



Resource Management Plan Acushnet Cedar Swamp State Reservation



Adopted by the DCR Stewardship Council **Month**, 2023

Massachusetts Department of Conservation and Recreation
Division of Conservation and Resource Stewardship
Office of Cultural Resources

Purpose

Resource Management Plans (RMPs) are foundational documents that identify a park, forest, or reservation's defining natural, cultural, and recreational resources and identify potential threats and opportunities to guide DCR's continued stewardship of the property and to inform future decisions about the property in a way that celebrates and preserves its identity.

RMPs are prepared for "all reservations, parks, and forests under the management of the department." (M.G.L. Chapter 21: Section 2F) These plans "shall include guidelines for the operation and land stewardship of the aforementioned reservations, parks and forests, shall provide for the protection and stewardship of natural and cultural resources and shall ensure consistency between recreation, resource protection, and sustainable forest management." DCR finalizes RMPs following a public process and adoption by the DCR Stewardship Council.

Maura T. Healey, Governor

Kimberley Driscoll, Lieutenant Governor

Rebecca L. Tepper, Secretary

Brian M. Arrigo, Commissioner

The Massachusetts Department of Conservation and Recreation (DCR), an agency of the Executive Office of Energy and Environmental Affairs, oversees 450,000 acres of parks and forests, beaches, bike trails, watersheds, dams, parkways, and over 100 National Register listed properties. The agency's mission is to protect, promote, and enhance our common wealth of natural, cultural, and recreational resources for the well-being of all.

DCR honors Indigenous communities for their care, throughout many generations, of the land that DCR now stewards on behalf of the people of the Commonwealth. DCR embraces this legacy of stewardship, fostering a sense of shared responsibility by all people for protection of the waters, lands and living things for the enjoyment and appreciation of all.

To learn more about the DCR, its facilities, and programs please visit us www.mass.gov/dcr. Contact us at mass.parks@state.ma.us.



Acushnet Cedar Swamp State Reservation

South Region

South Coast District

Fall River Heritage Complex

PARK OVERVIEW

Date Established	1971
Location	Dartmouth, New Bedford
Landscape Designation (acres)	
Parkland	0.0
Reserve	2,100.1
Woodland	0.0
Park Size (acres)	2,100.1
Boundary Length (miles)	13.9
Annual Attendance (2020)	Unknown
Regulatory Designations (acres)	
Priority Habitat (MESA)	655.2
Environmental Justice (acres)	1,560.2

LONG-TERM AGREEMENTS

None Identified	N/A
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CONCESSIONS

None	N/A
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PARTNERS & FRIENDS

None

FEATURES OF INTEREST

- Turner Pond
- Atlantic white cedar swamp

ACTIVITIES

- Canoeing/kayaking
- Dog walking, on-leash
- Fishing
- Hiking/walking
- Hunting
- Nature study/photography
- Wildlife viewing

Contact Info:

c/o 110 Slab Bridge Road, Assonet, MA 02702

<https://www.mass.gov/locations/freetown-fall-river-state-forest>

NATURAL RESOURCES	
Elevation (feet above sea-level)	63.1–165.5
Water Resources	
Watershed(s)	Buzzards Bay
Rivers and Streams (miles)	1.3
Open Water (acres)	63.3
Wetlands (acres)	1,059.7
Certified Vernal Pools (#)	6
Potential Vernal Pools (#)	12
Threatened & Endangered Species	
State-Listed (# Regulatory Species)	7
State-Listed (# Non-Regulatory Species)	2
Federally Listed (#)	0
Forest Cover (acres)	964.3
Known Invasive Plants (# species)	
Aquatic	1
Terrestrial	15
CLIMATE CHANGE (By 2070)	
Increase in annual days over 90° F	10–30
Change in annual maximum daily rainfall (inches)	>10
Massachusetts Coastal Flood Risk	
Model area of inundation (acres)	N/A
NATURAL HAZARDS (ACRES)	
Flood (1.0%–0.2%-chance)	967.0–967.0
Hurricane Inundation (Cat. 1–4)	N/A
FOREST MANAGEMENT	
(OBJECTIVE AND ACRES MANAGED, SINCE 2012)	
N/A	0.0

CULTURAL RESOURCES (#)	
Archaeological	3
Historic (total #)	0
National Register Listed	0
National Historic Landmark	0
RECREATION RESOURCES	
Turner Pond	1
Trail System	1
ROADS & TRAILS	
Roads (miles)	
Unpaved	0.0
Paved	0.3
Forest Roads (miles)	
Unpaved	4.4
Paved	0.0
Trails	
Unpaved (miles)	3.9
Paved (miles)	0.0
Unauthorized Trails (miles)	0.03
Trail Density (miles/acre)	0.00
Area of Impact (acres)	528.7
PARKING	
Lots (#)	2*
* Currently closed to the public.	
Parking Spaces (#)	0
Accessible (HP)	0
Other	0
INTERPRETIVE PROGRAMMING	
(#PROGRAMS/#CONTACTS)	
Formal Programming (2022)	
DCR	0/0

INTRODUCTION

Acushnet Cedar Swamp State Reservation (Acushnet Cedar Swamp or the Reservation) is located in Southern Bristol County, in the City of New Bedford and Town of Dartmouth. It is approximately 40 miles from Boston, 25 miles from Providence, Rhode Island, and four miles north of downtown New Bedford. The Reservation is approximately 6 miles southeast of Freetown-Fall River State Forest. The Reservation, like all other DCR properties in the Fall River Heritage Complex, is located in the Bristol Lowlands/Narragansett Lowlands Ecoregion. Adjacent land uses to the north, east, and south of the Reservation are primarily industrial; to the west is a mixture of residential development and protected and unprotected open space.

The Reservation is on land shaped by generations of Indigenous and Indigenous and non-Indigenous inhabitants. Past and present Indigenous residents embody fluid, relational connections to the places and spaces now known as Acushnet Cedar Swamp State Reservation. Indigenous groups and individuals, including peoples known as the Pokanoket and Wampanoag are recorded in available documentation (Native Land Digital 2023) as having relationships to this place over seasons and generations. Archaeological evidence suggests that Native American settlement was heaviest along the coast and the banks of Slocums River, with “interior settlement likely focused on the confluence of the Paskamansett River and Destruction Brook” (MHC 1981*a*). Given that the headwaters for the Paskamansett River are located in Acushnet Cedar Swamp, it is highly likely that Native Americans were knowledgeable of the area included in the Reservation. Following Native American dispossession, the Town of Dartmouth was incorporated in 1664, and New Bedford was incorporated in 1787 from part of Dartmouth (Massachusetts Historical Commission (MHC) 1981*a*, 1981*b*). The Reservation was established in 1971, when approximately 1,800 acres were acquired to provide “long-range permanent protection” to “an outstanding area of old growth Atlantic white cedar” (Department of Natural Resources (DNR) 1972). Atlantic white cedar swamps in Massachusetts have greatly diminished in size and number since European settlement, with many converted to agriculture, filled for development, mined for bog iron, or their trees cut for posts and shingles. The Reservation’s swamp is “one of the finest stands of this species remaining” (DNR 1972). The National Park Service recognized the ecological merits of this wetland and in 1972 designated the area as a National Natural Landmark (National Park Service (NPS) n.d.).

Many of the qualities that make Acushnet Cedar Swamp ecologically significant limit its use for recreation. A mixture of Atlantic white cedar swamp, shrub swamp, and bogs cover much of the Reservation’s interior. Forested uplands border this wetland complex on the southeast, west, and north. Most of Turner Pond, an impoundment of the Paskamansett River, is located within the Reservation, although the City of New Bedford manages the Turner Pond Dam (NID# MA01152). Recreation, in the forms of fishing, hiking, and hunting, primarily take place on the fringes of the Reservation in the forested uplands and along the pond shore.

PARK IDENTITY AND SIGNIFICANCE

Acushnet Cedar Swamp State Reservation is strongly identified with its namesake feature, an exceptionally large Coastal Atlantic White Cedar Swamp community type with excellent structural and species diversity. About half of the swamp is dominated by nearly pure stands of Atlantic white cedar that range in age from 50–200 years. Future uses of Acushnet Cedar Swamp must be consistent with its identity as a Reserve and continue to prioritize the long-range permanent protection of the Atlantic White Cedar Swamp and its ecological functions. Protection of the cedar swamp requires maintaining or enhancing water quality, proper regulation of water levels in Turner Pond, and protecting associated wetlands and upland buffers.

Acushnet Cedar Swamp is significant for the following reasons:

- It is one of the finest Coastal Atlantic White Cedar Swamps remaining in Massachusetts.
- It is an approximately 2,100-acre Reserve, largely within the City of New Bedford.
- It is a National Natural Landmark; one of seven in Massachusetts and one of three in the DCR system.

DEFINING RESOURCES AND VALUES

Resources that define the park are related to Atlantic White cedar. They include:

- An exceptionally large Coastal Atlantic White Cedar Swamp, with excellent structural and species diversity.
- Turner's Pond, an 86-acre freshwater pond that enhances the Reservation's aesthetics, increases its ecological diversity, and provides opportunities for water-based recreation.
- A mixture of wetlands, streams, and uplands.
- Nearly 4 miles of official trails for recreation.

INTERPRETIVE THEME

Acushnet Cedar Swamp contains one of the densest and purest stands of Atlantic white cedar in the state, forming one of the largest, wildest, and most impenetrable swamps in Massachusetts.

VISITOR EXPERIENCE

Acushnet Cedar Swamp provides nature-based visitor experiences, including the following:

- **Virtual Visitor Experience.** Potential visitors will find little information about Acushnet Cedar Swamp on DCR's web site. The "Find a Park" tool (<https://www.mass.gov/info-details/find-a-park>) identifies the Reservation's location and lists Hiking/Walking as activities that visitors may enjoy here. There is no additional information to help potential visitors plan a trip. The Freetown/Fall River State Forest web page does not list Acushnet Cedar Swamp as being one of its "related parks."
- **Entering the Park.** Visitors arriving at the Reservation by vehicle park along the shoulders of Shawmut Avenue, New Plainville Road, or Old Plainville Road, all in New Bedford; or along High Hill Road, Dartmouth. All formal parking areas have been closed to the public; there are no kiosks or park information to greet visitors. A Park and Forest Entrance Sign is located adjacent to the former parking area on Shawmut Avenue.
- **Water-based Recreation.** Once visitors have secured roadside parking, they may access the waters of Turner Pond to fish, canoe, or kayak. Turner Pond is an acidic warm-water pond created by the impoundment of the Paskamansett River at Old Plainville Road. Cartop boats may be launched from Shawmut Avenue, New Bedford. Visitors may access the pond shore from Shawmut Avenue, Old Plainville Road, or the trail network that connects the two.
- **Trail-based Passive Recreation.** Nearly four miles of trails around Turner Pond and throughout the northwest corner of the Reservation provide visitors the opportunity to explore the park on foot, walk their dog, or access the pond.
- **Nature photography.** Turner Pond and the cedar swamp provide striking backgrounds for photography and attract visitors from the area.

THREATS AND OPPORTUNITIES

The following information identifies potential threats to the park's natural and cultural resources and identifies opportunities to enhance their protection and stewardship. Although not considered a resource under statute (M.G.L. Part I, Title II, Chapter 21, Sections 2F), recreation is also included below because it is an important part of the park-going experience, helps define a park's values, and is a key part assessing the consistency of activities taking place in the Commonwealth's forests, parks, and reservations.

Threats and opportunities identified below are used to inform the development of management recommendations. Potential recommendations must meet prioritization criteria to be included in the Priority Recommendations table, page 16.

Natural Resources

Threats

- Hydrologic alteration has been identified as a threat to two of the Reservation's rare natural communities: Acidic Shrub Fen and Coastal Atlantic White Cedar Swamp (Swain 2020). Alteration of hydrology has the potential to negatively affect the Reservation's state-listed species, all seven of which are associated with wetlands.
- The Acidic Shrub Fen community is sensitive to trampling and could be damaged by dispersed passive recreation (e.g., Swain 2020).
- Common reed, an invasive plant, is present in three Certified Vernal Pools (numbers 7388, 7389, and 7478) and pose a threat to these resources.
- Emerald Ash Borer is believed to be present and is anticipated to significantly impact the Reservation's white ash trees in the next five years.
- Canoes and kayaks have the potential to introduce aquatic invasive plants not currently present in Turner Pond.
- Wetlands, endangered species habitat, and the visitor experience are potentially being threatened by the illegal dumping of trash and yard waste in the southeast corner of the Reservation, at closed parking areas, along road shoulders, and elsewhere in the Reservation.
- Two known geocaches are located in endangered species habitat, within the buffer of Turner Pond. Off-trail travel to these caches has the potential to degrade rare species habitat.
- Run-off from Shawmut Avenue and Old Plainville Road are flowing into Turner Pond and causing erosion along the pond shore.
- Unauthorized OHVs are being operated within the reservation, particularly in the southeast corner. It is impacting vernal pools, wetlands, and rare species habitat, and may be impacting rare species.
- During the summer, the oxygen levels in the deeper parts of Turner Pond are poor, concentrating fish in the top eight feet of the water column (Hurley 2007). Surveys indicate that the fish population is sparse due to these conditions.

Opportunities

- Suitable habitat exists in the Reservation for two additional species of state-listed invertebrates. Surveying for these species may confirm their presence in the Reservation.
- Community interest and actions taken (i.e., a volunteer clean-up day) indicate an opportunity for DCR to work with concerned citizens to keep the shores of Turner Pond clean of litter and illegally dumped materials. Such activities require coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) when taking place in rare species habitat.
- Opportunities exist to work with the City of New Bedford and the NHESP to use the Turner Pond Dam to regulate the water level in Turner Pond to maintain favorable hydrology for the Reservation's Coastal Atlantic White Cedar and Acidic Shrub Fen communities.
- The size and condition of the Reservation's Atlantic white cedar swamp make it an appropriate location for ecological research. Opportunities may exist to attract academic institutions, resource agencies, and research-focused non-profit organizations to Acushnet, for the purpose of obtaining information that may be applied to the management of the swamp and its associated resources.
- Conducting an aquatic plant survey would help identify aquatic species, both non-invasive and invasive, and generate information useful to the management of the Reservation.
- Managing common reed in Certified Vernal Pools numbers 7388, 7389, and 7478 would improve the health of these resources, allowing them to better adapt to environmental stressors.

- Implementing recommendations in the regional Invasive Plant Management Plan (BSC Group 2017) may help increase native species presence in the Reservation and decrease black swallowwort and “dense pockets” of eleven additional species of invasive plants.
- Some of the 12 potential vernal pools may provide additional breeding habitat for the Reservation’s state-listed amphibian population. Surveying these pools and certifying the as appropriate, may help better protect the Reservation’s state-listed amphibian and amphipods.
- Providing a hardened cartop boat access point and designated access points for fishing can help mitigate erosion along the pond’s shore.

Cultural Resources

Threats

- Unauthorized OHV use, such as occurs in the southeast corner of the property, has the potential to disturb below ground resources.

Opportunities

- No opportunities were identified.

Recreation

Threats

- Land and Water Conservation Fund (LWCF) monies paid for half of the Reservation’s acquisition cost. This funding carries with it several ongoing responsibilities, including maintaining the property to appear attractive and inviting to the public; keeping the property “reasonably open, accessible, and safe for public use;” keeping structures and improvements in reasonable repair to encourage public use; and posting an LWCF acknowledgement sign (NPS 2021). Not all these conditions are being met.
- The Reservation’s gateway formerly included two formal parking areas, a lot along old Plainville Road and formal parking spaces along Shawmut Avenue. The lot has been removed and the Shawmut Avenue spaces barricaded; both in response to depreciative behaviors by some visitors. This discourages public use of the property and limits access to its recreational resources. Development of new intensive use recreation facilities, such as parking lots, is not permitted in Reserves (DCR 2012).
- There is limited official information available on Acushnet Cedar Swamp. DCR’s web page does not include information on the Reservation, making it difficult for potential visitors to become aware of the property and its recreational opportunities.
- Visitors to the Reservation are provided only a single identifying sign and park information is absent from trail signs. Many visitors are unaware that they are on a DCR property and that park regulations exist.
- At the time of acquisition, a “system of interpretive trails” was planned for the Reservation (DNR 1972); it was never established. The property’s Landscape Designation of Reserve now places limits on the establishment of interpretive trails.
- Many trail segments are overgrown with vegetation, making them hard to navigate.
- Increased water levels at the pond have flooded sections of trails. User-created trails have been cut near, or on, private property to bypass these flooded areas. It is unclear if landowners are aware of, or endorse, public use of trails across their property.
- Most wetlands within the New Bedford portion of the Reservation will be exposed to flooding during 1.0%-chance floods. Approximately 4,800 feet of forest roads and single-track trails are located within the area exposed to this flooding; all are located just east of the New Bedford-Dartmouth town line.
- There is no formal boating or fishing access.

- The current launching of cartop boats at informal locations may introduce aquatic invasive plants to Turner Pond impacting pond health and recreational activities.
- A Freshwater Fish Consumption Advisory has been issued by the Massachusetts Department of Public Health (DPH) for Turner Pond (DPH 2022) due to the presence of mercury in fish tissues. Signs informing the public of this health advisory are deteriorated and unreadable.
- The Reservation does not present the appearance of an actively managed and cared for property. As a result, illegal trash/dumping, vegetation damage, and infrastructure damage are occurring, creating an unwelcoming environment for visitors.

Opportunities

- An opportunity exists to promote positive public use of the Reservation by re-establishing a formal gateway at the location of the closed parking area along Shawmut Avenue. The re-established gateway could include the portion of the existing parking area adjacent to the existing streetlight, a Main Identification sign, and kiosk with a welcome wayside panel.
- Posting information on the Reservation's history, wildlife, regulations, recreation opportunities, and DPH fish consumption advisories at the re-established gateway will inform visitors of the Reservation's amenities and regulations.
- Adding information on Acushnet Cedar Swamp to DCR's web page would allow potential visitors to become aware of the Reservation, its resources, and associated recreation opportunities. In addition, including an interpretive video on Acushnet Cedar Swamp would allow those unable to visit the Reservation or travel its hiking trails to get a sense of this unique property.
- Installing a sign identifying the area as a National Natural Landmark will inform visitors of the ecological significance of the Reservation.
- Establishing a formal cartop boat launch at the location of the current informal boat launch would create a safe launching area and decrease erosion and runoff into Turner Pond. This launch should include dedicated parking and provide information on preventing the spread of aquatic invasives.
- There is potential to establish additional trails at the Reservation and increase the maintenance of trails for visitor use. Because the property is designated as Reserve, trail density needs to remain below 3 km/km² (DCR 2019).
- The City of New Bedford's Flora B. Pierce Nature Trail has a trailhead located just south of Old Plainville Road, near Turner Pond Dam. An opportunity exists to connect this property's trails to those of the Reservation.
- The Town of Dartmouth's 2018 acquisition of the High Hill Conservation Area completed a continuous sequence of protected open space parcels between the Southeastern Massachusetts Bioreserve and Acushnet Cedar Swamp. This creates the opportunity to work with partners to establish a continuous hiking trail between the Bioreserve and the Reservation, and to connect this trail with the Reservation's trails system.

Climate Change

Climate change impacts nearly every aspect of DCR's properties, from ecosystem health, to infrastructure, to recreation. The Department is actively working to mitigate and adapt to current and future impacts through such actions as forest management, decarbonizing DCR's buildings and vehicles, protecting wetlands, and using nature-based solutions to minimize stormwater impacts. Information on these, and other, efforts is incorporated into RMPs as available and appropriate.

DCR manages its forests to provide a range of ecosystem services such as recreation, clean water, wood commodities, and wildlife habitat (DCR 2020). For ecosystems under its management, DCR carefully considers both their vulnerability to climate change and their ability to mitigate the effects of climate change by storing carbon in ecosystems and harvested wood products. Several approaches are used to monitor DCR forests and to

design forest management strategies to adapt to climate change and provide ecosystem services. (See Swanston et al. (2016) for information on adaptation strategies and approaches associated with DCR's forest management.) Established in 1957, DCR's Continuous Forest Inventory System (CFI) uses a network of more than 2,000 permanent plots on which repeated measurements are taken on an ongoing basis. The CFI measures the status, size, and health of over 100,000 trees; other vegetation; down woody material; and the forest floor. (See DCR 2014 for additional information on the CFI System.) This information helps DCR understand at a strategic scale the current character, condition, and trends of forest ecosystems under its care. DCR also uses operational inventory to help plan specific treatments and evaluate their outcomes. Using these different scales of information, remotely sensed data, and local and regional external expertise, DCR plans projects that help its stands, forests, and other lands adapt to climate change and mitigate greenhouse gas emissions. For additional information on the relationship between DCR's forest management practices and climate change, please see pages 77–85 in *Massachusetts Forest Action Plan 2020* (DCR 2020) and *Managing Our Forests...For Carbon Benefits* (<https://www.mass.gov/info-details/managing-our-forests-for-carbon-benefits>).

The Department is actively assessing the vulnerability of its properties and facilities to the anticipated impacts of climate change. A Climate Change Vulnerability Assessment (CCVA) will be used by DCR to enhance park operations and maintenance, inform resilient investment, and provide a framework for hazard mitigation and climate adaptation for natural resources, cultural resources, buildings, facilities, and other infrastructure. Property-specific climate change information derived from the CCVA is included in the RMP dashboard (see Climate Change (by 2070)).

Climate Exposure

During the preparation of Resource Management Plans some resources may be identified as having particularly high exposure to the anticipated impacts of climate change. When this occurs, these resources are described in the RMP.

Two of the Reservation's natural communities, Acidic Shrub Fen (S3-Vulnerable) and Coastal Atlantic White Cedar Swamp (S2-Imperiled), are sensitive to hydrologic changes. Atlantic White Cedar Swamps require a natural cycle of wet and dry periods for their survival and reproduction; any alteration to the natural hydroperiod threatens their persistence (Swain 2020). Changes in precipitation, or the regulation of water over the Turner Pond Dam, have the potential to impact these communities.

It is the position of the Massachusetts Natural Heritage and Endangered Species Program that state-listed species and Priority Natural Communities are likely to be highly sensitive to the anticipated impacts of climate change and that all state-listed species will be negatively affected by hydrologic changes, changes in water, soil, and air temperature, and changes in forest composition.

Applied Land Stewardship Zoning

DCR assesses the appropriate uses and stewardship of its properties at two spatial scales: the landscape level and the property level.

Landscape Designation

In 2012, DCR engaged in a comprehensive system-wide assessment of lands managed by its Division of State Parks and Recreation, designating them as Reserve, Woodland, or Parkland. (See *Landscape Designations for DCR Parks & Forests: Selection Criteria and Management Guidelines* (DCR 2012) for details.) Multiple Landscape Designations may apply to parks with diverse resources and levels of development. All of Acushnet Cedar Swamp State Reservation was designated Reserve. Identification of Land Stewardship Zones within Acushnet Cedar Swamp was performed in the context of the Reserve Landscape Designation

The following Land Stewardship Zoning is recommended to guide management and any future development. (See Land Stewardship Zoning map, page 13.)

Zone 1

Zone 1 areas have highly sensitive ecological and/or cultural resources that require additional management approaches and practices to protect and preserve these special features and their values (DCR 2012). The following areas of Acushnet Cedar Swamp have been designated Zone 1.

- The Acidic Shrub Fen natural community due to its sensitivity to both hydrologic changes and dispersed recreation (i.e., trampling).

Zone 2

Zone 2 areas provide for a balance between resource stewardship and recreational opportunities that can be appropriately sustained. They include stable yet important cultural and natural resources. These areas provide a buffer for sensitive resources, recharge areas for surface and groundwaters, and large areas where existing public recreation activities can be managed at sustainable levels (DCR 2012). The following areas of Acushnet Cedar Swamp have been designated Zone 2.

- The Coastal Atlantic White Cedar Swamp community and other wetland types not identified as being sensitive to dispersed recreation.
- All upland areas not identified as Zones 3.

Zone 3

Zone 3 areas include altered landscapes in active use and areas suitable for future administrative, maintenance, and recreation areas (DCR 2012). The following areas of Acushnet Cedar Swamp are currently developed, appropriate for potential future development, or intensively used for recreation. They have been designated Zone 3.

- Existing gateway area on Shawmut Avenue; based on the extent indicated in 2008/2009 color ortho photos.
- Parking area on Old Plainville Road; based on the extent indicated in 2008/2009 color ortho photos.
- Due to the Reservation having a Landscape Designation of Reserve, no areas have been identified for potential future development.

Significant Feature Overlay

Significant Feature Overlays provide precise management guidance to maintain or preserve recognized resources features regardless of the Land Stewardship Zone in which they occur.

- There are no Significant Feature Overlays associated with this forest.

DCR Stewardship Map Tool

This RMP should be viewed in conjunction with DCR's Stewardship Map, a GIS-based tool that allows users to view a property's natural, cultural, and recreational resources. The Stewardship Map tool is dynamic, and information continues to be updated after adoption of an RMP. Guidance for using the tool, as well as Best Management Practices for resource stewardship, are located on the Stewardship Map site: <https://dcrgis-mass-eoea.hub.arcgis.com/>.

Because authorized trails are located within State-Listed Species Habitat on this property, managers should consult an additional GIS-based tool, the NHESP 2022 Guidance Codes for DCR Trail Maintenance Map. (<https://mass-eoea.maps.arcgis.com/home/item.html?id=cb252e8df40d408c81fe8fcf690e14f6>) This tool allows users to select specific trail segments and identify restrictions and regulatory review associated with performing 10 common trail maintenance activities on these segments. Because site-specific rare species information is confidential under Massachusetts law (M.G.L. c. 66 §17D), access to this tool is restricted.

Consistency Review

Resource Management Plans “shall ensure consistency between recreation, resource protection, and sustainable forest management” (M.G.L. Part 1, Title II, Chapter 21, Section 2F). For planning purposes, an activity is considered consistent with resource protection if it has no significant, long-term, adverse impact on resources. To this end, a series of indicators were developed to evaluate the impacts of recreation and forest management on natural and cultural resources.

Many activities with the potential to negatively affect resources are already subject to agency and/or regulatory review (e.g., forest management activities, projects within Priority Habitat). For these activities, compliance with state regulations, regulatory authority guidance, DCR policies and processes, and Best Management Practices (BMPs) is considered an indicator of consistency between park use and resource protection. New indicators were generated for activities not subject to agency or regulatory review, and are based on available data, information readily identifiable via aerial imagery or site visits, assessments by DCR subject matter experts, or the property manager’s knowledge of park conditions and use. (See Consistency Assessment, page 14.

Indicators are applied during the RMP planning process to ensure a standardized assessment of consistency across all properties in the DCR system. Inconsistencies identified via the application of indicators are used to inform the development of management recommendations.

The status of indicators (Yes, No, and N/A) were accurate at the time this RMP was prepared and were used for planning purposes. ***However, they represent a snapshot in time and may not reflect future conditions.*** In addition, the status of indicators will change as recommendations get implemented.

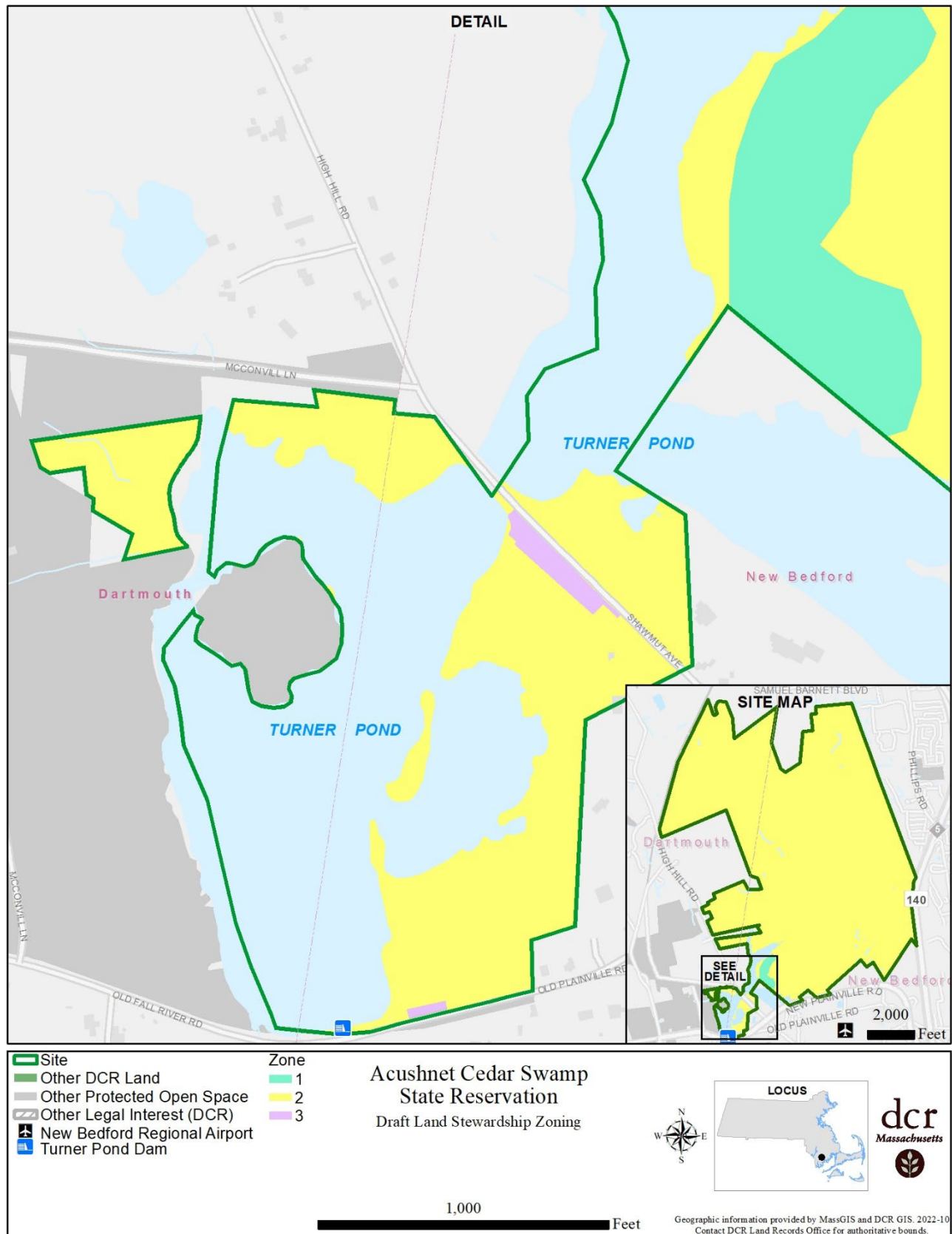
Management Recommendations

Sixteen priority management recommendations were developed for the Reservation. They are presented in the table Priority Recommendations for Acushnet Cedar Swamp State Reservation, page 16. All recommendations are of equal importance.

Priority management recommendations derive from Threats, Opportunities, and Consistency Assessment information presented in this RMP. For a recommendation to be considered a priority and listed in the table, it must meet one or more of the criteria listed below. Maintenance and management needs not meeting one or more of these criteria are not included in the table but are identified in the Threats and Opportunities sections.

The following types of recommendations are considered priority:

- Natural resource stewardship and restoration activities consistent with park identity and intended to improve ecological function and connectivity.
- Cultural resource management activities consistent with park identity and intended to prevent the loss of integrity of significant cultural resources.
- Improvements consistent with park identity that are needed to support intended park activities.
- Actions required for regulatory compliance or compliance with legal agreements.
- Activities that prevent or ameliorate threats to the health and safety of park visitors and employees.
- Activities that address inconsistencies among recreation, resource protection, and sustainable forest management, as identified through use of the Consistency Assessment checklist.



CONSISTENCY ASSESSMENT			
<i>This assessment represents a snapshot in time and may not reflect future conditions.</i>			
	Yes	No	N/A
Landscape Designation			
G.1. All development and uses of the park since 2012, or currently planned for the park, are consistent with its Landscape Designation(s).	X		
Natural Resources			
N1. All projects (normal maintenance activities, special projects, volunteer projects) conducted within Priority Habitat were reviewed and approved through DCR's internal review process and by NHESP for potential impacts to rare species and their habitats.	X		
N2. All projects conducted within areas subject to state and/or federal wetlands or waterways regulations were reviewed and approved through DCR's internal review process; reviewed and approved through the appropriate, local, state, and/or federal review process; and were carried out in accordance with the terms of a valid permit.		X	
N3. Sensitive resource areas, such as steep slopes, riverbanks, streambanks, pond and lakeshores, wetlands, and dunes are free of desire paths and other user-created trails.		X	
N4. Aquatic areas adjacent to beaches, boat ramps and launches, roads, and hiking trails are free of eroded sediments.		X	
N5. The extent of exposed soil in campground and/or picnic sites is stable or decreasing.*			X
N6. The extent of native vegetation in campground and/or picnic sites is stable or increasing.*			X
N7. Area of trail impacts in Reserves is less than 50% of total park area. (See Naughton (2021) for information on primary area of trail impacts.)	X		
N8. Congregations of breeding, migratory, or wintering wildlife are protected from disturbance by temporary (e.g., seasonal) restrictions on recreational access.		X	
N9. Geocaches, letterboxes, orienteering control locations, and other discovery destinations are located outside sensitive natural resource areas and their locations have been reviewed and approved by park personnel.*		X	
N10. Zone I wellhead protection areas are free of vehicle parking, chemical storage, or concentrated recreation.			X
N11. All boat ramps and launches have cleaning stations and/or educational signs and materials on preventing the spread of aquatic invasive organisms.*		X	
N12. For each barrier beach there is a current, approved Barrier Beach Management Plan and all beach-related activities are conducted in accordance with this plan.			X
Cultural Resources			
C1. All maintenance activities and projects with the potential to cause sub-surface disturbance are being reviewed by the DCR archaeologist for potential impacts to archaeological resources.	X		
C2. All maintenance activities and projects affecting historic properties (buildings, structures, and landscapes over 50-years-old) are being reviewed by the Office of Cultural Resources to avoid adverse impacts.	X		
C3. Historic buildings, structures, and landscapes are being used, maintained, and repaired in a manner that preserves their cultural integrity and conveys their historic significance to park visitors.	X		
C4. Recreational activities such as hiking, biking, and boating are not eroding cultural properties such as archaeological sites or historic landscapes through creation of desire lines, rutting in the landscape, damage to historic built features, or excessive scouring (erosion) of coastal and shoreline areas.		X	
C5. Geocaches, letterboxes, and other discovery destinations are located away from sensitive cultural resources, and their locations have been reviewed and approved by park personnel.	X		
C6. Historic buildings, structures, landscapes, archaeological sites, and concentrations of historic resources are located outside of areas predicted to be subject to flooding, storm surge, or sea-level rise.	X		

Consistency Assessment continues on next page.

CONSISTENCY ASSESSMENT <i>This assessment represents a snapshot in time and may not reflect future conditions.</i>			
	Yes	No	N/A
Recreation			
R1. Types of recreation, levels of recreational use, and types and extent of recreation infrastructure are consistent with the park's identity statement.	X		
R2. Trail density is consistent with the park's Landscape Designation(s). (See <i>Trails Guidelines and Best Practices Manual</i> (DCR 2019) for density thresholds.)	X		
R3. All authorized trail construction was performed in accordance with an approved Trail Proposal Form.	X		
R4. Over 90% of the park's official trails network is classified as being in Fair or better condition.		X	
R5. Recurring use by OHVs is restricted to authorized trails.*		X	
R6. There is a high level of compliance with dog leash regulations and policies.*	X		
R7. Athletic fields are free of recreation-caused impacts (e.g., bare spots) to turf.*			X
R8. Water-based recreation is consistent with: "Uses Attained" designation as identified by Mass DEP in its most current list of integrated waters (e.g., DEP 2021); DPH fish consumption advisories; and/or water quality testing at waterfront areas.	X		
R9. Recreation facilities are located outside of areas subject to flooding, storm surge, or sea-level rise.			X
Sustainable Forest Management			
F1. Forestry activities are consistent with Landscape Designation and associated forestry guidelines.	X		
F2. Forestry activities are consistent with current Forest Resource Management Plan.			X
F3. Tree cutting is performed in accordance with an approved cutting plan, if required under the Massachusetts Forest Cutting Practices Act (M.G.L. Ch. 132, Sections 40–46).			X

* As assessed by property manager.

Priority recommendations for Acushnet Cedar Swamp State Reservation. All recommendations are of equal importance.

Category	Recommendation	Implementation^a
Natural Resources	Convene a meeting among DCR, the City of New Bedford, and the Massachusetts Natural Heritage and Endangered Species Program to identify opportunities to manage water levels in Turner Pond to maximize conditions for Atlantic white cedar.	Office of Natural Resources
Natural Resources	Following appropriate review and permitting, control the occurrence of common reed in Certified Vernal Pools 7388, 7389, and 7478. Maintain actions as needed.	Contractor, Office of Natural Resources
Natural Resources	Following appropriate review and permitting, implement the <i>Invasive Plant Management Plan: South Region</i> (BSC Group 2017) for aquatic and terrestrial invasive plants throughout the Reservation. Maintain actions as needed.	Contractor, Office of Natural Resources
Natural Resources	Work with interested parties in the local community to keep the shore of Turner Pond free of litter and dumping.	Park Operations
Cultural Resources	Post the southeast corner of the reservation as a state park and closed to vehicles. Increase enforcement of OHV regulations as needed.	Forestry, Park Operations , Bureau of Ranger Services
Recreation	Reestablish a park gateway, with parking, at the former gateway location along Shawmut Avenue to encourage public use, as required by Land and Water Conservation Fund funding.	Landscape Architecture Section, Park Operations
Recreation	Install signs required under Land and Water Conservation Fund funding (NPS 2021).	Park Operations
Recreation	Develop and Install a Welcome Wayside panel; install at reestablished gateway.	Interpretive Services, Park Operations
Recreation	Contact the Office of Fishing and Boating Access to discuss the potential for establishing a hardened cartop boat launch on Shawmut Road at Turner Pond.	Engineering, Regional Staff
Recreation	Ensure that DPH Fish Consumption advisory signs are posted at fishing access locations.	Park Operations
Recreation	Close trails leading to private property or reroute trails onto DCR property and add standard DCR signs and markings to the existing trail system.	Park Operations
Recreation	Establish a DCR web page for Acushnet Cedar Swamp.	Interpretive Services
Recreation	Revisit the original concept of establishing a “series of interpretive trails” at the reservation; identify what interpretive materials may be appropriate given the park’s current use and its Landscape Designation of Reserve.	Interpretive Services
Recreation	Research land protection opportunities to enhance recreational and biological connections between Acushnet Cedar Swamp and the Southeastern Massachusetts Bioreserve.	Land Protection Program, Partner
Recreation	Develop a web-based interpretive video so that people of all abilities may be able to remotely access the Reservation’s key features.	Interpretive Services, Universal Access Program

Category	Recommendation	Implementation ^a
Recreation	Reestablish an existing trail from the Shawmut Avenue parking area to Old Plainville Road opposite the entrance to the City of New Bedford's Flora B. Pierce Nature Trail. Include distance and direction signs from the parking area to the City's trailhead.	Park Operations

a. The lead party responsible for implementation is identified in bold.

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