



Resource Management Plan Dighton Rock State Park



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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 <u>www.mass.gov/dcr</u>. Contact us at <u>mass.parks@state.ma.us</u>.

dct Massachusetts Digh	ton	Rock State Park
South Region	South	Coast District Fall River Heritage Complex "Dighton Rock" by jps246 is licensed under CC BY-ND 2.0
South Region PARK OVERVIEW Date Established Location Landscape Designation (acres) Parkland Reserve Woodland Park Size (acres) Boundary Length (miles) Annual Attendance (2020) Regulatory Designations (acres) None Identified Environmental Justice (acres) LONG-TERM AGREEMENTS None Identified None Identified Friends of Dighton Rock Museum Taunton River Watershed Alliance	South 1955 Berkley 151.0 0.0 0.0 151.0 3.5 Unknown N/A 0.0 N/A N/A N/A	Coast District Teleformation Content of the provided state of t

Contact Info:

3rd Ave., Berkley, MA 02779 https://www.mass.gov/locations/dighton-rock-state-park

NATURAL RESOURCES	
Elevation (feet above sea-level)	5.1–74.1
Water Resources	
Watershed(s)	Taunton
Rivers and Streams (miles)	1.1
Open Water (acres)	0.1
Wetlands (acres) Certified Vernal Pools (#)	22.0
Potential Vernal Pools (#)	6
Threatened & Endangered Species	
State-Listed (# Regulatory Species)	0
State-Listed (# Non-Regulatory Species)	1
Federally Listed (#)	1
Forest Cover (acres)	114.7
Known Invasive Plants (# species)	
Aquatic	1
Terrestrial	9
CLIMATE CHANGE (By 2070)	
Increase in annual days over 90° F	>30
Change in annual maximum daily	
rainfall (inches)	>10
Massachusetts Coastal Flood Risk	71.0
woder area of mundation (acres)	/1.0
NATURAL HAZARDS (ACRES))
Flood (1.0%-0.2%-chance)	41.7–61.1
Hurricane Inundation (Cat. 1–4)	14.0–71.1
FOREST MANAGEMENT	
(OBJECTIVE AND ACRES MANAGED, SINCE	2012)
N/A	0.0

CULTURAL RESOURCES (#)	
Archaeological	2
Historic (total #)	1
National Register Listed	1
National Historic Landmark	0
RECREATION RESOURCES	
Dighton Rock Museum	1
Picnic Area	1
Taunton River	1
Irails System	1
ROADS & TRAILS	
Roads (miles)	
Unpaved	0.1
Paved	0.8
Forest Roads (miles)	
Unpaved	0.4
Paved	0.0
Trails	
Unpaved (miles)	0.7
Paved (miles)	0.1
Unauthorized Trails (miles)	0.0
Area of Impact (acres)	0.01
Area of impact (acres)	/ 0.0
PARKING	
Lots (#)	1
Parking Spaces (#)	41
Accessible (HP)	1
Other	40
INTERPRETIVE PROGRAMMING	ì
(# Programs/# Contacts)	
Formal Programming (2019)	
DCR	2/50
Friends	10/250

INTRODUCTION

Dighton Rock State Park (Dighton Rock or the Park) is located in the Town of Berkley, a residential community approximately 30 miles south of Boston and 8 miles north of Fall River. It is situated on Assonet Neck, a southward-running peninsula defined by the confluence of the Taunton and Assonet Rivers. The Park is one of four DCR properties on the Taunton River, the others are Massasoit State Park (17.5 miles upriver), Sweets Knoll State Park (1.0 miles upriver), and Fall River Heritage State Park (8.0 miles downriver). All four properties are within the Bristol Lowland/Narragansett Lowland Ecoregion. Dighton Rock lies on the east bank of the Taunton River, which defines Dighton Rock's westerly boundary. Bay View Avenue defines portions of the easterly boundary of the property and provides the sole vehicle access. Residential properties with modest tracts of woods and fields bound the Park to the north and south, and portions of the east side.

The Taunton River is a federally designated Wild and Scenic River that extends 40 miles from Bridgewater to Fall River. For millennia, the Taunton River and its environs provided a "rich range of natural resources to support a sizable" Native American population prior to the arrival of European settlers (Taunton Wild and Scenic River Study Committee 2005). The river also provided an important transportation corridor. Many of the qualities that connected Native Americans to the river persist today and attract visitors to the Taunton.

The Park is on land shaped by generations of Indigenous and non-Indigenous inhabitants. Past and present Indigenous residents embody fluid, relational connections to the places and spaces now known as Dighton Rock State Park. 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. Assonet Neck, where the Park is located, is believed to have been a "heavily populated native settlement area" (Massachusetts Historical Commission (MHC) 1981). Following Native American dispossession, the Town of Berkley was incorporated in 1735, with additional land annexed from neighboring communities between 1799 and 1879 (MHC 1981). Dighton Rock was established in 1955, "for the purpose of preserving and protecting an ancient landmark known as Dighton Rock State Park, and for conservation and recreation purposes" (Massachusetts General Court 1955). It continues this mission today. The rock, which was originally located in the Taunton River, is a 40-ton, gray, feldspathic boulder with numerous cryptic inscriptions and symbols (i.e., petroglyphs) carved on a rock face 11 feet wide by 6 feet tall. Over the years, several theories (e.g., Norsemen, Portuguese explorer Miguel Corte-Real) have been put forth to explain the origin of these petroglyphs. In 2016, a 3-D laser scan and recordation of the petroglyphs identified the inscriptions as Native American. See Hunter (2017) for a discussion of various theories on the origin of the petroglyphs.

Dighton Rock rewards visitors with outstanding natural and cultural resources. It protects approximately threequarters of a mile of frontage on the Taunton River; helping to conserve its wild and scenic qualities, providing fishing access, and offering opportunities for other types of passive recreation. A small picnic grove with tables and grills is located along the river, as is a short trail. The Dighton Rock Museum, housed in a small building at the river's edge shelters the rock and interpretive panels that explain various theories concerning the origins of the petroglyphs. Dighton Rock State Park provides a peaceful place to spend a few hours or an entire day.

PARK IDENTITY AND SIGNIFICANCE

Dighton Rock State Park is strongly identified with its namesake feature, a glacial erratic that bears petroglyphs. This resource, along with the museum that exhibits the rock and provides interpretive panels on its origins, are the Park's focal points. Although the rock is the Park's main attraction, it is only part of the Park's identity. Dighton Rock's location along this particular stretch of the Taunton, and events associated with this location, led to the creation of the petroglyphs. The petroglyphs, the river, and the Native American use of the area are intertwined and are all part of the Park's identity. Future use and development of Dighton Rock should be compatible with preserving the petroglyphs, conserving the qualities of the river that first drew the Wampanoag to this specific location, and ensuring that Native American voices are a key part of the telling of the story of this site and of the petroglyphs.

Dighton Rock is significant for the following reasons:

- The Dighton Rock petroglyphs, which date to the pre-Contact period.
- The park boundaries also include the site of an early 20th century residential cottage community, represented by the former park headquarters building and several cellar holes and retaining walls in the woodlands north of the museum.
- It is one of four DCR properties along the Wild and Scenic Taunton River and provides river access for recreation.

DEFINING RESOURCES AND VALUES

Resources that define the park are related to its location along the Taunton River and to the Dighton Rock petroglyphs. They include:

- The Dighton Rock, a petroglyph-bearing boulder that once marked an important location in the Taunton River. The rock was listed in the National Register of Historic Places in 1971.
- Dighton Rock Museum, a building that houses the rock and contains interpretive panels and other displays on the theories of the petroglyphs' origins.
- A peaceful picnic area along the Taunton River.
- The walkway around the Dighton Rock Museum provides river access for taking in the scenery or fishing.

INTERPRETIVE THEME

Dighton Rock is the home to one of the best examples of petroglyphs in New England and represents a record of Indigenous peoples for whom we have few written records.

VISITOR EXPERIENCE

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

- Virtual Visitor Experience. Potential visitors will find detailed information about Dighton Rock State Park on DCR's web site. The Park has its own web page that provides potential visitors information needed to plan a visit. (https://www.mass.gov/locations/dighton-rock-state-park)
- Entering the Park. Visitors enter the park from Bay View Avenue through a formal gateway with a Forest and Park Entrance Sign; they descend a gently sloping road that winds its way to the east bank of the Taunton River. They arrive at the park's one parking area, where glimpses of the river are afforded. All recreation facilities, excepting forest trails, are in a narrow 350-foot-wide belt between the lot and the river.
- **Dighton Rock Museum**. The facility, which is operated and maintained by the Friends of Dighton Rock Museum, provides permanent interpretive displays and the Dighton Rock exhibit. Displays provide visitors with information on various theories of the petroglyph origins. The museum is open by appointment, so only those visitors with reservations may access the displays.
- **Picnicking.** A moderately-sized picnic area (fewer than 20 tables) is located approximately 100 feet from the river's edge. Its location and views draw visitors for a quiet picnic along the scenic Taunton River. Bathroom facilities, in the form of portable toilets, are located adjacent to the picnic grove.
- Fishing. With a peaceful view and easy water access, Dighton Rock is a popular destination for fishing.
- **Trail-based Passive Recreation**. Visitors seeking other recreational opportunities may access a modest trails network. Nearly 2 miles of official trails extend along the riverbank and through woodlands, providing visitors the opportunity for a light hike and park exploration.
- **Special events**. Dighton Rock offers park tours, outdoor exercise classes, river clean-ups, and cultural festivals. The Friends of Dighton Rock Museum also offers several events relating to archaeology, cultural events, and recreation.

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 17.

Natural Resources

Threats

- Approximately 30% of the Park is within the 1.0%-chance flood zone and 40% is within the 0.2%-flood zone. All buildings and parking are within the 1.0%-flood zone area.
- Dighton Rock is located along the estuarine portion of the Taunton River and is exposed to sea level rise and hurricane inundation.
- A state and federally Endangered aquatic animal uses the adjacent Taunton River. Activities within the Park that negatively affect water quality or quantity in the river may negatively affect this animal.
- Identified impairments in the section of the Taunton River adjacent to Dighton Rock include low Dissolved Oxygen, Fecal Coliform, and Total Nitrogen (Massachusetts Department of Environmental Protection (DEP) 2021). These impairments led to this stretch of the river being classified as not supporting Fish, other Aquatic Life and Wildlife.
- A Watch List plant (i.e., a plant species of known or suspected conservation concern but not protected under MESA) is present along the trail parallel to the river. The Park's population of this plant is subject to erosion, invasive plants, and human disturbance.
- There is evidence of fires and after-hours youth gatherings in sandy areas near the river. These sandy areas are suitable nesting habitat for turtles and such activities could physically alter nesting habitat and prevent female turtles from attempting to nest in this area.
- Some trail segments are located close to, or within, sensitive natural resource areas such as wetlands and potential vernal pools. Foot traffic may damage these resources.
- There are several blocked culverts in the park, creating new wetlands and/or potential vernal pools and altering the hydrology of existing wetlands.
- Erosion is occurring in several areas, including sections of the trail parallel to the river, at access points to the intertidal zone, and at road drainages on Ferry Lane. Increased erosion may cause sedimentation into the river, streams, and wetlands.
- The following 10 species of invasive plants have been identified in the Park: autumn olive, Bell's honeysuckle, common reed, garlic mustard, Japanese barberry, Japanese honeysuckle, Morrow's honeysuckle, multiflora rose, oriental bittersweet, and winged euonymus. Two Likely Invasive species (border privet and Tatarian honeysuckle) are also present. Invasive species may negatively impact both the biological health of the park and park aesthetics.

Opportunities

- Maintaining a vegetated buffer along the bank of the Taunton River would help prevent sediments and chemicals from the Park flowing into the river and degrading rare species habitat.
- Monitoring and managing the population of Watch List plant near the river, through control of sedimentation and invasive species, could help protect this species in the Park.

- Some of the six potential vernal pools may provide additional breeding habitat for the park's amphibians. Surveying and certifying these pools (Massachusetts Division of Fisheries and Wildlife 2009), as appropriate, may help better protect these animals.
- Maintaining, replacing, or installing culverts would allow for the free flow of water and decrease impacts to sensitive resource areas. Working with the Town of Berkley could address sedimentation associated with storm water runoff from roads (e.g., Ferry Lane) into the park.
- Taunton River Watershed Alliance (TRWA) is actively engaged in river clean-ups, improving water quality, providing educational programming, and more recently, turtle conservation. Opportunities exist to expand their relationship with DCR at this park.
- Establishing partnerships with nearby schools, such as UMass Dartmouth and Bristol County Agricultural High School, could encourage research into the park's natural resources and their management.

Cultural Resources

Threats

- Interpretive displays and materials in the museum do not include findings from the most recent research into the petroglyphs.
- The Taunton River has previously flooded the museum and damaged displays. The museum's proximity to the river exposes it to future flooding.
- In general, the banks of the Taunton River are considered to be highly sensitive for the potential occurrence of Native American sites and burial grounds. However, the park has not been surveyed for archaeological resources and it is unknown if these types of resources are present. Sub-surface disturbance could damage these resources if present.
- Fallen trees and vegetation growth are damaging known and other likely extant cellar holes, as well as stone walls throughout the park.
- Sections of trail extend through a cemetery and a known cellar hole, potentially causing damage to historic resources.
- At least one geocache is located near archaeological resources.
- The roof on the one remaining vacation cottage (adapted by DCR as a Headquarters, but no longer in use) that remains of an early-twentieth-century cottage community needs replacement.

Opportunities

- Update the museum's interpretive exhibits to provide a more comprehensive, inclusive, and accessible visitor experience. Incorporate recent findings that the petroglyphs are of Native American origin.
- There is an opportunity to engage representatives of the Pauquunaukit (Pokanoket) Wampanoag or other tribes (as appropriate) and other stakeholders in the decision-making process regarding the display and interpretation of Dighton Rock.
- Additional information on the park's archaeological resources would inform and enhance management of these resources.
- Vegetation management could help stabilize features such as cellar holes and stone walls.
- Researching the early 20th century cottage community would improve understanding of the potential significance of standing building(s) and archaeological resources associated with this aspect of the Park's history, add to park interpretation, and provide guidance on appropriate means to protect these resources (if required).

Recreation

Threats

- The Dighton Rock Museum, cottage/former Headquarters, picnic area, parking lot, nearly 0.2 miles of paved road, 0.1 miles of unpaved road, and 0.3 miles of trails are all located within the area predicted to be impacted by a 1.0%-chance flood. An additional 0.04 miles of paved road and 0.11 miles of trails are within the predicted to be impacted by the 0.2%-chance flood.
- Dighton Rock Museum and the vacation cottage/former Headquarters are exposed to the impacts of a Category 1 hurricane, the west edge of the parking lot is exposed to the impacts of a Category 2 storm, the remainder of the parking lot is exposed to Category 3 storms, and the park's well is exposed to Category 4 storms.
- The picnic area (e.g., grills, tables, vegetation) need maintenance and improvement.
- The Dighton Rock Museum is located in an unstable environment (i.e., along a river) and is subject to variable temperature and humidity. These conditions have led to portions of the rock starting to spall and damage to exhibits within the museum, and damage to the museum's building envelope.
- Some trails are poorly marked and overgrown.
- The designated accessible (HP) parking space may not be truly accessible, and it lacks proper signs.
- The Park's portable toilets are located far from accessible parking and are not connected by an accessible path.
- Recreation and grounds maintenance activities (e.g., mowing) have created bare spots in the ground cover and are eroding sections of the day-use area.
- There is no formal car-top boat launch area. As a result, recreationists launching boats have damaged vegetation and promoted erosion along the riverbank.
- The lack of staffing, including interpretive staff, has kept the museum closed and inaccessible to most park visitors. It is also responsible for the limited DCR interpretive programming at the Park.
- There is a low occurrence of illegal OHV use within the park.

Opportunities

- Keeping the museum open regularly, with updated displays, would provide interpretive opportunities year-round.
- The park's single entrance point makes this an ideal location to install car counters to allow for calculation of visitor numbers.
- Rehabilitating the picnic areas with accessible tables, grills, and accessible paths will attract more visitors and small group events to enjoy this scenic park.
- Construction of a pavilion would allow for group activities in the park and provide visitors shelter from inclement weather.
- Develop, design, and install a Welcome Wayside for site introduction and orientation. This would contribute to interpretation of the area in the absence of interpretive staff.
- Adding interpretive content to DCR's Dighton Rock State Park web page would provide visitors a source of interpretive information in the absence of seasonal interpreters.
- Develop an interpretive signage plan to provide information and connection to the site's natural and cultural resources.
- Installation of a Main or Cantilevered Identification Sign along the river would make the park identifiable to recreationists on the Taunton.

- A formal car-top boat launch would increase recreational opportunities at the park and eliminate boat-related damage to the riverbank.
- The park has the potential for a small nested-loop trails system away from the riverfront area.
- The Park is relatively flat between its southern boundary and the parking lot, creating opportunities for the creation of accessible trails. However, the same topography that makes the area conducive to the establishment of accessible trails also makes the area susceptible to flooding.
- Patrolling the grounds regularly could reduce the amount of illegal gatherings and protect the resources from vandalism and damage.

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.

The Massachusetts Coastal Flood Risk Model is a probabilistic sea level rise and storm surge model (Woods Hole Group et al. n.d.). The model generates high-resolution inundation predictions based on a combination of sea level rise (through 2070) and storm surge. Approximately 47% of Dighton Rock is exposed to inundation from coastal flooding. This includes all buildings, parking, the Dighton Rock Museum, the Park's water supply well, trail segments, and the western end of Delabarre Road.

The Massachusetts Natural Heritage and Endangered Species Program has identified Salt Marsh as a natural community type threatened by sea level rise (Swain 2020). An example of this community type is located on the banks of the Taunton, just north of the Dighton Rock Museum.

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 individual properties with diverse resources and levels of development. All of Dighton Rock State Park was designated Parkland. Identification of Land Stewardship Zones within Dighton Rock 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 14.)

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 Dighton Rock have been designated Zone 1.

• No areas within the park have been designated Zone 1.

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 Dighton Rock have been designated Zone 2.

• All areas 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 Dighton Rock are currently developed, appropriate for potential future development, or intensively used for recreation. They have been designated Zone 3.

- Facilities within existing altered footprint, including the Dighton Rock Museum, cottage, parking lot, picnic area, and water supply well.
- An approximately three-acre area located south of Delabarre Road, above the 0.2%-chance flood zone and the beyond the landward edge of the area impacted by a Category 4 hurricane. This area is solely reserved for *potential* future development associated with relocating park infrastructure outside of the area exposed to flood and hurricane impacts. This Zone 3 area is intended to replace, not expand, existing recreation facilities. Full regulatory review, including public input, will occur if specific development is proposed at this location.

Significant Feature Overlay

Significant Feature Overlays provide precise management guidance to maintain or preserve recognized resources features regardless of the zone in which they occur. The following Significant Feature Overlay was developed for Dighton Rock:

• Wellhead Protection Overlay. This overlay includes the Zone I Wellhead Protection Area. Within this overlay, activities must be consistent with Department of Environmental Protection guidance (DEP 2011) and should be consistent with Wellhead Protection Tips (DEP 1995).

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: <u>https://dcrsgis-mass-coeea.hub.arcgis.com/</u>.

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 15.)

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

Thirteen priority management recommendations were developed for this property. They are presented in the table Priority Recommendations for Dighton Rock State Park, page 17. 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			
This assessment represents a snapshot in time and may not reflect future conditions.		20	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).			
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.			
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.*	Х		
N6. The extent of native vegetation in campground and/or picnic sites is stable or increasing.*	Х		
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.)			Х
N8. Congregations of breeding, migratory, or wintering wildlife are protected from disturbance by temporary (e.g., seasonal) restrictions on recreational access.			Х
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.*			Х
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.		Х	

Consistency Assessment continues on next page.

CONSISTENCY ASSESSMENT This assessment represents a snapshot in time and may not reflect future conditions.		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.			
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.)			
R3. All authorized trail construction was performed in accordance with an approved Trail Proposal Form.			
R4. Over 90% of the park's official trails network is classified as being in Fair or better condition.			
R5. Recurring use by OHVs is restricted to authorized trails.*		Х	
R6. There is a high level of compliance with dog leash regulations and policies.*			
R7. Athletic fields are free of recreation-caused impacts (e.g., bare spots) to turf.*			Х
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.			
R9. Recreation facilities are located outside of areas subject to flooding, storm surge, or sea-level rise.		Х	
Sustainable Forest Management			
F1. Forestry activities are consistent with Landscape Designation and associated forestry guidelines.	Х		
F2. Forestry activities are consistent with current Forest Resource Management Plan.			Х
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.

Category	Recommendation	Implementation ^a
Natural Resources	Following appropriate review and permitting, implement the <i>Invasive Plant</i> <i>Management Plan: South Region</i> (BSC Group 2017) for aquatic and terrestrial invasive plants. Maintain actions as needed.	Office of Natural Resources, Park Operations
Natural Resources	Regularly inspect and clean culverts; replace as needed following appropriate internal and regulatory reviews.	Park Operations
Cultural Resources	Clear vegetation from cellar holes and the cemetery, in accordance with DCR Best Management Practices and redirect paths around these resources	Office of Cultural Resources, Park Operations , Volunteers
Cultural Resources	Reroute trails located in the cemetery and near cellar holes away from these cultural resources.	Office of Cultural Resources, Office of Natural Resources, Park Operations , Volunteers
Cultural Resources	Conduct a conditions assessment of the old cottage/former park headquarters. Determine if this building is appropriate for reuse given its condition and its location within the flood zone.	Contractor, Engineering , Office of Cultural Resources
Cultural Resources	Prepare a sensitivity map to identify the presence and extent of archaeological resources.	Consultant, Office of Cultural Resources
Cultural Resources	Engage local Native American tribes in the telling of the story of Dighton Rock from their perspective.	Interpretive Services, Office of Cultural Resources, Partner
Recreation	Determine if the replacement or major repair of existing recreation infrastructure, or the construction of new recreation infrastructure, is appropriate given the facilities' locations within flood and hurricane inundation zones.	Engineering, Office of Climate Resiliency
Recreation	Design, develop, and install a welcome and orientation kiosk near the parking lot.	Interpretive Services, Park Operations
Recreation	Contact the Office of Fishing and Boating Access to discuss the potential for adding a hardened car-top boat launch.	Engineering, Park Operations
Recreation	Conduct an accessibility assessment.	Contractor, Universal Access Program
Recreation	Identify opportunities to harden or reroute existing trails in areas where trail use has resulted in erosion.	Park Operations, Trails and Greenways Section
Recreation	Assess the potential for the creation of a nested loop trail system away from the park's sensitive resources.	Trails and Greenways Section

Priority recommendations for Dighton Rock State Park. All recommendations are of equal importance.

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

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