

Middlesex Fells Planning Unit Resource Management Plan



DCR Mission Statement



Spot Pond, DCR Archives

*To protect, promote and enhance our
common wealth of natural, cultural and
recreational resources.*



1893, the Massachusetts Legislature established the Metropolitan Parks Commission (MPC), with the authority to “acquire, maintain and make available to the inhabitants of said district open spaces for exercise and recreation”

Management Principle

“Through the creative use of state management resources, partnerships and volunteer stewardship; protect the cultural and ecological resources at the Middlesex Fells Reservation and provide diverse recreational opportunities that are compatible with resource protection.”



Reservoir trail, Paul Jahning



Orange swallow moth, Mike Nelson

Format of the RMP



The Cascades, Bryan Hamlin

- Executive Summary
- I. Introduction
- II. Existing Conditions
- III. Management Resources and Practices
- IV. Issues Discussion
- V. Management Recommendations
- Appendices

Goal: Protect water resources

Existing Conditions / Findings:



Fells Reservoir, MWRA

- 12% of the reservation (325 acres) is surface water
- Spot Pond and Fells Reservoir are back-up and active MWRA water supply
- 223 acres of the reservation are Zone A for three Winchester drinking water reservoirs
- 129 vernal pools
- 145 acres of wetland resources

Goal: Protect and enhance habitats for rare species, natural communities, and native plants and animals.



Ridgetop Pitch Pine Scrub Oak Community, Paul Jahrlige

Existing Conditions / Findings:

- 9 rare species
- 10 occurrences of 5 Priority Natural Communities
- One newly described Priority Natural Community
- 869 plant species, 564 native plants, 84 uncommon for the region
- 185 bird species, including 27 species in need of conservation
- 21 mammal species, 7 reptiles and 10 amphibians confirmed at the Fells

Goal: Preserve the cultural resources of the reservation



Pre-contact archaeological finds, DCR

Existing Conditions / Findings:

- 6 recorded pre-contact archaeological sites
- Historic archaeological resources including Spot Pond Brook Archaeological District
- 47 historic buildings and structures
- Cultural landscapes including the Sheepfold, Bellevue Pond and the Reservoir System

Goal: Provide Diverse Opportunities for Sustainable Outdoor Recreation



Young mountain bikers, GB-NEMBA

Existing Conditions / Findings:

- 122 miles of trail
- 22 miles of un-authorized, user-created trails
- Heavy recreational trail use by hikers, mountain bikers, dog-walkers, runners, skiers and others
- Off-trail and user-created trails impact soils, vegetation, wildlife, natural communities and wetlands
- Skating at the Flynn Rink
- Swimming at the Hall Pool
- Boating at Spot Pond Boating

Goal: Enhance compliance with rules and regulations to protect resources and enhance recreational experiences



Camping, litter and fires, Mike Nelson

Existing Conditions / Findings:

- High level of conflicting interests among stakeholder groups and some users
- Culture of non-compliance at the reservation
 - Off-leash dogs
 - Off-trail recreation
 - Trespassing on posted lands
 - Biking on pedestrian only trails
- Trail system design contributes to compliance and conflict issues
- Lack of enforcement presence
- Cooperation with / among stakeholder

Goal: Interpret the natural and cultural resources of the Fells



Virginia Wood historic trail, DCR

Existing Conditions / Findings:

- Rangers and staff provide some education and interpretation
- Many partner organizations provide numerous educational and interpretive programs
- Need identified for better maps, signs

Goal: Work with diverse partners and volunteers to achieve these management goals



ParkServe Day, DCR

Existing Conditions / Findings:

- DCR operating budget decreased by 30% from fiscal year 2009 to 2011
- Individuals have a strong sense of attachment to the Fells
- Strong stakeholder organizations can provide valuable organizing, labor and financial resources

Section IV: Issues Discussion

- Land Stewardship Zoning
- Pedestrian and Mountain Biking Recreation
- Recreation with Dogs
- Rules Compliance and Enforcement

Land Stewardship Zoning

Zone 1: “highly sensitive natural and cultural resources that require special management approaches and practices to protect and preserve their features and values”

Land Stewardship Zoning

Table 4.3.3. Zone 1 Areas at the DCR Middlesex Fells Reservation

Spot Pond Brook Archaeological District

Occurrences of:

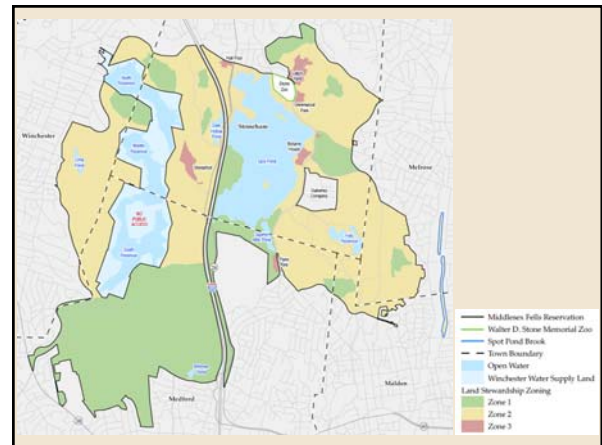
- Ridgtop pitch pine scrub oak
- Circumneutral rocky summit/rock outcrop
- Circumneutral talus forest/woodland
- Sugar maple-oak-hickory forest

Buffered known locations of:

- Large-bracted tick trefoil
- Cankerweed
- American clam shrimp
- Name not disclosed insect
- Early buttercup
- Allegheny buttercup
- Rock knotweed
- Rock spikemoss

Trail-free areas over 10 acres

Southern block of Vernal Pool Core Habitat



Evaluating Consistency between Recreation and Resource Protection

Criteria for Evaluation

- Public demand for the recreational activity
- Susceptibility of important natural and cultural resources to damage from the specific recreational activities
- Public safety
- Recreational experiences
- Management considerations

Evaluating Consistency between Recreation and Resource Protection

Criteria Evaluating the Environmental Impacts

- Characteristics of the Environment:
 - Resistance: the ability of particular soils, vegetation, and wildlife to withstand impacts without significant damage
 - Resilience: the ability to particular soils, vegetation, and wildlife recover following impacts
- Characteristics of the Activity:
 - Amount of use
 - Type of use
 - Behavior of users
 - Spatial distribution of use
 - Temporal distribution of use

Primary Findings

- Natural Resources are well documented, diverse, extensive and in generally good condition
- High degree of conflicting interests among stakeholders
- Culture of non-compliance
- Off-trail and user-created trails creating impacts

Protecting Resources and Addressing Conflict and Compliance

Best Management Practices

- Provide adequate recreational opportunities
- Establish appropriate expectations
- Minimize points of actual conflict
- Promote trail etiquette
- Encourage stakeholder groups to engage in positive actions
- Enhancing enforcement
- Monitoring

Recommendations

Resource Protection

- Trail Closures
- Trail free areas
- Zone 1 guidelines
- Habitat Management Plan
- Vernal Pool protection guidelines
- DCR review and permitting of activities
- Cultural resource assessments and stabilization



Recommendations

Enforcement and Compliance

- Information and Education
- Additional Rangers / Mounted Unit
- Issuing Citations
- Targeted Enforcement / Sweeps
- State Police / other agencies
- Park Watch
- Stakeholder Self-Enforcement
- Promote Positive Use

Recommendations

Public Safety and Compliance Monitoring

- Recording public safety incidents
- Dogs on-leash where required
- Owners picking up and properly disposing of dog waste
- Users staying on marked, official trails
- Users not trespassing on water supply lands
- Bikers staying on trails designated for that use

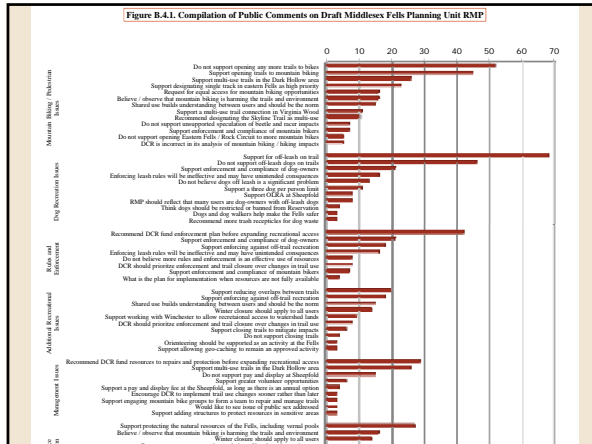
Recommendations

Recreating with Dogs

- Establish the Off-Leash Area at the Sheepfold
- Allow dogs with their owners on all trails, on-leash
- Enforce leash and waste removal regulations elsewhere
- Work with stakeholders toward compliance and management

Pedestrian and Mountain Biking Recreation

- Enhance both pedestrian and mountain biking
- Virginia Wood and Long Pond area as pedestrian only
- Skyline Trail as pedestrian only
- Reservoir (orange) Trail as shared-use
- Shared-use trails as part of larger strategy in Dark Hollow area
- Designate additional single-track loop opportunities in Eastern Fells



Changes to the Final RMP

- Updated some plant species, bird species and watch-listed species
- Added experiencing the Fells as a family as an important recreational experience
- Noted conflicting interests among stakeholder groups as the most significant issue facing the natural and social environment of the Fells
- Revised some of the discussion and citations in section on Environmental Impacts
- Updated to clarify Dark Hollow trails as multi-use
- Updated recommendations section with revised prioritization and resource levels, particularly highlighting our commitment to prioritizing enforcement

Changes to the Final RMP

Recommendations added:

- Implement guidelines to protect vernal pools
- Include consideration of trails designated for skiing
- Work with MBTA to improve public transportation access
- Expect greater civility among stakeholders

Appendix

- Detailed list of changes to the final plan
- Guidelines for the Protection of Vernal Pools
- Discussion of our evaluation of mountain biking and pedestrian recreation relative to Sierra Club's policy
- Addition of MWRA – DCR MOUs

