



The historic Ames Mansion is the symbol of Borderland State Park. (See Appendix K for photo information.)

SECTION 13. BORDERLAND STATE PARK

13.1. INTRODUCTION

Borderland State Park (Borderland) is located in the towns of Sharon and Easton, approximately 9 miles southwest of the Blue Hills Reservation. (Figure 13.1.1) It straddles the boundaries of Norfolk and Bristol counties, and the Neponset and Taunton watersheds.

The interconnectedness of Borderland's natural and cultural histories is at the forefront of the visitor experience. Large grassy fields, forest roads, and stone walls from 18th and 19th century farms occur next to ponds, formal paths, and a house constructed as parts of an early 20th century estate. The Ames Mansion, which symbolizes Borderland, has an exterior of locally cut field stones; further making the connection between the human and natural landscapes.

Borderland was acquired by the Commonwealth in 1971 and officially opened in the summer of 1973. It was immediately popular with the public, who walked its forest roads and paths well before its formal opening. When the visitor center opened in 1994, a 250 car parking lot was constructed to supplement the original 33 car lot. On most weekend afternoons, from spring through fall, the Park's

parking lots reach their capacity by late morning. With these cars come hundreds of visitors who hike or cycle the park's trails, play disc golf, ride horses, walk their dogs, geocache, tour the Ames Mansion, or picnic beneath a tree. An estimated 318,485 guests visited Borderland in 2015.

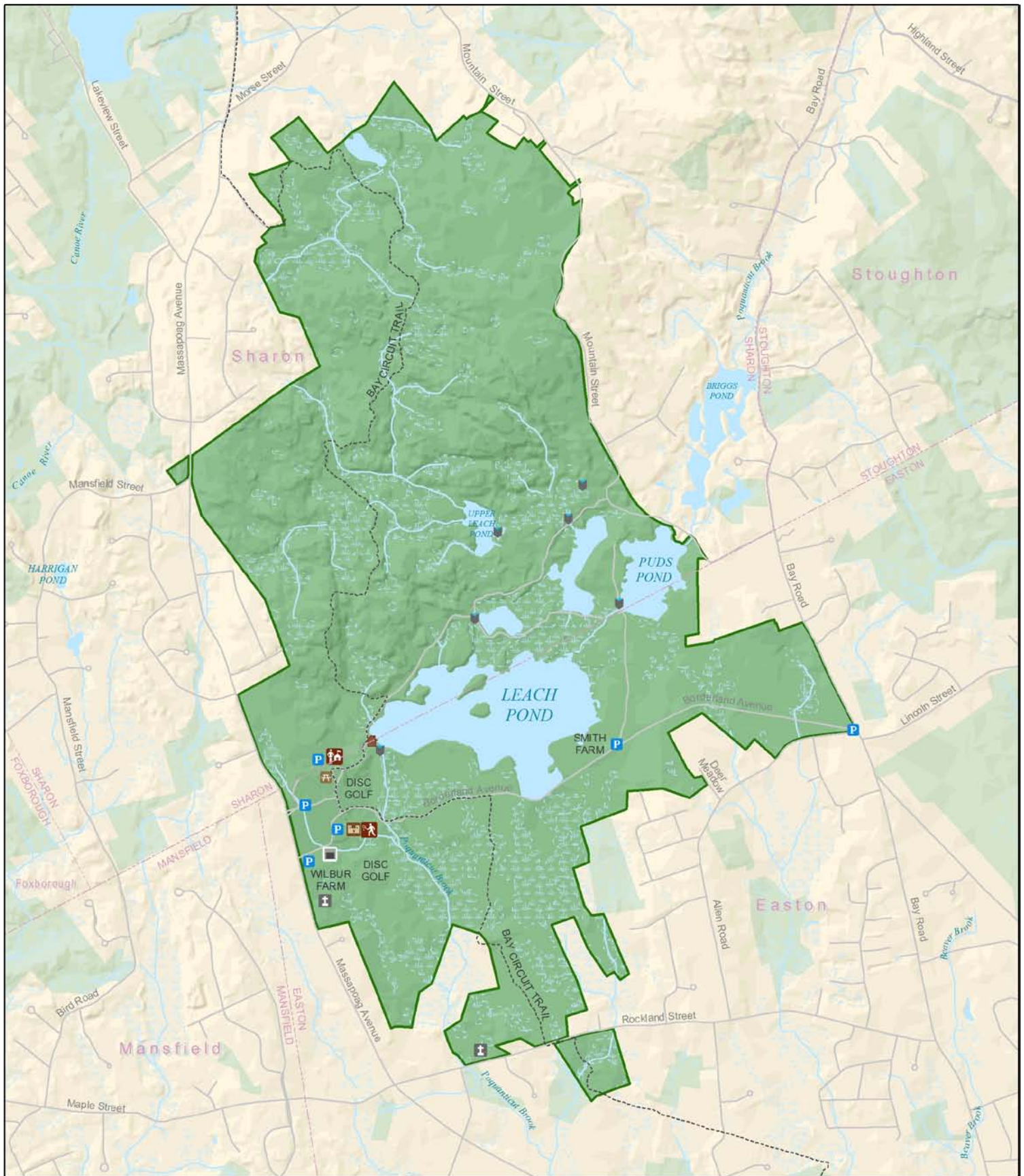
This much visited park's physical, political, and regulatory attributes are summarized in Table 13.1.1.

Table 13.1.1. Physical, political, and regulatory settings of Borderland State Park.

Setting	Name or Metric
Location:	Easton, Sharon
Area (acres)^a:	1,843.03
Perimeter (miles)^a:	12.67
Landscape Designation(s)^b:	Parkland
Legislative Districts:	
House	8 th Norfolk 11 th Plymouth
Senate	Norfolk, Bristol, and Plymouth
Regulatory Designations:	Priority Habitat National Register Historic District Canoe River Aquifer ACEC

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>.



Borderland State Park
Figure 13.1.1

1,000
Feet

Geographic information provided by MassGIS and DCR GIS, 2016



Associated Properties. There are no associated properties.

13.2. NATURAL RESOURCES

Physical Features

The park's topography varies between towns. The highest elevation, approximately 365 feet above sea level, occurs along Mountain Street in Sharon. From this point, the land slopes both north and westward toward wetlands (approximately 285 feet in elevation), and southward toward Leach Pond (approximately 205 feet in elevation). A number of hills, reaching up to 324 feet, occur along the Park's western boundary. Elevations in Easton are lower and the topography more level. The highest elevations in Easton, approximately 250 feet, occur along the park's boundaries to both the east and west of Leach Pond. The area between these hills forms a flat, broad valley. Most buildings and visitor facilities are located in this relatively level area. The lowest elevation, approximately 187 feet, occurs along Poquanticut Brook at Rockland Street.

Water Resources

The park's water resources, many of which have been highly modified, are among its most prominent features. These and other water resources are summarized in Table 13.2.1.

Table 13.2.1. Water resources of Borderland State Park.

Water Resource	Name or Metric
Watershed:	Neponset Taunton
Aquifer:	
Medium Yield (acres)	119.08
High Yield (acres)	5.77
Rivers and Streams (miles)	3.12
Vernal Pools	
Certified (#)	0
Potential (#)	20
Wetlands (acres)	331.28
Lakes and Ponds (acres)	152.89

Borderland straddles the Neponset and Taunton watersheds, with the dividing line in Sharon, to the north of the Quarry Loop Trail. Waters originating north of this point flow toward Massapoag Lake and the Neponset River. South of this point, waters flow toward the park's ponds, Poquanticut Brook, and the Taunton River.

The park's major ponds were artificially created. Leach Pond was created in 1825 by damming and cutting Poquanticut cedar swamp in order to provide water for an ironworks in Easton (Pearl et al. 1997). Upper Leach Pond and Pud's Pond were created by the Ames family "to enhance the natural surroundings of their estate" (Pearl et al. 1997). Many of the dikes and dams constructed to create these ponds and regulate water levels remain intact and in use. (See Section 13.3 for additional information on these cultural resources.)



Low water levels reveal stone walls running across a pond bottom; an indication that agricultural use predates the pond. (See Appendix K for photo information.)

There was insufficient information on the water quality of Leach Pond, Upper Leach Pond, and Pud's Pond for the DEP to identify appropriate uses (DEP 2013). There are no Public Health Fish Consumption Advisories for any of the ponds (HHS 2015).

Approximately 30 percent of the park is susceptible to flooding. (Table 13.2.2) Leach, Upper Leach, and Pud's ponds and adjacent uplands are predicted to be impacted by a 100-year flood. Poquanticut Brook, associated uplands, and areas of red maple swamp between Leach Pond and Rockland Street are also predicted to be impacted. Affected infrastructure includes approximately 0.50 miles of the "Pond Walk" between Leach and Upper Leach ponds, and

a bird blind along this trail. Many of the ponds, wetlands, and streams north of Upper Leach Pond are predicted to be impacted by 500-year floods. Approximately 1.44 miles of trails, including 0.08 miles of the Bay Circuit Trail, are included in the impacted area.

Table 13.2.2. Potential impacts of flooding to Borderland State Park.

Type of Impact	Acres	%
Flooding:		
100-year Storm	330.99	17.96
500-year Storm ^a	545.84	29.62

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



Predicted flooding around Leach Pond; shown in the center of the image. Areas impacted by the 100-year flood zone are represented in green and the 500-year zone in orange. Trails and roads are identified in red. The solid red line running from left to right across the bottom half of the image is Borderland Road. The diagonal yellow line running through Leach Pond is the Sharon-Easton town line. (See Appendix K for photo information.)

Rare Species

State-listed Species

Four state-listed species are known from Borderland. (Table 13.2.3) Three of these, the turtles and salamander, require a mixture of wetlands and forested uplands. They may occur in appropriate habitat throughout the entire park. The data-sensitive animal is associated with fields and rocky slopes. Appropriate habitat occurs in the portion of the park within the Town of Easton, and on adjacent private lands.

Table 13.2.3. State-listed species of Borderland State Park, as identified by the NHESP.

Species ^{a, b}	Type ^c	MESA ^d
Blanding's turtle	R	T
Data sensitive animal ^e	-	E
Eastern box turtle	R	SC
Marbled salamander	A	T

a. Presented alphabetically, by common name.

b. Fact sheets are available at:
<http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-information-and-conservation/mesa-list/list-of-rare-species-in-massachusetts.html>.

c. Types of state-listed species include: A = Amphibian; B = Bird; I = Insect; P = Plant; and R = Reptile.

d. Status of species listed under the Massachusetts Endangered Species Act (MESA): E = Endangered, SC = Special Concern; and T = Threatened.

e. Name not release in accordance with the NHESP's policy for organisms susceptible to collection.



The Blanding's turtle requires a variety of wetland and upland habitats including vernal pools, emergent marshes, scrub-shrub wetlands, and open uplands (NHESP 2015c). (See Appendix K for photo information.)

Priority Habitat

Nearly the entire park (1,661.71 acres, 90.16%) is designated Priority Habitat. Exceptions include a portion of the park in Sharon near the intersection of Massapoag Avenue and Mansfield Street, and a portion in Easton near the intersection of Borderland Avenue, Allen Road, and Bay Road. The Priority Habitat polygon (PH 367) extends well beyond the boundaries of the park, and includes Rattlesnake Hill to the northeast and portions of Sharon, Mansfield, and Easton to the southwest.

Vegetation

The park's vegetation has been shaped through changes in land use (e.g., farming, creation of ponds) and the introduction of ornamental and non-native plants as part of Oakes Ames' interest in botany and vision for his estate. Early interpretive field guides and brochures for the park (e.g., Richards 1974) included plant lists. Although on file at the visitor center, these guides are no longer broadly available. There is no current plant list for the park; recent information on the park's plants comes from ongoing forest monitoring efforts. (See *Forests*, below.)

The area around the Ames Mansion consists of formal gardens that contain a variety of exotic plants, including some invasives. (See DCR 2011c for information on the vegetation of the Ames Mansion landscape.) These gardens are part of the cultural landscape and are addressed as such throughout this section.

In June 2016, MassWildlife assessed the extent of deer browse on portions of Borderland. They described the Park's vegetation as "Heavily Impacted" by deer browse and noted that they saw few herbaceous plants preferred by deer (Stainbrook 2016b).

Invasive Species

There have been no formal surveys of Borderland's invasive plants. Preliminary information is presented in Table 13.2.4. Given its farming history, and the introduction of ornamental plants to the landscape during the Ames' ownership, it is likely that many additional invasive plants are present in the park.

Table 13.2.4. Known invasive, likely invasive, and potentially invasive plants of Borderland State Park.

Species ^a	Status ^b	Source ^c
Black swallowwort	I	1
Japanese barberry	I	2
Oriental bittersweet	I	2
Winged euonymus	I	1, 2
Yellow iris	I	2

- Presented alphabetically, by common name.
- Plants are classified as being either Invasive (I), Likely Invasive (L), or Potentially Invasive (P) according to MIPAG (2005).
- Information contained in this table was obtained from the following sources:
 - Observed by RMP planner.
 - Reported in DCR 2011c.

Invasive and other non-native species were historically planted in the mansion's landscape. Japanese barberry and oriental bittersweet were introduced into the U.S. by the Arnold Arboretum (DCR 2011c); the institution for which Oakes Ames was supervisor from 1927–1935. Their presence around the mansion is part of that building's cultural history.

Natural Communities

Six natural communities have been identified (Table 13.2.5); others are likely present. Mass DEP has identified three wetland types: Bog; Wooded Swamp - Mixed Trees; and Shallow Marsh, Meadow, or Fen. These wetlands do not correspond directly to natural communities. Historic data indicate the presence of one or more Atlantic White Cedar communities (Pearl et al. 1997); it is unknown which types are present today.

Table 13.2.5. Known natural communities of Borderland State Park.

Community Type ^a	System ^b	State Rank ^c	Source ^d
Cultural Grassland	T	N/A	1
Deep Emergent Marsh	P	S4	2
Mixed Oak Forest	T	S5	3
Red Maple Swamp	P	S5	3
Shrub Swamp	P	S3	2
White Pine-Oak Forest	T	S5	3

- Classified according to Swain and Kearsley (2011).
- E = Estuarine, P = Palustrine, T = Terrestrial.
- The NHESP ranks communities from most rare (S1) to the most common (S5).
- Information contained in this table was obtained from the following sources:
 - Observed by RMP Planner.
 - DEP Wetlands (1:12,000) data layer.
 - CFI data.

Forests

Most of Borderland (1,281.76 acres; 69.55%) is covered in upland forest. There are five CFI plots with complete data; two are located in Oak-Mixed stands, one is located in an Oak-Hardwood stand, one is located in a White/Red Pine stand, and the last is located in a Red Maple Swamp. Both Oak-Mixed plots have black and northern red oaks dominant in the canopy; black birch and red maple are also present. Other canopy species include scarlet oak,

white oak, yellow birch, and white pine. Understory species included low-bush blueberry, checkerberry, and white pine; black huckleberry, black birch, scarlet oak, maleberry, sweet pepperbush, ferns, and a bellwort. Stand age ranged from 59 to 80 years and Site Index values ranged from 39 to 43.

Both upland and wetland species were present in the Oak-Hardwood plot's canopy, including: white, black, and northern red oaks; white pine; hickory; black birch; black gum; and sassafras. Understory species were also a mixture of upland and wetland species, and included black huckleberry, black cherry, checkerberry, witch hazel, sweet pepperbush, red maple, and highbush blueberry. The stand age was 80 years, and the Site Index was 60.

Present in the White/Red Pine plot's canopy were white pine, northern red oak, white oak, hickory, and red maple. Understory species were lowbush blueberry, black huckleberry, white pine, and witch hazel. The stand's age was 78, and its Site Index 55. Although classified as a White/Red Pine stand under CFI protocols, this stand is a variant of the White Pine-Oak Forest described by Swain and Kearsley (2011).

Canopy trees in the Red Maple Swamp included red maple, white oak, northern red oak, hemlock, and white pine. The understory included sweet pepperbush, greenbrier, ferns, witch hazel, Sphagnum, and sedges. Stand age was 83 years, and the Site Index was 50.

Wildlife

Early nature trail guides (e.g., Enser 1975) included lists of wildlife species observed in the park. This information is not widely available, nor is it current. Few formal surveys have been conducted in recent years. However, the forest is identified as a birding hotspot by e-Bird and as of July 2016, 115 species have been recorded (www.ebird.org). The ponds attract migratory and breeding waterfowl, herons, and shorebirds. The uplands provide habitat for migratory and breeding birds associated with interior forests (e.g., ovenbird, veery); fields (e.g., barn swallow, eastern bluebird); thickets (e.g., gray catbird); and suburbia (e.g., mourning dove, chimney swift). Information is lacking for other taxa.

13.3. 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 Borderland is presented in Table 13.3.1. Cultural Resources are identified in Table 13.3.2.

Three archaeological resources are listed by the MHC. Because the MHC does not make information on archaeological resources available to the general public, these resources are not included in Table 13.3.2.

Table 13.3.1. Significant events in the history of Borderland State Park.

Year(s)	Events
1970	Ames Family offers to sell to the Commonwealth "approximately 1,000 acres of land in Sharon and Easton...to be used as a State Park." Not included are six tracts of land totaling approximately 372 acres. An assessment of this offer identifies the estate's potential use as a state park as "severely crippled" without the "six substantial and necessary tracts of land" (Walker and Richardson 1970).
1971	The Commonwealth acquires approximately 1,300 acres of the estate.
1972	Borderland State Park Advisory Council established; Friends of Borderland State Park formed.
1973	Borderland State Park officially opens to the public.
Late 1970s	Approximately 54 acres along Massapoag Avenue is added to park.
Mid-1980s	Park expands north and eastward with acquisition of approximately 200 acres along Mountain Street.
1988	6.6 acres off Deer Meadow Road, Easton is added to the park.
1993	Visitor center constructed.
1993-1994	Further northward expansion of the park, with the acquisition of approximately 200 more acres.
1997	The Borderland Historic District, which includes 1,270 acres of the Park, is added to the National Register of Historic Places.
2009-2011	Major interior and exterior renovations of mansion.

Table 13.3.2. Cultural resources of Borderland State Park.

Location and Resource	Type ^a	Date ^b	Condition ^c	Integrity ^d	In Use ^e	Utilities ^f	MHC # ^g	Guidance ^h
Borderland Historic District (National Register Historic District)	NRDIS	1786–1946	-	H	-	-	EST.H, SHA.C	-
Agricultural fields	LA	-	-	H	-	-	EST.941	1
Stone wall system	ST	-	-	M	-	-	EST.932, SHA.907	2
Electric Wire Fence System	OB	-	-	M	-	-	EST.933, SHA.908	2
Colonel Israel Tisdale Farm	LA						SHA.17	
Tisdale barn foundation	AR	ca. 1810	-	M	-	-	-	3
Tisdale farmhouse foundation	AR	ca. 1810	-	M	-	-	-	3
Tisdale farm grounds	LA	ca. 1810	-	L	-	-	-	1
Ames Estate	LA							
Ames Mansion	BU	1910–1911	3	H	Y	E, H, S, T, W	EST.112	4
Ames Mansion – Rock garden	LA	1910–1911	1	H	-	-	EST.943	1, 2
Ames Mansion – Swimming pool	ST	1910–1911	4	M	-	-	EST.944	2
Water pipe and valve system	OB	1930	4	L	-	-	EST.937	2
Ames Mansion tennis court	ST	1910–1911	3	M	-	-	EST.945	2
Ames shooting lodge	BU	1910–1911	3	H	Y	-	EST.113	4
Shooting range	LA	ca. 1906	-	L	-	-	EST.939	1
Circulation system	LA	-	-	H	-	-	EST.942	1
Root cellar	ST	1910–1911	4	H	-	-	-	2
Currihan farmhouse foundation	AR	Late 19 th c	-	L	-	-	-	3
Currihan barn foundation	AR	Late 19 th c	-	L	-	-	EST.931	3
Currihan corn crib	BU	Late 19 th c	4	H	Y	-	EST.138	4
Maintenance garage ⁱ	BU	1974	3	N/A	Y	E	EST.139	-
Lawrence Newcomb Visitor Center ⁱ	BU	1993	3	N/A	Y	E, H, I, S, T, W	EST.142	-
Briggs Nail Factory	AR	ca. 1831	-	-	-	-	SHA.915	3
Ponds, Dams, and Dikes								
Borderland State Park Dam #1 (MA03277)	ST	ca. 1940	5	M	-	-	-	2
Borderland State Park Dam #2 (MA03178)	ST	ca. 1940	5	M	-	-	-	2
Borderland State Park Dam #3 (MA03180)	ST	ca. 1940	5	M	-	-	-	2
Upper Leach Pond	LA	ca. 1939	-	M	-	-	SHA.911	1
Upper Leach Pond Dam (MA03037)	ST	ca. 1939	5	M	-	-	-	2
Upper Leach Pond Dike #1 (MA03269)	ST	ca. 1939	5	M	-	-	-	2
Upper Leach Pond Dike #2 (MA03270)	ST	ca. 1939	5	M	-	-	-	2
Upper Leach Pond Dike #3 (MA02371)	ST	ca. 1939	5	M	-	-	-	2
Pud's Pond	LA	1906, 1926	-	M	-	-	EST.935, SHA.910	1
Pud's Pond Dam (MA03038)	ST	ca. 1906	5	M	-	-	-	2
Leach (Wilbur) Pond	LA	1825	-	M	-	-	EST.934, SHA 909	1
Leach Pond Dam (MA03036)	ST	1825	5	M	-	-	-	2
Four Day Pond	LA	ca. 1938	-	M	-	-	-	1
Selee (Saten's Sawmill) Dam	ST	ca. 1908	-	L	-	-	EST.938	2
Dam and sluiceway system	ST	1825	-	M	-	-	EST.936	2
Water tower footings	ST	ca. 1906	-	-	-	-	EST.940	2
Smith Farm								
Smith farmhouse	BU	ca. 1880	5	M	Y	E, H, S, T, W	EST.115	5
Smith Farm barn	BU	-	N/A	N/A	-	-	EST.144	5

Location and Resource	Type ^a	Date ^b	Condition ^c	Integrity ^d	In Use ^e	Utilities ^f	MHC # ^g	Guidance ^h
Wilbur Farm								
George Wilbur House	BU	ca. 1786	5	M	Y	E, H, S, T, W	EST.114	5
George Wilbur cattle barn ^j	BU	-	6	L	N	-	EST.143	5
Wilbur cemetery	CM	1807	-	M	-	-	EST.803	6
William Dean Cemetery	CM	-	-	H	-	-	EST.814	6

- 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 Historic Building Maintenance BMP (DCR n.d.f).
 5. Under Historic Curatorship Program, refer to current lease.
 6. Refer to Cemeteries and Burial Grounds BMP. (DCR n.d.k).
- i. These non-historic buildings are identified as "non-contributing elements" in the National Register listing for the Borderland Historic District; they are listed both here and in Table 13.5.1.
- j. This barn has been dismantled; current plans call for it to be rebuilt using some of the remaining original materials.

ARCHAEOLOGICAL RESOURCES

Pre-Contact Resources

MHC archaeological files document over 50 pre-Contact sites within a mile of Borderland, however only two are recorded within the Park. Many of these sites are surface "findspots" located by collectors and contain little or no information. The oldest sites date back to the Paleo Indian period (11,000BP) with the most recent dating back to the Late Woodland Period (1,000 years BP-450 BP). Many sites are multi-component. For example, a stone-tool making workshop site was located during an archaeological survey in advance of work at one of the historic properties at Borderland. The park has a high archaeological potential for pre-Contact sites and any proposed below ground impacts must be reviewed by the DCR Archaeologist. An Archaeological Site Avoidance and Protection Plan must be in place in advance of any work at the site.

Post-Contact Resources

Two historic farmhouse sites are located within Borderland. The Wilbur House (MACRIS # EST.26) is a single family dwelling house built in the 18th century, and currently being renovated through the DCR Curatorship program. The house site contains many associated out-buildings and agricultural features and landscapes. The Drake-Tisdale House Site (MACRIS#SHA.2) is a 19th century single-family dwelling house. As with any historic structure, associated outbuildings, features and landscape remains survive in the archaeological record. Additional background research on the property will assist in identifying any significant historic or archaeological resources or landscapes that could be affected by future impacts.

The National Register of Historic Places Registration Form for the Borderland Historic District indicates a cellar hole on the south side of Mountain Street that is associated with the Briggs Nail Factory (Pearl et al. 1997). This resource was

last documented in 1906, and was not assessed for this RMP.

HISTORIC RESOURCES

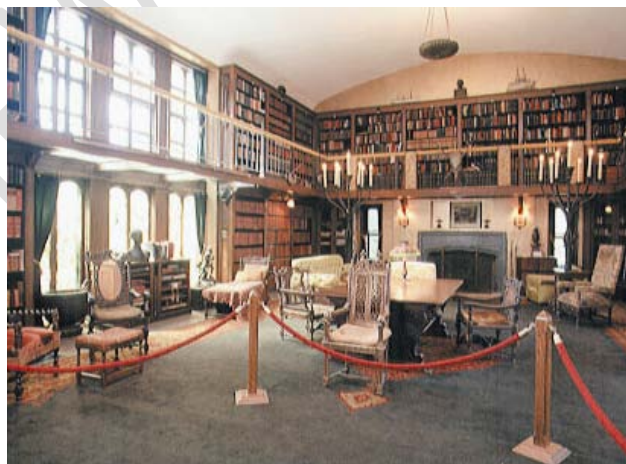
Borderland is significant for its association with two distinct periods of historic identity. The first is its association with agrarian use from the late 18th century to the late 19th century. The area that is now Borderland was heavily modified by different families for their farms. This was an eclectic grouping of farms, with uses ranging from cattle, to crops, to a gentleman's farm. This grouping of different farm lands was bought and consolidated into an estate from the Gilded Era. The Ames family began acquiring farm lands in the early 20th century and transformed them into a lavish estate complete with a mansion, athletic facilities, gardens, and outbuildings; all connected within an impressive landscape design. This estate was bought and preserved by the Commonwealth, and is now listed on the National Register of Historic Places.

Historic Landscapes

Colonel Israel Tisdale Farm. Captain Ebenezer Tisdale first settled his family's farm in the mid-18th century. Ebenezer was a Revolutionary War soldier who settled upon land along Mountain Avenue. This land passed down through his descendants, with his grandson the next Tisdale to develop the land. In the early 19th century, Colonel Israel Tisdale razed his grandfather's house and built a new house in this historic landscape. Various outbuildings were constructed for agrarian uses over the years, and the land remained used primarily for agriculture until purchased by the Ames Family. In 1906, Blanche Ames retrofitted the Federal Farmhouse into the Colonial Revival style. The Ames family lived in this house until their Mansion was ready to inhabit. Colonel Israel Tisdale's Farmhouse was destroyed by fire in 1984. All that remain of the farm are the foundations of the house and barn, and the farm's grounds.

Ames Estate. The Ames family made much of their fortune in manufacturing. They developed a shovel that was widely used during the building of transcontinental railway, and they were a major supplier of goods to Union Soldiers during the Civil War. They originally headquartered production of their goods in Bridgewater, and then built a large factory in the town of Easton. In 1906 the family

began to purchase land in the area that is now Borderland. After acquiring parcels of farm land in the towns of Easton and Sharon, they began developing their estate in 1910. The first parcel they acquired was the Currivan Farm, and it was on this land they built their mansion and developed the landscape. The estate included the Mansion, rock garden, a swimming pool, tennis courts, shooting lodge, and other outbuildings and structures. The mansion is the center piece of estate and was designed by Blanche Ames. She chose a gothic revival style for the design of the building, and every room faced northwest to face the morning sun. Building materials, including stone and asbestos reinforced plaster, were selected because of the Ames' fear of a house fire. The family lived on the estate until the late 1960's. The estate retains much of its original buildings and design. This high level of integrity was a contributing factor to the Estate's National Register of Historic Places listing.



The Ames Mansion's library is open to the public during mansion tours. (See Appendix K for photo information.)



The Ames shooting lodge is located on the western shore of Leach Pond. (See Appendix K for photo information.)

Ponds, Dams, and Dikes. Borderland contains several artificial ponds and a variety of water control structures. Some were developed for early industrial use in the 19th century, but most were installed by the Ames Family to provide for their recreational activity, sense of aesthetics, and scientific research. These features retain a high level of integrity, but are in various states of disrepair.

The Park's dams, dikes, and spillways are not just historic resources, they are also active water control structures. Inspections of these dams in the mid to late 2000s identified deficiencies, and offered over 100 suggestions for maintenance and improved safety. Although each dam and dike had its own set of safety issues, common problems included a general lack of Operations and Maintenance Plans, tree growth due to a lack of vegetation maintenance, areas of erosion caused by visitors walking to the water's edge, and seepage through the dam or dike. Failure to address deficiencies could result in the loss of ponds and the Ames original vision for the landscape. Readers interested in management recommendations specific to each dam or dike are directed to the inspection/evaluation reports listed in Table 13.8.2.



Upstream face of Pud's Pond Dam. This dam and associated dikes are in Poor condition and have over 30 identified deficiencies (Weston & Sampson 2008a). (See Appendix K for photo information.)

Smith Farm. Smith farm was developed in the late 19th century by Doctor Asabiel Smith, a “clairvoyant healer” from the town of Easton. Dr. Smith built a farmhouse with an attached barn and two outbuildings. All that remains today from the original development is the farmhouse, which is currently under lease through the Historic Curatorship Program. It is the curator's intent to

repurpose the farm into a “non-profit education and arts wellness center.” Information on the proposed repurposing may be found at <http://www.smithfarmheals.org>. Even though the property has lost three historic buildings, it still retains much of its historic integrity due to the surrounding landscape. The presence of the house, pond, and managed agricultural fields are enough to identify the historic use of the property.



The Smith farmhouse, September 2015. (See Appendix K for photo information.)

Wilbur Farm. The Wilbur farm was established in 1780 by George Wilbur who built a farmhouse, barn, and outbuilding. This farm was used to raise cattle and continued in agrarian use for decades. It was acquired by the Ames Family in 1949, and its Georgian style farmhouse is the oldest building in Borderland State Park. This farmhouse and cemetery are the only remaining objects from the original development. The house and surrounding land are currently under lease through the Historic Curatorship Program. The curator has demolished and re-built the kitchen ell, and is currently in the process of rehabilitating the original farmhouse. The barn was disassembled before the curators took control of the property, and they have plans to re-use some of the salvaged timbers to re-build the barn. The curators have documented the demolition process and provide updates of their progress restoring the house on their web site (<http://www.thewilburfarmhouse.com>). Similar to the Smith Farm, the Wilbur Farmhouse retains its historic integrity with the existence of the original farmhouse, cemetery, and agricultural context.

A small family cemetery is located south of the farmhouse, off Massapoag Avenue. It is located

entirely within the Park on State-owned land; the Town of Easton identifies this cemetery as municipally owned (Town of Easton 2008).



The Wilbur farmhouse; September 2015. (See Appendix K for photo information.)

William Dean Cemetery. This cemetery is located opposite 144 Rockland Street, Easton, along the Park's southern boundary. It is a walled, elevated burial ground approximately 40 feet by 50 feet in size. The elevated graves may be due to the proximity of Poquanticut Brook, which has a 100 year flood zone that extends into the cemetery. The site was first developed as a burial ground in the early 19th century, and has approximately 14 graves that date from 1815–1903. A metal sign and post erected by the Town of Easton identifies the cemetery's name. This burial ground is well maintained. Despite being located entirely within the Park on State-owned land, the Town of Easton identifies this cemetery as municipally owned (Town of Easton 2008).



The William Dean Cemetery; an elevated burial ground along Poquanticut Brook. (See Appendix K for photo information.)

Buildings

All of the park's historic buildings are associated with landscapes described above.

Structures

The National Register of Historic Places Registration Form for the Borderland Historic District lists water tower footings in the Sharon portion of the park, just west of Bay Road (Pearl et al. 1997). No additional information is provided in the form and these footings were not observed during the preparation of this RMP. Their condition and integrity were not assessed.

Objects

All of the Park's historic objects are associated with landscapes described above.

13.4. RECREATION RESOURCES

Recreation at Borderland is primarily trails based. There are few recreation resources that are not associated with the forest's trails. The following recreation activities take place in Borderland:

- Bicycling, mountain
- Disc golf
- Dog walking, on leash
- Dog walking, off-leash area
- Fishing
- Geocaching (30 caches as of July 2016)
- Hiking
- Horseback riding
- Nature study/Photography
- Orienteering
- Picnicking
- Running/Jogging
- Skiing, cross-country
- Sledding/tubing
- Tennis

Visitors obtain information on the park's resources, recreation opportunities, and regulations at the Lawrence Newcomb Visitor Center. Interpretive displays, public bathrooms, and other visitor amenities are available at this facility.

Picnic tables are located south of the visitor center; their location provides a view of the Ames Mansion and grounds. A few additional tables and a grill are located opposite the Ames Mansion's garage entrance.



View of Ames Mansion from Borderland's picnic area. (See Appendix K for photo information.)

An 18-hole disc golf course (Borderland Disc Golf) is located in the park. It is open to the public without charge. The course extends from the visitor center eastward to Leach Pond, and southward to just beyond the Wilbur House. The course includes open lawns and fields, as well as forested areas. It was established in 2002 as a 9-hole course and expanded over time. The Friends of Disc Golf at Borderland, a non-profit organization, manages the course and organizes two large annual events; the Spring Fling and Fall Classic. This is the only disc golf course in the Blue Hills Complex.



Disc golfers at Borderland; the course draws recreationists from throughout the northeast for tournaments and regular play. (See Appendix K for photo information.)

Dog walking, both on and off-leash is a common recreation activity. Two fields east of Leach Pond have traditionally been used as off-leash dog areas. In addition to recreational dog walking, there is also a high level of commercial dog walking.

Due to its strong visual character, Borderland is used as a wedding venue, and for video and still photography. Park buildings have appeared in major motion pictures (e.g., *Shutter Island*, *Ghostbusters*) and its grounds are often used as a backdrop for engagement, maternity, and family photos. A quick Internet search identified over 40 commercial photographers using Borderland as a backdrop for these photos. These commercial activities have a recreation component.

13.5. INFRASTRUCTURE

Property Boundary

Borderland is situated amidst residential development. It occurs within an area delimited by Massapoag Avenue to the west; Morse Street to the north; Mountain Street, Bay Road, and Allen Street to the east; and Rockland Street to the south. Approximately 2 acres of park are located west of Massapoag Avenue in Sharon, and 17.1 acres are located south of Rockland Street in Easton. Undeveloped municipal lands abut portions of its southern and southeastern borders. Undeveloped private lands abut its northern and northeastern border. Encroachment is not a major issue, despite the park's proximity to roads and residences.

Two easements relevant to the operation of Borderland were identified during the preparation of this RMP. In 1966 Oliver and Amyas Ames granted a perpetual easement on approximately 9.4 acres in Easton to the Montaup Electric Company, its successors, and assigns. (Bristol County Registry of Deeds Book 01484, Page 237) This easement allows for a broad variety of "fixtures, equipment and appurtenances" as "necessary for the transmission of electricity for light, heat, power, telephone, telegraph, or any other purpose." The deed for the Sullivan parcel, a 6.62 acre parcel located on Deer Meadow in Easton, includes a 4,047 square foot perpetual drainage easement. (Bristol County Registry of Deeds Book 4001, Page 226).

Buildings and Structures

There are four non-historic buildings; an observation blind; a variety of structures associated with the trails system; and livestock pens, sheds, and coops (Table 13.5.1).

The Lawrence Newcomb Visitor Center is an L-shaped, single story building located on the east side of the main parking lot. The center is named for a botanist who authored the standard field guide for identifying wildflowers in the Northeast. (See Chapter 154 of the Acts of 1995.) He was one of the “three incorporators of the Friends of Borderland,” served on the Borderland State Park Advisory Council, and was instrumental in the creation of a park visitor center. The building includes the park’s only public bathrooms, a multi-function room used for meetings and presentations, a water fountain, and a soft drink machine. All public spaces are at ground level and are accessible. Also in the building are a small office for staff, and an employee kitchenette. The office space is insufficient for current staffing

needs. Most of the buildings mechanical systems are housed in a half basement.



The Lawrence Newcomb Visitor Center welcomes guests to Borderland. (See Appendix K for photo information.)

Table 13.5.1. Non-historic buildings and structures of Borderland State Park.

Location and Infrastructure	Date ^a	Condition ^b	In Use ^c	Utilities ^d
Lawrence Newcomb Visitor Center	1993	3	Y	E, I, H, S, T, W
Leach Pond Area – Pond Walk				
Observation blind	ca. 2002	3	Y	-
Maintenance Area				
Maintenance garage	1974	3	Y	E
Tool shed	-	3	Y	-
Disc golf shed	-	3	Y	-
Wilbur Farm				
Livestock pens, coops, and sheds ^e	-	-	-	-
Trails System^f				
Boardwalks (12)	-	2–4	-	-
Bog bridge (1)	-	2	-	-
Bridges (10)	-	2–4	-	-

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.

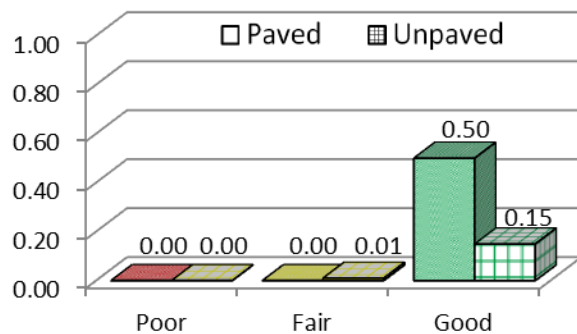
e. These structures are located on DCR property but are not owned by the DCR.

f. Based on 2007 trails assessment; the most recent year for which data are available.

Roads

Historic paths and roads are common at Borderland. However, they primarily function as trail segments and not as roads. Only 0.66 miles of public and administrative roads are present. The entrance road, from Massapoag Avenue to the visitor center, is the park's only public road, and the dirt road from Massapoag Avenue to the Ames Mansion is the only administrative road. The length and condition of these roads are identified in Figure 13.5.1.

Figure 13.5.1. Condition and length (in miles) of roads at Borderland State Park.



Parking

Borderland has one main lot, and five supplemental lots. (Table 13.5.2.) The main lot is located at the visitor center; two pay stations are associated with this lot. The park's original parking lot, located near the main entrance, provides parking for season pass holders. Both lots are open during daylight hours and locked overnight. Hours of operation change with day length. Parking for events at the Ames Mansion is located adjacent to the building (i.e., HP spaces) or in a field near the mansion. A small gravel lot provides parking for visitors attending functions at the Smith Farm. A small parking area is located on the east side of the park, at the intersection of Bay and Allen roads. During special events, vehicles may be parked on the lawn between the visitor center and the mansion. Visitors to Dean Cemetery may park off the shoulder of Rockland Street. Off-road parking also takes place along portions of the eastern shoulder of Massapoag Avenue; use of this area is not encouraged.

Table 13.5.2. Number of public parking spaces, by location and Borderland State Park.

Location	HP	Restricted	Other	Total
Lawrence Newcomb Visitor Center	10	0	240	250
Season Pass parking lot	0	0	33	33
Ames Mansion				
Garage entrance	2	0	0	2
Wedding parking – Field ^{b, c}	0	120	0	120
Smith Farm^{c, d}	0	7	0	7
Bay Road at Allen Road	0	0	10	10
Total	12	127	283	422

a. Based on pavement markings.

b. Based on 9 by 18 foot spaces with 24-foot wide aisles. The actual number of cars parked in this field exceeds the capacity calculated.

c. Restricted to use by visitors attending special events at facility.

d. Based on the number of 9-foot-wide spaces.



Main parking lot at Borderland; a pay station is visible on the right side of this photo. (See Appendix K for photo information.)

Employee parking is located adjacent to the visitor center and the maintenance garage. Resident parking is associated with the Smith and Wilbur farm houses.

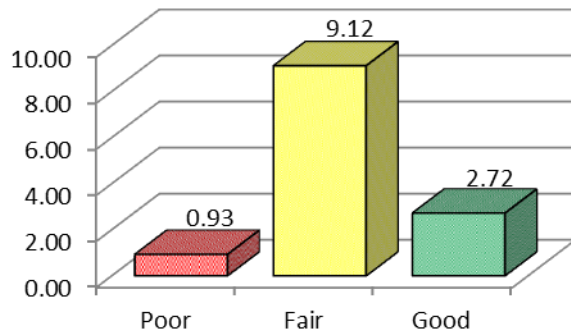
Following the implementation of a \$5 parking fee in January, 2015, some visitors began parking in adjacent residential neighborhoods and crossing private property to access the park. In June, 2015 the Easton Select Board referred the issue to the Town's Traffic Safety Committee.

Trails

Borderland's trail system includes cart paths and farm roads that pre-date the Ames Estate; fire roads and carriage paths created by the Ames family; and single tracks created specifically for hiking and

mountain biking. There are 12.77 miles of official trails (Figure 13.5.2); most (71.42%) are classified as being in Fair condition. An additional 1.13 miles of unauthorized user-created trails have also been documented.

Figure 13.5.2. Condition and length (in miles) of official trails at Borderland State Park.



The Pond Walk is an approximately 2.7 mile long loop trail that circles Leach Pond. It is comprised of old roads and cart paths. Although considered an easy walk, it is not ADA accessible. A 1.5 mile long portion of the Pond Walk has been designated a DCR Healthy Heart Trail.

A long-distance trail, the Bay Circuit Trail and Greenway, passes through the park. It extends 4.76 miles through the park along existing trails, including sections of the Pond Walk.

All trails are open to mountain bike use. The park provides both easy and hard riding experiences; the former along single track trails to the north of the ponds and the latter along carriage roads from the ponds south. Trails for intermediate skilled riders are uncommon (NEMBA 2015a).

A well-marked series of paths direct disc golfers from hole to hole to the next. These trails have not been inventoried or mapped, and are not represented in the values in Table 13.5.4.

Kiosks and Signs

There are four standard wooden DCR kiosks. Three are located adjacent to the visitor center and the fourth is located adjacent to the parking lot at Smith Farm. A non-standard kiosk, made of recycled plastic, is also located at Smith Farm.

The park's main identification sign is located at the entrance to the main parking lot on Massapoag

Avenue. A second identification sign is located on the east side of the park, at the intersection of Bay and Allen roads, in Easton. Two wooden signs are located at the visitor center. The first identifies it as the Lawrence Newcomb Visitor Center and the second acknowledges that the Land and Water Conservation Fund was used to acquire land. Internal regulatory signs are present at multiple locations. Course signs are associated with each disc golf tee box. Bay Circuit Trail signs are located along that trail.

Iron Ranger

There are two iron rangers; one is located near the visitor center and the other is located at Smith Farm.

Memorials and Markers

Several memorials and markers were identified during the preparation of this RMP. However, it is likely that additional markers are present but have gone undocumented. Because of this, the following list should be considered preliminary.

- Metal plaque attached to a rock near the entrance to the Ames Mansion. This plaque bears the following inscription: *Borderland Historic District. Estate of Blanche and Oakes Ames has been placed on the National Register of Historic Places by the United States Department of the Interior, 1997.*
- Engraved stone, located near season pass parking lot. This marker bears the following inscription: *Borderland: The former estate of two remarkable people, Oakes and Blanche Ames. Within this park are the sites of several eighteenth and Nineteenth Century industries, a bog iron operation, a reservoir for Easton furnace industries, early Easton homes, and a stone mansion. Easton Historical Commission, August 21, 1983.*
- Wooden plaque on Leach Pond observation blind, bearing the following inscription: *Tenner 6/1/87 – 6/30/02.*
- Aluminum marker identifying the cemetery on Rockland Street as *William Dean Cemetery, 1815*; erected by the Town of Easton and bearing the town's seal.

At least seven memorial benches bearing metal plaques or engravings were observed during the preparation of this RMP. More are likely present.



This engraved stone marker placed by the Easton Historical Commission highlights the history of Borderland. (See Appendix K for photo information.)

13.6. INTERPRETATION

Borderland has a dedicated visitor center and strong interpretive programming offered by the Park's Visitor Services Supervisor and the Friends of Borderland (i.e., the Friends). Programs, interpretive panels, and other interpretive materials focus on cultural resources (e.g., the Ames family), natural resources (e.g., the Park's geology), or recreation. The Friends' programming also focuses on the arts

In 2015, approximately 3,600 visitors participated in DCR programs and an additional 2,022 participated in programming offered by the Friends. The following programs were offered by DCR:

- Architecture tour: A story in stone
- Garden tour: secret treasures of the land
- Mansion tours. This program series includes the following six topics: Building a home; The Ames family and women's rights; Of governors and generals; A portrait of an artist; Partners in love and work; and Kids mansion tour
- Explore nature. This program series includes the following four topics: Ponding; Geology hike; Stonewall secrets; and Animal hide and seek
- Off the beaten path hike
- The long hike
- Ames boulder hike
- The pond walk

- Autumn hike
- Too much turkey hike
- Full moon hike
- Dr. Seuss story walk
- Fishing at borderland
- Kiddleidoscope



A Visitor Services Supervisor introduces visitors to Borderland before leading a winter hike. (See Appendix K for photo information.)

The Friends offered the following programs and special events:

- Ames Mansion tours
- Old fashioned baseball game
- Holiday hand bell choir
- Shakespeare in the park
- A Christmas Carol, a dramatic reading
- Fishing Fest
- New England Society of Botanical Artists demonstration

In most years the Friends sponsor the Blanche Ames National Juried Art Show and an associated opening reception. The show is currently on hiatus.

There are several permanent interpretive panels. Most are located at visitor center, the Ames Mansion, and throughout the mansion's grounds. These panels include:

- Welcome to Borderland State Park
- Changing landscapes, changing families
- Welcome to the house at Borderland
- The swimming pool at Borderland
- Upper Leach Pond (laminated)

In addition, the following five interpretive signs are located just outside the Ames Mansion as part of the “Ames Mansion Centennial Path:”

- Creating Borderland
- Passing of playfellows
- Building a home
- A team effort
- Struggle for equality

A single panel is located in a field off Mountain Street in Sharon, it reads:

- Changing landscapes, changing families

13.7. MANAGEMENT RESOURCES

Staffing

DCR Personnel

Borderland is managed by Mass Parks employees; there are three year-round and five seasonal personnel. (Table 13.7.1) A third year-round position has been vacant since 2014.

Table 13.7.1. Mass Parks personnel assigned to Borderland State Park.

Job Title	Number of Positions 2016
<i>Year-round Personnel</i>	
Forest and Park Supervisor III	2
Forest and Park Supervisor II ^a	0
Forest and Park Supervisor I	1
<i>Seasonal Personnel</i>	
Laborer II (short-term)	1
Park Ranger	1
Ranger I (short-term)	1
Summer Worker (short-term)	1
Visitor Services Supervisor	1

a. Vacant since 2014.

Two Forest Health Program employees are also headquartered at Borderland. Personnel include a Forestry Assistant and an Insect Pest Specialist; they provide support to all properties in the Complex.

Partnerships and Volunteers

A formal Borderland State Park Advisory Council was established in 1972 to provide stakeholder input on the creation and operation of the Park. Membership includes representatives from the

Towns of Sharon, Easton, Stoughton, and Mansfield, the Forest and Park Supervisor, and a representative of the Friends of Borderland. The advisory council meets quarterly and advocates for increased staffing and operating funds for the Park.

Three partner organizations have a major, ongoing presence: the Friends of Borderland; the Friends of Borderland Disc Golf; and the New England Mountain Bike Association (i.e., NEMBA). None have current formal agreements with the DCR. The Friends are a non-profit volunteer organization that assists the DCR “in preserving and interpreting the natural, historical, and cultural resources” of Borderland. Established in 1972, before Borderland was officially opened to the public, the Friends purchase flowers, bird seed, and mutt mitts, sponsor events, and raise funds on an annual basis to restore items in order to “preserve the history for future generations” (Friends of Borderland 2015). They operate a gift shop in the Ames Mansion and a “portable gift shop” at the visitor center. Gift shop hours are set around mansion tours and special events. The Friends of Borderland Disc Golf were established to advocate for, and then operate, the Borderland Disc Golf Course. They constructed and maintain the course, and run events. NEMBA is a recreational trails advocacy organization active throughout New England. Its mission is “to promote the best that mountain biking has to offer, steward the trail system where we recreate and preserve open space” (NEMBA 2015b). At Borderland, NEMBA has built bridges, performed trails work, and create limited, new trails (NEMBA 2015a). Perhaps, most importantly, they promote among their membership the ethos that the construction and use of unauthorized trails threaten natural resources, cultural resources, and ongoing recreational access.

Safety

Easton and Sharon fire departments provide fire response and emergency services. Additional support is provided by Fire Control Districts 3 and 4, which are based at Freetown-Fall River and Myles Standish state forests, respectively. Municipal police departments, the Massachusetts State Police (Station H-3, Foxborough and Station D-4, Middleborough), and the Massachusetts Environmental Police (Region C-7) provide law enforcement.

Funding

Conservation Trust Fund

Financial contributions placed into the park's iron rangers are added to the Conservation Trust Fund and used at Borderland. The fund has a balance of approximately \$28,760 at the time of this writing.

Retained Revenue

The park generates revenue from parking fees. This money counts toward DCR's retained revenue cap.

Other Revenues

In 2015 the park received \$10,000 from the producers of Ghost Busters, which filmed in the mansion's library. This money is included in the Trust Fund balance indicated above. These funds will be used to renovate bathrooms in the visitor center. The Friends raise money through membership fees, donations, special events, and gift shop sales. Funds are used to purchase supplies and services that are donated to the Park. There is no direct transfer of revenues.

13.8. MANAGEMENT PRACTICES

Management of DCR properties is guided by a variety of regulations, policies, BMPs (e.g., Table 13.3.2), legal agreements, and institutional knowledge. This section describes those practices unique to the management of Borderland. Legal agreements unique to the park are listed in Table 13.8.1.

Table 13.8.1. Key legal agreements for Borderland State Park.

Party and Subject of Agreement	Type ^a	Expiration Date ^b
Charles Wilbur. Permit Agreement to operate, manage, and maintain an agricultural concession located at Borderland State Park.	P	2012
Smith Farm at Borderland, Inc. Ground Lease; DCR Historic Curatorship Program. <i>Extensions of 10 and 15 years available at tenant's request.</i>	L	2052
The Friends of Wilbur Farmhouse, Inc. Ground Lease; DCR Historic Curatorship Program. <i>Extension of 5 years available at tenant's request.</i>	L	2047

a. Agreement types include: A = Memorandum of Agreement; C = Conservation Easement; E = Easement; L = Lease; P = Permit; S = Special Use Permit; U=Memorandum of Understanding.

b. Year that agreement expires.

Because the acquisition of Borderland was partially funded by the Land and Water Conservation Fund, use and management of this park are subject to that program's requirements (NPS 2008). Copies of Land and Water Conservation Fund inspection reports were not located during the preparation of this RMP.

Key planning documents are identified in Table 13.8.2.

Table 13.8.2. Key management and guidance documents for Borderland State Park.

Author and Document	Year
Gannett Fleming, Inc. Environmental Audit Report: Borderland State Park, North Easton, Massachusetts.	1999 ^b
Bargmann Hendrie + Archetype, Inc., et al. Building conditions assessment with maintenance recommendations.	2004
Fairbanks Engineering Corporation Inspection/Evaluation Report: Upper Leach Pond Dam	2006 ^a
Fairbanks Engineering Corporation Inspection/Evaluation Report: Borderland Dam #1	2006 ^b
Fairbanks Engineering Corporation Inspection/Evaluation Report: Leach Pond Dam	2006 ^c
Fairbanks Engineering Corporation Inspection/Evaluation Report: Upper Leach Pond Dike #1	2006 ^d
Fairbanks Engineering Corporation Inspection/Evaluation Report: Upper Leach Pond Dike #2	2006 ^e
Fairbanks Engineering Corporation Inspection/Evaluation Report: Upper Leach Pond Dike #3	2006 ^f
Weston & Sampson Follow-up Inspection; Pud's Pond Dam-MA03038, Borderland State Park, Sharon, Massachusetts	2008 ^a
Weston & Sampson Follow-up Inspection; Borderland State Park Dam #2-MA03178, Borderland State Park, Sharon, Massachusetts	2008 ^b
Weston & Sampson Follow-up Inspection; Borderland State Park Dam #3-MA03180, Borderland State Park, Sharon, Massachusetts	2008 ^c
Department of Conservation and Recreation Ames Mansion landscape rehabilitation plan: Borderland State Park; Easton, Massachusetts	2011 ^b

Annual Maintenance

Ongoing management practices typically follow a regular schedule. Common activities, and the desired frequency with which they occur, are identified in Table 13.8.3.

Table 13.8.3. Annual cycle of management activities at Borderland State Park.

Activity	Spring ^a	Summer ^a	Fall ^a	Winter ^a
Cleaning - Visitor center	D2	D2	D2	D2
Cleaning - Walkways	AN	AN	AN	N/A
Litter removal - Recreation areas	D	D	D	N/A
Litter removal - Trails	AN	AN	AN	AN
Maintenance - Picnic sites, fences, etc.	AN	AN	AN	N/A
Mowing and trimming	AN	E2	AN	N/A
Mulching and fertilizing	N/A	A	N/A	N/A
Pruning - Trees and shrubs	AN	AN	AN	N/A
Trash - Empty - Barrels	D	D	D	N/A
Trash-Empty-Bathrooms	D	D	D	AN
Weed - Flower beds	AN	AN	AN	N/A

a. Frequency codes are: A = Annually; AN = As needed; D = Daily, # times; E = Every # days; N/A = Not applicable.

Natural Resources

Water Resources

There are no water management activities; pond water levels are not actively managed.

Rare Species

There are no rare species monitoring or management activities.

Invasive Species

Park personnel try to limit the spread of Louise's swallowwort in a field between Pud's Pond and Mountain Street, Sharon, by mowing the field twice annually in order to prevent seeds from forming.

Vegetation

Field staff mows the lawns and fields associated with the visitor center, Ames Mansion, and maintenance garage. Historic curators are responsible for maintaining vegetation at the Smith and Wilbur farms in accordance with the terms of their respective ground leases. In the past, a five-year Permit Agreement for an "agricultural concession" on 35 acres of hay lands was awarded following a competitive bidding process. Under this permit, hay was cut in the late summer and fall and rye was planted as a winter cover crop. This activity

helped maintain the historic landscape and land use practices. The most recent Permit Agreement expired in 2013; none has been awarded since. The previous concessionaire's son continues to mow and plant the fields. Borderland Disc Golf maintains vegetation along their course. Because the hayfields and disc golf course are located in Priority Habitat, vegetation management in these areas is subject to review under MESA.



Active agriculture is necessary to maintain Borderland's historic landscape. The permit to hay Borderland's fields expired in 2013, leaving the future of its agricultural landscape in doubt. (See Appendix K for photo information.)

Volunteers work in the park every day, from 1:00–4:00 P.M. They perform landscape and garden maintenance, remove downed trees from trails, and remove tree branches from the edges of fields associated with Smith Farm.

There are six CFI plots; they were last monitored in 2010.

MassWildlife personnel surveyed deer browse near the visitor center, east of the Ames Mansion, and along Quarry Loop Trail in 2016 (Stainbrook 2016b). It is unknown if and when this survey will be repeated. Based on this assessment, MassWildlife has recommended regulated hunting to decrease deer densities to 6 to 18 deer/mi² of forest, in order to decrease impacts to vegetation (French and Conlee 2016).

Wildlife

There is no stocking of fish or game species. DCR's Parks and Recreation rules (302 CMR 12.11(3)) prohibit hunting and trapping at Borderland. Fishing is allowed.

In 2015, a multi-year Blanding's turtle conservation and restoration project began. The goal of the project is to capture female turtles, locate and monitor their nests, temporarily take hatchlings into captivity to "head start" their growth, and then release these turtles back at Borderland (Schuler et al. 2016). No nests were located during the project's first year.

Volunteers construct, install, and maintain wood duck boxes in the Park's wetlands. This takes place during the winter, when snow cover prohibits other outdoor volunteer activities.

Cultural Resources

The Smith and Wilbur farm houses and associated fields are under historic curatorship. These properties are managed in accordance with the terms of their respective Ground Leases.

The rehabilitation plan for the Ames Mansion landscape includes specific recommendations for entrance foundation plantings, the tall evergreen hedge, rock garden, and path to swimming pool (DCR 2011b). Plantings and ongoing landscape maintenance are detailed in this rehabilitation plan. Guidance is offered on removing some invasive plants while controlling the spread of historically important specimens. This plan is being implemented as time and resources permit.



Maintenance of this rock garden with formal plantings is addressed in a rehabilitation plan for the Ames Mansion's landscape. (See Appendix K for photo information.)

In 2012, approximately \$50,000 worth of *Arbor vitae* was planted as part of implementing the landscape rehabilitation plan. These shrubs were heavily browsed by deer that winter. Fencing was constructed around the plants to prevent additional

browsing. However, the fencing was knocked down, and browsing resumed.

The DCR is responsible for maintaining the historic dams and dikes, and their appurtenant structures. Although inspections are being conducted, there is no active management.

Recreation Resources

Borderland Disc Golf maintains the tees, tee boxes, baskets, and signs associated with the course. Because the disc golf course is located entirely within Priority Habitat, course maintenance activities are subject to review under MESA.

In accordance with Park and Recreation Rules, only cartop boats may be used in the park's ponds (302 CMR 12.07(11)).

Infrastructure

Boundary

The Regional Forester maintains boundary markings.

Buildings and Structures

Due to its size and age, the Ames Mansion requires ongoing monitoring and maintenance. The outside of the mansion is walked every two days, on a year-round basis, to look for vandalism and identify developing problems. The mansion is cleaned every two weeks during the active season, and every two months during the winter. During these cleanings, every room is opened and inspected to identify developing problems. This cleaning and monitoring is performed by DCR employees and volunteers. Park personnel are always on site during contractor repairs to the mansion. This constant monitoring takes them away from other Park activities.

Asbestos reinforced plaster in the mansion's interior is an ongoing challenge. When cracks develop, the fibers are exposed and may pose a health risk. The Forest and Park Supervisor, who is certified to handle up to three square feet of exposed asbestos, inspects the damage and contacts DCR's Office of Cultural Resources (OCR). The OCR then arranges for repairs to be performed by a Department of Labor Standards certified contractor. The asbestos is removed, and the plaster repaired, as time and resources permit. A caretaker's apartment in the

Mansion has been fully abated of asbestos; it remains unused.

DCR staff and volunteers clean and maintain the visitor center on an as needed basis. This includes sweeping, vacuuming, washing windows, cleaning and restocking bathrooms, and removing snow from sidewalks and the building's roof.

Recent repairs of the maintenance garage were performed by Park Support Operations. This included reroofing and painting the building.

Maintenance and repair of the Smith and Wilbur farm houses are performed in accordance with the terms of their respective Ground Leases.

Roads

There are no ongoing road maintenance activities. Park staff members fill potholes in dirt roads on an as needed basis. Potholes in the main entrance road go unfilled due to a lack of hot patch. The Forest and Park Supervisor from F. Gilbert Hills State Forest provides assistance with road grading on an as needed basis.

The Forest and Park Supervisor of Borderland plows roads and some parking lots in accordance with the following prioritization:

1. Bay Road, from Massapoag Avenue to the maintenance garage and Ames Mansion.
2. Park entrance, main parking lot, and visitor center.
3. Dirt road from visitor center to Ames Mansion, and the segment of "Borderland" Road from the Ames Mansion to Bay Road.

In heavy snow, the segment of Borderland Road between the Ames Mansion and Bay Road cannot be cleared with the available pickup truck and plow. The Park's truck is equipped with a small, slide-in sander that is used to treat the Park entrance and parking lot. A sander from the Blue Hills District provides assistance on an as needed, and as available, basis. Employees shovel snow at the visitor center and Ames Mansion on an as needed basis.

Parking Areas

During periods of low to moderate visitation, visitors enter the park without guidance and locate their own parking spaces. At these times, DCR

Rangers are available to enforce parking fees and park regulations, and to aid visitors. However, during peak use, such as summer weekends, their time is entirely consumed with emergency response and directing visitors to available parking.

See Roads (above) for information on snow removal and pothole repair.

Trails

Trails are maintained by a variety of organizations. The Friends donate supplies and materials for trail maintenance, but do not provide labor. NEMBA volunteers maintain trails north of the ponds, and Bob's Trail along the Park's eastern side. Each year the Forest and Park Supervisor submits requests for Americorps crews to perform trail maintenance. These crews have been made available for nearly all years requested. Trails have been mapped by DCR and are included in NHESP (2015a). This document must be consulted, and guidance followed, prior to performing trails maintenance in order to comply with MESA.

The Bay Circuit Trail and Greenway, in its entirety, is managed by the Bay Circuit Alliance. (See <http://www.baycircuit.org> for information on this organization.) Portions of the trail within Borderland are managed a Bay Circuit group based in Sharon, Appalachian Mountain Club staff and volunteers, and other volunteers. These activities are subject to MESA, as implemented through NHESP (2015a).

The Friends of Borderland Disc Golf maintain trails between holes on the disc golf course. Because these trails were not mapped by DCR, they were not included in the NHESP's statewide review of trail maintenance activities on DCR parks (NHESP 2015a). Because of this, all trail maintenance activities associated with the disc golf course are subject to review under MESA.

Kiosks and Signs

The disc golf course kiosk adjacent to the main parking lot is managed by Borderland Disc Golf. Other kiosks are managed by staff, with the assistance of the Friends.

13.9. RECOMMENDATIONS

Introduction

This section provides recommendations for the near- and long-term management of Borderland State Park. Applied Land Stewardship Zoning recommendations provide general guidance for managing these properties. Future activities and projects should be checked against the zoning map (Figure 13.9.1) for consistency. Management recommendations are all high-priority, and should be addressed as soon as resources become available.

Applied Land Stewardship Zoning (Figure 13.9.1)

The following Land Stewardship Zoning is recommended.

Zone 1

- No sections of Borderland have been designated Zone 1.

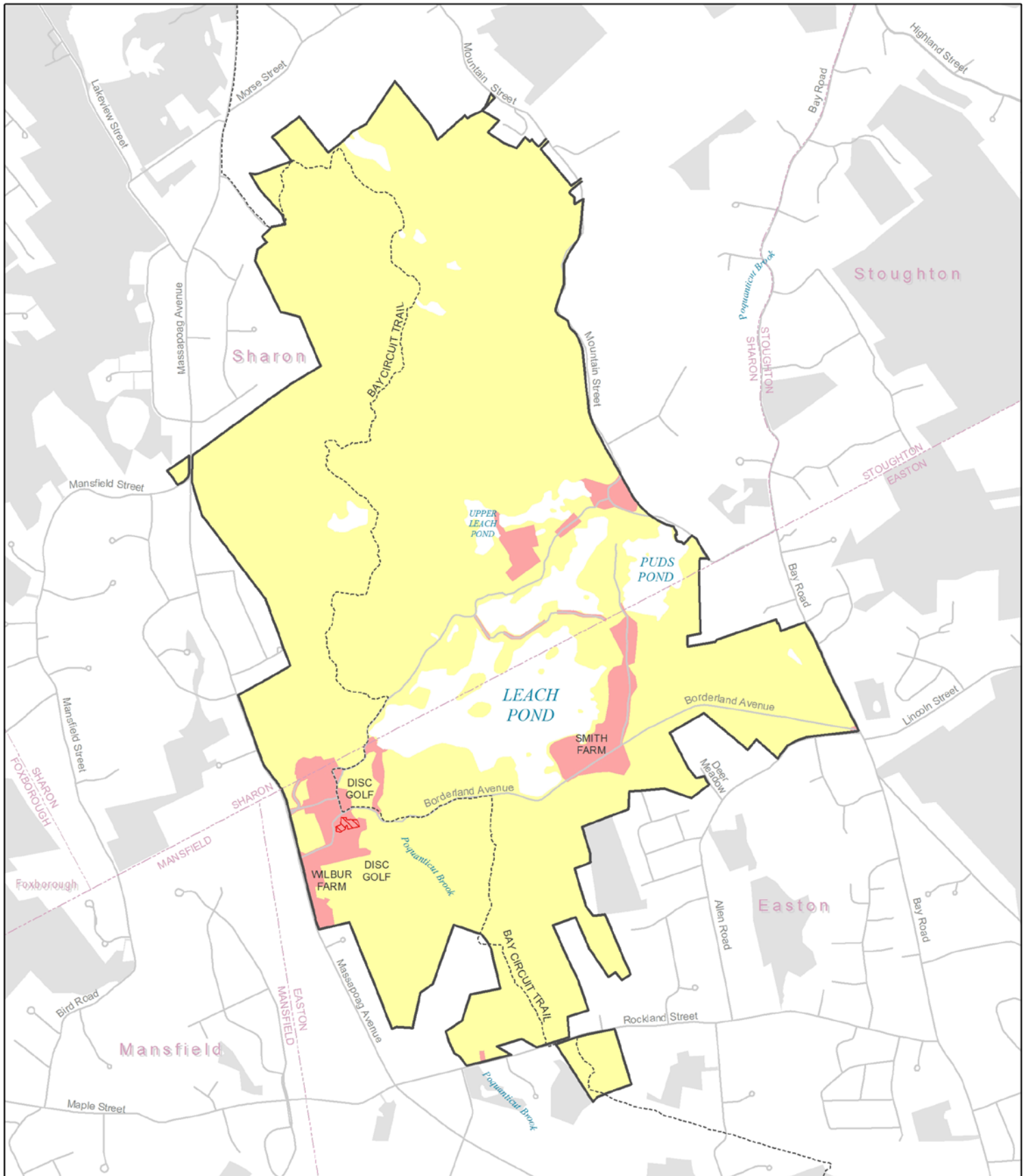
Zone 2

- All areas not specifically designated as Zone 3.

Zone 3

The following portions of Borderland are currently developed, appropriate for potential future development, or intensively used for recreation. They have been designated Zone 3.

- The park entrance area, including the main parking lot, seasonal pass parking lot, Currihan corn crib, and visitor center area.
- The Ames Mansion and associated grounds, gardens, pool, and tennis court. This includes the lawn between the visitor center and Ames Mansion. (See Significant Feature Overlay, below.)
- The Ames shooting lodge and Leach Pond Dam area.
- Borderland State Park dams #1–3, Pud's Pond Dam, and Upper Leach Pond Dam.
- Smith and Wilbur farms.
- Bay Road parking lot.
- William Dean Cemetery.



Legend

- Borderland State Park
- Other Legal Interest - DCR
- Other Protected Open Space

Land Stewardship Zoning

- Zone 1
- Zone 2
- Zone 3
- Ames Mansion Landscape Significance Overlay

Borderland State Park

Figure 13.9.1

Recommended Land Stewardship Zoning

Geographic data by MassGIS, DCR GIS. 2016

1,000
Feet

dcr
Massachusetts

Significant Feature Overlay

A Significant Feature Overlay was developed for the Ames Mansion's landscape. This overlay corresponds to the area identified in the Ames Mansion Landscape Rehabilitation Plan (DCR 2011c). Management and maintenance activities within the overlay must be consistent with this plan.

Management Recommendations

Seven priority management recommendations were developed for Borderland State Park. (Table 13.9.1) 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

Table 13.9.1. Priority recommendations for Borderland State Park.

Recommendation	Implementation^a
Work with commercial pet walkers to obtain the required permit for their commercial activity.	B, L, R
Work with commercial photographers to obtain the required permit for their commercial activity.	B, L, R
Develop and implement guidance on management activities for all dams and dikes in the Park, in order to preserve the ponds as historic landscape features.	D, P, R
Pursue the creation of a full-time caretaker position for the Ames Mansion in order to provide ongoing building maintenance, upkeep of the historic landscaping, oversight of mansion activities, and security.	L, P, R
Establish a new agricultural concession to provide for the continued mowing of agricultural fields in order to preserve the Smith Farm cultural landscape.	C, L, R
Establish formal legal agreements with the park's three major partners: Friends of Borderland; Friends of Borderland Disc Golf; and the New England Mountain Bike Association.	L, R, V
Work with MassWildlife to conduct a study of the white-tailed deer population and to ascertain its impacts on the Park's natural and cultural resources; discuss deer management options.	P, R, V
Require all new trail projects, including disc golf paths, to undergo review and approval using the DCR Trail Proposal and Evaluation Form, and all trail maintenance activities to be reviewed for compliance under MESA and the Massachusetts Wetlands Protection Act.	R, 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.