Hoppy's Landing, and many locations along Sconticut Neck, Shaw's Cove and Fort Phoenix.

**Plants:** The root system of American dune grass is essential to dune and high beach stability. Other important native plants in the maritime strand community include Seaside goldenrod, beach pea, sea-rocket, seabeach orache, seabeach sandwort, and seaside saltwort. At the top of the beach, shrubs such as bayberry may also stabilize the dunes. Beach rose (*Rosa rugosa*) is considered invasive, although it also stabilizes the dunes. Other common exotics include Russian thistle and seaside poppy. Common reed (*Phragmites australis*), although most common in brackish and salt marshes, can also invade the high beach/dune area. (Non-native plants are considered less productive from a biodiversity perspective although not all non-native/exotic plants are considered to be invasive.)

**Animals:** Where the waves come on shore is called the swash zone habitat and is inhabited by mud worms, digging amphipods, Coquina clams and mole crabs which are eaten by shorebirds. Barrier Beaches provide nesting habitat for rare shorebirds like the least tern and the piping plover. Migratory shorebirds use barrier beach systems for resting and foraging during migration. Seals also use beaches for haul out. Shorebird species that use this type of habitat include semipalmated plover, sora, ruddy turnstone, sanderling, red knot, black back gull, ring-billed gull, and the herring gull. Mammals that feed on and around the wrack include red and gray fox, striped skunk, raccoon, coyote and rodents. Invertebrates include tiger beetles and beach flies.

### **Salt Marshes**

Fairhaven has 607 acres of salt marsh according to CZM's 1985 statistics. Salt marshes are extremely important for they provide a diverse habitat and nursery for two-thirds of shellfish and commercial or sport fish during their early life stages. These economically important juvenile species use the marsh for feeding, shelter and protective covering. They also filter out nutrients and sediments from runoff. Nutrients such as phosphorus and nitrogen are taken up by plants and converted into plant biomass. And a variety of other pollutants can be taken up by the plants or held in the marsh soil.

Salt marshes are nearly flat, coastal grassland community subjected to periodic flooding and ebbing of tides. Its vegetation is dominated by extensive and nearly pure stands of two types of

grasses, *Spartina alterniflora*, (saltwater cordgrass) and *Spartina patens*, (saltmarsh hay). The unique character of the saltmarsh community lies in its development of intertidal location where it is influenced both by seawater and fresh water runoff. Salt marshes are generally found in sheltered areas of the coast. The low marsh is flooded daily by two tides and is dominated by the hardy salt water cordgrass. The high marsh is the part of the marsh that is periodically flooded during higher tides. Plants in the high marsh include salt marsh hay (which gives the high marsh a defining "cow licked" appearance), black grass and spike grass. The upper marsh is the highest portion of the marsh and is flooded only during moon tides and storms. Plants in this area include seaside goldenrod, high tide bush, and *Phragmites*. Homeowners often cut the plants in the upper marsh unknowingly. These plants can tolerate occasional flooding of saltwater and are more suited to the coastal environment than most landscape plants. The upland edge of a salt marsh is home to plants (such as bayberry), which are known as coastal buffer plants and can tolerate occasional salt spray. These plants provide an important buffer between a homeowners managed landscape and the Bay.

Saltmarsh is a NHESP recognized natural community, ranked S3, or vulnerable.

Examples of Fairhaven's salt marshes surround Little Bay, Nasketucket Bay, east and west Sconticut Neck and West Island, and the bay to the south of Egypt Lane.

Plants: Seaweeds (wrack and detritus), salt-hay (*Spartina patens*), saltwater cordgrass (*Spartina alterniflora*), spike grass, black grass (actually a rush), sea lavender, saltmarsh fleabane, saltmarsh aster, glassworts, saltworts, switch grass, marsh-elder, eastern false willow. Non-native invasive plant *Phragmites australis* takes over brackish and high marsh, significantly reducing native plant populations, and ultimately reducing the richness of plant and animal species.

Animals: The saltmarsh food chain begins with the decomposition of marsh grasses by bacteria and fungi, which are in turn eaten by snails, zoo plankton and tiny crustaceans. Further up the food chain are crabs, amphipod crustaceans, ribbed mussels, and snails. Dragonflies patrol the marsh for no-see-ums, greenheads, and other biting flies. These insects in turn, provide food for resident and migratory shorebirds and waterfowl, who nest, and forage in and around the saltmarsh. Birds of prey seen hunting over the saltmarsh include Osprey in the summer and in the winter Snowy Owls, and Northern Harriers (also called Marsh Hawk) all year around. Saltmarsh mudflats, creeks, and estuaries also provide a nursery for many marine species including commercially important fish and shellfish. A partial list of species that depend on salt marshes for at least some of their life cycle includes: Horseshoe crab, whelk, ribbed mussel, clam worm, saltmarsh flea, green crab, northern puffer, Atlantic silverside, pipefish, mummichog, bluefish, winter flounder, striped mullet, Atlantic tomcod, hogchoker, snails, periwinkles, soft shell clams, ivory barnacle, common spider crab, hermit crab, fourspine stickleback, threespine stickleback, flounder, alewife, Atlantic herring, windowpane, American eel, sheepshead minnow, soft shell clam, oyster drill, common oyster, grass shrimp, blue crab, fiddler crab, silverside, Atlantic menhaden, striped killifish, white perch, Northern pipefish, Tautog, blueback herring, cunner, scallop.

## **Tidal Flats**

Tidal flats are defined as those nearly level parts of coastal beaches, which usually extend from the mean low water line landward to the more steeply sloping face of the beach, or may be separated from the beach by an area of deeper water. They are exposed during periods of low tide and may or may not be connected to the rest of a coastal beach area. They are generally shorelines exposed to the open ocean or within estuaries functioning as habitats for shellfish, and other species. Tidal flats are also important during storm surges acting as a barrier to the area behind it, while providing sediment to down current beaches.

Examples in Fairhaven exist at the Winsegansett marshes on Sconticut Neck, on the east side of West Island, and Shaw's Cove.

## **Estuaries**

An estuary is a partially enclosed body of water formed where freshwater from rivers and streams flows into the ocean, mixing with the salty seawater. Estuaries and the lands surrounding them are places of transition from land to sea, and from fresh to salt water. Although influenced by the tides, estuaries are protected from the full force of ocean waves, winds, and storms by the reefs, barrier islands, or fingers of land, mud, or sand that define an estuary's seaward boundary.

Estuaries come in all shapes and sizes and go by many different names, often known as bays, lagoons, harbors, inlets, or sounds. Though they may have many names, the defining feature of an estuary is the mixing of fresh and salt water, not the name. The tidal, sheltered waters of estuaries support unique communities of plants and animals, specially adapted for life in these unique areas. Estuarine environments are among the most productive on earth, creating more organic matter each year than a comparable area of forest, grassland, or agricultural land.

The productivity and variety of estuarine habitats foster a wonderful abundance and diversity of wildlife. Shore birds, fish, crabs and lobsters, marine mammals, clams and other shellfish, marine worms, and sea birds are just some of the animals that make their homes in and around estuaries. These animals are linked to one another through a complex food web.

Besides serving as important habitat for wildlife, water draining from the uplands carries sediments, nutrients, and other pollutants. As the water flows through fresh and salt marshes, much of the sediments and pollutants are filtered out. Wetland plants and soils also act as a natural buffer between the land and ocean, absorbing floodwaters and dissipating storm surges.

NHESP identified natural communities in Fairhaven associated with estuaries include Brackish Tidal Marsh (S2 – Imperiled) and Coastal Salt Pond (S2 – imperiled).

The **Brackish Tidal Marsh** community consists of mixed salt tolerant herbaceous vegetation that is flooded by daily tides. Plants associated with this community include narrow leaved cattails, saltmarsh bulrush, bentgrass, switchgrass, common bulrush, seaside-goldenrod, rosemallow, and saltmarsh sedge. These communities are frequently overtaken by the non-native invasive common reed (*Phragmites australis*).

**Coastal Salt Ponds** exist in coastal depressions, surrounded by land or partially isolated from the sea. Examples exist on West Island and on privately held land at the SW end of Sconticut



Neck. Salinity may vary considerably in these ponds. Plants may include beds of eelgrass or sea lettuce or be relatively free of vegetation. Specific saltpond species may include saltpond spikerush, saltpond flatsedge and pygmy-weed.

Both estuary communities provide outstanding general wildlife habitat with abundant food for migratory and wintering waterfowl, and is generally associated with spawning habitat for anadromous fisheries.

### **Maritime shrublands**

Maritime shrubland communities are dominated by patches of dense shrubs with scattered areas of more open low growth or bare ground. They occur along the coast within the direct influence of the ocean. Plants in these communities are regularly exposed to wind and salt spray. Maritime shrubland are part of the mosaic of maritime communities and may succeed to maritime forest over time. The State ranks these also as S3 – vulnerable.

Examples in Fairhaven can be found on West Island, Nasketucket, and Sconticut Neck.

Plants: Bayberry, beach plum, meadowsweet, native roses, sumac, black chokeberry, blueberries, black huckleberry, black cherry, greenbriar, poison ivy and Virginia creeper, goldenrods, asters, grasses, and sedges are common. Disruptive non-native plants include Asian bittersweet, privet, and Morrow's honeysuckle.

Animals: Shrub thickets provide nesting habitat for Northern Harriers, towhees and song sparrows. Migrating swallows and other birds forage on bayberries and other berries produced in the shrubland. Coastal plain shrublands are habitat to rare state moths whose larvae feed on the typical shrubs.

### **Forests and Woodlands**

#### **Maritime Forests/Woodlands**

Maritime Forests/Woodlands are mixed deciduous evergreen forests within the coastal salt spray zone. Vegetation growth is stunted by winds and salt spray resulting in shorter trees. (<30 ft.) Maritime Forests usually occur in a mosaic with other maritime and coastal communities. This community is ranked S3 – vulnerable.

Specific examples in Fairhaven include Nulands Neck, several locations on Sconticut Neck, and West Island. This natural community is considered imperiled in Massachusetts, given a rank of S2 by the NHESP.

Flora: Native plants may include white oak, black oak, Scarlet oak, other oak species, hickories, American holly, sassafras, black gum, black cherry, and red maple, American beech. Pitch pine, red cedar, greenbriar, poison ivy, Virginia creeper, grape, bayberry, inkberry, winged sumac, shadbush, sweet pepperbush, bracken (and other) ferns, Canada mayflower, partridge-berry, starflower, native sedges and grasses. Wetter areas may include swamp azalea, arrow-wood viburnum, winterberry, high bush blueberry, columbine, starry Solomon's seal, and skunk meadow-rue. Non-native invasives capable of disrupting the ecology of the forest/woodland

include Asian bittersweet, Japanese barberry, Japanese and Morrow's honeysuckles, common buckthorn and multiflora rose.

Fauna: Maritime forest/woodlands provide habitat for migrating songbirds, white tailed deer, gray squirrels, rodents, turkeys, salamanders, snakes, turtles, moths, butterflies and other insects.

### **Coastal Forest/Woodland**

Coastal Forests are mixed deciduous communities at or below 60 ft. elevation, that occur within several miles of the coast but out of the daily salt spray zone, although they are subject to wind and spray during storms. They receive more moisture, warmer winters, and cooler summers than inland forests. Away from the coast, upland forests (such as the 63-acre Town Forest) grade into mixed oak forest /woodlands.

Specific examples of Coastal Forest in Fairhaven are located on West Island, Sconticut Neck, Little Bay Conservation Area, and in protected parcels along Nasketucket Bay (the Nasketucket Bay Conservation Project, 2014, saw the Town, in conjunction with several state, federal, non-profit, privates foundation, and other partners, protect an additional 416 acres of land in this critically important area; this effort included approximately 226 acres of additional coastal forest and woodland). Coastal Forest Communities are uncommon but not rare - ranked S4 by MA Natural Heritage and Endangered Species Program. Many private lands also contain and support fragments of Coastal Forest.

Plants of the coastal forest will thrive in almost every location in Fairhaven that is not directly on the coast, although the degree of soil wetness may determine which plants do better than others in specific locations. Planting these native species is essential for the food web for all coastal forest fauna.

Flora: Native plants may include white oak, black oak, scarlet oak, chestnut oak, black gum, white pine, pitch pine, sassafras, American holly, red maple, black cherry, American beech, sweet pepperbush, blueberry, black huckleberry, Virginia creeper, poison ivy, grape, greenbriar, sedges, hay scented and bracken fern, wintergreen, wild sarsaparilla. Non-native invasive plants capable of disrupting the ecology of the forest include Asian bittersweet, Japanese barberry, Japanese and Morrow's honeysuckles, common buckthorn, privet, and multiflora rose.

Associated Fauna: Coastal Forests provide habitat for migrating songbirds and summer residents (like Rufous-sided Towhees, Gray Catbirds, Common Yellowthroats, Ovenbirds and wild turkeys), Mammals who use the coastal forest include white tailed deer, gray squirrels, meadow voles, and white footed mice. Resident amphibians include salamanders, frogs and toads. Snakes and turtles include Eastern Box turtles. Insect species include moths, butterflies, and other insects, including uncommon species.

### **Public Shade Trees**

Public shade trees are defined in Massachusetts General Law (MGL Ch. 87, Section 1) as trees within the public way or on the boundaries thereof. Shade trees are an important part of the aesthetic in an urban environment, and they also provide wind breaks, relief and shelter from the sun, help improve air quality, and provide stormwater uptake as well.

Fairhaven's Subdivision Rules and Regulations (Section 7) provide for the retention of urban shade trees as well as landscaping street trees and tree belts. Design standards also include a prescribed mix of species and a list of recommended street trees for landscaping.

### **Inland Wetlands, Natural Communities and Water Resources**

Freshwater wetlands are considered wet areas that range from seasonally and perennially damp areas to swamps. These wetlands are nearly all found flanking our freshwater rivers and brooks, together forming a complex and ecologically healthy drainage pattern. Inland wetlands are found throughout Fairhaven, draining predominantly from north to south. These include creeks, streams, and river, their borders, vernal pools, sphagnum moss swamps, a limited amount of shrubland, and deciduous forest/wooded swamps.

#### **Shrub swamps:**

There are three small areas of inland shrub covered swamps. Two of these areas, of less than 10 acres, are along the course of the Nasketucket River near the small ponds that occur there. The most northerly of these has residential development adjacent to it. The other is in a farm. A larger area of shrub swamp, adjacent to a forested swamp, is located just north of the interchange of I-195 and State Route 240. It generally follows the right-of-way of a major power line, lying just east of it. The wetland may have been created or enlarged by the highway interchange and power line, when land was disturbed, interfering with existing drainage patterns.

#### **Forested swamp:**

There are extensive areas of inland-forested swamp in Fairhaven. They are in the eastern half of the Town and follow fingers of lowlands that resulted from glacial melting. The soils map reflects these wetlands (See Soils and Wetlands Maps). The residential and agricultural development that has occurred in these areas is on the slightly raised uplands between the fingers of lower swampy-forested land. Wetlands follow the drainage channels out of the area, the Nasketucket River and Swift Brook, but are not confined to them. Wetlands also occur in other lowland areas. There are not large differences in elevation in the area; the highest points being 70 to 80 feet above sea level, with the wetlands occurring in the areas between 30 to 50 feet in elevation.

Common plants associated with Inland Wetlands in Fairhaven include black gum, red maple, silver maple, Eastern cottonwood, alders, winterberry, spicebush, high bush blueberry, swamp azalea, arrowwood, sweet pepperbush, elderberry, cranberry, marsh fern, royal fern, cinnamon fern, sensitive fern, blue-flag iris, swamp milkweed, water arum, duckweed, wild rice, swamp cabbage, arrow-head, many sedge and rush species, certain grasses, sphagnum and other mosses.

## **NHESP Rare Species and Biomap Core Habitat**

There are several species of shorebirds, reptiles, and vascular plants found in Fairhaven that are considered threatened, endangered or listed as “species of special concern”. These classifications specify native species which have been determined to be suffering a decline in numbers and are subject to different levels of special efforts to assure that their numbers are maintained, these include:

| <b>Taxonomic Group</b>     | <b>Scientific Name</b>                | <b>Common Name</b>       | <b>State Rank</b> | <b>Federal Rank</b> | <b>Most Recent Obs</b> |
|----------------------------|---------------------------------------|--------------------------|-------------------|---------------------|------------------------|
| Reptile                    | <i>Malaclemys terrapin</i>            | Diamondback Terrapin     | T                 |                     | 1988                   |
| Reptile                    | <i>Terrapene Carolina</i>             | Eastern Box Turtle       | SC                |                     | 1990                   |
| Bird                       | <i>Botaurus Lentiginosus</i>          | American Bittern         | E                 |                     | 1993                   |
| Bird                       | <i>Charadrius melodus</i>             | Piping Plover            | T                 | (LE,LT)             | 1996                   |
| Bird                       | <i>Sterna antillarum</i>              | Least Tern               | SC                | (PS,LE)             | 1998                   |
| Bird                       | <i>Sterna hirundo</i>                 | Common Tern              | SC                |                     | 1995                   |
| Vascular Plant             | <i>Dichanthelium mattamuskeetense</i> | Mattamuskeet Panic-Grass | E                 |                     | 1990                   |
| Vascular Plant             | <i>Polygonum glaucum</i>              | Sea-Beach Knotweed       | SC                |                     | 1989                   |
| Priority Natural Community |                                       | Sea-Level Fen            | S1                |                     |                        |
| Priority Natural Community |                                       | Coastal Forest/Woodland  | S3                |                     |                        |
| Priority Natural Community |                                       | Maritime Shrubland       | S3                |                     |                        |

The state follows the Federally Endangered Species Act definition for the following types of criteria.

*Endangered* ~ (E) Any species that is in danger of extinction throughout all or a significant portion of its range.

*Threatened* ~ (T) Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

*Special Concern* ~ (SC) 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. (Natural Heritage and Endangered Species Program, Massachusetts Department of Fish and Game).

A rank of S1 represents a Critically Imperiled community, typically 5 or fewer documented sites or very few remaining acres in the state. A rank of S2 indicates an Imperiled community, typically 6-20 sites or few remaining acres in the state. A rank of S3 indicates a vulnerable community, typically 21-100 sites or limited acreage across the state.

The Massachusetts Natural Heritage and Endangered Species Program (NHESP) maintain an atlas of all vertebrate and invertebrate species that are endangered, threatened or are of special concern in the state. Listed above are species that have been observed in Fairhaven.

NHESP's BioMap 2 identifies those areas of Massachusetts most in need of protection in order to conserve biodiversity for generations to come. Core Habitat consists of the most viable habitat for rare plants, rare animals and natural communities. The entire east coast of Sconticut Neck and West Island in Fairhaven plus Nasketucket Bay are included on the BioMap 2 "Core Habitat". Core Habitat consists of the most viable habitat for rare plants, rare animals and natural communities. (see **BioMap 2 summary in Appendix D**)

The Priority Habitats are areas with unique habitats and species considered to be priorities for conservation and management. *Priority species* require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. *Priority species* include State Endangered, Threatened, Sensitive, and Candidate species; animal aggregations considered vulnerable; and those species of recreational, commercial, or tribal importance that are vulnerable. *Priority habitats* are those habitat types or elements with unique or significant value to a diverse assemblage of species. A *priority habitat* may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element.

Priority habitats found in Fairhaven are located in the vicinity of Round Cove, Shaws Cove, barrier beach near Winsegansett Heights, Rocky Point and the area along the eastern shore of West Island. These areas should be considered a priority in planning for the future of Fairhaven. (see **Section 10, Maps, Wildlife Habitat Map for Priority Habitats, from the Priority Habitats of Rare Species produced by Natural Heritage & Endangered Species Program; also, see BioMap 2 in Appendix D**).

### **Vernal Pools**

Vernal pools are magical worlds that have become a natural gateway from aquatic to terrestrial for many organisms. They are defined as depressions that in most years contain water for a few

weeks to a few months and can completely dry up. Another important characteristic is that they do not contain fish. Pools begin filling with late autumn rain and freeze over during the winter cold. When spring finally arrives, the pools thaw and become a nursery. Vernal pool activity starts as early as the first spring rain, when many species that have lain dormant emerge. Several of these species have been genetically programmed to follow routes overland to the pools they will breed in. Distinctive calls from croaking Wood Frogs announce the location of a pool.

The Vernal Pools include two types of species. Obligate species, which depend on vernal pools for their existence, and facultative species, which strongly favor vernal pools but also inhabit permanent ponds. Obligate species include the Fairy Shrimp, Wood Frog, Eastern Spadefoot Toad (State Threatened), Spotted Salamander, Blue-spotted Salamander, Four-toed Salamander (Special State Threatened), and Marbled Salamander.

Over the past few years many vernal pools have been identified and certified within the state of Massachusetts. But many more go undocumented, and since these particular areas are fairly easy to fill, many more could disappear from existence. The strongest instrument of protection is the Massachusetts Wetlands Protection Act, which protects pools and land within 100 feet, and can be certified by the Massachusetts Natural Heritage and Endangered Species Program. To qualify the pool must

- Be a confined basin depression
- Hold water for a minimum of two continuous months during spring and/or summer for most years
- Be free of adult fish populations
- Provide breeding habitat for vernal pool amphibians or contain fairy shrimp

Towns can enact bylaws to protect their own vernal pools, and about a dozen have done so far. Fairhaven has a number of potential vernal pools and a few are certified with the NHESP.

### **Scenic Resources and Unique Environments**

#### **Landscape Character**

Fairhaven's mix of land and sea has inspired artists such as William Bradford, Lemuel D. Eldred, and Percy Cowen, who went on to achieve national reputations. Its historic harbor, views of Buzzards Bay, stony shores, salt marshes, and forested rolling hills, interspersed with pastures and agricultural fields create a rich mosaic of visual experience and opportunities to explore that continues to stimulate the imaginations of young and old, resident and visitor.

The Town has a diversity of landscape types. From the historic central area with magnificent nineteenth century public buildings to the waterfront on New Bedford Harbor, the pastoral New England countryside in the northeast corner to the marshes of Little Bay and Priests Cove to the beaches of Sconticut Neck and West Island to the dramatic vistas of the water from the farmlands along Shaw's Road, Fairhaven encompasses a wide range of ecological and cultural experiences.

The central part of Town with the nineteenth century public buildings holds a unique charm. While there is not much open space in this area, many people enjoy walking along the shaded streets lined with many period houses. Once a cove that was filled in to create a Town recreation area, Cushman Park, located in the downtown area, recently had significant drainage and site improvements completed. This was done to address the serious drainage problems as large portions of the park were wet most of the year. In addition, Town and Fairhaven School Department worked together to develop athletic fields at the park as part of the overall improvements. In the past, Fort Phoenix State Park, at the southern end of the central section of Town, acted as a kind of town green in that it was a major outdoor meeting place.

Today, it remains a favorite walking area for Town residents. The waterfront, adjacent to the central area of Town, is in a transition process as the commercial fishing industry is still relatively flat and other marine industries are being developed to fill the gap. Development in this area will come in the form of renovation and re-use of older structures along the waterfront as there is virtually no undeveloped space within the central Town area. A Mixed Use zoning district was created adjacent to the waterfront industrial area to aid in the transition of this area and to assist in guiding future development.

The pastoral area in the northeast corner of Fairhaven consists of small farms and some scattered housing along roads lined by old stone walls. The Fairhaven Conservation Commission and the Fairhaven/ Acushnet Land Preservation Trust own several parcels of land in this area. The largest parcels include the Town Forest along New Boston Road that has the path of the Old Coach Road to Acushnet within its bounds. The character of the roads, such as New Boston Road, could be somewhat protected by the Town designating it to be a scenic road that would place restrictions on the way a development is constructed. Most of the holdings in this area are private and zoned agricultural and rural residential, so future development within this area would take the form of new large lot housing subdivisions.

Priests Cove contains an expanse of marsh, which, can be viewed from the hurricane barrier built across the head of the cove. This area is protected by the wetlands regulations and is bordered by the Phoenix multi-use path. The Little Bay area is also a beautiful marsh, which holds the mouth of the Nasketucket River. In fact, the native people word “Nasketucket” means place of the long grasses. This area is also bordered by the Phoenix multi-use path, which affords views of the marshes and the water of Little Bay out to Nasketucket Bay. There are currently a handful of residences along the mouth of the Nasketucket River. Any further development of this area should be done sensitively. The Town with help from an Urban Self-Help Grant purchased an 83-acre developable parcel of upland land on the western side of Little Bay known as Little Bay Estates. In addition to open space benefits to the Town of preserving this upland property, Little Bay Estates is adjacent to the Phoenix multi-use path and the spur extension runs through the eastern portion of the property. This path system offers a multi-use trail to and through the Little Bay area, thereby making this a key recreation destination for walkers and cyclists.

Sconticut Neck and West Island have historically been and look like summer resort communities. The beautiful marshes and beaches here are some of the most attractive in southern New England. With the spectacular Town Beach and Massachusetts Department of Conservation and Recreation (DCR) property covering a third of the island, West Island is partially protected from

future development. Two main open space issues facing West Island will be the manner in which the Town further develops its recreational facilities at Town Beach, as well as the state management plan that is to be developed for DCR property.

The character of the southern section of Sconticut Neck as a mixture of small farms and seaside houses could be significantly altered if the farms were replaced with housing subdivisions. The wide, open vistas over the flat farmland to the water would be interrupted and the spacious character of this end of the Neck negatively affected. The upper section of Sconticut Neck has been fairly densely settled, so further development in this area largely would take the form of renovation and re-use. White's Farm, partially in the Nasketucket Basin, and the farms east along Shaw Road are large, upland parcels. White's Farm is near the Austin Pond conservation area and the Nasketucket Watershed area. Mariner soccer, a youth soccer organization, has recently purchased the entire property. Their long-term development plans are to add additional fields and preserve the sensitive areas on site.

Similarly, the wide, expansive views through the farm silos to the water beyond Shaw's Cove are some of the most beloved views in the Town. There are already several housing subdivisions in this area and the visual impact on the character of the area is significant. These "agriculturally zoned" residential subdivisions are on 50,000-acre lots, and while this type of zoning is an attempt at preserving open space, it effectively creates typical large lot suburban settings. They are neither in keeping with the agricultural character of the area, nor are they in keeping with the traditional "village-like" scale and density of the housing found in the western portion of Town. The traditional village identified by many Fairhaven residents is preferred housing type. (see Section 10, Maps, Scenic Resources and Unique Environments Map)

### **Environmental Challenges**

#### **Hazardous Waste Sites**

The Atlas Tack site on the southeastern edge of Fairhaven Center presents the primary hazardous waste site clean-up problem in Town. The Environmental Protection Agency has declared it a 'superfund' site, along with seven other sites. The Atlas Tack site is important to open space and recreational planning because it is located on the route of the Phoenix multi-use path. In 2007 the EPA completed the cleanup to the industrial/commercial standard and the site is in the EPA monitoring period. The cleanup also included a significant wetlands restoration project. To use the site for residential and recreational purposes would require additional cleanup.

#### **Off Shore Oil Spills**

On Sunday, April 27<sup>th</sup>, 2003, Bouchard Transportation Co. Barge owned by Bouchard Shipping struck submerged rocks off the coast of Westport and ruptured the tank carrying #6 oil. Fuel loss was estimated at approximately 98,000 gallons. The oil released impacted hundreds of miles of shoreline and numerous species of wildlife in Buzzards Bay. Fairhaven was one of the hardest hit areas coating the shoreline with oil and closing a majority of shellfish beds. The hardest hit areas in Fairhaven include Hoppy's Landing, Balsam Street, the Causeway, and the Town Beach at the south end of West Island, Wilbur's Point and the Hacker Street area. Sconticut Neck and the east side of West Island were also affected.



The Department of Environmental Protection defined cleanup in several phases. The duration of the phases depended upon the type of shoreline affected and the degree of oil present. Certain areas like sandy beaches were easier to clean than the rocky shoreline.

Fairhaven's coastline, is in constant threat to from shipping activities. The costs of oil spill remediation are quite high. Like many other situations, cleaning up after the fact is one of the most-costly and inefficient ways of limiting the damage caused by oil spills. A more effective way to minimize the damage caused is by preventing the spill from occurring in the first place. It is both economically and environmentally advantageous for people to work to prevent oil spills.

### **Stormwater Runoff**

Rainwater running off of streets, parking lots, roofs, golf courses, lawns and other pervious and impervious surfaces carry contaminants and pollution into the rivers, ponds and bays.

Stormwater containments affect the shellfish beds and sometime close area beaches because of bacteria, which is carried in the water from pets and human. Paved roads and parking lots that are connect to the waterways by drainpipes are often a direct path for contaminants that were once isolated from the Bay.

Buzzards Bay Project National Estuary Program has developed an action plan for stormwater drainage in their Atlas of Storm Discharges in the Buzzards Bay Watershed (2003). This atlas is meant to identify with maps and tables all of the towns that discharge stormwater and road-cuts into the tidal waters in the Buzzards Bay basin. The action plan set priorities based on drainage system size, available water quality and the receiving water depending on land use and shellfish resources, estimated cost of remediation, and the sensitivity of receiving water to pollution. Fairhaven had, as of 2003, 202 pipes and 40 road cuts a total of 280 discharges (the 2003 Atlas is currently being updated and should be available in late 2017).

### **Chronic Flooding**

Chronic flooding occurs in the extensive coastal areas of Town. Some residential development and roads on West Island and Sconticut Neck are in the highest risk FEMA mapped Flood Zones. There is a hurricane barrier that protects New Bedford Harbor and Fairhaven Center. Numerous public and private rock and concrete jetties offer some local protection against storm surge and erosion, as do the 23 barrier beach segments in Fairhaven. Some of the barrier beaches will need additional protection, while others may eventually succumb to the impacts of climate change and sea level rise. (see Section 10, Maps, FEMA National Flood Hazard Map)

### **Development Impact**

Residential development is beginning to impinge on traditional farmland in Fairhaven, in the Shaw's Cove area and in the northeast quadrant of Town. Town residents, as indicated by open space plan meetings and discussion, regard this as a very important issue. Although these areas are zoned Agricultural and Rural Residential respectively, large lot (over 30,000 sq. ft.) development has occurred there. There continues to be interest in creating more residences in these areas. Several farm owners are approaching retirement age and have shown some interest in selling their property. Some property owners are using the 61A Program to receive tax abatements, but some owners have apparently dropped out of this program. Clearly the farms

need more attention and protection than they have had in the past (this is also consistent with the goals of the Fairhaven Agricultural Commission and Green Committee).

### **Making Fairhaven More Resilient**

The Fairhaven Planning Department is in the process of overseeing an update of the Town's Master Plan and the development of a Hazard Mitigation Plan. The intersection of these plans with the OpenSpace and Recreation Plan centers around the discussion of how to make Fairhaven more resilient.

Resilience is essentially the community's capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats (severe storms, flooding, etc.) with a minimum damage to social well-being, the economy, and the environment. Ecological and economic resilience go hand in hand.

In the Open Space and Recreation Plan, an inventory of our natural resources/natural green infrastructure includes a network of wetlands, waterways, wildlife habitats, forests, agriculturally significant soils, and other natural areas that support native species, maintain natural ecological processes, and sustain air and water quality. Our natural green infrastructure also contributes to the general health and quality of life of the community, provides recreational opportunity, and supports our cultural/heritage landscapes.

Low Impact Development (LID) planning practices, such as the use of bioretention, infiltration, porous pavement, rain gardens, and other engineered systems, are designed to mimic natural processes/natural green infrastructure, and can provide many environmental, social, and economic benefits (stormwater/flood control, urban heat island mitigation, energy demand reductions). The great opportunity here is to employ the natural green infrastructure and connectivity planning of our open space with the areas that would benefit from these engineered mitigation practices.

In terms of building community resilience, open space has become even more valuable for its function, particularly where we can retain large intact areas and native vegetation. How we plan for and prioritize our open space acquisition and preservation going forward, particularly in the most vulnerable parts of our community (coastal areas, flood prone areas, vulnerable populations), should be central to all of our municipal planning.

### **Limited Coastal Access**

Despite Fairhaven's extensive coastline, only small segments of it are accessible to the public. Fort Phoenix State Beach is a small, public beach, located at the southern end of Fairhaven Center. There are three paved parking areas there, with spaces for about 200 cars. The Town Beach on West Island is also open to the general public, for a daily fee (in season) of \$10.00 (\$20.00, non-resident) and \$3.00 (\$10.00, non-resident) for walk-ins. Town property owners pay a seasonal fee of \$30.00 for a parking sticker at this beach (\$100.00, non-resident), which has about 200 parking spaces in an unpaved lot. Hoppy's Landing, which is owned by the Town of Fairhaven, and offers parking for approximately 100 spaces, is open for public use for \$7.00 per day and a seasonal fee of \$30.00 for a parking sticker.

The eastern half of West Island is state owned, under the control of the Department of Conservation and Recreation. It is kept in its natural state and there are not public access facilities such as parking or walking trails there. There are two Town-owned boat ramps, one at Pease Park in Fairhaven Center, on New Bedford Harbor (with 25 parking spaces) and one on Sconticut Neck at the end of Seaview Avenue, on Nasketucket Bay, with about 55 parking spaces. There is the potential for a third boat ramp with other recreational uses on the southern half of Long Island, which the Town should look at acquiring.

The Mass Audubon Society owns a nature reserve at Shaw's Cove and there is a South Shore Marshes Wildlife Management Area on Stony Cove, both of which are served by limited access.

### **Wetlands Protection and Conservation Lands Management**

Fairhaven employs several regulatory tools in its efforts to protect its wetlands resources, including, Chapter 192 of the Code of the Town of Fairhaven; Wetlands Resource Protection District Zoning, and; the Massachusetts Wetlands Protection Act, MGL Chapter 131 section 40. Because of its diverse natural resource assets and the necessity to preserve and protect them, Fairhaven needs a full-time Conservation Agent with the appropriate training, background, and expertise. Presently, the Town allots ten hours per week for a part-time Conservation Agent, who also serves as the Building Commissioner/Zoning Enforcement Officer.

### **Non-Native Invasive Plants**

A native plant species is a plant that is considered indigenous and naturally occurring to the region since pre-Colonial times (before 1500) or arriving more recently without human intervention. Native plants are essential to the food chain by providing habitat for herbivore and pollinator insects. They are specifically adapted to local specific conditions of soil, exposure, climate, and salinity. They are essential for biodiversity, and to support native species of birds and butterflies. Extensive root systems of native plants are essential for control of flooding and to combat erosion.

A non-native plant species is a plant that is non-indigenous and not naturally occurring to eastern Massachusetts with an emphasis on the coastal environments. When non-native species enter into an ecosystem, they have the potential to disrupt the natural balance, reduce biodiversity, degrade habitats, alternative genetic diversity, and transmit exotic diseases to native species. However, not all non-native plants are invasive. Non-native plants that are not considered invasive are those that generally do not rapidly disperse, become established, or create self-sustaining or dominant populations that would be disruptive to the natural ecosystem.

Fairhaven's vulnerable coastal habitats and wetlands are being increasingly degraded by non-native invasive plants. The following plants form mono-cultures in important native habitats reducing plant, insect, and animal biodiversity. The following is a partial list of plants that are disrupting valuable eco-systems in Fairhaven.

*Phragmites australis* – Grass - Common Reed - degrades coastal, salt marsh, salt pond and estuary habitats

*Polygonum cuspidatum* – Woody Herbaceous -Japanese Knotweed - degrades wetlands, stream beds, and wetlands

*Rosa multiflora* – Shrub - Multiflora rose — degrades woodlands, pastures, Maritime

Shrublands, roadsides, can dominate and take over fallow fields

*Celastrus orbiculata* – Vine - Asian bittersweet - degrades woodlands, Maritime Shrublands

*Ligustrum obtusifolium*- Border Privet - degrades woodlands, Maritime Shrublands

*Elaeagnus umbellata* - Shrub - Autumn Olive - degrades woodlands, Maritime Shrublands

*Lonicera morrowii* – Shrub - Morrow's Honeysuckle – degrades woodlands, floodplains, forests, swamps, lawns, agricultural fields and open fields

*Cynanchum louiseae* – Vine -Black swallowwort - degrades coastal habitat, esp. Monarch butterfly habitat, fields, woodlands, roadsides, and wet edge habitat

Identification of the vulnerable natural communities should be followed by best practice removal and long term monitoring by the Conservation Agent, who at present does not have the hours to tackle this problem or the time to procure grants to assist financially with this problem.

### **Potential Wetlands Restoration**

Buzzards Bay Project National Estuary Program identified potential freshwater and saltwater restoration sites in the southern portion of Buzzards Bay Watershed. Of particular interest were wetlands that had been previously filled due to construction or agricultural activities on public or private lands, conservation areas, and abandoned cranberry bogs. An atlas was created to aid state and municipal officials in identifying potential remediation projects when road and bridgework is considered. It may also assist local organizations looking for restoration projects as part of the wetlands mitigation and banking efforts underway.

### **Eelgrass Restoration**

Eelgrass is a subtidal marine plant species that grows in temperate waters. Seagrass another name for eelgrass, are highly productive communities and are ecologically important because they act as a nursery, habitat, and feeding ground for a variety of fish, waterfowl and invertebrates. The loss of eelgrass can result in profound shifts in fauna, including commercial and recreational species.

Eelgrass has been recognized as a sensitive indicator of the overall ecosystem health in subtidal marine areas with which they grow. Excessive discharge of nitrogen from human sources associated with development and other human activities are a concern for the health of eelgrass beds in the Buzzards Bay area. Since Buzzards Bay is a partially enclosed embayment, it is more susceptible to these types of human activities and the potentially adverse impacts that can be detrimental to our coastal resources and native vegetative communities. The two principal human disturbances affecting eelgrass growth is declining water quality and physical disturbance.

The Buzzards Bay Project National Estuary Program has developed a Comprehensive Conservation and Management Plan that included strategies to protect and restore wetlands, habitat, and water quality and living resources in Buzzards Bay. For more information concerning the plan please visit the Buzzards Bay National Estuary web site at <http://www.buzzardsbay.org/eelgrass.htm>. (Buzzards Bay National Estuary Program, 2016).

### **Environmental Equity**

Fairhaven residents, including those in the Environmental Justice (EJ) population areas in town, have access to a diverse range of the passive and active recreational, as well as open space and

cultural resources in the community. The distribution of these resources, including Town holdings, publicly accessible non-profit organizational holdings, and federal, state, and community association holdings, occurs across the length and breadth of Fairhaven.

Environmental equity considers the distribution of the above-mentioned resources in a community to all neighborhoods, including EJ populations. Fairhaven's three (3) mapped EJ block groups surround one of the Town's most utilized and available recreation areas, the Livesey Park complex.

These municipal opportunities are supplemented by regional non-profit conservation areas that provide no-cost passive recreation opportunities for the local population. The challenge for the Town, going forward, will be to retain and strengthen these partnerships and actively seek out new partnership opportunities that will enhance the health and environmental benefits that open space and recreation provides to the entire community. (see **Section 10, Maps, Environmental Justice Map w/open space layer/Environmental Equity**)

## **Species Lists**

### **Fisheries and Wildlife**

#### **Wildlife**

Fairhaven's forests, inland and coastal wetlands, tide flats and off-shore areas of Buzzard's Bay provide habitat for a diversity of wildlife, including mammals, birds, reptiles, amphibians, finfish and shell fish. Common terrestrial wildlife includes:

#### **Mammals**

All members of the vertebrate class Mammalians are warm-blooded and able to maintain a near-constant body temperature. Almost all mammals are born live rather than hatched from eggs. Mammals also produce milk that is high in nutrients and fat and promotes growth in offspring.

|                    |                             |
|--------------------|-----------------------------|
| Red fox            | Gray squirrel               |
| Gray fox           | White-footed mouse          |
| Coyote             | Northern short tailed shrew |
| Cottontail rabbit  | Star –nosed mole            |
| Eastern cottontail | Little brown bat            |
| Eastern Chipmunk   | Meadow vole                 |
| Woodchuck          | Meadow jumping mouse        |
| Flying squirrel    | Short-tailed weasel         |
| Raccoon            | Fisher                      |
| Skunk              | Long-tailed weasel          |
| Virginia opossum   | Mink                        |
| Musk rat           | River otter                 |
| Red squirrel       | White-tailed deer           |

## **Amphibians and Reptiles**

The inland wetlands provide habitat for various reptiles and amphibians common to Fairhaven. Appreciating these animals often begins with a fondness for little lizards or long-legged frogs. Fondly dubbed the herps or herpitiles, the name comes from the Greek for “creeping,” *herpetos*. These two groups include not only creepers such as snakes, but sea turtles which swim, and treefrogs that climb, and all of them burrow. They share neither a method of locomotion nor any other trait that is theirs alone. Like mammals, birds and fish, they have backbones, but no fins or feathers. Reptiles and amphibians are cold-blooded, which means the temperature of their bodies varies with the outside temperature. The differences between reptiles and amphibians tend to reflect the reptiles greater independence from the water. The bodies of reptiles furnish general protection from predators and water loss, and amphibians are thin-skinned. Unlike the eggs of amphibians, the reptile’s eggs are either leathery like a pair of moccasins, or brittle like a birds’ egg and are less likely to dry out when laid on land. Some of the more common reptiles and amphibians located in Fairhaven include:

Bullfrog  
Wood turtle  
American toad  
Wood frog  
Garter snake  
Dekay snake  
Treefrog  
Green frog  
Pickerel frog  
Leopard frog  
Musk turtle  
Snapping turtle

Spotted turtle  
Eastern box turtle  
Diamondback terrapin  
Painted turtle  
Spotted salamander  
Red-backed salamander  
Northern black racer  
Garter snake  
Milk snake  
Hognose snake  
Blue-spotted salamander  
Eastern newts

## **Birds**

Birds are members of the class of Aves, birds are the only animals that have feathers, and most are capable of flight. Like their reptile ancestors, they lay eggs; like mammals, they are warm-blooded. The bird’s skeleton is designed for flight, the bones are light with sponge like interior. Occupying a diverse set of habitats, below is a list of common birds to Fairhaven.

Roseate tern  
Piping plover  
Northern harrier  
Osprey  
Common loon  
Red-throated loon  
Horned grebe  
Pied-billed grebe  
Canada goose  
Black duck

Mallard  
Harlequin duck  
Common eider  
Hooded merganser  
Red-breasted merganser  
Clapper rail  
Sanderling  
Long-tailed duck (oldsquaw)  
Great Egret  
Great blue heron

Snowy egret  
 Black-crowned night heron  
 Red tailed hawk  
 Mute swan  
 Greater scaup  
 Bufflehead  
 Turkey vulture  
 Sharp-shinned hawk  
 Ruffed grouse  
 Wild turkey  
 Ring-necked pheasant  
 Semi-palmated plover  
 Killdeer  
 Lesser yellowlegs  
 Greater yellowlegs  
 Sanderling  
 Common snipe  
 American woodcock  
 Ringed-bill gull  
 Tufted titmouse  
 Brown creeper  
 White-breasted nuthatch  
 House wren  
 Carolina wren  
 Northern mockingbird  
 Robin  
 Wood thrush  
 Veery  
 Eastern bluebird  
 Cedar waxwing  
 Ruby-crowned kinglet  
 Black and white warbler  
 Warbler (sp)  
 American Redstart  
 Ovenbird  
 Red-winged blackbird

Herring gull  
 Great black-backed gull  
 Common tern  
 Eastern screech owl  
 Great horned owl  
 Ruby throated hummingbird  
 Belted kingfisher  
 Chimney swift  
 Downey woodpecker  
 Northern flicker  
 Eastern phoebe  
 Eastern kingbird  
 Horned lark  
 Purple martin  
 Tree swallow  
 Blue jay  
 Bank swallow  
 Cliff swallow  
 Barn swallow  
 Brown-headed cowbird  
 Common grackle  
 European starling  
 Northern oriole  
 Scarlet tanager  
 Northern cardinal  
 American Goldfinch  
 House finch  
 Rufous-sided towhee  
 Sparrow (sp)  
 Dark-eyed junco  
 Black-capped chickadee  
 Wood duck  
 Whimbrel  
 American crow

### **Marine/Estuarine Invertebrates**

New England marine environments are home to a wide variety of invertebrates and Fairhaven is not exception. Below is a list of invertebrates common to the Fairhaven coast.

Quahog  
 Oyster  
 Soft-shell clam  
 Horseshoe Crab  
 Hard-shell Clam

Razor clam  
 Calm worm  
 Anemone  
 Limpet  
 Common periwinkle

Knobbed whelk  
Moon snail  
Common slipper snail  
Channel whelk  
Common jingle shell  
Atlantic bay scallop  
Ribbed mussel  
Blue mussel  
Northern rock barnacle

Blue crab  
Northern lobster  
Green crab  
Fiddler crab  
Rock crab  
Lady crab  
Sea star  
Sea Urchin

### **Fish**

Below is a list of fish common to Fairhaven waters. The three categories are salt, fresh or brackish. Most fish species either live strictly in either salt water or fresh water. Other species are frequently found in brackish water, where the fresh and the salt water mix. An anadromous fish, born in fresh water, spends most of its line in the sea and returns to fresh water to spawn. Common examples of this are smelt, shad, striped bass, and herring. Catadromous fish does the opposite; they live in fresh water and enter salt water to spawn. The American eel is a common example of a catadromous fish.

Windowpane  
Winter flounder  
Tautog  
Herring  
Smelt  
Scup  
Shad  
Menhadden  
Bluefish  
Goby  
Striped bass  
Silverside  
Mummichog  
Perch  
American eel  
Stickleback  
Lined seahorse  
Grubby  
Cunner  
Skate  
Northern pipefish  
Sculpin  
Black sea bass  
Hogchocke



## **Marine Mammals**

Harbor seals

Gray seals

## **Marine Turtles**

Leatherback turtle

## **Plants**

### **Ecologically Important Native plants found in Fairhaven (a partial list)**

A native plant species is a plant that is considered indigenous and naturally occurring to the region since pre-Colonial times (before 1500) or arriving more recently without human intervention. Native plants are essential to the food chain by providing habitat for herbivore and pollinator insects. They are specifically adapted to local specific conditions of soil, exposure, climate, and salinity. They are essential for biodiversity, and to support native species of birds and butterflies.

Beach and Maritime Plants:

American Beachgrass (*Ammophila breviligulata*)  
Beach Pea (*Lathyrus japonicus*)  
Beach Heather (*Hudsonia tomentosa*)  
Seaside Goldenrod ( *Solidago sempervirens*)  
Sea Rocket (*Cakile edentula*)  
Seabeach Sandwort (*Honckenya peploides*)  
Saltmeadow Cordgrass (*Spartina patens*)  
Saltmarsh Cordgrass (*Spartina alterniflora*)  
Spike Grass (*Distichlis spicata*)  
Sea Lavender (*Limonium carolinianum* or *nashii*)  
Saltmarsh rush (*Juncus gerardii*)  
Switchgrass (*Panicum virgatum*)  
Marsh Elder (*Iva frutescens*)  
Virginia Creeper (*Parthenocissus quinquefolia*)  
Northern Bayberry (*Morella caroliniensis*)  
Beach Plum (*Prunus maritima*)  
Eastern False Willow (*Baccharis halimifolia*)  
Eastern Red Cedar (*Juniperus virginiana*)

Native Grasses, Rushes, and Sedges:

Big Bluestem (*Andropogon gerardii*)  
Indian Grass (*Sorghastrum nutans*)  
Little Bluestem (*Schizachyrium scoparium*)  
Pennsylvania Sedge (*Carex pensylvanica*)  
Pink Tickseed (*Coreopsis rosea*)  
Poverty Dropseed (*Sporobolus vaginiflorus*)

Purple Lovegrass (*Eragrostis spectabilis*)  
Red Fescue (*Festuca rubra* ssp. *rubra*)  
Rushes (*Juncus* sp.)  
Sedges (Sedge sp.)  
Soft Rush (*Juncus effusus*)  
Tussock sedge (*Carex stricta*)  
Wavy Hairgrass (*Deschampsia flexuosa*)  
Woolsedge (*Scirpus cyperinus*)

**Herbaceous Plants:**

American trout-lily (*Erythronium americanum*)  
Asters (many species)  
Blue Flag (*Iris versicolor*)  
Boneset (*Eupatorium perfoliatum*)  
Broad-leaved cattail (*Typha latifolia*)  
Butterfly Weed (*Asclepias tuberosa*)  
Canada Mayflower (*Maianthemum canadense*)  
Common Milkweed (*Asclepias syriaca*)  
Common Ragweed (*Ambrosia artemisiifolia*)  
Daisy fleabane (*Erigeron annuus*)  
Duckweed (*Lemna* sp.)  
Early goldenrod (*Solidago juncea*)  
Eastern Starflower (*Lysimachia borealis*)  
Eelgrass (*Zostera marina*)  
Evening Primrose (*Oenothera biennis*)  
Feathery False Solomon's Seal (*Maianthemum racemosum*)  
Grass leaved goldenrod (*Euthamia caroliniana* and *graminifolia*)  
Gray goldenrod (*Solidago nemoralis*)  
Hairy Solomon's Seal (*Polygatum pubescens*)  
Indian Cucumber Root (*Medeola virginiana*)  
Indian-pipe (*Monotropa uniflora*)  
Jack-in-the-pulpit (*Arisaema triphyllum*)  
Jewelweed (*Impatiens capensis*)  
Joe-pye (*Eutrochium dubium* and *fistulosum*)  
New England Aster (*Symphyotrichum nova-angliae*)  
New England Blazing-star (*Liatris scariosa* var. *novae-angliae*)  
Peppergrass (*Lepidium virginicum*)  
Pink Lady's slipper (*Cypripedium acaule*)  
Pokeweed (*Phytolacca Americana*)  
Red Lobelia (*Lobelia cardinalis*)  
Red Columbine (*Aquilegia canadensis*)  
Red Wakerobbin (*Trillium erectum*)  
Sessile Bellwort (*Uvularia sessilifolia*)  
Swamp Cabbage (*Symplocarpus foetidus*)  
Swamp Milkweed (*Asclepias incarnata*)  
Swamp Rose Mallow (*Hibiscus moscheutos*)

Sweet Goldenrod (*Solidago odora*)  
Sweet white violet (*Viola blanda*)  
Turk's Cap Lily (*Lilium superbum*)  
Violets (*V. cucullata*, *labradorica*, *lanceolata*)  
Water Arum (*Calla Palustris*)  
White Water-lily (*Nympha oderata*)  
Whorled loosestrife (*Lysimachia quadrifolia*)  
Wild rice (*Zizania aquatic*)  
Wintergreen (*Gaultheria procumbens*)  
Wood Lily (*Lilium philadelphicum*)  
Yarrow (*Achillea millefolium*)

**Groundcovers:**

Bearberry (*Arctostaphylos uva-ursi*)  
Common Strawberry (*Fragaria virginiana*)  
Sand false heather (*Hudsonia tomentosa*)  
Partridgeberry (*Mitchella repens*)  
Woodland Strawberry (*Fragaria vesca*)

**Vines:**

Poison Ivy (*Toxicodendron radicans*)  
Virginia Creeper (*Parthenocissus quinquefolia*)  
Wild Grapes (*Vitus sp.*)

**Shrubs:**

Arrowwood *Viburnum* (*Viburnum dentatum*)  
Blackberry (*Rubus alleghensis*)  
Black Chokeberry (*Aronia melanocarpa*)  
Button bush  
Downy Serviceberry/Shadbush (*Amelanchier canadensis*)  
Elderberry (*Sambucus nigra* ssp. *Canadensis*)  
Flowering big-bracted-dogwood (*Benthamida florida*)  
Gray dogwood (*Swida racemosa*)  
Highbush Blueberry (*Vaccinium corymbosum*)  
Inkberry (*Ilex glabra*)  
Lowbush Blueberry (*Vaccinium angustifolium*)  
Meadowsweet (*Spirea alba*)  
Nannyberry (*Viburnum lentago*)  
New Jersey Tea (*Ceanothus americanus*)  
Pagoda dogwood ( *Cornus alterniflora*)  
Pussy willow (*Salix discolor*)  
Red Chokeberry (*Aronia arbutifolia*)  
Shrubby Cinquefoil (*Potentilla fruticosa*)  
Silky dogwood (*Swida amomum*)  
Spicebush (*Lindera benzoin*)  
Steeplebush (*Spirea tomentosa*)

Sweet Pepperbush (*Clethra alnifolia*)  
Virginia Rose (*Rosa virginiana*)  
Winterberry (*Ilex verticillata*)  
Witch Hazel (*Hamamelis virginiana*)  
Withe-rod (*Viburnum nudum*)

**Trees:**

Alder (*Alnus incana*, *Alnus serrulata*)  
American Beech (*Fagus grandiflora*)  
American Holly (*Ilex opaca*)  
Atlantic White Cedar (*Chamaecyparis thyoides*)  
Bigtooth Aspen (*Populus grandidentata*)  
Black Ash (*Fraxinus nigra*)  
Black Cherry (*Prunus serotina*)  
Black Gum (*Nyssa sylvatica*)  
Black Oak (*Quercus velutina*)  
Eastern Hemlock (*Tsuga canadensis*)  
Eastern Red Cedar (*Juniperus virginiana*)  
Gray Birch (*Betula populifolia*)  
Green Ash (*Fraxinus pennsylvanica*)  
Pitch Pine (*Pinus rigida*)  
Post Oak (*Quercus stellata*)  
Red Cedar (*Juniper virginiana*)  
Red Maple (*Acer rubrum*)  
Red Oak (*Quercus rubra*)  
Quaking Aspen (*Populus tremuloides*)  
Scarlet Oak (*Quercus coccinea*)  
Silver Maple (*Acer saccharinum*)  
Shagbark Hickory (*Carya ovata*)  
Sweet birch (*Betula lenta*)  
Sugar Maple (*Acer saccharum*)  
Swamp White Oak (*Quercus bicolor*)  
White Ash (*Fraxinus Americana*)  
White Oak (*Quercus alba*)  
White Pine (*Pinus strobus*)  
Yellow Birch (*Betula alleghaniensis*)

**Common Non-Native Plants (\*indicates invasive) partial list**

A non-native plant species is a plant that is non-indigenous and not naturally occurring to eastern Massachusetts with an emphasis on the coastal environments. When non-native species enter into an ecosystem, they have the potential to disrupt the natural balance, reduce biodiversity, degrade habitats, alter the native genetic diversity, and transmit exotic diseases to native species. However, not all non-native plants are invasive. Non-native plants that are not considered invasive are those that generally do not rapidly disperse, become established, or create self-sustaining or dominant populations that would be disruptive to the natural ecosystem.

Asian Bittersweet\* (*Celastrus orbiculata*)  
 Asiatic Dayflower (*Commelina communis*)  
 Autumn Olive\* (*Elaeagnus umbellata*)  
 Bittersweet nightshade (*Solanum dulcamara*)  
 Black-eyed Susan (*Rudbeckia hirta*)  
 Black Locust\* (*Robinia pseudoacacia*)  
 Black swallowwort\* (*Cynanchum louiseae*)  
 Border Privet\* (*Ligustrum obtusifolium*)  
 Chicory (*Cichorium intybus*)  
 Clover sp.\* Red, White, Rabbit's Foot (*Trifolium* sp.)  
 Common Mullein (*Verbascum thapsus*)  
 Common Reed\* (*Phragmites australis*)  
 Common Thistle\* (*Cirsium vulgare*)  
 Cow Vetch (*Vicia cracca*)  
 Creeping Buttercup (*Ranunculus repens*)  
 Dandelion (*Taraxacum vulgare*)  
 Dusty Miller (*Artemisia stelleriana*)  
 English Ivy (*hedera helix*)  
 Ground Ivy (*Glechoma hederacea*)  
 Gray Willow \* (*Salix cinerea*) easily confused with native pussy willow  
 Japanese Knotweed\* (*Polygonum cuspidatum*)  
 Morrow's Honeysuckle\* (*Lonicera morrowii*)  
 Mugwort\* (*Artemisia vulgaris*)  
 Multiflora rose\* (*Rosa multiflora*)  
 Narrow-leaf cattail (*Typha angustifolium*)  
 Norway Maple\* (*Acer platanoides*)  
 Pepperweed (*Lepidium latifolium*)  
 Purple Crown Vetch (*Securigera varia*)  
 Purple Loosestrife\* (*Lythrium salicaria*)  
 Queen Anne's Lace (*Daucus Carota*)  
 Smartweed sp. (*Polygonum* sp.)  
 Sycamore Maple\* (*Acer pseudoplatinus*)  
 Tansy (*Tanacetum vulgare*)  
 Violet sp. (*Viola tricolor*, *Viola odorata*, *Viola japonica*)  
 Yellow Flag\* (*Iris pseudocorus*)  
 Yellow Sea-Poppy \* (*Glaucium flavum*)

## Section 5: Inventory of Lands of Conservation and Recreation Interest

The Town puts a high value on open space and recreation protection and has a long history of such protection. Over the years the Town has acquired a Civil War Fort, a Town Beach as well as numerous other beach access parcels, a Town Forest, Little Bay Conservation Area and a rail road right of way that has been converted into a bike path. The Town is also home to two State Reservations, one on West Island and the other adjacent to Fort Phoenix. The conservation and recreation lands section below are those properties that are dedicated to open space and recreation purposes. Those properties owned by the State, County and Town are restricted for conservation, open space and recreation purposes whether by state statute for the state and county lands and those properties purchased with state open space funds or by deed restriction for Town properties. The private properties are not protected with any deed restrictions, but provide recreation opportunities for the citizens of the Town, and are therefore, worth listing.

As referenced above, Fairhaven protects its open space through a variety of means, and in conjunction with a number of partners, including: The Buzzards Bay Coalition, Mass Audubon, The Mattapoissett River Valley Water Supply Protection Advisory Committee and District, the Fairhaven Acushnet Land Preservation Trust, The Nature Conservancy, and others. The adoption of the Community Preservation Act (CPA) in 2005 has also provided the Town with a means by which to purchase, match grants, and leverage funds to secure open space.

Some of the means employed include the following:

- Donation of land
- Conservation Restriction (CR): A Conservation Restriction, or CR, is defined in Massachusetts General Law (MGL) Chapter 184 Sections 31-33. A CR is a legal agreement between a landowner and a government agency or land conservation organization (land trust or qualified non-profit) that permanently limits the uses of the subject land in order to protect the conservation value of the land (natural, scenic, or open condition). Under this agreement, the landowner may continue to use the land. The CR placed on the land can either be time limited (in rare cases) or in perpetuity (standard practice and highly recommended). Any land that has a CR in the deed is protected in perpetuity.
- Municipal acquisition through outright purchase and placing a deed restriction that will protect the land in perpetuity. Lands or easements taken or acquired for *natural resource purposes* are protected by the provisions of Article 97 of the Massachusetts Constitution, and shall not be used for another purpose unless the Massachusetts legislature approves the change by a two-thirds vote. (all municipally owned land committed to conservation purposes or parks are dedicated to MGL Chapter 45, Sections 3 and 14, which are protected under Article 97).
- Partnerships with numerous local, regional, state, and federal agencies and non-profits, combining resources to leverage funding and services.

Appendix “E” represents an inventory of the Town of Fairhaven’s “Protected” lands, and an inventory of the “Unprotected” parcels of valuable open space property that should be protected. The designation “MAP and LOT” on the table refers to the Town’s Assessor Map and Lot numbers for that parcel. When a parcel does not have a “Purpose” description, the purpose can be found by referring to the column “Property Name”.

The Town’s Conservation Commission, through the use of its wetland protection regulations, also works with landowners to assure that these ecologically important areas are protected. The Water Resource Map shows the Town’s coastal and inland wetlands. These wetlands, combined with the existing protected and unprotected open space, provide a network of both upland and wetland open spaces that provide protection for much of the Town’s character as well as enhance the Town’s resilience capacity in terms of dealing with storm surge,

flooding, climate change, and sea level rise. This network also provides habitat and movement corridors for much of the wildlife enjoyed by Town residents. (see **Section 10, Maps, Open Space Map**)

## **Conservation and Recreation Lands**

### **Parks, Beaches and Boat Ramps**

The Town of Fairhaven owns and maintains several fine parks, beaches and boat ramps providing access to the waterways that surround their community. There are also a number of private parcels located within the Town as well.

#### **Pease Park Public Landing**

Acreage: 1  
Managed/Owned: Fairhaven BPW  
Location: West end of Pease Street  
Description: This site consists of a boat ramp, dock, paved parking area for approximately 20 cars with trailers.  
Protection: Public Access Board Restriction

#### **Hoppy's Landing**

Acreage: 6.4  
Managed/Owned: Town of Fairhaven – Board of Selectmen  
Location: 55 Goulart Memorial Drive  
Description: Public access boat ramp and recreational uses.  
Protection: Federal Land and Water Grant - Article 97

#### **Cushman Park**

Acreage: 13.61  
Managed/Owned: Town of Fairhaven  
Location: Green and Bridge Streets  
Description: Located just north of Town Center, Cushman Park is a flat, grassy park with Baseball fields, running track, amphitheatre, playground equipment and tennis courts. Facilities include restrooms and a concession stand. There is limited public parking at the park. There is a paved path that winds through the park.  
Protection: Deed dedicated to Parks and Open Space

#### **Livesey Park**

Acreage: 11.4  
Managed/Owned: Fairhaven BPW  
Location: Glenhaven Avenue, Parker Street and Livesey Parkway  
Description: Livesey Park is a relatively flat, grassy park with two tennis courts, three baseball fields, football practice area, a basketball court and play equipment. Facilities include a changing room and/or restroom. This site is located adjacent to the Oxford School. There is currently no off street parking available at this park. There is a paved path that winds through the park.  
Protection: Urban Self Help Grant for improvements - Article 97

#### **West Island Beach/Town Beach**

Acreage: 10.16  
Managed/Owned: Fairhaven BPW

Location: West Island

Description: The Town beach facility consists of an unpaved parking lot for approximately 100-150 cars that leads to a sandy beach. This site includes salt marshes, about 3,000 feet of sandy beach frontage. The beach is unquestionably one of the finest in the area. There are no permanent restrooms at the site; however, seasonal portable restrooms are provided.

Protection: Deed dedicated to Parks and Open Space

#### **Seaview Avenue Boat Ramp**

Acreage: 1

Managed/Owned: Town of Fairhaven

Location: Sconticut Neck, end of Seaview Avenue

Description: The facility consists of a paved parking lot that services a boat ramp and dock. Parking is available for approximately 55 cars with trailers. This ramp allows access into Nasketucket Bay. Four handicapped spaces are available. The dock at the boat ramp should be modified in order to provide barrier-free access.

Protection: Public Access Board Restriction

#### **Pope Beach**

Acreage: 5.73

Ownership: Fairhaven Conservation Commission

Location: West side of Sconticut Neck at the end of Hacker Street

Description: This small Town beach is located on Buzzards Bay at the north end of Sconticut Neck. Pope Beach is a clean sandy beach that is used by local neighborhood residents. On street parking is limited.

Protection: Harbor Trustee Grant – Deed Restriction

#### **Silver Shell Beach**

Ownership: Private

Location: Silver Shell Beach Road

Description: This small private beach is located midway down the west side of Sconticut Neck.

#### **West Island Improvement Association**

Acreage: 3

Ownership: West Island Improvement Association

Location: West Island

Description: This three-acre site serves West Island residents. It provides a clubhouse and an athletic field.

#### **Macomber Pimentel Park**

Acreage: 4.75

Managed/Owned: Town of Fairhaven

Location: Bernese Street

Description: Macomber Pimentel Park consists of a ballfield and an adjacent open field with play equipment. A twenty car unpaved parking area is provided adjacent to the ballfield. There is also a playground with swings, slide, monkey bars and seesaw.

Protection: Deed dedicated for Parks



## **State Recreation Areas**

### **Fort Phoenix State Park**

Acreage: 16.25  
Managed/Owned: DCR  
Location: Fort Street  
Description: Fort Phoenix State Park was the guardian of our historic whaling port from the Revolutionary War through the Civil War. The park is owned and operated by the Massachusetts Department of Conservation and Recreation, and is located adjacent to the town-owned Fort Phoenix Beach. This historically significant park provides a swimming beach, bathhouse, two tennis courts, a basketball court and a picnic area.

The U.S. Army Corps of Engineers between 1962 and 1966 to protect New Bedford inner harbor from the tidal surges associated with large storms built a hurricane barrier. The hurricane barrier is the largest manmade stone structure on the east coast of the U.S. During a storm, the gates are shut to hold back the floodwaters. On the barrier, one may take a walk or in-line skate to nearly the middle of New Bedford Harbor.

### **Fort Phoenix**

Acreage: 2.9  
Managed/Owned: Town of Fairhaven  
Location: Fort Street  
Description: Fort Phoenix consists of a beach and a pre-civil war fort with cannons. The Fort is a significant historical structure and a key tourist attraction. A twenty car paved parking lot is provided.  
Protection: Deed restriction and Historic Deed Restriction

## **Conservation Areas**

### **Austin Pond**

Acreage: 64  
Managed/Owned: Fairhaven Water Department/Bristol County  
Location: Bridge Street  
Description: This area includes roughly 64 acres of land stretching from the Town wells on Mill Street, up the Nasketucket River to Bridge Street. Fairhaven owns fifteen acres of open watershed land around Austin Pond adjoined by 49 acres of wooded county conservation land. Ultimately, fishing, nature study, canoeing and hiking are available to residents at this location.

### **Town Forest**

Acreage: 63  
Managed/Owned: Fairhaven Conservation Commission  
Location: Near Acushnet Town line  
Description: The Town Forest is located near the Acushnet Town line; Fairhaven owns several large parcels of wooded conservation land totaling roughly 50 acres.

### **Shaw's Cove**

Description: A major conservation resource is located along the shores of Shaw's Cove where a total of about 100 acres of salt marsh and coastal upland is in public control. The site includes adjoining parcels owned by the Massachusetts Audubon Society (19 acres), Massachusetts

Department of Fish and Game (22.4 acres), Town of Fairhaven (10 acres), and over 50 acres of land leased to the Town for conservation use. Access to this area has been provided and no site development has yet taken place. Installation of additional walkways and nature study areas are planned.

### **East Fairhaven Conservation Land**

Acreage: 16  
Managed/Owned: Fairhaven Conservation Commission  
Location: New Boston Road  
Description: East Fairhaven Conservation Land is a 16-acre parcel of undeveloped land, which lies just west of the East Fairhaven School grounds.

### **Multi-Use Recreational Property**

#### **Phoenix multi-use Bike Path**

Managed/Owned: Town of Fairhaven, BPW  
Description: The Phoenix multi-use path, which uses an abandoned railroad right-of-way serves as the main spine of this network. The more recently completed Little Bay multi-use path extension is the first step towards a connection of the Sconticut Neck area and the ultimate connection to the Town Beach located on West Island. This connection, when completed would, consist of a combination of a multi-use path, striped bike lanes on Sconticut Neck Road, and a bike route from the causeway to the Town beach. This connection would be accessible in most parts with a smooth surface and small parking areas for residents arriving by car to walk on the trail portion of the network. The Little Bay trail provides rest areas along the route as well as views of the marshes. There are currently no other areas offering views of the marshes, which are accessible to elder, younger and physically challenged residents.

The multi-use trail connections running north and south off the length of the trail from the New Boston Road and Poverty Point areas to Fort Phoenix and West Island. Within the proposed trail system, New Boston Road, Oak Grove Road, Green Street, Fort Street and Causeway Road are shown as potential Town-designated “scenic roads” in order to protect their special character. Potential “pocket parks” are shown as small resting areas along popular walking routes such as Willow Park off Fort Street. These kinds of places, along with proposals to provide a range of recreational facilities for all age groups in town, will become particularly important as the majority of the Town’s residents become older.

### **Multi-Use, Multi-Town Conservation/Recreation Property**

#### **Nasketucket Bay Conservation Area**

Managed/Owned: Town of Fairhaven 135 acres; Town of Mattapoisett 281 acres  
Description: This project was completed in 2014 and was the result of the collaboration of multiple partners, led by the Buzzards Bay Coalition. Partnering/funding agencies and organizations, in addition to the two towns, included: U.S. Fish & Wildlife Service, NOAA, USDA, MA Department of Conservation and Recreation, MA Division of Conservation Services, The Bouchard Oil Spill Trustee Council, The Nature Conservancy, The Buzzards Bay National Estuary Project, and private donors and foundations.

The total project costs were over \$6 million. This conservation effort protected 416 acres of vulnerable land, including 226 acres of forestland and coastal wetlands, and placed conservation restrictions on 190 acres of active farmland. This purchase also facilitated a

connection between the Phoenix and Mattapoissett Bike Paths with the Nasketucket Bay State Reservation and the recreation land around the Mariner Soccer Complex.

In addition to affording spectacular passive recreational opportunities to the region, this land Also helps to protect and preserve the working agricultural landscape, protects water quality In Nasketucket Bay and, conserves important habitat for fish, shellfish, birds, and wildlife.

### **Shaw Farm Trail**

Managed/Owned: Buzzards Bay Coalition

Description: The Shaw Farm Trail is an approximately one (1) mile trail that runs through the Shaw Farm Prpoerty (part of the Nasketucket Bay Land Conservation property). The trailhead is located on the Phoenix Bike Path, just off of Shaw Road. There is a bike rack located at the trailhead to allow bikers to secure their bikes and take a walk along the trail.

The Shaw Farm Trail connects the Phoenix/Mattapoissett Bike Paths to the Nasketucket Bay State Reservation.

### **Fairhaven Recreation Center**

Acreage: 4

Ownership: Town of Fairhaven

Location: 227 Huttleston Avenue

Description:

The Fairhaven Recreation Center was built in 2000, with the grand opening in December 2001. The Community Center houses the new Council on Aging and the Recreation Center. The Recreation Center is 12,500 square feet a state of the art gymnasium. The facility has a Multi-Purpose Room with a small kitchen facility and media services, a men's and women's locker room with shower facility, a 6,300 square foot gymnasium with a full court for basketball or can be split into two half courts. We have two volleyball courts, tennis net, and a scoreboard. The Wellness Room contains cardiovascular equipment such as treadmills, elliptical machines, and stationary bikes. It also has free weights, and nautilus equipment. For the enjoyment of the members the Wellness Room has two cable televisions and a scale.

Fairhaven Recreation Center is located at 227 Huttleston Avenue, conveniently placed along the Fairhaven bike path. The large spacious backyard is home to a new playground, courtyard with outdoor seating and easy access to the bike path. Fairhaven Recreation provides the community with many recreational, leisure and fitness activities year round for all ages. The facility provides the Fairhaven residents to engage in recreational, social, educational, cultural and community activities.

The Recreation Department first began by offering Karate, Preschool playgroup, Open gym basketball, Aerobics, Volleyball, Adult basketball and Arts and Crafts classes. But the Recreation Department continually adds more to meet the growing needs of the community.

Examples of some of the programs offered include:

- Miles for Matty
- Holiday Events
- Big Truck Day
- Family Movie Nights
- Flashlight Egg Hunt
- Youth Basketball League
- Pee Wee Basketball
- Cheerleading

- Cardio Step & Sculpt
- Kool Kids Summer & After School Program
- NFL Pepsi Punt, Pass and Kick Contest
- Big Apple Bus Trip

Throughout the year new programs offered included Intro to Guitar, Flag Football League, Mad Science, Boot Camp and Lunch Muscle. We also continued offering the favorites, Sports and Games, Pilate's, Yoga, 20/20/20, Volleyball, Basketball, and Huddle Up Football Clinic just to name a few.

### **Little Bay Conservation Area**

Acreage: 70  
 Managed/Owned: Town of Fairhaven  
 Location: End of Little Bay Road  
 Description: Little Bay Conservation Area is adjacent to the Town sewer treatment plan and the bike path extension runs through the eastern portion of the property. This path offers a multi-use trail to and through the Little Bay area, thereby making this a key recreation destination for walkers and cyclists.  
 Protection: Urban Self Help Grant – Article 97

### **Schools**

Six public schools provide recreation areas. Since the schools were built to serve the local school age population, they are well distributed throughout the Town in different residential neighborhoods. These playgrounds heavily used by residents.

#### **Oxford School**

Acreage: 1  
 Owned: Fairhaven School Department  
 Location: 347 Main Street  
 Though this school only consists of a one-acre site, it is located adjacent to Livesey Park.

#### **Fairhaven High School**

Acreage: 8.5  
 Ownership: Fairhaven School Department  
 Location: Route 6  
 The Fairhaven High School is located just north of the Town Center on Rte. 6. The building itself is a very distinguished looking stone building. The athletic fields include a quarter mile track and a football field with spectator stands.

#### **Hastings Junior High School**

Acreage: 34  
 Owned: Fairhaven School Department  
 Location: 30 School Street  
 The school is located several blocks northeast of the high school. It provides six tennis courts and two baseball fields and a large athletic field.

#### **Rogers School**

Acreage: 3  
 Owned: Fairhaven School Department  
 Location: 100 Pleasant Street

Rogers School is located east of the Town Center on Pleasant Street. The playground equipment (replace by PTO in 2006 and 2007), playfield, baseball field and basketball courts are heavily used.

### **Wood School**

Acreage: 19.5

Owned: Fairhaven School Department

Location: 60 Sconticut Neck Road

Located on the northern part of Sconticut Neck, this nineteen-acre site provides a large athletic field, playground equipment, a baseball field and a basketball court.

### **East Fairhaven School**

Acreage: 15.2

Owned: Fairhaven School Department

Location: New Boston Road

This school is located just north of Rte. 6 on New Boston Road. The original school was demolished in 2005 and a new state of the art East Fairhaven school has been constructed. It is equipped with a playground, basketball court and a play field.

### **Whites Farm**

Acreage: 115

Managed/Owned: Mariner Youth Soccer

Location: Shaw Road

Description: White's Farm is near the Austin Pond conservation area and the Nasketucket Watershed area. Mariner soccer, a youth soccer organization, purchased the entire property. Their long- term development plans are to add additional fields, and indoor facility and preserve the sensitive areas on site. However, to accomplish this they have sold some acreage for residential development.

### **Agricultural Preservation**

The state provides farm owners with alternatives to selling their lands for residential or commercial development, through the Farmland Assessment Act (General Law Chapter 61A) and the Agricultural Preservation Restriction Act (APR). These programs not only ease developmental pressures but also preserve and important natural characteristic allowing the owner of the property an opportunity to realize the value of their property.

Under the 61A program, actively farmed lands are in a position to be assessed and taxed on its farm use value rather than its potential property value. Although designed to provide an impetus for farmers to continue to use of their land for agricultural purposes, this is not a permanent solution.

Under the APR program, the Commonwealth compensates landowners for their willingness to place a permanent restriction on their land prohibiting all development, only allowing agricultural use. The landowner retains all rights of ownership, including the right to lease, sell the property or to will it to heirs. Under this program a farmer may sell the development rights to the Commonwealth and the restricted farmland to another farmer, in keeping with the preservation of this important natural feature.

The Forest Assessment Act (General Law Chapter 61) is a program for owners of parcels of forestland consisting of ten or more acres of adjacent land. Primary use of the Forestry Act land is to devote the forest to the production of forestry products.

Finally, Chapter 61 B deals with recreational wildlife resource landscape. This act deals with the land not suitable for forestry or agriculture. Protection is offered for the preservation of wildlife, resource, and or passive recreation in areas such as steep slopes, scenic areas and wetlands. The only provision is that the land must be a least 5 acres in size, and “shall be deemed recreational land if it is retained in substantially natural, wild or open condition, or in a landscaped condition in such manner as to allow to a significant extent the preservation of wildlife and other natural resources, clean air, vegetation, rare or endangered species, geological features, high quality soils and scenic resources...” (see Appendix E for a list of Fairhaven’s Chapter Lands)

Additional methods to protect the future of farming in Fairhaven are the Right to Farm By-law and the Agricultural Commission

### **Right to Farm By-Law**

Fairhaven approved and adopted a Right to Farm By-law at the May 2009 Town Meeting. The purpose of the Right to Farm By-law is to state, with emphasis, the right to farm in accordance to all citizens of the Commonwealth under Article 97, of the Constitution. This General By-law encourages agriculture based economic opportunities, and protects farmlands within the Town. It achieves this by allowing agricultural uses and related activities to function with minimal conflict with abutters and other Town agencies.

### **Agricultural Commission**

The Fairhaven Agricultural Commission was also approved to be organized at the May 2009 Town Meeting. An Agricultural Commission represents the farming community, encourages the pursuit of agriculture, promotes agriculture-based economic opportunities, and works to protect and sustain agricultural businesses and farmland. Agricultural Commissions are a standing committee of town government, created through a vote at Town Meeting appointed by the Board of Selectmen or governing body of the Town.

In 2010, the Massachusetts Association of Agricultural Commissions (MAAC) was formed to provide assistance, support, and a conduit to resources for individual Agricultural Commissions. There are 172 Agriculture Commissions in Massachusetts as of this writing, including Fairhaven. In 20015, the Fairhaven Agricultural Commission voted to become members of both MAAC and the Massachusetts Farm Bureau.

The Agricultural Commission’s immediate goals are to establish and install Right to Farm signage in Fairhaven, benchmarking existing farmland, and working with the Fairhaven Green Committee to promote agriculture and the farmer’s market in Fairhaven.

## **Section 6: Community Goals**

### **Description of the Process**

The process of establishing goals for open space and recreation planning in Fairhaven was explained in Section 2 of this plan. In addition to the community-wide survey, the process consisted of the review of what has been accomplished since the completion and certification of the previous plan (2008 and 2010, respectively) during public working meetings and forums held by the Open Space and Recreation Planning Committee between August of 2016 and March of 2017. All Committee working meetings and public forums were held in an accessible meeting room and venue at the Town Hall, and were televised on local cable access television. A number of interviews with local citizens, local officials, and representatives of organizations who partner with the town in conservation and recreation ventures, were also conducted over this time period.

### **Progress Report from the 2008 Open Space and Recreation Plan**

In the course of developing the Action Plan for the 2017 Open Space and Recreation Plan, there was a great deal of discussion and review of the progress made on the implementation of the Action Plan items contained in the 2008 Open Space and Recreation Plan. The town, through its various departments, partnerships, and the efforts of individuals, has been able to address and implement several of these Action Plan items, or items that are related to specific recommended actions.

A list of some of the major accomplishments since the 2008 plan include:

- Little Bay Extension bike path
- The bike lane on Sconticut Neck (the Neck)
- The boat ramp at Hoppy's Landing
- Blinking, solar powered safety signage on the Neck and the Phoenix Bike Path
- Little Bay Estates
- Mariner's Field Property
- DeNormandie Property conservation (through Conservation Restriction and fee)
- The Shaw Farm Trail (partnership with the Buzzards Bay Coalition, connecting the Fairhaven and Mattapoisett Bike Paths with the Nasketucket Bay State Reservation)
- The Fitzgerald Property (with the Mattapoisett River Valley Water Supply Protection Committee)
- Mahoney/New Boston Road Property (with the Mattapoisett River Valley Water Supply Protection Committee)
- Fitzgerald Property (with the Mattapoisett River Valley Water Supply Protection Committee)
- Nasketucket Bay Land Conservation Project (416 acres preserved, 135 of which are in Fairhaven; funders/partners included: Buzzards Bay Coalition, Buzzards Bay

Project, US Dept. of Agriculture, US Fish & Wildlife, The Bouchard Fund, NOAA, private funders)

- The Viveiros Farm Property (Agricultural Preservation Restriction and fee; partnership with the Fairhaven Acushnet Land Preservation Trust)
- West Island Salt Marsh Restoration Project (partners included the New Bedford Harbor Trustees Council, MA Division of Ecological Restoration, Bristol County Mosquito Control)

### **Open Space and Recreation Goals**

In 2017, the stewardship of existing assets coupled with the challenges of developing new conservation, open space, and recreation opportunities for the town, makes establishing sound resource and recreation planning strategies essential. With a growing and aging population, fewer financial resources with which to operate (dwindling federal, state, and local grants in particular), and more competition for those remaining financial resources, the town must be even more organized, creative and resourceful in maximizing partnership opportunities, pursuing new and innovative ways to generate revenue, and prioritizing future conservation, recreation, and open space needs.

Seven (7) basic goals in the area of open space and recreation emerged during the public participation process, and are listed (in no specific order) as follows:

1. Set aside more land for conservation, open space, and water supply protection purposes
2. Preserve our cultural and historic places and landscapes
3. Increase access to the waterfront and water-based recreation opportunities
4. Preserve/protect forests/woodlands, habitat, and native inland and coastal vegetative communities
5. Provide quality, life-long recreational opportunities for all citizens regardless of age or ability
6. Increase awareness and stewardship of our conservation, recreation, and open space assets
7. Preserve our farmland and working agricultural landscape



## **Section 7: Analysis of Needs**

### **Summary of Resource Protection Needs**

The protection and retention of wetlands, wildlife, and habitat have remained priorities for the citizens of Fairhaven over the past twenty years. During the public process of updating the 2008 Open Space and Recreation Plan, retention of native plant species (our “natural green infrastructure”) for flood mitigation and to enhance the resilience of the community, was also mentioned as needing attention (this is also consistent with the town’s current preparation of a Hazard Mitigation Plan).

The need for conservation education materials for homeowners, as well as education on non-native invasive plants and how to properly deal with them, were also seen as necessary tools to address natural resource protection.

The public is also very supportive of the ongoing efforts of the Mattapoissett River Valley Water Supply Protection Committee to continue to acquire land that is important to the protection of the quality and quantity of the public water supply. Similarly, the public supports the continued efforts of the town, through various means (including partnerships with federal, state, local, and non-profit organizations), to acquire land in environmentally sensitive and vulnerable areas, and in areas adjacent to other conservation holdings.

In order to adequately address the town’s resource protection needs, several survey respondents and public participants expressed the need to employ a full-time Conservation Agent (currently, this is not a full-time staff position in Fairhaven).

### **Summary of Community and Recreation Needs**

The Statewide Comprehensive Outdoor Recreation Plan (SCORP), 2012, is a five-year plan developed by the Commonwealth’s Executive Office of Energy and Environmental Affairs. The plan is required for state participation in the federal Land and Water Conservation Fund (LWCF) grants programs. The SCORP also provides an overview of the recreational preferences of the citizens of the Commonwealth as determined through a geographically based public participation and outreach process. The profile of recreational use afforded by the SCORP also provides municipalities with a planning tool for addressing the future needs and uses of our outdoor recreational resources.

The SCORP summary of the Commonwealth’s Eastern and Southern Regions, which includes Fairhaven, indicates that water based activities and playgrounds provide the most popular recreational outlets for families in those regions. The SCORP also revealed that the most popular facilities for adults and seniors are hiking and walking trails; adolescents find athletic fields and skate parks most popular; playgrounds and athletic fields are popular for children’s activities, and; playgrounds and water based activities are most popular for activities involving preschoolers. The SCORP also indicated that trails are the type of facility that has increased the most in popularity over the past five years, as well as being the type of

facility that people believe will continue to increase the most in popularity over the next five years. This is very much in line with the preferences expressed in the public response to the Fairhaven Open Space and Recreation Plan Survey.

The SCORP also indicated that citizens of this region favored restoring/reinvesting in and maintaining existing facilities. The public response to the Fairhaven Open Space and Recreation Survey reflects similar views in regard to care and maintenance issues at certain valued and well-used facilities.

One of the recurring themes in the public/working meetings, and in the responses in the “additional comments” section of the public survey, was the issue of wayfinding/improved access. There is a need for improved visibility of and better access to many of the town’s recreational facilities and open space (including considerations for elder, younger, and physically challenged residents). These concerns can be addressed by the town’s continued efforts to address its ADA Transition Plan for conservation and recreation facilities. Site visibility involves “wayfinding” signage to indicate location and public access. Visibility can also involve the installation of consistent format (color/logo/symbol) of signage at town-owned, publically accessible facilities. These facilities can also be put on a web-based map (Rochester and the Dartmouth Natural Resources Trust are good local examples) to help locals and visitors find and take advantage of the conservation and recreational opportunities afforded by the town.

The Recreation Department needs more storage and office space. This is important in order to maintain the quality of programs and activities offered, which a majority of Open Space and Recreation Survey respondents rated as good.

The public assessment of needs at particular facilities was fairly consistent. A list of the public’s favorite, and most used facilities, included: Fort Phoenix, the Phoenix Bike Path, Cushman Park, Livesey Park, and West Island Beach. As is often the case with popular and heavily used facilities, many people commented on the potential for improvement of each one.

Issues at Fort Phoenix involve allowing canoe and kayak access which is currently restricted by the state. The town will have to work with local legislators to explore the removal of such restrictions (if possible).

It was suggested that the Phoenix Bike Path could use some plantings and beautification work to enhance the experience. It was also suggested that the town work with Mattapoisett to install mile-markers along the regional bike path.

Cushman Park is a mixed-jurisdiction facility (shared with the School Department) whose tennis courts are facing “end of life” issues, and will need to be relocated/rebuilt in approximately seven (7) years. The courts are also in need of protective netting to keep tennis balls on site. The Fairhaven Tennis Association has put 50% of the cost in on the court resurfacing project. The town may want to use Community Preservation funds to address repair and relocation issues (which would probably have to be resolved by 2021 in

order to allow for a seamless transition of the tennis facility).

Most of the comments on Livesey Park had to do with maintenance, trash, and parking issues. Many people felt that there should be trash receptacles at Livesey (and at every park) as part of a maintenance plan. The Open Space and Recreation Planning Committee further analyzed public comments and suggested that a feasibility study to repurpose available land in and around the park, for parking purposes, be considered.

The concerns expressed over West Island Town Beach centered largely around parking (particularly the condition of the parking lot) and traffic flow during the busy summer months. The parking lot issue will require a thorough look as it is large and in an environmentally sensitive area. While paving would improve the condition of the lot, it would not necessarily be the most environmentally friendly solution. Porous pavement with swales and infiltration may be too expensive in terms of application and maintenance. As for summer traffic flows, it has been suggested that a second parking lot attendant is needed for management purposes.

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

It is critically important that the town preserve open space that not only serves conservation and recreation purposes, but also functions as part of a green infrastructure network that will make the town more resilient to the predicted impacts of climate change (increased tidal/coastal flooding, storm surge, heavy precipitation events, rising temperatures, and air quality impacts). The ability to assemble open space in a manner that preserves intact, contiguous habitats and ecosystems is a functional consideration of our green space that should be knit into all of our planning documents (Master Plan, Hazard Mitigation Plan, Economic Development Plans).

Any vulnerable, significant conservation land that is not currently permanently protected should be placed under protection by the most appropriate means available (transfer to the Conservation Commission; Conservation Restriction, either held by the town or assigned to a non-profit partner, etc.). The appropriate departments/commissions within town should research the deeds of the property under their control, including the acquisition history of each. Identify the parcels that have affirmative Town Meeting Votes stating that the subject property is to be dedicated to either conservation or recreation use, and determine that the deed reflects the purpose of the acquisition. If research reveals that the accompanying does not reflect the intent of the acquisition, the situation may be remedied by recording a corrective deed (it is recommended that the authorizing Town Meeting Vote is recorded as an adjunct to the corrective deed).

### **Special User Group Needs**

#### *Seniors*

Fairhaven's senior population participates in a number and variety of special programs. Fairhaven's situation is similar to state and national trends in that its population is aging and remaining more active than in years past.

By 2010, about 50% of the total population of Fairhaven was aged 45 and over. The segment of

the population aged 45 and over also increased by 50% between 1990-2010, with the largest increase occurring in those aged 45-65. The population aged 75 and over increased by 26% during the same time period. Fairhaven's Median Age increased from 37.6 years in 1990 to 45.3 in 2010, and passed the state Median Age (39.1 years) for the first time ever.

While the town does provide recreational opportunities, people in this age group, both in surveys and in discussion during the Open Space Committee's working meetings, were looking for increased outdoor activities for seniors (walking, hiking, passive recreation, etc.). This is an issue that the town will have to look at going forward as part of its comprehensive open space and recreation goals to provide quality, life-long opportunities for citizens of all ages and abilities.

### *Citizens with Disabilities*

The town has prepared a self-evaluation and transition plan for its recreational facilities as required under the Americans with Disabilities Act (ADA). These plans are developed in conjunction with a municipally appointed ADA Coordinator. The ADA Coordinator is responsible for working to bring all municipal services, infrastructure, and buildings into compliance with the Act. The ADA Coordinator is not responsible for privately owned facilities.

The ADA Transition Plan, located in Appendix A of this document, contains an inventory of the public recreation facilities of the Town of Fairhaven (exclusive of the School Department facilities; the School Department must conduct their own assessment and prepare a Transition Plan for their facilities). The Transition Plan takes inventory of the improvements needed to bring a facility into ADA compliance. The town has been attempting to address these needs as funding allows, and has accomplished some of the tasks laid out in the most recent Transition Plan.

All future recreation facilities should be designed with the needs of citizens with disabilities in mind, in terms of access, physical use, and ability to view events and cultural/scenic landscapes.

## **Section 8: Goals and Objectives**

### **Goal 1: Preserve our farmland and working agricultural landscapes**

#### Objectives:

- A. Acquire specific critically located parcels of land to prevent development in inappropriate (e.g., coastal) areas in Fairhaven.
- B. Encourage continued participation and enrollment in farmland and forestry preservation programs under MGL 61, 61A and 61B, and in the state's Agricultural Preservation Restriction (APR).
- C. Preserve important agricultural soils/working agricultural landscapes in conjunction with state and local food systems security planning
- D. Work with the Agricultural Commission to develop an up-to-date Plan of Work that integrates appropriate conservation and open space goals and objectives

.

### **Goal 2: Increase awareness and stewardship of our conservation, open space, and recreational assets.**

#### Objectives:

- A. Develop a web-based map of conservation, recreation, and open space assets as part of an Open Space and Recreation web page
- B. Prepare information, including directional and on-site narrative and graphic signage and brochures, highlighting conservation and recreation areas, and encouraging stewardship and appropriate use.
- C. Establish a permanent Open Space Committee to work with other boards and commissions to help promote the Open Space and Recreation Plan

**Goal 3: Set aside more land for conservation, open space, and water supply protection**

Objectives:

- A. Continue to work with the Mattapoissett River Valley Water Supply Protection Committee to protect the resources of the Mattapoissett River aquifer.
- B. Continue appropriate administration of the provisions of the Water Protection Overlay Zoning District in the Nasketucket River Watershed.
- C. Encourage and educate the public on responsible land use management and planning practices within all water, marine, and critical habitat/natural resource areas.

**Goal 4: Provide quality life-long recreational opportunities for all citizens regardless of age or ability**

Objectives:

- A. Continue to develop recreational and athletic facilities, including multi-purpose fields, pathways, and play areas, particularly in underserved parts of town.
- B. Meet ADA required accessibility standards for access to all town-owned conservation, recreation, and athletic facilities, per the ADA Transition Plan.
- C. Improve access and maintenance of facilities at Livesey Park and Town Beach Beach on West Island.
- D. Continue to work to develop bicycle facilities, enhancements, and connections From the existing Phoenix Bike Path to other parts of town and to existing regional pathways.
- E. Work with the Wellness Committee to plan and develop the recommended Fitness Trail
- F. Find more administrative and storage space for the Recreation Department in order to retain adequate and efficient services

**Goal 5:        Preserve/protect forests/woodlands, habitat, and native inland and coastal vegetative communities**

Objectives:

- A. Protect inland and coastal wetlands and wildlife habitat through enforcement of the Wetlands Protection Act, floodplain regulations, and restrictions that apply to areas subject to coastal flooding.
- B. Continue to work with conservation partners to acquire lands that are significant to state recognized Core Habitat, Critical Natural Landscapes, and climate change resilient land.
- C. Hire a full-time Conservation Agent.

**Goal 6:        Preserve our cultural and historic places and landscapes**

Objectives:

- A. Continue to promote public awareness of the cultural and historical assets of the town and the accompanying stewardship needs.
- B. Acquire lands that represent important cultural landscapes associated with the history and character of the town.

**Goal 7:        Increase access to the waterfront and water-based recreation activities**

Objectives:

- A. Identify, improve, and increase the points of access to the waterfront for canoes, kayaks, and other recreational users.
- B. Improve ADA compliant opportunities for waterfront access.

## SECTION 9: ACTION PLAN 2017–2024

Fairhaven has been committed to pursuing opportunities to address the goals, objectives, and actions laid out in the 2008 Open Space and Recreation Plan. We have also been very fortunate to have numerous partners at the local, regional, state, and federal levels show an interest and willingness to partner with us in these pursuits.

The 2017 Open Space and Recreation Plan update affords us the opportunity to continue our work, both singularly at the town level, as well as with partners such as the Buzzards Bay Project, the Fairhaven Acushnet Land Preservation Trust, the Buzzards Bay Coalition, the New Bedford Harbor Trustees Council, U.S. Fish & Wildlife, SRPEDD, the EPA, NOAA, USDA, the Mattapoissett River Valley Water Supply Protection Committee, and numerous others. These partnerships provide not only technical assistance to town staff, but access to additional funding resources either overseen, passed through, or leveraged by these agencies and non-profits.

With this approach, potential partners, and available resources taken into consideration, the Seven Year Action Plan developed for the 2017 Open Space and Recreation Plan is presented below. (see **Section 10, Maps, Action Map**)

### **Years 1- 3**

**ACTION:** Appoint a permanent Open Space Committee

**Local Lead/Potential Partners:** Selectmen, Planning, others as appropriate

**Goals/ Objectives/Needs addressed:** Goal 2, Objective c

**Potential Funding Source:** Local

**ACTION:** Hire a full-time Conservation Agent

**Local Lead/Potential Partners:** Conservation, Selectmen

**Goals/Objectives/Needs addressed:** Goal 5, Objective c

**Potential Funding Source:** Local

**ACTION:** Work with the Buzzards Bay Coalition to acquire the Carvalho Farm property

**Local Lead/Potential Partners:** Planning, Conservation, Selectmen, Buzzards Bay Coalition, Agricultural Commission, Green Committee, non-profits, others as appropriate

**Goals/Objectives/Needs addressed:** Goal 1, Objectives a, c; Goal 5, Objective b; Goal 6, Objective b



**Potential Funding Source:** State, local, non-profit, foundation, other

**ACTION:** Develop a template for consistent wayfinding signage to clearly mark town-owned, publicly accessible conservation, recreation, and open space holdings

**Local Lead/Potential Partners:** Selectmen, Planning, Conservation, Recreation, Historical, non-profits, others as appropriate and necessary

**Goals/Objectives/Needs addressed:** Goal 2, Objectives a, b

**Potential Funding Source:** Local, state, federal, non-profit, other

**ACTION:** Develop a user-friendly, web-based map/brochure highlighting the town's conservation, recreation, and open space assets and opportunities

**Local Lead/Potential Partners:** Planning, Conservation, Historical, Selectmen, academic institutions, other town boards, non-profits, other commissions and departments, as appropriate

**Goals /Objectives/Needs addressed:** Goal 2, Objective a

**Potential Funding Source:** Local, state, federal, non-profit, other

**ACTION:** Conduct a feasibility study to find/develop/create more storage and office space for the Recreation Department

**Local Lead/Potential Partners:** Selectmen, Recreation, other town boards, commissions, and departments, as appropriate

**Goals/Objectives/Needs addressed:** Goal 4, Objective f

**Potential Funding Source:** Local, state, other

**ACTION:** Develop plans for the Wellness Committee's recommended Fitness Trail

**Local Lead/Potential Partners:** Planning, Recreation, Selectmen, Wellness Committee, non-profits, other boards, commissions, departments, as appropriate

**Goals/Objectives/Needs addressed:** Goal 4, Objectives a, b, e

**Potential Funding Source:** Local, federal, state, local businesses, volunteer contributions

**ACTION:** Work with Mattapoisett to develop a system of mile markers for the connected bike paths

**Local Lead/Potential Partners:** Planning, Town of Mattapoisett, Fairhaven Bike Path Committee, Mattapoisett Bike Path Committee, South Coast Bikeway

**Goals/Objectives/Needs addressed:** Goal 4, Objectives a, d

**Potential Funding Source:** Local, non-profit, businesses, volunteer contributions

**ACTION:** Conduct a feasibility study for the relocation and reconstruction of the tennis courts at Cushman Park

**Local Lead/Potential Partners:** Selectmen, Planning, Conservation, Recreation, Public Works, non-profits, other town offices as appropriate

**Goals/Objectives/Needs addressed:** Goal 4, Objectives a, b

**Potential Funding Source:** Local, state, non-profit, other

**ACTION:** Educate the public on non-native invasive plants and how to properly deal with them

**Local Lead/Potential Partners:** Conservation, Buzzards Bay Project, MA DEP, Buzzards Bay Coalition, New England Wild Flower Society, other federal, state, regional agencies and non-profits, volunteers

**Goals/Objectives/Needs addressed:** Goal 3, Objective c; Goal 5, Objective a

**Potential Funding Source:** Federal, state, regional, local, non-profit

## **Years 4 – 7**

**ACTION:** Work with legislators to remove state restrictions on canoeing/kayaking at Fort Phoenix

**Local Lead/Potential Partners:** Selectmen, state legislators, appropriate state agencies

**Goals/Objectives/Needs addressed:** Goal 7, Objectives a, b

**ACTION:** Develop new office and storage space for the Recreation Department

**Local Lead/Potential Partners:** Selectmen, Recreation, Conservation, Public Works, other town offices, and partners, as necessary and appropriate

**Goals/Objectives/Needs addressed:** Goal 4, Objective f

**Potential Funding Source:** Local, state, non-profit, other

**ACTION:** Complete the Fitness Trail and link it to bike path

**Local Lead/Potential Partners:** Selectmen, Planning, Conservation, Recreation, Wellness Committee, Bike Path Committee, other volunteers and non-profits

**Goals/Objectives/Needs addressed:** Goal 4, Objectives a, b, e

**Potential Funding Source:** Local, state, federal, non-profit, businesses, other as available

## **Ongoing (Years 1 – 7)**

**ACTION:** Protect, and retain wetland, wildlife, habitat, water/water supply, native vegetation and our other natural resources

**Local Lead/Potential Partners:** Conservation, Planning, Selectmen, Mattapoissett River Valley Water Supply Protection Committee, New England Wild Flower Society, federal, state, local, non-profit partners, others as appropriate and necessary

**Goals/Objectives/Needs addressed:** Goal 1, Objective a; Goal 3, Objectives a; Goal 5, Objectives a, b; Goal 6, Objective b

**Potential Funding Source:** Federal, state, local, non-profit, foundation, and other sources of funding

**ACTION:** Retain access to the coastline and increase it where and when possible

**Local Lead/Potential Partners:** Conservation, Selectmen, Planning, federal, state, local, non-profit partners, others as appropriate and necessary

**Goals/Objectives/Needs addressed:** Goal 7, Objectives a, b; Goal 4, Objective c

**Potential Funding Source:** Federal, state, local, non-profit, foundation, and other sources of funding

**ACTION:** Develop conservation education materials for homeowners

**Local Lead/Potential Partners:** Conservation, Planning, Public Works, federal, state, local, non-profits, others as appropriate

**Goals/Objectives/Needs addressed:** Goal 3, Objectives a, c

**Potential Funding Source:** Local, state, federal, non-profit, businesses, other

**ACTION:** Continue to develop multimodal pathway opportunities, including working with New Bedford and Acushnet on the Acushnet Riverwalk Project

**Local Lead/Potential Partners:** Planning, Conservation, Bike Path Committee, other town departments, committees, and commissions, federal, state, local, non-profit partners, volunteers, as appropriate

**Goals/Objectives/Needs addressed:** Goal 4, Objectives a, c

**Potential Funding Source:** Federal, state, local, non-profit, businesses, volunteer contributions

**ACTION:** Address maintenance, trash, and parking issues at all Town Park facilities (particularly at Livesey Park and West Island Town Beach)

**Local Lead/Potential Partners:** Conservation, Public Works, Selectmen, non-profits, volunteers, others as necessary

**Goals/Objectives/Needs addressed:** Goal 2, Objective b; Goal 4, Objectives b, c

**Potential Funding Source:** Local, state, businesses, non-profit, other

**ACTION:** Plantings and beautification for the Phoenix Bike Path

**Local Lead/Potential Partners:** Bike Path Committee, Beautification Committee, Planning, Conservation, Public Works, non-profits, volunteers, others as necessary

**Goals/Objectives/Needs addressed:** Goal 4, Objective d

**Potential Funding Source:** Local, state, businesses, non-profit, other

**ACTION:** Work with the Town of Mattapoisett to place mile markers on linked trails

**Local Lead/Potential Partners:** Fairhaven Bike Path Committee, Mattapoisett Bike Path Committee, volunteers, others as necessary

**Goals/Objectives/Needs addressed:** Goal 4, Objective d

**Potential Funding Sources:** Local, volunteer contributions, non-profits, other

**ACTION:** Look for opportunities to retain/preserve the working agricultural landscape/local farms

**Local Lead/Potential Partners:** Fairhaven Agriculture Commission, Green Committee, Planning, Selectmen, Conservation, others as necessary and appropriate

**Goals/Objectives/Needs addressed:** Goal 1, Objectives a, b, c, d; Goal 6, Objective b

**Potential Funding Source:** Federal, state, local, foundation, non-profit, other

**ACTION:** Strengthen working relationships with our local, regional, state, federal, non-profit, and business partners and continue to work together to pursue the resources necessary to realize the goals and objectives of the Open Space and Recreation Plan

**Local Lead/Potential Partners:** Selectmen, Recreation, Conservation, Planning, Public Works, Historical, other boards, commissions and committees as necessary and appropriate

**Goals/Objectives/Needs addressed:** Goal 3, Objective a; Goal 5, Objective b

**ACTION:** Coordinate, when feasible, acquisitions, projects, and regulatory improvements consistent with similar actions recommended in the Town's Master Plan and Hazard Mitigation Plan (integrated planning)

**Local Lead/Potential Partners:** Planning, Selectmen, Local Emergency Preparedness Committee, Conservation, Recreation, other boards, commissions, and committees as necessary and appropriate, federal, state, local, non-profits, others as appropriate

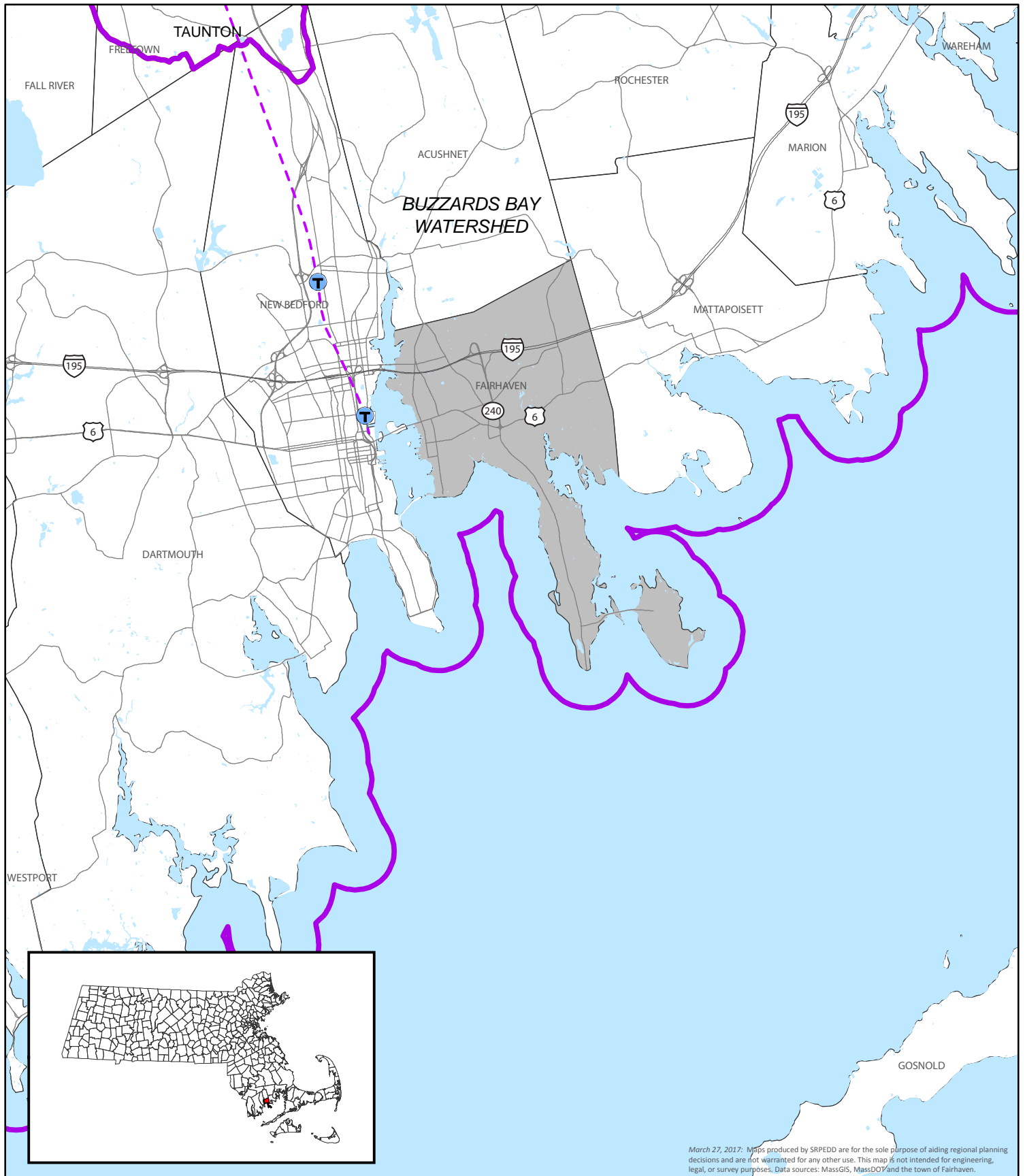
**Goals/Objectives/Needs addressed:** Goal 5, Objectives a, b; Goal 3, Objective c; Goal 2, Objective c

**Note:** Non-profits may include the Fairhaven Acushnet Land Preservation Trust, Buzzards Bay Coalition, Mass Audubon, The Mattapoisett River Valley Water Supply Protection Committee, The Nature Conservancy, and others with whom the town has worked previously.

Academic institutions may include UMass Dartmouth, Bridgewater State University, Mass Maritime, Bristol Community College, and others with whom the town has worked with previously.

## **Section 10: Maps**

- **Regional Context**
- **Environmental Justice Areas**
- **Zoning**
- **Land Use**
- **Surficial Geology**
- **Prime Soils**
- **Hydric Soils**
- **Farmland Soils**
- **Water Resources**
- **FEMA National Flood Hazard**
- **Wildlife Habitat**
- **Scenic Resources and Unique Environments**
- **Environmental Justice Areas w/Open Space Layer (Environmental Equity)**
- **Open Space Map**
- **Action Map**



## Town of Fairhaven

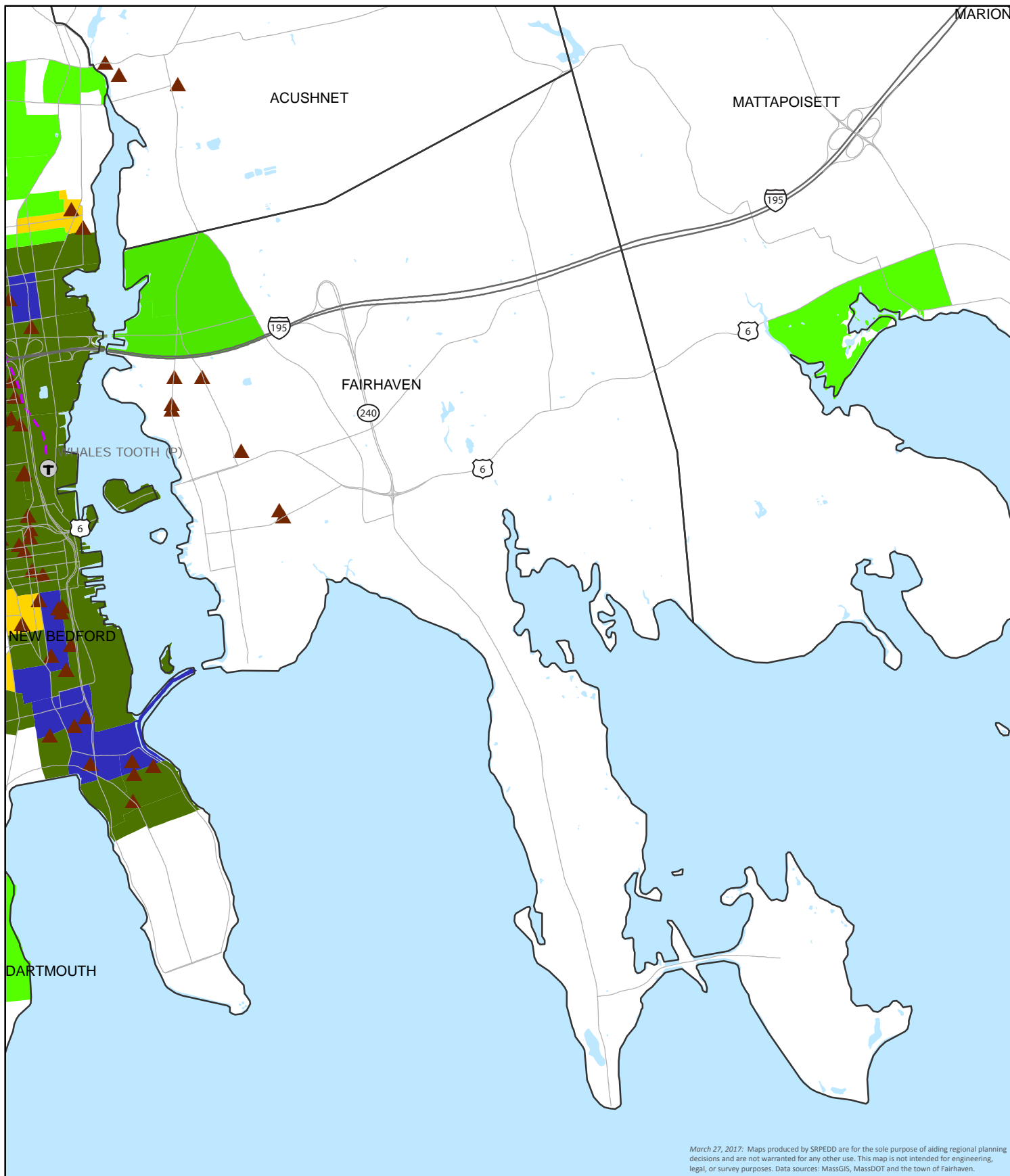
### Open Space and Recreation Plan - Regional Context Map

#### Legend

- Buzzards Bay Watershed
- Municipal Boundaries
- Interstates
- Arterials and Collectors
- Local Roads
- T MBTA Proposed Stations
- MBTA Proposed Commuter Rail Lines

5 mile





## Town of Fairhaven

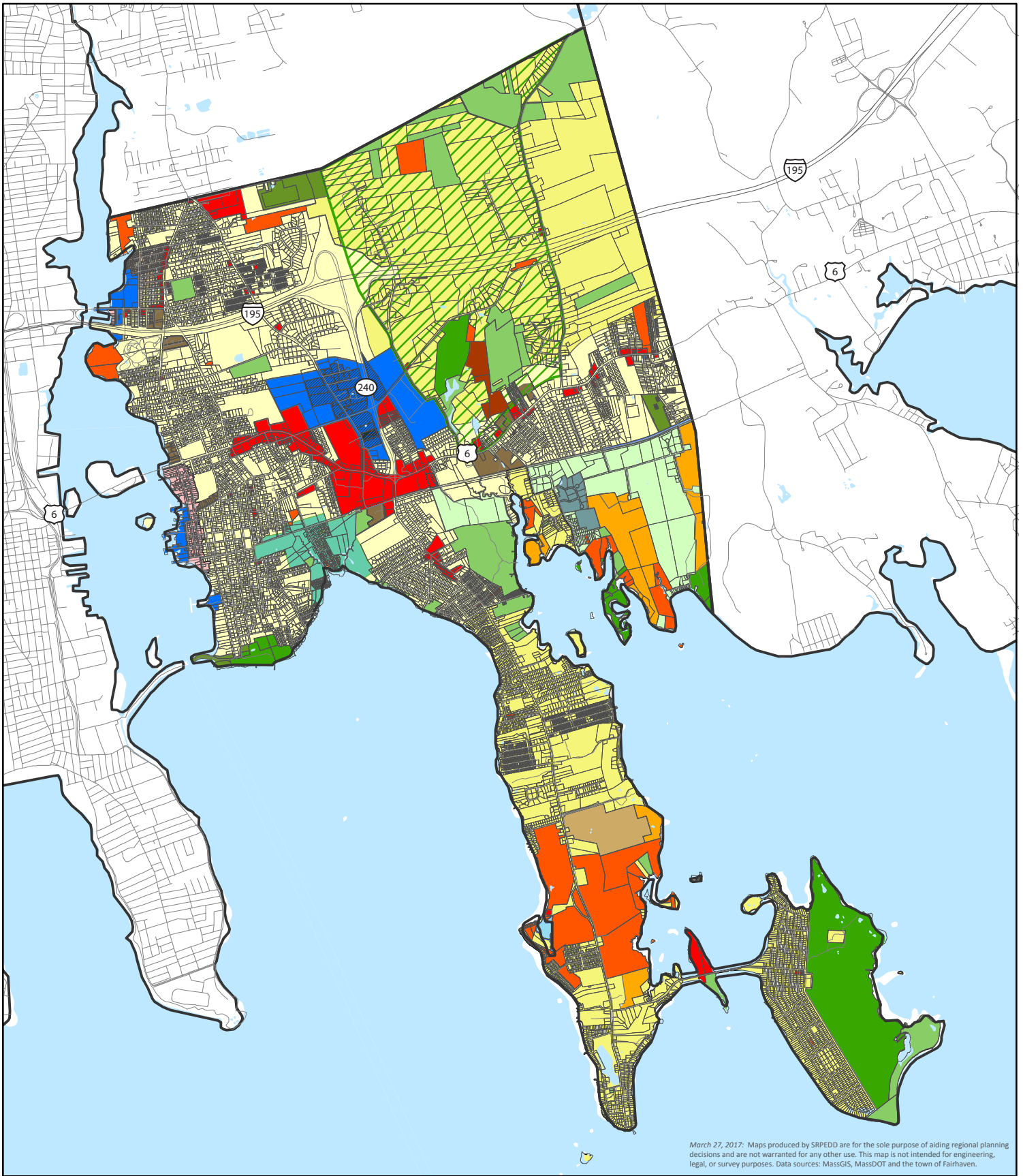
### Open Space and Recreation Plan - Environmental Justice Map

#### Legend

- Minority
- Income
- English Isolation
- Minority and Income
- Minority and English Isolation
- Income and English Isolation
- Minority, Income and English Isolation
- Subsidized Housing (SRPEDD)

- Municipal Boundaries
- Interstates
- Arterials and Collectors
- Local Roads

- MBTA Proposed Stations
- MBTA Proposed Commuter Rail Lines
- MBTA Active Commuter Stations
- MBTA Active Commuter Rail Lines



# Town of Fairhaven

## Open Space and Recreation Plan - Zoning Map

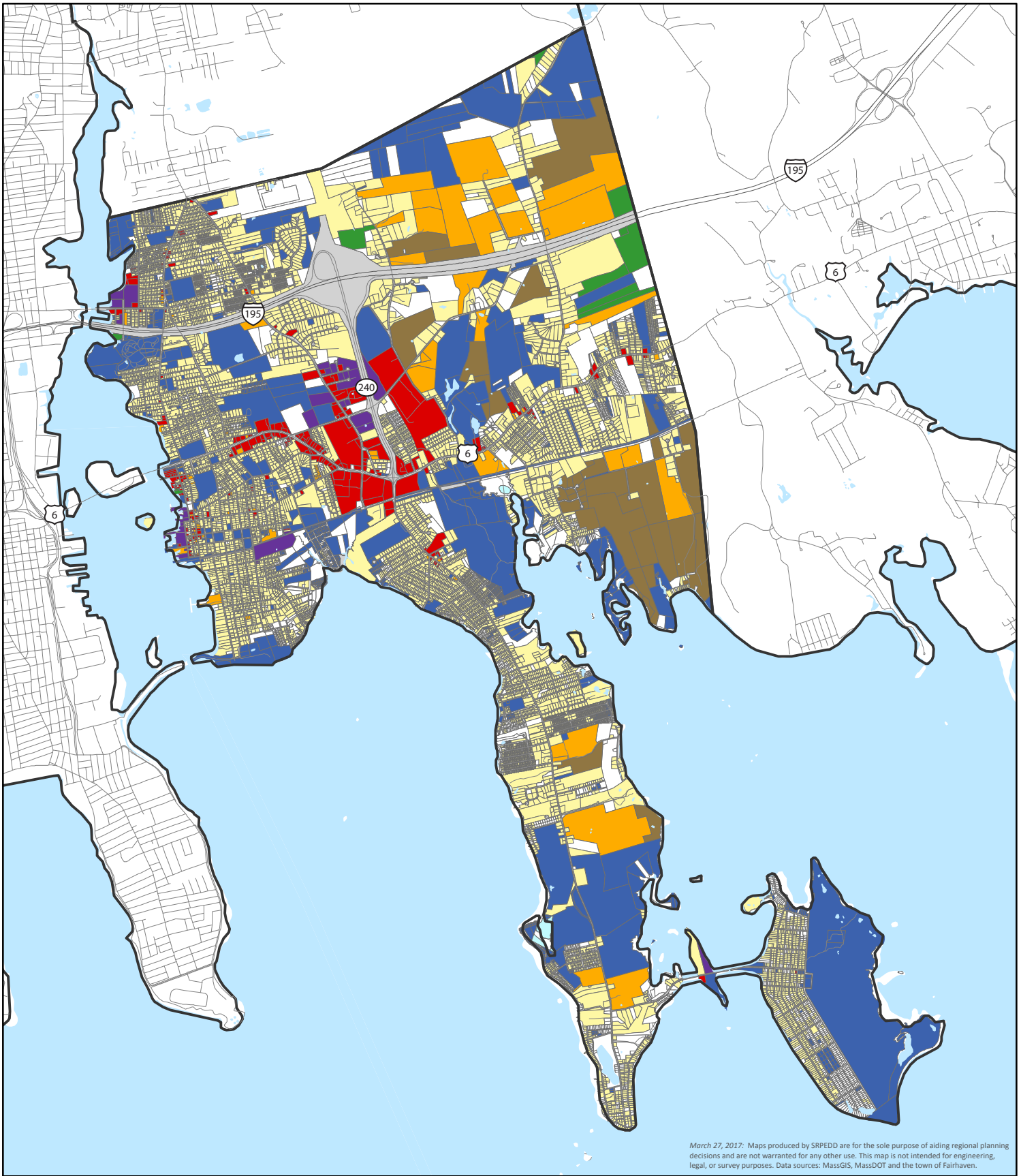
### Legend

|                                     |                         |  |                          |
|-------------------------------------|-------------------------|--|--------------------------|
| Single Residence District - RA      | Business District - B   | Wetland Resource Protection District - WRP     | Municipal Boundaries     |
| Rural Residence District - RR       | Industrial District - I | Medical Marijuana Overlay District - MM - MU   | Interstates              |
| General Residence District - RB     | Mixed Use District - MU | Nasketucket River Basin Overlay District - NRB | Arterials and Collectors |
| Apartment/Multifamily District - RC | Park District - P       |  | Local Roads              |
| Agricultural District - AG          |                         |  |                          |

1 mile







# Town of Fairhaven

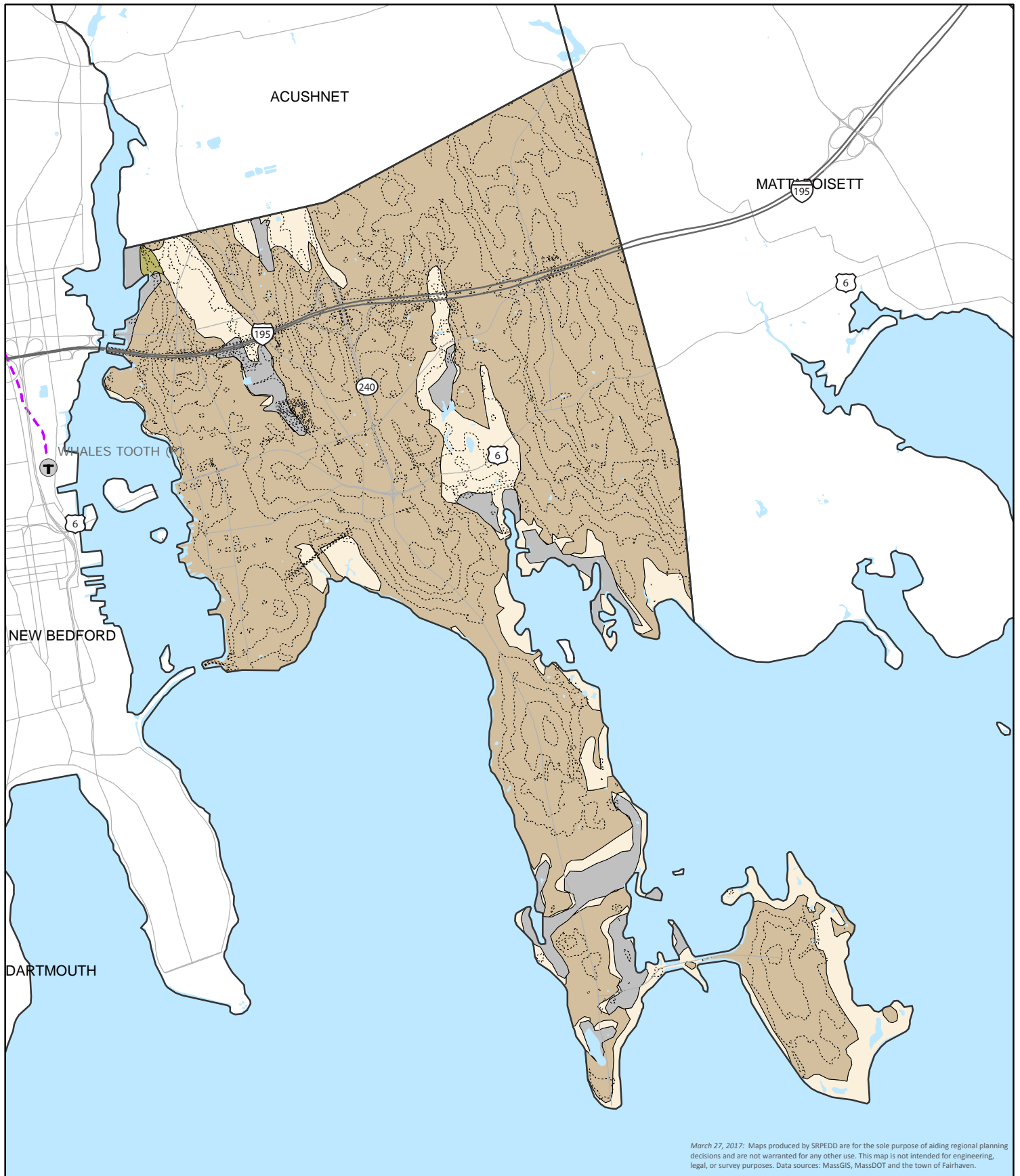
## Open Space and Recreation Plan - Land Use Map

### Legend

- |   |   |  |  |
|---|---|--|--|
| <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; background-color: white;"></span> Vacant or No Data | <span style="display: inline-block; width: 10px; height: 10px; background-color: brown;"></span> Agricultural | <span style="display: inline-block; width: 10px; height: 10px; background-color: blue;"></span> Institutional              | <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; background-color: white;"></span> Municipal Boundaries     |
| <span style="display: inline-block; width: 10px; height: 10px; background-color: orange;"></span> Mixed - Use                               | <span style="display: inline-block; width: 10px; height: 10px; background-color: red;"></span> Commercial     | <span style="display: inline-block; width: 10px; height: 10px; background-color: lightblue;"></span> Water                 | <span style="display: inline-block; width: 10px; height: 10px; border: 2px solid black; background-color: white;"></span> Interstates              |
| <span style="display: inline-block; width: 10px; height: 10px; background-color: yellow;"></span> Residential                               | <span style="display: inline-block; width: 10px; height: 10px; background-color: purple;"></span> Industrial  | <span style="display: inline-block; width: 10px; height: 10px; background-color: grey;"></span> Utility and Transportation | <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; background-color: white;"></span> Arterials and Collectors |
| <span style="display: inline-block; width: 10px; height: 10px; background-color: green;"></span> Open Space and Recreational                |   |  | <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; background-color: white;"></span> Local Roads              |

1 mile





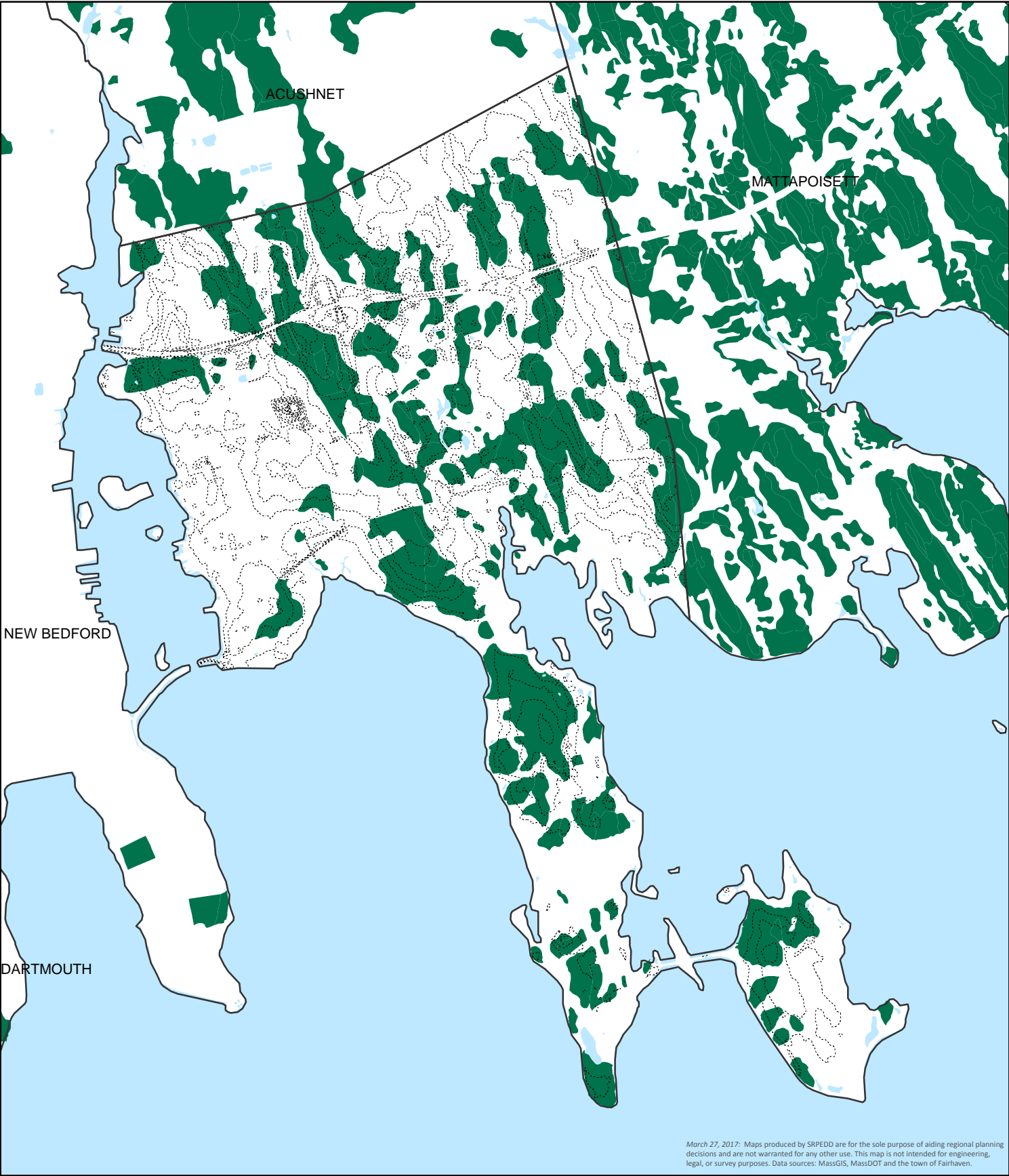
## Town of Fairhaven

### Open Space and Recreation Plan - Surficial Geology Map

#### Legend

- |   |                      |                               |                                   |
|---|----------------------|-------------------------------|-----------------------------------|
| Sand and Gravel Deposits  | 3 Meter Contours     | Interstates                   | MBTA Proposed Stations            |
| Till or Bedrock   | Municipal Boundaries | Arterials and Collectors      | MBTA Proposed Commuter Rail Lines |
| Large sand deposits where distinguished from sand and gravel deposits | Local Roads          | MBTA Active Commuter Stations | MBTA Active Commuter Rail Lines   |
| Floodplain Alluvium   |                      |                               |                                   |

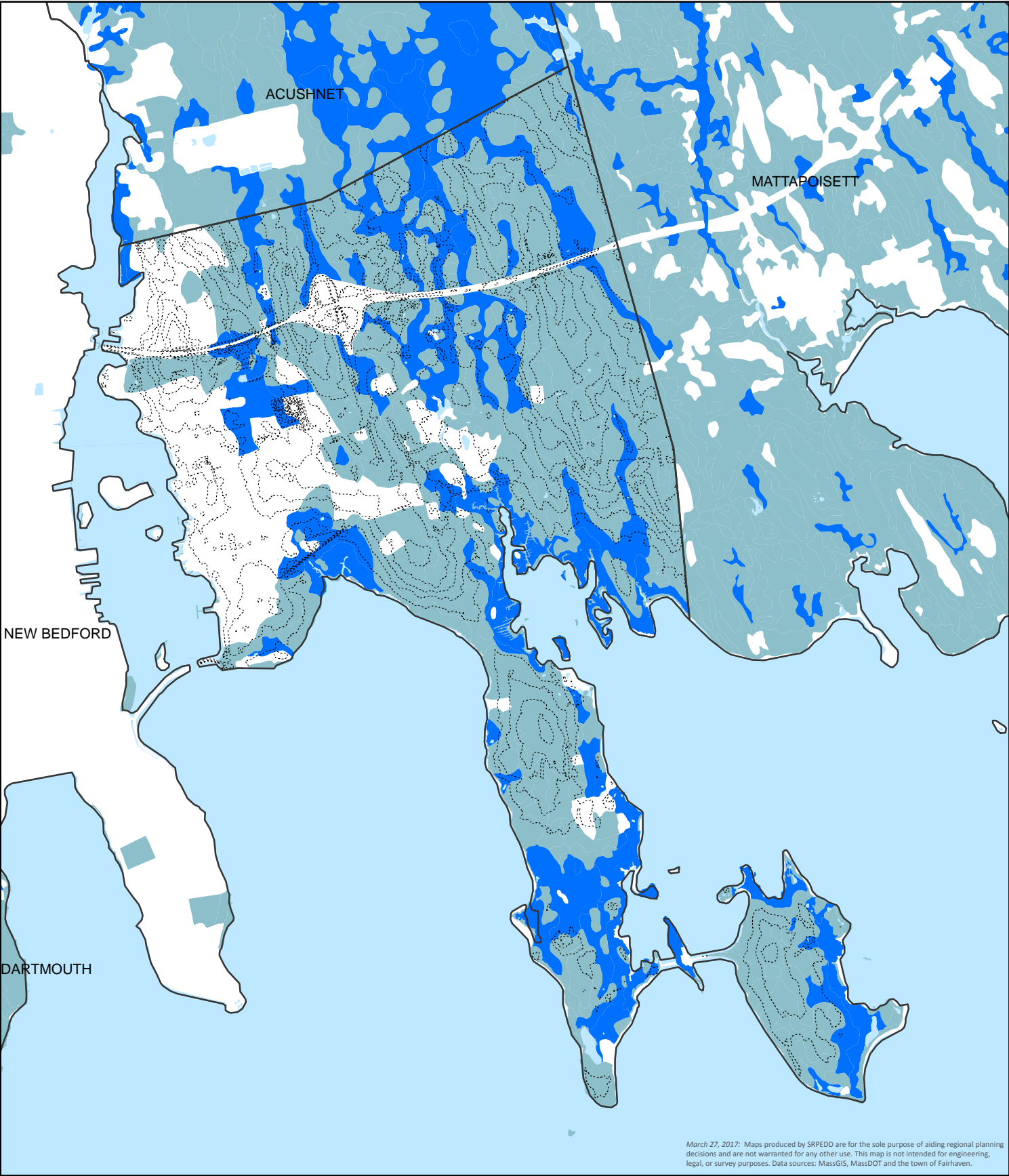
1 mile



**Town of Fairhaven**  
Open Space and Recreation Plan - Prime Soils Map

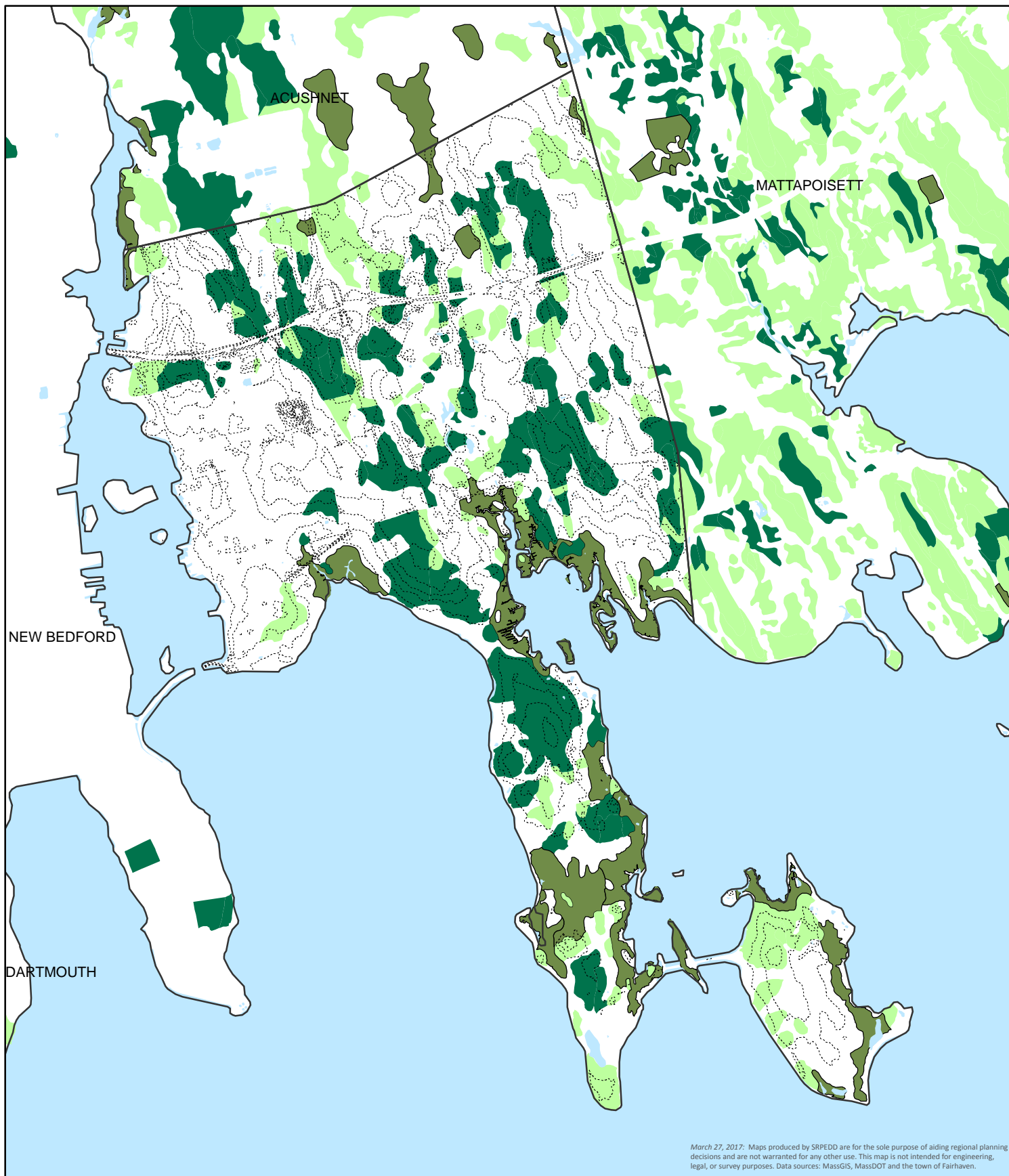
- Legend**
- All prime and Statewide Significance
  - 3 Meter Contours
  - Municipal Boundaries





**Town of Fairhaven**  
Open Space and Recreation Plan - Hydric Soils Map

- Legend**
- All Hydric
  - Partially Hydric
  - 3 Meter Contours
  - Municipal Boundaries



March 27, 2017: Maps produced by SRPEDD are for the sole purpose of aiding regional planning decisions and are not warranted for any other use. This map is not intended for engineering, legal, or survey purposes. Data sources: MassGIS, MassDOT and the town of Fairhaven.

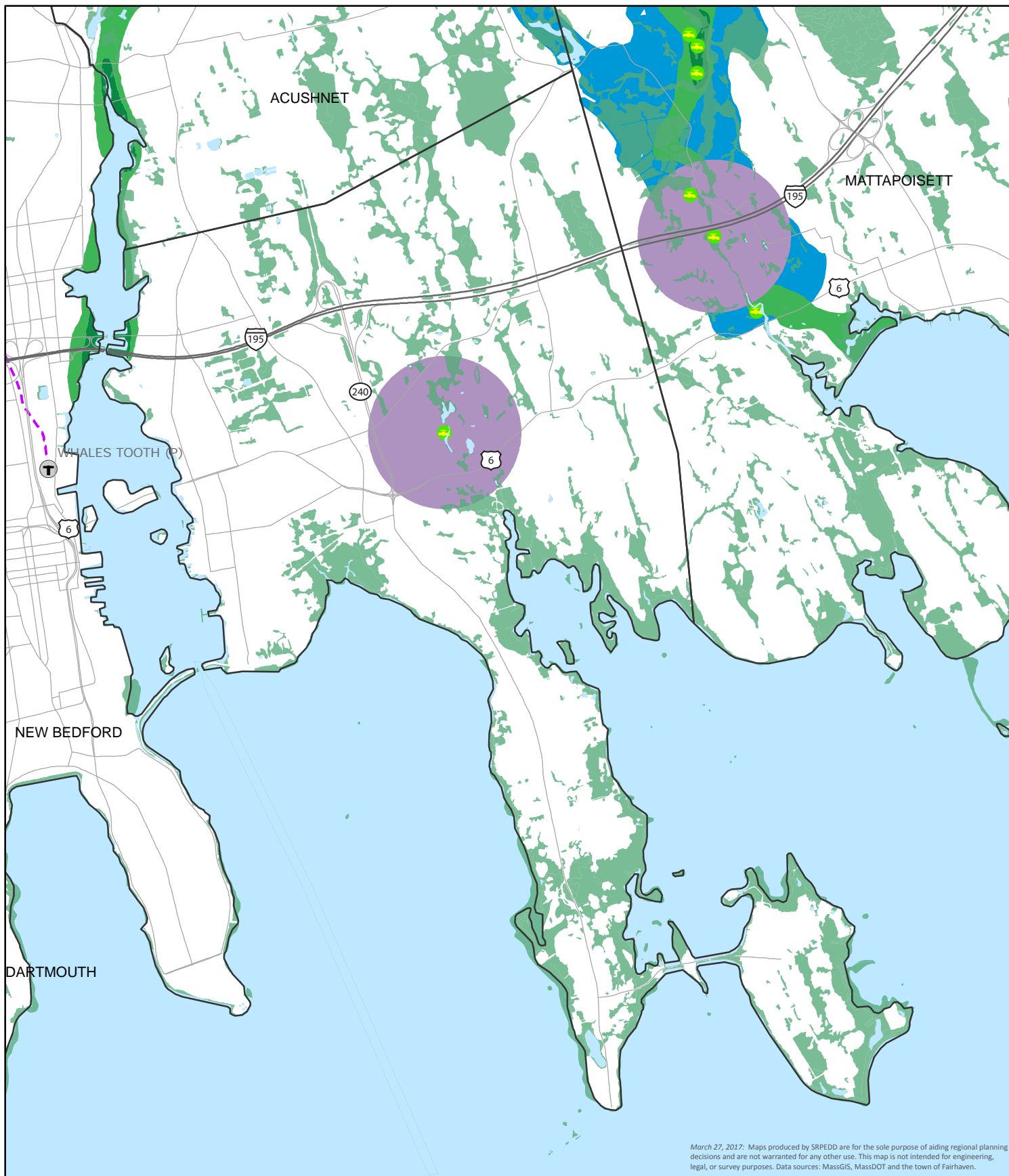
## Town of Fairhaven

### Open Space and Recreation Plan - Farmland Soils Map

#### Legend

- All areas of prime farmland
- Farmland of unique importance
- Farmland of statewide importance
- 3 Meter Contours
- Municipal Boundaries

1 mile



## Town of Fairhaven

### Open Space and Recreation Plan - Water Resources Map

#### Legend

- DEP Approved Zone II
- IWPA's
- Community Groundwater Source
- Wetlands

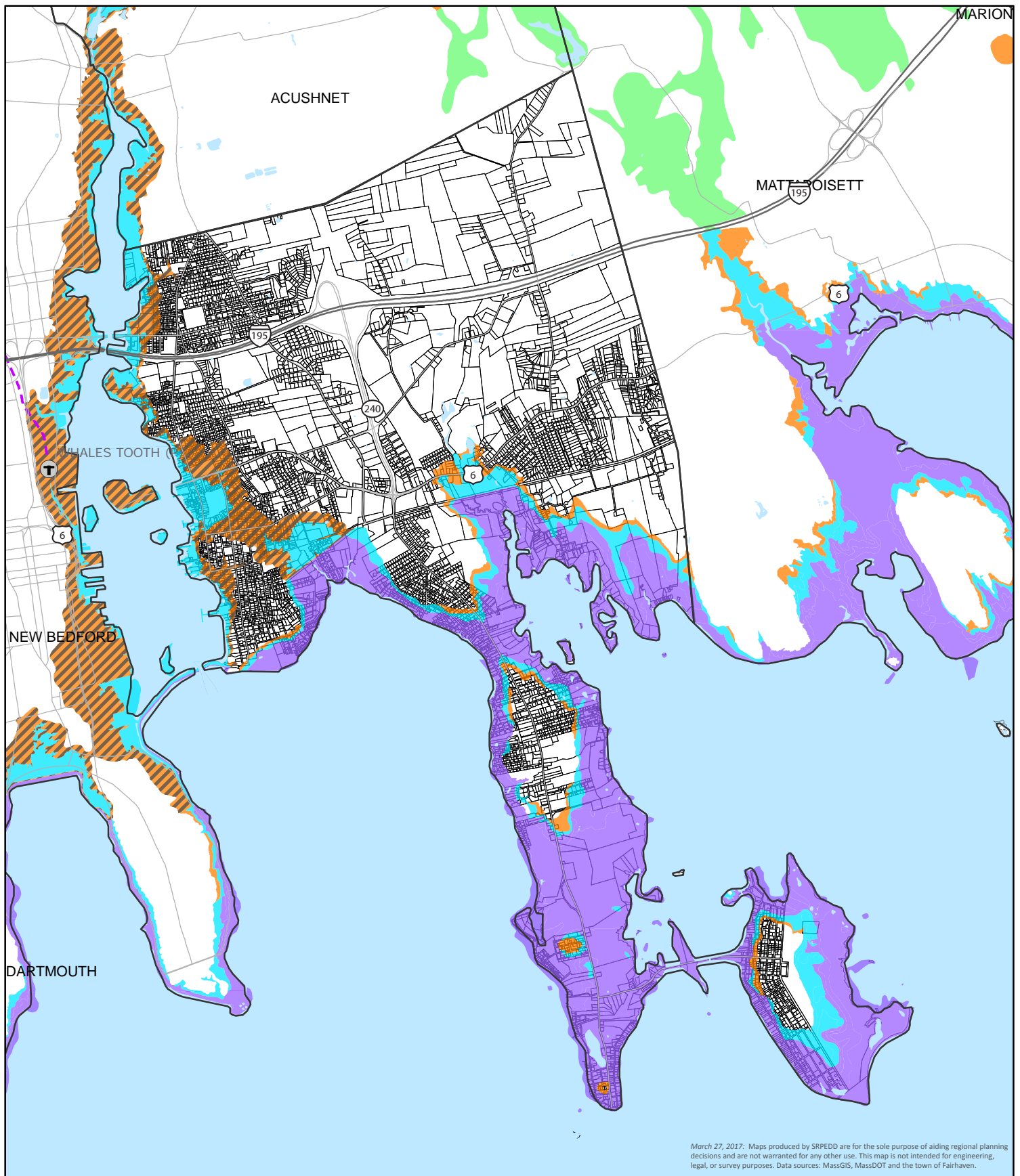
- Aquifers
- High Yield
- Medium Yield

- Municipal Boundaries
- Interstates
- Arterials and Collectors
- Local Roads

- T MBTA Proposed Stations
- MBTA Proposed Commuter Rail Lines
- I MBTA Active Commuter Stations
- MBTA Active Commuter Rail Lines

1 mile





# Town of Fairhaven

## Open Space and Recreation Plan - FEMA National Flood Hazard Layer Map

### Legend

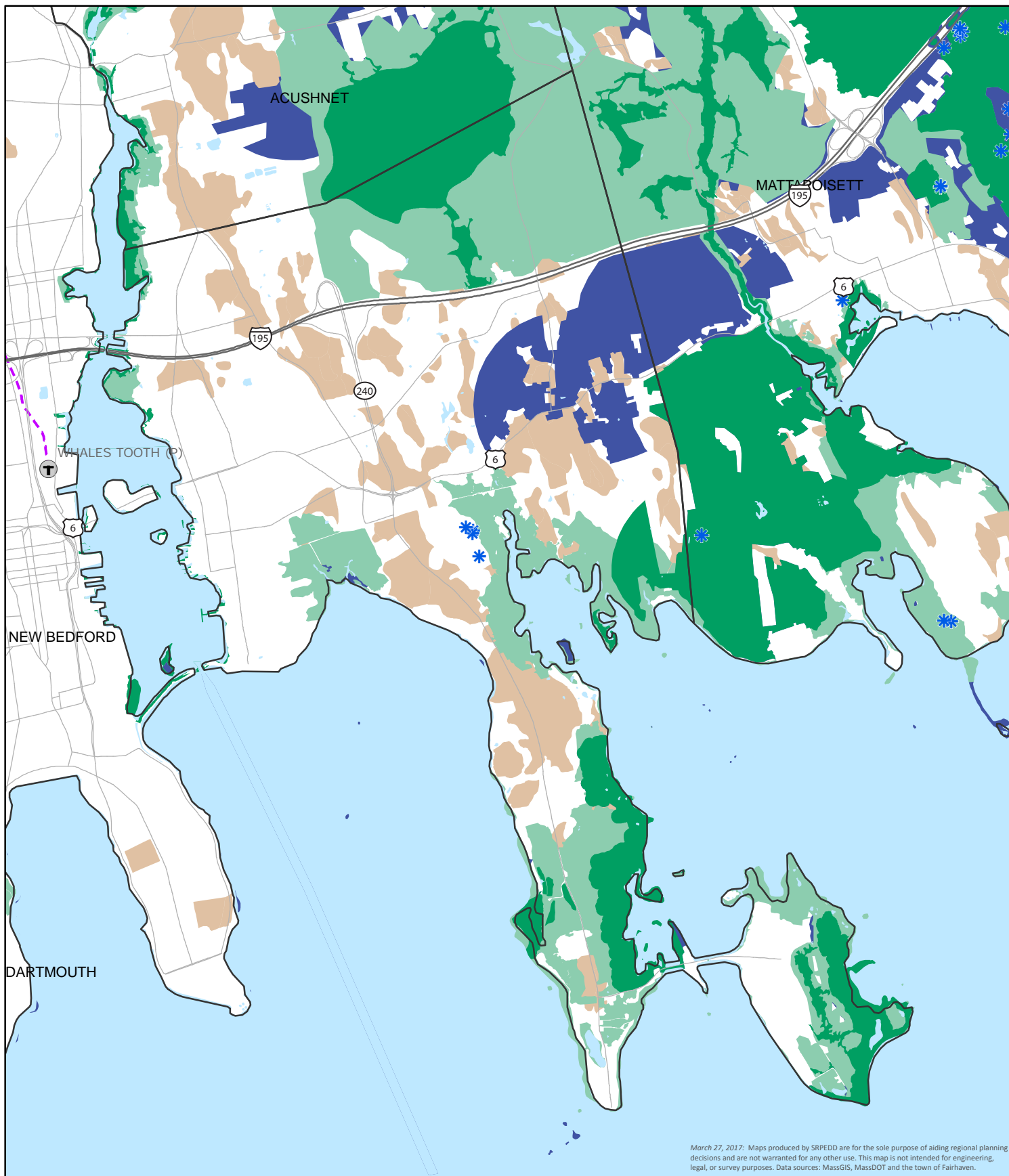
#### Flood Zone Designations

- A: 1% Annual Chance of Flooding, no BFE
- AE: 1% Annual Chance of Flooding, with BFE
- AE: Regulatory Floodway
- AH: 1% Annual Chance of 1-3ft Ponding, with BFE
- AO: 1% Annual Chance of 1-3ft Sheet Flow Flooding, with Depth

- VE: High Risk Coastal Area
- D: Possible But Undetermined Hazard
- X: 0.2% Annual Chance of Flooding
- X: Reduced Flood Risk due to Levee
- Area Not Included
- Area with no DFIRM - Paper FIRMs in Effect

- Municipal Boundaries
- Interstates
- Arterials and Collectors
- Local Roads

1 mile



## Town of Fairhaven

### Open Space and Recreation Plan - Habitat Map

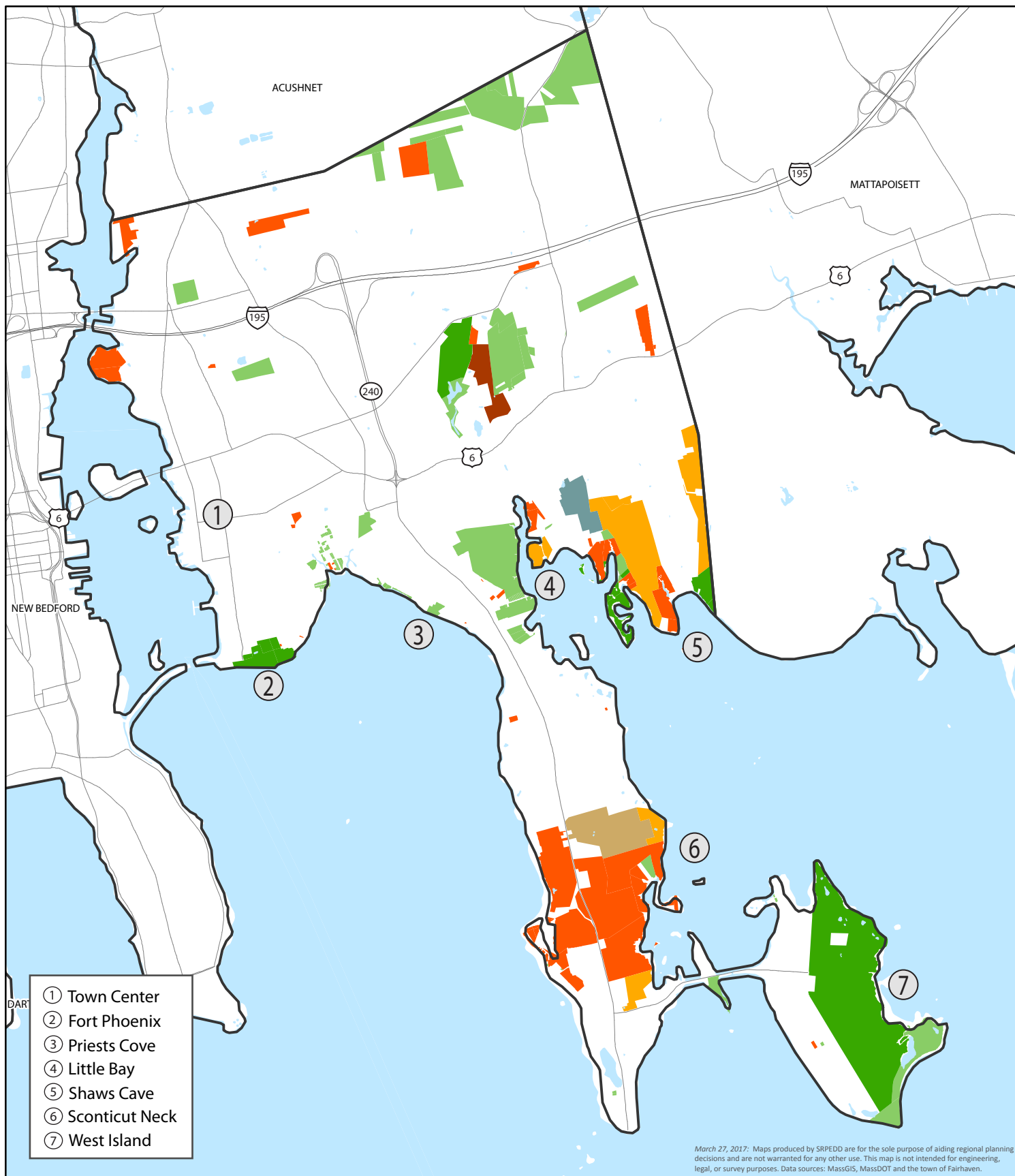
#### Legend

- |   |  |   |   |
|---|--|---|---|
| <span style="display: inline-block; width: 10px; height: 10px; background-color: #008000; border: 1px solid black;"></span> BioMap2 Core Habitat                    | <span style="display: inline-block; width: 10px; height: 10px; background-color: #0000FF; border: 1px solid black;"></span> NHESP Certified Vernal Pools | <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black;"></span> Municipal Boundaries     | <span style="display: inline-block; width: 10px; height: 10px; background-color: #000080; border: 1px solid black;"></span> MBTA Proposed Stations            |
| <span style="display: inline-block; width: 10px; height: 10px; background-color: #800080; border: 1px solid black;"></span> BioMap2 Critical Natural Landscape      | <span style="display: inline-block; width: 10px; height: 10px; background-color: #FFD700; border: 1px solid black;"></span> Prime Farmland               | <span style="display: inline-block; width: 10px; height: 10px; border: 2px solid black;"></span> Interstates              | <span style="display: inline-block; width: 10px; height: 10px; background-color: #FF00FF; border: 1px solid black;"></span> MBTA Proposed Commuter Rail Lines |
| <span style="display: inline-block; width: 10px; height: 10px; background-color: #0000FF; border: 1px solid black;"></span> NHESP Priority Habitats of Rare Species |  | <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black;"></span> Arterials and Collectors | <span style="display: inline-block; width: 10px; height: 10px; background-color: #0000FF; border: 1px solid black;"></span> MBTA Active Commuter Stations     |
|   |  | <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black;"></span> Local Roads              | <span style="display: inline-block; width: 10px; height: 10px; background-color: #FF00FF; border: 1px solid black;"></span> MBTA Active Commuter Rail Lines   |

1 mile







## Town of Fairhaven

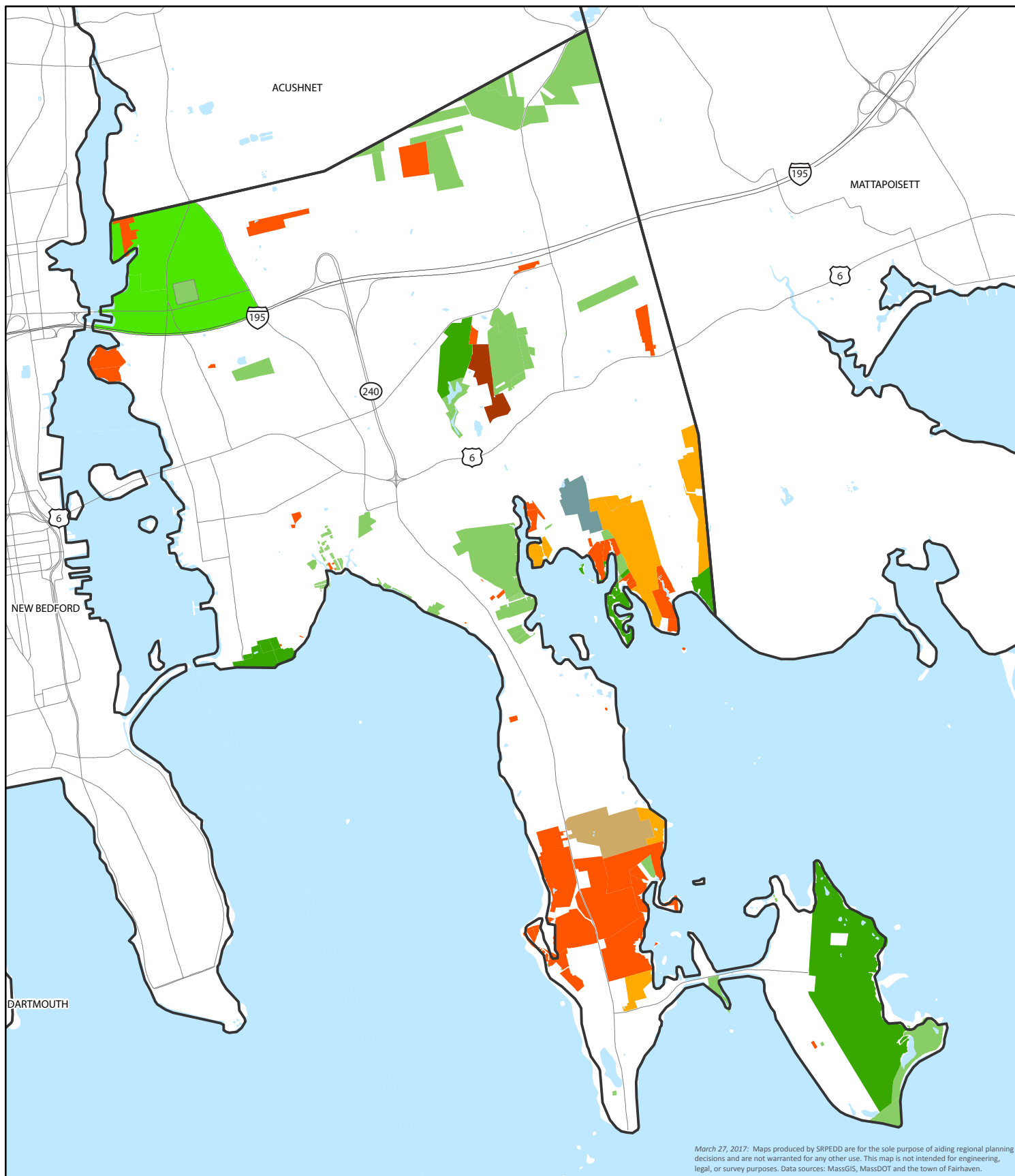
### Open Space and Recreation Plan - Scenic Resources and Unique Environments Map

#### Legend

|                                       |   |                          |
|---------------------------------------|---|--------------------------|
| Protected State & Federal Lands       | Land Trust Properties                         | Municipal Boundaries     |
| Protected Municipal Lands             | Land Trust Conservation Restriction (CR)      | Interstates              |
| Agricultural Preservation Restriction | Land Trust/Municipal Conservation Restriction | Arterials and Collectors |
| Municipal Conservation Restriction    |   | Local Roads              |

1 mile





## Town of Fairhaven

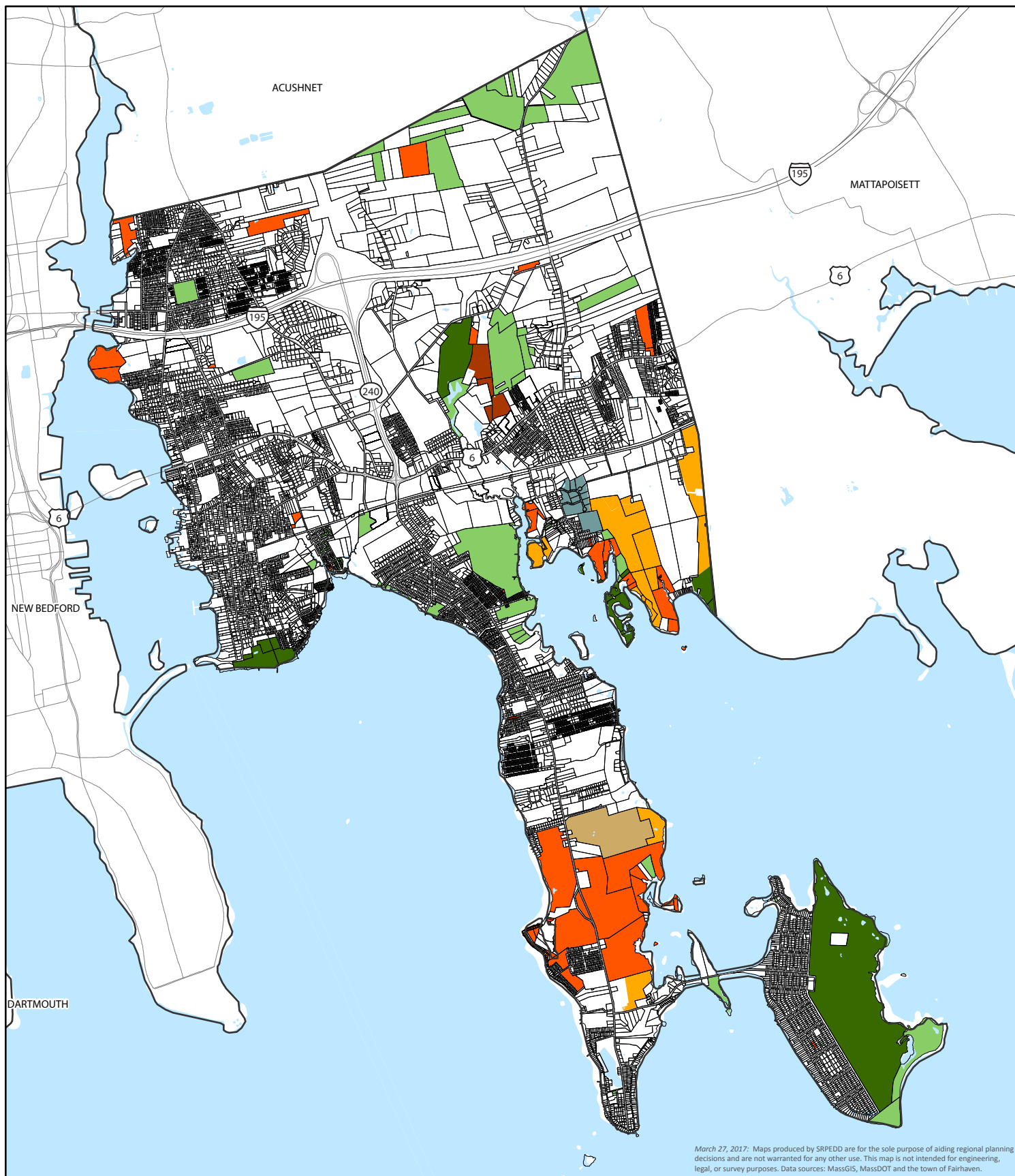
### Open Space and Recreation Plan - Environmental Justice/Equity Map

#### Legend

- |  |  |  |   |
|--|--|--|---|
| <span style="color: green;">■</span> Protected State & Federal Lands         | <span style="color: orange;">■</span> Land Trust Properties                            | <span style="border: 1px solid black;">□</span> Municipal Boundaries | <span style="color: blue;">●</span> MBTA Proposed Stations                |
| <span style="color: green;">■</span> Protected Municipal Lands               | <span style="color: yellow;">■</span> Land Trust Conservation Restriction (CR)         | <span style="color: black;">—</span> Interstates                     | <span style="color: purple;">---</span> MBTA Proposed Commuter Rail Lines |
| <span style="color: brown;">■</span> Agricultural Preservation Restriction   | <span style="color: darkbrown;">■</span> Land Trust/Municipal Conservation Restriction | <span style="color: grey;">—</span> Arterials and Collectors         | <span style="color: blue;">●</span> MBTA Active Commuter Stations         |
| <span style="color: lightgreen;">■</span> Municipal Conservation Restriction | <span style="color: lightgreen;">■</span> Environmental Justice /Income                | <span style="color: grey;">—</span> Local Roads                      | <span style="color: purple;">—</span> MBTA Active Commuter Rail Lines     |

1 mile





## Town of Fairhaven

### Open Space and Recreation Plan - Open Space Map

#### Legend

- Protected State & Federal Lands
- Protected Municipal Lands
- Agricultural Preservation Restriction
- Municipal Conservation Restriction
- Land Trust Properties
- Land Trust Conservation Restriction (CR)
- Land Trust/Municipal Conservation Restriction

□ Municipal Boundaries

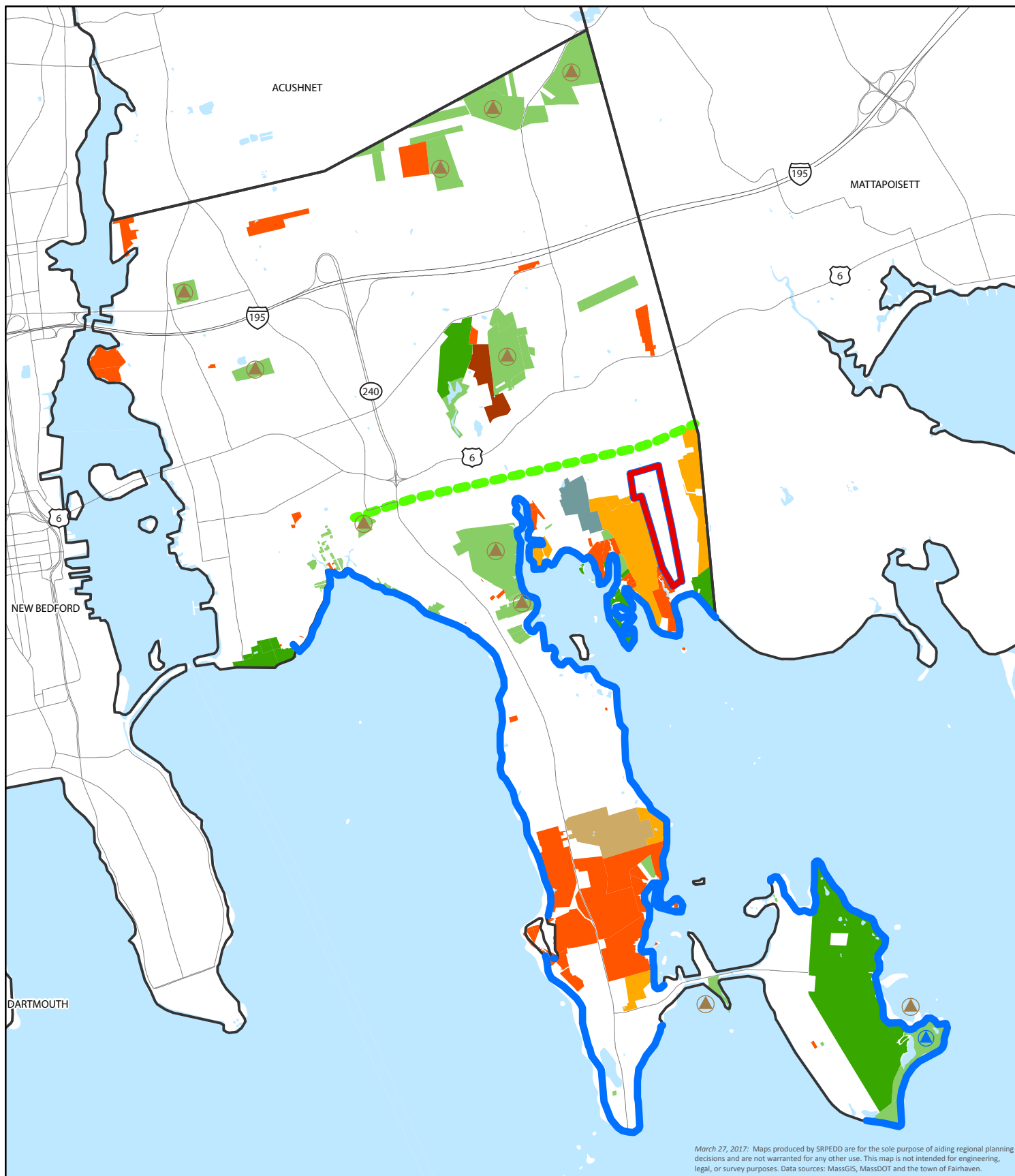
— Interstates

— Arterials and Collectors

— Local Roads

1 mile





## Town of Fairhaven

### Open Space and Recreation Plan - Action Map

#### Legend

- |  |  |   |   |
|--|--|---|---|
| <span style="color: green;">■</span> Protected State & Federal Lands       | <span style="color: orange;">■</span> Land Trust Properties                        | <span style="color: orange;">□</span> Acquisition / Preservation / Agricultural Retention | <span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Municipal Boundaries |
| <span style="color: green;">■</span> Protected Municipal Lands             | <span style="color: yellow;">■</span> Land Trust Conservation Restriction (CR)     | <span style="color: green;">---</span> Beautification / Mile Markers                      | <span style="border-bottom: 2px solid black; width: 20px; display: inline-block;"></span> Interstates                 |
| <span style="color: brown;">■</span> Agricultural Preservation Restriction | <span style="color: brown;">■</span> Land Trust/Municipal Conservation Restriction | <span style="color: blue;">---</span> Retention of Native Vegetation / Coastal Wetlands   | <span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span> Arterials and Collectors    |
| <span style="color: blue;">■</span> Municipal Conservation Restriction     |  | <span style="color: brown;">▲</span> Wayfinding Signage                                   | <span style="border-bottom: 1px solid gray; width: 20px; display: inline-block;"></span> Local Roads                  |
|  |  | <span style="color: blue;">▲</span> Parking / Maintenance                                 |   |

1 mile



## **SECTION 11: PUBLIC COMMENTS**



## SECTION 12: REFERENCES

### Print, Personal Meetings, and Correspondence

1. Commonwealth of Massachusetts, Division of Conservation Services, The Open Space Planner's Workbook, March, 2008.
2. Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs (EEA), Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP) 2012, December, 2012.
3. Natural Heritage & Endangered Species Program, Estimated Habitats of Rare Wildlife and Certified Vernal Pools, 11<sup>th</sup> Edition, June 1, 2003; 12<sup>th</sup> Edition, October 1, 2006; 13<sup>th</sup> Edition October 1, 2008.
4. Natural Heritage & Endangered Species Program, Massachusetts Species of Special Concern, 2010.
5. Massachusetts Audubon Society, Losing Ground: Planning for Resilience, 2014.
6. Massachusetts Historical Commission, Historic and Archaeological Resources of Southeastern Massachusetts, 1985.
7. Massachusetts Historical Commission, MHC Reconnaissance Survey Reports, December, 1981.
8. Natural Heritage & Endangered Species Program, BioMap 2, Fairhaven, MA, 2012
9. Town of Fairhaven, 2008 Open Space and Recreation Plan.
10. Mass GIS, Land Use data.
11. Assessor's data, Town of Fairhaven.
12. United States Department of Agriculture (USDA), Natural Resource Conservation Service, West Wareham Field Office, agricultural data and personal communication.
13. United States Environmental Protection Agency (EPA), website (Coastal Wetlands Protection).
14. Payne, Maggie, USDA, NRCS, personal communication.
15. Bowden, Alison, Freshwater Program Director, The Nature Conservancy, MA, personal communication.
16. Richards, Todd, Massachusetts Division of Fisheries & Wildlife, personal communication.

17. Lambert, Beth, Massachusetts Division of Ecological Restoration, personal communication.
18. Annett, Brendan, Buzzards Bay Coalition, personal communication.
19. SRPEDD, South Coast Rail Corridor Plan, Five Year Update of Community Priority Areas: Taunton, 2013.
20. U.S. Census Data 2010, Town of Fairhaven, SRPEDD Data Center.
21. American Community Survey Data 2009-2014, SRPEDD Data Center.
22. Massachusetts Executive Office of Labor and Workforce Development (EOLWD) Data 2000-2013, SRPEDD Data Center.
23. Decker, Allen, Buzzards Bay Coalition, personal communication.
24. Williams, Sarah, Buzzards Bay Project, personal communication.
25. Covino, Stefanie, Massachusetts Audubon Society, personal communication.
26. Jones, Jaqueline, South Coast Bikeway, personal communication.
27. Office of Tourism & Visitor's Center, Fairhaven, MA, Fairhaven Visitor's Guide, 2016.
28. Longley, K. and Lipsky, A., SeaPlan. Climate Change Vulnerability Assessment and Adaptation Planning Study for Water Quality Infrastructure in New Bedford, Fairhaven, and Acushnet, June, 2014.

## **Web-Based Sources of Material and Data**

Executive Office of Energy and Environmental Affairs [www.mass.gov/eea](http://www.mass.gov/eea)  
Department of Environmental Protection [www.mass.gov/dep](http://www.mass.gov/dep)  
Natural Heritage & Endangered Species Program [www.nhesp.org](http://www.nhesp.org)  
Buzzards Bay Project [www.buzzardsbay.org](http://www.buzzardsbay.org)  
Buzzards Bay Coalition [www.savebuzzardsbay.org](http://www.savebuzzardsbay.org)  
Town of Fairhaven [www.fairhaven-ma.gov](http://www.fairhaven-ma.gov)  
Office of Tourism & Visitor's Center [www.FairhavenTours.com](http://www.FairhavenTours.com)  
Division of Ecological Restoration [www.mass.gov/der](http://www.mass.gov/der)  
Department of Conservation and Recreation [www.mass.gov/dcr](http://www.mass.gov/dcr)  
Department of Fish and Game [www.mass.gov/dfg](http://www.mass.gov/dfg)  
MA Coastal Zone Management [www.mass.gov/eea/agencies/czm](http://www.mass.gov/eea/agencies/czm)  
Southeastern Regional Planning [www.srpedd.org](http://www.srpedd.org)  
Massachusetts Audubon Society [www.massaudubon.org](http://www.massaudubon.org)  
The Nature Conservancy [www.tnc.org](http://www.tnc.org)



USDA Natural Resource Conservation Service (NRCS) [www.ma.nrcs.usda.gov](http://www.ma.nrcs.usda.gov)

MA Department of Agricultural Resources [www.mass.gov/agr](http://www.mass.gov/agr)

US EPA [www.epa.gov](http://www.epa.gov)

Manomet Center for Conservation Sciences [www.manomet.org](http://www.manomet.org)

South Coast Bikeway Alliance [www.southcoastbikeway.com](http://www.southcoastbikeway.com)

Fairhaven Acushnet Land Preservation Trust [www.falpt.org](http://www.falpt.org)



**APPENDIX A**  
**ADA TRANSITION PLAN**

## **I. Section 504 ADA Self-Evaluation and Transition Plan**

The ADA Assessment of Fairhaven Parks was developed as part of a long range Transition Plan for the town's public conservation and recreation areas. The initial inventory and review was conducted on March 19, 2008 by Wayne Fostin, Fairhaven Building Commissioner, and William D. Roth, Jr., Planning & Economic Development Director and landscape architect, and changes are documented as they occur (actions taken since the last Open Space and Recreation Plan appear in **bold print**).

The Transition Plan was developed in accordance with the protocol presented in Appendix H of the state's Open Space and Recreation Planner's Handbook (Executive Office of Energy and Environmental Affairs, Division of Conservation Services, rev. March 2008). Individual facility sheets were developed for each of the fifteen (15) properties discussed in the Transition Plan. Implementation of the individual facility transition plans that make-up the Transition Plan is the responsibility of the controlling department, board, or commission. In some instances, such as where the Town has Management Agreements in place with the state, the planning, scheduling, and implementation of these facility plans will be conducted on a partnership basis.

## **II. Program Accessibility**

### **1. PEASE PARK PUBLIC LANDING**

This site consists of a boat ramp, dock, and paved parking area for approximately 20 cars with trailers. There is one designated handicap parking space adjacent to the boat ramp; however, it is not striped and the sign is not located at the correct height. The parking lot needs to be restriped and the handicap space needs to be brought up to code. The boat ramp is currently accessible, but the dock adjacent to the ramp is not accessible, and would require major modification if it were made accessible.

**Action: \$409,000 upgrade by the MA Department of Fish & Game to make the facility accessible**

### **2. CUSHMAN PARK**

Cushman Park was renovated in 1999 as part of the High School renovation project. It provides some of the athletic fields for the school. It is a flat, grassy park with baseball fields, an amphitheatre, play equipment (primarily for younger children), running track, track & field stations and tennis courts. Facilities include restrooms and a concession stand.

There is a public parking lot for between 30 and 50 cars located off of Main Street. The parking lot is paved but not striped. There are no designated handicap parking spaces. The parking lot should be striped and handicap spaces need to be provided.

The renovations included a pathway system through out the park that provides handicap accessibility to all the fields, tennis courts, track and playground. It is recommended that additional pathways be added in the future to provide more access points to the Green Street side of the park. In addition, handicap parking should be provided on the Green Street side of the park.

The 1995 survey indicated that the baseball field dugouts need to be made accessible. The dugouts are now at grade. The bleachers at the baseball fields should have a railing added on one side. The concession stand at the baseball field should have paper and pencil available for deaf patrons.

Play equipment at the park consists of a swing set and slides. The swing set can be made accessible by replacing one swing with an ADA approved model. Accessible equipment should be added to the playground area, to meet accessibility guidelines.

The park restrooms were locked at the time this survey was conducted. They are accessible, with at grade thresholds and 34" doors.

**Action: 2011 Town Meeting approved \$7,500, Fairhaven Tennis Association raised \$17,100, and USTA granted \$4,800 to work in partnership to completely repaired, resurfaced, and upgrade the four (4) tennis courts on site.**

### 3. LIVESEY PARK

Livesey Park was renovated in 2003 and 2004. It is a relatively flat, grassy park with tennis courts, a baseball fields, a football practice area, a basketball court, play equipment, a skate park and outdoor rollerblade hockey rink. Facilities include a changing room and/or restroom. There is a parking area containing 2 handicap spaces. The spaces were added with the renovation and are fully accessible. All other parking is on street parking.

An accessible paved path system was installed in the park providing access to all of the uses in the park. Accessible curbcuts need to be added where the path system meets Glenhaven Avenue and Livesey Street.

The baseball fields are connected by the path system and the dugouts are at grade and bleachers are not provided. The play equipment has several accessible items; however, there is a 6" boarder around the playground making it inaccessible and base under the play equipment is not accessible to a wheelchair and should be replaced by an ADA recommended accessible surface that provide protection for falling children.

The restroom/ changing room is an older facility that is currently not accessible. The 6" threshold needs to be modified and the 32" doors need to be 34". The facility was locked so the interior was not available to evaluate.

**Action: in 2013 the two (2) tennis courts on site were completely repaired, resurfaced, and upgraded through a partnership between the Town (CPA funds) and the Fairhaven Tennis Association (\$5,000).**

### 4. WEST ISLAND BEACH/TOWN BEACH

The Town Beach facility consists of an unpaved parking lot for approximately 100-150 cars that leads to a sandy beach. There are no restrooms at the site; however, the Board of Public Works provides seasonable portable restroom facilities. Currently no handicap parking spaces are designated. Handicap parking needs to be designated and the surface provided under this parking needs to be hard-packed or paved. The 1995 survey recommended an accessible path and boardwalk to the water. While such a facility would extend the access to the beach, we do not see how feasible it would be to provide such access to a beach that is then not accessible. In addition, the environmental permitting of such a facility on a barrier beach may not be allowed. The guardrail would have to be modified in order to build an accessible path to the beach.

### 5. SEAVIEW AVENUE BOAT RAMP

This facility consists of a paved parking lot that services a boat ramp and dock. Parking is available for approximately 35 cars with trailers, with 4 handicapped spaces currently stripped (3-12' spaces and 1-15' space). The 15' space should be 16' in order to accommodate a van, and all handicap spaces need signage and restriping. The dock at the boat ramp is seasonal and needs to be modified in order to provide barrier-free access. A railing should be added on the piling side, and metal plates added to cover the joints between sections of the dock.

## 6. MACOMBER PIMENTEL PARK

This park consists of a ballfield and an adjacent open field with play equipment. A paved parking area for approximately 15 cars is provided adjacent to the field. The parking is not striped and no handicap spaces exist. A handicap space needs to be provided, and parking lot striping needs to be provided. An accessible path should be provided from the parking to the ballfield and to the play equipment. The dugout needs to be modified in order to eliminate a 6" threshold. The bleachers should have a railing added on one side.

All the existing play equipment is on grass, and consists of swings, a slide, monkey bars and a see-saw. The swings need to be made accessible and a piece of accessible equipment placed on an ADA approved surface should be added.

## 7. RECREATION / SENIOR CENTER

The Recreation/Senior Center was constructed in 2001. The building and parking lot are fully accessible. The facility has a parking lot for approximately 110 cars with 5 handicap spaces. A small playground was added to the rear of the building at a later date. The play equipment is on wood chips, and consists of two swings, overhead glider and platform structure with slides. The swings need to be made accessible and a piece of accessible equipment placed on an ADA approved surface should be added. An accessible path, from the play equipment to the parking lot and to the building should be added.

## 8. LITTLE BAY CONSERVATION AREA

The Little Bay Conservation Area is an approximate 84 acre parcel. It has been left in its natural state. There is a 1,600 foot dirt road that accesses a small paved parking area. Adjacent to the parking area are two pads with accessible type picnic tables. The parking area is not striped and no handicap spaces are provided. The access road should be improved to a minimum of gravel, the parking lot should be striped, a handicap space meeting code should be added and an accessible path from the parking lot to the picnic tables should be added. There is a small, relatively unmaintained trail system through out the property. The Town should consider formalizing the trail system and in some locations add an accessible boardwalk. The Little Bay Bike Path extension runs through the property.

## 9. LITTLE BAY LOOP BIKE PATH

The Little Bay bike path is a 1 mile bike path that is a spur off of the Phoenix Bike Path. It starts behind the Public Works and Sewer Plant and runs in a southerly direction to the end of Orchard Street. The path is fully accessible and provides a small vista area on the edge of Little Bay. An accessible connection from the bike path to the above mentioned parking and picnic area should be provided.

## 10. PHOENIX BIKE PATH

The Phoenix Bike Path is a 3.9 mile path that uses an abandoned rail road right-of-way. It starts in the center of Town at the intersection of Main and South Streets and dead ends at the Town line with the Town of Mattapoisett. The path is fully accessible and provides numerous access points where it intersects with the existing street system. The intersection with Sconticut Neck Road should be evaluated for better safety and accessibility. Vista pullouts with accessible seating thought out the path should be provided. A paved parking lot behind the Public Works building exists. The parking lot is an employee lot during working hours and is used by patrons of the bike path during non-work hours. The parking lot is striped and has one handicap space. The handicap space does not meet code for striping and signage and should be improved. An accessible connection from the parking lot to the bike path should be added.

## 11. HOPPY'S LANDING

Hoppy's Landing is a 6.4 acre parcel. It has a shell parking area, boat ramp and floating dock. The ramp and floating dock are not accessible. The Town should improve the ramp and dock area to it make accessible. A small building is located on site. It is used by the Harbormaster as an annex office. Accessible portable toilets are provided during the summer months adjacent to the building. Currently no handicap parking spaces are designated. Handicap parking needs to be designated and the surface provided under this parking needs to be hard-packed or paved.

**Action: design and build of a barrier free accessible concrete boat ramp and a fixed pier with a heavy steel designed float**

## 12. ANTHONY'S FIELD (ON NORTH ST.)

This park consists of a baseball field and an adjacent open field with basket court in the far northern corner of the site. There is no off street parking; however, the Town could consider adding parallel parking adjacent to the street and provide a handicap space. An accessible path should be provided from the street to the baseball field and to the basketball court. The basketball court surface is in poor condition should be resurfaced. The dugouts are at grade.

## 13. HASTINGS MIDDLE SCHOOL BALL FIELDS

The facilities behind the school consist of tennis courts, soccer fields, baseball fields and general open fields. There is parking for between 75 – 100 cars. The parking area is paved and striped in a majority of area. No handicap spaces are provided. Handicap spaces should be provided at various locations. An accessible path should be provided from the parking areas to the fields and tennis courts. The bleachers should have a railing added on one side.

## 14. WOOD SCHOOL PLAYGROUND

A paved and stripped parking lot with approximately 60 parking spaces exists. There are three handicap spaces meeting code. The adjacent playground is a fully accessible playground.

## 15. ROGERS SCHOOL PLAYGROUND

The site contains a basketball court, baseball field and a playground. All parking is on street. There are two signed handicap spaces on Pleasant Street; however, they are not stripped and properly signed. The Town should strip and sign these handicap spaces so as to meet code. An accessible path should be provided from the parks access points to the baseball field and to the play equipment. All the existing play equipment is on wood chips, and consists of swings, multiple platform play structures, a tot lot, slides, monkey bars and an Xscape play system. The swings need to be made accessible and a piece of accessible equipment placed on an ADA approved surface should be added.

**TOWN OF FAIRHAVEN  
POLICY AGAINST UNLAWFUL DISCRIMINATION  
HARASSMENT AND SEXUAL HARASSMENT**

**1. POLICY STATEMENT**

The Town of Fairhaven is committed to maintaining a workplace free of discrimination, harassment, sexual harassment or any form of inappropriate or disrespectful conduct imposed by one individual or another which adversely affects an employment relationship or working environment. Employees of the Town are entitled to a professional working environment free of harassment or interference for reasons unrelated to the performance of their duties. Any form of discrimination or harassment, either written, verbal or physical, based on race, color, sex, religious beliefs, national origin, age, physical or mental disability, marital status, sexual orientation or veteran status is unlawful. Accordingly, the Town will not engage in, tolerate, permit or ignore any such behavior or conduct.

This policy shall apply to all employees, appointees and elected officials of the Town of Fairhaven. Any individual violating this policy shall be subject to appropriate discipline, up to and including discharge.

No individual shall be intimidated, threatened, coerced or discriminated against for filing a complaint, furnishing information or for participating in any manner in an investigation, compliance review, hearing or any other activity related to the administration of laws or regulations prohibiting discrimination and harassment.

**2. DISCRIMINATION**

The Town of Fairhaven strictly prohibits any form of unlawful discrimination on the basis of race, color, sex, religious beliefs, national origin, age, physical or mental disability, marital status, sexual orientation or veteran status. The Town does not engage in such conduct, and insists that its employees avoid such conduct at all times.

The Town believes there should be equal opportunity afforded to all individuals. Under no circumstances shall an individual's terms or conditions of employment, or opportunities for employment or advancement, be based on or affected by the individual's status.

**3. HARASSMENT**

Harassment is a form of discrimination. It is conduct which oppresses or takes advantage of individuals because of their status. Harassment violates the standards of integrity and impartiality which are required of all employees, causes harm to harassed employees, and interferes with work productivity

The Town will not tolerate harassment of its employees in any form. Each employee is responsible for respecting the rights of their co-workers and creating an atmosphere free of



discrimination or harassment. Any form of harassment relating to an employee's race, color, sex, religious beliefs, national origin, age, physical or mental disability, marital status, sexual orientation or veteran status is a violation of this policy and will be treated as a serious disciplinary matter. For these purposes, the term harassment includes, but is not necessarily limited to:

- Offensive jokes, criticisms, insinuations, slurs, or other offensive conduct which relates or tends to relate to an individual's race, color, sex, religious beliefs, national origin, age, physical or mental disability, marital status, sexual orientation or veteran status.

#### 4. **SEXUAL HARASSMENT**

Sexual harassment has been defined by Federal regulations as unwelcome sexual advances, requires for sexual favors, or any other written, verbal, physical or visual conduct based on sex, by male or female personnel, when:

- a. Submission to such conduct is made either explicitly or implicitly a term of condition of an individual's employment; OR
- b. Submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individual; OR
- c. Such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile or offensive working environment; OR
- d. In third-party situations, one individual is offended by the sexual interaction, conduct or communications between others.

When an employee's job or working conditions depend on another person's good will and reasonable behavior, the employee may try to avoid friction in order to prevent an adverse employment decision or other form of retaliation. This can place sexually harassed individuals in situations where they are tolerating offensive or demeaning behavior in order to maintain their jobs, with a concomitant loss of self-esteem and increased job stress. An employee who is harassed, pressured or intimidated is less productive than someone who is allowed to work in a professional environment.

Employees cannot assume that their conduct is inoffensive just because it seems acceptable to them, or because the recipient of the conduct does not complain about it. Behavior that is in fact offensive may constitute sexual harassment.

The following kinds of behavior, or others which have a similar harassing effect, are absolutely prohibited by the Town:

- Abusing an employee through insulting or degrading sexual remarks, jokes, innuendos, or other sexually oriented conduct.
- Making graphic or descriptive comments relating to an individual's body or physical appearance; sexually oriented teasing or practical jokes; improper suggestions, or displaying obscene cartoons, objects or pictures.

- Making unwanted physical contact with sexual overtones, such as touching, patting, repeatedly “brushing” against someone or impeding the movement of another person.
- Presenting threats, demands or suggestion that an employee’s work status or employment benefits depend in any way upon tolerating or accepting sexual advances or sexually oriented conduct.
- Demeaning, excluding or otherwise failing to accord equal professional stature to an employee because of their sex.
- Making offensive visual contact such as staring or leering, or making obscene or offensive gestures.
- Sending suggestive or obscene written comments in notes, letters, memos or e-mail.
- Making inappropriate, repeated or unwelcome sexual flirtations, advances or propositions.
- Retaliating against an employee for complaining about or refusing to tolerate any of the behaviors described above.

## 5. **APPLICABILITY OF POLICY**

The prohibition against harassment applies to everyone – managers, supervisors, salaried and hourly workers, part-time employees, seasonal employees, temporary employees, vendors, contractors, suppliers, visitors, guests, elected officials and appointed administrative officials. The Town of Fairhaven will not tolerate harassment of any kind by anyone.

## 6. **REPORTING ILLEGAL HARASSMENT**

While the Town of Fairhaven encourages individuals who believe they are being harassed to firmly and promptly notify the offender that his or her behavior is unwelcome, the Town of Fairhaven also recognizes that such a confrontation may be uncomfortable or even impossible. In the event that such informal direct communication between individuals cannot be accomplished for any reason, or is ineffective or inappropriate given the circumstance or severity of the situation, the following steps should be taken to file a formal harassment complaint:

- A. Notify Appropriate Staff – Individuals who believe they have been sexually harassed or subject to harassment because of race, color, sex, religious beliefs, national origin, age, physical or mental disability, marital status, sexual orientation or veteran status, or any other basis protected by federal, state, or local law, should immediately report the incident to their direct supervisor. If the supervisor is the alleged harasser, or the employee is uncomfortable reporting the alleged harassment to their supervisor, the incident should be reported directly to their Department Head. In the event that the circumstances of the situation make it inappropriate to report the incident to the individual’s supervisor or to their Department Head, the incident should be reported to the Executive Secretary and/or the Chairman of the Board of Selectmen. Remember, if the Town does not know about the conduct, it cannot take responsible action.
- B. Prepare Written Report of Misconduct – An accurate record of objectionable behavior or misconduct is needed to resolve a formal complaint of harassment. Verbal reports of harassment must be reduced to writing by either the complainant or their supervisor, and

be signed by the complainant. The written report must then be submitted to the Executive Secretary and/or the Chairman of the Board of Selectmen for investigation. Individuals who believe they have been or currently are being harassed should maintain a record of objectionable conduct in order to prepare effectively to make their written report, and to substantiate their allegations. Your complaint should be as detailed as possible, including the names of individuals involved, the names of any witnesses, direct quotations when language is relevant and any available documentary evidence (notes, pictures, cartoons, et cetera).

- C. Promptly Report the Complaint – The Town of Fairhaven encourages a prompt reporting of complaints so that a rapid response and appropriate action may be taken. A prompt report not only aids the complainant, but also helps to maintain an environment free from discrimination for all employees. Employees, supervisors, and managers must report any incident of sexual harassment or harassment because of race, color, sex, religious beliefs, national origin, age, physical or mental disability, marital status, sexual orientation or any other basis protected by federal, state, or local law, they may observe or become aware of, even if they are not the target or victim of such harassment. Such reports will be handled in the same fashion as complaints by victims of harassment.

## **7. INVESTIGATING THE COMPLAINT**

- A. Confidentiality – Any allegation of harassment will be promptly investigated. Confidentiality will be maintained throughout the investigatory process to the extent practicable and appropriate under the circumstances, consistent with the need to conduct an adequate investigation.
- B. Investigation Process – The Town of Fairhaven will thoroughly and quickly investigate any incident of sexual harassment or harassment because of race, color, sex, religious beliefs, national origin, age, physical or mental disability, marital status, sexual orientation or any other basis protected by federal, state, or local law and will try to take the wishes of the complainant under consideration, keeping the complainant informed as to the status of the investigation.

## **8. DISCIPLINE FOR ENGAGING IN HARASSMENT**

Depending on the nature and seriousness of the offense, the Town of Fairhaven will impose all appropriate discipline, up to and including termination, against any manager, supervisor or employee found to have engaged in sexual harassment or other forms of harassment.

Anyone who is found, after investigation, to have engaged in harassment prohibited by this policy will be subject to disciplinary action up to and including discharge from employment. This policy shall not limit the authority of the Town to take disciplinary action against an employee who engages in inappropriate conduct, regardless of whether it satisfies the definition of harassment or sexual harassment under this policy

When a vendor, guest, contractor or other person not employed by the Town of Fairhaven is found to have engaged in harassment against a Town of Fairhaven employee, the Town of

Fairhaven will advise the person and his or her employer of the Town of Fairhaven's policy against such harassment, and will take such other action as is appropriate under the circumstances.

False Accusations – False accusations of harassment (i.e. the alleging of incidents or behavior that are proven, through investigation, not to have occurred at all) may result in severe disciplinary action up to and including termination. A finding that either harassment did not occur or that there is insufficient evidence does not necessarily, in itself, establish that accusations were false.

## **9. PROTECTION AGAINST RETALIATION**

The Town of Fairhaven will not in any way retaliate against an individual who makes a complaint of harassment or against any participant in the investigation, nor will it permit any supervisor/manager or employee to do so. Retaliation is defined as discriminating against any employee or applicant because he or she opposed an unlawful employment practice or made a charge, testified, assisted, or participated in any manner in an investigation, proceeding or hearing. Retaliation is a serious violation of this harassment policy and should be reported immediately. Any person found to have retaliated against another individual for reporting any harassment will be subject to the same disciplinary action described above (see section 8).

Examples of retaliation are:

- a. Treating someone who has reported an incident of harassment or participated in an investigation differently than other employees (i.e. "cold shoulder")
- b. Disciplining an individual, making negative comments, reducing an individual's responsibility, denying a transfer, requiring a transfer, giving unfavorable evaluations, scrutinizing an individual's work, etc., who has reported an incident or harassment or participated in an investigation.
- c. Subjecting an individual to any adverse employment action or loss of benefit for reporting an incident of harassment or participating in an investigation.

## **10. STATE AND FEDERAL REMEDIES**

If you believe you have been subjected to harassment, you may file a formal complaint with either or both of the government agencies set forth below. Using our complaint process does not prohibit you from filing a complaint with these agencies. Each of these agencies has a short time period for filing a claim (EEOC – 180 days; MCAD – 6 months).

- A. The United States Equal Employment Opportunity Commission ("EEOC")  
1 Congress Street, 10<sup>th</sup> Floor  
Boston, MA 02114  
(617) 565-3200

B. The Massachusetts Commission Against Discrimination (“MCAD”)

Boston Office

One Ashburton Place, Room 601

Boston, MA 02108

(617) 727-3990

# Town of Fairhaven, MA

## Commission on Disability

**Contact:** Charles Murphy Sr. , Chairman /ADA Coordinator

### Meeting Agendas

### Meeting Minutes

#### **Members**

#### **Term Expires**

Charles Murphy Sr.  
Waldemar DeOliveira  
Maria DeOliveira  
Ronald Medina  
Brian Rego  
Diane Rocha  
Anne Silvia

2018  
2018  
2018  
2020  
2020  
2020  
2020

# Town of Fairhaven, MA

## Properties maintained by the parks & Grounds Division

### Parks

---

- |   | Property                                 |
|---|--|
| • | Anthony Field – North Street             |
| • | Cushman Park – Green Street              |
| • | Livesey Park – Glenhaven Street          |
| • | Macomber Pimental Field – Bernese Street |
| • | Pease Park – Middle Street               |
| • | Willow Park – South Street               |

### Cemeteries

---

- |   | Property                         |
|---|----------------------------------|
| • | Delano Cemetery - Wilbur's Point |
| • | Woodside Cemetery – Main Street  |

### Board Of Public Works Properties

---

- |   | Property                         |
|---|----------------------------------|
| • | Board of Public Works Building   |
| • | Boston Hill Water Tower          |
| • | Little Bay Bike Path             |
| • | Mill Road Pumping Station        |
| • | Phoenix Bike Path                |
| • | River Road Pumping Station       |
| • | Sanitary Landfill                |
| • | Sconticut Neck Water Tower       |
| • | Tinkham Lane Pumping Station     |
| • | West Island Town Beach           |
| • | Wolf Island Road Pumping Station |

### Other

---

- |   | Property                            |
|---|-------------------------------------|
| • | Animal Shelter – Bridge Street      |
| • | Benoit Square – Main & Adams Street |
| • | Brook Drive Drainage Area           |
| • | Causeway Road                       |

**Property**

- Chapel – North Street
- Civil War Memorial – Huttleston Avenue
- Cooke Memorial – Pilgrim Avenue
- Fort Phoenix – Town side
- Garrison Park – Howland Road
- Grimshaw Property – Fort Phoenix
- Holiday Inn Express – Route 6 – Adjacent Land
- Hoppy's Landing
- Long Road –roadside and pond area
- Old School House – North Street
- Park Avenue Drainage Area
- Recreation/Senior Center
- Seaview Avenue Boat Ramp
- Sycamore Street – Howland Road to Bus Company
- Veterans Memorial – Huttleston Avenue

**Fairhaven Acushnet Land Preservation Trust**

---

**Property**

- Other open space in Fairhaven is owned and maintained by the:  
  
Fairhaven Acushnet Land Preservation Trust  
Post Office Box 491  
Fairhaven, Massachusetts 02719  
website at: <http://falpt.pbwiki.com/>



## **APPENDIX B**

### **PROTECTING COASTAL WETLANDS**

Water: Wetlands

Contact UsShare

- Water Home
- Drinking Water
- Education & Training
- Grants & Funding
- Laws & Regulations
- Our Waters
- Drinking Water
- Ground Water
- Lakes
- Oceans, Coasts, Estuaries & Beaches
- Rivers & Streams
- Stormwater
- Wastewater
- Watersheds
- Wetlands
- Where You Live
- Pollution Prevention & Control
- Resources & Performance
- Science & Technology
- Water Infrastructure
- What You Can Do

You are here: [Water](#) » [Our Waters](#) » [Wetlands](#) » Coastal Wetlands

# Coastal Wetlands



- About Coastal Wetlands
- Coastal Wetlands Initiative
- Managing Stressors
- Tools & Links

## About Coastal Wetlands

Despite their environmental and economic importance, coastal wetlands (wetlands located in coastal watersheds) in the eastern United States are being lost at twice the rate they are being restored. More focused protection strategies are required to reverse this trend.

- What are "coastal wetlands"?
- Why are coastal wetlands important?
- What is the rate of coastal wetlands loss?
- Why are coastal wetlands being lost?
- Protecting Wetlands Every Day!

### What's New?

Welcome to EPA's new Coastal Wetlands webpage!

- [View the Coastal Wetland Review Reports](#)

## What are "coastal wetlands?"

Coastal wetlands include saltwater and freshwater wetlands located within coastal watersheds — specifically USGS 8-digit hydrologic unit watersheds which drain into the Atlantic, Pacific, or Gulf of Mexico.

Wetland types found in coastal watersheds include salt marshes, bottomland hardwood swamps, fresh marshes, mangrove swamps, and shrubby depressions known in the southeast United States as "pocosins." Coastal wetlands cover about 40 million acres and make up 38 percent of the total wetland acreage in the conterminous United States. Eighty-one percent of coastal wetlands in the conterminous United States are located in the southeast.

The diagram to the right illustrates the range of wetlands which can be found in a coastal watershed. These wetlands can be tidal or non-tidal, and freshwater or saltwater.



[View Larger Diagram](#)

As seen on the map (left), coastal watersheds can extend many miles inland from the coast.



[View Larger Map](#)

The extent and condition of wetlands within a coastal watershed is both dependent on and influences the health of the surrounding watershed. Wetlands in coastal watersheds are experiencing disproportionate losses compared to wetlands in the rest of the country, making them particularly important areas for protection.

More information about wetlands can be found on the [EPA Wetlands page](#).

### Why are coastal wetlands important?

Coastal habitats provide ecosystem services essential to people and the environment. These services are valued at billions of dollars.<sup>1</sup>

Services provided by coastal wetlands include:

- Flood Protection: Coastal wetlands protect upland areas, including valuable residential and commercial property, from flooding due to sea level rise and storms.<sup>2</sup>
- Erosion Control: Coastal wetlands can prevent coastline erosion due to their ability to absorb the energy created by ocean currents which would otherwise degrade a shoreline and associated development.<sup>3</sup>
- Wildlife Food & Habitat: Eighty-five percent of the nation's waterfowl and migratory birds, and about 50 percent of the nation's endangered species depend on coastal wetlands.<sup>4</sup> These animals and their habitat have recreational and commercial value to humans.
- Commercial Fisheries: Over 50 percent of commercial fish and shellfish species in the Southeastern United States rely on coastal wetlands.<sup>5</sup>
- Water Quality: Wetlands filter chemicals and sediment out of water before it is discharged into the ocean.<sup>3</sup>
- Recreation: Recreational opportunities in coastal wetlands include canoeing and kayaking, wildlife viewing and photography, and recreational fishing and hunting.
- Carbon Sequestration: Certain coastal wetland ecosystems (such as salt marshes and mangroves) can sequester and store large amounts of carbon due to their rapid growth rates and slow decomposition rates.<sup>6</sup>



Coastal watersheds contain both freshwater (left) and saltwater (right) wetlands.

### What is the rate of coastal wetlands loss?

In the coastal watersheds of the Atlantic, the Gulf of Mexico, and the Great Lakes, wetlands were lost at an average rate of about 59,000 acres per year between 1998 and 2004.

Coastal wetland acreage trends are documented in the [Status and Trends of Wetlands in the Coastal Watersheds of the Eastern United States \(PDF\)](#) (36 pp, 8.7MB, [About PDF](#)) report by the U.S. Fish & Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service. This analysis found that while wetland area increased between 1998 and 2004 nationally, coastal wetlands were decreasing significantly. A majority



of this loss occurred in freshwater wetlands.

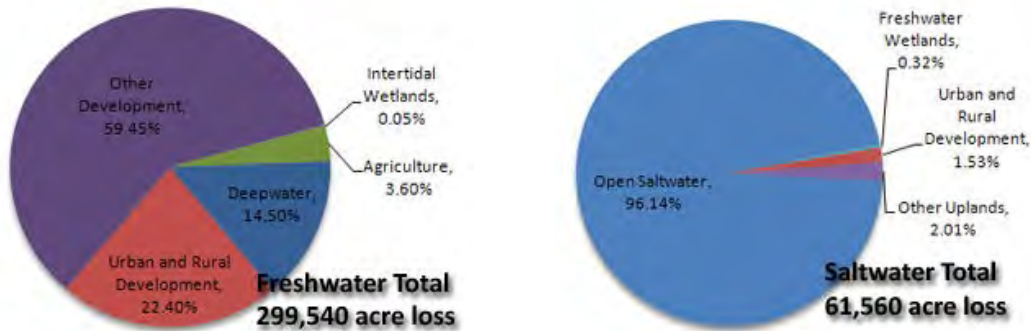
A report on the status and trends of coastal wetlands from 2004 to 2009 is coming soon.

### Why are coastal wetlands being lost?

Coastal wetland losses occur as a result of both human activity and natural processes.

**Human Activity:** Human activities which may lead to losses of coastal wetlands include *urban and rural development*, *agriculture*, and *silviculture*. These land use changes can also indirectly impact nearby wetlands by *altering hydrology* through increased runoff or water withdrawals in the watershed. Almost 70 percent of coastal wetland losses reported in the *Status and Trends of Wetlands in the Coastal Watersheds of the Eastern United States* were due to development, with most of this loss occurring in freshwater wetlands. Over half of the U.S. population lives in coastal counties, intensifying the stress on coastal wetlands relative to inland areas.<sup>7</sup>

**Natural Processes:** Coastal wetlands, especially estuarine and marine wetlands, are naturally altered by high energy events such as erosion and inundation from *sea level rise and storms*. The impacts of these processes may be magnified by *climate change* and *shoreline armoring*. Estuarine wetlands typically protect the coastline from erosion and flooding, but if sea level increases and development prevents inland migration of wetlands, more wetlands will be converted to open water.



Wetland loss and changes in land cover between 1998 and 2004 in freshwater (left) and saltwater (right) wetlands. Loss or conversion occurred in 299,540 acres of freshwater wetlands and 61,560 acres of saltwater wetlands. Based on information from *Status & Trends of Wetlands in the Coastal Watersheds of the Eastern United States*.

### Protecting Wetlands Every Day!

We can make decisions in our everyday lives which help preserve coastal wetland area and maintain their ecological integrity.

1. Participate in programs that help protect and restore wetlands. Contact local, state, or federal agencies, community groups, environmental organizations, and other non-government organizations. See [American Wetlands Month events](#).
2. Report illegal actions such as unauthorized wetland fill or dredging activities to government authorities, such as the [U.S. Environmental Protection Agency](#) or the [U.S. Army Corps of Engineers](#).
3. Pick up litter and dispose in appropriate trash containers. Keep surface areas that wash into storm drains clean from pet waste, toxic chemicals, fertilizers, and motor oil, which can eventually reach and impair our wetlands.
4. Use native species when planting trees, shrubs, and flowers to preserve the ecological balance of local wetlands.
5. Use "living shoreline" techniques that make use of plant roots to stabilize soil if you own waterfront property and your shoreline or river bank needs to be stabilized.

6. Avoid wetlands if you are expanding your house or installing a shed.
7. Use phosphate-free laundry and dishwasher detergents. Phosphates encourage algae growth, which can suffocate aquatic life.
8. Use paper and recycled products made from unbleached paper. Bleached paper contains toxic chemicals that can contaminate water.
9. Use non-toxic products for household cleaning and lawn and garden care. Never spray lawn and garden chemicals outside on a windy day or on a day that it might rain and wash the chemicals into waterways.
10. Enjoy the scenic and recreational opportunities coastal wetlands offer, while preserving their integrity for future generations by minimizing the use of heavy equipment and staying in designated visitor areas where available.

<sup>1</sup> Pendleton, L. 2008. The Economic and Market Value of Coasts and Estuaries: What's at Stake? Restore America's Estuaries, Arlington, VA, 182 pp.

<sup>2</sup> Costanza, R., O. Pérez-Maqueo, ML Martinez, P Sutton, SJ Anderson, K Mulder. 2008. The value of coastal wetlands for hurricane protection. *Ambio* 37(4): 241-248

<sup>3</sup> Carter, V. 1997. [Technical Aspects of Wetlands: Wetland Hydrology, Water Quality, and Associated Functions](#). United States Geological Survey Water Supply Paper 2425.

<sup>4</sup> Mitsch, W.J. and Gosselink, J.G. 1993. *Wetlands*, Van Nostrand Reinhold, New York.

<sup>5</sup> Martin, DM, T Morton, T Dobrzynski, & B. Valentine. 1996. *Estuaries on the Edge: The Vital Link Between Land and Sea*. A Report by American Oceans Campaign.

<sup>6</sup> NOAA National Marine Fisheries Service. [Coastal Blue Carbon](#).

<sup>7</sup> NOAA National Ocean Service. 2004. [Population Trends Along the Coastal United States: 1980-2008](#)

[About the Wetlands Program](#) | [Publications](#)

[EPA Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)  
Last updated on Thursday, September 12, 2013



News by E-mail



EPA Mobile



Widgets



News Feeds



Podcasts





## **APPENDIX C**

# **MATTAPOISETT RIVER VALLEY WATER SUPPLY PROTECTION**





# 15-YEAR STATUS REPORT (2001-2016)

## MATTAPOISETT RIVER VALLEY LAND PROTECTION PARTNERSHIP

BUZZARDS BAY COALITION • MATTAPOISETT RIVER VALLEY WATER SUPPLY PROTECTION  
ADVISORY COMMITTEE • TOWNS OF MARION, ROCHESTER, MATTAPOISETT AND FAIRHAVEN

### THE CHALLENGE

#### Protecting our drinking water in the Mattapoissett River Valley

The Mattapoissett River Valley, spanning from Snipatuit Pond in Rochester to the Harbor in Mattapoissett, is one of southeastern Massachusetts most important water resources. The river itself supports outdoor recreation, an historically active herring run and a number of rare and threatened plants and animals. But the river valley is just as important for what you can't see - the underlying aquifer that is the regional drinking water supply for more than 24,000 people living in the towns of Fairhaven, Mattapoissett, Marion and Rochester. Over the past 15 years, the Buzzards Bay Coalition has worked in close partnership with these towns to proactively preserve the forests and wetlands along the Mattapoissett forever.

The towns of Fairhaven and Mattapoissett get all of their public drinking water from a series of wells within the Mattapoissett River Valley. The towns manage this water supply along with the towns of Marion (60% of town water) and Rochester who also withdraw water from the valley. It is a clean, dependable source of drinking water, but protections for the area from inappropriate land development are limited.

The most critical portion of this river valley is the 6,000 acres of land closest to the wells from which we withdraw water - the recharge area designated by the MA Department of Environmental Protection as the "Zone II". Protection of undeveloped lands within the Zone II is one of the best and most cost effective ways to preserve the quality of drinking water. Yet, 72% of land within the critical Zone II area around the wells, remains unprotected from uses that might pollute the water supply.

### OUR STRATEGY

Back in 2000, the status of open space protection within the Mattapoissett River Valley was exceptionally weak for such an important public water supply. Despite some early land purchases by the Fairhaven, Mattapoissett and Marion Water Departments immediately around their well sites, only 8% of the land within the Mattapoissett River Valley watershed was permanently protected from residential development which could harm the water supply.

Nevertheless, land protection opportunities in the Mattapoissett River Valley were strong. Much of the remaining undeveloped land exists in large parcels that have been passed down for generations within local families with solid land ethics and community ties. Forests and wetlands continued to define the landscape and held the promise of a water supply that could continue to safely supply these growing communities for generations to come. The work ahead was in how best to get these lands into permanent conservation.

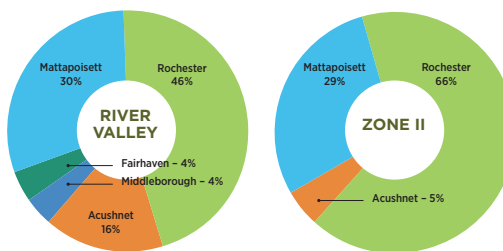
Having already organized into the Mattapoissett River Valley Drinking Water Supply Protection Advisory Committee with representatives from each of the four communities withdrawing water from the valley, the towns joined forces with the nonprofit Buzzards Bay Coalition which had already begun work to protect land in the area for water resource protection. Together the Coalition, the Advisory Committee and town water officials began strategizing how to accelerate the pace and amount of land being protected each year in the valley.

Fifteen years later, this report documents the outstanding success of this partnership model. Since negotiating our first deals in 2001, the Partnership has completed 27 separate real estate transactions resulting in the permanent protection of 1,468 acres of Mattapoissett River Valley Water Supply lands - a rate of nearly 100 acres each year.

### THE MATTAPOISETT RIVER VALLEY & ZONE II DRINKING WATER SUPPLY AREAS



### RIVER VALLEY STATS



The Mattapoissett River Valley (also called its Drainage Basin or Watershed) contains 18,381 acres in five communities. The Mattapoissett River Zone II (6,000 acres) lies entirely within the River Valley. While all activities on the land within the valley have the potential to harm our drinking water, those occurring within the MA DEP-designated Zone II are most critical to protect. This is the primary area where rainwater soaks into the ground to recharge the underlying aquifer from which we draw our drinking water.

# 1,468 ACRES PROTECTED

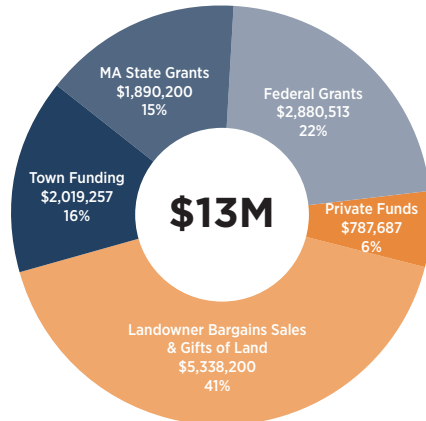
BETWEEN 2001-2016

**98 ACRES PER YEAR - Doubled The Amount Of Protected Land**  
**AS A RESULT, TODAY: 28% OF ZONE II PROTECTED**  
**17% OF RIVER VALLEY PROTECTED**



## THE RESULTS

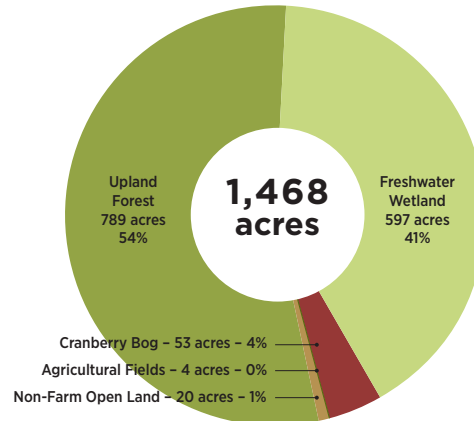
Between 2001-2016, the Mattapoissett River Valley Land Protection Partnership permanently protected 1,468 acres of land to maintain the quality and quantity of our region's drinking water supply. Four charts tell the story best.



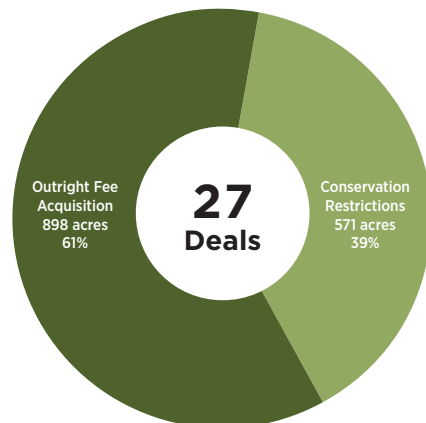
Funding to acquire the lands and Conservation Restrictions featured in this 15-year report was split nearly equally between government grant (53%) and private (47%) sources. The largest source of support came from generous local landowners who agreed to sell their land for less than its Fair Market Value in order to see the land protected. These 'bargain sales' of land totaled \$5,338,000 in donated value. The Buzzards Bay Coalition also raised \$787,687 in gifts from individuals, families and foundations concerned about clean water.

On the government side, funding was divided almost equally between local, state and federal sources. Town funding primarily came in the form of contributions from the Mattapoissett River "Water Supply Protection Fund" which collects approximately \$75,000 each year as a user fee of one penny per one hundred gallons used. Since 2010, these local funds have been supplemented with Community Preservation Funds in the towns of Fairhaven, Mattapoissett and Marion.

The Buzzards Bay Coalition coordinated State and Federal Grant applications, usually in close partnership with a municipal applicant. Most notable among these programs were MA DEP Drinking Water Supply Protection Grants and the US Department of Agriculture's Wetland Reserve Program.

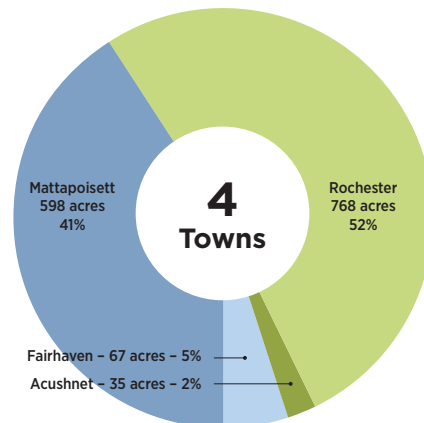


In selecting lands for protection, first priority was placed on properties within the Zone II Recharge Area for the Mattapoissett River Valley municipal wells system. These areas have been determined to most directly recharge the groundwater around the wells so their protection is most important to maintaining both water quality and quantity. Second priority was granted to forest and wetlands. These areas are powerful pollution filters, help maintain soil and water temperatures, reduce stormwater runoff and encourage groundwater recharge, and provide wildlife habitat. The cranberry bogs acquired are immediately adjacent to two important wells and were removed from cultivation in order to prevent potential pollution from fertilizers, pesticides and herbicides and restore natural water flows both of which further support the maintenance of healthy drinking water.



Between 2001-2016, the Mattapoissett River Valley Land Protection Partnership completed 27 separate real estate transactions with landowners willing to sell or donate their land for conservation. All participation by landowners was entirely voluntary.

In selecting deals to pursue, land immediately adjacent to wells was considered a priority for outright acquisition to allow for the highest level of protection of the water supply. Adjacent lands were considered suitable for protection through Conservation Restrictions (CR). A CR is a permanent agreement between a conservation nonprofit like the Buzzards Bay Coalition or a town conservation commission or water department which prevents development of land while allowing it to remain in private ownership.



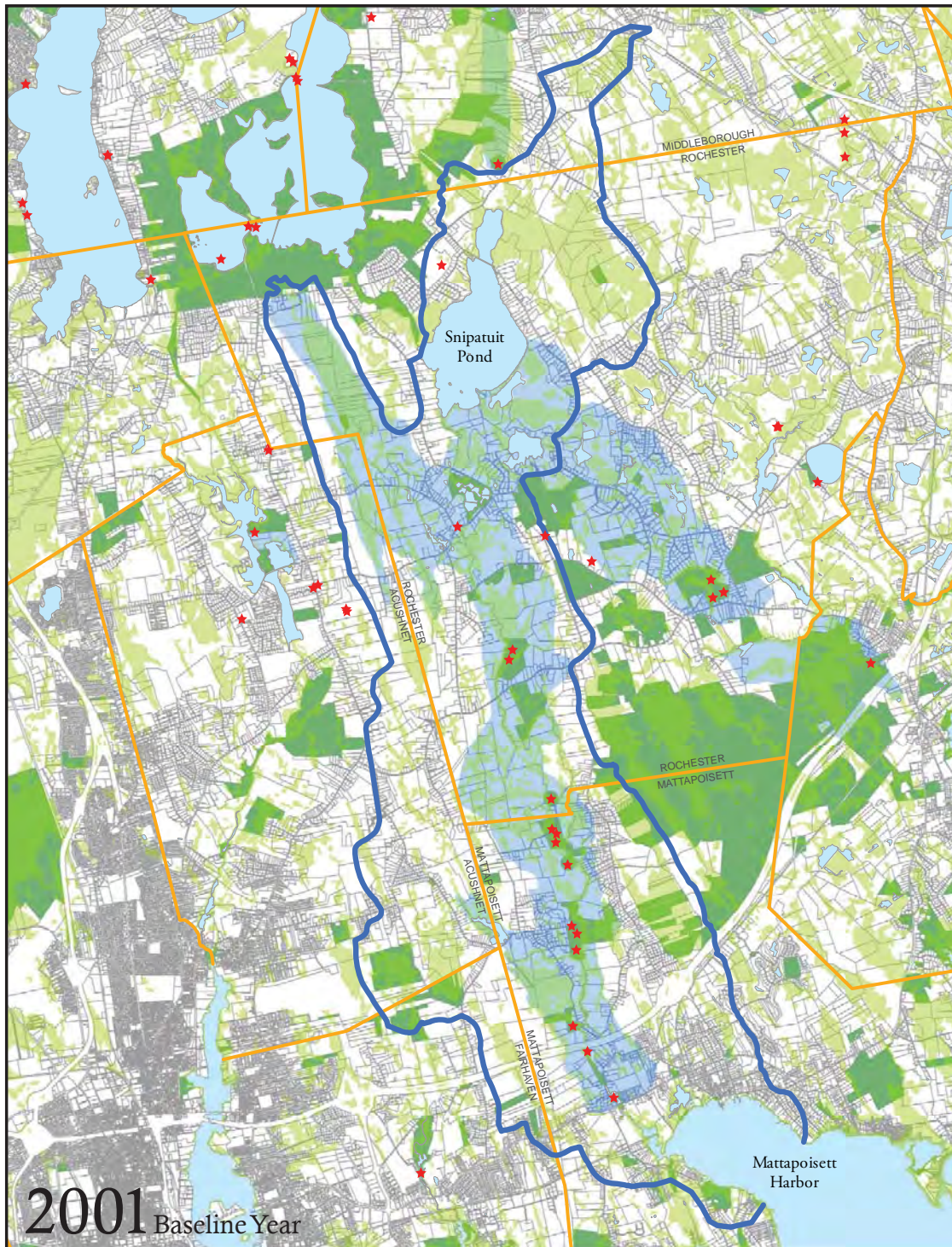
The Mattapoissett River Valley straddles five communities - Mattapoissett, Rochester, Fairhaven, Acushnet and Middleborough - but the vast majority of the Valley and its critical Zone II lies in Rochester and Mattapoissett. Therefore, the lands protected over the past fifteen years have mirrored this distribution. As a regional water resource, what town boundary a parcel of land might fall within matters much less than how that land contributes to the overall protection of the water supply. As a result, many deals saw voters in Marion, Mattapoissett and Fairhaven voting to spend their own town funds on lands in other communities - a testament to the strength of this truly regional water supply.

## THE DEALS

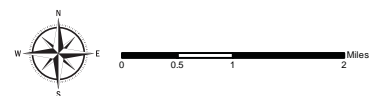
Beyond the planning and fundraising, the day-to-day work of the Mattapoissett River Valley Land Protection Partnership has been with the landowners and families of this landscape - many of whom have owned these lands for generations. The maps on the following pages show how these deals unfolded between 2001-2016. Behind the labels and colors on the map are many of the foundation families of Old Rochester - the Rounsevilles, Churches, and Tinkhams - and relative "newcomers" like the Decas Cranberry Company, and the McIntire and Keeler families. It has been our privilege to work with all of them to preserve not only the waters but the rural character and beauty of the Mattapoissett River Valley.

# 2001

**15-YEAR STATUS REPORT (2001-2016)**  
**MATTAPOISETT RIVER VALLEY LAND PROTECTION PARTNERSHIP**  
 BUZZARDS BAY COALITION & MATTAPOISETT RIVER VALLEY WATER SUPPLY PROTECTION ADVISORY COMMITTEE



- ★ DEP-Approved Public Water Supply Wells
- Mattapoisett River Valley Watershed
- Municipal Boundaries
- DEP Core Wetland Resources
- Existing Protected Lands
- DEP Drinking Water Zone II
- Assessors' Parcels



Data Sources: MassGIS & Buzzards Bay National Estuary Program

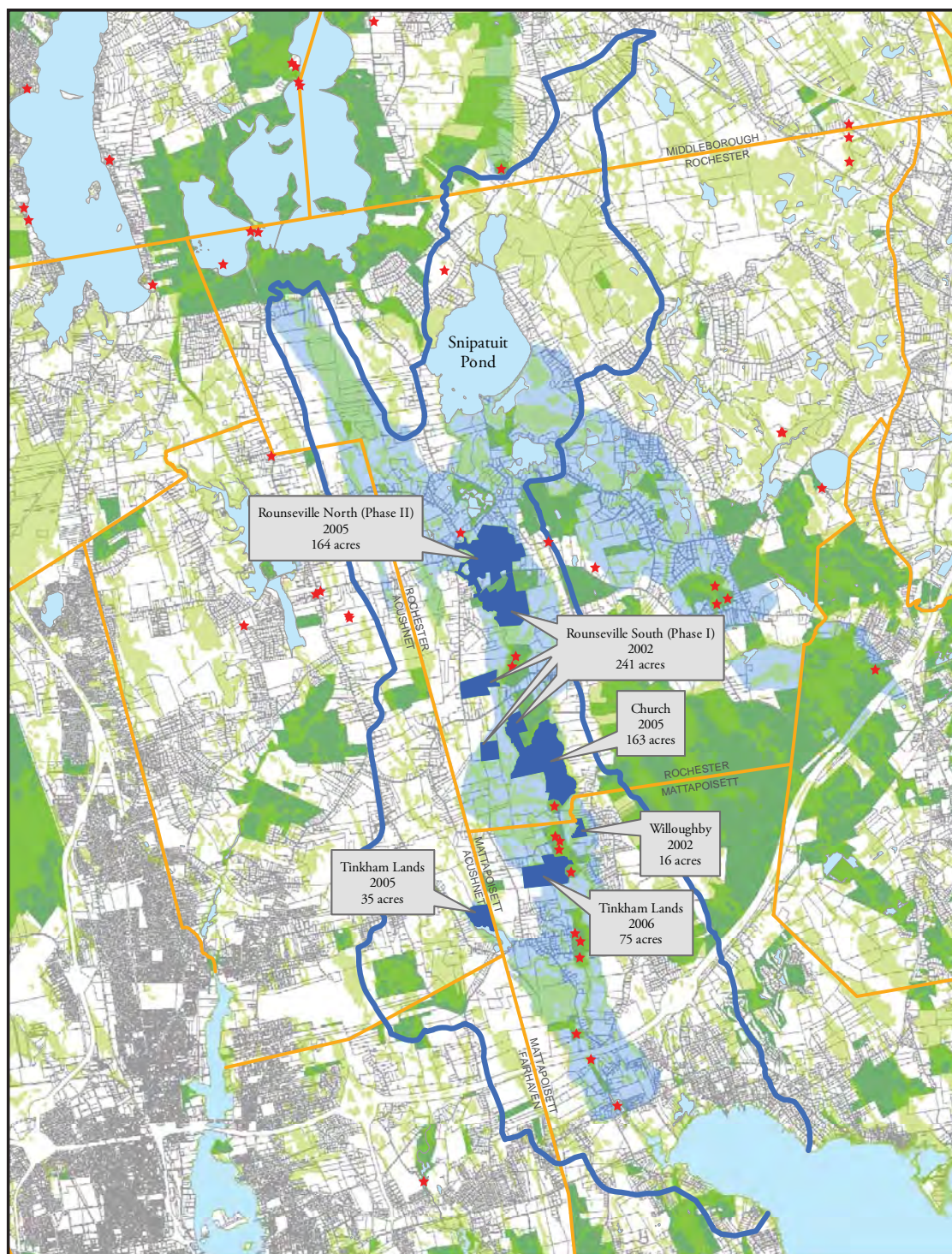


# 2006

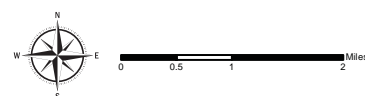
15-YEAR STATUS REPORT (2001-2016)

MATTAPOISETT RIVER VALLEY LAND PROTECTION PARTNERSHIP

BUZZARDS BAY COALITION & MATTAPOISETT RIVER VALLEY WATER SUPPLY PROTECTION ADVISORY COMMITTEE



- ★ DEP-Approved Public Water Supply Wells
- Mattapoisett River Valley Watershed
- Municipal Boundaries
- BBC Partnership Projects
- DEP Core Wetland Resources
- Existing Protected Lands
- DEP Drinking Water Zone II
- Assessors' Parcels



Data Sources: MassGIS & Buzzards Bay National Estuary Program

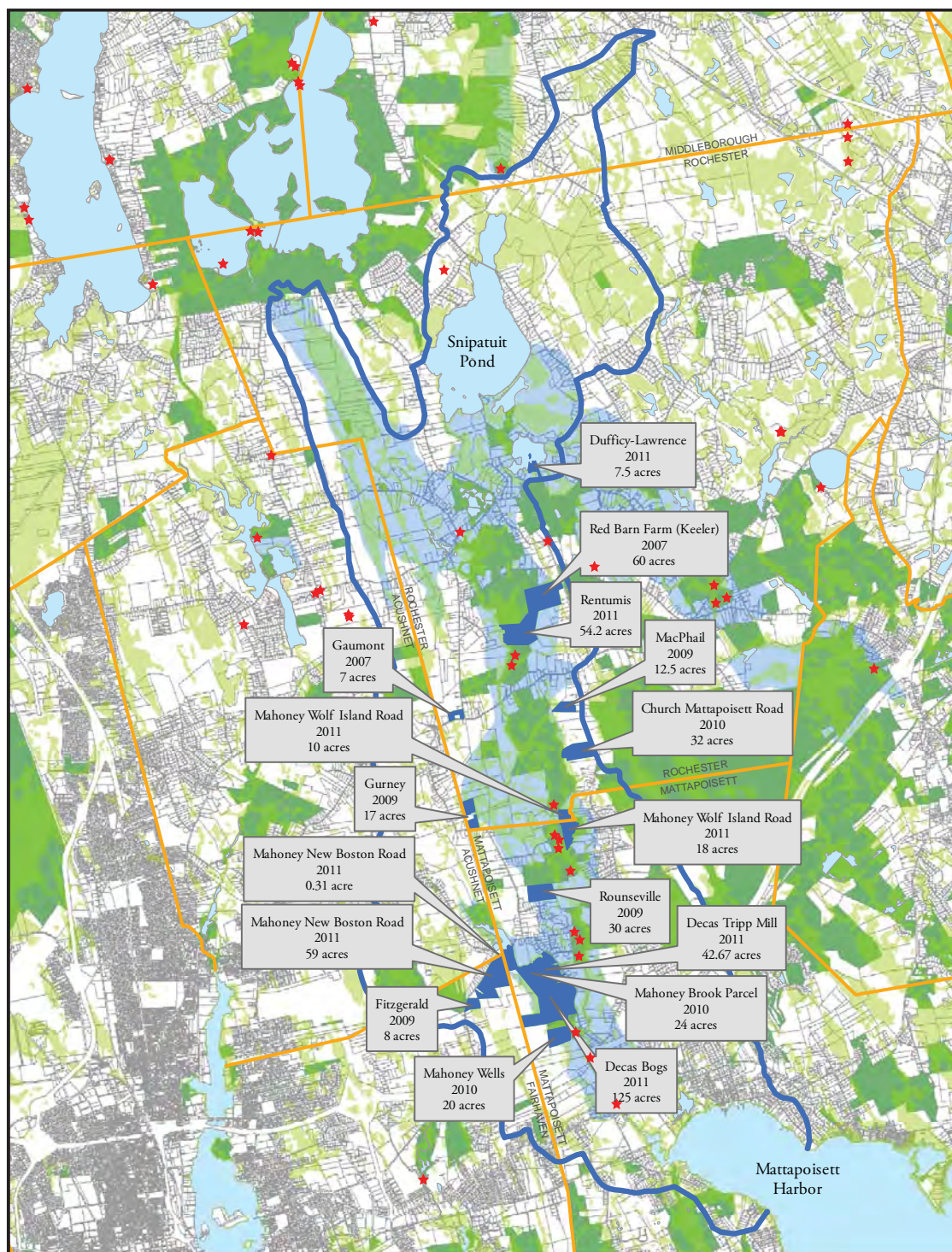


# 2011

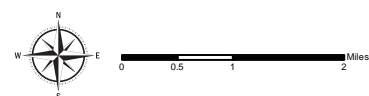
15-YEAR STATUS REPORT (2001-2016)

MATTAPOISETT RIVER VALLEY LAND PROTECTION PARTNERSHIP

BUZZARDS BAY COALITION & MATTAPOISETT RIVER VALLEY WATER SUPPLY PROTECTION ADVISORY COMMITTEE



- ★ DEP-Approved Public Water Supply Wells
- Mattapoisett River Valley Watershed
- Municipal Boundaries
- BBC Partnership Projects
- DEP Core Wetland Resources
- Existing Protected Lands
- DEP Drinking Water Zone II
- Assessors' Parcels

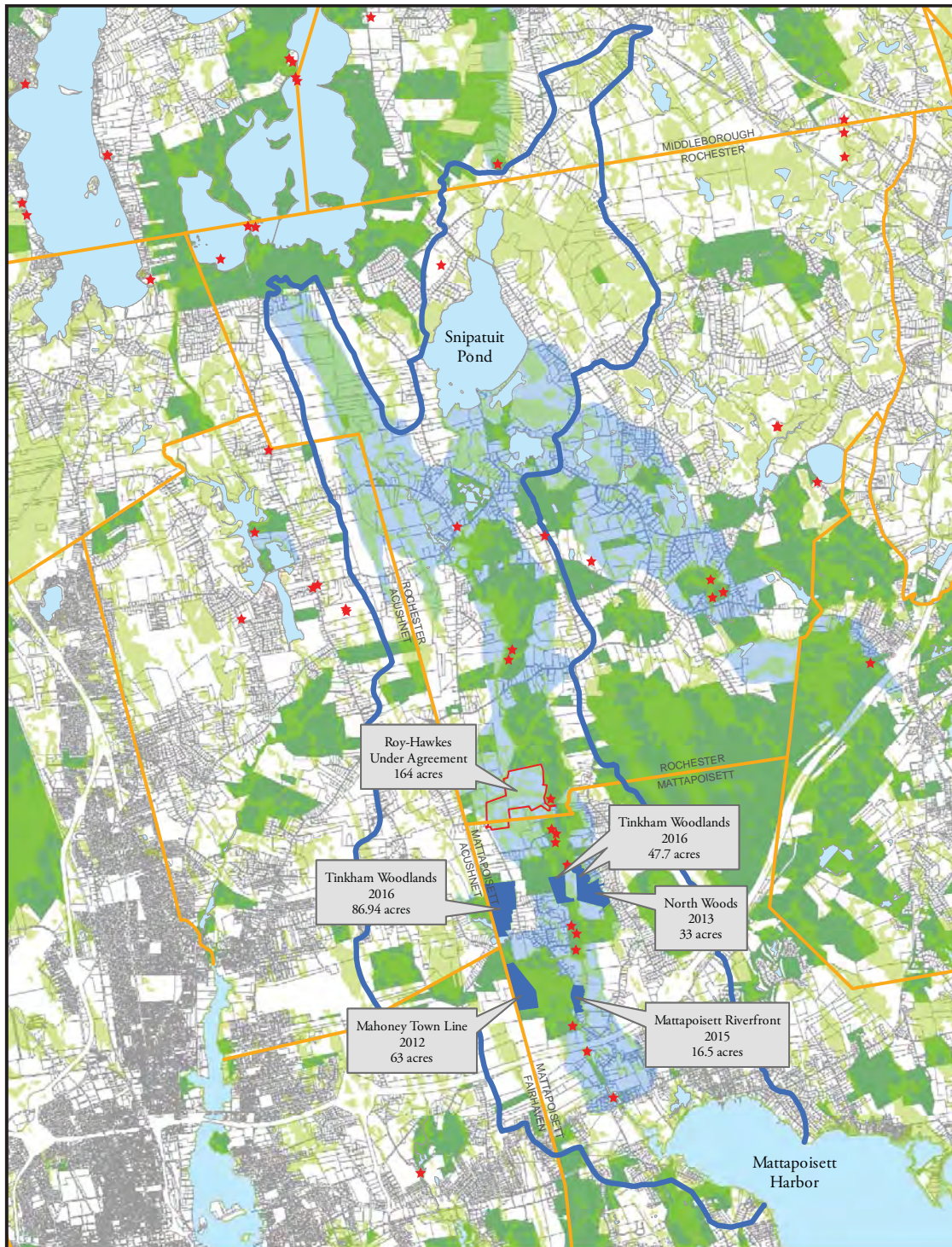


Data Sources: MassGIS & Buzzards Bay National Estuary Program

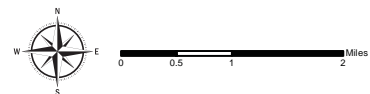


# 2016

**15-YEAR STATUS REPORT (2001-2016)**  
**MATTAPOISETT RIVER VALLEY LAND PROTECTION PARTNERSHIP**  
 BUZZARDS BAY COALITION & MATTAPOISETT RIVER VALLEY WATER SUPPLY PROTECTION ADVISORY COMMITTEE



- ★ DEP-Approved Public Water Supply Wells
- Mattapoisett River Valley Watershed
- Municipal Boundaries
- BBC Partnership Projects
- DEP Core Wetland Resources
- Existing Protected Lands
- DEP Drinking Water Zone II
- Assessors' Parcels



Data Sources: MassGIS & Buzzards Bay National Estuary Program

## THE PROJECTS

| YEAR | PROJECT NAME                | TOWN                   | TOTAL ACRES  | LAND PROTECTION OUTCOME                    |  |
|------|-----------------------------|------------------------|--------------|--|--|
|      |                             |                        |              | OWNERSHIP                                  | CONSERVATION RESTRICTION HOLDER(S)                             |
| 2002 | Willoughby                  | Mattapoisett           | 16           | Mattapoisett Conservation Commission       |  |
| 2002 | Rounseville Homestead South | Rochester              | 241          | Private                                    | Rochester Land Trust & Marion Water Department                 |
| 2005 | Tinkham Pond lands          | Acushnet               | 35           | Fairhaven-Acushnet Land Preservation Trust |  |
| 2005 | Rounseville Homestead North | Rochester              | 164          | Private                                    | Wildlands Trust & Rochester Conservation Commission            |
| 2005 | Church Homestead            | Rochester              | 163          | MA Division of Fish & Game                 |  |
| 2006 | Tinkham Lands               | Mattapoisett           | 75           | Mattapoisett Water Department              |  |
| 2007 | Gaumont Farm                | Rochester              | 7            | Private                                    | Buzzards Bay Coalition & Rochester Land Trust                  |
| 2007 | Red Barn Farm               | Rochester              | 60           | Private                                    | Buzzards Bay Coalition & Rochester Land Trust                  |
| 2009 | Fitzgerald                  | Fairhaven              | 8            | Fairhaven Conservation Commission          | Buzzards Bay Coalition   |
| 2009 | Rounseville woodlot         | Mattapoisett           | 30           | Mattapoisett Water Department              |  |
| 2009 | MacPhail                    | Rochester              | 12.5         | Private                                    | Buzzards Bay Coalition & Rochester Land Trust                  |
| 2009 | Gurney                      | Rochester/Mattapoisett | 17           | Private                                    | Buzzards Bay Coalition & Rochester Land Trust                  |
| 2010 | Mahoney Brook Parcel        | Mattapoisett           | 24           | Buzzards Bay Coalition                     | Mattapoisett Conservation Commission CR                        |
| 2010 | Mahoney Wells               | Mattapoisett           | 20           | Mattapoisett Water Department              |  |
| 2010 | Church Mattapoisett Road    | Rochester              | 32           | Rochester Land Trust                       |  |
| 2011 | Mahoney New Boston Road     | Acushnet               | 0.31         | Buzzards Bay Coalition                     |  |
| 2011 | Mahoney New Boston Road     | Fairhaven              | 59           | Fairhaven Conservation Commission          | Buzzards Bay Coalition   |
| 2011 | Mahoney Wolf Island Road    | Mattapoisett           | 18           | Mattapoisett Water Department              | Fairhaven Water Department                                     |
| 2011 | Decas Tripps Mill           | Mattapoisett           | 42.67        | Mattapoisett Conservation Commission       | Buzzards Bay Coalition   |
| 2011 | Decas Bogs                  | Mattapoisett           | 125          | Buzzards Bay Coalition                     | USDA Natural Resources Conservation Service                    |
| 2011 | Rentumis                    | Rochester              | 54.2         | Marion Water Department                    | Buzzards Bay Coalition   |
| 2011 | Mahoney Wolf Island Road    | Rochester              | 10           | Rochester Conservation Commission          | Fairhaven Water Department                                     |
| 2011 | Dufficy-Lawrence            | Rochester              | 7.5          | Private                                    | Buzzards Bay Coalition & Rochester Land Trust                  |
| 2012 | Town Line Lots              | Mattapoisett           | 63           | Buzzards Bay Coalition                     | Mattapoisett Conservation Commission                           |
| 2013 | North Woods                 | Mattapoisett           | 33           | Mattapoisett Conservation Commission       | Buzzards Bay Coalition   |
| 2015 | Mattapoisett Riverfront     | Mattapoisett           | 16.6         | Mattapoisett Conservation Commission       | Buzzards Bay Coalition   |
| 2016 | Tinkhamtown Woodlands I     | Mattapoisett           | 115.3        | Mattapoisett Water Department              | Buzzards Bay Coalition, Fairhaven Water and Marion Water Depts |
| 2016 | Tinkhamtown Woodlands II    | Mattapoisett           | 19.3         | Buzzards Bay Coalition                     |  |
|      |                             |                        | <b>1,468</b> |  |  |

Depending on the characteristics of the land, wishes of landowners, and available funding sources, each deal resulted in slightly different land protection outcomes. Lands destined for walking trail networks, hunting and fishing, and canoe access were prioritized for ownership by the Buzzards Bay Coalition who committed to manage the land for responsible public use into the future. Lands close to wells were acquired by town Water Departments, and private lands were protected with Conservation Restrictions (CRs). This flexible approach to each individual deal has been one of the hallmarks of this partnership and will continue in the years ahead. What is common to every transaction, however, is that the land is protected from development forever – usually through multiple reinforcing land ownership and CR agreements.

## THE BENEFITS

### Protecting Water Quality

The forests and wetlands of Mattapoisett River Valley work together to shield the river and the valley aquifer from excess nitrogen and other pollutants. When development and urbanization threaten the natural spaces that filter out pollutants and prevent them from entering the water supply, the overall quality of the water in the valley can be degraded. This manifests through an increase in contaminants entering the watershed, which can include wastewater from residential septic systems, pesticides and fertilizers from lawns and gardens, road salts, and heavy metals. Permanent protection of this land sustains the essential natural areas that protect against contamination, safeguarding clean drinking water for more than 24,000 people and ensuring that the Mattapoisett River Valley drinking water supply will remain healthy for generations to come.

### Maintaining Water Quantity

In the Mattapoisett River Valley, the aquifer is maintained as water soaks into the ground after rainfall. The area in which this occurs is known as the recharge area, or Zone II (See map on page 1). However, 72% of land in Zone II is not currently protected from development, which threatens the pervious surfaces that allow water to soak into the ground in the recharge area. Housing developments, driveways and roads are all examples of impervious surfaces resulting from development that decrease the base flow reaching the aquifer. Protecting land around the Mattapoisett River Valley recharge area safeguards against the construction of impervious surfaces, ensuring that the base flow sustaining the aquifer will be protected and that there will be an adequate supply of clean water for all.

### Expanding Outdoor Recreation

Protecting land in the Mattapoisett River Valley does more than safeguard against ecological threats—it also provides additional recreational spaces and opportunities for local residents. On much of the land that has been protected in the valley, the public is welcome to explore the preserved areas and engage in passive recreation opportunities. Depending on the site, visitors can enjoy miles of walking trails, fish, birdwatch, cross-country ski, hunt, and more. Preserving land around the Mattapoisett River Valley affords residents the chance to get outdoors and enjoy the natural beauty of the South Coast—just steps from their homes, offices, and schools. It also ensures that their children and grandchildren will be able to experience the unspoiled magnificence of the area.

### Preserving Fish and Wildlife

Preserving open space also benefits the animals and plants that call the Mattapoisett River Valley home. Much is at stake—the Mattapoisett River has historically been home to one of the largest herring populations on Buzzards Bay with thousands of herring migrating up the river to spawn each year. Other species, such as shad, sturgeon, and Atlantic salmon are entirely gone from the region. On land, the valley is home to a number of rare and threatened species of plants and animals with much of the area mapped by the state as Priority Habitat. Therefore, it is imperative to preserve large, contiguous areas of open space in the Mattapoisett River Valley to protect the well-being of keystone species threatened by habitat degradation and fragmentation.





PHOTOS: THIS PAGE – TIM SYLVIA, FRONT – SIPPICAN WEEK

## In Closing,

In the past fifteen years, the Buzzards Bay Coalition, working in close partnership with the Mattapoissett River Valley Water Supply Protection Advisory Committee, has made extraordinary progress toward the permanent protection of our drinking water. 1,468 acres of land were preserved around our wells between 2001-2016. The model created for this work leveraged local government funding for drinking water supply protection by six times, making it possible to protect land in the Mattapoissett River Valley at a rate of nearly 100 acres per year. This critical work continues today with much more land in need of protection around our wells.

**buzzards  
BAY**  
COALITION

114 Front St. New Bedford, MA 02740  
(508) 999-6363 | [www.savebuzzardsbay.org](http://www.savebuzzardsbay.org)  
  
Dedicated to the restoration, protection  
and sustainable use and enjoyment of  
our irreplaceable Bay and its watershed.

**MATTAPOISETT RIVER VALLEY  
WATERSUPPLY**  
PROTECTION ADVISORY COMMITTEE  
P.O. Box 1055 | Mattapoissett, MA 02739 | [www.mrvwspac.org](http://www.mrvwspac.org)

Managing Water  
Resources For Our  
Future and Protecting  
the Aquifer for  
Fairhaven, Marion,  
Mattapoissett &  
Rochester







## **APPENDIX D**

### **BIOMAP 2 SUMMARY**



## Introduction

The Massachusetts Department of Fish & Game, through the Division of Fisheries and Wildlife's Natural Heritage & Endangered Species Program (NHESP), and The Nature Conservancy's Massachusetts Program developed *BioMap2* to protect the state's biodiversity in the context of climate change.

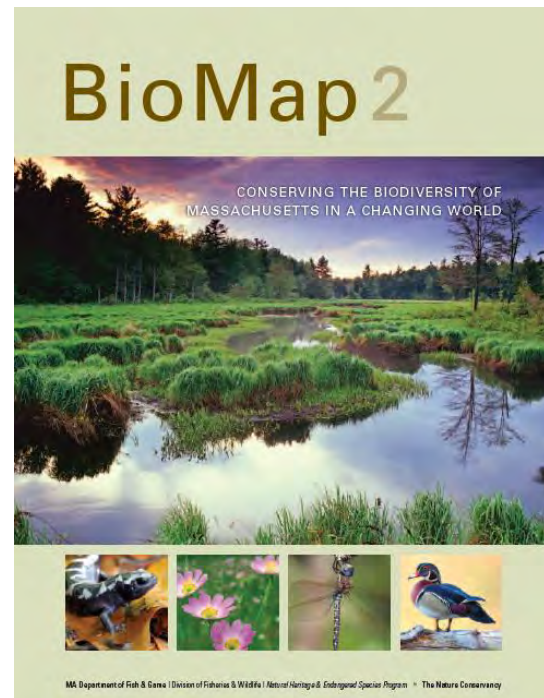
*BioMap2* combines NHESP's 30 years of rigorously documented rare species and natural community data with spatial data identifying wildlife species and habitats that were the focus of the Division of Fisheries and Wildlife's 2005 State Wildlife Action Plan (SWAP). *BioMap2* also integrates The Nature Conservancy's assessment of large, well-connected, and intact ecosystems and landscapes across the Commonwealth, incorporating concepts of ecosystem resilience to address anticipated climate change impacts.

Protection and stewardship of *BioMap2* Core Habitat and Critical Natural Landscape is essential to safeguard the diversity of species and their habitats, intact ecosystems, and resilient natural landscapes across Massachusetts.

## What Does Status Mean?

The Division of Fisheries and Wildlife determines a status category for each rare species listed under the Massachusetts Endangered Species Act (MESA), M.G.L. c.131A, and its implementing regulations 321 CMR 10.00. Rare species are categorized as Endangered, Threatened or of Special Concern according to the following:

- Endangered species are in danger of extinction throughout all or a significant portion of their range or are in danger of extirpation from Massachusetts.



Get your copy of the *BioMap2* report! Download from [www.mass.gov/nhesp](http://www.mass.gov/nhesp) or contact Natural Heritage at 508-389-6360 or [natural.heritage@state.ma.us](mailto:natural.heritage@state.ma.us).

- Threatened species are likely to become Endangered in Massachusetts in the foreseeable future throughout all or a significant portion of their range.
- Special Concern species have suffered a decline that could threaten the species if allowed to continue unchecked or occur in such small numbers or with such restricted distribution or specialized habitat requirements that they could easily become Threatened in Massachusetts.

In addition NHESP maintains an unofficial watch list of plants that are tracked due to potential conservation interest or concern, but are not regulated under the Massachusetts Endangered Species Act or other laws or regulations. Likewise, described natural communities are not regulated by any law or regulations, but they can help to identify



**Natural Heritage  
& Endangered  
Species Program**

**Massachusetts Division of Fisheries and Wildlife**  
1 Rabbit Hill Road, Westborough, MA 01581  
phone: 508-389-6360 fax: 508-389-7890



ecologically important areas that are worthy of protection. The status of natural communities reflects the documented number and acreages of each community type in the state:

- Critically Imperiled communities typically have 5 or fewer documented good sites or have very few remaining acres in the state.
- Imperiled communities typically have 6-20 good sites or few remaining acres in the state.
- Vulnerable communities typically have 21-100 good sites or limited acreage across the state.
- Secure communities typically have over 100 sites or abundant acreage across the state; however, excellent examples are identified as Core Habitat to ensure continued protection.

In 2005 the Massachusetts Division of Fisheries and Wildlife completed a comprehensive State Wildlife Action Plan (SWAP) documenting the status of Massachusetts wildlife and providing recommendations to help guide wildlife conservation decision-making. SWAP includes all the wildlife species listed under the Massachusetts Endangered Species Act (MESA), as well as more than 80 species that need conservation attention but do not meet the requirements for inclusion under MESA. The SWAP document is organized around habitat types in need of conservation within the Commonwealth. While the original BioMap focused primarily on rare species protected under MESA, *BioMap2* also addresses other Species of Conservation Concern, their habitats, and the ecosystems that support them to create a spatial representation of most of the elements of SWAP.

### ***BioMap2*: One Plan, Two Components**

*BioMap2* identifies two complementary spatial layers, Core Habitat and Critical Natural Landscape.

Core Habitat identifies key areas that are critical for the long-term persistence of rare species and other Species of Conservation Concern, as well as a wide diversity of natural communities and intact ecosystems across the Commonwealth. Protection of Core Habitats will contribute to the conservation of specific elements of biodiversity.

Critical Natural Landscape identifies large natural Landscape Blocks that are minimally impacted by development. If protected, these areas will provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience to natural and anthropogenic disturbances in a rapidly changing world. Areas delineated as Critical Natural Landscape also include buffering upland around wetland, coastal, and aquatic Core Habitats to help ensure their long-term integrity.

The long-term persistence of Massachusetts biological resources requires a determined commitment to land and water conservation. Protection and stewardship of both Critical Natural Landscapes and Core Habitats are needed to realize the biodiversity conservation vision of *BioMap2*.

### **Components of Core Habitat**

Core Habitat identifies specific areas necessary to promote the long-term persistence of rare species, other Species of Conservation Concern, exemplary natural communities, and intact ecosystems.

### **Rare Species**

There are 432 native plant and animal species listed as Endangered, Threatened or Special Concern under the Massachusetts Endangered Species Act (MESA) based on their rarity, population trends, and threats to survival. For





Table 1. Species of Conservation Concern described in the State Wildlife Action Plan and/or included on the MESA List and for which habitat was mapped in *BioMap2*. Note that plants are not included in SWAP, and that marine species such as whales and sea turtles are not included in *BioMap2*.

| Taxonomic Group | MESA-listed Species | Non-listed Species of Conservation Concern |
|-----------------|---------------------|--|
| Mammals         | 4                   | 5  |
| Birds           | 27                  | 23   |
| Reptiles        | 10                  | 5  |
| Amphibians      | 4                   | 3  |
| Fish            | 10                  | 17   |
| Invertebrates   | 102                 | 9  |
| Plants          | 256                 | 0  |
| <b>Total</b>    | <b>413</b>          | <b>62</b>                                  |

*BioMap2*, NHESP staff identified the highest quality habitat sites for each non-marine species based on size, condition, and landscape context.

### Other Species of Conservation Concern

In addition to species on the MESA List described previously, the State Wildlife Action Plan (SWAP) identifies 257 wildlife species and 22 natural habitats most in need of conservation within the Commonwealth. *BioMap2* includes species-specific habitat areas for 45 of these species and habitat for 17 additional species which was mapped with other coarse-filter and fine-filter approaches.

### Priority Natural Communities

Natural communities are assemblages of plant and animal species that share a common environment and occur together repeatedly on the landscape. *BioMap2* gives conservation

priority to natural communities with limited distribution and to the best examples of more common types.

### Vernal Pools

Vernal pools are small, seasonal wetlands that provide important wildlife habitat, especially for amphibians and invertebrate animals that use them to breed. *BioMap2* identifies the top 5 percent most interconnected clusters of Potential Vernal Pools in the state.

### Forest Cores

In *BioMap2*, Core Habitat includes the best examples of large, intact forests that are least impacted by roads and development, providing critical habitat for numerous woodland species. For example, the interior forest habitat defined by Forest Cores supports many bird species sensitive to the impacts of roads and development, such as the Black-throated Green Warbler, and helps maintain ecological processes found only in unfragmented forest patches.

### Wetland Cores

*BioMap2* used an assessment of Ecological Integrity to identify the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

### Aquatic Cores

To delineate integrated and functional ecosystems for fish species and other aquatic





Species of Conservation Concern, beyond the species and exemplary habitats described above, *BioMap2* identifies intact river corridors within which important physical and ecological processes of the river or stream occur.

### Components of Critical Natural Landscape

Critical Natural Landscape identifies intact landscapes in Massachusetts that are better able to support ecological processes and disturbance regimes, and a wide array of species and habitats over long time frames.

### Landscape Blocks

*BioMap2* identifies the most intact large areas of predominately natural vegetation, consisting of contiguous forests, wetlands, rivers, lakes, and ponds, as well as coastal habitats such as barrier beaches and salt marshes.

### Upland Buffers of Wetland and Aquatic Cores

A variety of analyses were used to identify protective upland buffers around wetlands and rivers.

### Upland Habitat to Support Coastal Adaptation

*BioMap2* identifies undeveloped lands adjacent to and up to one and a half meters above existing salt marshes as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

The conservation areas identified by *BioMap2* are based on breadth and depth of data, scientific expertise, and understanding of Massachusetts' biodiversity. The numerous sources of information and analyses used to

### Legal Protection of Biodiversity

*BioMap2* presents a powerful vision of what Massachusetts would look like with full protection of the land most important for supporting the Commonwealth's biodiversity. While *BioMap2* is a planning tool with *no regulatory function*, all state-listed species enjoy legal protection under the [Massachusetts Endangered Species Act \(M.G.L. c.131A\)](#) and its implementing regulations ([321 CMR 10.00](#)). Wetland habitat of state-listed wildlife is also protected under the [Wetlands Protection Act Regulations \(310 CMR 10.00\)](#). The *Natural Heritage Atlas* contains maps of [Priority Habitats and Estimated Habitats](#), which are used, respectively, for regulation under the Massachusetts Endangered Species Act and the Wetlands Protection Act. For more information on rare species regulations, and to view Priority and Estimated Habitat maps, please see the [Regulatory Review](#) page at <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>.

***BioMap2* is a conservation planning tool that does not, in any way, supplant the Estimated and Priority Habitat Maps which have regulatory significance. Unless and until the *BioMap2* vision is fully realized, we must continue to protect our most imperiled species and their habitats.**

create Core Habitat and Critical Natural Landscape are complementary, and outline a comprehensive conservation vision for Massachusetts, from rare species to intact landscapes. In total, these robust analyses define a suite of priority lands and waters that, if permanently protected, will support Massachusetts' natural systems for generations to come.

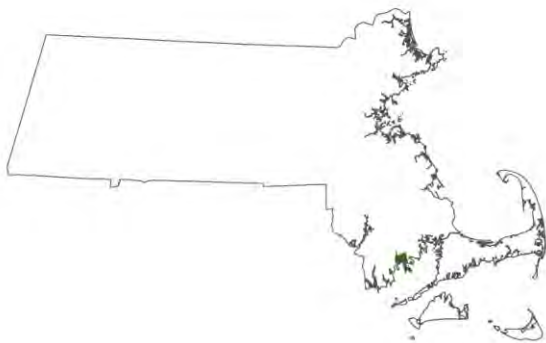






## Town Overview

Fairhaven lies on the border of the Bristol Lowland/Narragansett Lowland and the Cape Cod and Islands Ecoregions. The Bristol Lowland/Narragansett Lowland Ecoregion is an area of flat, gently rolling plains. Forests are mostly central hardwoods and some elm-ash-red maple and red and white pine. There are numerous wetlands, some cropland/pasture, and many cranberry bogs. Many rivers drain this area. The Cape Cod and Islands Ecoregion was formed by three advances and retreats of the Wisconsin Ice Sheet. The resulting terminal moraines, outwash plains, and coastal deposits characterize the area with their sandy beaches, grassy dunes, bays, marshes, and scrubby oak-pine forests. There are numerous kettle hole ponds, swamps, and bogs. Much of the surface water is highly acidic.



## Fairhaven at a Glance

- Total Area: 7,942 acres (12.4 square miles)
- Human Population in 2010: 15,873
- Open space protected in perpetuity: 1,497 acres, or 18.8% percent of total area\*
- BioMap2 Core Habitat: 850 acres
- BioMap2 Core Habitat Protected: 495 acres or 58.2%
- BioMap2 Critical Natural Landscape: 2,710 acres
- BioMap2 Critical Natural Landscape Protected: 1,135 acres or 41.9%.

## BioMap2 Components

### Core Habitat

- 4 Exemplary or Priority Natural Community Cores
- 1 Forest Core
- 2 Wetland Cores
- 2 Aquatic Cores
- 7 Species of Conservation Concern Cores\*\*
  - 4 birds, 3 reptiles, 1 plant

### Critical Natural Landscape

- 1 Landscape Block
- 4 Wetland Core Buffers
- 2 Aquatic Core Buffers
- 20 Coastal Adaptation Areas
- 7 Tern Foraging Areas

\* Calculated using MassGIS data layer "Protected and Recreational Open Space—March, 2012".

\*\* See next pages for complete list of species, natural communities and other biodiversity elements.

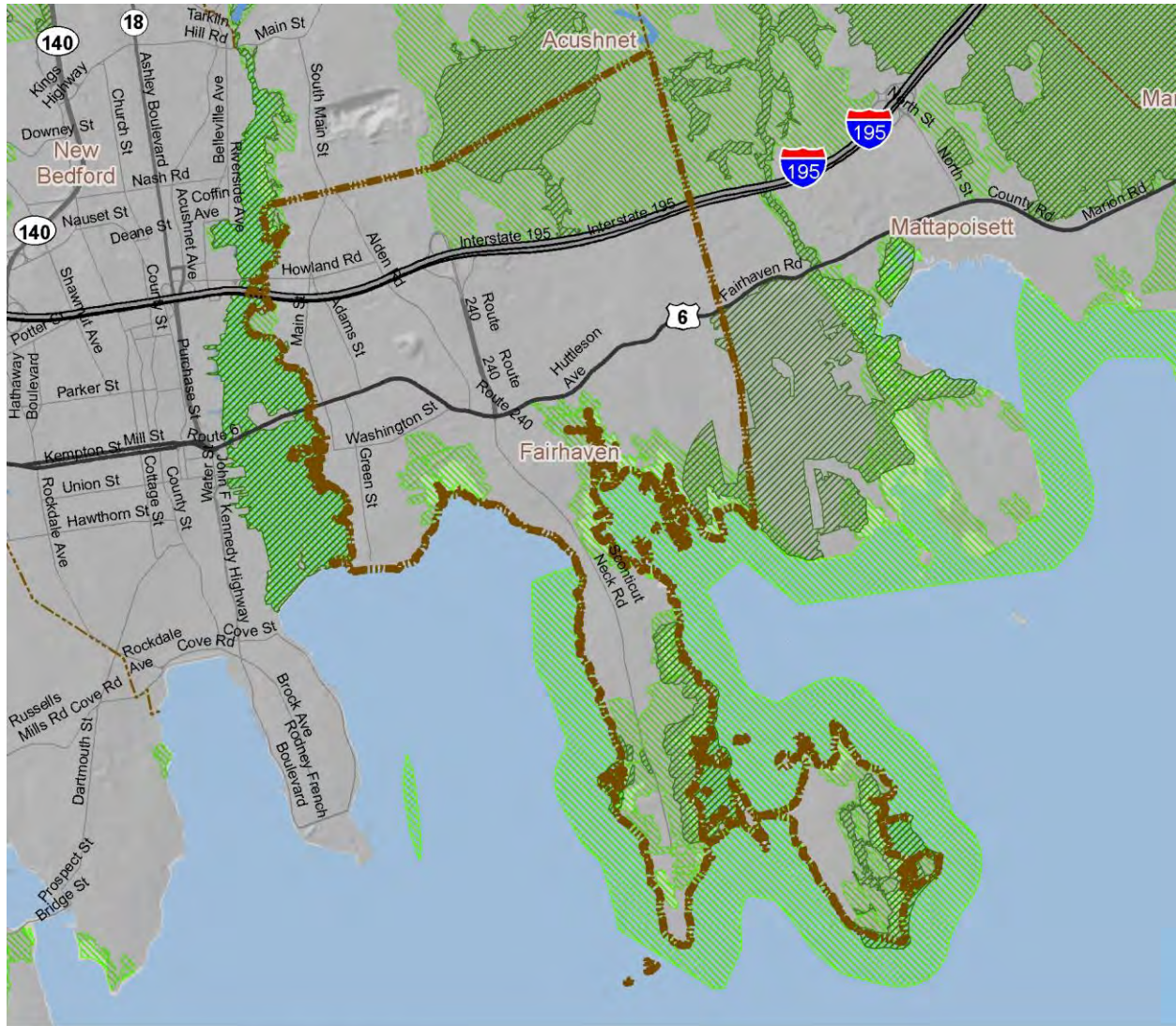




BioMap2

Conserving the Biodiversity of Massachusetts in a Changing World

## BioMap2 Core Habitat and Critical Natural Landscape in Fairhaven

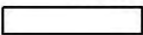


BioMap2 Core Habitat



BioMap2 Critical Natural Landscape

1 Mile



**Natural Heritage  
& Endangered  
Species Program**

**Massachusetts Division of Fisheries and Wildlife**

1 Rabbit Hill Road, Westborough, MA 01581

phone: 508-389-6360 fax: 508-389-7890

For more information on rare species and natural communities, please see our fact sheets online at [www.mass.gov/nhesp](http://www.mass.gov/nhesp).





## **APPENDIX E**

### **CHAPTER LANDS and PROTECTED LANDS**

## **Chapter Lands**

### **Fairhaven Chapter 61 Parcels**

| <b>Parcel Ownership</b>         | <b>Site Address</b>                       | <b>Parcel Acreage</b> | <b>Usage</b> |
|---------------------------------|---|-----------------------|--------------|
| Mariner Youth Soccer            | Huttleston Avenue<br>Fairhaven, MA        | 52.62                 | Forest Land  |
| Mahoney Property                | New Boston Road<br>Fairhaven, MA          | 79.22                 | Forest Land  |
| Medeiros Property               | 107 New Boston Road<br>Fairhaven, MA      | 10.69                 | Forest Land  |
| <b>Parcel Ownership</b>         | <b>Site Address</b>                       | <b>Parcel Acreage</b> | <b>Usage</b> |
| Dube Property                   | 105 New Boston Road<br>Fairhaven, MA      | 10.69                 | Forest Land  |
| Charpentier Property            | 119 New Boston Road<br>Fairhaven, MA      | 14.00                 | Forest Land  |
| Costa's Farm                    | 197 New Boston Road<br>Fairhaven, MA      | 14.28                 | Forest Land  |
| Machado Property                | New Boston Rd./Town Line<br>Fairhaven, MA | 4.33                  | Forest Land  |
| <b>Total Acres Ch. 61 Lands</b> |   | <b>185.83</b>         |              |

### **Fairhaven Chapter 61A Parcels**

| <b>Parcel Ownership</b> | <b>Site Address</b>                     | <b>Parcel Acreage</b> | <b>Usage</b>                       |
|-------------------------|---|-----------------------|------------------------------------|
| Costa's Farm            | 197 New Boston Road<br>Fairhaven, MA    | 56.10                 | Pasture                            |
| Robichaud               | New Boston Road<br>Fairhaven, MA        | 97.76                 | Field Crops                        |
| Carvalho Farm           | 148 Shaw Road<br>Fairhaven, MA          | 69.96                 | Field Crops                        |
| Lopes Farm              | 156 Shaw Road<br>Fairhaven, MA          | 82.64                 | Field Crops<br>Woodland<br>Pasture |
| Motta Property          | 483 Bridge Street<br>Fairhaven, MA      | 19.84                 | Field Crops                        |
| Viveiros                | 523 Sconticut Neck Rd.<br>Fairhaven, MA | 98.96                 | Field Crops<br>Pasture             |
| Denormandie Property    | Shaw Road<br>Fairhaven, MA              | 88.59                 | Field Crops                        |
| Mariner Youth Soccer    | Huttleston Avenue                       | 30.73                 | Field Crops                        |

|                                  |   |               |             |
|----------------------------------|---|---------------|-------------|
|                                  | Fairhaven, MA                           |               |             |
| Denormandie Property             | Nulands Neck<br>Fairhaven, MA           | 68.49         | Woodland    |
| Paquette Property                | Charity Stevens Ln.<br>Fairhaven, MA    | 58.69         | Field Crops |
| Deterra Property                 | 287 Mill Road<br>Fairhaven, MA          | 41.87         | Field Crops |
| Haskell Property                 | Charity Stevens Ln.<br>Fairhaven, MA    | 46.57         | Field Crops |
| Winterbottom Property            | 31 Charity Stevens Ln.<br>Fairhaven, MA | 12.24         | Field Crops |
| <b>Total Acres Ch. 61A Lands</b> |   | <b>772.44</b> |             |

#### Fairhaven Chapter 61B Parcels

| <b>Parcel Ownership</b>          | <b>Site Address</b>              | <b>Parcel Acreage</b> | <b>Usage</b> |
|----------------------------------|----------------------------------|-----------------------|--------------|
| Stolecki                         | I-195/Town Line<br>Fairhaven, MA | 26.87                 | Nature Study |
| <b>Total Acres Ch. 61B Lands</b> |                                  | <b>26.87</b>          |              |

| MAP | LOT   | Land Trust<br>Location | Owner                 | Purpose      | Access  | Acres | Zoning |
|-----|-------|------------------------|-----------------------|--------------|---------|-------|--------|
| 2   | 51    | Worth St               | Land Trust            | Conservation | No      | 0.12  | RA     |
| 15  | 1     | Marsh Island           | Land Trust            | Conservation | Limited | 23.26 | AG     |
| 17  | 129   | Marsh Island           | Land Trust            | Conservation | Limited | 18.06 | AG     |
| 23  | 203   | Kacy Ln                | Land Trust            | Conservation | Limited | 0.66  | RA     |
| 27  | 242   | French St              | Land Trust            | Conservation | No      | 0.61  | WRP    |
| 27  | 253   | Scott St               | Land Trust            | Conservation | No      | 0.1   | WRP    |
| 31  | 5A    | Bridge St              | Land Trust            | Conservation | Limited | 3.31  | RR     |
| 32  | 8     | Weeden Rd              | Land Trust            | Conservation | No      | 6.19  | RR     |
| 32  | 46    | Shawmut St             | Land Trust            | Conservation | No      | 2.49  | RR     |
| 33  | 3     | Bass Pond              | Land Trust            | Conservation | No      | 9.94  | AG     |
| 33  | 13    | Stoney Cove            | Land Trust            | Conservation | No      | 2.39  | AG     |
| 33  | 14    | Stoney Cove            | Land Trust            | Conservation | No      | 1     | AG     |
| 33  | 21    | Shaws Cove             | MA Audubon<br>Society | Conservation | No      | 3.26  | AG     |
| 33  | 24    | Shaws Cove             | MA Audubon<br>Society | Conservation | No      | 10.56 | AG     |
| 33  | 44    | Wards Rock             | MA Audubon<br>Society | Conservation | No      | 0.3   | AG     |
| 37  | 16-17 | Rivard St              | Land Trust            | Conservation | No      | 32.33 | RR     |
| 39  | 11    | Turkey Grove           | Land Trust            | Conservation | No      | 22.27 | RR     |
| 41  | 11    | Sconticut Neck Rd      | Land Trust            | Conservation | Limited | 69.73 | RR     |
| 41  | 12    | Deacons Cove           | Land Trust            | Conservation | No      | 10.28 | RR     |
| 41  | 13    | Deacons Cove           | Land Trust            | Conservation | No      | 3.95  | RR     |
| 41  | 20    | Round Island           | Land Trust            | Conservation | No      | 3.76  | RR     |
| 41  | 25    | Sconticut Neck Rd      | Land Trust            | Conservation | Limited | 3.84  | RR     |
| 41  | 2J    | Sconticut Neck Rd      | Land Trust            | Conservation | Limited | 50.63 | RR     |
| 41  | 2K    | Sconticut Neck Rd      | Land Trust            | Conservation | Limited | 35    | RR     |
| 42  | 3     | Winsegansett Ave       | Land Trust            | Conservation | No      | 6.15  | RR     |
| 42  | 14    | Sconticut Neck Rd      | Land Trust            | Conservation | Limited | 52.75 | RR     |
| 28B | 462   | Grape St               | Land Trust            | Conservation | No      | 0.35  | RA     |
| 28B | 493   | Bonney St              | Land Trust            | Conservation | No      | 0.76  | RA     |
| 28B | 716   | Bonney St              | Land Trust            | Conservation | No      | 0.1   | RR     |
| 29B | 13    | Marion St              | Land Trust            | Conservation | No      | 0.53  | RR     |
| 29B | 26    | Smith St               | Land Trust            | Conservation | No      | 0.53  | RR     |
| 29C | 190   | Seaview Ave            | Land Trust            | Conservation | No      | 0.17  | RR     |
| 32A | 18    | Nonquitt Ave           | Land Trust            | Conservation | No      | 0.52  | RR     |
| 34A | 273   | Pine Grove St          | Land Trust            | Conservation | No      | 0.2   | RA     |
| 34A | 178A  | Huttleston Ave         | Land Trust            | Conservation | Limited | 12.69 | RA/RR  |

| MAP    | LOT  | Land Trust<br>Location | Owner      | Purpose      | Access  | Acres  | Zoning |
|--------|------|------------------------|------------|--------------|---------|--------|--------|
| 34A    | 178B | Huttleston Ave         | Land Trust | Conservation | Limited | 1.1    | RA     |
| 43C    | 151  | Cottonwood St          | Land Trust | Conservation | No      | 0.28   | RR     |
| 43C    | 155  | Cottonwood St          | Land Trust | Conservation | No      | 0.28   | RR     |
| TOTAL: |      |                        |            |              |         | 390.45 |        |

| MAP    | LOT      | Cemetery                         | Owner              | Purpose  | Access     | Acres | Zoning |
|--------|----------|----------------------------------|--------------------|----------|------------|-------|--------|
| 18     | 75       | Riverside Cemetery               | Riverside Cemetery | Cemetery | Unofficial | 6.28  | RA     |
| 17     | 130      | Riverside Cemetery               | Riverside Cemetery | Cemetery | Unofficial | 15.28 | RA     |
| 15     | 2        | Riverside Cemetery               | Riverside Cemetery | Cemetery | Unofficial | 11.56 | RA     |
| 22A    | 70       | Woodside Cemetery                | Town               | Cemetery | Unofficial | 2.36  | RA     |
| 28     | 4, 5, 11 | Nasketucket Cemetery             | Riverside Cemetery | Cemetery | Unofficial | 13.66 | RA     |
| 29D    |          | Indian Cemetery (Wigwam Beach)   | Private Property   | Cemetery | No         | 6.71  | RR     |
| 33     | 28       | Shaw Burying Ground              | Town               | Cemetery | No         | 0.1   | AG     |
| 43     | 270A     | Delano Cemetery (Wilbur's Point) | Town               | Cemetery | Unofficial | 0.04  | RR     |
| TOTAL: |          |                                  |                    |          |            | 55.99 |        |

| MAP | LOT     | Conservation Lands<br>Location | Owner   | Purpose      | Access | Acres | Zoning   | Condition | Rec.<br>Potential | Degree of<br>Protection | Grant |
|-----|---------|--------------------------------|---------|--------------|--------|-------|----------|-----------|-------------------|-------------------------|-------|
| 20  | 1 to 4  | Sycamore St                    | Town    | Conservation | No     | 3.48  | RA       | Excellent | None              | Limited                 |       |
| 20  | 24      | Sycamore St                    | Town    | Conservation | No     | 0.2   | RA       | Excellent | None              | Limited                 |       |
| 20  | 323-326 | Sycamore St                    | Town    | Conservation | No     | 9.94  | RA       | Excellent | None              | Limited                 |       |
| 27  | 7A      | Egypt Ln                       | Town    | Conservation | Yes    | 5.21  | RA / WRP | Excellent | None              | Limited Art. 97 Land    |       |
| 27  | 18      | Boys Creek                     | Con Com | Conservation | No     | 1.49  | WRP      | Excellent | None              | Limited Art. 97 Land    |       |
| 27  | 24      | Egypt Ln                       | Town    | Conservation | Yes    | 4.26  | RA / WRP | Excellent | None              | Limited Art. 97 Land    |       |
| 27  | 144-145 | Preston St                     | Con Com | Conservation | No     | 0.14  | WRP      | Excellent | None              | Limited Art. 97 Land    |       |
| 27  | 161-162 | Alexander St                   | Con Com | Conservation | No     | 0.21  | WRP      | Excellent | None              | Limited Art. 97 Land    |       |
| 27  | 165-171 | Cameron St                     | Con Com | Conservation | No     | 0.82  | WRP      | Excellent | None              | Limited Art. 97 Land    |       |

| MAP | LOT         | Conservation<br>Lands<br>Location | Owner   | Purpose      | Access | Acres | Zoning | Condition | Rec.<br>Potential | Degree of<br>Protection | Grant |
|-----|-------------|-----------------------------------|---------|--------------|--------|-------|--------|-----------|-------------------|-------------------------|-------|
| 27  | 174         | Cameron St                        | Con Com | Conservation | No     | 0.11  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 181         | Scott St                          | Con Com | Conservation | No     | 0.17  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 183         | Lawrence St                       | Con Com | Conservation | No     | 0.34  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 193         | Cameron St                        | Con Com | Conservation | No     | 0.22  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 195         | Scott St                          | Con Com | Conservation | No     | 0.23  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 199         | Sandringham Ave                   | Con Com | Conservation | No     | 0.09  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 202-<br>203 | Lawrence St                       | Con Com | Conservation | No     | 0.5   | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 207         | Lawrence St                       | Con Com | Conservation | No     | 0.11  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 210-<br>211 | Hyland St                         | Con Com | Conservation | No     | 0.23  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 232         | Sandringham Ave                   | Con Com | Conservation | No     | 0.2   | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 235         | Sandringham Ave                   | Con Com | Conservation | No     | 0.2   | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 238         | French St                         | Con Com | Conservation | No     | 0.11  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 260         | French St                         | Con Com | Conservation | No     | 0.72  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 270         | Sandringham Ave                   | Con Com | Conservation | No     | 0.6   | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 279         | Sandringham Ave                   | Con Com | Conservation | No     | 0.26  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 293-<br>294 | Circuit Ave                       | Con Com | Conservation | No     | 1.01  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 309-<br>310 | Westgate Ave                      | Con Com | Conservation | No     | 0.84  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 327-<br>330 | Washburn Ave                      | Con Com | Conservation | No     | 0.41  | RA     | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 335-<br>336 | Washburn Ave                      | Con Com | Conservation | No     | 0.14  | RA     | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 340         | Washburn Ave                      | Con Com | Conservation | No     | 0.06  | RA     | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 345-<br>346 | Washburn Ave                      | Con Com | Conservation | No     | 0.16  | RA     | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 351         | Cove Promenade                    | Con Com | Conservation | No     | 0.05  | WRP    | Excellent | None              | Art. 97<br>Land         |       |
| 27  | 353         | Cove Promenade                    | Con Com | Conservation | No     | 0.07  | WRP    | Excellent | None              | Art. 97<br>Land         |       |

| MAP | LOT         | Conservation<br>Lands<br>Location      | Owner   | Purpose      | Access  | Acres | Zoning | Condition | Rec.<br>Potential | Degree of<br>Protection | Grant     |
|-----|-------------|--|---------|--------------|---------|-------|--------|-----------|-------------------|-------------------------|-----------|
| 27  | 355         | Cove Promenade                         | Con Com | Conservation | No      | 0.03  | WRP    | Excellent | None              | Art. 97<br>Land         | Self-Help |
| 27  | 356         | Washburn Ave                           | Con Com | Conservation | No      | 0.02  | RA     | Excellent | None              | Art. 97<br>Land         |           |
| 27  | 360         | Washburn Ave                           | Con Com | Conservation | No      | 0.01  | RA     | Excellent | None              | Art. 97<br>Land         |           |
| 28  | 14          | Little Bay Con.<br>Area                | Con Com | Conservation | Yes     | 83.7  | RA     | Excellent | None              | Art. 97<br>Land         |           |
| 29  | 7           | Little Bay Shore                       | Con Com | Conservation | No      | 2.41  | RA     | Excellent | None              | Art. 97<br>Land         |           |
| 29  | 10 to<br>12 | Little Bay                             | Con Com | Conservation | No      | 8.83  | RA     | Excellent | None              | Art. 97<br>Land         |           |
| 30  | 46G         | Howard Farms                           | Con Com | Conservation | No      | 6.79  | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 30  | 46H         | Howard Farms                           | Con Com | Conservation | No      | 1.15  | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 30  | 46J         | New Boston Rd                          | Con Com | Conservation | No      | 0.06  | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 30  | 47E         | Tanner Ln                              | Con Com | Conservation | No      | 1.87  | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 32  | 29          | Little Bay                             | Con Com | Conservation | No      | 1.88  | AG     | Excellent | None              | Art. 97<br>Land         |           |
| 33  | 6           | Skipping Creek                         | Con Com | Conservation | No      | 5.46  | AG     | Excellent | None              | Art. 97<br>Land         |           |
| 34  | 42          | New Boston Rd                          | Con Com | Conservation | No      | 16.77 | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 36  | 1A          | Alden Rd                               | Con Com | Conservation | No      | 0.03  | RA     | Excellent | None              | Art. 97<br>Land         |           |
| 39  | 2, 4 & 8    | Town Line<br>Acushnet                  | Con Com | Conservation | No      | 11.09 | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 39  | 12          | Town Forest<br>Old Road to<br>Acushnet | Con Com | Conservation | Limited | 31.63 | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 40  | 1           |  | Con Com | Conservation | No      | 0.41  | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 40  | 3, 5 & 6    | Town Forest                            | Con Com | Conservation | Limited | 19.37 | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 40  | 16-17       | New Boston Rd                          | Con Com | Conservation | Limited | 51.79 | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 40  | 25          | New Boston Rd                          | Con Com | Conservation | No      | 0.24  | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 40  | 54          | Short Beach Rd                         | Con Com | Conservation | No      | 0.56  | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 41  | 15          | Deacons Cove                           | Con Com | Conservation | No      | 4.04  | RR     | Excellent | None              | Art. 97<br>Land         |           |
| 42  | 54          | Short Beach Rd                         | Con Com | Conservation | No      | 0.56  | RR     | Excellent | None              | Art. 97                 |           |

Land

| MAP | LOT     | Conservation<br>Lands<br>Location | Owner          | Purpose      | Access        | Acres         | Zoning | Condition | Rec.<br>Potential | Degree of<br>Protection | Grant |
|-----|---------|-----------------------------------|----------------|--------------|---------------|---------------|--------|-----------|-------------------|-------------------------|-------|
| 43  | 25258   | Brownell Ave                      | Con Com        | Conservation | No            | 0.42          | RR     | Excellent | None              | Art. 97<br>Land         |       |
| 28A | 125     | Hacker St                         | Con Com        | Conservation | No            | 0.75          | RA     | Excellent | None              | Art. 97<br>Land         |       |
| 28A | 161     | Highland Ave                      | Con Com        | Conservation | No            | 0.78          | RA     | Excellent | None              | Art. 97<br>Land         |       |
| 28A | 460     | Pope Beach                        | Con Com        | Conservation | Yes           | 1.14          | RA     | Excellent | None              | Art. 97<br>Land         |       |
| 28A | 497     | Manhattan Ave                     | Con Com        | Conservation | Yes           | 3.51          | RA     | Excellent | None              | Art. 97<br>Land         |       |
| 28B | 41A     | Cove St                           | Con Com        | Conservation | No            | 0.18          | RA     | Excellent | None              | Art. 97<br>Land         |       |
| 28B | 525     | Edgewater St                      | Con Com        | Conservation | Yes           | 1.96          | RR     | Excellent | None              | Art. 97<br>Land         |       |
| 28B | 560     | Edgewater St                      | Con Com        | Conservation | Yes           | 12.85         | RR     | Excellent | None              | Art. 97<br>Land         |       |
| 28B | 566-567 | Edgewater St                      | Con Com        | Conservation | Yes           | 0.14          | RR     | Excellent | None              | Art. 97<br>Land         |       |
| 29A | 18      | Sconticut Neck Rd                 | Con Com        | Conservation | No            | 0.03          | RR     | Excellent | None              | Art. 97<br>Land         |       |
| 32A | 29      | Samoset Circle                    | Con Com        | Conservation | No            | 0.38          | RR     | Excellent | None              | Art. 97<br>Land         |       |
| 42A | 260     | Winsegansett Ave                  | Con Com        | Conservation | No            | 0.07          | RR     | Excellent | None              | Art. 97<br>Land         |       |
| 42A | 268     | Shore Dr                          | Con Com        | Conservation | No            | 0.19          | RR     | Excellent | None              | Art. 97<br>Land         |       |
|     |         |                                   |                |              | <b>TOTAL:</b> | <b>303.68</b> |        |           |                   |                         |       |
| 30  | 105     | Town Watershed                    | Bristol County | Conservation | Unofficial    | 45.34         | RR     | Excellent | None              | Art. 97<br>Land         |       |
| 23  | 175     | Dana Pond<br>Retention Basin      | Town/BPW       | Conservation | Unofficial    | 40            | RR     | Excellent | None              | Art. 97<br>Land         |       |
| 30  | 27      | Austin Pond                       | Town/BPW       | Conservation | Unofficial    | 15            | RR     | Excellent | None              | Art. 97<br>Land         |       |
|     |         |                                   |                |              | <b>TOTAL:</b> | <b>100.34</b> |        |           |                   |                         |       |



| MAP | LOT      | Recreation<br>Lands<br>Location | Owner         | Purpose    | Access     | Acres | Zoning | Condition | Rec.<br>Potential | Degree of<br>Protection<br>Deed<br>Restrict<br>Deed<br>Restrict | Grant |
|-----|----------|---------------------------------|---------------|------------|------------|-------|--------|-----------|-------------------|---|-------|
| 1   | 1        | Ft. Phoenix                     | Town          | Recreation | Yes        | 1.92  | P      | Good      | Yes               |   |       |
| 1   | 1A       | Ft. Phoenix                     | Town          | Recreation | Yes        | 1     | P      | Good      | Yes               |   |       |
| MAP | LOT      | Recreation<br>Lands<br>Location | Owner         | Purpose    | Access     | Acres | Zoning | Condition | Rec.<br>Potential | Degree of<br>Protection<br>Deed<br>Restrict<br>Deed<br>Restrict | Grant |
| 1   | 14       | Dike                            | Town          | Recreation | Unofficial | 1.3   | P      | Good      | Yes               |   |       |
| 6   | 46A      | Dike                            | Town          | Recreation | Unofficial | 3.08  | P      | Good      | Yes               |   |       |
| 7   | 68       | Willow Park                     | Town          | Recreation | Yes        | 0.32  | RA     | Fair      | Yes               |   |       |
| 7   | 9        | Union Warf                      | Town          | Boating    | Yes        | 1.68  | MU     | Poor      | None              |   |       |
| 8   | 68       | Rogers Park                     | Town          | Recreation | Yes        | 1.82  | RA     | Good      | Yes               |   |       |
| 9   | 19       | Cushman Park                    | Town          | Recreation | Yes        | 0.67  | RA     | Good      | Yes               |   |       |
| 11  | 61       | Cushman Park                    | Town          | Recreation | Yes        | 12.93 | RA     | Good      | Yes               |   |       |
| 11  | 51       | Cushman Park                    | Town          | Recreation | Yes        | 0.04  | RA     | Good      | Yes               |   |       |
| 11  | 12       | Pease Park                      | Town          | Boating    | Yes        | 0.85  | RA     | Fair      | Yes               |   |       |
| 16  | 39       | Anthony's Field<br>(North St.)  | Town          | Recreation | Yes        | 2.24  | RA     | Poor      | Yes               |   |       |
| 27  | Multiple | Dike                            | Town          | Recreation | Unofficial | 13.78 | WRP    | Fair      | Yes               |   |       |
| 28  | 23       | Dike                            | Town          | Recreation | Unofficial | 1.92  | WRP    | Fair      | Yes               |   |       |
| 28  | 1        | Recreation/Senior<br>Center     | Town          | Recreation | Yes        | 4.09  | B      | Good      | Yes               |   |       |
| 42  | 23A      | Hoppy's Landing                 | Town          | Recreation | Yes        | 6.4   | B      | Good      | Yes               |   |       |
| 22A | 194      | Livesey Park                    | Town          | Recreation | Yes        | 11.46 | RA     | Excellent | Yes               |   |       |
| 29A | 317      | Macomber                        | Town          | Recreation | Yes        | 4.76  | RR     | Poor      | Yes               |   |       |
| 29C | Multiple | Pimental Park                   | Town          | Recreation | Yes        | 2.18  | RR     | Fair      | Yes               |   |       |
| 31A | 721      | Seaview Avenue                  | Town          | Boating    | Yes        | 2.18  | RR     | Fair      | Yes               |   |       |
| 31A | 804      | Boat Ramp                       | Town          | Boating    | Yes        | 2.18  | RR     | Fair      | Yes               |   |       |
| 31A | 866      | Little League Field             | Town          | Recreation | Limited    | 13.43 | RA     | Good      | Yes               |   |       |
|     |          | Little League Field             | Little League | Recreation | Limited    | 0.37  | RA     | Good      | Yes               |   |       |
|     |          | Little League Field             | Little League | Recreation | Limited    | 0.29  | RA     | Good      | Yes               |   |       |

|     |     |                                  |      |            |     |      |    |           |      |      |
|-----|-----|----------------------------------|------|------------|-----|------|----|-----------|------|------|
| 43A | 44  | Gulf Island Rd.<br>Beach Access  | Town | Recreation | Yes | 0.2  | RR | Excellent | Yes  | None |
| 43A | ROW | Little Neck Road<br>Beach Access | Town | Recreation | Yes | 0.13 | RR | Excellent | None | None |

| Recreation Lands |      |                                 |       |            |        |        |        |           |                |                      |       |
|------------------|------|---------------------------------|-------|------------|--------|--------|--------|-----------|----------------|----------------------|-------|
| MAP              | LOT  | Location                        | Owner | Purpose    | Access | Acres  | Zoning | Condition | Rec. Potential | Degree of Protection | Grant |
| 43A              | 1    | Causeway Road<br>Beach          | Town  | Recreation | Yes    | 3.15   | RR     | Excellent | None           | None                 |       |
| 43A              | 1A   | Causeway Road<br>Beach          | Town  | Recreation | Yes    | 1      | RR     | Excellent | None           | None                 |       |
| 43B              | ROW  | Blue Point Road<br>Beach Access | Town  | Recreation | Yes    | 0.13   | RR     | Excellent | None           | None                 |       |
| 43D              | 207A | West Island Town<br>Beach       | Town  | Recreation | Yes    | 14.2   | RR     | Good      | None           | None                 |       |
| 43D              | 203A | West Island Town<br>Beach       | Town  | Recreation | Yes    | 8.9    | RR     | Good      | None           | None                 |       |
| 43D              | 203B | West Island                     | Town  | Recreation | No     | 5      | RR     | Good      | None           | None                 |       |
| TOTAL:           |      |                                 |       |            |        | 119.24 |        |           |                |                      |       |

| MAP    | LOT     | BIKE PATH         | Owner | Purpose    | Access | Acres | Zoning | Condition | Rec. Potential | Degree of Protection | Grant       |
|--------|---------|-------------------|-------|------------|--------|-------|--------|-----------|----------------|----------------------|-------------|
| 7      | 69      | Phoenix Bike Path | Town  | Recreation | Yes    | 0.2   | RA     | Excellent | Yes            | Limited              | MassHighway |
| 7      | 86      | Phoenix Bike Path | Town  | Recreation | Yes    | 0.35  | RA     | Excellent | Yes            | Limited              | MassHighway |
| 8      | 62      | Phoenix Bike Path | Town  | Recreation | Yes    | 0.21  | RA     | Excellent | Yes            | Limited              | MassHighway |
| 8      | 130     | Phoenix Bike Path | Town  | Recreation | Yes    | 0.27  | RA     | Excellent | Yes            | Limited              | MassHighway |
| 8      | 71      | Phoenix Bike Path | Town  | Recreation | Yes    | 2.16  | RA     | Excellent | Yes            | Limited              | MassHighway |
| 27     | 14      | Phoenix Bike Path | Town  | Recreation | Yes    | 2.18  | WRP    | Excellent | Yes            | Limited              | MassHighway |
| 27     | 14A     | Phoenix Bike Path | Town  | Recreation | Yes    | 0.54  | WRP    | Excellent | Yes            | Limited              | MassHighway |
| 28     | 23C     | Phoenix Bike Path | Town  | Recreation | Yes    | 0.18  | RC     | Excellent | Yes            | Limited              | MassHighway |
| 28     | 37 - 39 | Phoenix Bike Path | Town  | Recreation | Yes    | 4.22  | RC/B   | Excellent | Yes            | Limited              | MassHighway |
| 31     | 126     | Phoenix Bike Path | Town  | Recreation | Yes    | 2.22  | AG     | Excellent | Yes            | Limited              | MassHighway |
| 31A    | 307     | Phoenix Bike Path | Town  | Recreation | Yes    | 4.66  | AG     | Excellent | Yes            | Limited              | MassHighway |
| 31B    | 297     | Phoenix Bike Path | Town  | Recreation | Yes    | 2.61  | AG     | Excellent | Yes            | Limited              | MassHighway |
| 31B    | 307     | Phoenix Bike Path | Town  | Recreation | Yes    | 1.59  | AG     | Excellent | Yes            | Limited              | MassHighway |
| TOTAL: |         |                   |       |            |        | 21.39 |        |           |                |                      |             |

| MAP | LOT | SCHOOLS                   | Owner        | Purpose    | Access | Acres | Zoning |
|-----|-----|---------------------------|--------------|------------|--------|-------|--------|
| 12  | 236 | Fairhaven High<br>School  | School Dept. | Recreation | Yes    | 8.69  | RA     |
| 24  | 12  | Hastings Middle<br>School | School Dept. | Recreation | Yes    | 34.02 | RA     |
| 30B | 146 | East Fairhaven<br>School  | School Dept. | Recreation | Yes    | 15.2  | RA     |
| 28  | 24B | Wood School               | School Dept. | Recreation | Yes    | 19.83 | RA     |
| 22A | 192 | Oxford School             | School Dept. | Recreation | Yes    | 1.06  | RA     |

|               |     |                            |              |            |     |              |    |
|---------------|-----|----------------------------|--------------|------------|-----|--------------|----|
| 8             | 9   | Rogers School              | School Dept. | Recreation | Yes | 1.65         | RA |
| 12            | 105 | Anthony School<br>(Former) | Town         |            | Yes | 1.26         | RA |
| <b>TOTAL:</b> |     |                            |              |            |     | <b>81.71</b> |    |

| <b>STATE LANDS</b>  |            |                                  |              |                |               |                |               |                  |                           |                                 |              |
|---------------------|------------|----------------------------------|--------------|----------------|---------------|----------------|---------------|------------------|---------------------------|---------------------------------|--------------|
| <b>MAP</b>          | <b>LOT</b> | <b>Location</b>                  | <b>Owner</b> | <b>Purpose</b> | <b>Access</b> | <b>Acres</b>   | <b>Zoning</b> | <b>Condition</b> | <b>Rec.<br/>Potential</b> | <b>Degree of<br/>Protection</b> | <b>Grant</b> |
| 1                   | 2          | Ft. Phoenix State<br>Reservation | DEM          | Recreation     | Yes           | 16.42          | P             | Excellent        | Yes                       | State Land                      |              |
| 1                   | 5A         | Ft. Phoenix State<br>Reservation | DEM          | Recreation     | Yes           | 3.64           | P             | Excellent        | Yes                       | State Land                      |              |
| 1                   | 6          | Ft. Phoenix State<br>Reservation | DEM          | Recreation     | Yes           | 1.14           | P             | Excellent        | Yes                       | State Land                      |              |
| 2                   | 3A         | Ft. Phoenix State<br>Reservation | DEM          | Recreation     | Yes           | 2.46           | P             | Excellent        | Yes                       | State Land                      |              |
| 2                   | 4          | Ft. Phoenix State<br>Reservation | DEM          | Recreation     | Yes           | 6.3            | P             | Excellent        | Yes                       | State Land                      |              |
| 33                  | 1          | Hunts Island                     | DMF          | Conservation   | No            | 1.15           | AG            | Excellent        | None                      | State Land                      |              |
| 33                  | 2          | Bass Pond                        | DMF          | Conservation   | No            | 0.83           | AG            | Excellent        | None                      | State Land                      |              |
| 33                  | 5          | Skippling Creek                  | DMF          | Conservation   | No            | 0.59           | AG            | Excellent        | None                      | State Land                      |              |
| 33                  | 7 to 12    | Stony Cove                       | DMF          | Conservation   | No            | 18.85          | AG            | Excellent        | None                      | State Land                      |              |
| 33                  | 43         | Shaw's Cove                      | DEM          | Conservation   | No            | 1.3            | AG            | Excellent        | None                      | State Land                      |              |
| 43D                 | 203        | West Island State<br>Reservation | DEM          | Recreation     | Yes           | 333.11         | RR            | Excellent        | None                      | State Land                      |              |
| <b>TOTAL:</b>       |            |                                  |              |                |               | <b>385.79</b>  |               |                  |                           |                                 |              |
| <b>GRAND TOTAL:</b> |            |                                  |              |                |               | <b>1458.59</b> |               |                  |                           |                                 |              |

Zoning Index:

P: Park District  
RA: Single Residential Districts  
RR: Rural Residential Districts  
RC: Apartment Multifamily Districts  
WRP: Wetland Resource Protection Districts  
AG: Agricultural Districts  
MU: Mixed Use Districts  
B: Business Districts



## **APPENDIX F**

### **2013 PRIORITY DEVELOPMENT and PRIORITY PROTECTION AREAS (PPA-PDA): Fairhaven Community Priority Areas Summary**

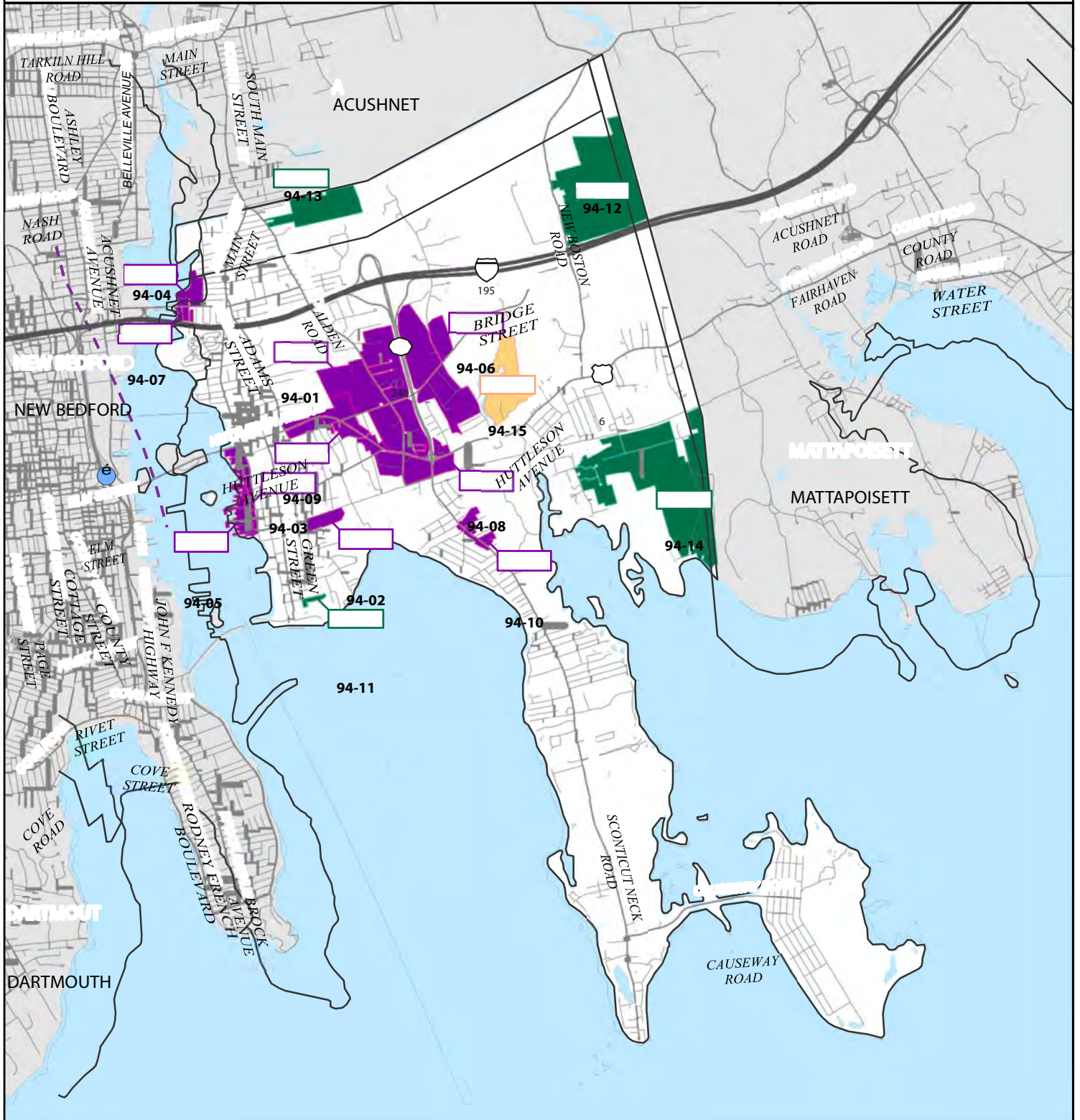
***2013 Fairhaven Community Priority Area List***

| <b>ID Number</b> | <b>Name</b>                                       | <b>Type</b> | <b>Acres</b> |
|------------------|---|-------------|--------------|
| 94-01            | Alden Road Redevelopment                          | Development | 124.93       |
| 94-02            | Atlas Tack Redevelopment Site                     | Development | 13.70        |
| 94-03            | Central Waterfront Mixed Use                      | Development | 20.78        |
| 94-04            | Howland Road Industrial Area                      | Development | 20.56        |
| 94-05            | Marine Industrial District and Working Waterfront | Development | 18.92        |
| 94-06            | Mill Bridge Office Park                           | Development | 137.03       |
| 94-07            | North Waterfront Mixed Use Area                   | Development | 1.62         |
| 94-08            | Route 6 and Route 240 Business Area               | Development | 110.15       |
| 94-09            | Route 6 Corridor                                  | Development | 56.14        |
| 94-10            | Sconticut Neck Limited Commercial                 | Development | 15.14        |
| 94-11            | Doan Street Protection Area                       | Protection  | 3.18         |
| 94-12            | New Boston Road Farm                              | Protection  | 215.93       |
| 94-13            | North Fairhaven Conservation Area                 | Protection  | 61.59        |
| 94-14            | Shaw Road Farms                                   | Protection  | 288.84       |
| 94-15            | Mariners' Fields                                  | Combined    | 71.32        |

# Town of Fairhaven Community Priority Areas, 2013

- Priority Development Areas (PDAs)
- Priority Protection Areas (PPAs)
- Combined PDA/PPA
- Water
- Interstates
- Arterials and Collectors
- Local Roads
- MBTA Proposed Stations
- MBTA Proposed Rail Lines

This map is for the sole purpose of aiding regional planning decisions and is not warranted for any other use. June 2013



**TOWN OF FAIRHAVEN**  
**SOUTH COAST RAIL CORRIDOR PLAN**  
**PRIORITY DEVELOPMENT & PROTECTION AREAS FIVE-YEAR UPDATE**

**INTRODUCTION**

This report presents the updated Priority Development Areas (PDAs) and Priority Protection Areas (PPAs) in the town of Fairhaven. This community-driven land use planning exercise first took place in 2008, when three Regional Planning Agencies, SRPEDD, MAPC, and OCPC, worked alongside local residents, business owners, officials, and organizations to designate the areas that were most important for development or preservation in each community. All thirty-one (31) South Coast Rail (SCR) Corridor communities participated in this project in 2008 and again in 2013.

In 2013, the three Regional Planning Agencies (RPAs) revisited these 31 communities to review and update the 2008 designations. Updates took into account new data that became available over the last five years as well as new municipal priorities. The “Five-Year Update” process was an opportunity to confirm choices made during the 2008 process, to revise previous designations, and to make new choices that acknowledged new conditions. During this review process, the SRPEDD website provided current information to the public, including a calendar of SCR Five-Year Update meetings and a resource library of relevant information sheets and maps.

*What are Priority Development Areas (PDAs)?*

Priority Development Areas (PDAs) are areas that are appropriate for increased development or redevelopment due to several factors including good transportation access, available infrastructure (primarily water and sewer), an absence of environmental constraints, and local support. PDAs can range in size from a single parcel to many acres. Potential development ranges from small-scale infill to large commercial, industrial, residential, or mixed-use projects. Town and village centers, Chapter 40R Districts, industrial parks, and proposed commuter rail station sites are typical examples of PDAs.

*What are Priority Protection Areas (PPAs)?*

Priority Protection Areas (PPAs) are areas that are important to protect due to the presence of significant natural or cultural resources, including endangered species habitats, areas critical to water supply, historic resources, scenic vistas, and farms. Like PDAs, the PPAs can vary greatly in size. Sites may be candidates for protection through acquisition or conservation restrictions.



### *What are Combined Priority Development and Priority Protection Areas (Combined Areas)?*

In Combined Priority Development and Priority Protection Areas, communities welcome development; however, the development is expected to be sensitive to its site and the surrounding area. This may include development that complements the older structures within a historic district or low impact development that protects nearby water resources or biodiversity.

### *What do PDAs and PPAs do for my city or town?*

A community's Priority Area designations can guide municipal decisions about zoning revisions, infrastructure investments, and conservation efforts. For example, some communities choose to incorporate these designations into their Master Plan. Also, municipalities are implementing these designations using technical assistance available through State funding programs such as the South Coast Rail Technical Assistance and District Local Technical Assistance (DLTA).

In addition, the Community Priority Areas serve as the foundation for developing Regional and State Priority Area designations. Lastly, through Executive Order 525 (see below), the Patrick Administration asked certain state agencies to consider priority areas when making funding commitments.

### *Executive Order 525 (E.O. 525)*

In fall 2010, Gov. Patrick issued Executive Order 525 (E.O. 525) providing for the implementation of the South Coast Rail Corridor Plan and Corridor Map (Corridor Plan) through state agency actions and investments. The Executive Order calls for state investments to be consistent with the Corridor Plan's recommendations to the maximum extent feasible. These state actions have the potential to leverage local and private investments in the priority areas. The Executive Order also directs state agencies to conduct a retrospective analysis to determine how consistent their actions and investments in the region have been with the Corridor Plan goals.

## PRIORITY AREA REVIEW PROCESS

SRPEDD staff worked with cities and towns to review their Priority Areas identified in 2008. Amendments to Priority Areas included delineating more precise boundaries using Geographic Information Systems (GIS) data. RPAs used interactive GIS maps to present over forty layers of information including, but not limited to, ortho photography, parcel lines, zoning districts, state program areas (such as Growth District Initiative and Chapter 40R sites), and designated resource areas (such as high-yield aquifers, Zone II aquifers, BioMap 2 Core Habitats, and rivers and streams with their associated wetlands). Communities also worked to clarify the stated purpose for each Priority Area.

The process included a series of three meetings:

#1: Introductory meeting: A Regional Planning Agency staff member visited with Boards of Selectmen and Mayors to reintroduce the land use planning process that took place in 2008 and the reasons for conducting the Five-Year Update of Priority Area designations.

#2: Preliminary Meeting: SRPEDD staff facilitated a 2-3 hour working session with municipal staff and/or board and committee/commission members to review each priority area. Staff incorporated interactive GIS maps depicting various data layers (see Appendix) to inform discussions and decision-making. This preliminary process of updating the 2008 Priority Area designations had the following general guiding principles in mind:

- Incorporating changes in municipal priorities, needs, and desires
- Understanding updated state policies such as Executive Order 525
- Refining priority area boundaries to be exact and “rational” (coterminous with other map layers such as roadways, zoning boundaries, designated resource areas, etc.)
- Making clear and strategic statements about the stated purpose for and desired character of priority areas

For the few SRPEDD communities without town staff, SRPEDD did this preliminary review at a public meeting in the community; then, using the criteria outlined by meeting participants, SRPEDD made the remaining changes and returned revised maps and a narrative description of the revisions to the municipality for their review prior to the workshop with the general public. SRPEDD staff used the input from the preliminary meetings to generate a “before” and “after” map to present to the public for their feedback and input.

#3: Public Meeting Review: Each community held a public meeting, at which time RPAs and local meeting participants reviewed each community's priority areas and identified desired changes. Some communities incorporated this into a Board of Selectmen meeting, others

during a Planning Board meeting, and some communities held a public meeting held specifically for this purpose.

## TOWN OF FAIRHAVEN RESULTS

On December 27, 2012, SRPEDD staff met with the Board of Selectmen (BOS) to re-introduce the Priority Area planning exercise. The BOS designated the Town Planner, William D. Roth, Jr., as the contact person for this work. The preliminary municipal meeting was held on February 20, 2013 at SRPEDD's offices. Participants reviewed the purpose and the boundaries of each 2008 Priority Area. In discussions, they clarified the purpose of each and adjusted the respective boundaries to coincide with the stated purpose.

The town of Fairhaven held a public meeting to seek input from town residents on the revisions recommended by the municipal representatives on May 20, 2013 at Town Hall. No revisions were requested for the priority areas. The consensus of the meeting attendees was that the 2013 Priority Area map depicts the boundaries of areas deemed to be priorities for development and for preservation. The result of this work is the 2013 Fairhaven Community Identified Priority Area Map, which can be found on page 2 of this document.

## PRIORITY AREA ADJUSTMENTS

As stated above, the 2013 Priority Areas (PAs) are based upon the PA designations identified in 2008. Many of these PAs still represent municipal growth priorities today. In most cases, revisions made to the PAs simply transition them from the "general designations" of the 2008 process to more "exact designations" (both in terms of their boundaries and their stated purposes) using current Geographic Information Systems data and updated local input. In some cases, communities added new PAs or removed previous designations because (1) municipal priorities changed over time, (2) the purposes for designations were achieved or new ones arose, or (3) designations were incorporated into other PAs identified for the same purpose. The text below lists the updated 2013 PAs, identifies their stated purposes, describes their boundaries, and details changes from the 2008 Priority Areas.

## PRIORITY DEVELOPMENT AREAS

### **Alden Road Redevelopment [94-01]**

*Purpose:* Redevelopment opportunities associated with existing businesses, the landfill, and underutilized sites.

*Boundaries:* Boundaries correspond to selected parcels within the Industrial Zoning District.

*Changes from 2008:* Community representatives altered boundaries to more clearly follow parcel lines and zoning districts.

#### **Atlas Tack Redevelopment Site [94-02]**

*Purpose:* To redevelop a former industrial site.

*Boundaries:* Boundaries were drawn to correspond to parcel of the former site and to remove the wetlands from the area as drawn in 2008.

*Changes from 2008:* Community representatives altered boundaries to more clearly follow parcel lines.

#### **Central Waterfront Mixed-use Area [94-03]**

*Purpose:* To maintain and encourage mixed-use areas associated with waterfront industry.

*Boundaries:* Boundaries correspond to selected parcels adjacent to the working waterfront.

*Changes from 2008:* In 2008, this PA was part of the Waterfront Redevelopment PDA. Community representatives renamed this area in order to more clearly describe its purpose and location. Community representatives also altered its boundaries to more clearly follow parcel lines.

#### **Howland Road Industrial Area [94-04]**

*Purpose:* Industrial and commercial redevelopment.

*Boundaries:* Boundaries correspond to parcels within the Industrial Zoning District and contain two Economic Opportunity Areas (EOAs).

*Changes from 2008:* Community representatives altered boundaries to more clearly follow parcel lines and zoning districts.

#### **Marine Industrial District and Working Waterfront [94-05]**

*Purpose:* To maintain and encourage waterfront industry.

*Boundaries:* Boundaries correspond to waterfront parcels within the Industrial Zoning District.

*Changes from 2008:* In 2008, this PA was part of the Waterfront Redevelopment PDA. Community representatives renamed this area in order to more clearly describe its purpose

and location. Community representatives also altered its boundaries to more clearly follow parcel lines and zoning districts.

#### **Mill Bridge Office Park [94-06]**

*Purpose:* Office Park, medical, and research and development expansion and infill opportunities.

*Boundaries:* Boundaries correspond to selected parcels within the Industrial, Business, Single Residence, and Rural Residence Zoning Districts. The designation contains an EOA and OpenCape Broadband infrastructure.

*Changes from 2008:* In 2008, this PA was called the Former AT&T Redevelopment Site. The community renamed this PA in order to more clearly describe its purpose and location. Community representatives also altered its boundaries to more clearly follow parcel lines.

#### **North Waterfront Mixed-use Area [94-07]**

*Purpose:* To encourage a mixed-use node adjacent to job opportunities.

*Boundaries:* Boundaries correspond to selected parcels, the majority of which are within the Mixed-Use Zoning District and adjacent Industrial Zoning District.

*Changes from 2008:* In 2008, this PA was called the Riverfront Mixed-Use Area. The community renamed this PA in order to more clearly describe its purpose and location. Community representatives also altered its boundaries to more clearly follow parcel lines and zoning districts.

#### **Route 6 and Route 240 Business Area [94-08]**

*Purpose:* Commercial development associated with this major intersection.

*Boundaries:* Boundaries correspond to selected parcels within the Industrial, Business, and Single Residence Zoning Districts.

*Changes from 2008:* In 2008, this PA was called the Kmart Plaza Alden Rd. South Area 1 and Area 2. The community renamed this PA in order to more clearly describe its purpose and location. Community representatives also altered its boundaries to more clearly follow parcel lines and zoning districts.

### **Route 6 Corridor [94-09]**

*Purpose:* To maintain the corridor as a business and commercial area.

*Boundaries:* Boundaries correspond to parcels within the Business District as well as selected, small areas representing possible business expansion.

*Changes from 2008:* In 2008, this PA was called the Rte. 6 Commercial Redevelopment. The community renamed this PA in order to more clearly describe its coverage. Community representatives also altered its boundaries to more clearly follow parcel lines and zoning districts.

### **Sconticut Neck Limited Commercial [94-10]**

*Purpose:* Limited, neighborhood-scale commercial opportunities to serve the surrounding area.

*Boundaries:* Boundaries include parcels within the existing Business District as well as selected expansion parcels within the Single Residence District.

*Changes from 2008:* This priority area is new in 2013.

## **PRIORITY PROTECTION AREAS**

### **Doan Street Protection Area [94-11]**

*Purpose:* To maintain passive recreation and education opportunities.

*Boundaries:* Boundaries include selected parcels.

*Changes from 2008:* In 2008, this PA was called the NSTAR Property Protection Area. The community renamed this PA in order to more clearly describe its purpose and location. Community representatives also altered its boundaries to more clearly follow parcel lines and zoning districts.

### **New Boston Road Farmland [94-12]**

*Purpose:* To protect active agriculture and farmland.

*Boundaries:* Boundaries consist of selected parcels.

*Changes from 2008:* Community representatives altered boundaries to more clearly follow parcel lines.

### **North Fairhaven Conservation Area [94-13]**

*Purpose:* To preserve open space.

*Boundaries:* Boundaries consist of selected parcels.

*Changes from 2008:* In 2008, this PA was called the North Fairhaven Parkland. The community renamed this PA in order to more clearly describe its purpose. Community representatives also altered its boundaries to more clearly follow parcel lines.

### **Shaw Road Farms [94-14]**

*Purpose:* Protection of active agriculture and farmland; preservation of marine resources, floodplain buffers, and open space connectivity.

*Boundaries:* Boundaries include chosen parcels associated with habitat information, excluding concentrated areas of development and the area which is now covered by a Conservation Restriction (CR) owned by the Buzzard's Bay Coalition.

*Changes from 2008:* Community representatives altered boundaries to more clearly follow parcel lines.

### **COMBINED PRIORITY AREAS**

#### **Mariners' Fields [94-15]**

*Purpose:* To maintain the current active recreation use and to encourage development associated with active recreation.

*Boundaries:* Boundaries correspond to selected parcels within the Business, Rural Residence, and Single Residence Zoning Districts.

*Changes from 2008:* This priority area is new in 2013.

### **DELETED PRIORITY AREAS**

**East Fairhaven Protection Area PPA:** Community representatives chose to remove this PA as the town was able to purchase this area, thereby achieving its goal of preserving it for open space and conservation.

