dcr
Massachusetts

Resource Management Plan
Northfield State Forest

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, 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 www.mass.gov/dcr. Contact us at mass.parks@mass.gov.

Northfield State Forest

https://www.mass.gov/locations/erving-state-forest

1. Property Overview

Characteristic	Value
Date Established	1924
Location	Northfield, Warwick
Ecoregion	Connecticut River Valley, Worcester Plateau
Watershed	Connecticut, Millers
DCR Region	Central
DCR District	Central Highlands
DCR Complex	Erving
Management Forestry District	Mid-State
Fire Control District	North Worcester
Size (acres)	3,549.8
Boundary Length (miles)	40.4
Elevation - Minimum (feet)	337.7
Elevation - Maximum (feet)	1,346.3
Environmental Justice (acres)	0.0
Estimated Annual Attendance (2023)	15,000
Interpretive Programs (# programs, 2023)	0
Interpretive Programs (# attendees, 2023)	0

2. Landscape Designations

Designation	Acres
Parkland	0.0
Reserve	0.0
Woodland	2,110.3
No Designation	1,515.7

3. Regulatory Designations

Designation	Acres
Priority Habitat (MESA)	324.1
Outstanding Resource Waters - Grandin Reservoir	160.2
Surface Water Supply Protection Zone A	52.2

4. Long-Term Agreements

Agreement	Expiration Year
None Identified	N/A

5. Concessions

Concession Type
None

6. Partners & Friends

Group(s)
Appalachian Mountain Club
Mount Grace Land Conservation Trust

7. Features of Interest

Feature
Access to Richardson-Zlogar Cabin
Garnet Rock
Garnet Rock Overlook
Keyup Brook
New England National Scenic Trail (NET)
Mill Brook
Moss Brook
Notch Mountain
Notch Mountain Overlook
Strobridge Hill
West Wait Brook

8. Natural Resources

Resource	Value
Tree Canopy (acres)	3,436.6
Rivers and Streams (miles)	10.1
Open Water (acres)	0.0
Wetlands (acres)	153.8
Certified Vernal Pools (#)	9
Potential Vernal Pools (#)	8
State-Listed Species (# Regulatory)	6
State-Listed Species (# Non-Regulatory)	1
Federally Listed Species (#)	0
Aquatic Invasive Plants (# known species)	0
Terrestrial Invasive Plants (# known species)	4

9. Forest Management (Since 2012)

Management Objective	Acres
None	N/A

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	220
Acres burned by wildfires in Fire Control District; 2019–2023	108.5
Type of Wildland-Urban Interface	Intermix
Predicted rate of spread, based on Fire Behavior Fuel Model 13	Rapid

11. Natural Hazards

Hazard Type	Acres
Flood (1.0%-chance)	No Data
Flood (0.2%-chance)	No Data
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	1
Historic - Total MACRIS Listed	3
Historic - National Register Listed	0
Historic - National Historic Landmark	0

14. Recreation Resources

Resource	#
New England National Scenic Trail	1
Trails System	1

15. Recreation Activities

Activity
Bicycling, mountain
Dog walking, off-leash area
Hiking/Walking
Horseback riding
Nature study/Photography
Snowshoeing
Snowmobiling
Wildlife viewing

16. Roads and Trails

Metric	Value
Roads - Unpaved (miles)	1.9
Roads - Paved (miles)	0.0
Forest Roads - Unpaved (miles)	4.9
Forest Roads - Paved (miles)	0.0
Trails - Unpaved (miles)	16.9
Trails - Paved (miles)	0.0
Trails - Unauthorized (miles)	5.3
Trail Density (miles/acre)	0.008
Area of Impact (acres)	1,255.9

17. Parking

Parking Resources	#
Lots	3
Parking Spaces - Total	20
Parking Spaces - Accessible (HP)	0
Parking Spaces - Other	20

INTRODUCTION

Northfield State Forest (Northfield or the Forest) is primarily located in the Town of Northfield (the Town) with a small portion in the Town of Warwick. Most of the Forest lies east of the Connecticut River, along the Northfield – Warwick town line. The rest of the Forest is located west of the river, near the Bernardston town line. East of the river, Northfield is bordered by Warwick State Forest to the east, Erving State Forest to the south, and residential properties to the west. The section of the Forest west of the Connecticut River is bordered almost entirely by permanently protected open space. Most of the Forest is situated in the Worcester Plateau Ecoregion, with the remainder in the Connecticut River Valley ecoregion. Northfield State Forest is composed of five distinct tracts (see Land Stewardship Zoning Map, page 22), they are:

- **Satan's Kingdom Tracts**. These two tracts are the only sections of the Forest located west of the Connecticut River. Situated approximately 2.5 miles northwest of downtown Northfield, these tracts contribute to a larger conservation landscape, and are almost entirely surrounded by Satan's Kingdom Wildlife Management Area (WMA) and a conservation easement associated with that WMA.
- **Notch Mountain Tract**. This tract is bordered by downtown Northfield to the west, School Street and Warwick Road to the south, the East Northfield Water Company's Louisiana Brook Watershed conservation easement and New Hampshire to the north, and vacant land and Mount Grace Land Trust's Wallace Memorial Forest to the east. This tract includes the only section of the Forest, approximately 77 acres, in the Town of Warwick.
- **Great Hemlock Tract**. This tract is located along the Northfield-Warwick town line. It borders Warwick State Forest to the east and Warwick Street to the north. A portion of the New England National Scenic Trail (NET) passes through the southern end of this tract. The NET is a 235-mile-long trail that runs north from Guilford, Connecticut, through Massachusetts, ending at the border with New Hampshire, linking to smaller trails along the way. Along its course it passes through nine DCR-owned or managed properties, the closest of which to the Forest are Erving State Forest and Warwick State Forest. The Appalachian Mountain Club (AMC) provides trail maintenance in Massachusetts, including in the Forest. See New England Trail (n.d.) for additional information. In 2023, the National Park Service (NPS) designated the NET a National Park.
- **Orange Road Tract**. This tract is located in the southeast corner of the Forest, along the Northfield-Erving-Warwick town line. This tract may be accessed from Alexander Hill Road to the north, Gulf Road to the west, Coller Cemetery Road to the South, or via the NET. The Orange Road Tract is part of a large conservation landscape. Warwick State Forest borders this tract to the east and Erving State Forest to the south. The remaining borders are comprised of other conservation lands and private rural properties. The NET passes through the northwest corner of this Tract, and connects to the Great Hemlock Tract, to the north.

The Forest is on land shaped by generations of Indigenous peoples and Non-Indigenous inhabitants. Past and present Indigenous peoples embody fluid, relational connections to the places and spaces now known as Northfield State Forest. Groups and individuals, including peoples known as the Wabanaki (Dawnland Confederacy), Pennacook, and N'dakina (Abenaki/Abenaquis), are recorded in available documentation (Native Land Digital 2023) as having relationships to this place over seasons and generations. The area now known as the Town of Northfield began experiencing European settlement

in the late 1600s with sixteen families establishing residency around 1675, many moving here from Hadley and Hatfield (Massachusetts Historical Commission (MHC) 1982). However, European settlement was often temporary, going through various iterations of settlement and abandonment, due to conflicts with Indigenous peoples. Settlers traded with Indigenous people remaining in the Northfield area, one of the latest surviving Indigenous communities in the Connecticut River Valley. Agriculture was the primary industry for the settlers and remained Northfield's primary industry throughout the 1700s, becoming more diversified and robust to meet the needs of the sawmills and grist mills being built on Mill Brook and Millers Brook. The addition of two railroad lines in the 1840s allowed wider distribution for the Town's agricultural products. The new trains encouraged industrial development in the latter 1800s in Northfield, adding canning and pickle factories and a creamery, all supported by local agricultural lands (MHC 1982). Northfield State Forest was established in 1924 when the first 235 acres were acquired (Massachusetts Department of Conservation (DOC) 1925). In 1929, a work crew improved roads and built waterholes within the Forest (DOC 1930). In 1936 the size of the Forest grew to 399 acres (DOC 1937). The state continued to add land to Northfield, reaching 2,100 acres by 1990. An additional 117 acres were acquired in 2012 using federal grant funds from the Forest Legacy Program, part of the Land and Water Conservation Fund. In 2016, over 1,200 acres were purchased from Northfield Mount Hermon School with assistance from Landscape Partnership and Community Preservation Funds as part of the Northfield Forest Conservation Landscape Partnership Project.

Northfield is comprised of many different landscapes, including open and forested wetlands, and deciduous and evergreen forests, that provide visitors with a varied outdoor experience. The Forest's extensive trail system leads visitors over rolling hills, sometimes rewarding visitors with expansive views, including those from Garnet Rock Overlook and Notch Mountain Overlook. Many of the Forest's trails extend onto nearby properties, including Erving State Forest and Warwick State Forest. Hikers on the New England National Scenic Trail pass through the Forest on their backpacking adventure.

PARK IDENTITY

Northfield State Forest is identified with the history of land conservation, protection of unique landscapes, and forestry in Massachusetts. All future activities and improvements should be consistent with the Forest's identity as a Woodland, with an emphasis on resource protection and trails-based recreation.

DEFINING RESOURCES AND VALUES

Resources that define the Forest are related to its natural features, recreational opportunities, and significant contribution towards land conservation in the region. They include:

- An extensive trail system that provides over 20 miles of forest roads and trails for passive recreation and includes portions of the New England National Scenic Trail.
- Northfield protects important natural areas in Massachusetts. Over 300 acres of Priority Habitat are located within Northfield, protecting habitat for rare and endangered species in Massachusetts. Northfield contributes to protection of four priority Natural Communities.
- The views from Garnett Hill and Notch Mountain Overlook attract visitors looking for expansive views.

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 Northfield State Forest. The sequence of these statements does not reflect their level of significance.

- Notch Mountain is designated as Priority Habitat (PH 2078). This indicates land that is known to be the geographic extent of habitat for state-listed species. These species are either at risk, or may become at risk, of extinction.
- Beyond the original intents of timber harvesting, pest control, and fire control, DCR forest management objectives have evolved to include carbon sequestration and storage, diverse wildlife habitats, forest resiliency, safety, and water quality.
- Though foresters recognized that forest management could enhance recreational activities, when they created the state forests, recreation was a secondary motivation. State forests were viewed as opportunities to provide a "wilder" recreational experience in contrast to "planned," more landscaped parks. Prior to 1933, only three forests offered recreational facilities. Over time the focus on recreation grew to the point where it is the most visible function of the agency.
- The Massachusetts State Forest system was founded on the principles of scientific forest management. These practices contrasted with ongoing un-managed destructive practices throughout the country. This effort focused on the long-term cultivation of forests to achieve a sustainable harvest. Foresters worked to maximize production and provide a sustained yield over time, aiming for long-term stewardship over short term profits. The State Forests were also meant to serve as a model for private landowners, who the state foresters assisted in this endeavor.

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 Forest, both personal (i.e., formal and informal interactions with visitors) and non-personal (e.g., exhibits, signage, brochures).

The Unifying Theme for Northfield State Forest is:

Forest management treats land as a community of interacting and interdependent parts.

VISITOR EXPERIENCE

Northfield State Forest provides a variety of visitor experiences, including the following:

- **Virtual Experience**. Potential visitors will find little information about Northfield State Forest on DCR's web site. The "Find a Park" tool (https://www.mass.gov/info-details/find-a-park) identifies the Forest's location and lists Hiking/Walking as activities that visitors may enjoy here. There is no additional information to help potential visitors plan a trip. The Erving State Forest web page does not list Northfield as being one of its "related parks."
- **Entering the Forest**. Lacking a formal gateway, visitors enter the Forest through numerous formal and informal entrances. There is no central parking area. Visitors are not greeted by a Main Identification Sign or Welcome Wayside and may not know they are in Northfield State Forest. The primary parking areas for the Forest are located on Birnam Road and School Street in the north and Collier Cemetery Road in the south. Another access point for the Forest is at the end of Alexander Hill Road, through private land.
- **Trail-based Passive Recreation**. Visitors seeking opportunities for hiking may access an extensive trails network. Over 20 miles of forest roads and trails extend through forested areas and over hills, some providing views of the Connecticut River.
- **Trail-based Active Recreation**. In the winter, under appropriate snow conditions, visitors may operate snow vehicles (i.e., snowmobiles) on designated forest roads and trails within the Forest. Trail 2, a main corridor of the Snowmobile Association of Massachusetts' trail network passes through the southern end of the Forest.
- **Hunting**. Northfield is open to all legal hunting, as are the two contiguous State Forests (Erving and Warwick) that abut Northfield.

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

- Hemlock Wooly Adelgid, a non-native insect that kills Eastern Hemlock, has been identified at Northfield, threatening the persistence of Forest's hemlocks.

- Although the Forest has not been systematically surveyed for invasive plants, the following four species are known to be present: Japanese barberry; Oriental bittersweet; glossy buckthorn; and multiflora rose.
- Although the Forest's natural communities have not been systematically surveyed, four priority natural communities have been identified. These communities, and threats to their ecological integrity and continued persistence in the Forest are identified below:
    - Hickory–Hop Hornbeam Forest/Woodland (S2 – Imperiled). The Forest's known example of this community type is located near the Notch Mountain Overlook. It is vulnerable to encroachment by invasive species and the presence of recreational trails (Swain 2020).
    - Red Maple–Black Gum Swamp (S2 – Imperiled). An example of this community type is partially located on the east side of the Notch Mountain Tract in Warwick. Most of this community type is located on adjacent private land. This community is susceptible to changes in hydrology (Swain 2020).
    - Level Bog (S3 – Vulnerable). A large example of the Level Bog community type is associated with Stevens Swamp in Northfield and Warwick State Forests. This community type is susceptible to changes in hydrology, nutrient enrichment from runoff, and peat mat degradation by trampling (Swain 2020). Trails at Northfield are in close proximity to the Level Bog, potentially contributing to its trampling.
    - Sugar Maple–Oak–Hickory Forest (S3 – Vulnerable). A very small occurrence of this community type is located near the Notch Mountain Overlook, in association with Hickory-Hop Hornbeam Forest/Woodland and a small occurrence of Dry, Rich Oak Forest/Woodland. Invasives, which have been documented within this example of Sugar Maple–Oak–Hickory Forest are a known threat to this community type (Swain 2020).
- There are at least 14 unapproved geocaches in the Forest. Inappropriately located geocaches may threaten sensitive natural resources by creating off-trail foot traffic.
- Unauthorized trail building is negatively impacting vegetation through absence of required regulatory review, and the elimination, cutting, and trampling of vegetation.
- Notch Mountain Tract contained a system of trails before DCR acquired the land. The authorized trails on this tract have not been added to the DCR Trails GIS data layer, inhibiting adequate evaluation of potential impact to natural resources.
- Extensive unauthorized Off Highway Vehicle (OHV) use is widespread in Northfield and may be negatively impacting natural resources through increased erosion and trail widening.
- Potential boundary encroachments associated with residential development exist along the Forest's boundary and may be negatively impacting natural resources at the Forest.

Opportunities

- The Forest's eight potential vernal pools may provide additional breeding habitat for the park's amphibians, including species protected under the Massachusetts Endangered Species Act (MESA; 321 CMR 10.00). Surveying and certifying these pools (Massachusetts Division of Fisheries and Wildlife (MassWildlife) 2009), as appropriate, may help better protect these animals.

- Implementing forest management strategies to increase structural diversity and species diversity throughout the Forest could help establish more resilient forest conditions.
- Managing current invasive species and monitoring/preventing future encroachment into the Priority Natural Communities near Notch Mountain could help protect the biological integrity of these communities into the future.
- Relocating trails away from the Level Bog would better protect that natural community at Northfield.
- Acquiring locational data for the trails within the Notch Mountain Tract and adding the data to the DCR Trails GIS data layers would allow better evaluation of the potential impacts to natural resources.
- Increasing the presence of Environmental Police Officers and DCR rangers would help deter unauthorized OHV use and unauthorized trail building.
- Approximately 1,515.7 acres of the Forest has no Landscape Designation (DCR 2012). Assigning Landscape Designations to these portions of the Forest could help with management of associated natural resources and ensure management consistent with other DCR properties statewide.
- Land protection opportunities exist for Forest tracts east of the Connecticut River. Land protection in these areas would protect the Forest from fragmentation and maintain ecological integrity of existing DCR lands.
- The Forest is located within the Quabbin to Cardigan Initiative'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 Forest'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).

Cultural Resources

Threats

- Current digitized and spatially referenced flood maps from Federal Emergency Management Agency (FEMA) do not cover Northfield State Forest. This limits DCR's ability to identify potential threats to cultural resources from flood events in the Forest.
- There are at least 14 unapproved geocaches in the Forest. Inappropriately located geocaches may threaten sensitive cultural resources.
- A lack of knowledge concerning archaeological resources in the Forest threatens their effective management and protection.
- Erosion from natural weather events and human recreational activities (e.g., hiking, mountain biking, OHV use, geocaching, etc.) may damage archaeolgoical resources.

Opportunities

- There is an opportunity to improve management, protection, and interpretation of significant cultural resources in the Forest through completion of a Forest-wide cultural resources reconnaissance survey in partnership with municipal, tribal, and regional entities.

- Approximately 1,515.7 acres of the Forest has no Landscape Designation (DCR 2012). Assigning Landscape Designations to these portions of the Forest could help with management of associated cultural resources and ensure management consistent with other DCR properties statewide.
- Increasing the presence of Environmental Police Officers and DCR rangers would help deter unauthorized OHV use, improving protection of known and unknown cultural resources.

Recreation

Threats

- There is limited official information available on Northfield State Forest. DCR's web page provides minimal information on the Forest, making it difficult for potential visitors to become aware of the property and its recreational opportunities.
- Parking areas do not have any official signage, potentially leading visitors to be unsure of where they are parking.
- Existing kiosks are generally devoid of information, lacking DCR signage, rules and regulations, interpretive information, or Northfield State Forest identification.
- Land and Water Conservation Fund (LWCF) monies paid for some of the Forest's acquisition cost. This funding carries with it an obligation to post an LWCF acknowledgement sign (NPS 2023). This requirement has not been met.
- Although trails in the newly acquired Notch Mountain Tract are well marked and reflect the trail colors on the posted map, the directional signs have trail names that are not reflected on the trail map posted at the parking lot.
- Trails data are out of date and do not reflect the current extent, surface, or condition of trails in the Park making park planning and trail maintenance difficult.
- Numerous unauthorized trails branching from authorized trails might confuse visitors about their location within the trail system and Forest, potentially causing them to get lost or have a negative visitor experience.
- Unauthorized OHV use is negatively impacting trails and creating negative interactions with hikers.
- There are many access points to the Forest's five tracts, making it difficult to determine attendance. As a result, the attendance figure for this Forest is an estimate.
- Views from the lookouts at Notch Mountain and Garnett Rock are threatened by tree growth which could potentially obscure the scenic vistas and make the Forest a less attractive destination for visitors.
- Current digitized and spatially referenced flood maps from FEMA do not cover Northfield State Forest. This limits DCR's ability to prepare for flood emergency operations and to identify potential threats from flood events to recreational resources in the Forest.

Opportunities

- Adding a Northfield State Forest web page to DCR's web site would allow potential visitors to become aware of the Forest, its resources, and associated recreation opportunities.
- There is opportunities to add Universal Accessibility through addition of a universally accessible trail.

- Preparing a sign plan for Northfield State Forest would increase the property's visibility within Northfield, help visitors locate parking areas and trails, and provide interpretive information for visitors.
- More accurate estimates of property visitation would better inform future planning and interpretation efforts.
- Working with the Town's Highway Department to install trail crossing signs in areas where major trails cross roads or trail access is across the street from parking, would better prepare drivers for pedestrians crossing the street.
- A trails plan exists for the Notch Mountain Tract, but not for the rest of the Forest. Expanding the trails plan to include all tracts would create a cohesive trail system throughout the entire Forest.
- Adding a shelter and/or tent site for hikers along the New England National Scenic Trail would provide through hikers with an additional opportunity to rest along the route.
- Increasing the presence of Environmental Police Officers and DCR rangers would help deter unauthorized OHV use, dumping, and other unauthorized activities.
- Maintaining the lookouts at Garnet Rock and Notch Mountain will ensure visitors can enjoy the views from these areas into the future. The Notch Mountain Overlook is in Priority Habitat.

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 (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 (Massachusetts Executive Office of Energy and Environmental Affairs (EEA) 2024). 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 CO_2 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) (Friggens et al. 2018). 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" (MassWildlife 2015: 357).

Natural Resources—Property-Specific Exposure and Impacts

Two of the Forest's priority natural communities, Level Bog and Red Maple – Black Gum Swamp, are sensitive to hydrologic changes (Swain 2020). Climate-related alterations to the natural hydroperiods of these communities threatens their persistence in the Forest.

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.

Three of the Forest's streams have been identified as Coldwater Fish Resources by the Massachusetts Division of Fisheries and Wildlife (MassWildlife). This includes West Wait Brook (Satan's Kingdom tracts), Mill Brook, a tributary of the Connecticut River, (Notch Mountain and Great Hemlock tracts), and Keyup Brook, a tributary of Millers River (Orange Road Tract). Such streams provide important habitat for coldwater species, which are typically more sensitive than other species to alterations in stream flow, water quality, and temperature (MassGIS 2021). The entire lengths of these streams within the Forest are exposed to climate impacts.

Climate change may cause some vernal pools to dry earlier in the season than they have historically, potentially interfering with amphibian life cycles (Cartwright et al. 2022). Because of this, some of the Forest's pools and associated wildlife may be negatively impacted.

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 at 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 2018). 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 Forest likely to be negatively impacted by exposure to weather changes resulting from climate change include hunting and snow-dependent sports (i.e., cross-country skiing, snowmobiling, and snowshoeing).

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 Northfield State Forest was designated Woodland. Identification of Land Stewardship Zones within Northfield was performed in the context of the Woodland Landscape Designation.

The following Land Stewardship Zoning is recommended to guide management and any future development. (See Figure 1. 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 Northfield have been designated Zone 1.

- The following natural community is known to be sensitive to trampling and should be kept trail free:
  - Example of Level Bog natural community at Stevens Swamp, to existing wetland boundary/tree line.

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 Northfield have been designated Zone 2.

- All areas not identified as Zone 3 or Zone 1.

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 Northfield are currently developed, appropriate for potential future development, or intensively used for recreation. They have been designated Zone 3.

- The existing footprint of the following parking areas, to existing tree line:
  - Birnam Road Parking
  - School Street Parking
  - Collier Cemetery Road Parking

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. The following Significant Feature Overlays were developed for Northfield.

- **Surface Water Protection Zone A**. Land uses and activities within this overlay should be consistent with Massachusetts' Drinking Water Regulations to protect surface water supplies. Refer to 310 CMR 22.20B and 310 CMR 22.20C for specific guidance.
- **Sensitive Rare Species Overlay**.Areas identified by the Massachusetts Natural Heritage and Endangered Species Program (NHESP) as providing habitat for a state-listed species sensitive to trampling and other disturbance associated with dispersed recreation. Activities and projects within this overlay, including trail-related activities, should consult with NHESPbefore project development.

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-eoeea.hub.arcgis.com/.

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

Consistency Review

Resource Management Plans "shall ensure consistency between recreation, resource protection, and sustainable forest management" (M.G.L. 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

Sixteen priority management recommendations were developed for this property. They are presented in 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.

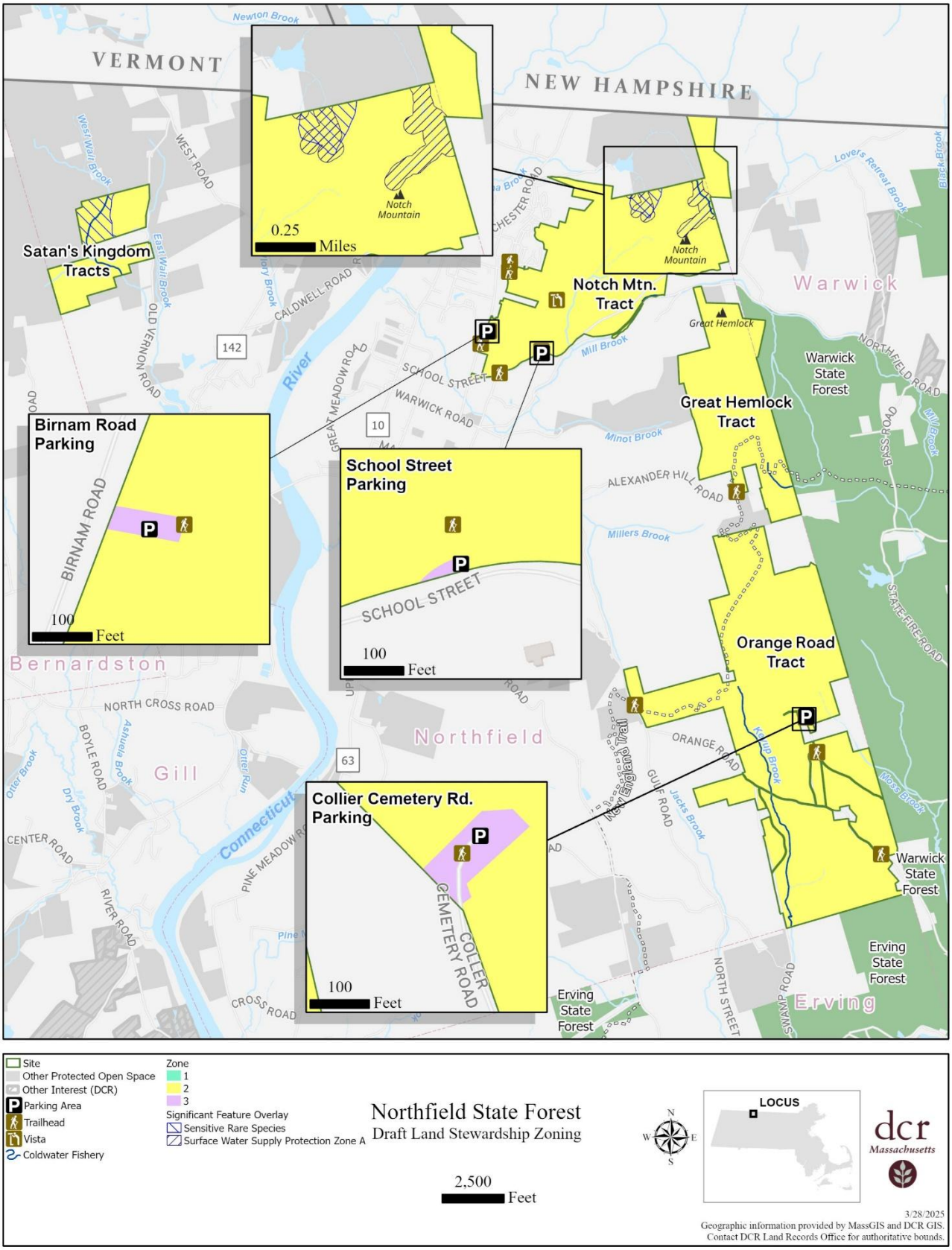

Figure 1. Land Stewardship Zoning Map.

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.	Unknown
Natural Resources	4. Aquatic areas adjacent to beaches, boat ramps and launches, roads, and hiking trails are free of eroded sediments.	N/A
Natural Resources	5. The extent of exposed soil in campground and/or picnic sites is stable or decreasing.	N/A
Natural Resources	6. The extent of native vegetation in campground and/or picnic sites is stable or increasing. (As assessed by property manager.)	N/A
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
Natural Resources	10. Zone I wellhead protection areas are free of vehicle parking, chemical storage, or concentrated recreation.	Yes

Category	Metric	Status
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.)	N/A
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.	Yes
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.	No
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.	Unknown
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.	Yes
Recreation	1. Types of recreation, levels of recreational use, and types and extent of recreation infrastructure are consistent with the park's identity statement.	No

Category	Metric	Status
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.)	Yes
Recreation	3. All authorized trail construction was performed in accordance with an approved Trail Proposal Form.	No
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.)	No
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 the Massachusetts Department of Environmental Protection (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.	N/A
Sustainable Forest Management	1. Forestry activities are consistent with Landscape Designation and associated forestry guidelines.	N/A
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.Ch. 132, §§ Sections 40–46).	N/A

Table 19. Priority Recommendations for Northfield State Forest. 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	Develop and implement a management plan for the Hickory-Hop Hornbeam Forest/Woodland and Sugar Maple - Oak - Hickory Woodland priority natural communities near Notch Mountain Overlook.	Management Forestry (Co-Lead), Office of Natural Resources (Co-Lead), Trails and Greenways Program,
Natural Resources	Survey, document, and submit documentation to certify potential vernal pools that are in NHESP habitat of MESA-protected vernal pool obligate species or in Woodland portions of the Forest, in accordance with MassWildlife (2009), as warranted.	Office of Natural Resources (Lead), Volunteers
Natural Resources	Apply Landscape Designations to those portions of the Forest currently lacking such designations.	Management Forestry (Lead), GIS Program
Natural Resources	Post interpretive and/or regulatory signs at access points to Level Bog informing visitors of the sensitive nature of these wetlands and requesting that they stay off these wetland mats.	Interpretive Services(Lead), Office of Natural Resources, Park Operations
Cultural Resources	Conduct an archaeological reconnaissance survey (950 CMR 70) in cooperation with municipal, tribal, and non-profit partners, including the Towns of Northfield and Warwick. Complete appropriate Massachusetts Historical Commission archaeological site forms for identified archaeological resources.	Consultant, Office of Cultural Resources (Lead), Partners
Recreation	Establish a Forest gateway area with parking, Identification Sign, Welcome Wayside, and kiosk.	Design & Project Management (Lead), Facilities Engineering, Management Forestry, Interpretive Services, Park Operations

Category	Recommendation	Implementation
Recreation	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: • 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	Acquire locational data for the trails within the Notch Mountain Tract and add the data to the DCR Trails GIS data layers.	Park Operations, GIS Program, Office of Natural Resources,
Recreation	Establish a DCR web page for the Forest.	Interpretive Services, Regional Staff (Lead), Park Operations, Web Content Creator
Recreation	Following field staff review of OHV use in the Forest, add barriers, such as gates, as appropriate, to deter OHV use.	Park Operations
Recreation	Coordinate with the Northfield Highway Department to install Trail Crossing signs at major trail crossings and where parking areas are located on the opposite side of the road as parking.	Facilities Engineering, Park Operations, Trails and Greenways Program (Lead)

Category	Recommendation	Implementation
Recreation	Increase the presence of Environmental Police Officers, DCR Rangers, and Forest operations staff, as appropriate and available, in areas with high OHV use.	Ranger Bureau (Co-Lead), Regional Staff (Co-Lead), Park Operations
Recreation	Update the DCR trails data layer to include roads, trails, and points on recently acquired parcels, including the Notch Mountain Tract, and create a new trail map.	Trails and Greenways Program, GIS Program
Recreation	Manage vegetation at Garnett Rock Overlook to maintain views for visitors. Develop and implement a Habitat Management Plan for the Notch Mountain Overlook in Priority Habitat.	Office of Natural Resources (Lead), Management Forestry, Park Operations
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 locations of 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)
Recreation	Install a permanent Land and Water Conservation Fund acknowledgement sign at the Orange Road Tract in accordance with funding requirements (NPS 2023).	Interpretive Services, Land Protection Program, Park Operations (Lead),

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