



Resource Management Plan Dunn State Park



Adopted by the DCR Stewardship Council Month, 2025

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

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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. c. 21, § 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. The contents of this RMP represent the best available information at the time of adoption by the Stewardship Council.

Mission and Core Principles

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 strives to be an exemplary leader in conservation and recreation. DCR's staff is passionate, dedicated, and continuously employs best practices, expertise, and a sense of place in carrying out the mission. The following core principles ground the agency in its work. For the benefit and well-being of all—people and the environment—DCR pledges to:

- Provide access to a diversity of outdoor recreational experiences and unique landscapes that is equitable, inclusive, and welcoming.
- Conserve lands, water, and forests by integrating science, research, and technical expertise into the management of our natural resources.
- Advance climate change mitigation and adaptation efforts by implementing sustainable practices and advancing resiliency across our infrastructure, assets, and resources.
- Support healthy communities by providing places for people to connect with nature and each other.
- Inspire generations of stewards by recognizing and honoring our legacy through partnerships, public engagement, and education.

Stewardship

DCR honors Indigenous peoples 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 at www.mass.gov/dcr. Contact us at mass.parks@mass.gov.

Dunn State Park

<https://www.mass.gov/locations/dunn-state-park>

1. PROPERTY OVERVIEW

Characteristic	Value
Date Established	1996
Location	Gardner
Ecoregion	Worcester Plateau
Watershed	Millers
DCR Region	Central
DCR District	Central Highlands
DCR Complex	Wachusett
Management Forestry District	Mid-State
Fire Control District	North Worcester
Size (acres)	131.8
Boundary Length (miles)	2.1
Elevation - Minimum (feet)	1,094.5
Elevation - Maximum (feet)	1,181.3
Environmental Justice (acres)	131.8
Estimated Annual Attendance (2023)	Unknown
Interpretive Programs (# programs, 2023)	230
Interpretive Programs (# attendees, 2023)	900

2. LANDSCAPE DESIGNATIONS

Designation	Acres
Parkland	131.8
Reserve	0.0
Woodland	0.0
No Designation	0.0

3. REGULATORY DESIGNATIONS

Designation	Acres
None Identified	N/A

4. LONG-TERM AGREEMENTS

Agreement	Expiration Year
None Identified	N/A

5. CONCESSIONS

Concession Type
None

6. PARTNERS & FRIENDS

Group(s)
City of Gardner

7. FEATURES OF INTEREST

Feature
Boat docks
Dunn Pond
Picnic facilities
Trail System
Universally Accessible facilities and trails

8. NATURAL RESOURCES

Resource	Value
Tree Canopy (acres)	112.7
Rivers and Streams (miles)	0.6
Open Water (acres)	17.9
Wetlands (acres)	0.9
Certified Vernal Pools (#)	0
Potential Vernal Pools (#)	0
State-Listed Species (# Regulatory)	0
State-Listed Species (# Non-Regulatory)	0
Federally Listed Species (#)	0
Aquatic Invasive Plants (# known species)	2
Terrestrial Invasive Plants (# known species)	7

9. FOREST MANAGEMENT (SINCE 2012)

Management Objective	Acres
N/A	0.0

10. HISTORY OF WILDFIRES AND CONDITIONS INFLUENCING FUTURE WILDFIRES

Wildfire Attribute	Value or Characteristic
Number of wildfires on property; 2019–2023	0
Acres burned by wildfires on property; 2019–2023	0.0
Number of wildfires in Fire Control District; 2019–2023	294
Acres burned by wildfires in Fire Control District; 2019–2023	1169.6
Type of Wildland-Urban Interface	Intermix
Predicted rate of spread, based on Fire Behavior Fuel Model 13	Rapidly Spreading

11. NATURAL HAZARDS

Hazard Type	Acres
Flood (1.0%-chance)	4.1
Flood (0.2%-chance)	32.8
Hurricane Inundation (Cat. 1)	N/A
Hurricane Inundation (Cat. 4)	N/A

12. CLIMATE CHANGE (BY 2070)

Type of Change	Amount of Change
Increase in annual days over 90° F	>30
Change in annual maximum daily rainfall (inches)	>10
Massachusetts Coastal Flood Risk Model area of inundation (acres)	N/A

13. CULTURAL RESOURCES

Resource Type	#
Archaeological	0
Historic - Total MACRIS Listed	0
Historic - National Register Listed	0
Historic - National Historic Landmark	0

14. RECREATION RESOURCES

Resource	#
Dock	1
Dunn Pond Waterfront Area	1
Fishing Piers	2
Healthy Heart Trail	1
Ice rink (seasonal)	1
Pavilion	1
Playground	2
Trail System	1

15. RECREATION ACTIVITIES

Activity
Boating (non-motorized)
Canoeing/kayaking
Cross-country skiing
Dog walking, on-leash
Educational programs
Fishing, fin fish
Geotoursim (viewing geological landforms)
Hiking/walking
Kite flying
Nature study/photography
Orienteering
Picnicking
Playground use
Races (road or trail)
Running/jogging
Scenic Vista viewing
Skiing, cross country
Snowshoeing
Swimming/Sunbathing
Wildlife viewing

16. ROADS AND TRAILS

Metric	Value
Roads - Unpaved (miles)	0.0
Roads - Paved (miles)	0.3
Forest Roads - Unpaved (miles)	0.1
Forest Roads - Paved (miles)	<0.1
Trails - Unpaved (miles)	2.2
Trails - Paved (miles)	0.4
Trails - Unauthorized (miles)	0.7
Trail Density (miles/acre)	0.027
Area of Impact (acres)	150.7

17. PARKING

Parking Resources	#
Lots	2
Parking Spaces - Total	111
Parking Spaces - Accessible (HP)	8
Parking Spaces - Other	103

INTRODUCTION

Dunn State Park (Dunn or the Park) is located in a residential section of the City of Gardner (the City), in northern Worcester County. The Park is north of Route 2 and west of Route 140 and has frontage on Route 101. Dunn is mainly bordered by residential property, roads, and undeveloped land, including the City-owned Dunn Forest to the east.

The Park is on land shaped by generations of Indigenous peoples and non-Indigenous inhabitants. Past and present Indigenous residents embody fluid, relational connections to the places and spaces now known as Dunn State Park. Groups and individuals, including peoples known as the Wabanaki (Dawnland Confederacy) and Pennacook, are recorded in available documentation (Native Land Digital 2023) as having relationships to this place over seasons and generations. The Town of Gardner is situated on the border of areas that were likely sparsely inhabited by the Nipmucs and Squakeg, due to proximity to Otter River, smaller waterways, and ponds (Massachusetts Historical Commission (MHC) 1984). Following Indigenous peoples' dispossession, Gardner was established as a town in 1785 from parts of Ashburnham, Templeton, Westminster, and Winchendon, and incorporated as a city in 1922 (MHC 1984). The Park is named after John Ainsworth Dunn (1831–1915), who owned a large chair factory in Gardner. Dunn bequeathed the land to the City, which accepted the property in 1920 so that it “shall forever be kept and maintained by the town as a wooded park and place where the people may, under proper rules and regulations, freely resort” (Richard 2021). During its tenure as a municipal park, Dunn became a popular location for winter and summer recreation with picnic facilities, a food concession, trails, and a playground. In the winter, it was also a popular destination for ice skating and pond hockey. In 1983, the Massachusetts General Court (MGC) authorized the City to convey the Dunn Pond parcel to the Commonwealth (MGC 1983); the actual transfer would not occur until 1996. In 1984, Dunn Pond was dredged and expanded, creating the recreational waterfront that we know today. The Department of Environmental Management (DEM) assumed management of the Park in 1986, expanding upon existing facilities while continuing to manage the site as a day-use area. Since then, efforts have focused on making the Park a leader in accessible recreation, with an accessible waterfront area, fishing pier, pavilion, picnic facilities, rest rooms, trails, and visitor center. Dunn State Park is considered to be “one of the [Gardner] area’s most-visited swimming and recreation areas” (Richard 2001).

Dunn State Park was originally acquired as part of Gardner Heritage State Park (HSP). In 1978, DEM and the Office of State Planning had issued requests for proposals for locations to establish urban heritage state parks throughout the Commonwealth. The Heritage State Park program’s objectives were threefold: 1) the creation of quality downtown open space; 2) the celebration of each community’s cultural heritage; and 3) the stimulation of private economic development. Gardner submitted a successful proposal that included portions of the City’s historic downtown and the (then) city-owned Dunn Park. The City’s plan was to restore select historical sites and link them with Dunn Park via a 1.5-mile semi-urban corridor along Pearl Street (Route 101). In 1982, the City sold the historic Lake Street Fire Station in downtown Gardner to the Commonwealth, with DEM opening a visitor center in the remodeled fire station in 1986. The visitor center featured exhibits on Gardner’s history of chair making and silversmithing. As mentioned previously, the Dunn State Park component of the HSP was acquired from the City in 1996. The HSP’s final parcel, a small lot next to the visitor center, was acquired in December 1997. The Visitor Center closed to the public in 2002, and by 2017 most of the exhibits had been transferred to the Gardner Museum. Chapter 147 of the Acts of 2020 authorized the

Commonwealth and the City of Gardner to enter into negotiations to convey the City's 5.4-acre Stump Pond parcel, located across Route 101 from the entrance to Dunn State Park, to DCR in exchange for the two HSP parcels containing the fire station in downtown Gardner (MGC 2020). As of June 2025, the transfer has not yet occurred and modification of the language authorizing the conveyance has been proposed (e.g., MGC 2024). Because of the anticipated transfer of the Stump Pond parcel, the parcel is shown on the Land Stewardship Zoning Map but is not otherwise addressed in this RMP. The Park was previously managed under a 1996 DEM Guidelines for Operations and Lands Stewardship (GOALS) plan for the Northeastern Connecticut Valley Region (DEM 1997).

Dunn State Park is a day-use area that provides a wooded, pond-side experience nestled in a quiet neighborhood. The Park consists of the approximately 18-acre pond and 110 acres of surrounding land comprised mainly of evergreen forest, deciduous forest, and wooded wetlands. The Park is unique in the DCR system due to the high concentration of accessible facilities and its proximity to Massachusetts' major metropolitan areas. Dunn provides a destination for people with disabilities due to its Universally Accessible recreational features and activities, including trails, picnic areas, beach, and playgrounds. Dunn provides many opportunities for winter recreation, including ice fishing on Dunn Pond when conditions are favorable. Dunn Pond also provides recreational opportunities for summer swimming, boating, and fishing. Two Universally Accessible fishing piers allow anglers of all abilities to take advantage of the brown trout and rainbow trout stocked in Dunn Pond. Surrounding residents often visit Dunn for a light hike and dog walking around the pond or through the Park's wooded area.

PARK IDENTITY

Dunn State Park is strongly identified with its namesake feature, Dunn Pond, which provides opportunities for swimming, fishing, and ice fishing. Over the years, numerous accessible recreation facilities have been constructed and accessible recreation activities implemented. As a result, Dunn has a high concentration of accessible features, which has made it a popular year-round recreation area with an emphasis on Universal Access. Future activities and improvements should expand upon Dunn's identity as a park that provides nature-based recreation opportunities for all visitors.

DEFINING RESOURCES AND VALUES

Resources that define the Park are related to Dunn Pond, its surrounding open space, and the numerous recreation opportunities that it provides. They include:

- Accessible pathways connect many universally accessible recreational resources, including an accessible visitor center, dock, fishing piers, pavilion, trail, and beach. These Universally Accessible resources serve as a model for other DCR properties.
- Dunn Pond, the main attraction, provides numerous opportunities for recreation, including fishing, boating, and swimming. The pond also adds to the Park's aesthetics, being visible from numerous overlooks and trails in the Park.
- A well-developed trail system that provides opportunities to explore the Park and find solitude in the woods. This trail system includes an accessible trail and an accessible trail map.
- Playgrounds and nearby picnic areas provide spaces for families to gather, enjoy a meal, and relax.
- The Park provides recreational amenities to, and enhances environmental quality and equity for, an Environmental Justice (EJ) community.

STATEMENTS OF SIGNIFICANCE

Statements of Significance describe the importance or distinctiveness of a place and its resources (National Park Service (NPS) 1998). These statements reflect current scholarly inquiry and interpretation and go beyond a simple listing of resources to include contextual information that makes the facts more meaningful. Significance statements cover the following categories of information:

- The property's significance at the time of its establishment.
- How the property, or society's understanding of the property, has changed since its acquisition that makes it significant or unique within the state park system today.
- The property's role in recreation and its importance to the community it supports, particularly regarding activities that are unique to that property.

For park planning, these statements focus management actions on the preservation and enjoyment of those attributes that most directly contribute to the importance of the place. For interpretive planning, they comprise the information upon which the interpretive themes and overall program are built.

The following Statements of Significance have been identified for Dunn State Park. The sequence of these statements does not reflect their level of significance.

- The Park represents the generosity of industrialist John Ainsworth Dunn and his belief that people should have a place where they could enjoy the outdoors.
- The Park was not just created by preserving an existing woodland and pond, instead humans modified the landscape to suit their needs, transforming a meadow into a scenic pond.
- The recreation opportunities at Dunn Park offered workers and their families an opportunity to recharge from the factory work they performed the rest of the week.
- The Dunn Park Universal Access amenities are meant to serve as a model for recreation accessibility on the Commonwealth's state forests and parks. It represents the cooperative efforts of the Federal, State, and City governments for the benefit of all.

UNIFYING THEME

The Unifying Theme is a statement that ties a property's stories together and shapes the overall interpretive message that DCR wants to share with visitors in their experience at the property. The theme provides an overarching conclusion for visitors to contemplate (Ham 2013) and answers the question "so what?" The theme guides all interpretation for the park, both personal (i.e., formal and informal interactions with visitors) and non-personal (e.g., exhibits, signage, brochures).

The Unifying Theme for Dunn State Park is:

Recreational opportunities in a natural setting build a better quality of life for individuals, families, and communities.

VISITOR EXPERIENCE

Dunn State Park provides a variety of visitor experiences, including the following:

- **Virtual Experience.** Potential visitors will find detailed information about Dunn State Park on DCR's web site. The Forest has its own web page that provides potential visitors information needed to plan a visit. (<https://www.mass.gov/locations/dunn-state-park>)
- **Entering the Park.** Visitors enter the main Park entrance on Central Street through a formal gateway, greeted by a maintained lawn and Main Identification Sign. Just past the entrance is a large parking area, providing quick access to the Visitor Center and Dunn Pond beach. The Betty Spring Lot on Betty Spring Road provides additional ADA seasonal parking for universally accessible recreational opportunities along the pond's southern shore, near Dunn Pond Dam.
- **Pond House Visitor Center.** This facility provides essential services and acts as the central point from which visitors may obtain information before exploring the Park. During winter, visitors can warm fingers and toes by the roaring fire in the Visitor Center. The Pond House also serves as a gathering spot for park-related meetings and programming throughout the year.
- **Waterfront Area.** Visitors of all ages can spend a summer day sunbathing on the beach or cooling off swimming in the waterfront area. Lifeguards are present from mid-June through mid-August. Beach mat and beach wheelchairs are provided.
- **Water-based Passive Recreation.** Bringing their own car top boats, visitors may kayak or canoe around Dunn Pond, launching from the accessible dock near the Visitor Center. Anglers may fish for brown and rainbow trout, stocked twice a year by the Massachusetts Division of Fisheries and Wildlife, accessing the pond from two accessible fishing piers, one near the Pond House Visitor Center and the second near the Betty Spring Road parking area.
- **Trail-based Passive Recreation.** Just under 3 miles of official trails and forest roads invite visitors to enjoy views of the pond or meander through the forest on foot, by wheelchair, cross-country skis, or snowshoes. The Woodland Trail is accessible, providing glimpses of Dunn Pond along the route.

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 recreation is not considered a resource under statute (M.G.L. c. 21, § 2F), it is included below because recreation is an important part of the park-going experience, helps define a park's values, and is a key part of 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 (Table 19, page 26).

Natural Resources

Threats

- The water quality in Dunn Pond is threatened by watershed inputs to the pond from the surrounding areas, including nearby septic systems and untreated stormwater runoff flowing into the pond from multiple sources, such as parking lots, roadways, and walkways.
- Erosion of walkways and trails, near and upgradient of the pond, are adding to sedimentation in Dunn Pond.

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- OHVs may be coming into the Park from adjacent roadways, impacting vegetation close to the pond.
- Non-native aquatic plant growth in the pond, including European watermilfoil, threatens native aquatic plant habitat, overall biodiversity, and ability to sustain future fish populations.
- There is limited information on the presence or distribution of invasive plants in Dunn. Such information is needed to determine if any sensitive resources are being impacted by invasive plants
- Many visitors take advantage of Dunn Pond's recreational opportunities during the summer, including swimming, potentially negatively impacting water chemistry and sediment load through overuse.
- Construction damage and soil compaction in the picnic area and along the Healthy Heart Trail has led to dead and declining trees.
- There is at least one unapproved geocache in the Forest. Inappropriately located geocaches may threaten sensitive natural resources. The known geocache is located far from an official trail.
- The Park is located within the Quabbin-to-Cardigan Partnership's (Q2C) project area. This initiative is a public-private collaborative effort to conserve the Monadnock Highlands of north-central Massachusetts and western New Hampshire. The Park's location within the project area offers opportunities to participate in organizational partnerships, grants, and land acquisitions in support of DCR's and Q2C's mutual conservation and recreation goals (Q2C 2023).

Opportunities

- Assessing all stormwater runoff from DCR parking lots and proposing a design solution would help detain and treat the runoff.
- Working with the City of Gardner and residents to protect the watershed, including outreach about how activities like septic system maintenance can help keep Dunn Pond clean, could reduce negative impacts to Dunn Pond.
- Assessing the trails, walkways, and unvegetated areas near the pond for erosion could improve the condition of the pond by reducing sedimentation.
- The Stump Pond Lot has no Landscape Designation (DCR 2012). Assigning Landscape Designations to this lot once included as part of Dunn State Park could help with management of associated natural resources and ensure management consistent with other DCR properties statewide.
- There is an opportunity to enhance the Park's ecological integrity and biodiversity through targeted removal of invasive plant species.
- Completing an aquatic invasives survey and management plan would better inform natural resource protection.
- Dunn State Park is located within the DCR Priority Watershed "selected Millers Basin Lakes." DCR construction projects within Priority Watersheds maximize Stormwater Control Measures, potentially beyond those necessary to meet regulatory criteria (VHB 2022). By maximizing treatment, DCR addresses existing impairments in the receiving waters and contributes to improving water quality in the Priority Watershed. Designers of future projects at Dunn should review the latest Massachusetts Department of Environmental Protection (MassDEP) 303d list to understand other impairments of the receiving water and to fine tune stormwater treatment to address these pollutants, in accordance with the DCR Stormwater Design Handbook (VHB 2022).

- Developing daily limits on summer recreational activities in Dunn Pond, including swimming, could improve conditions and prevent overuse.

Cultural Resources

Threats

- No threats were identified.

Opportunities

- The Forest is recognized for its scenic, natural, and historic qualities through inclusion in the Freedom's Way National Heritage Area, which offers opportunities for agency partnerships, grants, and potentially higher visibility for the Forest (Freedom's Way Heritage Association 2015).
- The Park's central location in the Otter River watershed and Nipmuc homeland provides a central location for DCR staff to host or facilitate Indigenous peoples and cultural resource interpretive events.

Recreation

Threats

- Approximately 3% of the Park lies within the FEMA 1.0%-chance flood zone and 25% of the Park lies within the FEMA 0.2%-chance flood zone. Approximately 0.67 miles of trails, 0.04 miles of roads, the Pond House Visitor Center, deck, and waterfront area fall within the 0.2%-chance flood zone and could therefore be exposed flood damage. (These data are derived from the FEMA's paper Flood Insurance Rate Maps, or FIRMS, dating to 1979. Because of their age, FIRMS may only be used to portray zones of uncertainty and possible risks associated with flooding, not the absolute delineation of flood boundaries (MassGIS 1997).)
- Multiple threats to universal accessibility exist at Dunn, including no accessible surface for the playgrounds, trail surface conditions that may hinder accessibility on portions of the Woodland Trail, and lack of accessible routes to fitness equipment stations.
- Current trail density (0.0272 miles/acre) is slightly above the 0.0226 miles/acre (i.e., 9 km/km²) threshold for Parklands and is considered Excessive (DCR 2019).
- On the rare occasions when the parking lot fills to capacity, a staff member stands by the entrance gate directing traffic away from the Park, diverting their time away from other tasks at Dunn.
- The Park is a major local destination and visitor attendance has increased significantly over the past few years, leading to some degradation of the trails and infrastructure.
- The beach sand needs to be replenished, due to erosion from recreation activity, to maintain an active waterfront area.
- The beach access route is showing signs of age and should be replaced.
- Dunn Pond has exceeded Enterococci testing thresholds six times from 2018 to 2021, impairing a popular recreational resource at Dunn (Massachusetts Department of Public Health (DPH) 2019, 2020, 2021, 2022).
- A Public Health Fish Consumption Advisory has been issued for Dunn Pond due to the presence of mercury and Polyfluoroalkyl Substances (PFAS) hazards (DPH 2023).

- The picnic area has experienced extensive soil degradation and compaction due to use, negatively impacting aesthetics, and future use as a picnic area.
- Land and Water Conservation Fund (LWCF) monies contributed approximately \$266,000 to the redevelopment of the Park in the late 1990s. These funds carry with them a requirement for the posting an LWCF acknowledgement sign (NPS 2023). There is no such sign at the Park.

Opportunities

- Identifying areas to improve Universal Accessibility, through an Accessibility Assessment, will help Dunn State Park remain an example for Universal Access.
- Installing an accessible EZ Launch Dock would allow for accessible boating, adding another accessible recreational activity to Dunn.
- Adding an amenity like a wading pool or splash pad at Dunn could provide more reliable access to water areas, if water quality at Dunn Pond does not improve.
- Refurbishing the degraded soils of the trails and the picnic area and adding more sand at the swimming beach could enhance visitor experience.
- Removing trees that are in poor health from the picnic area would allow younger trees a better opportunity to grow and improve the health of the forest.
- Creating or updating exhibits and interpretive materials in the Pond House Visitor Center to reflect the natural and cultural history of the Park would help improve visitor experience.
- Although most of the recommendations from the Energy Audit Study of Dunn State Park (Rise Engineering 2016) have been implemented, an opportunity exists to implement the remaining recommendations and to address the items in "Other Measures Evaluated." These measures would increase visitor and staff comfort while helping the Commonwealth meet its targets for reductions in energy costs, energy consumption, and greenhouse gas emissions
- Making the necessary building updates to implement the remaining recommendations from the Energy Audit Study of Dunn (Rise Engineering 2016) would increase visitor and staff comfort while helping the Commonwealth to meet its targets for reductions in energy costs, energy consumption, and greenhouse gas emissions.
- Working with the City of Gardner to establish new trailheads at Dunn Forest and establish official trails connecting Dunn State Park and Dunn Forest would provide residents with improved/better/more access to the Park. This may also help the City of Gardner achieve goals outlined in its 2022 Draft Open Space and Recreation Plan (Leedy et al. 2023).
- The Emergency Action Plan for Dunn Pond Dam (Dam No. MA01244), classified as a Significant Hazard Potential structure, provides detailed information on how field operations personnel are to respond to dam safety issues, from minor issues to impending failure (Pare Corporation 2018). There is opportunity to increase awareness of this plan among park staff and local first responders, thereby increasing public safety.
- The entire Park is within an EJ tract. There may be opportunities to advance environmental justice and equity via DCR's Environmental Justice Strategy (see pages 79–88 in Massachusetts Executive Office of Energy and Environmental Affairs (EEA) 2024a), in alignment with the EEA's EJ Policy (EEA 2021) and the Executive Order on Environmental Justice (No. 552) (Patrick 2014).

CLIMATE CHANGE

Climate change impacts nearly every aspect of DCR's properties, from ecosystem health, to infrastructure, to recreation. (See DCR 2024 for an overview of these impacts.) The Department is actively working to mitigate and adapt to current and future impacts through such actions as forest management; decarbonizing DCR's buildings, vehicles, and power equipment; 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.

Any discussion of climate change requires a shared understanding of terminology. Because of this, this RMP section adopts commonly accepted terms to the greatest extent possible. In general, climate-related technical terms used in this RMP are as defined in the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2021). Exceptions to this are the terms Adaptation, Risk, and Sensitivity, which are used as defined in DCR's Climate Change Vulnerability Assessment (CCVA; Weston and Sampson 2022).

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 (CFI) system 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 2022 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. The conservation and science-based management of forest lands are an essential element to ensuring crucial carbon storage and advancing climate change resilience (EEA 2024b). 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 (DCR 2023).

The Department is actively assessing and addressing the vulnerability of its properties and facilities to the impacts of climate change. In 2022, DCR conducted a Climate Change Vulnerability Assessment (Weston and Sampson 2022). Findings from this CCVA are being 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, recreational activities, buildings, facilities, and other infrastructure. Property-specific climate change information from the CCVA is included in the Climate Change (by 2070) table (Table 12) at the beginning of this RMP. An overview of the impacts of climate change on DCR facilities and operations is presented in the DCR Climate Impacts Story Map (DCR 2024).

Climate Exposure and Impacts

A summary of the ways in which the Commonwealth's natural, cultural, and recreational resources may be impacted by climate change is provided below. During the preparation of Resource Management Plans some resources may be identified as having particularly high exposure and/or sensitivity to the anticipated hazards or consequences of climate change. When this occurs, these resources and the projected impacts to them are described. In some instances, the potential impacts of climate change on a given resource are not well understood. When this occurs, only exposure is discussed.

Natural Resources—General Impacts

Climate change affects temperature, precipitation, and atmospheric and ocean chemistry, which in turn directly and indirectly affect the natural environment, including the plants, animals, and natural communities of DCR's forests, parks, and reservations.

Climate is known to influence the presence, absence, distribution, reproductive success, and survival of both native and non-native plants (Finch et al. 2021). Native northern and boreal species, including balsam fir, red spruce, and black spruce may fare worse under future conditions, but other species may benefit from the projected changes in climate (Janowiak et al. 2018). Some non-native invasive species will be affected by climate change while others will remain unaffected, and some non-invasive non-native species are likely to become invasive (Finch et al. 2021). In general, elevated temperature and CO₂ enrichment associated with climate change increases the performance of non-native plants more strongly than the performance of native plants (Liu et al. 2017). Climate change may result in the presence of new non-native invasive plants on a property, and changes to the distribution and/or abundance of invasives already present on a property.

Exposure to a changing climate affects wildlife in a variety of ways. For animals that live in or near aquatic environments, "changes in habitat and hydrological regimes are expected to shift their abundance and distribution" (Isaak et al. 2018: 89). Impacts to terrestrial animals are expected to be highly variable (Halofsky et al. 2018) but may be considered to fall into the following four categories: 1. habitat loss and fragmentation; 2. physiological sensitivities (i.e., innate characteristics that influence the ability to cope with changing temperature and precipitation conditions); 3. alterations in the timing of species' life cycles; and 4. indirect effects (e.g., disruption of ecological relationships)). Although all Northeast wildlife are exposed to hazards associated with climate change, some groups, "including montane birds, salamanders, cold-adapted fish, and freshwater mussels, could be particularly affected by changing temperatures, precipitation, sea and lake level, and ocean processes" (Massachusetts Division of Fisheries and Wildlife (MassWildlife) 2015: 357). In addition, 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 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.

Natural Resources—Property-Specific Exposure and Impacts

No natural resources with known elevated exposure or sensitivity to potential consequences of climate change were identified at this property.

Cultural Resources—General Impacts

Climate change may negatively affect cultural resources, their preservation, and maintenance (EEA 2022; International Council on Monuments and Sites (ICOMOS) Climate Change and Cultural Heritage Working Group 2019; Rockman et al. 2016: 3, 18; United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Center 2007). In Massachusetts, cultural resources may be exposed to the following natural phenomena that are correlated with adverse impacts: higher annual average temperature (especially in winter), increased numbers of freeze-thaw cycles, increased precipitation intensity, higher relative humidity, higher wind speeds, an increase in severe storm events, increased numbers and severity of wildfires, more severe seasonal droughts, increase in number and severity of inland flood events, increased coastal flooding and erosion, increased probability of landslides, changes in groundwater levels, shifts in native and invasive species distribution, performance, and phenology; and changes in oceanic and atmospheric chemistry (Rockman et al. 2016; Commonwealth of Massachusetts 2023: 5.1-31–5.1-61).

The phenomena listed above may produce a variety of adverse impacts to Massachusetts' cultural resources. Sensitivity and potential impacts vary based on resource category (i.e., archaeological sites, cultural landscapes, ethnographic landscapes and sites, and buildings and structures). Resource-specific factors such as location, design, materials, condition, etc. will also influence sensitivity and consequent impacts. All categories of cultural resources may be subject to complete or partial destruction through wildfire, inland flooding, sea level rise, storm surge, or landslides. Additionally, these resource categories may be subject to other types of impacts, as follows. Archaeological sites may have site stratigraphy disrupted by changes in hydrography, may suffer accelerated decomposition of artifacts and features, and may be impacted inadvertently during disaster response. Cultural landscapes may lose plantings due to a variety of stressors (e.g., drought or flood, pests, soil salinity), may be infiltrated by invasives, may be eroded by surface runoff, may experience more rapid deterioration of hardscaping and site furnishings, and may be damaged by high wind or heavy snow events. Ethnographic landscapes, traditional cultural places, and associated communities (including Indigenous peoples) may suffer both tangible and intangible impacts such as loss or diminishment of natural species used for food, ceremony, or medicine; alterations in timing of hunts, etc.; increased difficulty of vulnerable subgroups (e.g., the elderly) to perform outdoor tasks; and a loss of cultural knowledge associated with resources and practices. Buildings and structures may be damaged or destroyed by high wind or heavy snow events, suffer accelerated deterioration through a variety of mechanisms (e.g., elevated humidity, chemical reactions, destructive pests and organisms), may be destabilized by hydrological changes, or be damaged by inadequate gutters or drainage systems (ICOMOS Climate Change and Cultural Heritage Working Group 2019: 73–89; Rockman et al. 2016: 20–24). (See Rockman et al. 2016: 19–24 for a detailed assessment of the potential impacts of climate change on cultural resources.)

Cultural Resources—Property-Specific Exposure and Impacts

No cultural resources with known elevated exposure or sensitivity to potential consequences of climate change were identified at this property.

Recreation—General Impacts

Outdoor recreation and park visitation are dependent on weather and climate and will be affected by a warming climate (Wilkins and Horne 2024). Higher temperatures positively affect participation in most

outdoor activities, except snow-based activities (Wilkins and Horne 2024). “Winter is warming substantially faster than other seasons, and winter warming is especially pronounced in the...Northeastern United States” (Wilkins and Horne 2024: 15). Exposure to this climate change phenomenon is projected to significantly reduce the length of winter recreation seasons for downhill skiing, cross-country skiing, and snowmobiling, decreasing recreational opportunities and causing substantial economic impacts (Wobus et al. 2017). Whitewater rafting, primitive area use, and hunting are also projected to be negatively impacted by exposure changing weather patterns associated with climate change (Askew and Bowker 2024). Although “coldwater fishing habitat is expected to decline under a warming climate, which will likely result in fewer fishing days,” overall fishing participation in the Northeast is projected to rise “due to the more favorable temperatures” (Wilkins and Horne 2024: 11). Horseback riding on trails, boating, swimming, and visiting interpretive sites are also expected to see higher participation in the Northeast under climate change (Askew and Bowker 2018). Temperature preferences of campers indicate that the “number of ideal days” for camping will also increase (Wilkins and Horne 2024: 13). Participation in biking is also projected to increase, especially in the winter and shoulder months (Wilkins and Horne 2024: 13). Climate change may also impact outdoor recreation through increased impacts to recreation infrastructure (e.g., flooding impacts), and increased exposure to disease vectors (e.g., mosquitoes and ticks), longer pollen seasons, and heat-related illnesses (O’Toole et al. 2019).

Recreation—Property-Specific Exposure and Impacts

Recreation activities at the Park likely to be negatively impacted by exposure to weather changes resulting from climate change include snow-dependent sports (i.e., cross-country skiing and snowshoeing). Other recreation activities may see increased participation, especially those associated with the waters of Dunn Pond. Fishing, swimming, and other water-based activities may experience increased participation due the anticipated increase in temperature (i.e., more than 30 additional days with temperatures over 90° F; Table 12). The temporary outdoor ice-skating rink at Dunn is exposed to warming temperature regimes associated with climate change. These temperature regimes may make the rink unusable and threaten associated UAP programming.

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 individual properties with diverse resources and levels of development. All of Dunn State Park was designated Parkland. Identification of Land Stewardship Zones within Dunn was performed in the context of the Parkland Landscape Designation.

The following Land Stewardship Zoning is recommended to guide management and any future development. (See Land Stewardship Zoning map, page 22.)

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 Dunn have been designated Zone 1.

- None Identified

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 Dunn have been designated Zone 2.

- All areas of Dunn State Park not identified as Zones 1 or 3.
- Portion of Stump Pond Lot not identified as Zone 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 Dunn are currently developed, appropriate for potential future development, or intensively used for recreation. They have been designated Zone 3.

- The existing footprint of developed recreation facilities, including the main visitor parking lot, visitor center, and waterfront areas.
- Parking area off Betty Spring Road.
- Dunn Pond Dam (NID # MA 01244) and Stump Pond Dam (NID # MA01725), including aprons, spillways, access roads, and other existing altered areas needed to operate, maintain, or repair these dams.

Significant Feature Overlay

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

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

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://dcrsgis-mass-eoeaa.hub.arcgis.com/>.

CONSISTENCY REVIEW

Resource Management Plans “shall ensure consistency between recreation, resource protection, and sustainable forest management” (M.G.L. c. 21, § 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 Table 18, page 23.)

Indicators are applied during the RMP planning process in order 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, Unknown, 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

Thirteen priority management recommendations were developed for this property. They are presented in the Table 19, page 26. 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.

Progress toward implementing priority recommendations is tracked through the use of DCR's Capital Asset Management Information System (CAMIS). The property manager should enter each recommendation listed in Table 19 (page 26) into CAMIS as a separate work order, noting "*RMP" in the description field. Non-traditional work orders (e.g., volunteer trail work, posting of DPH Fish Consumption Advisory posters, certification of vernal pools) should be closed out by the property manager, once the recommendation has been implemented.

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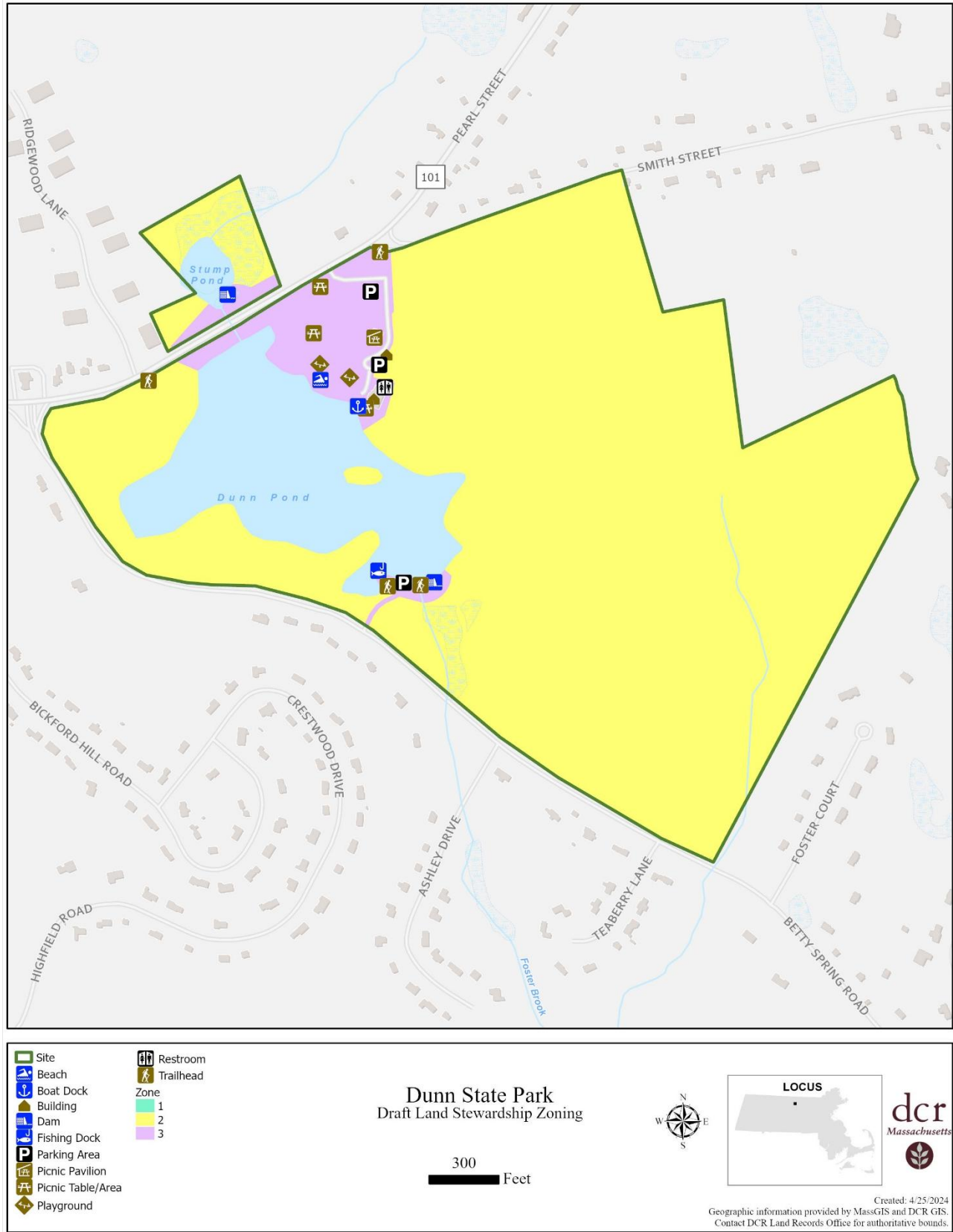


Figure 1. Land Stewardship Zoning Map.

Resource Management Plan: Dunn State Park

Table 18. Consistency Assessment. This assessment represents a snapshot in time and may not reflect future conditions.

Category	Metric	Status
Landscape Designation	1. All development and uses of the park since 2012, or currently planned for the park, are consistent with its Landscape Designation(s).	Yes
Natural Resources	1. 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.	Yes
Natural Resources	2. 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.	Yes
Natural Resources	3. 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.	No
Natural Resources	4. Aquatic areas adjacent to beaches, boat ramps and launches, roads, and hiking trails are free of eroded sediments.	No
Natural Resources	5. The extent of exposed soil in campground and/or picnic sites is stable or decreasing.	No
Natural Resources	6. The extent of native vegetation in campground and/or picnic sites is stable or increasing. (As assessed by property manager.)	No
Natural Resources	7. Area of trail impacts in Reserves is less than 50% of total area. (See Naughton (2021) for information on primary area of trail impacts.)	N/A
Natural Resources	8. Congregations of breeding, migratory, or wintering wildlife are protected from disturbance by temporary (e.g., seasonal) restrictions on recreational access.	N/A
Natural Resources	9. 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. (As assessed by property manager.)	No

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Category	Metric	Status
Natural Resources	10. Zone I wellhead protection areas are free of vehicle parking, chemical storage, or concentrated recreation.	N/A
Natural Resources	11. All boat ramps and launches have cleaning stations and/or educational signs and materials on preventing the spread of aquatic invasive organisms. (As assessed by property manager.)	No
Natural Resources	12. 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.	N/A
Cultural Resources	1. 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.	Yes
Cultural Resources	2. 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.	Yes
Cultural Resources	3. 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.	No
Cultural Resources	4. 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.	Yes
Cultural Resources	5. Geocaches, letterboxes, and other discovery destinations are located away from sensitive cultural resources, and their locations have been reviewed and approved by park personnel.	No
Cultural Resources	6. 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.	No

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Category	Metric	Status
Recreation	1. Types of recreation, levels of recreational use, and types and extent of recreation infrastructure are consistent with the park's identity statement.	Yes
Recreation	2. Trail density is consistent with the park's Landscape Designation(s). (See Trails Guidelines and Best Practices Manual (DCR 2019) for density thresholds.)	No
Recreation	3. All authorized trail construction was performed in accordance with an approved Trail Proposal Form.	Yes
Recreation	4. Over 90% of the park's official trails network is classified as being in Fair or better condition.	No
Recreation	5. Recurring use by OHVs is restricted to authorized trails. (As assessed by property manager.)	No
Recreation	6. There is a high level of compliance with dog leash regulations and policies. (As assessed by property manager.)	Yes
Recreation	7. Athletic fields are free of recreation-caused impacts (e.g., bare spots) to turf. (As assessed by property manager.)	N/A
Recreation	8. Water-based recreation is consistent with "Uses Attained" designation as identified by MassDEP in its most current integrated list of waters (e.g., MassDEP 2023); DPH fish consumption advisories; and/or water quality testing at waterfront areas.	Yes
Recreation	9. Recreation facilities are located outside of areas subject to flooding, storm surge, or sea-level rise.	No
Sustainable Forest Management	1. Forestry activities are consistent with Landscape Designation and associated forestry guidelines.	Yes
Sustainable Forest Management	2. Forestry activities are consistent with current Forest Resource Management Plan.	N/A
Sustainable Forest Management	3. Tree cutting is performed in accordance with an approved cutting plan, if required under the Massachusetts Forest Cutting Practices Act (M.G.L. c. 132, §§ 40–46).	N/A

Resource Management Plan: Dunn State Park

Table 19. Priority Recommendations for Dunn State Park. All recommendations are of equal importance. When multiple agency parties are responsible for implementing a recommendation, the lead party, or parties, are identified parenthetically in the Implementation column. Property managers should enter these recommendations as work orders in CAMIS to ensure their tracking and implementation.

Category	Recommendation	Implementation
Natural Resources	Initiate discussions with the City of Gardner regarding trail connection between Dunn State Park and Dunn Forest.	Trails and Greenways Section
Natural Resources	Apply Landscape Designations to those portions of the Park currently lacking such designations.	Management Forestry Lead), GIS Program
Natural Resources	Post educational signs and materials on preventing the spread of aquatic invasive organisms.	Park Operations
Recreation	As appropriate, promote EEA's Environmental Justice Policy goals at Dunn State Park.	Interpretive Services (Co-Lead), Land Protection Program, Park Operations (Co-Lead), Partners, Trails and Greenways Section
Recreation	As funding allows, prioritize and implement recommendations and items from "Other Measures Evaluated" section of the AEP Report (Rise Engineering 2016).	Contractor, Facilities Engineering (Lead), Park Operations
Recreation	Develop a Master Plan with an emphasis on maximizing accessible recreation facilities and activities such that Dunn may serve as a model of universal access possibility throughout the DCR system.	Interpretive Services, Landscape Architecture Section (Lead), Park Operations, Universal Access Program
Recreation	Conduct an accessibility assessment.	Universal Access Program (Lead)
Recreation	Work with the geocaching community to ensure that caches located in sensitive natural and cultural resources are relocated out of those areas and that any new geocaches are placed outside of sensitive areas and with the approval of the property manager.	Office of Cultural Resources, Office of Natural Resources, Park Operations (Lead)

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Category	Recommendation	Implementation
Recreation	Increase awareness of the Emergency Action Plan for Dunn Pond Dam (Pare Corporation 2018) among Park staff and local first responders.	Office of Dam Safety, Park Operations (Lead)
Recreation	Ensure that Department of Public Health Fish Consumption Advisory Posters (https://www.mass.gov/doc/fish-consumption-advisory-poster-for-marine-and-fresh-water-bodies-0/download) are posted at all fishing access locations.	Park Operations
Recreation	<p>Resolve trail-related threats and opportunities identified in this RMP, in accordance with Trails Guidelines and Best Practices (DCR 2019, or update), through the following actions:</p> <ul style="list-style-type: none"> • Maintain authorized trails, as identified in the DCR Trail Data Layer provided to the Natural Heritage and Endangered Species Program in 2021, and in accordance with the Recreational Trail Maintenance and Biodiversity Conservation 2021 update. • Evaluate trail segments for discontinuation or active closure, including those that are: unauthorized, unsafe, connecting to privately-owned property, located in environmentally or culturally sensitive areas, or otherwise inconsistent with DCR Trails Guidelines and Best Practices. Provide an updated trail data layer to the Natural Heritage and Endangered Species Program. • Establish new trails, as warranted, following regulatory review. Provide an updated trail data layer to the Natural Heritage and Endangered Species Program. 	Management Forestry, Office of Cultural Resources, Office of Natural Resources, Park Operations (Co-Lead), Partners, Trails and Greenways Section (Co-Lead)
Recreation	Identify opportunities to harden or reroute existing trails in areas where trail use has resulted in erosion.	Park Operations (Co-Lead), Trails and Greenways Section (Co-Lead)
Recreation	Install signs required under Land and Water Conservation Fund funding (NPS 2023).	Park Operations (Lead)

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