



Stone walls, some over four feet high, are a common feature of Rehoboth State Forest. (See Appendix K for photo information.)

# SECTION 10. REHOBOTH STATE FOREST

## 10.1. INTRODUCTION

Rehoboth State Forest is located in the town of Rehoboth; north of Route 44 and east of Route 118. (Figure 10.1.1) It is located approximately 11.5 miles south of F. Gilbert Hills State Forest.

In 1934 the Department of Conservation acquired six parcels of land along the East Branch of the Palmer River in Rehoboth, thus establishing Rehoboth State Forest. The “original idea was to purchase a much larger area but interest and money ran out” (Cook ca. 1954). Forestry data indicate that at the time of acquisition at least one of these parcels was agricultural land that had been abandoned for approximately a decade. The size of the Forest has remained unchanged since its establishment.

The Forest’s southernmost portion is located on the slopes of Great Meadow Hill. From 1916 through 1955 a state-owned fire tower stood at the summit of this hill. The presence of this tower may have influenced the decision to acquire nearby land. However, the reason(s) that specific parcels were selected remains unknown.

Rehoboth State Forest is a small, little known property with limited recreation infrastructure. It is used for passive recreation including hiking,

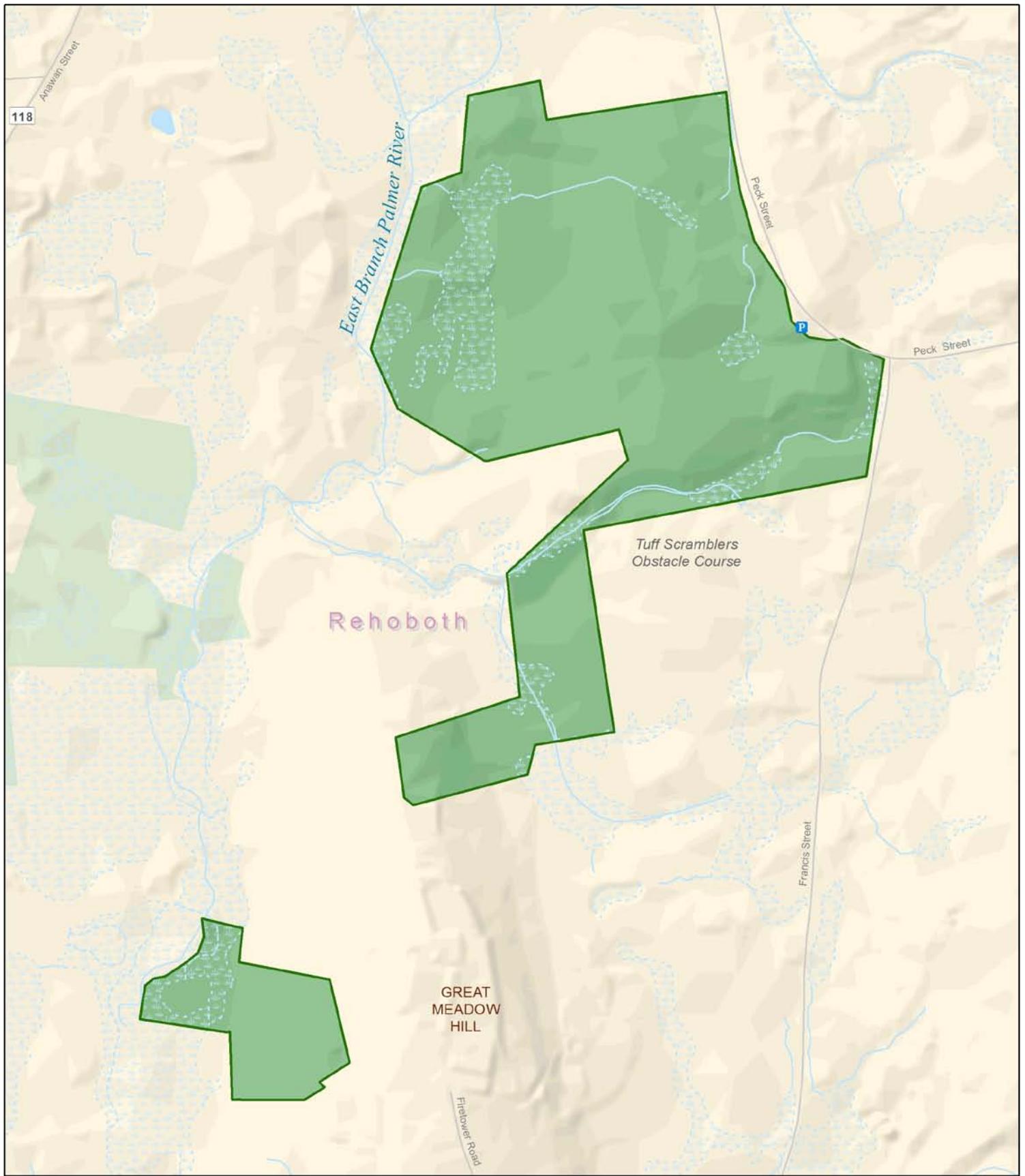
geocaching, and hunting. However, its greatest use is likely associated with a 5k adventure race that traverses the Forest and adjacent private land. Two days per year this race brings hundreds of runners into the forest. The forest’s physical, political, and regulatory attributes are summarized in Table 10.1.1.

**Table 10.1.1. Physical, political, and regulatory settings of Rehoboth State Forest.**

Setting	Name or Metric
<b>Location:</b>	Rehoboth
<b>Area (acres)<sup>a</sup>:</b>	139.96
<b>Perimeter (miles)<sup>a</sup>:</b>	3.50
<b>Landscape Designation(s)<sup>b</sup>:</b>	Woodland
<b>Legislative Districts:</b>	
House	4 <sup>th</sup> Bristol
Senate	Bristol and Norfolk
<b>Regulatory Designations:</b>	None identified

- a. Calculated using a Geographic Information System (GIS).
- b. For a summary of DCR’s landscape designations, see <http://www.mass.gov/eea/docs/dcr/ld/ld-factsheet-final.pdf>.

**Associated Properties.** There are no associated properties. The Rehoboth Fire Tower is located within the Fall River Heritage Complex.



- Rehoboth State Forest
- Blue Hills Complex Land
- Other DCR Land
- Other Open Space
- DCR Legal Interest
- Public Parking

### Rehoboth State Forest

Figure 10.1.1

1,000 Feet

Geographic information provided by MassGIS and DCR GIS, 2016



The Forest and Park Supervisor from F. Gilbert Hills State Forest manages, as time and resources permit, several DCR properties, including F. Gilbert Hills State Forest (Section 6), Bristol Blake State Reservation (Section 7), Franklin State Forest (Section 8), Wrentham State Forest (Section 9), Rehoboth State Forest, West Bridgewater State Forest (Section 11), and Bridgewater State Forest (Section 12). They also oversee DCR's interests in Angle Tree Monument Reservation (Section 1).

## 10.2. NATURAL RESOURCES

### Physical Features

The forest consists of two separate parcels; the larger Peck Street parcel (approximately 125 assessed acres) and the smaller Great Meadow Hill parcel (13 assessed acres). The former is located north of Great Meadow Hill, and the latter is located west of Great Meadow Hill. Both parcels slope westward toward the East Branch of the Palmer River. Elevations in the Peck Street parcel range from approximately 118 feet along the river to approximately 226 feet on the northern slope of Great Meadow Hill. Elevations in the Great Meadow Hill parcel range from approximately 108 feet along the river to 167 feet on the west slope of Great Meadow Hill.

### Water Resources

Most of the Forest's wetlands are associated with the East Branch of the Palmer River. Both parcels border forested wetlands along the river. The Peck Street parcel also has several isolated wetlands and wetlands associated the streams that pass through this parcel. All are forested. These and other water resources are summarized in Table 10.2.1.

**Table 10.2.1. Water resources of Rehoboth State Forest.**

Water Resource	Name or Metric
<b>Watershed:</b>	Narragansett Bay
<b>Aquifer:</b>	
Medium Yield (acres)	0.00
High Yield (acres)	0.00
<b>Rivers and Streams (miles)</b>	0.63
<b>Vernal Pools</b>	
Certified (#)	0
Potential (#)	1
<b>Wetlands (acres)</b>	16.19
<b>Lakes and Ponds (acres)</b>	0.00

No portion of the Forest is susceptible to floods. (Table 10.2.2)

**Table 10.2.2. Potential impacts of flooding to Rehoboth State Forest.**

Type of Impact	Acres	%
<b>Flooding:</b>		
100-year Storm	0.00	0.00
500-year Storm <sup>a</sup>	0.00	0.00

a. Cumulative value; includes 100-year storm impacts.

### Rare Species

#### State-listed Species

There are no state-listed species.

#### Priority Habitat

There is no Priority Habitat.

### Vegetation

There has been no floristic inventory of this forest; information on its plants comes from ongoing forest monitoring efforts. (See *Forests*, below.)

#### Invasive Species

Invasive species have not been surveyed. Three species were incidentally observed during the preparation of this plan. (Table 10.2.3) All are associated with a former homestead.

**Table 10.2.3. Known invasive plants of Rehoboth State Forest.**

Species <sup>a</sup>	Status <sup>b</sup>	Source <sup>c</sup>
Garlic mustard	I	1
Japanese barberry	I	1
Winged euonymus	I	1

- a. Presented alphabetically, by common name.
- b. Plants are classified as being either Invasive (I), Likely Invasive (L), or Potentially Invasive (P) according to MIPAG (2005).
- c. Information contained in this table was obtained from the following sources:
1. Incidentally observed by RMP Planner, November 2015.

### Natural Communities

Information on the Forest's natural communities is incomplete; only three community types have been confirmed. (Table 10.2.4) CFI data and forest cover type maps suggest that Mixed Oak Forest and Oak-Hickory Forest community types may also be present.

**Table 10.2.4. Known natural communities of Rehoboth State Forest.**

Community Type <sup>a</sup>	System <sup>b</sup>	State Rank <sup>c</sup>	Source <sup>d</sup>
Inland Atlantic White Cedar Swamp	T	S2	1,2
Red maple swamp	P	S5	1
Shrub Swamp	P	S3	1

- a. Classified according to Swain and Kearsley (2011).
- b. E = Estuarine, P = Palustrine, T = Terrestrial.
- c. The NHESP ranks communities from most rare (S1) to the most common (S5).
- d. Information contained in this table was obtained from the following sources:
1. DEP Wetlands (1:12,000) data layer.
  2. DCR trails assessment data.



This Inland Atlantic White Cedar Swamp is the rarest of the Forest's known natural communities. (See Appendix K for photo information.)

### Forests

Most of the Forest (122.76 acres, 87.71%) is covered in upland forest. Stand types include oaks, oaks and other hardwoods, and oaks and white pine. There is one CFI plot; it is located in an Oak-Hardwood stand. Canopy species include black, northern red, and white oaks; black and yellow birch; red maple, American beech, white ash, and hickories.

Understory species typically include regenerating canopy species, American hazelnut, black huckleberry, bristly sarsaparilla, hop hornbeam, sweet pepperbush, Virginia creeper, and white pine. The stand's age was estimated at 83 years in 2010; it had a site index value of 62.

### Wildlife

The wildlife of Rehoboth State Forest is undocumented.

## **10.3. CULTURAL RESOURCES**

This section describes the known and potential cultural resource areas, including pre-Contact and post-Contact archaeological resources, and historic landscapes, buildings, structures, and objects. An overview of significant events in the history of Rehoboth State Forest is presented in Table 10.3.1. Cultural Resources are identified in Table 10.3.2. There are no archaeological resources listed by the MHC for the Forest.

**Table 10.3.1. Significant events in the history of Rehoboth State Forest.**

Year(s)	Events
1934	Commonwealth acquires approximately 140 acres of land and establishes Rehoboth State Forest. An existing fire tower is located nearby, on the summit of Great Meadow Hill.
1955	U.S. Government constructs Nike Battery PR-19 Integrated Fire Control area at the top of Great Meadow Hill. This has no direct impact on the forest, but forces the relocation of a fire tower to Reservoir Avenue, Rehoboth. (See Section 1 for additional information on fire towers.)
1978	A “release” cut takes place in the Peck Street parcel.
1983	A commercial fuel wood thinning takes place in the Peck Street parcel (Mason 1983).

**Table 10.3.2. Cultural resources of Rehoboth State Forest.**

Location and Resource	Type <sup>a</sup>	Date <sup>b</sup>	Condition <sup>c</sup>	Integrity <sup>d</sup>	In Use <sup>e</sup>	Utilities <sup>f</sup>	MHC # <sup>g</sup>	Guidance <sup>h</sup>
<b>Jones House Site</b>	LA	-	-	-	-	-	-	1, 2
Cellar Hole	AR	-	4	M	-	-	-	1, 3
Well	AR	-	3	H	-	-	-	3, 4
Retaining wall	ST	-	3	M	-	-	-	1, 2
Forest road	ST	-	3	M	-	-	-	1, 2
<b>Stone walls</b>	ST	-	3	H	-	-	-	2

- a. Resource types include the following: AR = Archaeological; BU = Building; CM = Cemetery; LA = Landscape; LHD = Local Historic District; NRHD = National Register Historic District; OB = Object; and ST = Structure.
- b. Date of construction provided, when known.
- c. Preliminary condition assessment using the building system and equipment condition codes as used in the Massachusetts Capital Asset management Information System (CAMIS). The following codes are used: 1 = Excellent-easily restorable to like new condition; 2 = Good-routine maintenance required; 3 = Adequate-some corrective and preventative maintenance required; 4 = Fair-excessive corrective maintenance and repair required; 5 = Poor-renovation needed; and 6 = Fail.
- d. Integrity is a relative assessment of the condition of a resource’s retention of its historic character-defining features; H = High; L = Low; M = Medium; and U = Unknown.
- e. Use categories include N = No, building is not in use; S = Building is used on a seasonal basis; and Y = Yes, building is in use year-round.
- f. The following codes are used to identify utilities associated with buildings: E = Electric; H = Heat; I = Internet; S = Septic system; T = Telephone; W = Water; and W(S) = Water is available on a seasonal basis. This information is included for all buildings.
- g. Massachusetts Historical Commission inventory number; does not include Historic Archaeological numbers.
- h. The following guidance is offered for the ongoing maintenance of these cultural resources:
1. Refer to Vegetation in Historic Landscapes BMP (DCR n.d.e).
  2. Refer to Historic Landscapes - Built Features BMP (DCR n.d.d).
  3. Refer to Archaeological Features BMP (DCR n.d.g).
  4. Refer to Water Holes BMP (CDR n.d.j).

## ARCHAEOLOGICAL RESOURCES

### Pre-Contact Resources

Rehoboth State Forest has not been archaeologically surveyed and no pre-Contact sites are documented within the forest. Less than a mile to the north an Indigenous American Village Site dating to the Middle Archaic Period (8,000–6,000 years B.P.) is recorded along the Palmer River. Less than a mile to the south is a rock outcrop known as Anawan’s Rock (Wampanoag) and recorded as MHC#REH.2. The Forest has a high archaeological potential for

pre-Contact sites. Any proposed below ground impacts must be reviewed by the DCR Archaeologist.

### Post-Contact Resources

The only known post-Contact resources are associated with the Jones Home Site. (See *Historic Landscapes*, below.) Background research will determine if the Forest is sensitive for locating historic period archaeological sites.

## HISTORIC RESOURCES

The Forest borders the Palmer River and Great Meadow Hill. Although there are few historic resources within the Forest, its proximity to the river and hill are of note. This stretch of the Palmer River was used in the early 18<sup>th</sup> century for multiple early industrial ventures, with the most significant being the Peck Family Iron Forging Privilege. Along with the Pecks, other families used this area of land for early industrial and agrarian purposes. These activities were likely happening on the land that is now Rehoboth State Forest.

### Historic Landscapes

**Jones House Site.** This landscape is located in the Peck Street parcel, between Peck Street and the Palmer River. It consists of a cellar hole, stone well, and a small retaining wall adjacent to a forest road to the site. The house site is located in a stand of red cedar, indicating its past use as pasture. Several non-native and invasive plants are located around the cellar hole; remnants of former ornamental plantings. This collection of resources, located so closely together, provides a good sense of what this landscape was like when active. It retains a great deal of integrity.



Stone well at the Jones House Site. Park visitors capped the well using a large stone from the nearby cellar hole. (See Appendix K for photo information.)



Cellar hole at the Jones House Site. One wall is partially collapsed, but the remainder of the foundation is in generally good shape. (See Appendix K for photo information.)

### Buildings

There are no historic buildings

### Structures

Stone walls are common throughout the Forest, generally along former parcel boundaries. They are unusual in that they are high, many segments are over four feet tall, and that they incorporate large boulders.

## 10.4. RECREATION RESOURCES

Recreation is trails based. The following recreation activities take place:

- Bicycling, mountain
- Dog walking, on leash
- Geocaching (5 caches as of July 2016)
- Hiking
- Horseback riding
- Hunting
- Nature study/Photography
- Running/Jogging
- Skiing, cross-country

A commercial, 5K adventure run (i.e., Tuff Scramblers) partially takes place on the forest. It is “spread out over 140 acres combining technical single track on DCR’s State Forest and off-road terrain” and includes “over 20 natural and unique man made obstacles” and “plenty of mud” (<http://www.tuffscramblers.com>). All obstacles are located outside the Forest. Races are held in May



and October, and have 700 to 1,000 participants and 100 to 300 spectators per event.

## 10.5. INFRASTRUCTURE

### Property Boundary

Both parcels are located east of the East Branch of the Palmer River. The Peck Street parcel borders Peck Street and Francis Street to the east, and private lands to the south, west, and north. These properties are mostly forested or agricultural. One abutting property, located south of the Peck Street parcel and fronting Francis Street, has been developed for commercial adventure runs. (See *Recreation*, above, for more information.)

The Great Meadow Hill parcel is bordered on all sides by private land belonging to a single owner. This adjacent land is entirely forested, wetland, or agricultural.

### Buildings and Structures

There are no non-historic buildings. The only non-historic structures are boardwalks associated with the trails system. (Table 10.5.1)



Boardwalks, one in foreground and one in background, along the Pine Loop Trail. (See Appendix K for photo information.)

### Roads

A 1934 “Map of State owned lands in Rehoboth, Mass.; surveyed by B. R. Evans” indicates a road network through much of the Peck Road parcel and a single road through the High Meadow Hill parcel. Over time, these roads have closed in and become trails. There are no longer any public or administrative roads in the forest.

**Table 10.5.1. Non-historic buildings and structures of Rehoboth State Forest.**

Location and Infrastructure	Date <sup>a</sup>	Condition <sup>b</sup>	In Use <sup>c</sup>	Utilities <sup>d</sup>
<b>Trails System</b>				
Boardwalk (2)	2015	1	-	-

a. Date of construction provided, when known.

b. Preliminary condition assessment using the building system and equipment condition codes as used in the Massachusetts Capital Asset Management Information System (CAMIS). The following codes are used: 1 = Excellent-easily restorable to like new condition; 2 = Good-routine maintenance required; 3 = Adequate-some corrective and preventative maintenance required; 4 = Fair-excessive corrective maintenance and repair required; 5 = Poor-renovation needed; and 6 = Fail.

c. Use categories include N = No, building is not in use; S = Building is used on a seasonal basis; and Y = Yes, building is in use year-round.

d. The following codes are used to identify utilities associated with buildings: E = Electric, H = Heat; I = Internet; S = Septic system; T = Telephone; W = Water; and W(S) = Water is available on a seasonal basis. This information is included for all buildings.

## Parking

There is one formal parking area; its entrance is located opposite 93 Peck Street. (Table 10.5.2)

**Table 10.5.2. Number of public parking spaces, by location and type, at Rehoboth State Forest.<sup>a</sup>**

Location	HP	Restricted	Other	Total
Peck Street	0	0	4	4
<b>Total</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>

a. Based on the number of potential 9-foot-wide spaces.

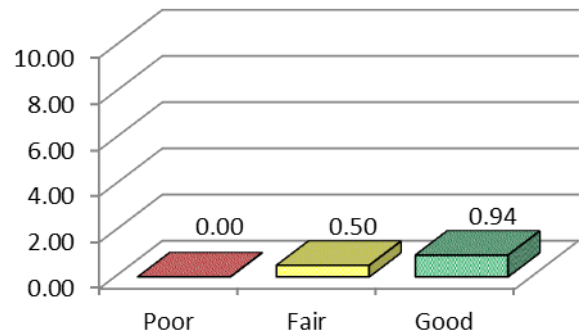


Peck Street parking lot. Trailhead and map board are located just to the left of this image. (See Appendix K for photo information.)

## Trails

There are 1.44 miles of official trails in the Forest; all are located in the Peck Road parcel (Figure 10.5.1). There are two named trails, Pine Loop Trail and Cedar Swamp Trail. The former is a loop trail that accesses most of the Peck Road parcel, and the latter is a spur off the Pine Loop Trail that leads to the Forest's Atlantic white cedar swamp. Both trails are marked with standard DCR painted blazes. The Cedar Swamp Trail leads off the Forest onto private property, as do two other unnamed trail segments. There are no known unauthorized user-created trails.

**Figure 10.5.1. Condition and length (in miles) of official trails at Rehoboth State Forest.<sup>a</sup>**



A 1.25 mile long Healthy Heart Trail is based on the Pine Loop Trail; it includes a combination of trails and forest roads. It is not ADA accessible.

## Kiosks and Signs

The Forest's main identification sign is located opposite 93 Peck Street, adjacent to the parking lot entrance. There is no kiosk. However, a map board, identify the Pine Loop and Cedar Swamp trails, is located adjacent to the parking area.



The Forest's map board gets a fresh coat of paint. The board and map were constructed as part of a Boy Scout project. (See Appendix K for photo information.)

## Iron Ranger

There is no iron ranger.

## Memorials and Markers

There are no known memorials and markers. However, the forest has not been inventoried for these markers so some may be present.



## 10.6. INTERPRETATION

There is no regular interpretive programming, and there are no interpretive panels.

## 10.7. MANAGEMENT RESOURCES

### Staffing

#### DCR Personnel

This property is unstaffed. The Forest and Park Supervisor from F. Gilbert Hills is responsible for the operation and maintenance of this forest.

#### Partnerships and Volunteers

There are no partnerships or ongoing volunteer efforts. In the past, youth groups (e.g., Boy Scouts) have volunteered at the Forest.

#### Safety

The Rehoboth fire department provides fire response and emergency services. Additional firefighting support is provided by Fire District 3 personnel based at Freetown-Fall River State Forest. The Rehoboth Police Department, Massachusetts State Police (Station D-4, Middleborough), and the Massachusetts Environmental Police (Region C-7) provide law enforcement.

### Funding

#### Conservation Trust Fund

There are no Conservation Trust Fund revenues dedicated to Rehoboth State Forest.

#### Retained Revenue

The park does not generate or retain revenue.

#### Other Revenues

There are no other revenues.

## 10.8. MANAGEMENT PRACTICES

Management of DCR properties is guided by a variety of regulations, policies, BMPs, legal agreements, and institutional knowledge. This section describes those practices unique to the management of Rehoboth State Forest. Legal agreements specific to the Forest are listed in Table 10.8.1.

**Table 10.8.1. Key legal agreements for Rehoboth State Forest.**

Party and Subject of Agreement	Type <sup>a</sup>	Expiration Date <sup>b</sup>
<b>Tuff Scramblers, Inc.</b> One day obstacle run for approximately 700 runners; all obstacles located outside of forest.	S	2015

- Agreement types include: A = Memorandum of Agreement; C = Conservation Easement; E = Easement; L = Lease; P = Permit; S = Special Use Permit; U=Memorandum of Understanding.
- Year that agreement expires.

No key management or guidance documents have been identified for this property.

### Annual Maintenance

There are no regular activities; all maintenance is performed on an as needed basis.

### Natural Resources

#### Water Resources

The DCR does not conduct any water management activities at this Forest. An abutter has the deeded right to “maintain the old iron works dam” on the East Branch of the Palmer River and to “flow said meadows as originally reserved by Colonel Philip Wheeler in his deed to Valentine Wheeler in 1746” (Book 38, Page 353). This could potentially flood portions of the Forest along the river. It is unknown when this right was last exercised or if the old iron works dam retains the capacity to “flow said meadows.”

#### Rare Species

There are no rare species monitoring or management activities.

#### Invasive Species

There is no monitoring or management of invasive plants.

#### Vegetation

There is one CFI plot; it was last monitored in 2010.

Two tree harvests were conducted in the late 1970s and early 1980s. In 1978, 50 cords of black oak, northern red oak, white oak, cottonwood, and red

maple were cut to release white pine. In 1983, 181 cords of “good quality firewood” were cut as part of a fuel wood thinning (Mason 1983). Both harvests took place in the Peck Street parcel. There have been no harvests since.

### Wildlife

Under DCR’s Forest and Park Regulations (302 CMR 12.11), fishing and hunting is allowed in the forest.

### **Cultural Resources**

There are no management practices unique to this forest.

### **Recreation Resources**

There are no recreation resources or infrastructure to maintain.

### **Infrastructure**

#### Boundary

The Regional Forester and the Forest and Park Supervisor from F. Gilbert Hills maintain the boundaries.

#### Buildings and Structures

There are no buildings to repair or maintain.

#### Roads

There are no ongoing road maintenance activities.

#### Parking Areas

There is no ongoing maintenance of the parking area. It is not plowed in the winter.

#### Trails

The F. Gilbert Hills Forest and Park Supervisor maintains trails and trail markings on an as needed basis, as time and resources permit.

#### Kiosks and Signs

The Forest and Park Supervisor from F. Gilbert Hills maintains the kiosk and signs.

## **10.9. RECOMMENDATIONS**

### **Introduction**

This section provides recommendations for the near- and long-term management of Rehoboth State

Forest. Applied Land Stewardship Zoning recommendations provide general guidance for managing these properties. Future activities and projects should be checked against the zoning map (Figure 10.9.1) for consistency. Management recommendations are all high-priority, and should be addressed as soon as resources become available.

### **Applied Land Stewardship Zoning (Figure 10.9.1)**

The following Land Stewardship Zoning is recommended.

#### Zone 1

No sections of Rehoboth State Forest have been designated Zone 1.

#### Zone 2

The entire Rehoboth State Forest has been designated Zone 2.

#### Zone 3

No sections of Rehoboth State Forest have been designated Zone 3.

#### Significant Feature Overlay

There is no Significant Feature Overlay.

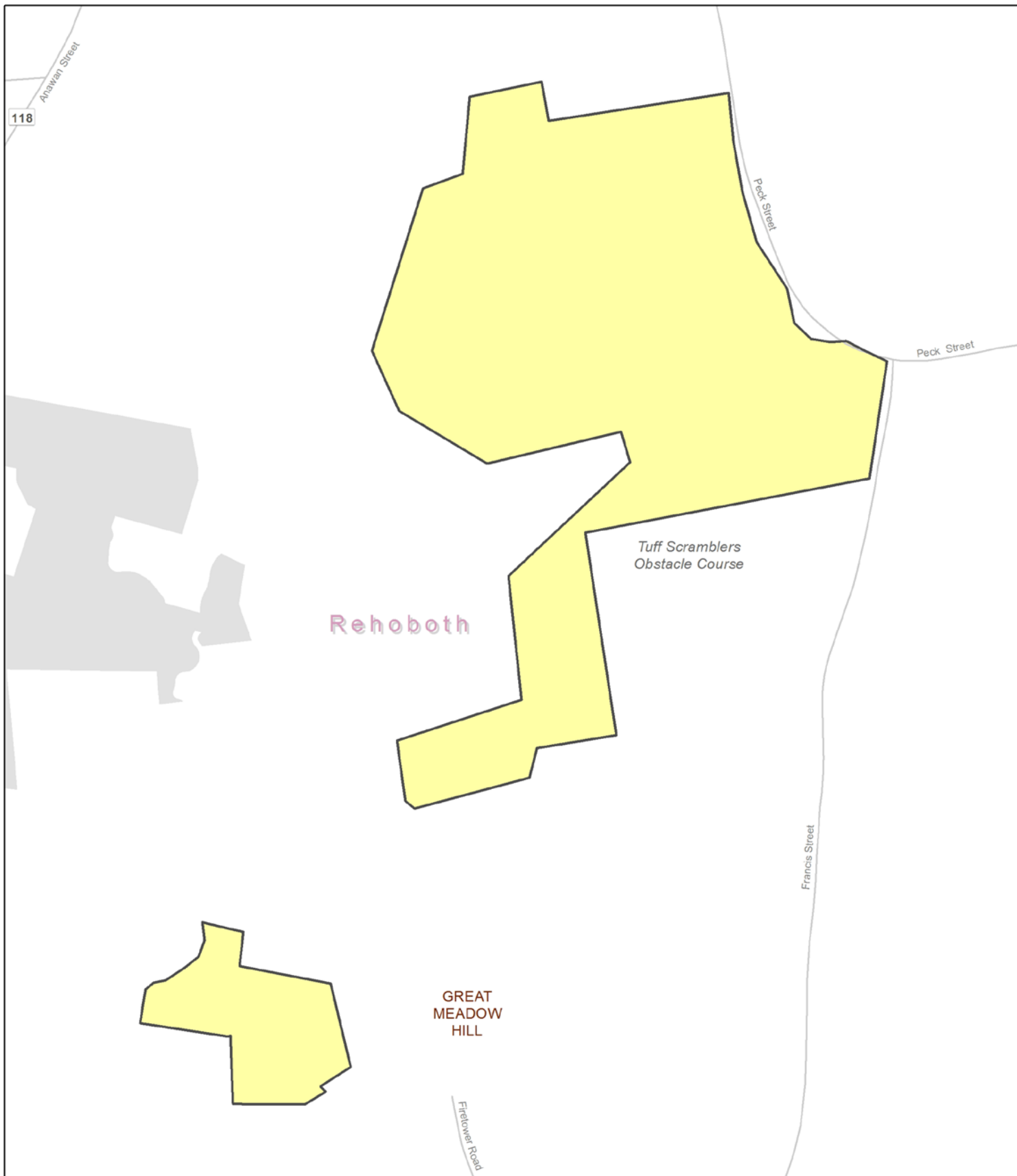
### **Management Recommendations**

Two priority management recommendations were developed for Rehoboth State Forest. (Table 10.9.1) For a recommendation to be considered priority it must address one or more of the following criteria:

- Regulatory compliance or compliance with legal agreements.
- Threats to the health and safety of park visitors and employees.
- The imminent loss of a natural, cultural, or recreation resource.

Additional maintenance and management needs observed during the preparation of this RMP, but not meeting one or more of the above criteria, are not included in this plan.

All recommendations are of equal priority.

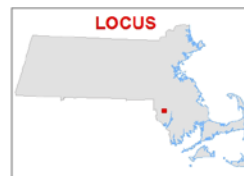


- Rehoboth State Forest  
 Other Legal Interest - DCR  
 Other Protected Open Space
- Land Stewardship Zoning  
 Zone 1  
 Zone 2  
 Zone 3

## Rehoboth State Forest

Figure 10.9.1

### Recommended Land Stewardship Zoning



1,000

Feet

Geographic information provided by MassGIS and DCR GIS, 2016



**Table 10.9.1. Priority recommendations for Rehoboth State Forest.**

Recommendation	Implementation <sup>a</sup>
Cover well in accordance with Archaeological Features BMP.	P, R
Stabilize the east wall of the cellar hole to prevent further collapse.	C, P

- a. The following codes identify the party or parties responsible for implementing the recommendations: B = Bureau of Ranger Services; C = Contractor; D = Office of Dam Safety; E = Division of Engineering; F = Bureau of Forest Fire Control and Forestry; L = Legal Services; O = Other; P = Bureau of Planning, Design & Resource Protection; R = Regional and district staff; S = Park Support Operations; U = Universal Access Program; V = Volunteer or partner; and X = Office of External Affairs and Partnerships.