



Bridgewater State Forest, as viewed from Water Street. (See Appendix K for photo information.)

SECTION 12. BRIDGEWATER STATE FOREST

12.1. INTRODUCTION

Bridgewater State Forest is located in the town of Bridgewater; south of Route 104 and east of Water Street. (Figure 12.1.1) It is located approximately 16.4 miles southeast of F. Gilbert Hills State Forest.

In the early 1900s the Commonwealth acquired a number of properties with the intent of creating commercially viable forests. These reforestation lots, as they were called, were largely managed through the planting of trees and cutting of brush. Bridgewater State Forest was one such lot. In 1925 the Commonwealth acquired the George M. Baker reforestation lot; it was later renamed Bridgewater State Forest.

The Forest was historically a working forest, with tree plantations and at least one commercial harvest. However, its Parkland landscape designation prohibits commercial timber harvesting. Future tree cutting is restricted to supporting recreation and ameliorating public safety hazards (DCR 2012a).

Bridgewater State Forest is a small, little known property with no infrastructure and few known recreational uses. It helps protect the quality of water entering South Brook and also functions as protected open space for adjacent residential development.

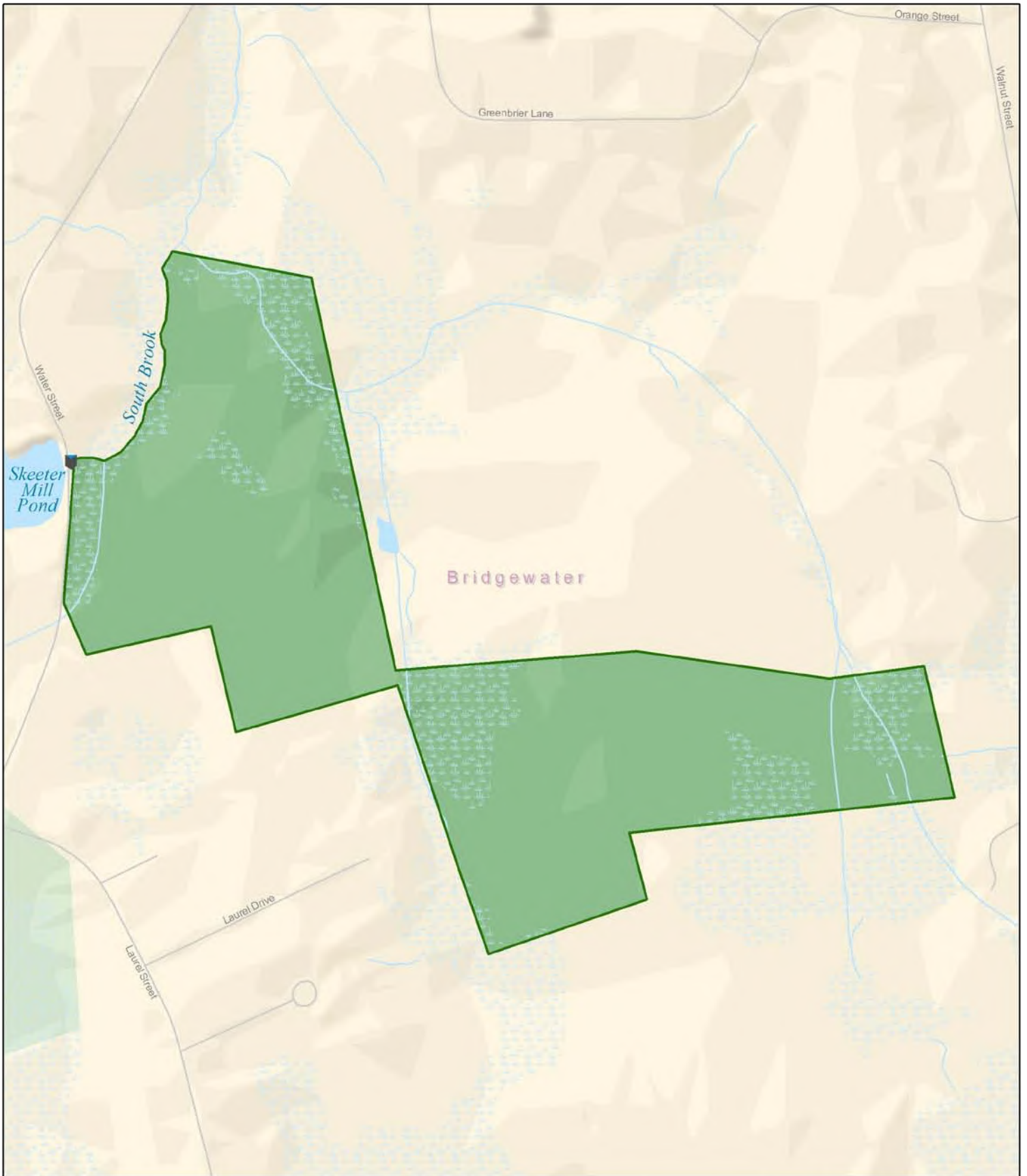
The forest’s physical, political, and regulatory attributes are summarized in Table 12.1.1.

Table 12.1.1. Physical, political, and regulatory settings of Bridgewater State Forest.

Setting	Name or Metric
Location:	Bridgewater
Area (acres)^a:	60.73
Perimeter (miles)^a:	2.02
Landscape Designation(s)^b:	Parkland
Legislative Districts:	
House	8 th Plymouth
Senate	First Plymouth and Bristol
Regulatory Designations:	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.



- Bridgewater State Forest
- Blue Hills Complex Land
- Other Protected Open Space
- DCR Legal Interest
- D Dam
- P Public Parking

Bridgewater State Forest
Figure 12.1.1

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 (Section 10), West Bridgewater State Forest (Section 11), and Bridgewater State Forest. They also oversee the DCR’s interests in Angle Tree Monument Reservation (Section 1).

12.2. NATURAL RESOURCES

Physical Features

The Forest is a single parcel with two lobes and a “constriction” in the middle, creating an outline similar to that of a bowtie. An unnamed stream passes through the “constriction.” Elevation is highest (approximately 60 feet above sea level) in the eastern lobe and drops to the northwest. The lowest elevation, approximately 40 feet, occurs along South Brook on the Forest’s western boundary.

Water Resources

The Forest borders South Brook, a tributary of Town Brook that itself is a tributary of the Taunton River. Approximately 20.2% of the Forest is covered in wetlands, primarily red maple swamps. Most of these swamps are connected to South Brook via streams, with water flowing northwestward toward the brook. These and other water resources are summarized in Table 12.2.1.

Table 12.2.1. Water resources of Bridgewater State Forest.

Water Resource	Name or Metric
Watershed:	Taunton
Aquifer:	
Medium Yield (acres)	0.00
High Yield (acres)	0.00
Rivers and Streams (miles)	0.02
Vernal Pools	
Certified (#)	0
Potential (#)	0
Wetlands (acres)	13.22
Lakes and Ponds (acres)	0.09

Approximately 40% of the Forest is susceptible to floods. (Table 12.2.2) This number reflects the Forest’s topography, and its proximity and hydrological connections to South Brook.

Table 12.2.2. Potential impacts of flooding to Bridgewater State Forest.

Type of Impact	Acres	%
Flooding:		
100-year Storm	25.52	42.02
500-year Storm ^a	25.52	42.02

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

South Brook Dam (MA02398), a 225-foot long dam owned and operated by the Town of Bridgewater, is located just outside the Forest along Water Street. Water levels in Skeeter Mill Pond (i.e., behind the dam) are approximately 10 feet higher than downstream levels. The dam is classified as a small sized dam, in Fair physical condition, and having a Significant Hazard Potential (Nover-Armstrong Associates, Inc. 2012). Dam failure would result in downstream flooding, including parts of the Forest. However, there is no infrastructure within the Forest.

Rare Species

State-listed Species

There are no confirmed state-listed species. A photo of an eastern box turtle, identified as taken on April 23, 2016 is posted on Geocaching.com.

Priority Habitat

There is no Priority Habitat.

Vegetation

There has been no floristic inventory of this forest.

Invasive Species

Invasive species have not been surveyed.

Natural Communities

There is virtually no information on the Forest’s natural communities; only one community type has been confirmed. (Table 12.2.3)

Table 12.2.3. Known natural communities of Bridgewater State Forest.

Community Type ^a	System ^b	State Rank ^c	Source ^d
Red Maple Swamp	P	S5	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.

Forests

Most of the Forest (47.45 acres, 78.13%) is covered in upland forest. Mason (1976a) identified the following five stand types:

- white pine
- red pine

- residual white pine
- white pine, red pine, and hardwoods
- red maple

A three acre red pine plantation is located on the western half of the Forest (Gregory 2015b).

Wildlife

The wildlife of Bridgewater State Forest is undocumented.

12.3. 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 Bridgewater State Forest is presented in Table 12.3.1. Cultural Resources are identified in Table 12.3.2. There are no archaeological resources listed by the MHC for this Forest.

Table 12.3.1. Significant events in the history of Bridgewater State Forest.

Year(s)	Events
1925	Commonwealth acquires approximately 60 acres off Water Street from George M. Baker and establishes Bridgewater State Forest. (Book 1496; Page 210)
1954	Salvage logging performed following hurricane that blew down merchantable pine (Cook 1955).
1976	Approximately 27,000 board feet of white pine is harvested from 10.5 acres in the central portion of the forest (Mason 1976).

Table 12.3.2. Cultural resources of Bridgewater State Forest.

Location and Resource	Type ^a	Date ^b	Condition ^c	Integrity ^d	In Use ^e	Utilities ^f	MHC # ^g	Guidance ^h
Stone walls	ST	-	3	H	-	-	-	1

- 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 Historic Landscapes - Built Features BMP (DCR n.d.d).

ARCHAEOLOGICAL RESOURCES

Pre-Contact Resources

No archaeological surveys have been conducted in the Forest, and there are no recorded pre-Contact resources. Many pre-Contact sites near the Forest have been located in margins of wetlands associated with the Taunton River. The forest has a high archaeological potential for pre-Contact sites and any proposed below ground impacts must be reviewed by the DCR Archaeologist.

Post-Contact Resources

There are no documented post-Contact resources in the Forest. Background research will determine if the forest is sensitive for locating historic period archaeological sites.

HISTORIC RESOURCES

The Forest is located 1.25 miles southeast of downtown Bridgewater and is bordered by Water and Laurel Streets; two roadways that were well used during the colonial period. In addition, nearby South Brook Dam “may have originally been used for mechanical power generation in association with a mill” (Nover-Armstrong Associates, Inc. 2012). Given these factors, early industrial activity may have taken place within what is now the Forest. However, there are no known resources.

Historic Landscapes

There are no known historic landscapes.

Buildings

There are no historic buildings

Structures

Along the stretch of Water Street that intersects with South Brook, a stone wall runs parallel to the road. Another stretch of stone wall exists in the southern section of Bridgewater Sate Forest.

Objects

There are no known historic objects.

12.4. RECREATION RESOURCES

There are no recreation facilities or infrastructure, only the following authorized recreation activity is known to take place.

- Geocaching (1 cache as of July, 2016)
- Hunting

12.5. INFRASTRUCTURE

Property Boundary

The forest is located between Water and Walnut streets, to the south of Route 104. It is bounded on the north and south by unprotected undeveloped land and to the east and west by residential development. The Forest’s western boundary has frontage on both Water Street and South Brook.

Buildings and Structures

There are no non-historic buildings or structures.

Roads

There are currently no mapped roads. A map associated with a 1976 tree harvest identifies a simple road network (Mason 1976*b*). This network no longer exists.

Parking

There is no formal parking area; limited parking (approximately three spaces) is available on the west shoulder of Water Street adjacent to the dam. Additional parking is located immediately north and west of the dam.

Trails

There are no official trails.

Kiosks and Signs

A main identification sign is located in the treeline along Water Street. There is no main identification sign. There is no kiosk.

Iron Ranger

There is no iron ranger.

Memorials and Markers

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

12.6. INTERPRETATION

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

12.7. MANAGEMENT RESOURCES

Staffing

DCR Personnel

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

Partnerships and Volunteers

There are no partnerships or ongoing volunteer efforts.

Safety

Bridgewater Fire Department provides fire response and emergency services. Additional support is provided by Fire District 2 personnel, based at Myles Standish State Forest. The Bridgewater 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 Bridgewater State Forest.

Retained Revenue

The Forest does not generate or retain revenue.

Other Revenues

There are no other revenues.

12.8. 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 Bridgewater State Forest. No key legal agreements were identified for this property.

Key planning documents are identified in Table 12.8.1.

Table 12.8.1. Key management and guidance documents for Bridgewater State Forest.

<u>Author and Document</u>	<u>Year</u>
Gannett Fleming, Inc. Environmental Audit Report: Bridgewater State Forest, Bridgewater, Massachusetts.	1998

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.

Rare Species

There are no rare species monitoring or management activities.

Invasive Species

There is no monitoring or management of invasive plants.

Vegetation

There are no CFI plots.

A shelterwood cut of approximately 27,000 board feet of white pine took place on 10.5 acres of the forest in 1976 (Mason 1976b). At that time it was estimated that the forest had not been cut in over 60 years.

Wildlife

Under DCR’s Forest and Park Regulations (302 CMR 12.11), fishing and hunting is allowed in the forest. However, the proximity of occupied dwellings and paved roads means that much of the Forest cannot be legally hunted.

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 maintains the boundaries.

Buildings and Structures

There are no buildings to repair or maintain.

Roads

There are no roads to maintain.

Parking Areas

There is no parking area to maintain.

Trails

There are no official trails to maintain.

Kiosks and Signs

The main identification sign was installed by the Forest and Park Supervisor from F. Gilbert Hills State Forest, who is responsible for its maintenance.

12.9. RECOMMENDATIONS

Introduction

This section provides recommendations for the near- and long-term management of Bridgewater 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 12.9.1) for consistency. Management recommendations are all high-priority, and should be addressed as soon as resources become available.

Applied Land Stewardship Zoning (Figure 12.9.1)

The following Land Stewardship Zoning is recommended.

Zone 1

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

Zone 2

The entire Bridgewater State Forest has been designated Zone 2.

Zone 3

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

Significant Feature Overlay

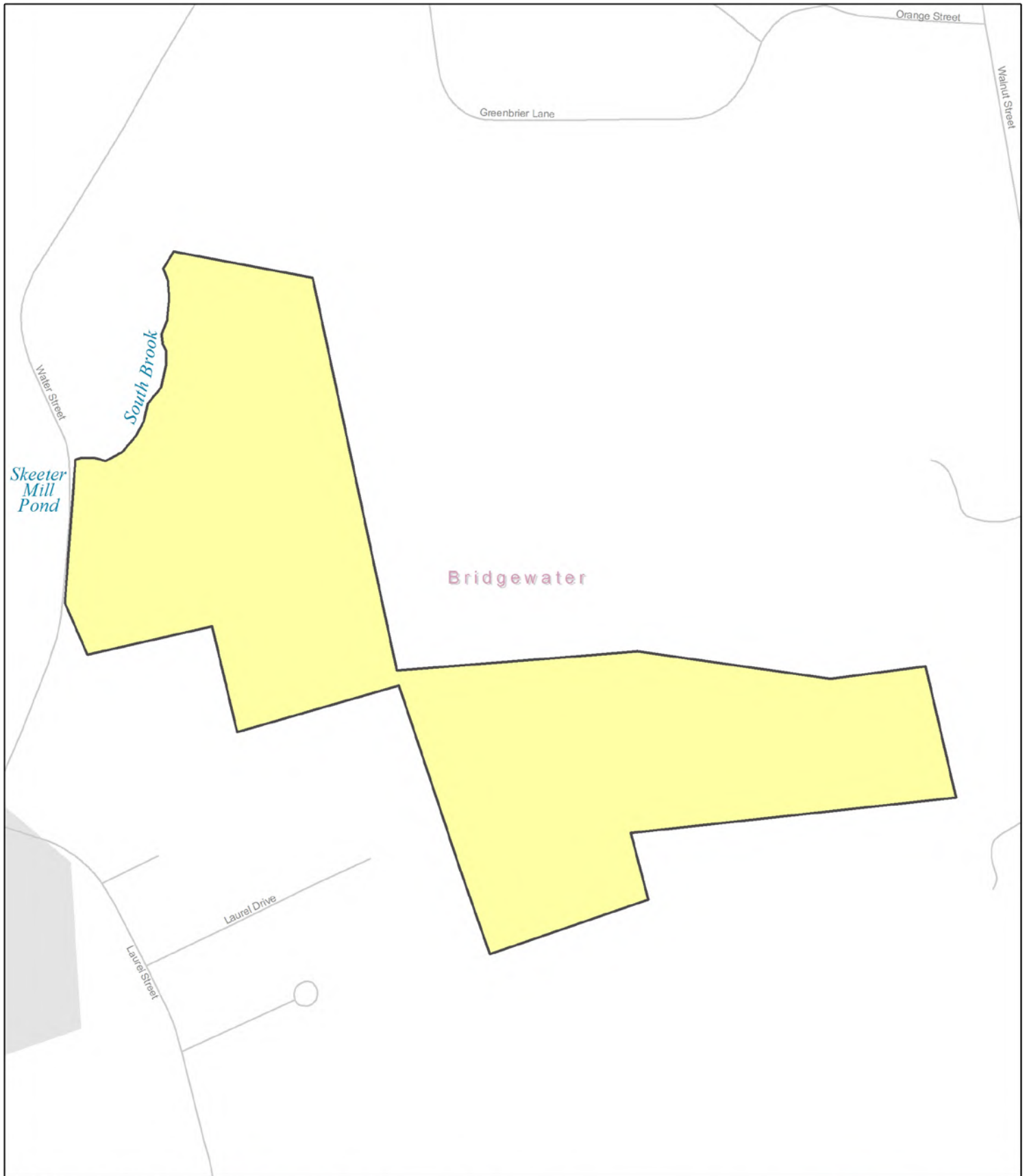
There is no Significant Feature Overlay.

Management Recommendations

There are no priority management recommendations; current management activities are sufficient for ensuring consistency among recreation, resource protection, and forest management. 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.



Bridgewater

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

Bridgewater State Forest

Figure 12.9.1

Recommended Land Stewardship Zoning

Geographic information provided by MassGIS and DCR GIS, 2016

1,000 Feet

