You Can’t Always Get What You Want: Managing Recreational Use in the Middlesex Fells

by

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ABSTRACT

Land conservation programs are often guided by a dual mission: to protect natural resources and provide for the recreational use of a property. These goals are fundamentally in conflict, however, because all recreational use causes environmental impacts. Recreational management decisions are frequently contentious, as different types of recreationalists argue that their use is appropriate within the context of natural resource protection. Such a conflict is currently playing out in the Middlesex Fells Reservation, which is owned and managed by the Massachusetts Department of Conservation and Recreation (DCR). I use the Middlesex Fells Trail System Plan as a case study to explore how public agencies resolve conflicts over open space. I find that the driving force behind DCR’s recreational use decisions is user group input; the agency takes user demands seriously. But user group desires are filtered through a variety of factors, all of which push the agency’s ensuing recommendations toward the middle ground of compromise and incremental change. These factors include the agency’s mission, existing system-wide policies, staff’s professional judgment about the purpose of the property, the agency’s understanding of the science, the regulatory framework, and—most importantly—perceptions of political feasibility. I argue that the draft Trail System Plan attempts to reconcile the conflicting user group demands by accommodating each group’s desired recreational experiences. DCR was unable to implement the draft plan, however, because the proposed compromise did not reconcile the fundamental difference in how user groups view and value the property.

Thesis supervisor: Judith Layzer, Associate Professor of Environmental Policy
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YOU CAN'T ALWAYS GET WHAT YOU WANT: MANAGING RECREATIONAL USE IN THE MIDDLESEX FELLS

INTRODUCTION
The United States loses an average of four acres of open space per minute. That adds up to 6,000 acres per day, 2.1 million a year (USDA Forest Service 2006). For over 100 years, environmentalists' primary response to this problem has been to acquire land with conservation value. The bulk of this acquisition is undertaken by public agencies, which choose to protect open space for numerous reasons. Open space provides a diverse array of benefits, such as conserving biodiversity, maintaining ecosystem services, protecting watersheds and viewsheds, preserving cultural resources, managing urban growth and guiding city form, and providing for active and passive recreation (Hollis and Fulton 2002; The Trust for Public Land 2002). Federal, state, and local land conservation programs often incorporate many, if not all, of these goals into their mission. The classic example is the National Park Service, whose mission is “to promote and regulate the use of the...national parks...which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (National Park Service 2011).

Land conservation programs with inclusive mandates like this attract the support of stakeholders with a variety of values and interests. The desires of these stakeholders can come into conflict over how open space should be managed. The fundamental problem is that all recreational use affects natural resources. Implicit in a mission like the Park Service’s is that some level of impact is acceptable because recreational use is valued. But the amount and types of recreational use have changed significantly over the last century, and the level of environmental impact has steadily increased. The question that agencies must now grapple with is: How much is too much?

Recreational management decisions are therefore increasingly contentious, as different types of recreationalists argue that their use is appropriate within the context of natural resource protection. The best-known example of this fight is between motorized uses, like snowmobiles, all-terrain vehicles, and off-road motorcycles, and non-motorized uses like hiking. But the positions and arguments of these two camps are replicated among non-motorized users when the debate turns to “new” forms of passive recreation, like mountain biking and dog walking. Regardless of who the
particular user groups are, managers are lobbied by all sides and must decide how to balance the uses with each other and with environmental protection.

Just such a conflict is currently playing out in the Middlesex Fells Reservation, a 2,575-acre property owned and managed by the Massachusetts Department of Conservation and Recreation (DCR). Like the Park Service, DCR has a dual mandate to protect natural resources and provide for recreational use; its mission is “to protect, promote, and enhance our common wealth of natural, cultural, and recreational resources” (Department of Conservation and Recreation [DCR] 2010a). The Middlesex Fells is located in Medford, Massachusetts, approximately eight miles north of downtown Boston. It contains a wealth of natural and cultural resources, but it is also very heavily used. In 2010, DCR attempted to change existing recreational use patterns by undertaking a comprehensive planning process focused on the trail system. The trail planning process illuminates two broad conflicts that the agency faces in formulating management recommendations for recreational use. The first is the disagreement among user groups, including hikers, mountain bikers, and dog walkers, about desired uses for the trail system. The second is the tension between natural resource protection and recreational use.

I use the Middlesex Fells Trail System Plan as a case study to explore how public agencies resolve conflicts among stakeholders over open space. I ask: how do land managers make decisions about recreational uses when faced with conflicting program goals and stakeholder desires? I examine the role of user groups in the trail planning process and explain how agency staff identify management problems and opportunities, evaluate tradeoffs, and make decisions that resolve these conflicts, through either compromise or consensus building.

I find that the driving force behind DCR’s recreational use decisions is user group input; the agency takes user demands seriously. But user group desires are filtered through a variety of factors, all of which push the ensuing recommendations toward the middle ground of compromise and incremental change. These factors include the agency’s mission, existing system-wide policies, staff’s professional judgment about the purpose of the property, the agency’s understanding of the science, the regulatory framework, and—most importantly—perceptions of political feasibility. I argue that the draft Trail System Plan attempts to reconcile the conflicting user group demands by accommodating each group’s desired recreational experiences. DCR was unable to implement the draft plan, however, because the proposed compromise did not reconcile the fundamental difference in how user groups view and value the property.
The Department of Conservation and Recreation is a relatively new agency, created through the legislative merger of the Metropolitan District Commission and the Department of Environmental Management in 2004. But the dual mandate embodied in the mission of the agency dates to the nineteenth century parks movement, in which both the Middlesex Fells and DCR’s predecessors originated. When the Fells was established in 1895, its founders were very clear about its purpose: to both preserve nature and allow for passive recreation. At the time there was no sense that these two goals could be in tension.

The mid nineteenth century was a period of tremendous growth in the Boston region. As historian Sam Bass Warner explains, “In fifty years [Boston] changed from a merchant city of two hundred thousand inhabitants to an industrial metropolis of over a million. In 1850 Boston was a tightly packed seaport; by 1900 it sprawled over a ten-mile radius and contained thirty-one cities and towns” (quoted in Moga 2009, 309). As the “streetcar suburbs” surrounding Boston expanded, farms, forests, and natural areas were cleared and subdivided.

The rate and impact of this development alarmed a small but vocal group of local residents. Among these were Wilson Flagg, a naturalist and author, and Elizur Wright, an insurance magnate and abolitionist. Flagg and Wright loved the beauty and wildness of the Middlesex Fells area and became tireless advocates for its protection. In 1856, Flagg published an article titled “A Forest Preserve: A Proposition to State and City Governments,” in which he recommended that the “wild region” extending from Stoneham to Salem be protected as a series of preserves. In 1869, Wright published a pamphlet titled “Mt. Andrew Park,” which suggested that the Fells region, then known as the Five Mile Wood, be converted into a park, and that a system of “Schools for the study of Natural History” be established within it. In 1872, Flagg published a series of essays on “The Woods and Byways of New England,” which again urged that the Five Mile Wood be selected for the site of a “Forest Conservancy.” In 1876, Flagg circulated a petition among several prominent citizens of Cambridge and presented it to the Massachusetts legislature, asking for legislative action to protect the Five Mile Wood. But the petition was rejected, which stymied Wright and Flagg’s advocacy for several years (Davenport 1893; Lawrence 1886).

In 1879, however, journalist and metropolitan planning advocate Sylvester Baxter reinvigorated their efforts with an article in the Boston Herald on “Spot Pond and its vicinity”:

Something like five miles northerly from Boston lies a great tract of country, all stony hills and table-lands, almost uninhabited, and of wonderful picturesqueness, and wild, rugged beauty. It is within the limits of the towns of Malden, Medford, Melrose, Stoneham and
Winchester; and its heart is that most beautiful of Boston’s suburban lakes, Spot Pond, which lies high up among the hills (quoted in Lawrence 1886, 200).

Baxter’s article received widespread attention, and shortly after it was published Wright and Flagg organized the Middlesex Fells Association. The association’s mission was “securing the preservation of the ‘Fells’ for a great natural park, or forest conservatory” (Davenport 1893, 6). Wright and Flagg envisioned the Fells as a place that would both protect nature and allow for its study through recreation. “It would be a living museum for the study of nature which could not be surpassed,” Flagg wrote in 1880. “A wild tract of land, covered partially with wood, and kept in its primitive condition, for the preservation of our indigenous fauna and flora, and as a resort for naturalists and other persons who would seek it for rational recreation” (quoted in Ryan 2011b).

Support for the creation of the reservation continued to grow. In January 1881 the Middlesex Fells Association organized a public meeting in Medford’s town hall, and over 200 people attended. Thanks at least in part to the association’s advocacy, the Massachusetts legislature passed the Public Domain Act, or Forest Act, in 1882. The Forest Act granted towns and cities the ability to purchase land to “provide for the preservation and reproduction of forests and for the preservation of the water supplies” (quoted in Ryan n.d., 4). The towns of Medford, Malden, Melrose, and Stoneham began to acquire watershed protection land around Spot Pond. But when Wright died suddenly in November 1885, his vision for a 4,000-acre reservation remained unrealized (Lawrence 1886).

That very month, however, the person who would play the pivotal role in the creation of the Middlesex Fells was embarking on a yearlong study of European parks and gardens. Charles Eliot, son of Harvard University president Charles William Eliot and apprentice to Fredrick Law Olmsted, started his own landscape architecture firm in Boston in 1886. Eliot’s vision and objectives for public parks echoed the earlier writings of Flagg and Wright: he prized natural features for their scenic value, regional character, and as settings for the active enjoyment of nature. He soon transformed his site-specific design philosophy into a proposal for regional-scale landscape preservation. In a February 1890 editorial in Garden and Forest, Charles Sprague Sargent, the director of the new Arnold Arboretum, advocated the preservation of the majestic Waverly Oaks in the suburban towns of Waltham and Belmont. Eliot responded with a letter to the editor, in which he proposed a “scheme by which, not just the scene at Waverly only, but others of the finest bits of natural scenery near Boston, might perhaps be saved to delight many future generations” (Eliot 1999, 316). Eliot argued that, in spite of the pressing need for parks, individual cities and towns would fail
to act as long as they “continue to be fearful of spending money for the enjoyment of their neighbors” (316). He thus recommended the establishment of a state commission to oversee metropolitan park planning. Eliot recognized, however, that such a commission would take months or years to organize. In the interim, he proposed the creation of “an incorporated association…empowered by the State to hold small and well-distributed parcels of land free from taxes, just as the Public Library holds books and the Art Museum pictures—for the use and enjoyment of the public” (318).

Eliot quickly began an advocacy campaign to create such an association. He started with a presentation to the leaders of the Appalachian Mountain Club in March 1890, and then wrote letters to influential people throughout the state who he thought might be interested in the project. Enthusiastic replies began to pour in, and Eliot organized a conference attended by more than 100 people in May 1890. The conference led to the creation of a committee, which drafted an act of incorporation and a legislative petition. A public hearing before the Senate Judiciary Committee was held in March 1891, and hundreds of people attended in support of the legislation. In the end, both houses of the legislature easily passed the act, and Governor William Russell signed it into law in May 1891 (Haglund 2003). The nonprofit land conservancy The Trustees of Public Reservations became a reality less than 15 months after Eliot proposed the idea in his letter to Garden and Forest. The very first property donated to The Trustees was land adjacent to Spot Pond in the Middlesex Fells: the 20-acre Virginia Wood.

Even before the campaign to create The Trustees was completed, Eliot began laying the groundwork to create a public regional parks authority. He quickly recruited veteran Fells advocate Sylvester Baxter to this effort, as Baxter had just published a series of articles about regional governance that focused on parks. Eliot and Baxter mobilized the newly created Trustees to organize a meeting of park commissioners from across the Boston region in December 1891. Public hearings were held the following spring, and the temporary Metropolitan Park Commission was authorized by the legislature in June 1892 (Haglund 2003). The purpose of the commission was to investigate the need for metropolitan open space. Baxter was named secretary, and Eliot was the lead landscape architect. They spent the next seven months preparing a report that laid out the rationale for the park system and identified the areas to be acquired.

Among those areas was the Middlesex Fells: “One of the most celebrated tracts under consideration is the wild, rocky, and woodland region known as “the Middlesex Fells… This territory has been more prominently brought to the public attention as a place demanding
reservation for the use of the people than any other landscape feature in the metropolitan district” (quoted in Ryan 2011b). Eliot and Baxter’s report featured numerous photographs, maps, and detailed descriptions of the proposed parks, and it became a best seller when it was published in January 1893. In June 1893, the legislature and governor passed a bill permanently establishing the Metropolitan Park Commission. Eliot was immediately asked to advise the commission on the best boundaries for five of the proposed reservations (Haglund 2003). By 1895, Wright and Flagg’s vision for a “great natural park” was finally realized: the commission acquired over 4,000 acres for the Middlesex Fells Reservation.

Natural Resources
Nearly 120 years after its creation, the Middlesex Fells remains a natural oasis within a heavily urbanized region. It is not a pristine wilderness and was not even at the time of its protection. The landscape was significantly shaped by human use during the colonial and industrial periods, when it was the site of farming, timber harvesting, milling and manufacturing, quarrying, ice harvesting, and the construction of summer homes. But the ecosystems have persisted and recovered over time. The Fells is located in an urban setting, but its size and the diversity of flora and fauna it supports make it more ecologically significant than a traditional urban park.

The Fells is characterized by its topographic and geologic features. The reservation is a mix of hills and valleys, with rolling to steep topography. The hills provide many scenic views of the surrounding low-lying Boston Basin, and the valleys contain several ponds and reservoirs. Geologic features include numerous outcrops of both volcanic and metamorphic rocks. Upland soils are generally shallow, excessively drained, and rocky, while soils in low-lying areas and drainages are very deep and poorly drained (DCR 2010a; United States Department of Agriculture 2009).

This topographic and geologic variation provides for a range of habitat types. The Fells includes dozens of natural communities, or assemblages of plant and animal species that occur together in space and time. These include upland mixed and deciduous woodlands, ridge top and rock outcrop communities, forested and shrub swamps, woodland vernal pools, cultured grasslands, and pond shores and marshes. The Massachusetts Natural Heritage and Endangered Species Program (NHESP) identifies and maps uncommon and imperiled natural communities across the state. NHESP has not formally designated any of these “priority natural communities” in the Fells,

1 The Metropolitan Park Commission became the Metropolitan District Commission in 1919, which became the DCR in 2004.
but it has identified some potential priority communities based on photo-interpretation and field visits. These include Ridgetop Pitch Pine Scrub Oak, Circumneutral Rocky Summit/Rock Outcrop, and Hickory – Hop-hornbeam Forest/Woodland (DCR 2010a).

The Fells also includes numerous water resources, including wetlands, vernal pools, streams, ponds, and reservoirs. Vernal pools are ephemeral ponds, which typically fill with water in the fall and remain ponded through spring and early summer. They are unconnected to other bodies of water and dry completely by the middle of summer each year. The drying cycle prevents fish from establishing permanent populations, which makes vernal pools important breeding habitat for amphibians and invertebrates. NHESP certifies vernal pools that are documented by citizens and identifies potential vernal pools through aerial surveys. There are 26 certified and 103 potential vernal pools within the Fells (DCR 2010a).

The diversity of habitats within the Fells supports hundreds of plant species. In 1896, the Metropolitan Park Commission completed a survey of vascular plants in the reservation. It reported 677 species, 578 of which were native and 99 introduced. A recent comparative survey, completed by Dr. Bryan Hamlin and Walter Kittredge in March 2011, documented 859 species: 576 native and 283 introduced. Two plant species found in the Fells are listed under the Massachusetts Endangered Species Act, including lesser snakeroot (*Ageratina aromatic*, endangered) and large-bracted tick-trefoil (*Desmodium cuspidatum*, threatened). Other native species of note include native Hawthorns, American Chestnut trees, and the Pink Lady Slipper orchid (DCR 2010a; Hamlin 2011b).

Numerous animal species also inhabit the Fells. Mammals include white-tailed deer, raccoon, striped skunk, opossum, grey squirrel, eastern chipmunk, fisher, eastern coyote, red fox, and bobcat. Resident amphibians and reptiles include spotted salamander, eastern newt, wood frog, milk snake, common garter snake, painted turtle, and snapping turtle. The Fells also provides important habitat for birds. Mass Audubon designated the reservation as an Important Bird Area (IBA), which is a site that provides essential habitat to one or more species of breeding, wintering, or migrating birds. The Fells is an IBA because of its size, its relatively unfragmented character, and its significance as a stopover site for migratory land birds (Mass Audubon 2011). Over 100 species of birds have been observed in the Fells, including woodpeckers, hawks, warblers, and water birds. Some reported observations include rare species such as the bald eagle, peregrine falcon, and blackpoll warbler (DCR 2010a).

Finally, there are seven documented rare or endangered invertebrate species in the Fells, including Hentz’s redbelly tiger beetle (*Cicindela rufiventris bentzii*, threatened), orange sallow moth
(Rhodoecia aurantiago, threatened), frosted elfin (a butterfly; Callophrys irus, special concern), oak hairstreak (a butterfly; Satyrium favonius, special concern), American clam shrimp (Limnadia lenticularis, special concern), purple tiger beetle (Cicindela purpurea, special concern) and an endangered species whose name is not released. Habitats for these species are concentrated in the southern portion of the Fells, which is identified as Priority Habitat by NHESP (DCR 2010a; Harper 2011b).

Recreational Use
Just as the Fells’ natural resources have grown more precious in the context of its urban setting, so have the recreational opportunities it provides. Population growth, the loss of unprotected open space, and rising participation in outdoor recreation have led to increasing use of the reservation, especially since the 1980s. The Fells’ desirability for recreational use is closely linked to its natural characteristics; it is one of few places in the greater Boston region to hike, run, and mountain bike in a natural environment.

Most recreational use takes place on the Fells’ trail system, the core of which was developed in the early 1900s. In keeping with the dual emphasis of its founders, early management of the Fells included making provisions for public access. Eliot and Baxter’s report called for the construction of a series of pleasure roads, or parkways, that would link the public with each of the newly created parks. In May 1894, Eliot began planning the first of these parkways, to connect the Fells with the surrounding towns. By 1897, the reservation included 13 miles of carriage roads and eight miles of public roads. In 1910 a new electric trolley began service from Somerville to Stoneham, with a stop at the Sheepfold pasture in the Fells. The trolley significantly increased the number of visitors to the reservation. By 1919, a network of more than 50 miles of carriage roads, bridal trails, and pedestrian footpaths had been developed. The carriage roads and bridal trails provided access to the reservation’s ponds and woodlands, and the footpaths created additional loops and connections to the hilltops and ledges. In the 1930s the Civilian Conservation Corps and Works Progress Administration constructed several longer-distance loop trails on top of the system of carriage roads (DCR 2010a; Friends of the Middlesex Fells 2011b).

This original trail network has been expanded through piecemeal development. Some new trail segments were sanctioned by DCR, but many others developed unofficially through user actions. A road and trail inventory conducted in 2010 documented over 122 miles of trails throughout the reservation. DCR categorizes these trails as single-track trails, user-created (or rogue) trails, woods (or fire) roads, and administrative management roads. There is significant
overlap and redundancy among trails and roads in the formal trail network, and informal user-created trails create additional connections and shortcuts. The road and trail inventory also documented 110 trail system access points, 132 dead-end trails, and an astonishing 1,949 trail intersections—an average of 16 per mile. In short, the history of official and unofficial trail development has resulted in a dense and extensive trail system that is confusing to the typical user and potentially very damaging to the environment (DCR 2010a).

Because of its location in the middle of an urbanized area, the Fells is heavily used. The most popular trail uses are hiking, running, mountain biking, and dog walking. Secondary uses include snowshoeing and cross-country skiing. DCR has very little data on total use levels, but trail counts conducted during October and November of 2009 provide some information about the prevalence of each use type. The trail counts were conducted at three access points, both mid-week and on the weekend. Overall, 41 percent of users counted were hikers or dog walkers. (The counts did not differentiate between hikers with or without dogs, but the number of dogs exceeded the number of hikers.) Twenty-three percent of users were bikers, and 17 percent were runners. Most weekday users were hikers or dog walkers, with the number of bikers and runners increasing on the weekends. It is important to note—and DCR recognizes—that these user counts are not statistically representative samples (DCR 2010a).

The current regulations governing recreational use in the reservation are posted online and on signage and kiosks at main trail system access points. All users are required to stay on trail; off-trail use is not allowed without a permit. All trails are open to pedestrians and dogs, but dogs must remain on-leash. Mountain biking is allowed on fire roads and on one designated mountain bike loop. The mountain bike loop is approximately 85 percent fire roads and 15 percent single-track; all other single-track trails are currently closed to bikes.

Of course, actual user behavior departs substantially from posted rules. One of the most notable trademarks of the Fells is what DCR calls a culture of noncompliance: the “pervasive attitude that posted rules don’t always apply” (DCR 2010a, 17). Users of all types routinely disregard the rules. For example, nearly 85 percent of dogs counted in the 2009 surveys were off-leash. Mountain bikers frequently ride single-track trails that are signed for pedestrian use only. Water supply lands located within the reservation are clearly posted as closed to the public, but users routinely hike or bike into closed areas. Many hikers, dog walkers, and mountain bikers go off-trail even though off-trail use is prohibited. Finally, use often continues after dark, even though the reservation is technically closed from dusk to dawn.
It is clear the reservation is deeply loved by its users, many of whom are frequent visitors and have a long relationship with the property. The numerous community access points, many miles of trails, and absence of a management presence from DCR contribute to the sense of personal ownership and attachment. At the same time, however, the Fells is a hotbed of user conflict. Many users report having uncomfortable or frightening interactions with others they meet on the trails. For example, hikers and mountain bikers frequently encounter off-leash dogs that are not under the control of their owners. But the most entrenched, longest lasting conflict within the trail system is between mountain bikers and hikers.

All of the passion that users feel—both positive and negative—is channeled into three organized user groups: the Friends of the Middlesex Fells (Friends of the Fells), the New England Mountain Bike Association (NEMBA), and the Fells Dog Owner Group (FellsDOG). Friends of the Fells “is dedicated to the protection and harmonious use of the Fells, promoting awareness, policies and programs which honor and preserve the landscape and heritage of this public resource for current and future generations” (Friends of the Middlesex Fells 2011a). Friends of the Fells advocates for both environmental protection and what they see as appropriate recreational uses, including hiking and other pedestrian activities, birding, photography, and nature study. NEMBA is a mountain bike advocacy organization with 19 local chapters. NEMBA’s motto is “ride the trails, save the trails;” it is dedicated to “taking care of the places that we ride, preserving open space, and educating the mountain bike community about the importance of responsible riding” (New England Mountain Bike Association [NEMBA] 2011). FellsDOG is the newest and most informal of the three organizations. Formed in 2008, it is a volunteer-based group that promotes responsible dog ownership and advocates for off-leash recreation.

These three user groups had interacted with each other and with DCR prior to the initiation of the trail system planning process in 2009. Friends of the Fells and NEMBA in particular have a long and acrimonious relationship. NEMBA was actually established in response to Friends of the Fells’ advocacy against mountain bike use in the late 1980s, and the groups have been at odds ever since. But most of the interactions among the groups have been informal, project-specific, and reactive. The trail system planning process was the first opportunity to involve all three organizations in a comprehensive, forward-looking discussion about recreational use at the Fells.
THE TRAIL SYSTEM PLANNING PROCESS

Trail system planning is a new process for DCR, and the Middlesex Fells is its test case. The process was established by DCR’s Trail Guidelines and Best Practices Manual, which was prepared by the Greenways and Trails Program in 2008. The objective of the Trails Program, and by extension the guidelines it produced, is “to provide safe, quality recreation experiences for a diverse range of trail users while practicing sound stewardship of the Commonwealth’s natural and cultural resources” (DCR 2010g, 2). The Trails Program reconciles its dual recreation and conservation mandate with the concept of sustainable trails. As the trail manual explains, “the challenge is to keep impacts to a minimum while providing the desired experience. To be sustainable, a trail must serve the needs of users for generations to come, while preserving the sense of place and protecting the quality of the surrounding environment” (3). The Trail Guidelines and Best Practices Manual provided the first agency-wide trail policies and standards for achieving this balance.

A Trail System Plan is a tool that allows DCR to take a systematic approach to trail management. As the trail manual laments,

Unfortunately, we are often faced with requests for new trails or new allowed uses from advocacy groups before we have had the opportunity to carefully consider the trail system needs. Before considering new uses or new trail development, we should ensure that the existing trail system is working to its full potential and that the new trail will, in fact, contribute to the goals of our network (DCR 2010g, 15).

Comprehensive trail planning is thus a departure from typical DCR practices, in which new projects and policies arise opportunistically and are evaluated incrementally.

DCR decided to undertake trail system planning at the Fells because staff’s ability to approve projects informally had reached an impasse due to tension between NEMBA and Friends of the Fells. The precipitating event was a request from NEMBA to repair and improve an existing trail and open it to mountain bike use. In spring 2009, NEMBA submitted a proposal to DCR asking for approval to perform a series of repairs on the Dark Hollow Pond Trail and requesting that the improved trail be opened to mountain bikes. The proposal described two potential benefits of the project. First, it would protect natural resources by creating “a viable preferred route through an area of the Fells that is experiencing an abnormal proliferation of unplanned rogue spur trails and braids.” Identifying and improving the best trail through the area would enable the closure and restoration of user-created and redundant trails at a later date. Second, the improved trail would enhance the mountain biking experience by creating “a new and highly desirable single-track extension of the current Mountain Bike Loop. By attracting MTB riders to this new link and the
later-planned Phase 2 and Phase 3 stacked loops, the potential side benefit will be to relieve some pressure on other already overburdened trails within the park” (NEMBA 2009a, 1).

The new Fells District Manager was supportive of NEMBA’s proposal, and the operations staff started to move toward implementation. At that point, however, Friends of the Fells found out about the project and immediately appealed to senior DCR staff to stop it. Friends of the Fells argued that opening an additional trail to mountain bike use was irresponsible when the current impacts of mountain biking in the reservation had never been analyzed. The group also raised concerns about the habitat impacts of repairing the existing trail, especially to wetlands. Implementation was put on hold, and both user groups began to lobby DCR staff.

The intervention by Friends of the Fells mobilized the mountain bike community. On July 7, 2009, NEMBA organized a gathering of over 80 mountain bikers to lay out a strategy to counteract what they called “the Friends of the Fells’ 20-year long anti-bike smear campaign” (NEMBA 2009b). The result was a phased plan for improving mountain bike access at the Fells and a series of next steps for NEMBA and its members to take. The proposed changes started with opening the Dark Hollow Pond Trail to bikes but also included six additional recommendations, including opening the Reservoir Trail to bikes, legitimizing unmarked trails, converting some fire roads to single-track, allowing for after-dark access, and changing the winter closure policy to apply only to mud season. NEMBA provided their members with contact information for DCR staff members and local legislators and coordinated an email campaign in support of the Dark Hollow Pond Trail proposal. NEMBA credits this email campaign with bringing DCR to the table. On July 31, 2009, NEMBA representatives met with DCR to discuss the Dark Hollow Pond Trail proposal. As an online update recounts, “DCR expressed surprise in the number of appeals they have received from people supporting this proposal and they are calling for a public meeting to receive broad input from all users and move the proposal forward” (NEMBA 2009c).

Instead of an ad hoc public meeting for one project, however, DCR decided to undertake a complete Trail System Plan for the reservation. According to Recreation Bureau Chief Gary Briere, the agency did consider reviewing NEMBA’s request though an internal trail approval process that was also outlined in the Trail Guidelines and Best Practices Manual. But given the highly contested nature of mountain biking in the Fells, DCR instead decided to step back and undertake the more comprehensive planning process. Briere explained, “It became very clear very quickly that in the case of the Fells even a relatively modest decision like that was one that had significant differences of opinion, and therefore we entered into the trails planning process as a way to explore those
differences of opinion and give folks an opportunity to be able to share their views on it” (Briere 2011).

The trail system planning process began in the fall of 2009. In its online introduction to the process, DCR explained the purpose of the Trail System Plan as follows:

This plan will consider the whole trail system at the Middlesex Fells, provide guidance for short and long-term management of these trail assets, set priorities for allocating limited staff and financial resources, identify stewardship partners and opportunities, and function as both a stand-alone trails plan and component of a future Resource Management Plan (DCR 2011a).

In September, the agency invited major stakeholder groups to a meeting to explain and get feedback on the process. Invitees included user groups (Friends of the Fells, NEMBA, and FellsDOG), statewide environmental organizations (Appalachian Mountain Club, Mass Audubon, and the Sierra Club), inholders (Massachusetts Water Resources Authority and the Winchester Water Department), the state police, and area legislators. DCR then began the internal work of gathering data and evaluating existing conditions, and the user groups awaited their opportunity to get involved.

**User Group Mobilization**

In December 2009, DCR began soliciting public input into the trail system planning process. The agency invited letters and emails with any “comments, experiences, goals, and concerns,” and posted a set of guiding questions about use types and patterns, trail system highlights, current problems, and potential solutions (DCR 2011b). The three user groups quickly told their members about the open comment period. NEMBA prepared a list of talking points that advocated for an even greater expansion of mountain bike access than they proposed during the July visioning meeting. Their argument focused on agency-wide precedent and equality: “The policy for mountain biking at the Fells needs to be brought more in line with those found in virtually every other DCR park. All trail users are equal and have equal rights, responsibilities, and impacts” (NEMBA 2009b). They recommended that the designation of bike access be shifted from an opt-in to an opt-out process. In other words, all trails should be considered multi-use unless otherwise marked, and exclusions would be made on a case-by-case basis.

Representatives of FellsDOG encouraged their members to write in support of “safe and legal” options for off-leash recreation in the Fells. They recommended that members focus on the
benefits of socializing and exercising dogs off-leash, both in the Sheepfold\(^2\) and on trails throughout the reservation. They argued that these activities could be enjoyed without interfering with other user’s experience in the Fells and without threatening wildlife, and thus should not be against DCR regulations (FellsDOG 2011). The Somerville Dog Owner Group (som|dog), a separate but associated organization, also asked its members to submit comments to DCR. Their message reached Somerville Alderman Bob Trane, who prompted the Board of Aldermen to pass a resolution in support of off-leash areas at the Fells.

Friends of the Fells mobilized their members around the threat posed by mountain bikers, and the current efforts of NEMBA in particular. They argued that expanding the number of trails open to mountain bikers is one of the major threats to both the environment and public safety at the Fells:

> With the threat to turn the Fells into a bikers’ playground, the ability of the reservation to remain a natural oasis for plant and animal species – and to provide quality visitor experiences – is very much at stake. Now the push by NEMBA to build ever-growing webs of trails in the Fells poses serious problems of increased habitat fragmentation, increased erosion, and threats to wildlife, as well as increases in visitor conflicts and added concern about public safety (quoted in Roy 2010c).

Friends of the Fells urged their members to submit comments that emphasized the need to preserve the reservation’s natural character.

The next step in the planning process was a public Trail Planning Workshop held on February 8, 2010. As with the written comments, the groups focused on getting their message across through sheer numbers. As one of the leaders of FellsDOG urged,

> We must ensure that the voices of dog owners are heard at this meeting! This is our chance to show the DCR how many dog owners use the Fells, and care about protecting this natural resource. There is no better way to demonstrate that legal off-leash activity at the Sheepfold should be a part of the new Trail System Plan, and can be implemented in a way which respects the rights of all park users (FellsDOG 2011).

A NEMBA announcement also emphasized turnout: “This is your chance to show up and participate and make sure the voices of the MTB community are heard. We need everyone to show up! (Really, not kidding!)” (NEMBA 2010b).

The appeals worked: over 200 people attended the meeting. The workshop began with a DCR presentation on the trail planning process and an overview of existing conditions of the Fells

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\(^2\) The Sheepfold is a large meadow in the northwestern area of the Fells. It is the busiest trail system access point in the reservation. It is also a popular place for dog owners to exercise their pets off-leash.
trail system. The presentation covered the trail system structure, trail conditions, and general recreational use impacts to soils, vegetation, wildlife, and water quality. DCR then described its understanding of primary user desires: additional and enhanced mountain biking opportunities; limiting mountain biking; official off-leash dog areas and trails; access to the Town of Winchester watershed land, and after-work (i.e., after-dark) use (DCR 2010d).

DCR also revealed some of the public input received to date. The impact of user group mobilization was evident in the responses to the question about desired changes to the trail system. The vast majority of the 206 comments received concerned mountain biking in the reservation. The most frequent request was to increase mountain biking opportunities. The second most frequent was to limit mountain biking. The third was to educate users and reduce tensions among user groups. Other common requests included reducing impacts to ecology and wildlife, establishing an off-leash dog area, and allowing off-leash trail access.

Finally, DCR summarized its understanding of the user conflict. It identified the greatest conflict as being between mountain bikers and some hikers. The agency explained the bikers feel that they have been unfairly treated and that the trails in the Fells are unduly restricted. In contrast, the hikers feel that bikers don’t follow the rules, cause environmental damage, and impact their recreational experience. Off-leash dogs were also recognized as a source of conflict, but to a lesser degree; DCR’s attention was focused on the 20-year dispute between NEMBA and Friends of the Fells.

The format of the meeting then changed from presentation to participation. The members of the public were divided into groups, each with a facilitator and reporter. The groups were prompted with two sets of guiding topics, both of which were intended to provide DCR with new information. The first topic was to identify trail system features, such as places of interest, main access points, special routes, potential new connections, problem areas, and sensitive areas that should be avoided. The second topic was to propose potential solutions to existing problems, such as how to reduce the complexity of the existing trail system, increase positive and reduce negative user behaviors, reduce user tensions, meet reasonable desired demands, and improve trail conditions.

The user groups had prepared their members with talking points, however, and the fact that DCR acknowledged and attempted to move beyond these positions did not dissuade them from sticking with the party line. Only one third of the breakout groups recorded any information about existing features, like special places and access points. The identification of potential solutions was the focus of the discussion, but the proposed “solutions” did not necessarily incorporate the spirit
of creativity, consensus, or compromise that DCR was hoping to stimulate. The output of the workshop was essentially a list of issues that included the concerns of all of the user groups, but did not provide any guidance on how to reconcile them (DCR 2010c).

Framing the Use Debate
The Trail Planning Workshop was not the user groups' final opportunity to communicate their message to both DCR and the larger Fells community. The public comment period did not close until February 28, 2010, so in mid February representatives of FellsDOG, NEMBA, and Friends of the Fells expanded upon their group's positions in letters and editorials.

The dog owners framed their request in terms of equity for a legitimate use. Joel Feingold, a member of FellsDOG and the past President of Callahan Dog Owners Group, wrote a letter to DCR arguing that off-leash recreation is not harmful and that dog owners should be given a fair share of a large common resource. Feingold cited anecdotal evidence that off-leash dogs do not chase or scare away wildlife, explaining that dogs ignore wildlife because they are well-fed house pets. He stated that the size of the reservation ensured that off-leash recreation could be allowed with no negative impacts to other users, and "by allowing and sign posting behavior and uses that may often occur now, potential conflicts between users will be reduced." Since dogs did not actually impact wildlife or other users, he reasoned, DCR's reasons for prohibiting off-leash recreation are not valid. But a small, enclosed off-leash area would not be an adequate solution, because it would restrict dog owners from recreating in the majority of the park which "in fairness should be available to them too." "Given the large amount of space available and significant number of users," he concluded, "fundamental fairness demands that the DCR allocate large swaths of the Fells and numerous trails within to dog owners for off-leash recreation space and bike riders for mountain biking" (FellsDOG 2011).

In addition to aligning the dog owners with mountain bikers, Feingold's letter took a subtle jab at Friends of the Fells: "Attempts to delay appropriate implementation of fair use policies by allegations of insufficient study should be understood to be what they are: tactics to obstruct legitimate and reasonable use by a large component of the total users" (FellsDOG 2011). Adam Glick, President of the Greater Boston chapter of NEMBA, was not so restrained. In an open letter posted online and published in local newspapers, he directly rebuked Friends of the Fells for opposing mountain bike access:
For the past 20 years, many of the trail use policies at the Fells have been heavily influenced by a single user group, the Friends of the Fells. Over the last two decades, this group has pursued one of the most vehemently anti-mountain bike agendas in the country, and they are increasingly attempting to marginalize other user groups in the park as well (Glick 2010b).

Glick framed NEMBA’s goals in terms of equal access to and stewardship of the existing trail network. “Quite simply,” he explained, “NEMBA wishes the DCR to develop an equitable trail use policy that allows cyclists to have more access to existing single-track trails, that creates more marked loops on existing trails and helps displace much of the negative use that is taking place in the Fells with positive recreation.” By “negative use” he meant the cruising, or casual anonymous sex between gay men, that frequently occurs in the Dark Hollow Pond area. Additional mountain bike access in that area would thus be a win-win: it would increase equity for a marginalized user group and help eliminate an illicit use (one that all of the groups could agree they did not want).

Glick dismissed Friends of the Fells’ fear that mountain biking would ruin the reservation as “extremist nonsense and patently false.” He explained that NEMBA’s proposals would result in improvements from the status quo, not in additional damage. Maintaining and reengineering the trails would help mitigate existing erosion. And NEMBA was in the unique position of knowing how to properly care for the trails, and thus the reservation:

Unlike FoF volunteers, NEMBA trail crews are trained and highly skilled trail maintainers. We are widely known for our expertise: we teach courses in trail design and maintenance, and we are contracted by the state to provide training to DCR staff. We do trail work and consulting in scores of DCR properties throughout the commonwealth, and perform about 70+ trail projects each summer throughout New England. We have been awarded the Environmental Protection Agency’s Environmental Merit Award for our work in the Fells (Glick 2010b).

Finally, Glick painted Friends of the Fells as obstructionists who “would rather scuttle partnerships, prevent volunteer projects and maintain a status quo that is letting the trail system at the Fells slowly decay for lack of care.” In contrast, he explained that NEMBA frequently partners with many different user groups, because “we sincerely believe that to solve trail problems and protect open space we need to work together.” This willingness to cooperate and coexist tied back in to the original appeal to equity, as the letter concluded, “The Fells is not the private playground of an elite few—it is a park of the people, to be shared responsibly. Every legitimate user group deserves equitable trail access, and there should be no one group or organization that gets to call the shots” (Glick 2010b).
Friends of the Fells responded with its own editorial the following week. Executive Director Mike Ryan also focused his argument on history and stewardship: not NEMBA’s, but DCR’s. According to Ryan, mountain bike use was originally authorized in the Fells under two conditions: “effective Fells ranger enforcement of regulations to restrict bike riding to the thirty five miles of Fells trails and fire roads, and compliance with the rules by bikers.” He argued that those two conditions have never been met, and the result has been environmental degradation:

- Staffing for trail use enforcement has been absent in the Fells, and as a result, many of the narrow Fells hiking trails have been converted by knobby tires into eroded gullies, and wildflower and animal habitats have been decimated along trail margins, with bikers riding cross-country creating new trails at will. With so much damage already done, many are convinced that the unique nature of the Fells is on the verge of being destroyed (Ryan 2010c).

Ryan then argued that the current trail system planning process is inadequate to protect the reservation’s “natural and cultural resources and the quality of visitor experiences.” He explained that DCR should instead undertake a “full-fledged Resource Management Plan, mandated by Massachusetts law, establishing a rigorous process to examine in detail the best possible resource management of this unique forest Reservation.” In the absence of a Resource Management Plan (RMP), the trail planning process would change the very character of the Fells, “from a Reservation for the protection and enjoyment of nature into a wide scale recreational bike park” (Ryan 2010c).

**Political Escalation**

The relationship between a Trail System Plan and a Resource Management Plan quickly became a dominant issue in the planning process. DCR has a legislative mandate to prepare Resource Management Plans for “all reservations, parks, and forests under the management of the department.” The purpose of an RMP is to “form the framework for managing public lands based upon a comprehensive inventory and assessment of environmental and recreational resources.” An RMP is intended to guide the short and long-term management of a property in a manner that balances recreational use with natural resource protection. Massachusetts General Law Chapter 21, Section 2F states that RMPs “shall include guidelines for operations and land stewardship, provide for the protection of natural and cultural resources, and ensure consistency between recreation, resource protection, and sustainable forest management” (DCR 2011c).

DCR’s founding legislation also specifies that RMPs must be adopted by the Stewardship Council. The Stewardship Council is a 13-member citizen advisory committee appointed by the
governor “to work with the Secretary of Energy and Environmental Affairs, the Commissioner of Conservation and Recreation, and agency staff” to oversee RMPs, capital planning, and policy development (DCR 2011d). Since 2003, however, only seven RMPs have been prepared and adopted. DCR developed a schedule to prioritize the preparation of RMPs for the rest of its 385 properties. As of winter 2010, the RMP for the Fells was about four years away. The crux of the debate was what type of recreational use decisions DCR should make in the interim, prior to the completion of an RMP.

Friends of the Fells was not the only group to argue that mountain bike use should not be expanded in the absence of an RMP. After the February Trail Planning Workshop, two statewide environmental heavyweights became involved in the process: Mass Audubon and the Massachusetts chapter of the Sierra Club. Both organizations had been invited to the September stakeholder briefing and the workshop but did not attend. In early March, however, John Clarke, Mass Audubon’s Director of Public Policy and Government Relations, wrote a letter directly to DCR Commissioner Richard Sullivan requesting that the agency prepare an RMP for the Middlesex Fells. Like Mike Ryan’s editorial, Clarke’s argument emphasized righting past wrongs and taking a comprehensive approach to planning:

The history of mountain bike use in the Fells is illustrative of the unintended effects of trail use expansion decisions made in the absence of a Resource Management Plan (RMP). Curtailment of existing and ongoing damage to resources in the Fells should be the first priority, and any new or expanded uses, trails, or parking facilities should not be considered outside of a comprehensive RMP (Clarke 2010).

Clarke’s letter also reviewed the history of mountain biking in the Fells. In response to the request of the mountain bike community, in 1989 the (then) Metropolitan District Commission issued a policy directive allowing mountain bikes in designated areas, with conditions including requirements that riders conduct themselves in a responsible manner, not cause injury to the Fells’ resources or other users, and yield the right of way. The policy was revised several times over the next few years, including opening of additional trail segments in response to claims that this would help curtail unauthorized use by completing loops (Clarke 2010).

But Mass Audubon, like Friends of the Fells, claimed that the result was the opposite: opening new trails to mountain bikers only served to expand the environmental damage. Over the past 20 years, the amount of mountain biking increased and the “promised self-enforcement by bikers proved ineffective.” Clarke stated that the current “spider web” network of user-created trails was attributable in large part, if not entirely, to mountain bikes. As a result, Clarke urged DCR to “not
allow any increased access or opening of additional trails to mountain bikes or other uses where presently not allowed.” The agency should instead focus on enforcing the existing rules and developing an RMP to inform future management decisions.

The following day, Heidi Ricci, Senior Policy Analyst at Mass Audubon, presented that argument directly to the DCR Stewardship Council. The monthly Stewardship Council meetings are open to the public and include a public comment period in which citizens can express their opinions and concerns. Although the Middlesex Fells trail system planning process was not on the Council’s agenda, Ricci raised Mass Audubon’s concerns during public comment. Also in the audience was James McCaffrey, Director of the Sierra Club’s Massachusetts chapter. He too requested that an RMP be undertaken for the Middlesex Fells prior to making any trail policy changes.

NEMBA was not happy with these developments. The following week, Executive Director Philip Keyes sent a letter to Commissioner Sullivan rebutting Mass Audubon’s argument. Keyes disputed Mass Audubon’s portrayal of the history of biking in the Fells, and explained that because there was no formal policy in place biking was an allowed use in the late 1980s. Bikers had not organized to change MDC policy; Friends of the Fells did, by attempting to ban bicycles. Keyes also challenged Mass Audubon’s claim that bikes cause more environmental damage than hikers. He explained that the consensus of recent recreational ecology literature was that that hikers and bikers result in similar impacts, and that poor trail design is true culprit of erosion problems. NEMBA’s proposed solution was to increase volunteerism and trail stewardship. Keyes again explained the benefits of the proposed trail work in the Dark Hollow Pond area (NEMBA 2010d).

In NEMBA’s eyes the deeply troubling development was the threat to the trail system planning process. Keyes wrote, “We are dismayed that Mass Audubon has presented you and the DCR Stewardship Council public comment about the Middlesex Fells Trails Plan after the conclusion of such a lengthy comment period” (NEMBA 2010d). He stressed that DCR did not need to wait to prepare a full RMP before changing trail policy in the Fells. Citing the comprehensive road and trail inventory and existing natural resource data, he argued that the agency has all of the information it needs to make sound decisions. Finally, he contended that the legislative mandate to perform an RMP does not prohibit DCR from implementing trail policy changes in the interim. NEMBA reiterated these points to the Stewardship Council at their April meeting.
Preliminary Recommendations

Meanwhile, DCR staff continued the internal preparation of the draft Trail System Plan. The agency had originally planned to release the document during a public meeting in April. By the end of the month, that deadline had been pushed back to late May. But preliminary recommendations were revealed to stakeholder groups during a briefing on May 4, 2010. To the dismay of Friends of the Fells, the recommendations did include expanded access for mountain bikers. Friends of the Fells again requested that DCR refrain from implementing the changes until an RMP was completed. Mike Ryan told a reporter that he was “very concerned” by the preliminary plan, which was “fast tracking” an increase in use with no plans for conservation or stewardship of natural and cultural resources. “Without fully understanding what those features are it makes absolutely no sense to make a policy change,” Ryan said. “The people who are in charge of the trail assessment plan seem to just be completely oblivious to the harm they’re proposing” (Roy 2010b).

DCR stressed that it did plan to develop an RMP for the Fells, and that conducting a trails assessment was a step toward that goal. “A trails system plan, for the most part, considers the same agricultural and ecological data as a Resource Management Plan,” Paul Jahnige, the project manager and DCR’s Director of Greenways and Trails, told a reporter. “It's just more focused on the trail aspect.” NEMBA agreed that the two documents were complimentary, and emphasized that the current plan “addresses immediate needs by reducing habitat fragmentation through the elimination of redundant trails and expanding equal access.” Adam Glick again accused Friends of the Fells of refusing to work collaboratively with other user groups: “They do not like the fact that any trails are being changed to shared use. Rather than participate in a constructive way they have chosen to subvert and obstruct the DCR process.” Glick warned that if DCR headed Friends of the Fells’ request, many mountain bikers would become disillusioned with the process. “Conditions on the ground are going to get worse,” he said. “The feeling will be [that] the DCR can be totally derailed by this private organization” (Roy 2010b).

NEMBA was pleased with the preliminary recommendations. In an update to members in early June, Glick said that the preliminary plan “goes a long way towards correcting the access inequities that the mountain bike community has experienced for over twenty years at the Fells.” But he was worried about what an RMP would mean for that hard-earned progress:

It is likely that once an RMP is initiated, additional stalling efforts will happen to prevent any change from occurring. That is why we believe all DCR’s hard work on revising the trails policy at the Fells, all the fair and open meetings, all the letters from you – all of it – may be at risk. DCR knows what the right thing to do is: implement the plan they created. The
problem is that they may be swayed by whomever yells the loudest at this point. We need to yell! Loudly! Now! (NEMBA 2010c)

While the schism between NEMBA and Friends of the Fells continued to widen, another user group was feeling disenfranchised: the dog owners. There were no changes to the dog policies included among the preliminary recommendations. As Melrose Dog Society President Greg Panta told a reporter, "They really weren't giving any attention to the dogs, which is discouraging. When I asked why, the response was user conflicts and the environment" (Roy 2010a). In a letter to Paul Jahnige, FellsDOG co-founder Michele Biscoe expressed several concerns with the preliminary plan. From her perspective, none of the input that DCR received from dog owners, including letters and emails, comments at the public workshop, and the resolution from the Somerville Board of Aldermen, was included in the plan. She was deeply disappointed that the preliminary plan identified off-leash recreation as "an 'inappropriate' use, along with vandalism and sexual activities" (Biscoe 2010). She framed the omission of legal off-leash activity as a failure to "address the wholesome, family-oriented recreational needs of taxpayers and voters who own dogs." Finally, Biscoe pointed out that according to DCR's own 2009 survey, dogs (and thus dog owners) were the largest user group. She emphasized the management challenge that would result from not meeting the needs of such a large user group: "if off-leash recreation is not allowed on any trail, off-leash recreation will occur on every trail."

The statewide environmental groups were also unhappy with the preliminary recommendations. In late May, four environmental groups—Mass Audubon, the Sierra Club, the Environmental League of Massachusetts, and Environment Massachusetts—wrote a joint letter to Commissioner Sullivan requesting that DCR suspend the trail system planning process and prepare an RMP for the Fells within the next year. The groups expressed concern that the trail system planning process was "primarily driven by proposed expansion of trails and uses; we believe this is too narrow of an approach given the concentration of both the range of recreational demands and the diverse natural, historical, and cultural resources at the Fells" (Goodman et al. 2010). The letter argued that a more "comprehensive" and "robust" RMP would better integrate recreational planning with resource stewardship and would "strengthen the validity of management decisions." The environmental groups also urged DCR to demonstrate its capacity to enforce the existing rules before further expanding recreational use.

As of June 2010, the fate of the draft Trail System Plan was unclear. Preparing an RMP for the Fells was discussed at length at the June 3 Stewardship Council meeting. Commissioner Sullivan
explained that DCR would put together an “action plan” and possibly a “demonstration project” while continuing to engage stakeholders. He acknowledged that preparing a “full blown RMP” was a relatively slow process, and said that DCR would be looking at “a new approach” to help speed it up. In the interim he promised increased enforcement through the addition of two seasonal rangers, in order to “create public trust that DCR can enforce its rules.” He also said that DCR was “exploring the creation of ‘off leash’ dog areas,” but that off-leash areas would require more public discussion, permitting, and a master plan (DCR 2010e).

According to a *Boston Globe* article, on June 4 Commissioner Sullivan “announced that the state may never implement any of the recommendations in the trail plan, and would pursue the resource management plan.” “Even though the trail’s planning [sic] includes all of the elements that would go into a resource management plan, many of the stakeholders would like a full master plan for the entire park,” he explained. Sullivan said that some recommendations from the draft Trail System Plan could be implemented before the RMP was finished, but he “declined to take a position on expanded mountain bike access or off-leash dogs” (Rosenberg 2010).

Friends of the Fells urged DCR to go one step further and scrap the draft Trail System Plan entirely, disregarding its preliminary recommendations for additional bike access. As Mike Ryan explained to a reporter, “It would be meaningless if they green-light a Fells resource management plan while at the same time authorize any expanded use or access in the Fells. What they need to do is repair damage that’s happened already and set up an enforcement plan that’s been demonstrated to be effective.” But NEMBA urged DCR to stand by the trail planning process and implement some of its recommendations prior to the completion of the RMP. “DCR has spent an awful lot of energy and effort in putting together an excellent trails plan, and what is discouraging is that special interests prevail,” said Adam Glick. “Our fear is that there won’t be any changes, and that doesn’t help anybody. It sets a dangerous precedent” (Rosenberg 2010).

NEMBA encouraged members of FellsDOG to support the trail planning process too, in spite of their disappointment in the preliminary plan:

DCR needs to hear that you support their process – even if the immediate outcomes aren’t everything you hoped for….DCR knows from it's [sic] own data that dog owners are one of the largest user groups in the Fells – they will work to address the off-leash need. But they have to start somewhere and if they cannot start by implementing the Trails Plan they worked hard to create, nothing is going to change.

FellsDOG agreed with NEMBA about the importance of continuing the trail planning process. In response to Glick’s message, Biscoe wrote “Many Massachusetts residents have participated in the
process and it is unfair to all of us to suspend the process now” (FellsDOG 2011). To communicate this message to DCR, FellsDOG prepared a petition in support of off-leash recreation. The purpose of the petition was to “demonstrate to the Commissioner that many stakeholders want options for off-leash recreation sooner rather than later!” (FellsDOG 2011).

True to Commissioner Sullivan’s June pronouncement, DCR began preparations for a Middlesex Fells Resource Management Plan. At the August 2010 Stewardship Council meeting, the Policy and Planning Committee reported that DCR was developing a template to speed up the RMP process, and that the Middlesex Fells RMP should be ready for review by spring 2011. But the fate of the Trail System Plan remained in limbo until September 2, when Sullivan wrote a letter to the Sierra Club in response to the environmental groups’ concerns about the planning process. The letter stated that the RMP process for the Middlesex Fells would be initiated in the fall, but that DCR “will not, however, be suspending the Middlesex Fells Trails System planning process or the good work that has been completed thus far” (Sullivan 2010).

Sullivan provided two primary reasons for not suspending the trail planning process. First, he legitimized the process as “one of the integrated planning tools that DCR uses to ensure consistency between recreation, resource protection, and adaptive management.” Sullivan explained that the Trail Guidelines and Best Practices Manual provides comprehensive guidance for trail management activities that might occur “in the absence of, or in concert with, an RMP.” He defended the trail planning process, as defined in the Trail Guidelines and Best Practices Manual, as “both robust and participatory.” It incorporated natural resource data through “extensive GIS mapping and field site visits” and involved “over 200 individuals in a public planning workshop and over 500 comments during the public input phase” (Sullivan 2010).

Second, and more tellingly, Sullivan defined the limits of the trail system planning process by emphasizing that the draft Trail System Plan “will not call for an expansion of the trail system, construction of new trails or the expansion of parking, but rather focuses on enhanced enforcement, education, trail closures, resource protection and improved recreational experiences for all existing users” (Sullivan 2010). This indicated that DCR was going to take a more conservative approach to the scope of the plan than envisioned in the Trail Guidelines and Best Practices Manual. Sullivan said that DCR agreed with the environmental groups that it was important to address enforcement and user conflict issues immediately, and he used that concern to justify moving forward with the trail planning process in advance of the completion of the RMP: “As you note, addressing these issues at
the Fells is important for both resource protection and the recreational experience, and I trust you
will see how the recommendations of the Trail System Plan move us forward in this regard.”

THE DRAFT TRAIL SYSTEM PLAN
DCR presented the draft Trail System Plan at a public meeting on September 20, 2010 and released
the document for public review the following day. The tone of the draft plan is balance and
compromise. Its stated goal is directly in line with DCR’s mission: to provide “a range of users with
a range of recreational experiences…while simultaneously conserving the natural qualities of the
Fells environment and protecting the sensitive resources that exist there” (DCR 2010a, 24). To
achieve that balance, the plan attempts to do three things at once: provide a variety of recreational
experiences, minimize user conflicts, and minimize ecological impacts.

Recreational Experiences and Expectations

The recreational experiences that the trail system is intended to provide are identified as
what the agency calls “managed experiences.” Managed experiences are the uses that DCR “actively
seek[s] to provide and manage for.” They are an important component of the plan because they
effectively determine the scope of the proposed recommendations. DCR incorporated the basic
desires of all three user groups into the nine managed experiences identified in the draft plan.

First, the plan identifies the existing pedestrian uses. The group most closely associated with
pedestrian use is Friends of the Fells, but the uses themselves were uncontested during the planning
process. They include:

- “Walking, hiking, and snowshoeing on a variety of types and difficulties of trails and terrain”
- “Running on a variety of types and difficulties of trails and terrain”
- “Cross-country skiing on a variety of types and difficulties of trails and terrain”

The nature-based experiences sought by Friends of the Fells are also specified:

- “Observing, exploring, discovering, and sharing nature from existing trails”
- “Experiencing diverse landscapes and views from the trails”
- “Occasionally finding solitude”
- “Stewarding and improving the Fells environment”

Mountain biking is recognized as a legitimate use, and the desire for additional single-track trail is
implicitly incorporated:

- “Mountain biking on a variety of types and difficulties of trails and terrain”

31
And, in a notable revision from the preliminary draft, recreating with a dog is included among the managed experiences:

- “Engaging in the above experiences with a family dog, and exercising and socializing a family dog with other dogs” (DCR 2010a, 24)

DCR’s decision about what to include among the managed experiences was a function of multiple factors. The mission of the agency, existing system-wide practices and policies, and the historical use of the Fells defined the extent of possible changes to the status quo. Some potential uses never came up in public debate, but if they had they would not have been seriously considered; legal off-highway vehicle recreation, for example, would be a non-starter in the Fells. But a non-starter that was raised in some public comments was the desire to eliminate mountain bike use all together. DCR could not seriously consider that proposal because prior agency decisions and regulations at many similar properties recognized mountain biking as an appropriate use. Once a use has made the “managed experiences” list, it is very hard to remove.

Within the institutional context, however, there is room to add or modify managed experiences based on current use patterns. This is where user group desires come into play. Several DCR staff members acknowledged that advocacy by the dog owners directly influenced the decision to include recreating with a dog among the managed experiences. As Gary Briere explained, “The off-leash dog question is one that is about the urban environment within which the Middlesex Fells exists. Here you have to have that discussion and you have to be thinking about that because it’s such a huge demand in the community” (Briere 2011). The high level of existing dog use at the Fells convinced DCR that it should provide for the needs of dog owners when making management decisions. But the agency would not have identified dog use as a managed experience, even with knowledge of current use patterns, if the user group had not asked for it—as evidenced by its absence from the preliminary draft.

DCR’s designation of managed experiences serves to recognize and legitimize the presence of each use in the Fells generally. The draft Trail System Plan next identifies conditions that enhance and diminish each of those recreational experiences. In doing so DCR acknowledged how the uses could affect one another, and began the process of managing user expectations about how far the recommendations could or would go to accommodate their desires. The draft trail plan seeks to minimize user conflict, so the desires of each user group served as a limit on the two others. DCR’s approach to minimizing conflict was compromise: each group could expect to get some, but not all, of the type of experience they wanted.
For example, under “observing, exploring, discovering, and sharing nature,” the draft plan acknowledges several concerns expressed by Friends of the Fells:

This experience can be diminished by noise, groups of other people or intrusion by the features of our urbanized lifestyles such as trash or vehicles. It is also diminished by the perceived scaring away, destruction or loss of that nature; be it by a dog romping through a vernal pool, a woodland flower trampled or a rare species extirpated from the park.

The draft plan goes on to suggest, however, that it is unrealistic to expect the equivalent of a wilderness experience in an urban context: “While the Fells is a wonderful place to observe, explore and discover nature, it is also a popular and well-used urban park. As such, users should expect to encounter other users, and should expect some level of disturbance by others” (DCR 2010a, 25).

Under “walking, hiking and snowshoeing on a variety of types and difficulties of trails and terrain,” the draft plan explains that the pedestrian experience can be diminished by encountering damaged, eroded or wet trails, the presence of trash, and...situations that make the user feel uncomfortable or unsafe. Some of the specific situations that may diminish the pedestrian experience in the Fells include being startled by another user, having to “jump out of the way” of a fast moving biker, ...being approached by an unknown dog off-leash, encountering dog waste or bags of dog waste along the trail, and becoming lost.

That said, hikers must be prepared to compromise in some areas of the reservation:

The Fells is a popular, multi-use, urban park. On most trails, pedestrians should expect to encounter other users, including dogs and bikers, and hikers and walkers should be prepared for faster moving users to announce themselves from behind. However, DCR also believes that walkers, hikers, and snowshoers should be able to find some high-quality trail experiences in the Fells in which they do not have to worry about encountering fast-moving bikers or off-leash dogs (DCR 2010a, 26).

The draft plan presents mountain bikers with similar acknowledgement and admonishments. It talks about the importance of single-track trails and loops of various difficulties to the mountain biking experience, and states that, based on the typical travel distance of five to 15 miles per outing, “an adequate trail system should provide approximately 40 miles of trails of varying types, levels of difficulty, and terrain.” The draft plan explains that the mountain biking experience is currently diminished by the limited mileage and type of trails open to biking, by negative encounters with other users, and by a feeling of not being welcome in the reservation. But it also sets the boundaries of accommodation and access:

The Fells, as a well used urban park, is not an appropriate place for mountain bikers on all trails or for bikers to find the most advanced trail conditions. Mountain bikers in the Fells should expect to feel welcome, be respected by all users, and be able to find sufficient, single
track trail mileage in the beginner and intermediate trail categories and maybe some sections of advanced trail. But the Fells is not the appropriate place to find expert trails, man made obstacles, off-trail opportunities, or extensive advanced trail mileage (DCR 2010a, 27).

For dog owners, the draft plan acknowledges the important societal role of dogs as family pets, and even as members of the family. It recognizes that many dog owners at the Fells want to be able to socialize and exercise their dogs off-leash, both at the Sheepfold and on trail. It states that recreating with a dog is enhanced by a “beautiful, natural setting, and by the ability to allow their dogs to run and explore at their own pace.” But it also lists the rationale for requiring dogs to be on leash: “[S]ome dogs can be aggressive, and even friendly dogs off-leash, particularly on trails, can startle or frighten other users or dogs as they approach. Dogs off-leash will also tend to run both on and off-trail, contributing to off-trail impacts, and potentially disturbing wildlife” (DCR 2010a, 28). As a result, “dog owners should expect to recreate with their dogs on leash on trail at the Fells.”

DCR’s decisions regarding the conditions that each managed use can expect to be provided in the Fells were a function of multiple factors. First, DCR listened to user group input about what they wanted. DCR acknowledged many, if not all, of the requests and concerns raised in public comments. But the draft trail plan did not promise to provide everything the users wanted. DCR decided whether the requests were reasonable or unreasonable based on staff’s vision for the correct role of the property. The draft trail plan repeatedly emphasized that the Fells is a “well-used urban park,” which means that all legitimate uses (i.e., managed uses) need to coexist with minimal conflict. DCR also used “urban park” to imply that the property does not need to provide all types of experiences to all user groups. The Fells is not a wilderness area, a mountain bike terrain park, or a dog park. Managing it as any of those would have too great of an impact on the other users. In short, staff used their professional judgment to define the basic needs of each recreational use, and sought to meet these needs while minimizing user conflict.

Natural Resource Protection

The recreational experiences and expectations described above provide the framework for decisions about the types of use DCR views as appropriate in the Fells and how each user group is expected to compromise in order to accommodate the others. The draft plan also addresses how recreational use as a whole affects natural resources and how those impacts can be mitigated. A major difference between the draft plan’s recreation section and the natural resource section is the extent to which DCR relied on user group input. While both the desires and the constraining
factors for recreational experiences came from the user groups, DCR based its natural resource recommendations on scientific literature, the state regulatory framework, and advice from a sister agency, the Natural Heritage and Endangered Species Program.

**Recreational ecology literature**

The major dispute regarding natural resource protection in the context of the trail system is whether hiking, mountain biking, and dogs have differing environmental impacts. To answer that question, DCR turned to the scientific literature on recreational ecology. Recreational ecology is the study of the impacts of outdoor recreation on natural or semi-natural environments. Over the past few decades, hundreds of empirical studies have illustrated the effects that recreational use can have on soil, vegetation, water quality, and wildlife.

All use types trample soil and vegetation, which is the most widespread and visible impact of recreation on natural systems. Trampling reduces the height and vigor of vegetation and removes the protective layers of vegetation cover and organic litter. The resulting exposure of the underlying soil reduces soil moisture and leads to compaction and erosion. Soil compaction changes infiltration rates and surface water flow, which causes muddiness and eventual trail widening as users try to avoid wet areas. Compaction and increased sunlight exposure can favor invasive species and result in altered species composition. The impacts of trampling are not necessarily limited to a linear corridor of disturbance along a trail: changes in surface water flow and the introduction of non-native plants can extend outward into the surrounding area. But even localized trampling impacts can result in the loss of rare or sensitive plant species (Leung and Marion 2000; Monz et al. 2010).

In addition to compaction, recreational use can displace soils through trail incision. This also leads to erosion and runoff, which has the potential to damage adjacent wetland resources. Trail runoff increases sedimentation, turbidity, and nutrient inputs and reduces water quality for fish and amphibians. Recreational use can also harm water bodies directly, through the introduction of invasive species and pathogens (Leung and Marion 2000; Monz et al. 2010).

Many studies have investigated the effects of recreation on different species of wildlife. Researchers have found that the construction of recreational facilities, like trails, causes habitat alteration or loss. The mere presence of recreational users disturbs wildlife, which results in increased energy expenditures, physiological stresses, and displacement from food, water, and shelter. The long-term effects of disturbance include reduced health and fitness, reduced reproduction rates and population levels, and changes in species composition and diversity (Leung and Marion 2000).
Three principal factors affect the intensity and spatial extent of recreation impacts on ecological systems: the amount of use, the type and condition of the environment, and the type of use (Monz et al. 2010). Land managers can often influence these factors, so research on these relationships is frequently incorporated into management plans. Indeed, the draft trail plan for the Fells addresses all three factors.

The relationship between the amount of recreational use and the impact to vegetation and soil has been well established as asymptotic and curvilinear (Monz et al. 2010). This means that initially, even small increases in the amount of use result in significant increases in impacts to vegetation and soils. Once use levels have passed a certain threshold, however, areas with large differences in use can show similar levels of impact. The generalization commonly drawn from these findings is that land managers should concentrate use on designated trails and visitor sites in popular areas in order to limit the extent of use impacts. This is reflected in the draft trail plan's desire to prevent off-trail use.

Numerous environmental factors affect the area and intensity of recreational impacts. Characteristics of vegetation, like plant form, strongly influence its resistance and resilience to trampling. Vegetation mats and root zones with high shear strengths can resist trail widening and incision. Geology is an important factor: areas with exposed substrates, like sand, gravel, or rock, and little to no vegetation are very durable. Well-drained soils can help prevent erosion and muddiness. Topography is especially important for erosion. Steep trail grades and alignments parallel to the prevailing slope are vulnerable to incision from high volumes and velocities of water runoff. The ability of environments to tolerate recreational use also varies between seasons. For example, wildlife can be particularly vulnerable during the breeding season, and high rainfall and soil moisture increase the likelihood of vegetation and soil damage (Leung and Marion 1996, 2000; Monz et al. 2010). One conclusion that DCR draws from this research is that trails should be sited along topographic contours in areas with well-drained soils and moderate slopes. The draft trail plan also prohibits mountain bike use during mud season.

Finally, the potential difference in environmental impacts among different types of recreational use is a very contentious issue for managers not just at the Fells, but in the majority of public lands. Over the last 25 years, there has been a significant increase in participation in recreational activities that either did not previously exist or were not popular, such as all-terrain vehicle riding, mountain biking, rock climbing, and geocaching (Cordell 2008; Cordell, Betz, and
Green 2008). Some of these uses clearly have much greater environmental impacts than hiking. For example, motorized all-terrain vehicles can travel longer distances in a shorter time, which increases the extent of impacts. They apply higher ground pressures and greater torque to soil and vegetation, which increases impact intensity. And they create a significant amount of noise, which increases wildlife disturbance (Monz et al. 2010).

By comparison, there is significant public debate about potential impact differences between hiking and mountain biking. But many studies indicate that mountain biking and hiking have similar effects on soils and vegetation. Research on experimentally applied mountain biking and hiking on vegetation and soil in a deciduous forest found no significant difference in plant stem density, species richness, and soil exposure (Thurston and Reader 2001). A study comparing the erosion impacts of hikers, mountain bikes, horses, and motorcycles found that horses and hikers actually generated more sediment than mountain bikes (Wilson and Seney 1994). Research on trail conditions in five Southwestern ecosystems found that mountain bike trails were comparable to hiking trails in terms of width and incision (White et al. 2006). And a study of wildlife responses to hikers and mountain bikers found no difference between the two (Taylor and Knight 2003).

The recreational ecology literature does suggest that dogs have a greater impact than hiking and mountain biking. Dog waste can contribute to bacteria in water supplies, which can pose health risks to humans and other animals. But most studies about dog use focus on impacts to wildlife. Dogs can displace foraging birds, disrupt their nesting behavior, and destroy nests. The presence of dogs can reduce bird diversity and abundance and alter the physiology and behavior of mammals. Even the lingering scent of dogs can displace mammalian predators. These impacts can affect wildlife habitat for hundreds of feet to either side of a trail (DCR 2010b).

Based on this literature, the draft plan concludes that mountain biking does not have greater impacts than hiking, but that dogs do:

Anecdotal reports notwithstanding, the current recreation ecology literature on the impacts of trail uses demonstrates that the environmental impacts caused by different types of trail use are similar between the main uses in the Fells, including hiking, running and mountain biking. Dogs, and particularly off-leash dogs within natural areas, do have some documented greater impacts on wildlife disturbance and dog waste can negatively impact drinking water supplies (DCR 2010a, 31).

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3 Geocaching is a high-tech treasure hunting game played using Global Positioning System (GPS) devices. The basic idea is to locate containers hidden outdoors, which often contain a logbook and small, non-valuable artifacts for the finder to take.
With the exception of dogs, the draft plan focuses on the magnitude of trail use, trail layout and design, and user behavior—not on use type—as it outlines recommendations to protect natural resources.

**Regulatory framework and sister agency guidance**

After establishing that all trails and recreational uses have measurable ecological impacts, the draft trail plan states that DCR is particularly concerned about areas “where illegal uses, off-trail uses or existing trails intersect with sensitive resources,” including wetlands, vernal pools, rare and endangered species habitats, and priority natural vegetation communities (DCR 2010a, 31). These sensitive resources are regulated by two state laws: the Wetlands Protection Act and the Massachusetts Endangered Species Act. The Wetlands Protection Act (WPA) applies to several types of “wetland resources” found in the Fells, including ponds, streams, banks, bordering vegetated wetland (swamps and marshes), and certified vernal pools. The WPA is administered by the Massachusetts Department of Environmental Protection (MassDEP) and by municipal conservation commissions. MassDEP and the local conservation commission must review and issue a permit for proposed projects that will remove, fill, dredge, or alter a wetland resource area (Massachusetts Department of Environmental Protection 2011; Pruitt 2011). Projects like trail construction and maintenance activities could trigger a permit requirement, but it is important to note that a policy change regarding allowed uses would not—the regulatory framework does not differentiate among the use types that occur in the Fells.

The draft trail plan does go beyond DCR’s legal responsibility to protect wetland resources. It states that DCR will attempt to certify additional vernal pools, and that “all vernal pools, certified or not, should be protected from direct trail and use impacts.” The draft plan states that DCR should prioritize maintenance activities with the potential to reduce existing erosion and sedimentation, and that “trails that currently traverse and impact wetland resources will be evaluated for closure” (DCR 2010a, 32). The recommendations to protect wetland resources reflect DCR’s interpretation of the recreational ecology literature: they address factors such as poor trail layout and design, off-leash dogs, and dog waste. The recommendations do not address the primary concern raised by Friends of the Fells: mountain bike use.

The protection of rare and endangered species habitats is regulated by the Massachusetts Endangered Species Act (MESA). MESA prohibits the “take” of any plant or animal species listed as endangered, threatened, or of special concern by the Massachusetts Division of Fisheries and
Wildlife. If a project is located within Priority Habitat for rare species and does not qualify for a standard exemption, it must be reviewed and approved by the Natural Heritage and Endangered Species Program (NHESP). The draft trail plan specifies that “all trail construction and maintenance activities (including basic maintenance) within Priority Habitat, whether completed by DCR staff or in cooperation with partners, must be reviewed and approved by the NHESP” (DCR 2010a, 33).

DCR has a close working relationship with NHESP, and staff asked Habitat Protection Specialist Lynn Harper to help assess the effects of trails on the nine listed species in the Fells. NHESP limited its comments to trails within the southern half of the reservation, which is listed as Priority Habitat. In a letter to Paul Jahnige, Harper stated that the presence of existing trails or any routine maintenance will have no effect on five of the listed species. But she identified three areas where maintenance on or erosion from existing trails could potentially cause problems for the other three listed species. In two of those areas the concern was wetland water quality. NHESP suggested that DCR ensure that trails within the area are not eroding into wetlands, and “if necessary to protect water quality, DCR should consider closing or moving trails in these areas” (DCR 2010a, 59). In the third area NHESP requested that DCR avoid disturbing the soil adjacent to trails or roads and refrain from enlarging the mowed areas adjacent to trails or roads beyond the existing lawns.

As with wetland protection, the draft trail plan incorporated recommendations beyond the legal requirements to protect sensitive flora and fauna. In addition to addressing specific impacts to listed species, NHESP’s letter expressed concern about the density of trails in the Fells:

DCR should consider very carefully any proposals for new trails in the Reservation. NHESP will review under MESA all such proposals in Priority Habitat of Rare Species, but beyond impacts to rare species habitats, dense trail networks can disrupt breeding birds, create lethal barriers to amphibian movement, and compact forest soils, among other impacts to general biodiversity (DCR 2010a, 59).

The draft plan also reflects a desire to protect potential Priority Natural Communities, which are not protected under MESA but “deserve special consideration by DCR in the planning of trail maintenance and development because they harbor important components of biodiversity” (33). The draft plan identifies off-trail use on ridge top locations as a particular concern, and states that DCR consulted with NHESP’s Natural Community Ecologist to develop a set of protective recommendations.
Staffing and Stewardship Partners

The recreational experiences and natural resource protection goals discussed above create the framework and establish the justification for the draft trail plan’s recommendations. But the draft plan is intended to be implementable, so another important consideration factored into DCR’s decisions regarding projects and policy changes: staffing resources and stewardship partners. The Middlesex Fells is managed by DCR’s Division of Urban Parks and Recreation (DUPR), which is responsible for 36 parks in the greater Boston area. The Fells is located within the Fells District of the North Region of DUPR, which also includes Breakheart, Mystic River, Beaver Brook, and Alewife Brook Reservations, a number of smaller properties, and miles of parkways. Technically, the Fells is overseen by three managers: the North Region Manager, the District Manager, and a Park Supervisor. In addition, four full-time staff are responsible for parkway maintenance, mowing, hazard tree removal, erosion control, and trailhead garbage removal. But these full-time operations staff are not responsible for trail maintenance, repair, or monitoring. DCR does hire seasonal employees for the summer recreation season. In 2010, two seasonal employees “had some responsibility for trail maintenance and monitoring” (DCR 2010a, 37).

DCR’s enforcement capabilities are even more limited. Two full-time rangers are responsible for overseeing the Fells District. In 2010, four seasonal rangers were hired for the district. According to the draft plan, ranger duties include opening and locking gates, crowd and parking control, interpretive services, responding to emergencies, and “monitoring and enforcement” (DCR 2010a, 37). But rangers have limited enforcement authority; they are only authorized to issue a citation for a non-criminal violation. If a ranger witnesses a violation, he or she may request identifying information from the offender. If the offender refuses, however, there is nothing the ranger can do. The Massachusetts State Police are the primary policing agency for DCR’s parkways and reservations and can assist the rangers with their enforcement responsibilities. But state police involvement is generally targeted at issues like possession of alcohol, vandalism, and trespassing on Massachusetts Water Resources Authority property (i.e., illegal swimming in the drinking water reservoirs). Neither the rangers nor the state police currently issue citations for trail use violations.

Unsurprisingly, the draft trail plan finds that “at current staffing levels, personnel within the Fells District are severely over-burdened by the management responsibilities of these significant properties” (DCR 2010a, 37). In the absence of agency resources, DCR turns to stewardship partners. The draft plan acknowledges the important roles played by both Friends of the Fells and NEMBA. Friends of the Fells organizes numerous educational and recreational programs, including
lectures, interpretive hikes, habitat restoration, and cleanups. Friends of the Fells also occasionally performs trail maintenance, through organized group projects and a volunteer trail adopter program. NEMBA organizes riding events, trail maintenance days, and a volunteer trail patrol.

In addition to recognizing the contributions of Friends of the Fells and NEMBA, the draft trail plan states that DCR “seeks to collaborate with a variety of other partners who may bring financial, organizational, human or other resources to assist DCR in forwarding its mission and goals within the Fells,” including FellsDOG and the Sierra Club. The draft plan continues, “DCR seeks to expand the number and breadth of stewardship partners collaborating with us in the Fells, particularly around the issues of trail maintenance, stewardship, and education” (DCR 2010a, 38). The recommendations reflect DCR’s reliance on user groups for trail improvements, user education, and self-enforcement.

**Recommendations**

DCR used its conclusions about recreational experiences and expectations, natural resource protection, and staffing and stewardship partner capacity as the framework for its recommendations. The draft trail plan includes 40 broad recommendations in ten categories, “designed to equally protect the Fells environment by reducing impacts from [the] trail system and trail uses and enhance the recreational experiences for all appropriate trail users” (DCR 2010a, 39). DCR prioritized the recommendations, and 26 were scheduled for either review in the RMP or implementation during 2010 and 2011 (46-47). The priority recommendations include the following:

- **Enhance enforcement of rules and regulations**
  - Enforce “Stay on Designated Trails” (no off-trail activities without a permit)
  - Enforce “No Biking on Hiking Only Trails” (prioritize Skyline and Rock Circuit Trails)
  - Enforce “Carry In, Carry Out”

- Close redundant, poor condition, confusing, and impactful trails
  - Close unnecessary trails leading to posted watershed land
  - Close poor condition and redundant trails in the Pine Hill area
  - Close “spider-web” trails in the Dark Hollow area

- Maintain trails with stewardship partners
- Establish trail stewardship Memoranda of Understanding and annual work plans with NEMBA, Friends of the Fells, and the Appalachian Mountain Club

- Improve trail system maps and signage
  - Create trail maps
  - Install intersection directional signage and enhance trailhead signage

- Enhance user education, information, and self-enforcement
  - Host trail user etiquette workshop to establish etiquette messages and partner self-enforcement strategies
  - Post trail rules and etiquette at trailheads

- Protect sensitive resources
  - Initiate implementation of all recommendations in Section 6.4

- Enhance parking and access
  - Evaluate options for a day use fee at Sheepfold (in RMP)

- Enhance pedestrian trail user experience
  - Designate Virginia Wood as “hiking only”
  - Evaluate separating overlaps between major loop trails (in RMP)
  - Evaluate options for separating uses by times or days (in RMP)

- Enhance mountain biking user experience
  - Designate Reservoir Trail as multi-use
  - Evaluate, design, and permit (if necessary) one to three official designated routes connecting Bear Hill parking to the Sheepfold in the Dark Hollow area; enhance signage and blazing
  - Change the winter closure policy for mountain biking to March 1 to April 15 or as conditions warrant
  - Evaluate designating sections of the Cross Fells Trail and Crystal Springs Trail as multi-use (in RMP)
  - Evaluate designating all appropriate trails as multi-use trails (in RMP)

- Provide positive experience for dog owners and their pets

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4 Section 6.4 of the draft plan includes the following recommendations: educate all users about ecological impacts of trail use; protect water supplies and wetland resources; protect certified and potential vernal pools; protect rare and endangered species and their habitats; minimize impacts to Priority Natural Communities; reduce disturbance to flora and fauna; and protect sensitive cultural resources.
o Establish a trial designated area or times that allow dogs to socialize off-leash at the Sheepfold
o Create and post rules regarding off-leash area and owner responsibility
o Monitor and evaluate off-leash dog use
o Evaluate options for off-leash trail opportunities (in RMP)

STAKEHOLDER REACTIONS
The only user group that was satisfied with the recommendations of the draft plan was NEMBA. In an online post on September 20, 2010, Adam Glick crowed, “Twenty...five...years. 1985. That’s how long we have been waiting. 25 years of inequitable access to a key, public, taxpayer (i.e. us) funded *urban* park and that is all about to change. It’s hard to believe, but at tonight’s public presentation, DCR showed some very positive steps in the right directions” (NEMBA 2010a).

But the group was not about to rest on its laurels. NEMBA organized a massive comment campaign, setting up a web-based platform for members and supporters to send form emails to DCR. The email expressed support for the draft trail plan and encouraged DCR to implement it immediately while the RMP proceeds. It identified eight recommendations in particular as good “starting points of changes in the Fells.” These included the four recommendations to designate or evaluate trails for mountain bike access and the proposal to shorten the winter closure to March only (although NEMBA recommended that it apply to all users, not just bikes). But NEMBA also expressed support for reducing the total trail mileage, formalizing stakeholder partnerships, and improving signage and maps. Of course, the email did offer suggestions for improvement. It identified three recommendations that NEMBA did not support, including designating the Skyline Trail and Virginia Woods as hiking only and separating uses by times or days. All told, NEMBA members and supporters sent a staggering 1,936 of these emails to DCR during the comment period.

Adam Glick also wrote a comment letter on behalf of the organization. In addition to providing detailed comments about specific recommendations, which reinforced the message of the form email, the letter made three main points. First, it returned to the familiar theme of bike access as a matter of equity: “Mountain bicyclists have endured a quarter century of discrimination due to arbitrary and overly restrictive trail policies applied only to bicycling. We applaud DCR’s attempt to reverse this fundamental inequity and bring it closer to the policies found in other DCR parks.” Second, it emphasized the integrated and comprehensive nature of the draft trail plan as a reason not to delay implementation: “Using DCR’s new Trail Planning Guidelines and Best Practices
Manual, the resulting Draft Trails Plan for the Fells is the most complete tool DCR has ever used in planning and managing their trail and natural resources. It is a model that can be used at any of the 200 properties under DCR’s stewardship” (Glick 2010a).

Third, Glick’s letter argued against the strategy of improving the pedestrian trail user experience by designating some trails as hiking only. “Almost all users at the Fells interact with one another in an appropriate way and the social bonds that are created through common experience are valuable to the trail community,” he explained. “The creation of exclusive-use trails only serves to reinforce the anti-social behavior of a select few (but vocal) users.” Glick recommended that instead of creating hiking-only trails DCR should treat the Fells like “every other DCR-managed park” and apply the statewide standard of a shared-use trail system (Glick 2010a).

Dog owners were pleased that recreating with a dog was incorporated among the managed uses, and that off-leash recreation was no longer associated with illicit uses like partying and cruising. They were happy about the proposal for an off-leash area at Sheepfold, but were disappointed in DCR’s failure to sanction off-leash trail use. In his comment letter on the draft plan, FellsDOG co-founder David Monahan argued that dog owners are primarily “responsible park users who respect the rights of other park users and treat our natural resources with great respect.” Given the existing pattern of off-leash use, and considering “the miles and miles of trails at the Fells, there is no reason why the DCR should not...designate one or more trails as permissible for off-leash dog walking” (Monahan 2010).

Monahan also disputed DCR’s portrayal of the science regarding the environmental impacts of dogs, saying that the draft trail plan gives the impression that “dogs are more damaging to the environment than the cited studies actually state.” He argued that research on water quality actually indicates that “waterfowl, gulls, and pigeons are a much greater source of fecal coliform in water supplies than dogs,” and that the studies cited regarding the impact of dog walking on wildlife did not support DCR’s conclusions. Monahan agreed that “the impact of dogs on wildlife should be taken into account,” but that DCR should not “overstate the impact that dogs have as compared to hikers and bikers” (Monahan 2010).

Friends of the Fells was deeply disappointed with the draft plan’s recommendations, especially in light of “the assurances made by Commissioner Sullivan” in his September letter that the trail plan would “essentially remain in draft form until an RMP process had been completed, save for protective measures.” Instead, as Mike Ryan argued in an email to DCR’s Director of Partnerships, the draft plan “put forth an agenda, phased to begin immediately, to convert hiking
trails to bike use to ‘Improve the Mountain Biking Trail User Experience.’” According to Ryan, the draft plan justifies additional bike access with the “demonstrable lie—verbatim NEMBA propaganda points—that boots and bikes are equal in their impacts on natural features” (Ryan 2010a).

Ryan argued that the draft plan denies the “obvious truth” that bikes have greater impacts, as evident based on both the principles of physics and “direct on the ground evidence” (Ryan 2010b). He explained that the distance traveled by mountain bikes per visit increases the extent of human impacts on both plants and animals. The weight and power of the bike are concentrated on a small tread print, which creates grooves that channel water and increase erosion. Ryan stated that bikers will ride on the edges of a trail to avoid rocks, which widens the trails. He also cited “half moons” on embankments and skid marks from stops and turns as evidence of increased erosion. Finally, he asserted that mountain bikes cannot avoid plants or small animals on a trail, and that they will ride through streams and vernal pools instead of going around them like hikers do. To support these arguments, Ryan cited the findings of another DCR management plan, the *Sudbury and Foss Reservoirs Watershed 2010 Public Access Plan Update*, prepared by the Office of Watershed Management in July 2010:

Regulations restrict bicycle riding to designated areas of DCR-Watershed property. The intensive use of trails for biking, if not properly constructed or maintained on a regular basis, can cause severe erosion. Heavy bicycle usage can also be incompatible with walking and nature observation. Additional policing is needed to monitor both permitted bicycling and illegal off-trail riding, and to prevent erosion. Due to limited resources for management of public access, recreational use, and user conflicts, DCR does not allow bicycle use on DCR-Watershed lands in the Sudbury System (DCR 2010f).

For Ryan, DCR’s insistence that mountain biking and hiking have equal environmental impacts was the result of a planning process focused on recreation, not resource management. He argued that the recreation orientation of the plan’s author—the Director of Greenways and Trails—resulted in a “paradigm shift” in how DCR views and seeks to manage the Middlesex Fells. From the perspective of Friends of the Fells, this paradigm shift is especially threatening in the absence of enforcement. Ryan sees the trail plan’s incremental increase in mountain bike access as the first leap down a slippery slope:

Opening up hiking trails to bikes without enforcement is tantamount to signaling that the entire Fells is fair game for bikes, given that bikers use permitted trails as feeder trails for riding wherever they decide would be more fun. The stamp of legitimacy will fuel NEMBA to herald the Fells as a new bike mecca and will bring a bold new presence of bikes into all sectors.
Without effective enforcement, Ryan argued, greater numbers of bikers will “ride wherever they choose,” including off-trail and onto sensitive habitats. He dismissed the proposed two additional seasonal rangers as having no enforcement power, and blasted the draft plan for failing to recommend that rangers team up with state police to issue citations and levy fines. He called the plan’s proposal for self-enforcement deceptive: “bikers laugh at such nonsense” (Ryan 2010a).

In short, Ryan argued that allowing additional mountain bike access without any additional enforcement capability would fundamentally change the character of the Middlesex Fells. He maintained that mountain bikes damage the environmental attributes that are supposed to be protected and disturb and endanger visitors who wish to use the park as it was originally intended: for the quiet contemplation of nature. In Ryan’s eyes, the Fells is and should remain a reservation: “a protected area managed primarily for its ecosystem’s flora and fauna, while also preserving features of geological, historical and cultural significance, all of which can be appreciated and enjoyed by visitors” (Ryan 2010a). But by increasing mountain bike access and downplaying the expectation of solitude, the draft Trail System Plan reframes the property as an “urban park” to be managed for recreational use.

Ryan’s proposed solution was to halt the draft trail plan and begin the resource management planning process. He acknowledged that the RMP can evaluate expanded uses, but argued that it also must demonstrate DCR’s capacity to enforce regulations and implement the natural resource protection measures: “the burden of proof is on the agency following twenty years of oversight failure and rampant non-compliance” (Ryan 2010a).

Ryan’s recommendations, if not all of his rationale, were supported by the four environmental groups that submitted comment letters on the draft plan: the Appalachian Mountain Club, the Environmental League of Massachusetts, Mass Audubon, and the Sierra Club. The groups made their position clear in a joint letter sent early in the comment period. They were concerned that “significant changes in trail use” were slated to occur prior to the completion of the RMP. These changes included designating mountain bike trails in the Dark Hollow area, shortening the winter mountain bike closure to a March closure, establishing an off-leash dog area at the Sheepfold, and designating Virginia Woods as hiking only. The joint letter explained that these “are all significant management decisions that would be best decided in the context of the full RMP process….For the RMP process to be meaningful and credible, these decisions should not be finalized and implemented outside of it.” The groups insisted that only “implementation measures
that would not significantly change the nature of a trail” should take place prior to the completion of the RMP, including “increased enforcement, improved signage, creation of trail maps, public education, and closing redundant trails” (Clish et al. 2010).

Letters submitted by the groups individually in November repeated this message with varying degrees of enmity. The Appalachian Mountain Club (AMC) was the most accepting of the draft Trail System Plan, and the bulk of its letter consisted of comments about the recreational experiences and expectations section and specific recommendations. But the AMC did advocate for the RMP process, and framed it as a way to build consensus among users: “Given the contentious debate around trail use at the Fells, we believe the process will also result in broader support for implementation of the final plan” (Clish 2010).

The Environmental League of Massachusetts (ELM) framed the RMP process as an opportunity for additional deliberation and public discussion:

We believe that before any significant changes in use take place, a fuller understanding of the reasons for the recommendations and more robust consideration of possible alternatives…would result in a better outcome and one that would be more widely accepted by those that use and cherish the Fells. We also believe that a facilitated or mediated series of dialogues could help address what appear to be conflicting needs.

ELM expressed doubts that the techniques proposed to manage user behavior, including education and self-enforcement, would be adequate to increase compliance with regulations. Like Friends of the Fells, ELM asked DCR to prove its management capacity prior to making changes from the status quo: “We strongly recommend that before any significant change in uses is made, that DCR attempt to manage the current conflicts and demonstrate that these techniques work and are sufficient” (Goodman 2010).

Comments from Mass Audubon and the Sierra Club directly addressed the role of a Trail System Plan as compared to a Resource Management Plan. The groups argued that resource management planning is a more appropriate framework for considering major management changes because it incorporates “a much greater spectrum of issues than a Trail System Plan.” At the heart of their argument is the fact that DCR is required by statute to prepare a Resource Management Plan that includes “guidelines for the operation and land stewardship” of the property. According to the Sierra Club, the intent of the statute is that “all major projects must proceed in accordance with a plan adopted by the [Stewardship] Council.” Since the Middlesex Fells does not yet have a Resource Management Plan, DCR cannot in good faith implement significant management changes, including changing the allowed recreational uses. Attempting to implement major changes through
the Trail System Plan “undermine[s] and betray[s] the intent and spirit of the laws designed to protect our public lands.” The Sierra Club also argued that implementing the recommendations of the draft trail plan could make the RMP “potentially meaningless when complete because it is already influenced by agency decisions that pre-date [it]” (McCaffrey 2010).

The Sierra Club did not limit its comments to the public record for the trail planning process. It also wrote a letter directly to Governor Patrick, and distributed the letter to the Stewardship Council at its November meeting. With political escalation came rhetorical escalation. The letter lambasted DCR for undertaking two simultaneous planning processes for the Middlesex Fells: “This duplicative and wasteful process undermines the credibility of any future Fells management directives, while squandering scarce agency resources with overlapping and conflicting efforts.” It argued that there was “no conceivable imperative to support the immediate expansion of use for any recreational group prior to the completion of [an RMP],” and that the “planning process has been manipulated into a futile effort with a predetermined outcome over which many environmental groups have expressed great concern.” The letter asked the governor to direct DCR to halt the trail planning process and to instead proceed with an RMP, “consistent with the DCR management planning statute.”

**DCR’S RESPONSE AND IMPLEMENTATION DECISION**

The comment period for the draft Trail System Plan ended on November 19, 2010. In early January 2011, DCR released a summary of the comments received and the agency’s response to major themes. DCR received 2,562 comments from over 2,400 individuals during the comment period, which the agency characterized as “evidence of vigorous public interest in the future of the Fells” (DCR 2011e). The majority of the comments—approximately 2,100 of the 2,562—supported the draft trail plan and its immediate implementation. DCR did note that “nearly all of these (1,936) were received as a form letter e-mail.” Support of the draft plan equated to support for additional mountain bike access, including designating trails as multi-use and implementing a March closure applying to all users. DCR acknowledged that the comments were opposed to keeping the Skyline Trail as hiking only, designating Virginia Woods as pedestrian only, and exploring the concept of different uses by different days or times.

As with the recreational experiences and expectations section of the draft trail plan, DCR’s response to these comments provides insight into the decision-making process. First, the agency views mountain biking as a legitimate and appropriate use: “DCR reaffirms that mountain biking is a
suitable recreational use in the Fells and that properly managed mountain biking is compatible with the natural and cultural values of the reservation even on single track trails” (DCR 2011e). The extent of that use, however, is constrained by the agency’s desire to accommodate users who want hiking-only trails. The response explains, “It is clear at the Fells that many users desire to find a recreational experience that does not include encountering bikes.” DCR did not directly respond to NEMBA’s request that the Skyline Trail be opened to multi-use, but rather postponed that decision until the RMP process.

Designating Skyline and Rock Circuit Trails as hiking only would actually be a continuation of the status quo. By contrast, DCR was not as attached to two potential changes intended to improve the pedestrian experience. According to the summary, no comments supported the proposals to designate Virginia Woods as pedestrian only or to separate pedestrian and mountain bike use by days or time. In both cases, DCR explained that “it is unlikely that we will include this recommendation in the final plan” (DCR 2011e). DCR was willing to propose those changes in the draft plan in response to general user requests, but the recommendations needed active hiker support to balance the opposition of both NEMBA and the AMC. Without support, DCR was not going to push the issue.

According to the comment summary, the “second largest number of comments received (roughly 350) opposed an expansion of mountain biking at the Fells or designating additional trails to include mountain biking use” (DCR 2011e). These comments fell into two camps: opposition to allowing mountain bikes in the Fells at all, and opposition to expanding any legal mountain bike access. DCR identified three common concerns used to justify these requests. First, that mountain bike use damages the natural environment by causing erosion, impacting wetlands, damaging plants, and disturbing wildlife. Second, that encountering mountain bikes can impact another user’s enjoyment of nature and sense of solitude. And third, that bikes pose a safety hazard to some other users, especially children and the elderly.

In response to comments about environmental impacts, DCR stood by its conclusions in the draft plan: the claim that mountain bikes damage the natural environment “is not supported by DCR’s evaluation of the trail conditions at the reservation or by the body of scientific literature in the field of recreational ecology.” DCR dismissed Friends of the Fells’ concerns as a matter of misperception. The response cited a 2002 study about the perceptions of environmental impact attributed to biking versus evaluations of actual impact. The study explains that “environmental consequences are minimal” because they are confined to the trail surface, and even though “tire
tracks in soft earth left by bikes are visually distinctive, they are not evidence of broader environmental impacts such as erosion or vegetation trampling” (DCR 2011e). In short, DCR justified its position by explaining that the environmental impact of bikes is not as bad as some people conclude simply by looking at the trails.

DCR also addressed concerns about user impacts. The response acknowledged Friends of the Fells’ clarification that impacts to solitude are a function of the type of use encountered: a mountain biker disturbs a hiker’s solitude, but another hiker does not. But this did not change the agency’s position about expectations: “DCR reaffirms the finding of the Trail Plan that users can find solitude in the Fells in certain areas and at certain times and seasons…[but] that finding solitude at all locations and times cannot be an expectation of users” (DCR 2011e). As with mountain bikers, DCR’s willingness to accommodate the desired recreational experiences of hikers is limited by the need to serve other user groups as well.

To respond to the concern that bikes pose a safety hazard, DCR turned to two sources of information in addition to user input: data and scientific literature. The response explained that “While DCR does receive reports of people having to move out of the way to avoid bikes, Fells incident records do not include any reports of actual accidents involving bikers and walkers” (DCR 2011e). This is consistent with the findings of the study about perceptions cited earlier, in which “bike-walker accidents were found to be nonexistent or minimal.” DCR concludes that bikes are not actually a safety hazard, but treats the perception of safety as an element of user experience: “we are committed to continuing to provide quality hiking-only experiences…so that users can find trails where they will not encounter bikes.” Of course, this assumes that bikes will in fact be absent from hiking only trails, and the response promises that DCR is committed to enhancing enforcement.

The use debate that dominated the comments on the draft plan was the 20-year-old disagreement about the presence and role of mountain bikes at the Fells. DCR received relatively few comments about off-leash dogs. According to the summary, approximately ten comments supported an official off-leash area at the Sheepfold. Even more surprisingly, since people are more likely to comment on what they dislike than what they agree with, “approximately seven individuals requested consideration of off-leash trail opportunities, and roughly the same number expressed concern about off-leash dogs at the reservation.” DCR’s response was to affirm the recommendations of the draft plan, while preparing dog owners for additional enforcement efforts. Beginning in spring 2011, “DCR will be allowing off-leash dogs only in a designated area at the
[S]heepfold, and better enforcing the leash laws elsewhere” (DCR 2011e). Potential designation of off-leash trails would be further explored in the RMP.

In short, DCR did not change its position on the types and extent of uses appropriate in the Fells in response to the comments it received. But the actual recommendations of the draft plan were only part of the larger debate, especially because several of the most controversial proposals had already been tabled for consideration during the RMP process. The question that DCR needed to answer definitively was whether the use-related recommendations of the draft trail plan would be implemented before the RMP was completed.

DCR decided not to implement the draft Trail System Plan prior to the completion of the RMP. This decision was based on perceptions of political feasibility: DCR responded to the demands of the politically powerful statewide environmental groups. But instead of weighing in on the larger issue raised by the environmental groups, which questioned the fundamental relationship between a Trail System Plan and a Resource Management Plan, DCR framed its decision as a response to the disagreement over the role of mountain biking. In a letter to stakeholders released simultaneously with the comment summaries and responses, Acting Commissioner Jack Murray explained:

DCR reaffirms that mountain biking is a suitable recreational use in the Fells and that properly managed mountain biking is compatible with the natural and cultural values of the reservation. Like other recreation and resource management goals, we believe that mountain biking can be enhanced in the Fells, but because of the public disagreement about the subject, we will not be designating any new trails for mountain biking use prior to the completion of the RMP (Murray 2011).

DCR effectively gave the environmental groups what they wanted most, without completely undermining the Trail System Plan and while maintaining the ability to make some (less controversial) management decisions in the interim.

Murray’s letter indicated that DCR did not intend to scrap the draft trail plan, as Friends of the Fells requested. The letter called the work on the Trail System Plan impressive, and stated that it will “become a component of the future draft RMP.” But Murray acknowledged the “need to enhance enforcement at the Fells now,” and announced that DCR was “revising some rules so that they make better sense to users and are more enforceable. We will then work with park staff, rangers, local and state police to enhance enforcement.” He announced that DCR would be undertaking four new enforcement priorities, two of which actually incorporated use changes proposed in the draft trail plan:
• Allowing off-leash dogs only in a designated area at the Sheepfold, and better enforcing the leash laws elsewhere beginning in the spring
• Changing the winter closure for mountain biking to the month of March, or as conditions warrant to protect the trail tread during “mud season,” and enforcing this restriction
• Affirming the regulation of no off-trail uses (without the appropriate permit) and enforcing this restriction, and
• Working with the Town of Winchester, MWRA and the State Police to better enforce no trespassing on posted water supply lands (Murray 2011)

The emphasis on enforcement could be construed as responsive to the concerns of Friends of the Fells and the environmental groups. But notably absent from that list is enforcement of the existing rules prohibiting biking on hiking-only trails. Nor did Murray prioritize any habitat restoration projects. With the exception of creating an off-leash area and shortening the winter mountain bike closure, the draft trail plan recommendations were essentially tabled—both the agreed-upon recommendations and those that were controversial.

CONCLUSIONS
DCR undertook the trail system planning process as a means of resolving the 20-year conflict between NEMBA and Friends of the Fells. From the agency’s perspective, the dispute was interfering with staff’s ability to make “modest” management decisions—like approving NEMBA’s Dark Hollow Pond Trail proposal—through typical internal processes. DCR’s solution was to step back and undertake a comprehensive, systematic review of the trail system. The planning process would allow DCR to “explore those differences of opinion” and engage both groups in a “broader dialog around the pros and cons of various decisions” (Briere 2011). The Trail System Plan would then establish an informed and considered vision for recreational use at the Fells.

DCR did want the planning process to build consensus and understanding between the two groups, as evidenced by its attempt to guide input and encourage collaborative problem solving at the February 2010 workshop. But given the conflict’s long history and the limitations of the traditional decide-announce-defend decision-making model, NEMBA and Friends of the Fells’ relationship remained adversarial. Both groups lobbied DCR heavily throughout the planning process, each trying to advance its own arguments and undermine the arguments of the “opposition.” There were two parts to each group’s strategy: the contents of the message, and how it was delivered.
The positions and arguments of each group remained consistent throughout the trail planning process. NEMBA framed the request for additional mountain bike access in terms of equality for a marginalized user group. Mountain bikers cited agency-wide precedent for multi-use trails and argued that the same standards should apply to the Fells. They justified additional mountain bike access by arguing that bikes do not cause environmental damage, and that bikers are in fact stewards of the property with specialized trail repair knowledge. Finally, NEMBA stressed their willingness to cooperate and coexist with other user groups.

Friends of the Fells made two primary arguments against mountain biking: that bikes cause environmental damage, and that they impact the recreational experience of other users by creating a safety hazard and decreasing the quality of the visitor experience. Friends of the Fells also focused on DCR’s failure to enforce existing rules and claimed that in the absence of enforcement any increase in authorized use would lead to additional unauthorized use. But the crux of their argument was that the Trail System Plan would fundamentally change the character of the Fells, from a reservation to a recreational bike park.

Both groups used similar tactics to ensure that their message was heard. First, each focused on numbers in an attempt to make their voice the “loudest.” They encouraged members to attend the public workshop and to submit comments during each step of the planning process. By emphasizing numbers, they seemed to assume that the group with the highest level of participation would prevail. Second, they did not limit their comments to the official public participation process. In addition to submitting comments to the project manager, they called, met with, or wrote letters to staff members and political officials all the way up the hierarchy, including the planning bureau chief, the commissioner, members of the Stewardship Council, and even the governor.

User group input did have a significant influence on DCR’s decisions about recreational use at the Fells. DCR incorporated the groups’ desired recreational experiences into the nine managed experiences identified in the draft plan. The recommendations offered something for each group: additional single-track mileage for mountain bikes and hiking-only trails and increased enforcement for Friends of the Fells.

But in spite of their consistent messages and persistent involvement in the process, neither group got everything they wanted. That was not because DCR failed to listen to or understand their desires; the contents of the draft plan and DCR’s response to comments acknowledged all of the groups’ major points. There were two limiting factors on their requests. First, because DCR attempted to manage recreational conflict through compromise, each user group was constrained by
what the other wanted. NEMBA could not have access to the Skyline Trail because Friends of the Fells wanted high-quality trail experiences where they would not encounter bicycles. Similarly, Friends of the Fells could not limit mountain bikes to the existing road network because NEMBA wanted additional single-track. Second, DCR had to determine that the user groups’ requests were reasonable. Reasonableness, in this case, was a function of how agency staff interpreted DCR’s mission and the purpose of the property. The dual mandate of the mission meant that neither conservation nor recreation could be left out entirely. But the location of the Fells in an urban setting, and the fact that it currently receives high levels of use, meant that it has to function as an urban park. In DCR’s view, an urban park must be some things to all people. The basic needs of all of the users must be met, and the most important environmental elements must be protected. Ultimately, however, an urban park prioritizes recreation above conservation.

If the conflict between NEMBA and Friends of the Fells was only about their desired recreational experiences, than the compromise proposed by the draft plan recommendations could have potentially reconciled their conflicting desires. But the debate over mountain biking is not just about its impacts on the hiking or nature study experience. It is fundamentally about how each group values the property. Friends of the Fells views the Fells as a reservation to be managed primarily for natural resource protection. NEMBA views it as a park that should accommodate recreational activities. By framing the Fells as an urban park, DCR staff made recreational use decisions that were well aligned with NEMBA’s values but inconsistent with Friends of the Fells’.

The draft plan tries to assuage Friends of the Fells’ concern about natural resource protection. It promises to meet and exceed regulatory guidance and incorporates the recommendations of the Natural Heritage and Endangered Species Program. But Friends of the Fells was not convinced by DCR’s insistence that mountain bikes have the same environmental impacts as hiking, nor did they trust the agency to do a better job enforcing the rules. DCR did not rely on their input in developing the natural resource recommendations, and Friends of the Fells did not trust the draft plan to be adequately protective of the environment.

The draft plan thus failed to resolve the fundamental conflict between the user groups, because the proposed compromise was inconsistent with Friends of the Fells’ values. Friends of the Fells resorted to a process-oriented strategy to try to force DCR to reprioritize conservation through the resource management planning process. They were able to outmaneuver NEMBA by appealing to statewide environmental groups that exert significant influence on the commissioner and Stewardship Council. DCR has consistently proven unwilling to make a final decision if staff thinks
another process may resolve a disagreement, so the agency tabled the draft Trail System Plan until the RMP is completed.

It is unlikely, however, that the RMP will fundamentally change the way DCR views the property. One of the hallmarks of the RMP process, and something that trail system planning does not incorporate, are Land Stewardship Zoning Guidelines. The purpose of the zoning guidelines is to define DCR’s priorities for stewardship based on three categories of properties. This is an attempt to make explicit the staff understanding of the property’s role. But in this case the zoning guidelines are not specific enough to settle the “reservation” or “urban park” debate. Even the most protective zone will allow the agency to make similar judgments about natural resource impacts based on its interpretation of scientific literature, on-the-ground data, and regulatory guidance.

That said, however, the RMP process does provide an opportunity to improve upon the resource protection recommendations of the trail plan. Improvements will not necessarily arise from the incorporation of new data, or additional user input, or a realignment of agency priorities—all of those will probably remain fundamentally the same during the RMP process. But the RMP should do a better job of analyzing recreational recommendations in the context of existing natural resource data. The draft Trail System Plan included a significant amount of natural resource data: topography, soil suitability, hydrology, priority habitat, and trail conditions. But the draft plan failed to interpret that data and integrate it into the recommendations. The RMP should ensure that the recreational recommendations are consistent with the natural resource data.

Finally, the draft trail plan’s “priority recommendations” included all of the recommendations to protect sensitive resources. On paper, those recommendations are adequately protective of the environment. But in practice, they are too broad to implement in the face of such limited agency resources. In the RMP, recommendations to enhance recreation and recommendations to protect natural resources should be proposed and evaluated at the same level of detail. The recreation orientation and the emphasis on user group input skewed that balance for the draft trail plan. To correct that, the RMP should create specific, project-level recommendations that incorporate both recreation and restoration. That would be an outcome with a chance of implementation by DCR and its stewardship partners.
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REFERENCES


http://www.gbnemba.org/home/entry/dcr-draft-plan-key-points.


