

Final Trails Plan
for
*Clarence Fahnestock Memorial
State Park and
Hudson Highlands State Park Preserve*

December 15, 2010



**New York State Office of Parks, Recreation
and Historic Preservation**

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Statement for Clarence Fahnestock Memorial State Park and Hudson Highlands State
Park Preserve 2010

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Andy Beers
Acting Commissioner

Tom Alworth
Deputy Commissioner for Natural Resources

Garrett Jobson
Acting Regional Director and Capital Facilities Manager, Taconic Region

Taconic Region Staff

William Bauman, *Park Manager*
Jesse Jaycox, *Natural Resource Steward (Biologist)*
Paul Kuznia, *Assistant Regional Recreation Coordinator, TOEC*
Kenneth Lutters, *Senior Landscape Architect (Retired)*
John Stowell, *Park Supervisor, TOEC*
Evan Thompson, *Park Worker*

Albany Staff

Edwina Belding, *Associate Environmental Analyst*
Richard Doll, *Parks and Recreation Aide*
Lynne Gort, *Parks and Recreation Aide Activity Specialist*
Nathan Krish, *Parks and Recreation Aide*
Robert Reinhardt, *Director of Planning (Retired)*
Nancy Stoner, *Trails Planner*

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I. Introduction

Clarence Fahnestock Memorial State Park (Fahnestock SP), comprised of over 14,000 acres, is located in the towns of Carmel, Kent, Philipstown and Putnam Valley in Putnam County, NY. The majority of the park is located between Route 9 on the west and the Taconic State Parkway (TSP) to the east. Other portions of the park lie between the TSP and the NYS Electric & Gas power line corridor to the east. There are two parcels off the northeast and southeast corners of the park that are isolated from the main park area. Conservation easements are held by OPRHP on three parcels (total of 2,018 acres) adjacent to the main area of the park.

The park offers a variety of recreational opportunities including camping, swimming and boating in the Canopus Lake area, as well as fishing, hunting, bird watching and trail-related activities. There are over 50 miles of designated trails (including footpaths and wood roads) that traverse the park and its diversity of ecological communities and varied topography and that provide access to scenic summits and a number of lakes and ponds. Trail uses permitted in the park include hiking, biking, horse-back riding, cross country skiing and snowshoeing.

Hudson Highlands State Park Preserve (Hudson Highlands SPP), comprised of 6,942 acres, consists of 15 areas located in three counties (Dutchess, Putnam and Westchester), three towns (Fishkill, Philipstown, and Cortlandt), two villages (Cold Spring and Nelsonville) and the City of Beacon, NY. The areas vary in size from 2.4 acres to over 4,000 acres. They span a 16 mile stretch along the east side of the Hudson River and extend eastward up to four miles. A conservation easement is held by OPRHP on a 445 acre parcel around Lake Surprise.

The park offers fishing along the Hudson River, two car-top boat launching sites, hunting, bird watching, and trail-related activities. The park is generally divided into a northern and a southern section. The northern section provides 35 miles of hiking trails and 2 miles of hiking/biking trails which include trails that extend onto adjacent properties that allow public access. The southern section of the park provides 10 miles of hiking trails including the Camp Smith Trail which traverses the NYS Military Reservation at Camp Smith within a trail easement between Anthony's Nose and the Harriman Tollhouse. Snowshoeing is allowed on all designated trails.

The Appalachian National Scenic Trail (AT), a 2,155 mile long hiking trail spanning from Springer Mountain, Georgia to Baxter State Park, Maine, traverses both the southern section of Hudson Highlands SPP and Fahnestock SP. The trail was designated the first National Scenic Trail in 1968 and is part of the National Park System.

As part of the master planning process, it was identified that due to the extensive nature and the high use of the trail systems and the diversity and sensitivity of the natural resources in the parks that a trails plan should be developed in conjunction with the master plan. With the extensive use of the trail systems, changing environmental conditions, and expanded information on significant natural resources within the parks, this trails plan provides direction and guidance for staff in the development, management and maintenance of high quality trail systems that meet the needs of the users while protecting the resources and integrity of the parks.

The Final Trails Plan has been developed concurrently with and as a supporting document to the master plan. Public comments regarding trails and recreation in the park were received at a public

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information meeting held in September 2009 as well as during the public comment period during September and October 2009 as part of the master planning process. A Trails Plan Subcommittee comprised of OPRHP staff was formed in October 2009 to provide input during the trails planning process and to make recommendations on proposals for the Trails Plan. This committee met with trail user groups in January 2010 to receive input regarding the trails systems. All of the comments received by OPRHP have helped to guide the development of the Trails Plan. Other factors that were taken into consideration in the development of the plan include current trail conditions, current uses, undesignated trails, needs and trends, current and future demands, and natural resource protection.

II. Existing Trail Systems

Fahnestock SP and Hudson Highlands SPP provide over 80 miles of designated trails covering a wide range of ecological communities and terrain over a large area. Designated trails are defined generally as trails that are named, marked and maintained for specific uses. When trails are designated, they have designated uses assigned to them; trails are to be maintained to use standards per OPRHP trail standards (see Appendix 1). There are many more miles of trails in both parks that are considered undesigned meaning they are unnamed, unmarked and not maintained.

Trail uses in the parks include hiking, biking, horse back riding, cross country skiing and snowshoeing. Trails in both parks are often extended onto adjacent parcels owned and managed by other entities that allow public access, thus providing a more expansive trail experience in the region.

At **Fahnestock SP**, footpaths are generally designated for hiking only, while designated wood roads are considered multi-use (hiking, biking, equestrian use) trails. **Figure 1** – Fahnestock State Park – Existing Trail System illustrates these and the parking areas currently serving them. Trail experiences at Fahnestock SP include those that offer scenic views of water bodies in the park to trails that traverse the more mountainous areas providing longer range vistas. Winter trail use is focused at the Fahnestock Winter Park in the Canopus Lake area. See **Figure 2** – Fahnestock State Park – Winter Park. There are over 10 miles of groomed cross country ski trails provided in the Winter Park, as well as 4 miles of marked snowshoe trails. All designated trails (except groomed cross country ski trails) are open to snowshoeing throughout the winter.

Parking lots (established parking areas for three or more vehicles) and trailheads (pull off areas for one to two vehicles) are located throughout the park providing multiple entry points into the trail system. There are a number of parking lots to accommodate horse trailers located at access points to the multi-use trails as well. In addition to designated trails in the park, there are many miles of undesigned trails including social trails developed by users over time, remnants of old carriage roads, old town roads and wood roads left from logging and other practices prior to the park's establishment.

At **Hudson Highlands SPP**, all designated trails currently allow for hiking only (except for Denning's Point and the Klara Sauer Trail which allow biking as well). See **Figures 3 and 4** – Hudson Highlands State Park Preserve – Existing Trail System – North/South. Due to the variety of sizes and locations of parcels that make up Hudson Highlands SPP, some longer trails traverse high rocky summits and offer scenic views of the Hudson River Valley to the west and east to Fahnestock SP, while other shorter trails are located along the Hudson River at Denning's Point, Little Stony Point, Dockside, and Arden Point and provide waterfront access. Designated trails are open to snowshoeing in the winter months (with the exception of Denning's Point which is closed from December 1 through March 31). There are no designated cross country ski trails in the park.

As with Fahnestock SP, parking areas are located at multiple entry points to the park. Access is currently provided to most of the 15 areas. There are undesigned trails located in the park consisting of social trails developed by users over time, as well as old wood roads and carriage roads.

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Designated footpaths throughout both parks are maintained by the New York-New Jersey Trail Conference (NYNJTC). Trail maintenance includes regular inspections, tree and brush clearing, marking, maintaining drainage structures, and addressing water management issues along trails. In addition, volunteers of the NYNJTC have played a traditional and integral role in trail construction and as stewards for the trail systems by developing and distributing trail maps and providing a presence along trails and on some mountain summits to direct visitors, answer questions and help in any necessary ways to enhance the user experience and protect the parks' resources. Free trail maps are available to the public at the Fahnestock SP office, various kiosks in the parks, and at the trail heads of Mt. Taurus and Breakneck Ridge in Hudson Highlands SPP. Two of the multi-use trails in Fahnestock SP (School Mountain and Moneyhole Mountain Trails) are maintained by a coordinated effort of the NYNJTC and local equestrian groups while the third multi-use trail (Roaring Brook Trail) is maintained by park staff.

Inventory

Table 1 and Table 2 below are inventory lists that provide the name, blaze color, designated uses, and mileage of each designated trail within Fahnestock SP and Hudson Highlands SPP respectively.

Table 1: Fahnestock State Park Trails Inventory

Trail Name	Blaze	Uses*	Length (miles)
Appalachian Trail (AT)	AT	H, SS	10.24
Cabot (CA)	White	H, SS	1.02
Candlewood Hill (CH)	Red	H, SS	2.17
Catfish Loop (CF)	Red	H, SS	3.95
Charcoal Burners (CB)	Red	H, SS	3.33
Clear Lake Scout Reservation (CL)	Various	H, SS	4.66
East Mountain (EM)	Red	H, SS	1.50
Fahnestock (FS)	Blue	H, SS	6.88
Moneyhole Mountain (MM)	Yellow	H, B, E, SS	4.07
Old Mine Railroad (OM)	Yellow	H, SS	1.65
Pelton Pond (PP)	Yellow	H, SS	0.87
Perkins (PK)	Yellow	H, SS	4.14
Roaring Brook (RB)	White	H, B, E, (SS), (CC)	7.53
School Mountain (SM)	White	H, B, E, SS	4.06
Three Lakes (TL)	Blue	H, SS	4.29
Trout Brook (TB)	Yellow	H, SS	0.55
Wiccopee (WI)	Blue	H, SS	1.82
Total Mileage (not including AT)			51.73

Type of Use: H (Hiking), B (Biking), E (Equestrian), SS (Snowshoeing), CC (Cross country skiing – groomed).
 *Uses noted in () indicate only a portion of that trail is open to the use.

Snowshoeing is allowed on all designated trails throughout the park except for the groomed cross country ski trail at the Fahnestock Winter Park. With the exception of the Fahnestock Winter Park, there are no designated cross country skiing trails in the park. The Fahnestock Winter Park provides a series of seasonally marked snowshoe trails and groomed cross country ski trails. These trails are currently only designated and marked for winter use.

Table 2: Hudson Highlands State Park Preserve Trails Inventory

Trail Name	Blaze	Uses	Length (miles)
Appalachian Trails (AT)	AT	H, SS	4.86
Arden Point (AP)	Blue/ Red	H, SS	1.51
Breakneck Bypass (BB)	Red	H, SS	0.76
Breakneck Ridge (BR)*	White	H, SS	4.40
Brook (BK)*	Red	H, SS	1.48
Camp Smith (CS)	Blue	H, SS	3.67
Carriage Connector (CC)	Yellow	H, SS	0.93
Casino (CT)*	Red	H, SS	2.00
Cornish (CN)*	Blue	H, SS	1.41
Denning's Point (DP)	White	H, B, SS	1.23
Fishkill Ridge (FR)*	White	H, SS	4.99
Klara Sauer (KS)*	None	H, B, SS	0.92
Lonestar (LS)	Blue	H, SS	0.99
Nelsonville (NV)*	Green	H, SS	2.28
North Redoubt (NR)	Red	H, SS	0.65
Notch (NT)*	Blue	H, SS	4.90
Osborn Loop (OB)	Blue	H, SS	2.06
Split Rock (SR)	Red	H, SS	0.26
Sugarloaf (SL)*	Red	H, SS	1.67
Undercliff (UC)*	Yellow	H, SS	3.60
Washburn (WB)	White	H, SS	2.26
Wilkinson Memorial (WM)*	Yellow	H, SS	7.94
Total mileage (not including AT)			46.74

Type of Use: H (Hiking), B (Biking), E (Equestrian), SS (Snowshoeing)

* Portions of these trails are located on adjacent properties.

Snowshoeing is allowed on all designated hiking trails throughout the park. There are no designated cross country skiing trails in the park.

The Appalachian National Scenic Trail (AT) transects both parks. The southern section of Hudson Highlands SPP is bisected by the AT from the crossing of the Hudson River on the Bear Mountain Bridge northeast through the Osborn Preserve to Route 9 and is 4.86 miles long within the park boundaries. From Route 9 north to Philipse Brook Road, the AT is located on lands owned by the National Park Service. The AT traverses Fahnestock SP for the next 10.24 miles, entering from the southern boundary of the park east of Catfish Pond, north across Route 301 past Canopus Lake, and exiting the park at Long Hill Road, near the Dutchess-Putnam County boundary. The AT within state parkland is cooperatively managed by the Appalachian Trail Conservancy and the NYNJTC, under a formal Memorandum of Understanding with OPRHP and other entities.

Assessment

As part of the trails planning process for these parks, the trails, all designated and most undesignated trails, were assessed during October 2009. The trail assessment team used hand-held Trimble GeoXT Global Positioning System (GPS) units to accurately collect assessment information. Most trails were assessed for type of use, general condition, degree of erosion, ease of travel, adequacy of signage and issues with water on the treadway. **Figures 5, 6, 7 and 8** – Trail Assessment Summaries depict the results of these assessments for Fahnestock SP (north and south) and Hudson Highlands SPP (north and south) in that order and represent the conditions found along the trails at that point in time.

Trails are generally very well blazed and well maintained because of the on-going efforts of NYNJTC volunteers, other user groups and OPRHP staff. All designated trails in the parks are marked with color markers or blazes. Designated trailheads and designated trail intersections are generally well marked as well. There are many undesignated trails throughout both parks consisting of wood roads and narrower singletrack trails (trails with a tread width of approximately 18-30 inches). These trails are generally in poor condition as they are not maintained and they are unmarked which causes disorientation for visitors unfamiliar with the parks' trail systems.

The parks' trails receive a high volume of users, including some who are unprepared for the trail experience. The presence of unmarked, undesignated trails in both parks and the high-use and inexperience of some visitors to the parks, contributes to weekly occurrences of lost visitors. Although maps are available in multiple locations, lost hikers are often found without maps in hand. At Hudson Highlands SPP, there is currently no central orientation hub or visitor center where patrons can get oriented and receive information about the trail system including access points and the expected experience, such as length and difficulty. On weekends during the summer of 2009, a Park Ranger was posted on high-use trails within Hudson Highlands SPP to provide an official park presence and help with visitor orientation and safety. NYNJTC volunteers often provide guidance and information to visitors along the trails. Nonetheless, the lack of orientation and informational kiosks, staff presence, and a centralized point of contact are significant ongoing concerns regarding the operation of Hudson Highlands SPP.

A number of trails in Fahnestock SP and the northern and southern sections of Hudson Highlands SPP traverse through or near two types of rocky summit communities (pitch pine-oak-heath rocky summit and red cedar rocky summit), that have been identified as significant ecological community types by the New York Natural Heritage Program (NYNHP). These are generally located along rocky mountain ridge tops. The Camp Smith Trail in the vicinity of Anthony's Nose in the southern section of Hudson Highlands SPP traverses a rocky summit grassland community that is also considered a significant ecological community. These natural communities provide habitat for some state threatened species. High visitor use in these very popular scenic areas may result in adverse impacts to the habitat, such as trampling of sensitive vegetation and erosion of the thin soils. Additional management of these areas should be considered as part of this plan.

All-Terrain Vehicle (ATV) and Off-Road Vehicle (ORV) (including off-road motorcycle) use and impacts are also concerns noted in both parks. These activities can result in significant erosion and other impacts to natural resources. Despite the fact that these recreational uses are prohibited in all state parks, ATV and ORV users access the trail systems from multiple points off both designated and undesignated trails. Use of existing wood roads is prevalent in some areas. In other areas, trail treads have been widened by ATV/ORV use because vegetation is run over by vehicle tires. Additionally, unwarranted trails have been created by users. Easy access to trails off main roads has been identified as a potential reason for the prevalence of use. Efforts to deter use and access, such as installation of signage and gates at trail entrances, have been largely ignored and have proved ineffective.

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Fahnestock SP

There are portions of some designated trails within Fahnestock SP that are in need of attention and potential rerouting. Some sections of the multi-use trails have eroded or are located in wet areas and there are also bridge structures in need of repair. The Old Mine Railroad Trail in the vicinity of Hidden Lake is sometimes underwater because beavers have dammed the lake outlet. The Three Lakes Trail crosses the outlet of John Allen Pond near the breached dam and is sometimes underwater and impassable.

The Canopus Lake Area in Fahnestock SP is a high-use area year-round. During the warmer months, the beach and camping areas are very popular and often filled to capacity. In addition, the lake is used for fishing. While there are winter trails in this area (Fahnestock Winter Park), they are currently marked only for winter uses and markers are removed for the summer season. A lack of designated (marked) hiking trails during the summer months in this heavily used area may contribute to its environmental degradation from visitors creating social paths and trampling vegetation.

The Taconic Outdoor Education Center (TOEC) is a year-round facility located next to Duck Pond in Fahnestock SP. The program provides environmental education, outdoor recreation, “Project Adventure”, maple sugaring, retreats, and public programs for Hudson Valley schools, scout troops and clubs. There is a network of trails surrounding TOEC that are used for programs and are not considered open for public through-access. Most of these trails have names but only some of them are marked. Three trails (marked but unnamed) provide connections from the TOEC trails to the Catfish Loop Trail. Trails are generally in good condition, although the assessment noted a number of wet spots along the trail to the north of Duck Pond where wetlands are located.

Hudson Highlands SPP

Some sections of trails in Hudson Highlands SPP are very steep and eroded and follow fall line alignments. In some cases, these sections experience very high use that contributes to tread wear, denuded trailside vegetation and severely eroded sections of trail. Parallel trails have developed in some instances because users try to bypass eroded and/or very steep sections. These sections of trail are considered unsustainable in that the current alignment, the lack of water management measures and the high levels of use are adversely impacting the natural resources. Erosion and trampled vegetation along trails and areas adjacent to trails are causes for concern.

The trail system of the northern section of Hudson Highlands SPP can be accessed by multiple parking areas and trailheads. On busy days, the public demand exceeds the capacity of the available parking spaces. Vehicles are often found parked along Route 9D which in many areas are not designated parking areas and have little sight distance. In some cases, parking areas are located across Route 9D from the trailhead. This issue is addressed in the master plan.

There are three Hudson River shoreline parcels in Hudson Highlands SPP that provide trail experiences for patron use. Denning’s Point offers a designated loop trail that generally follows a former fire road above and set back from the shoreline of the peninsula. The property is accessed via a parking lot on Dennings Avenue Extension. Denning’s Point is also the location of a Hudson River Greenway Water Trail designated site. The Klara Sauer (Beacon Riverfront) Trail,

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maintained by the City of Beacon, provides hiking and biking access between Denning's Point, Scenic Hudson's Long Dock holding, the Metro North station at Beacon, and the City of Beacon's Riverfront Park. The proposed extension of the Klara Sauer Trail eastward would connect Denning's Point to Scenic Hudson's Madam Brett Park, which is located to the east along the Fishkill Creek.

Little Stony Point is a +25-acre peninsula just to the north of the Village of Cold Spring along Route 9D. A one lane bridge crosses the Metro North tracks and provides safe access to the Point. The trail network, wholly undesignated and unmarked, consists of 8-foot wide trails to the beach area and around the base of the upland area. Single-track trails ascend through woodlands to the overlooks on the height of land and descend along the rocky edge left by previous quarry activities to re-join the lower trails. Parking, that provides access to this parcel and designated trails to the east, is located on both sides of Route 9D. The parking areas are often overflowing during busy summer weekends.

Arden Point also offers a designated loop trail with access from Lower Station Road at the Metro North Station in Garrison Landing. Trail connections exist between Arden Point and the Appalachian Trail within the Osborn Preserve area of the park via lands owned by the Open Space Institute and DEC's Castle Rock Unique Area. Arden Point is considered an appropriate stop on the Hudson River Water Trail although it is currently not a designated water trail site.

Other portions of the park provide short trails or access to the Hudson River. The North Redoubt, a Revolutionary War fortification, is a separate 18-acre parcel in the south section of Hudson Highlands SPP with a designated trail to the summit providing views of the Hudson River. A short trail from Indian Brook Road in Garrison leads to the base of Indian Brook Falls. Annsville Paddlesport Center, Bannerman's Island, Constitution Marsh, and Dockside each provide access to a variety of park resources but do not currently offer designated trails. In addition, several railroad underpasses, which connect the river and adjacent park uplands, exist in the brickyard area south of Denning's Point. These are currently undesignated but represent unique, potential access to the shoreline.

III. Trail System Alternatives

The alternatives and analyses presented here are the result of discussions on resource information provided in the previous chapter as it was analyzed to develop recommended directions for the trail systems in each park. All trails in the park were mapped using a hand-held Trimble GeoXT Global Positioning System (GPS). A conditions assessment of all trails was conducted by OPRHP staff during October 2009. The existing conditions maps, assessment information, Natural Heritage Data and public comments received from the master plan public information meeting held in September 2009 and public comment period, including some specific trail proposals, were all analyzed by OPRHP staff. The following factors were considered in the analysis process:

- Types of trail experiences
- Minimizing user conflicts
- Needs and desires of trail users
- Compatibility with and protection of significant natural and cultural resources
- Accessibility to persons of all abilities
- Support facilities
- Connections within high-use areas
- Linkages to external trail systems and adjacent communities
- Adequacy of parking
- Sustainability
- Parallel trails
- Density of trails
- Opportunities for environmental education and interpretation
- Park operations and management

The status quo, alternatives, considerations, and preferred alternative for uses and/or specific areas in each park are described in tabular form below.

Fahnestock SP

Fahnestock - Hiking-only trails
<p>Background for Analysis: Hiking activities, including walking, running, bird watching, and photography, occur throughout the park. Hiking is currently allowed on all designated trails within the park. There are over 35 miles of designated hiking-only trails. The AT provides an additional 10 miles of hiking-only trail experience within the park. Parking and trailheads are located at multiple locations around the park to access the trail system.</p> <p>Hiking-only trails are generally in good condition. Trailheads and trail intersections with undesignated trails are in some cases lacking in adequate signage and information for visitors.</p> <p>The Highlands Trail is a long distance hiking trail proposed by the NYNJTC to connect Pennsylvania (PA) and Connecticut (CT) through the Highlands physiographic region. The trail currently extends westward from the Hudson River at Storm King Mountain to the Delaware River in New Jersey. Plans to establish the trail eastward from the Hudson River include proposals to align the trail through Hudson Highlands SPP and Fahnestock SP.</p>

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See additional hiking-only trail recommendations under Candlewood Hill area and Canopus Lake Day Use Area below.	
Alternatives	Considerations
Alternative 1 - Status Quo	<ul style="list-style-type: none"> • The current network of hiking-only trails is maintained.
Alternative 2 – Improve the existing network of hiking-only trails including upgrades to and installation of trailhead and intersection signage, closure of some undesignated trails, and upgrades to unsustainable sections of trail.	<ul style="list-style-type: none"> • Visitor experience and safety is improved. • Upgrades to sections of trail may require water management techniques and clearing and grubbing for re-alignment. • Maintenance improvements, including potential re-alignments, increase the sustainability of the trail system and reduce impacts to the natural resources. • Trails along summits and near wetlands will be reviewed on a case by case basis for improvements to natural resource protection measures. • Remaining unsustainable trail sections and undesignated trails will be closed to protect resources and improve visitor safety and experience.
Alternative 3 – Develop a trail from the parking area on Route 301 north to School Mountain Trail near Round Hill.	<ul style="list-style-type: none"> • Provides additional trail loop opportunities, a unique trail experience through open and forested areas and improves the visitor experience overall. • Undesignated trail exists along portion of this corridor. • Some reroutes will be necessary to bypass unsustainable trail sections. • Trail construction, including vegetation clearing, tread development and stream crossing work, is required. • The existing parking area at the trailhead along Route 301 requires improvement. • The proposed trail alignment is located below sensitive summit areas and away from the steeper section of Round Hill. • Increases the potential for invasive species introduction and illegal ATV activity in current trail-less area; may increase use in areas of summit natural communities. • Additional monitoring will be required to insure there are no impacts to adjacent sensitive environmental areas (e.g. rare plant populations).
Alternative 4 - Designate a trail along Clove Creek from the parking area on Route 301 to connect into the Perkins Trail.	<ul style="list-style-type: none"> • Provides additional trail loop opportunity that will improve the visitor experience. • Existing undesignated trail is in fairly good condition. • May include bridge upgrade or development across Clove Creek to connect to the Perkins Trail. • Existing parking area along Route 301 requires improvement (same as above). • Additional monitoring will be required to insure there are no impacts to adjacent sensitive environmental areas (e.g. rare plant populations).

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<p>Alternative 5 – Designate a connector trail from Roaring Brook Trail to Clear Lake Trails.</p>	<ul style="list-style-type: none"> • Designates an appropriate connection already in use that will improve the visitor experience.
<p>Alternative 6 – Designate and develop hiking-only trails in the park as part of the Highlands Trail.</p>	<ul style="list-style-type: none"> • Requires additional development of trails to make hiking-only connections. • Includes a connection between Fahnestock SP and Hudson Highlands SPP. • Supports efforts to establish a trail connection from PA to CT.
<p>Alternative 7 – Designate and develop trails (hiking and multi-use) in the park as part of the Highlands Trail.</p>	<ul style="list-style-type: none"> • Some sections of this trail will be designated on multi-use trails. • Existing trails are used as much as possible. • Includes connection between Fahnestock SP and Hudson Highlands SPP. • Supports efforts to establish a trail connection from PA to CT.
<p>Preferred Alternative: A combination of Alternatives 2, 3, 4, and 5 is the preferred alternative because of the desire to designate some trails already in use and the need for additional connections and loop opportunities. See Figure 9 – New Trails Alternatives. The preferred alternative includes the designation of 1.2 miles of currently undesignated trail and development of 0.8 miles of new trail.</p> <p>OPRHP is committed to providing a Highlands Trail connection through Fahnestock SP. Figure 10 depicts one alternative alignment based on Alternative 7 above. Designation of a Highlands Trail route will require further review and assessment in conjunction with NYNJTC and partners as listed in the Memorandum of Understanding (MOU) for the AT. The Highlands Trail route will need to cross the AT in order to continue its eastward track. The trails plan does not currently recommend a final alignment for the Highlands Trail. In addition, the alignment for the Highlands Trail to the eastern boundary of the park is yet to be determined. Two conceptual routes are shown.</p> <p>Note regarding Figures: <i>Proposed Hiking Trail</i> denotes where an existing undesignated trail already exists and <i>Proposed Hiking Trail (Conceptual)</i> denotes a conceptual trail alignment where no trail currently exists. <i>Development</i> of a trail implies that at least a portion of the new trail does not currently exist and will need to be developed from design and layout through construction. <i>Designation</i> of a trail implies that there is an existing undesignated trail. Efforts will be made to use as much of the existing trails as possible during development and designation of new trails. In some cases, reroutes may be required along existing trails.</p>	

Fahnestock - Multi-use trails	
<p>Background for Analysis: There are over 15 miles of designated multi-use trails for hiking, biking and equestrian use in the park consisting of three out and back trails. The trails comprise old wood roads and carriage roads.</p> <p>Some sections of the multi-use trails are in need of maintenance including water management measures and bridge rehabilitation. Trailheads and trail intersections with undesignated trails are, in some cases, lacking in adequate signage and information for visitors.</p> <p>Parking and trailheads, providing access the trail system, are located at multiple locations around the park.. Horse trailer parking is available for each trail. The parking lot at the terminus of Wicoppee Road near the Taconic State Parkway (TSP), however, is not very well signed or publicized and is rarely used. Most equestrian use of the trails is currently by local riders who access the park and trails from adjacent parcels and/or along roads.</p>	
Alternatives	Considerations
Alternative 1 - Status Quo	<ul style="list-style-type: none"> • The current network of multi-use trails is maintained.
Alternative 2 – Improve the existing network of designated multi-use trails including upgrades to and installation of trailhead and intersection signage, closure of some undesignated trails, and upgrades to unsustainable sections of trail.	<ul style="list-style-type: none"> • Visitor experience and safety is improved. • Upgrades to sections of trail may require water management techniques and clearing and grubbing for re-alignment. • Maintenance improvements, including potential re-alignments, increase the sustainability of the trail system and reduce impacts to the natural resources. • Bridge rehabilitation is required in some cases. • Trails along summits and near wetlands will be reviewed on a case by case basis for improvements to natural resource protection measures. • Remaining unsustainable trail sections and undesignated trails will be closed to protect resources and improve visitor safety and experience.
Alternative 3 – Develop a multi-use trail to the northeast of Hubbard Lodge off School Mountain Trail.	<ul style="list-style-type: none"> • Provides a shorter trail loop near Hubbard Lodge that accommodates different uses, persons of differing abilities and improves the visitor experience. • Undesignated trail exists along portion of this corridor. • Trail construction, including vegetation clearing and tread development, is required. • Offers additional opportunity for interpretation of park’s natural and cultural resources and complements use of Hubbard Lodge.
Alternative 4 – Designate two multi-use trails east of Catfish Pond in the southeastern corner of the park and reroute a short section of the Moneyhole Mountain Trail off private property.	<ul style="list-style-type: none"> • Designates an appropriate connection to the trail system and provides access to scenic and cultural resources of the park. • Reflects current visitor uses of these trails. • Relocates section of trail off private property.

Fahnestock SP and Hudson Highlands SPP: Trails Plan

<p>Alternative 5 – Designate a multi-use trail between Wiccopee (WI) and Fahnestock (FS) Trails as part of a new multi-use loop consisting of portions of the School Mountain (SM), WI, Perkins (PK), and FS Trails.</p>	<ul style="list-style-type: none"> • Provides additional multi-use trail mileage and a loop opportunity that meets the needs of the public.. • Uses existing designated and undesignated trails for entire loop. • May require upgrading portions of existing designated hiking-only trails to other use standards.
<p>Alternative 6 – Develop a trail in the northern Wiccopee area to connect the Trout Brook Trail to Canopus Lake area trails and designate the Trout Brook Trail as multi-use.</p>	<ul style="list-style-type: none"> • Provides additional multi-use trail mileage that meets the needs of the public.. • Provides a multi-use trail connection between the eastern and western portions of the park. • Provides a multi-use access point along the northern border of the park. • Trail construction, including vegetation clearing and tread development, is required. • Uses remnants of an old town road, which is in fairly good condition, to create a portion of the trail. • May require bridge construction at multiple stream crossings. • The Trout Brook trailhead parking area does not accommodate horse trailers.
<p>Alternative 7 - Develop a hiking/biking loop trail east of the Taconic State Parkway.</p>	<ul style="list-style-type: none"> • Provides additional multi-use trail mileage that meets the needs of the public.. • The Park already works with user groups to clear and upgrade existing undesignated trails. • Trail construction, including vegetation clearing and tread development, is required.
<p>Alternative 8 - Develop multi-use loop trails utilizing sections of Indian Brook and Sunken Mine Roads in conjunction with Moneyhole Mountain Trail.</p>	<ul style="list-style-type: none"> • Loop trail opportunities enhance the visitor experience. • Uses existing right-of-ways. • The roads are open to vehicular traffic and maintained by the towns of Putnam Valley and Philipstown. • Sections with sharp curves and no sight lines exist along both roads which could create unsafe conditions. • There is very little shoulder area, if any, along roads.

Preferred Alternative: A combination of Alternatives 2, 3, 4, 5, and 7 and a portion of Alternative 6 is the preferred alternative because of the desire to designate some trails already in use, the need for additional connections and loop trails to enhance multi-use opportunities in the park.

See **Figure 9** – New Trails Alternatives depicting the multi-use trail alternatives. See **Figure 11** – Equestrian Trails Alternatives and **Figure 12** – Biking Trails Alternatives for the proposed equestrian and biking trail networks.

Alternative 6: The development of a trail in the northern Wiccopee area to connect the Trout Brook Trail to Canopus Lake area trails will require further review and assessment and consultation with the partners of the MOU for the AT because the proposed trail crosses the AT corridor. (This trail is shown on Figure 9 as an alternative but is not included on the Final Trails Plan map.) The Trout Brook Trail will be designated as multi-use to provide an additional multi-use access point along the northern border of the park.

The preferred alternative will include the re-designation of 2.5 miles of currently hiking-only trails to multi-use trails, 5.9 miles of undesignated trails and development of 2.1 miles of new trail. Horse trailer parking at Hubbard Lodge will be developed and improved per the master plan. Horse trailer parking at the terminus of Wiccopee Road will be promoted through signage and education in conjunction with this alternative.

Note: See additional multi-use trail recommendations under Roaring Brook area and Canopus Lake Day Use Area below.

Fahnestock - Candlewood Hill Area

Background for Analysis: The Candlewood Hill Area is located southeast of the Clear Lake Conservation Easement parcel and to the west of Oscawana Lake and includes a section of lake frontage. Existing roadside parking along Sunken Mine Road provides access to the Candlewood Hill Trail in the northern part of this area. The southern portion of the Candlewood Hill Trail descends sharply to Bell Hollow Road. Recent acquisitions have extended the park southward. A couple of undesignated trails extend from the Candlewood Hill Trail south along the ridge. There is no parking area designated for access from roads to the south.

Alternatives	Considerations
Alternative 1 - Status Quo	<ul style="list-style-type: none"> • One trail designated in northern section has a steep descent to Bell Hollow Road. • Trails will not be designated in this area. • Visitor access to the Candlewood Hill parcel and lake-front is limited.
Alternative 2 – Designate and develop trails in this area.	<ul style="list-style-type: none"> • Provides designated trail access to the Candlewood Hill Area and the lake for viewing and fishing. • Trail construction is required to access the lake. • Parking is limited. • May require relocation of trail access points from Bell Hollow Road.

Preferred Alternative: Alternative 2 is the preferred alternative because of the desire to provide designated and sustainable access into this area and to Oscawana Lake. Access will be from the Candlewood Hill Trail to the north and off Bell Hollow Road (trail access may require relocation). Designation and development of trails in this area will require future on-site visits. Development of a parking area will be considered upon future acquisition of adjacent property(ies). See **Figure**

9 – New Trails Alternatives.

Fahnestock - Roaring Brook Area

Background for Analysis: This area is located in the southeast portion of the park on the east side of the Taconic State Parkway (TSP). There is an existing network of undesignated trails composed of old stone wall-lined town roads that run past many remnants of old homesteads and a former Civilian Conservation Corps camp. The trail network connects to the power line corridor on the eastern park boundary and continues east along old town roads to Waywayanda Road and a small Department of Environmental Conservation (DEC) parking area for the California Hill Multiple Use Area.

The area does not offer any parking and there is no easily accessible site where one could be developed. The south and west are bounded by the TSP with private property to the north and a power line corridor to the east.

Alternatives	Considerations
Alternative 1 - Status Quo	<ul style="list-style-type: none"> • No designation of trails in this area. • There will continue to be limited or no designated access for visitors. • Some sections of trail are very eroded and will continue to erode without maintenance.
Alternative 2 – Designate and develop multi-use trail loops within this area with access through the DEC property.	<ul style="list-style-type: none"> • Provides multi-use opportunities in the area. • Provides access to cultural resources of the park. • Uses parking facilities located on DEC property. • Maintenance of trails will reduce impacts to the natural resources.

Preferred Alternative: Alternative 2 is the preferred alternative because it will provide trail activities in this section of the park and appropriate access to the area’s cultural resources. This plan recommends future designation of multi-use (hiking, biking, equestrian) trail loops in this parcel using sustainable sections of the existing network. Additional trail construction will be required to develop the proposed loops. Designation and development of trails in this area will require future on-site visits. Coordination with DEC for parking and access through the California Hill Multiple Use Area is required. See **Figures 9, 11 and 12.**

Fahnestock - Cross country Skiing

Background for Analysis: The Fahnestock Winter Park, developed and maintained by staff of the Taconic Outdoor Education Center (TOEC), currently provides over nine miles of groomed cross country ski trails. Trail alignments occur on a mixture of park roads, road shoulders, and trail corridors through forested areas. Trails are only marked for winter use. Parking and facilities for cross country skiers are provided at the Canopus Lake Lodge.

Concerns have been raised about perceived and potential impacts to the natural resources of the Canopus Lake Area due to the density of cross country ski trails.

Aside from the Winter Park, there are no designated cross country ski trails in the park. Currently, some trails are being used for this winter use.

Fahnestock SP and Hudson Highlands SPP: Trails Plan

Alternatives	Considerations
Alternative 1 - Status Quo	<ul style="list-style-type: none"> • The current network of groomed trails is maintained. • There are no designated cross country ski trails aside from the Winter Park.
Alternative 2 – Reduce the density of the existing groomed trail system.	<ul style="list-style-type: none"> • Potentially reduces impacts to the natural resources. • Reduces mileage for a highly popular program and will potentially diminished the visitor experience. • Potentially reduces revenues from park programs because of decreased use.
Alternative 3 – Expand the groomed cross country ski trail system into other areas of the park.	<ul style="list-style-type: none"> • Expands cross country skiing opportunities in the park. • Potentially increases impacts to the natural resources of the park. • Requires additional infrastructure to monitor use and collect fees.
Alternative 4 – Expand the network of groomed trails with one additional trail loop around Stillwater Lake.	<ul style="list-style-type: none"> • Expands cross country skiing opportunities in the park. • Uses existing park roads and an undesignated trail to the greatest extent possible in order to minimize impacts to natural resources. • Some vegetation clearing and tread construction will be required. • An additional loop opportunity will enhance the visitor experience and will meet public demand.
Alternative 5 – Designate certain trails and a seasonal road for (ungroomed) cross country skiing (School Mountain Trail and a new multi-use loop trail near Hubbard Lodge, Old Mine Railroad Trail, a new designated and developed loop trail east of TSP and Sunken Mine Road (closed to vehicles Dec. - Apr).	<ul style="list-style-type: none"> • Not all trails in the park are appropriate for this use. • Designation of trails for this use will help direct public winter use toward appropriate trails and increase public safety.
<p>Preferred Alternative: A combination of Alternative 4 and 5 is the preferred alternative because it expands the park’s groomed cross country skiing opportunities in an adjacent area and designates trails appropriate for (ungroomed) cross country skiing. The additional loop around Stillwater Lake will include the designation of 1.1 miles of currently undesignated trail and park roads and the development of 0.4 miles of new trail. The newly designated trails and road will be maintained for cross country skiing.</p>	

Fahnestock - Snowshoeing
<p>Background for Analysis: The Fahnestock Winter Park currently provides three miles of marked snowshoe trails. Trail alignments follow a section of the AT but otherwise weave through forested areas. Trail markers are removed after the winter season and trail corridors are generally not</p>

distinguishable throughout the rest of the year. In addition, snowshoeing is allowed on all designated trails (with the exception of groomed cross country ski trails). The existing network of marked snowshoe trails and access to all designated trails currently meets the public demand.

Preferred Alternative: Continue to provide the existing network of marked snowshoe trails at the Fahnestock Winter Park and allow snowshoeing on all designated trails throughout the park (except groomed cross country ski trails).

Fahnestock - Canopus Lake Day Use Area and Pelton Pond Campground Area Trails

Background for Analysis: Some of the existing trails in the Canopus Lake Day Use and Pelton Pond Campground Areas are currently winter use only trails (see **Figure 1**). They were generally designed as cross country ski trails. Trail markers are installed along the ski trails for the winter season and removed thereafter. (The snowshoe trails are also only marked in the winter. The majority of these trails, however, are not identifiable trails in summer.)

Most of these winter use only trails are considered undesignated trails throughout the remainder of the year (they are unmarked, unnamed and have no specific uses associated with them); however, they are used by hikers, bikers, and equestrians in the summer months. There are some sections of the ski trails that become overgrown and are not readily distinguishable during the summer season. Otherwise, the trails are maintained in good condition including a number of wooden platform bridges to the southeast of the campground area.

This is the highest use area of the park year-round. The need to designate some trail loops in this area will enhance the summer trail experiences for the multitude of visitors to the lake, beach and campgrounds. The opportunity exists to designate some of the ski trails as single and multi-use trails for year-round use.

Alternatives	Considerations
Alternative 1 - Status Quo	<ul style="list-style-type: none"> • Trails in this vicinity are maintained as cross country ski trails for winter use only. • The lack of designated trail loops will not enhance the summer visitor experience.
Alternative 2 – Designate <u>some</u> of the currently winter use only trails for summer use.	<ul style="list-style-type: none"> • Some of these trails are currently being used by hikers, bikers, and equestrians. • Designating trails would reflect existing use focusing visitors to desired and appropriate trail corridors. • Loop trail opportunities will enhance the visitor experience. • Both single-use and multi-use trail opportunities exist.
Alternative 3 – Designate <u>all</u> of the currently winter use only trails for summer use.	<ul style="list-style-type: none"> • Some of these trails are currently being used by hikers, bikers, and equestrians. • Designating trails will focus visitors to desired and appropriate trail corridors. • Loop trail opportunities will enhance the visitor experience. • Both single-use and multi-use trail opportunities exist. • Not all trails are aligned appropriately for summer use (through and between campsites).

Preferred Alternative: Alternative 2 is the preferred alternative because it will accommodate existing use and enhance the visitor experience while reducing impacts to the natural resources.

Two loops will be designated near the beach area. Two multi-use loops will be designated and developed south of the campground near Stillwater Lake (includes the new cross country ski trail loop around Stillwater Lake as noted in the cross country skiing alternatives above.) Connector trails, between the campground and campground road and the Pelton Pond Trail will be blazed and signed to enhance the visitor experience. See **Figure 13** – Canopus Lake Area Alternatives. A bridge will be constructed over Route 301 near the Canopus Lake entrance to provide a year-round safe crossing for park users.

The preferred alternative will designate 4.6 miles of ski trails for summer use.

Designating a multi-use trail through the Canopus Lake Area (as shown on Figure 13) to connect to the Wiccopee area will require further review and assessment in conjunction with a potential multi-use trail in the Wiccopee area. This multi-use connection is not shown on the Final Trails Plan maps.

Taconic Outdoor Educational Center (TOEC) – Staff use a network of hiking trails surrounding the facilities to conduct programming. Some of these trails are designated (maintained, marked and named) while some are maintained and named but remain unmarked. Three marked (but unnamed) connector trails provide links between TOEC trails and the Catfish Loop (CF) Trail. This plan recommends closing one unused trail (Old Ski Trail) and one redundant trail (southern connector trail to the CF Trail.) The plan also recommends marking currently named but unmarked trails and signing trail intersections to increase visitor safety and enhance the trail experience. See **Figure 14 - Taconic Outdoor Education Center**.

The Taconic State Parkway (TSP) represents an impediment to trails because at-grade crossings of the parkway are unlikely to receive DOT approval. The crossing of the TSP is limited to the Route 301 overpass. This connection should be maintained and improved during any future DOT construction. The current at-grade road crossing at Pudding Street is being considered for construction of a grade separation between the town road and the TSP. Improved trail connections between the portions of Fahnestock SP lying east and west of the TSP should be incorporated in these and future DOT projects.

Hudson Highlands State Park Preserve

Hudson Highlands - Hiking-only trails	
<p>Background for Analysis: Hiking activities, including walking, running, bird watching, and photography, occur throughout the park. Hiking is currently allowed on all designated trails in the park. There are over 40 miles of hiking-only trails. Parking areas and trailheads that access the trail system exist at multiple locations around the park.</p> <p>The Highlands Trail is a long distance hiking trail proposed to connect Pennsylvania (PA) and Connecticut (CT) along the Highlands physiographic region. The trail currently extends westward from the Hudson River at Storm King Mountain to the Delaware River in New Jersey. Plans to establish the trail eastward from the Hudson River include proposals to align the trail through Hudson Highlands SPP and Fahnestock SP.</p>	
Alternatives	Considerations
Alternative 1 - Status Quo	<ul style="list-style-type: none"> • The current network of hiking-only trails is maintained.
Alternative 2 – Improve the existing network of hiking-only trails including upgrades to and installation of trailhead and intersection signage, closure of some undesignated trails, and upgrades to unsustainable sections of trail.	<ul style="list-style-type: none"> • Visitor experience and safety is improved. • Upgrades to sections of trail may require water management techniques, rock work, and clearing and grubbing for re-alignment. • Maintenance improvements including potential re-alignments increase the sustainability of the trail system and reduce impacts to the natural resources. • Trails along summits and near wetlands will be reviewed on a case by case basis for improvements to natural resource protection measures. • Remaining unsustainable trail sections and undesignated trails will be closed to protect resources and improve visitor safety and experience.
Alternative 3 – Designate and develop a trail from the parking area located near the entrance of the Lake Surprise Camp south to connect into the Notch Trail. (North section of HHSPP)	<ul style="list-style-type: none"> • An easement held by OPRHP allows for development of one trail southeast of the camp property. • Uses existing undesignated trail as much as possible. • Provides an additional access point to the trail system from the east side of the park.
Alternative 4 – Designate and develop a trail through the Northeast Fishkill Ridge parcel in the northern-most section of the park connecting Route 9 to the Fishkill Ridge Trail. (North section of HHSPP)	<ul style="list-style-type: none"> • Provides an additional access point to the trail system and the only access from Route 9. • Completes a trail connection between Cold Spring and Fishkill. • Requires bridge construction over Clove Creek. • Requires development of a small trailhead parking area. • Sensitive summit areas and habitat are located in the vicinity. • Wetlands are located west of Route 9. • There are steep ridges along eastern side of the mountain that pose challenges for routing the trail. • Northern slopes are gentler for potential trail development.

Fahnestock SP and Hudson Highlands SPP: Trails Plan

<p>Alternative 5 – Designate and develop an alternate alignment for a section of the AT just south of the trailhead along South Mountain Pass Road to connect into the Camp Smith Trail to the northeast of Anthony’s Nose. (South section of HHSPP)</p>	<ul style="list-style-type: none"> • Provides a less steep trail route than the existing alignment. • Uses the existing military road for the eastern half of proposed trail. • Anthony’s Nose is a location of sensitive summit areas and habitat.
<p>Alternative 6 – Designate and Develop trails within the park as part of the Highlands Trail. (North section of HHSPP)</p>	<ul style="list-style-type: none"> • Existing trails will be used as much as possible. • Trail construction, including vegetation clearing and tread development, is required for the eastern section. • Includes a connection between Hudson Highlands SPP and Fahnestock SP. • Supports efforts to establish a trail connection from PA to CT
<p>Preferred Alternative: A combination of Alternatives 2, 3, 4, and 6 is the preferred alternative because it will enhance the existing system, address the need for additional connections and support a regional trail effort. See Figures 15 and 16 – New Trails Alternatives (North and South).</p> <p>Alternative 5: Development of a less steep alternate alignment for the AT (shown on Figure 16) (in addition to the existing alignment) will be further reviewed and assessed in conjunction with the partners listed in the Memorandum of Understanding (MOU) for the AT because this additional proposed trail is within the AT corridor. This trail is not shown on the Final Trails Plan maps. The preferred alternative will include the designation of 4.8 miles of currently undesignated trail and development of 2.9 miles of new trail.</p>	

<p>Hudson Highlands - Mountain Biking</p>	
<p>Background for Analysis: The only designated trails in Hudson Highlands SPP that allow mountain biking are at Denning’s Point and the Klara Sauer Trail. Mountain biking is not allowed in the Osborn Preserve section of the park because of a deed restriction. In the northern section, many trails (both designated and undesignated) north of the Melzingah Reservoirs, including the Notch Trail, are currently informally used for mountain biking. Mountain bikers also use a number of trails that extend onto the adjacent Scenic Hudson parcels (Mount Beacon Park and Fishkill Ridge) and onto private lands.</p> <p>There are many parking areas located in this vicinity; each is located off park property.</p>	
<p>Alternatives</p>	<p>Considerations</p>
<p>Alternative 1 – Status Quo</p>	<ul style="list-style-type: none"> • Mountain biking opportunities remain limited in the park. • Mountain biking continues in an informal manner.
<p>Alternative 2 – Designate and develop a network of trails in the northern section of the park for mountain biking use (including sections of the Notch and</p>	<ul style="list-style-type: none"> • Existing trails (designated and undesignated) are used as much as possible to minimize impacts on natural resources. • Unsustainable trail sections will be closed to protect resources and improve visitor safety and experience. • Addresses demand for this activity and directs existing use to appropriate areas.

<p>Casino Trails, a number of existing woods and maintenance roads and singletrack trails near the Melzingah Reservoirs) and develop a connection to the proposed parking area for the proposed Visitor Center along Route 9D (see master plan).</p>	<ul style="list-style-type: none"> • Loop trails will enhance the visitor experience. • An additional parking lot accessed from Route 9D at the site of the proposed Visitor Center will accommodate users. • Access will be maintained from the former University Settlement Camp. • Includes minor reroutes of the Notch Trail to move alignment off private property. • Includes closing the short section of trail between the existing trailhead sign along Route 9D and the small dam and establishing the parking area as the new trailhead. • Requires coordination with Scenic Hudson for designation of use on trails.
<p>Preferred Alternative: Alternative 2 is the preferred alternative because it addresses demand for mountain biking and directs the existing use to more sustainable trails. See Figure 15 – New Trails Alternatives depicting the proposed multi-use trails. See Figure 17 – Biking Trails Alternatives for the proposed biking trail network. The preferred alternative will include the designation of 2.0 miles of currently hiking-only trails, 8.8 miles of currently undesignated trails and maintenance roads and development of 0.6 miles of new trail.</p>	

Hudson Highlands - Equestrian Use

Background for Analysis: There are currently no trails designated for equestrian use in Hudson Highlands SPP. The very steep terrain in the northern section of the park is not conducive to horse back riding.

There are a number of old carriage roads and trails in the Osborn Preserve area (southern section) that extend off park property onto adjacent public and private lands and that are used by equestrians. Equestrians generally enter park trails from adjacent or nearby private property. A portion of the Appalachian Trail (AT) in the Osborn Preserve parcel allows horse back riding because the AT was aligned on a historic carriage road in this section.

There is a car parking area and two trailheads located on park property to access the trails including a number of parking areas available on adjacent public lands. There is no designated horse trailer parking available in the vicinity of the park.

Alternatives	Considerations
Alternative 1 - Status Quo	<ul style="list-style-type: none"> • There are no designated trails that allow equestrian use within the park. • Equestrian use will continue in an informal manner.
Alternative 2 – Designate a network of trails in the southern section of the park for equestrian use.	<ul style="list-style-type: none"> • Existing trails (designated and undesignated) will be used to the greatest extent possible to minimize impacts on natural resources. • Addresses demand for this activity and directs existing use to appropriate areas. • Loop trails will enhance the visitor experience. • Horse trailer parking will be provided at the Castle Rock Unique Area in conjunction with DEC.

Preferred Alternative: Alternative 2 is preferred because it directs existing use to appropriate areas and addresses demand for the activity. See **Figure 16** – New Trails Alternatives depicting the proposed multi-use (hiking, equestrian) trails. See **Figure 18** – Equestrian Trails Alternatives for the equestrian trail network. The network will use existing trails (either adding equestrian use to currently hiking-only trails or designating currently undesignated trails for hiking and equestrian use); there is no new construction proposed.

The section of proposed trail south of South Mountain Pass Road will require further review and assessment with the partners as listed in the MOU for the AT because a portion of this trail is within the AT corridor. This section of trail is not shown on the Final Trails Plan maps.

There will remain no equestrian use in the northern section of Hudson Highlands SPP due to the limitations of the terrain.

The preferred alternative will designate 4.3 miles of hiking-only trails and 2.8 miles of undesignated trails as multi-use (hiking, equestrian) trails.

Hudson Highlands - Cross country skiing	
Background for Analysis: There are no designated cross country ski trails in the park. Much of the terrain in Hudson Highlands SPP is not conducive to this use.	
Alternatives	Considerations
Alternative 1 - Status Quo	<ul style="list-style-type: none"> • There remain no designated cross country ski trails in the park. • Many trails are not conducive to this use due to terrain.
Alternative 2 – Designate (ungroomed) cross country skiing on certain trails that are appropriate for this use such as Arden Point Trail, Little Stony Point Trail, Nelsonville Trail and the Klara Sauer Trail.	<ul style="list-style-type: none"> • Not all trails in the park are appropriate for this use. • Designating appropriate trails for this use will help direct public winter use to acceptable locations and increase public safety.
Preferred Alternative: Alternative 2 is preferred because it designates appropriate trails for this use. The newly designated trails will be maintained for cross country skiing. Coordination with the Village of Nelsonville, Scenic Hudson, and City of Beacon will be required for the Nelsonville and Klara Sauer Trails.	

Hudson Highlands - Snowshoeing
Background for Analysis: Snowshoeing is allowed on all designated trails throughout the park.
Preferred Alternative: Continue to allow snowshoeing on all designated trails throughout the park.

Little Stony Point – There is an existing network of undesignated trails on this popular peninsula with limited signage. The loop trail is considered part of the Hudson River Greenway Trail. The loop trail and the trails to the overlook and beach will be blazed and intersection signage will be installed to improve the visitor experience. This area will remain for hiking only.

IV. Final Trails Plan

A. Trail Systems

1. Trails

Fahnestock SP

The Final Trails Plan recommends approximately 66 miles of existing and new trails that provide a variety of trail experiences for hikers, equestrians, bikers, cross country skiers, and snowshoers (see **Figures 19, 20 and 21**). Trails include singletrack trails, wider carriage and wood road trails, and groomed winter-use trails. Table 3 provides a comparison breakdown by mileage and use for the existing trail system and the Final Trails Plan for Fahnestock SP.

Table 3: Comparison of Mileage by trail use for designated trails for Fahnestock SP

Type of use	Existing Trail System (mileage)	Final Trails Plan (mileage)***
Hiking/Snowshoeing	51.7	65.8
Equestrian	15.7	23.7
Biking	15.7	28.8
Cross country skiing (groomed)*	10.7	12.3
Cross country skiing (ungroomed)	0	13.5
Snowshoeing (marked)	4.1	4.1
Total trail mileage**	51.7	65.8

* Fahnestock Winter Park ski trails are groomed and maintained for this use.

** Various trails accommodate multiple uses.

*** Mileage calculations include portions of conceptual trail alignments. Final mileage calculations may differ when trails are developed.

The table above does not include mileages for the Candlewood Hill or Roaring Brook areas. Future assessments will determine appropriate trail networks in these locations. The mileages also do not include the AT.

The Final Trails Plan will increase the total mileage of designated trails by 14 miles (includes new trails and designation of existing trails). There will be approximately 3.2 miles of new trail development (0.8 miles for hiking only and 2.4 miles for multi-use) and 10.8 miles of newly designated trails (3.1 miles for hiking only and 7.7 miles for multi-use). The mileage for newly designated trails includes 0.5 miles of connector trails near Pelton Pond, which are not included in the calculations for designated trails above. Approximately 3.2 miles of currently designated hiking-only trails will be upgraded to multi-use trails. The Trails Plan includes the closure of 5.7 miles of undesigned or rerouted trails.

Table 4 below provides an inventory of trails for the Final Trails Plan by trail name, trail uses, proposed tread width and mileage. Many trails located throughout the park are old carriage or wood roads maintained at a width of approximately 4-8 feet. In an effort to reduce the footprint of some trails, some existing trails will be allowed to “grow in” and reduce the tread width to 18-30 inches (considered singletrack for hiking, biking and equestrian use per OPRHP trail standards – see **Appendix 1**). Trail corridors will be maintained at 4-6 feet wide and 8-12 feet high depending on designated uses. Trails that are designated for cross country skiing, in higher use areas, maintained for vehicle maintenance access, and/or have considerable infrastructure such as bridges or retaining

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walls will be maintained at a 4-10-foot tread width. Trail corridors will be maintained at 8-12 feet wide and 8-12 feet high depending on designated uses of the trail.

Table 4: Inventory of trails for the Final Trails Plan for Fahnestock SP

Trail Name	Designated Uses*	Proposed Tread Width	Mileage
Blueberry Scoot (BS)	H, CC	4-8'	0.85
Cabot (CA)	H, SS	18-30"	1.02
Candlewood Hill (CH)	H, SS	18-30"	2.17
Catfish Loop (CF)	H, SS	18-30"	3.95
Charcoal Burner (CB)	H, SS	18-30"	4.05
Chimney Top (CM)	H, B, E, SS	18-30"	0.53
Clear Lake Connector (CLC)	H, SS	18-30"	0.21
Clear Lake Scout Reservation (CL)	H, SS	18-30"/4-8'	4.66
Clove Creek (CC)	H, B, E, SS	18-30"	1.39
Dicktown Loop (DL)	H, B, XC, SS	4-8'	4.10
East Mountain (EM)	H, SS	18-30"	1.50
Fahnestock (FS)	H, (B), (E), SS	18-30"	6.88
Hubbard Loop (HL)	H, B, E, XC, SS	4-8'	0.91
Moneyhole Mountain (MM)	H, B, E, SS	18-30"	4.07
Moneyhole Mountain Access (MMA)	H, B, E, SS	18-30"	0.42
Old Mine Railroad (OM)	H, XC, SS	4-8'	1.65
Pasture Loop (PL)	H, B, E, CC	4-8'	1.08
Pelton Pond (PP)	H, SS	18-30"	0.87
Perkins (PK)	H, (B), (E), SS	18-30"	4.14
Perkins Access (PA)	H, SS	18-30"	0.67
Ridge Line (RL)	H, CC	4-8'	1.11
Roaring Brook (RB)	H, B, E, (CC), (SS)	18-30"/4-8'	7.53
Round Hill Bypass (RH)	H, SS	18-30"	1.17
School Mountain (SM)	H, B, E, XC, SS	4-8'	4.06
Stillwater Loop (SL)	H, B, E, CC	4-8'	1.59
Three Lakes (TL)	H, SS	18-30"	4.29
Trout Brook (TB)	H, SS	18-30"	0.83
Wiccopee (WI)	H, B, E, SS	18-30"	1.22

Designated Uses: H (Hiking), B (Biking), E (Equestrian), SS (Snowshoeing), CC (Cross country skiing – groomed), XC (Cross country skiing – ungroomed)

*Uses noted in () indicate only a portion of that trail is open to the use.

Sunken Mine Road will also be open to cross country skiing during December through April when closed to vehicular traffic. The Fahnestock Winter Park provides a series of seasonally marked snowshoe trails and groomed cross country ski trails. Some of these trails are designated for winter use only and are not included in the table above.

The trails at the TOEC (**Figure 14**), not included in the table above, are hiking-only trails open for group programming and annual events. Designation and development of trails in the Candlewood and Roaring Brook areas are not included in the table above, due to the need for additional future assessments and coordination with adjacent land owners including the potential for additional acquisitions in the areas.

Additional review and assessment is required for a potential future trail in the northern Wiccopee area of the park in conjunction with a multi-use connection through the Canopus Lake area and for

the alignment of the Highlands Trail through the park. These trails are not included in the tables above or on the Final Trails Plan maps. Discussions in a coordinated and cooperative effort with the partners as listed in the Memorandum of Understanding (MOU) for the Appalachian Trail (AT) will take place for potential trails that are within or cross the AT corridor. The Highlands Trail alignment will be further reviewed with the NYNJTC and the AT management partners as the trail will necessarily cross the AT corridor. A connection of the Highlands Trail with Hudson Highlands SPP will be made in the future with additional acquisition and agreements in the vicinity of Hubbard Lodge.

Hudson Highlands SPP

The Final Trails Plan recommends approximately 67 miles of existing and new trails that provide a variety of trail experiences for hikers, equestrians, bikers, cross country skiers and snowshoers (**Figures 22 and 23 – North; Figures 24 and 25 - South**). Trails include singletrack trails and trails on old carriage, wood and maintenance access roads. Table 5 provides a comparison breakdown by mileage and use for the existing trail system and the Final Trails Plan.

Table 5: Comparison of Mileage by trail use for designated trails for Hudson Highlands SPP

Type of use	Existing Trail System (mileage)	Final Trails Plan (mileage)**
Hiking/snowshoeing	46.7	66.5
Equestrian	0.0	7.3
Biking	2.5	14.0
Cross country skiing (ungroomed)	0.0	5.5
Total trail mileage*	46.7	66.5

* Various trails accommodate multiple uses.

** Mileage calculations include portions of conceptual trail alignments. Final mileage calculations may differ when trails are developed.

The table above does not include mileage for the AT.

The Final Trails Plan will increase the total mileage of designated trails by 20 miles (includes new trails and designation of existing trails). There will be approximately 3.5 miles of new trail development (2.9 miles for hiking only and 0.6 miles for multi-use) and 16.3 miles of newly designated trails (4.7 miles for hiking only and 11.6 miles for multi-use). Approximately 6.3 miles of currently designated hiking only trails will be upgraded to multi-use trails. The Trails Plan includes the closure of 6.0 miles of undesignated or rerouted trails.

Table 6 provides an inventory of trails for the Final Trails Plan by trail name, trail uses, proposed tread width and mileage.

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Table 6: Inventory of trails for the Final Trails Plan for Hudson Highlands SPP

Trail Name	Designated Uses*	Proposed Tread Width	Mileage
Arden Point (AP)	H, XC, SS	4-8'	1.51
Beacon Reservoir Road (RR)	H, B, SS	8-10'	1.83
Breakneck Bypass (BB)	H, SS	18-30"	0.76
Breakneck Ridge (BR)	H, SS	18-30"	4.40
Brook (BK)	H, SS	4-8'	1.48
Camp Smith (CS)	H, SS	18-30"	3.67
Carriage Connector (CC)	H, (E), SS	4-8'	0.93
Casino (CT)	H, (B), SS	18-30"/4-8'	2.00
Casino Connector (CC)	H, B, SS	18-30"	0.97
Cornish (CN)	H, SS	18-30"	1.41
Denning's Point (DP)	H, B, SS	4-8'	1.23
Fishkill Ridge (FR)	H, SS	18-30"	4.99
Highlands Trail (HT)	H, SS	18-30"	0.99
Klara Sauer (KS)	H, B, XC, SS	4-8'	0.92
Lake Surprise Bypass (LB)	H, SS	18-30"	1.83
Little Stony Point (SP)	H, (XC), SS	18-30"/4-8'	1.15
Lonestar (LS)	H, SS	18-30"	0.99
Melzingah Trail (MT)	H, B, SS	18-30"/4-8'	2.92
Mountain Pass (MP)	H, E, SS	4-8'	0.55
N. Beacon Mtn. Bypass (NM)	H, B, SS	18-30"/4-8'	0.69
Nelsonville (NV)	H, XC, SS	4-8'	2.28
North Redoubt (NR)	H, SS	18-30"	0.65
Notch (NT)	H, (B), SS	18-30"	5.91
Notch Bypass (NB)	H, B, SS	18-30"	0.06
Osborn Loop (OB)	H, (E), SS	4-8'	2.06
S. Beacon Mtn. Bypass (SB)	H, B, SS	18-30"	1.18
S. Beacon Mtn. Outlook (SO)	H, B, SS	8-10'	0.18
Split Rock (SR)	H, SS	18-30"	0.26
Sugarloaf (SL)	H, (E), SS	4-8'	1.67
Sugarloaf Loop (SU)	H, E, SS	4-8'	1.73
Undercliff (UC)	H, SS	18-30"/4-8'	3.60
Washburn (WB)	H, SS	18-30"	2.26
White Rock (WR)	H, E, SS	4-8'	0.87
Wilkinson Memorial (WM)	H, SS	18-30"/4-8'	1.36
Woodle (WO)	H, B, SS	18-30"	0.92
Woodle Access (WA)	H, B, SS	18-30"	0.39

Designated Use: H (Hiking), B (Biking), E (Equestrian), XC (Cross country skiing - ungroomed), SS (Snowshoeing)

*Uses noted in () indicate only a portion of that trail is open to the use.

Additional review and assessment is required for two trail alternatives discussed for the southern portion of the park: an alternate alignment (in addition to the existing alignment) for a section of the AT east of Anthony's Nose and a multi-use loop trail south of South Mountain Pass Road. Both of these potential trails are located within the AT corridor and will be reviewed through a coordinated and cooperative effort with the partners as listed in the MOU for the AT. These trails are not included in the tables above or on the final trails plan maps.

The Highlands Trail will co-align with some existing, designated trails. A future connection with Fahnestock SP, in the area between the Lonestar Trail and Hubbard Lodge, is planned and will require additional acquisition and agreements.

2. Connections

External systems

The trail systems of both parks have connections to external trail systems. The Appalachian Trail (AT) traverses the southern portion of Hudson Highlands SPP and generally bisects Fahnestock SP from the southwest to the northeast. The Highlands Trail will traverse the northern portion of Hudson Highlands SPP, co-aligning with existing designated trails, and connecting to Fahnestock SP via the Hubbard Lodge area. A final alignment of the Highlands Trail through Fahnestock SP is yet to be determined.

A portion of the NYS Department of Transportation (DOT) Route 9 Bicycle Route runs between the northern portion of Hudson Highlands SPP and Fahnestock SP providing non-motorized access into Fahnestock's trail system at Hubbard Lodge. The bicycle route continues south on Route 301 and Route 9D, in close proximity to several points of access to both parks, and crosses the AT just north of the Bear Mountain Bridge.

The Osborn Preserve area is adjacent to the NYS Department of Environmental Conservation's (DEC) Castle Rock Unique Area which has existing trails and a parking area used by park patrons. Directly across Route 9D, the Glenclyffe parcel owned by the Open Space Institute (OSI), offers a loop trail system that connects to Arden Point along the Hudson River. To link the Osborn Preserve parcel to the northeastern North Redoubt and North Woods parcels through the Garrison School Forest property, future acquisitions and partnerships will be required.

The Westchester River Walk is a 46-mile long planned greenway trail to run the river's length in Westchester County. The Annsville Creek Paddlesport Center lies along this route and provides a southern entrance into the park. Additional acquisition in this area would provide an 'all park' connection to the Harriman Toll House. The proposed greenway's route runs along the Camp Smith Trail to Anthony's Nose in the park near the northern boundary of Westchester County.

The Klara Sauer Trail currently links Beacon's Riverfront Park, the Metro North station, Scenic Hudson's Long Dock property, and the Denning's Point area of Hudson Highlands SPP. An extension to Madam Brett Park, owned by Scenic Hudson and maintained by the City of Beacon, would connect with existing trails at Fishkill Creek. Replacing a bridge across the creek would establish a link to the location of the proposed Hudson Highlands Visitor Center on Route 9D and provide access to the trail system in Hudson Highlands State Park and Scenic Hudson lands. OPRHP will work with partners to further these connections.

The Fishkill Creek Water Trail is a proposed water trail for canoes and kayaks to link Glenham to Hopewell Junction. The section between Glenham and the junction of Routes 52 and 82 is currently open. Parking and access points are located at Town of Fishkill parks at Route 52/82 in Brinckerhoff, east of Route 9 in Fishkill, and off Washington Avenue in Glenham. This section of Fishkill Creek runs through the Northeast Fishkill Ridge portion of the park.

The Hudson River Valley Greenway Trail System, which provides physical and visual access to the Hudson River, includes both land trails and a water trail. A number of the designated trails located within Hudson Highlands SPP are noted as part of the Hudson River Greenway Trail. There are additionally four water trail sites in the park, located at Denning's Point, Little Stony Point, Arden Point and the Annsville Creek Paddlesport Center. These locations are available for hand-launching kayaks and canoes and as destinations for day-use. Denning's Point and Arden Point provide unimproved campsites for water trail visitors.

Mass Transportation

Many visitors to Hudson Highlands SPP come by Metro North train. There are multiple stops adjacent to or near to the park along the Hudson River. Metro North stops are located in the City of Beacon near Denning's Point (access via the Klara Sauer Trail), just north of the Wilkinson Memorial Trailhead (Breakneck Ridge Station), just south of Dockside in Cold Spring, and at Garrison next to the entrance of Arden Point. Further enhancement and promotion of these sites as entrance points into the park's trail system is a recommendation of this plan.

B. Interpretation and Education

Fahnestock and Hudson Highlands SPs have a vast array of significant cultural and natural resources. The majority of interpretive programming currently offered on trails is held at the Taconic Outdoor Education Center in Fahnestock SP. The facility provides year-round environmental education and outdoor recreation programs for groups that use the trail system. The *Mountain Laurel Outdoor Recreation Fest* in May and the *Winterfest* in January are two day-long outdoor events at TOEC that include nature walks highlighting the variety of flora and fauna found in the vicinity. The trailhead for the Pelton Pond Nature Interpretive Trail has interpretive kiosks and panels providing information about the wildlife in the area.

At Hudson Highlands SPP, National Audubon offers programming associated with Constitution Marsh. The Beacon Institute holds walking tours at Denning's Point that highlight the natural and historic aspects of the area. Many other organizations, including the Fresh Air Fund, Friends of Fahnestock/Hudson Highlands, Hudson Highlands Land Trust, Hudson Highlands Nature Museum, NYNJTC, Open Space Institute, Scenic Hudson and the Surprise Lake Camp among others, are partners who use the parks' trail systems for interpretation and education purposes. Programs and support include hiking/walking tours, producing and/or distributing maps and brochures, collecting data on park resources, and conducting research.

Many more interpretive opportunities are offered by the diversity of flora, fauna, topography, and historic and cultural resources of the parks. Future interpretation and education programming may include signage/kiosks, brochures and guided hikes highlighting resources in the parks. Resources include: Civilian Conservation Corps (CCC) structure remnants found in the Canopus Lake area; flora and fauna located throughout the parks but also specifically those in sensitive summit communities (as part of educating visitors as to the significance, sensitivity, and need for preservation of these ecological communities as described in the master plan); locations of events of the Revolutionary War (historic panels provided by the State Education Department are located along roads in Hudson Highlands);

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as well as scenic vistas located from mountain tops down to the peninsulas along the Hudson River. Existing and proposed interpretive trails with potential topics include:

- Pelton Pond Trail (update/enhance existing panels; mining; CCC)
- Canopus Lake area trails (CCC camp remains)
- N. Redoubt Trail (Revolutionary War events)
- Hubbard Loop Trail (flora/fauna including education about invasive species; agriculture; Old Post Road; schoolhouse)
- Arden Point (scenic vistas of Hudson River and western shore; iron mining; railroad construction; Native American use)
- Denning's Point (scenic vistas of Hudson River and eastern and western shores; brick-making; Revolutionary War; railroads)
- Little Stony Point (quarrying; Storm King controversy/environmental; aquatic resources)

Interpretive trails may have educational information provided either on-site or through the use of self-guiding brochures. The development of the proposed Hudson Highlands Visitor Center would provide a centralized location for environmental and cultural education/interpretation opportunities at Hudson Highlands SPP, while the TOEC and Hubbard Lodge provide central locations at Fahnestock SP.

C. Parking Facilities

Table 7 identifies the existing parking facilities and vehicle capacities that provide access to the parks' trail systems. The location of these facilities throughout the parks encourages the distribution of trail users which results in an enhanced trail experience. There are additional trailheads in both parks, not listed here, that provide space for 1-3 cars each.

Table 7: Parking Facilities

Fahnestock State Park	
Parking Lot	Capacity
Canopus Lake Beach	~300
Pelton Pond	~80
Canopus Lake Boat Rental	12
Hubbard Lodge	~80
TOEC	50
Appalachian Trail	12-north side; 20-southside
Park Office	10
Lakeside parking (peninsula)	8
Trout Brook (Wiccopee)	6
Stillwater (permit parking)	~40
Group Camp	~100
Sunken Mine & Dennytown Roads	15
Old DPW Lot (Route 301)	~12
Hudson Highlands State Park	
Parking Lot	Capacity
Breakneck Ridge/MTA Lot	6-south side; 40-north side
Little Stony Point	12-west side; 30-east side
Denning's Point	~20
Annsville Paddlesport Center	30
Harriman Toll House	12
Bear Mountain Overlook	14

A number of parking areas will be formalized and improved to provide a more organized parking layout. These areas will also be improved to grant safer access to and from roadways and trailheads. Formalization and improvement may include expansion, paving, designed traffic flow, improved sight distance, installation of signage and/or striping. Parking areas at Fahnestock SP that will be improved include: Canopus Beach, Pelton Pond, Canopus Lake boat launch, the peninsula and the old DPW Lot/Route 301 trailhead (Round Hill Bypass/Perkins Access trails). A new park office location will provide approximately 10 spaces, and a new formal parking area to be developed at Hubbard Lodge will provide approximately 40 spaces. Signage will be installed at the trailheads for Moneyhole Mountain Access and Dicktown Loop Trails. At Hudson Highlands SPP, the parking area at Little Stony Point and the Breakneck/MTA lot will be improved. A parking lot will be developed at the new Visitor Center. The trailhead for the Lake Surprise Bypass trail will have signage installed. A small trailhead parking area (2-3 spaces) will be developed along Clove Road at Route 9 for the Northeast Fishkill Ridge trailhead. See the master plan for additional details on parking area improvements.

Horse trailer parking is currently available at Fahnestock SP at the campground area, Hubbard Lodge, and the terminus of Wiccopee Road adjacent to the Taconic State Parkway. The new formal parking area at Hubbard Lodge will include space for horse trailers. Signage will be installed to promote equestrian use of the parking lot at the terminus of Wiccopee Road. OPRHP will work with DEC for equestrian parking improvements at DEC's Castle Rock Unique Area for access to the Osborn Preserve area of Hudson Highlands SPP.

Additional parking access to the Candlewood Hill area and parking access to the Roaring Brook area through DEC's California Hill Multiple Use Area will be addressed at a future date.

D. Coordination

Operation and management of the trail systems of Fahnestock SP and Hudson Highlands SPP involves a wide variety of activities that include the need to:

- Oversee basic maintenance of trails, support facilities, and amenities
- Oversee operation and winter maintenance of the Fahnestock Winter Park
- Ensure that special events will be compatible with resources and environmentally sustainable uses of trails
- Ensure enforcement of rules and regulations along trails
- Establish and oversee regular trail patrols to monitor trail use, trail conditions, and educate and assist users
- Provide trail information to the public
- Assist with search and rescue operations
- Ensure that trail design, construction and maintenance is compatible with natural resources
- Limit the impact of invasive species due to trail use
- Ensure remediation of trails or sections of trail that are considered unsustainable
- Maintain contact with all staff involved with trail operations
- Act as liaison with public agencies and private organizations

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- Provide outreach to additional organizations to assist with operation and maintenance of the trail system
- Develop a process to evaluate and modify the trail system
- Develop a training program for trail stewards
- Otherwise implement this plan

The park manager will continue to coordinate trail maintenance and management efforts in association with other park staff and volunteer groups, such as the NYNJTC, equestrian and mountain biking groups and the Friends of Fahnestock and Hudson Highlands State Parks. It is recommended that volunteer groups sign a written Memorandum of Agreement (MOA) with OPRHP for trail development and maintenance purposes (see **Appendix 2** – Sample Memorandum of Agreement). In addition, it is recommended that volunteer groups submit an “Annual Project Work Plan” form (see **Appendix 3**) to the park manager for approval of all trail work beyond standard maintenance practices. This plan also recommends the OPRHP Regional Natural Resource Steward be involved in trail development and maintenance work programs in the parks regarding work schedules and timing of projects.

Volunteer groups should meet periodically with park staff and help provide a coordinated approach to maintaining and improving the trail system. Continued coordination with and participation by a variety of organizations and user groups is recommended to assist park staff with the operation and maintenance of the trail systems. Any existing agreements should be maintained and new partnerships developed with trail organizations and user groups.

As funds are made available, trail improvements will be made by OPRHP. Trail groups may also provide funding or resources to make improvements to the trail systems. Prioritization of trail building activities will occur on an annual basis and be coordinated through the park manager.

Both parks have trails that extend beyond their boundaries and/or trailheads located on adjacent parcels. It is important to maintain continuity of trail standards across boundaries, securing rights for public access and enhancing coordination and cooperation with other entities.

Ownership and management of the adjacent parcels vary. Tables 8 and 9 provide listings of the ownership of adjacent lands with trails and/or trailheads and information regarding the status of cooperative agreements between the entities and OPRHP.

Table 8: Parcels/parking adjacent to Fahnestock SP with trails

Ownership	Designated Trails	Status
Catfish Pond Association	Moneyhole Mountain Trail	No existing agreement.
Clear Lake Boy Scouts	Clear Lake Scout Reservation Trails	Conservation Easement held by OPRHP.
Glynwood Center	Perkins Trail	OPRHP holds right for public access on trail corridor.
NYS DOT	Route 301 ROW – parking/trailhead for Round Hill Bypass and Perkins Access Trails	No existing agreement.

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Ownership	Designated Trails	Status
NYS DOT	Southern section of the Roaring Brook Trail (within old parkway ROW)	No agreement necessary.
OSI	Field Trail (proposed)	Conservation Easement held by OPRHP.

Table 9: Parcels/parking adjacent to Hudson Highlands SPP with trails

Ownership	Designated Trails	Status
City of Beacon	Klara Sauer Trail	Existing agreement between City of Beacon, Scenic Hudson and OPRHP
Federal Land and Appalachian Management Corridor	Osborn Loop Trail	No agreement necessary.
Lake Surprise	Lake Surprise Bypass	Conservation easement held by OPRHP includes development of one trail.
MTA/Metro North RR	Trailhead for Breakneck Ridge	No existing agreement.
Village of Nelsonville	Nelsonville and Undercliff Trails	No agreement necessary.
NYC Catskill Aqueduct/ NYC Department of Water Supply	Nelsonville, Washburn, Undercliff, Cornish, Brook, Breakneck Ridge	No existing agreement.
NYS DEC (Castle Rock Unique Area)	Sugarloaf	No agreement necessary.
NYS DOT	Trailhead parking along Route 9D	No existing agreement.
NYS Military Reservation Camp Smith	Camp Smith	OPRHP holds a permanent trail easement for 50 feet on each side of the trail.
Scenic Hudson (Mount Beacon Park, Fishkill Ridge Conservation Area)	Casino, Fishkill Ridge, Wilkinson Memorial, Beacon Reservoir Road Trail, N. Beacon Mtn. Bypass	No agreement necessary.
Scenic Hudson	Klara Sauer Trail	Existing agreement between City of Beacon, Scenic Hudson and OPRHP
Private lands	Breakneck Ridge, Wilkinson Memorial, Notch, Fishkill Ridge	No existing agreement.

In some cases, where the owner is a state agency or a not-for-profit organization that allows public access to their property and trails, no agreement is necessary. As noted in the tables, where no existing agreement exists, an agreement will be sought by OPRHP with the land owner.

Future development of trails is planned in the Roaring Brook area of Fahnestock SP. This will require coordination with NYS DEC for access through the California State Forest. Also,

consultation and cooperation will be required for equestrian parking improvements at DEC's Castle Rock Unique Area.

E. Park Rules

Fahnestock SP:

Visitors to the park are expected to follow general park rules. These rules are as follows:

- Park is open from sunrise to sunset. No overnight parking.
- Trails are restricted to day use only. Camping or making of fires is prohibited, except in designated campgrounds. Permit required.
- Remain on trails for your own safety and to minimize the impact on the forest environment.
- Carry out and take home everything you bring with you. Maintaining a quality trail experience requires keeping the trails free of litter and the environment undisturbed. Collection of plants and animals is prohibited.
- All motorized vehicles are not permitted on park trails.
- Dogs are permitted on park trails, on a leash of no more than 10 feet.
- Swimming is permitted only at Canopus Beach, when lifeguards are on duty.
- Some trails are designed for a variety of users. Please exercise caution and trail courtesy when approaching other users.

Hudson Highlands SPP:

Visitors to the park are expected to follow general park rules. These rules are as follows:

- Park is open from sunrise to sunset. No overnight parking.
- Trails are restricted to day use only. Camping or making of fires is strictly prohibited.
- Remain on trails for your own safety and to minimize the impact on the forest environment.
- Carry out and take home everything you bring with you. Maintaining a quality trail experience requires keeping the trails free of litter and the environment undisturbed. Collection of plants and animals is prohibited.
- All motorized vehicles are not permitted on park trails.
- Dogs are permitted on park trails, on a leash of no more than 10 feet.
- Swimming is prohibited.
- Some trails are designed for a variety of users. Please exercise caution and trail courtesy when approaching other users.

These rules will be posted on trailhead kiosk panels to promote appropriate use of park facilities.

F. Special Events and Permits

A permit is required for any organized event or outing within the park, including those that use park trails. This helps limit trail use to a level that is environmentally sustainable and ensures that event participants are aware of their responsibilities. For additional information or to obtain a permit application please call (845) 225-7207.

G. Enforcement

Trail users are expected to obey all New York State Parks Rules and Regulations and any park specific signage as posted. Problems or concerns regarding the trail system should be reported to the park office. Emergencies, such as injuries, hazardous situations or criminal activity, should

be reported directly to the NYS State Park Police. Due to the extensive trail systems, the State Park Police rely on trail users to report all problems encountered while using the parks.

H. Implementation

Implementation of this plan will be guided by staff knowledge of trails, the trail assessment information collected in 2009, additional detailed assessments of trail conditions and the agency's standards and guidelines for trails which are located in **Appendix 1**.

Trail work proposals as submitted on the Annual Project Work Plan – Trails form (**Appendix 3**) will be reviewed by the Park Manager for consistency with this Trails Plan. All trail work beyond standard maintenance practices (blazing, clearing brush from treadway, tree pruning and maintaining erosion control structures) on existing designated trails must be approved prior to commencement of work. The Park Manager will meet with Trail Groups on an annual basis, at a minimum, to discuss proposed trail development and maintenance plans, and review the consistency of those plans with this Trails Plan.

If the proposal is not within the scope of this Trails Plan then additional review, including environmental review, may be required. In these circumstances, the Manager will consult with Regional and Albany office staff regarding next steps. See *Trail Project Approval Process for NYS Parks* at: <http://nysparks.com/recreation/trails/technical-assistance.aspx>.

Prior to trail construction, review of final trail layouts will be conducted in the field by appropriate agency staff (e.g. Park Manager, Regional Natural Resource Steward) to ensure consistency with trail standards and protection of sensitive resources.

The Park Manager will be responsible for periodic inspections of all trail projects to ensure that they are being carried out in accordance with approved plans.

For many trails, OPRHP partners with trail organization(s) for development and/or maintenance. It is important that clear lines of communication are maintained among all involved parties.

Improvements and reroutes should generally be completed prior to expanding multiple use opportunities. Priority will be given to basic maintenance and rehabilitation of existing trails, as well as trail re-routes and closures to correct unsustainable conditions and/or to protect sensitive environmental areas. Priorities for new trails will be based on availability of funding and resources.

Existing undesignated identified for designation will be improved and used as much as possible in the implementation of this trails plan. New trails and rerouted trail sections will be designed to protect the natural resources of the parks. Sensitive ecological areas including locations of rare and endangered species will be considered during new trail alignments. Rerouted sections will be closed using appropriate closure techniques specified in the *OPRHP Guidelines for Closing Trails* (<http://nysparks.com/recreation/trails/technical-assistance.aspx>). Undesignated trails and wood roads that are not part of the proposed trail system will also be closed. Additional signage in the form of trailhead, trail intersection signs and kiosks will be developed to improve the overall trail signage system, visitor orientation and to encourage visitors to remain on trails. Signage will be developed in accordance with the *Trail Signage Guidelines for the NY State Park System* (<http://nysparks.com/recreation/trails/technical-assistance.aspx>).

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New trails and altered trails connected to an accessible trail or designated trailhead should be designed to improve accessibility for persons with disabilities. The existing trail systems will be assessed to determine whether the trails meet accessibility guidelines. Also, actions needed to make the trails accessible, will be identified. Informational material will be provided at trailhead kiosks and in trail brochures identifying the characteristics (i.e. slope, terrain, etc.) of the trails.

In order to provide guidance on implementation of this, the following table provides a listing of all existing and proposed trails and specific actions that were identified during the planning process.

Table 10: Implementation Steps for Trails at Fahnestock SP

Trail Name	Mileage	Blazing	Type of Use*	Implementation Steps
Blueberry Scoot (BS)	0.85	TBD	H, CC	<ul style="list-style-type: none"> • Install trailhead and intersection signage. • Blaze trail.
Cabot (CA)	1.02	White	H, SS	<ul style="list-style-type: none"> • Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. • Assess trail's proximity to Jordan Pond; consider upgrades or reroute if necessary.
Candlewood Hill (CH)	2.17	Red	H, SS	<ul style="list-style-type: none"> • Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. • Consider relocation of the access from Bell Hollow Road upon development of trails in the Candlewood Hill area.
Catfish Loop (CF)	3.95	Red	H, SS	<ul style="list-style-type: none"> • Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. • Remove fallen trees from trail corridor.
Charcoal Burners (CB)	4.05	Red	H, SS	<ul style="list-style-type: none"> • Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. • Remove fallen trees from trail corridor. • Refresh blazing where necessary.
Chimney Top (CM)	0.53	TBD	H, B, E, SS	<ul style="list-style-type: none"> • Upgrade trail and blaze trail. • Remove fallen trees from trail corridor. • Install intersection signage. • Consider interpretive signage at summit.
Clear Lake Connector (CLC)	0.21	TBD	H, SS	<ul style="list-style-type: none"> • Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. • Blaze trail. • Install intersection signage.
Clear Lake Scout Reservation (CL)	4.66	Various	H, SS	<ul style="list-style-type: none"> • Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. • Remove fallen trees from trail corridor. • Assess alignment of trails in proximity to wetland area; consider reroute if necessary.
Clove Creek (CC)	1.39	TBD	H, B, E, SS	<ul style="list-style-type: none"> • Determine final trail alignment, upgrade trail and blaze trail. • Upgrade/replace bridge crossings as necessary. • Install intersection signage.

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Trail Name	Mileage	Blazing	Type of Use*	Implementation Steps
Dicktown Loop (DL)	4.10	TBD	H, B, XC, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail.
East Mountain (EM)	1.50	Red	H, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Remove fallen trees from trail corridor.
Fahnestock (FS)	6.88	Blue	H, (B), (E), SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Remove fallen trees from trail corridor. Upgrade portion of trail to meet multi-use standards prior to expanding uses. Assess trail alignment near water resources; consider upgrades or reroutes if necessary. Close undesignated trails between FS and WI and CB Trails. Install <i>Do Not Enter</i> signage at intersection with undesignated trail to Glynwood Center and at park boundary.
Hubbard Loop (HL)	0.91	TBD	H, B, E, XC, SS	<ul style="list-style-type: none"> Assess feasibility of developing accessible trail (include section of SM Trail from Hubbard Lodge to intersections). Determine final trail alignment and develop at 6-8 ft. wide tread (will require clearing, tree removal and grading). Blaze trail and sign intersections. Consider interpretive components for trail (signage, brochure for self-guided tour).
Moneyhole Mountain (MM)	4.07	Yellow	H, B, E, SS	<ul style="list-style-type: none"> Reroute short section of trail off private property east of Catfish Pond. Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Remove fallen trees from trail corridor. Sign intersection with Three Lakes Trail. Assess trail alignment near water resources; consider trail upgrades where necessary.
Moneyhole Mountain Access (MMA)	0.42	TBD	H, B, E, SS	<ul style="list-style-type: none"> Upgrade trail and blaze trail. Remove fallen trees from trail corridor. Install trailhead and intersection signage.
Old Mine Railroad (OM)	1.65	Yellow	H, XC, SS	<ul style="list-style-type: none"> Remove fallen trees from trail corridor. Consider upgrades/reroute of alignment near Hidden Lake due to beaver activity.
Pasture Loop (PL)	1.08	TBD	H, B, E, CC	<ul style="list-style-type: none"> Install trailhead and intersection signage. Blaze trail. Upgrade numerous bridges for multiple uses.
Pelton Pond (PP)	0.87	Yellow	H, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Remove fallen trees from trail corridor. Assess trail's proximity to the pond; consider stabilization techniques along shoreline and/or reroutes if necessary. Blaze and sign connector trails from the campground and campground road.

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Trail Name	Mileage	Blazing	Type of Use*	Implementation Steps
Perkins (PK)	4.14	Yellow	H, (B), (E), SS	<ul style="list-style-type: none"> • Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. • Remove fallen trees from trail corridor. • Cut back/remove vegetation as necessary. • Refresh blazing where necessary. • Upgrade portion of trail to meet multi-use standards prior to expanding uses.
Perkins Access (PA)	0.67	TBD	H, SS	<ul style="list-style-type: none"> • Upgrade trail and blaze trail. • Remove fallen trees from trail corridor. • Upgrade/replace bridge over Clove Creek to PK Trail as necessary. • Install intersection and trailhead signage. • Close undesigned section of trail along Clove Creek.
Ridge Line (RL)	1.11	TBD	H, CC	<ul style="list-style-type: none"> • Install trailhead and intersection signage. • Blaze trail.
Roaring Brook (RB)	7.53	White	H, B, E, (SS), (CC)	<ul style="list-style-type: none"> • Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. • Remove fallen trees from trail corridor. • Assess trail alignment near water resources; consider trail upgrades where necessary.
Round Hill Bypass (RH)	1.17	TBD	H, SS	<ul style="list-style-type: none"> • Determine final trail alignment; develop trail and blaze trail (use sustainable sections of existing trail as much as possible). • Construct bridge over Bull Creek. • Install trailhead and intersection signage.
School Mountain (SM)	4.06	White	H, B, E, XC, SS	<ul style="list-style-type: none"> • Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. • Remove fallen trees from trail corridor. • Refresh blazing where necessary. • Upgrade bridges at stream crossings as necessary. • Assess trail alignment near water resources; consider trail upgrades where necessary.
Stillwater Loop (SL)	1.59	TBD	H, B, E, CC	<ul style="list-style-type: none"> • Determine final trail alignment, develop trail and blaze. • Install intersection signage.
Three Lakes (TL)	4.29	Blue	H, SS	<ul style="list-style-type: none"> • Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. • Remove fallen trees from trail corridor. • Sign intersection with Moneyhole Mountain Trail. • Consider upgrades/reroutes of alignment near breached dam at John Allen Pond and near Hidden Lake.
Trout Brook (TB)	0.83	Yellow	H, SS	<ul style="list-style-type: none"> • Upgrade trail/road over brook at parking area gate to accommodate park vehicles. • Assure length of trail meets multi-use standards prior to expanding uses.

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Trail Name	Mileage	Blazing	Type of Use*	Implementation Steps
Wiccopee (WI)	1.22	Blue	H, B, E, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Upgrade portion of trail to meet multi-use standards prior to expanding uses.

Types of Use: H (Hiking), B (Biking), E (Equestrian), SS (Snowshoeing), CC (Cross country skiing - groomed), XC (Cross country skiing – ungroomed).

*Uses noted in () indicate only a portion of that trail is open to the use.

The remaining groomed cross country ski trails and marked snowshoe trails of the Fahnestock Winter Park are not included in this table. These trails will be maintained and marked for seasonal use only. Maintenance includes clearing the treadway and corridor of vegetation.

Additional review and assessment is required for potential future trails including: a trail in the northern Wiccopee area, a multi-use connector trail through the Canopus Lake area, and the alignment of the Highlands Trail. These trails are not included in the table above or on the final trails plan maps. Discussions in a coordinated and cooperative effort with the partners as listed in the Memorandum of Understanding for the AT will take place for potential trails that are within or cross the AT corridor. The Highlands Trail alignment will be further reviewed with the NYNJTC and the AT management partners because the trail is proposed to cross the AT corridor. A connection of the Highlands Trail with Hudson Highlands SPP will be made in the future with additional acquisition and agreements in the vicinity of Hubbard Lodge.

A bridge will be constructed across Route 301 near the entrance to the Canopus Beach Recreation Area to accommodate trail users.

The trails for the TOEC will be maintained by program staff. Two trails will be closed as shown on **Figure 14**. Currently named but unmarked trails will be marked and trail intersections will be signed to improve visitor safety.

Candlewood Hill and Roaring Brook Areas require further assessment for designation and development of trails. Existing trail alignments will be used as much as possible but, some reroutes, closures and additional construction of trails or trail sections may be required to provide appropriate connections.

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Table 11: Implementation Steps for Trails at Hudson Highlands SPP

Trail Name	Mileage	Blazing	Type of Use	Implementation Steps
Arden Point (AP)	1.51	Blue/ Red	H, XC, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Remove fallen trees from trail corridor. Designate southern point as a Hudson River Greenway Water Trail site.
Beacon Reservoir Road (RR)	1.83	TBD	H, B, SS	<ul style="list-style-type: none"> Work with Scenic Hudson regarding vehicular access along road; road remains access for residence and maintenance vehicles. Blaze trail. Install intersection signage.
Breakneck Bypass (BB)	0.76	Red	H, SS	<ul style="list-style-type: none"> Routine trail maintenance.
Breakneck Ridge (BR)	4.40	White	H, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Refresh blazing as necessary.
Brook (BK)	1.48	Red	H, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Remove fallen trees from trail corridor. Assess trail alignment along brook and at stream crossings; upgrade and/or reroute as necessary. Remove markers from section of trail between the Notch Trail and the Lake Surprise Camp; to remain as a maintenance road only.
Camp Smith (CS)	3.67	Blue	H, SS	<ul style="list-style-type: none"> Remove fallen trees from trail corridor. Refresh blazing as necessary.
Carriage Connector (CC)	0.93	Yellow	H, (E), SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Remove fallen trees from trail corridor. Upgrade portion of trail to meet multi-use standards prior to expanding uses.
Casino (CT)	2.00	Red	H, (B), SS	<ul style="list-style-type: none"> Coordinate with Scenic Hudson. Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Upgrade portion of trail to meet multi-use standards prior to expanding uses.
Casino Connector (CC)	0.97	TBD	H, B, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail. Install intersection signage.
Cornish (CN)	1.41	Blue	H, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections.
Denning's Point (DP)	1.23	White	H, B, SS	<ul style="list-style-type: none"> Routine trail maintenance.

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Trail Name	Mileage	Blazing	Type of Use	Implementation Steps
Fishkill Ridge (FR)	4.99	White	H, SS	<ul style="list-style-type: none"> Coordinate with Scenic Hudson. Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Assess trail alignment near stream between trailhead and first intersection; consider trail upgrades where necessary.
Highlands Trail (HT)	0.99	TBD	H, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop trail and blaze trail. Install intersection signage.
Klara Sauer (KS)	0.92	None	H, B, XC, SS	<ul style="list-style-type: none"> Coordinate with City of Beacon.
Lake Surprise Bypass (LB)	1.83	TBD	H, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail. Install trailhead and intersection signage.
Little Stony Point (SP)	1.15	TBD	H, XC, SS	<ul style="list-style-type: none"> Blaze trail. Install intersection signage.
Lonestar (LS)	0.99	Blue	H, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections.
Melzingah (MT)	2.92	TBD	H, B, SS	<ul style="list-style-type: none"> Coordinate with City of Beacon. Implement water management measures as appropriate. Blaze trail. Install intersection signage.
Mountain Pass (MP)	0.55	TBD	H, E, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail. Install intersection signage.
N. Beacon Mtn. Bypass (NM)	0.69	TBD	H, B, SS	<ul style="list-style-type: none"> Coordinate with Scenic Hudson. Determine final trail alignment, develop/upgrade trail and blaze trail. Install intersection signage.
Nelsonville (NV)	2.28	Green	H, XC, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Remove fallen trees from trail corridor.
North Redoubt (NR)	0.65	Red	H, SS	<ul style="list-style-type: none"> Routine trail maintenance.
Notch (NT)	5.91	Blue	H, (B), SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Close beginning of trail off of Rte 9D; establish trailhead at parking area along existing wood road. Re-align two sections off of private property and close these sections of trail (one will co-align with the Melzingah Trail and the other will require new trail construction). Remove fallen trees from trail corridor. Upgrade portion of trail to meet multi-use standards prior to expanding uses.
Notch Bypass (NB)	0.06	TBD	H, B, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail. Construct small bridges as necessary. Install trailhead and intersection signage.

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Trail Name	Mileage	Blazing	Type of Use	Implementation Steps
Osborn Loop (OB)	2.06	Blue	H, (E), SS	<ul style="list-style-type: none"> Remove fallen trees from trail corridor. Upgrade portion of trail to meet multi-use standards prior to expanding uses.
S. Beacon Mtn. Bypass (SB)	1.18	TBD	H, B, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail. Install intersection signage.
S. Beacon Mtn. Outlook (SO)	0.18	TBD	H, B, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail. Install intersection signage.
Split Rock (SR)	0.26	Red	H, SS	<ul style="list-style-type: none"> Remove fallen trees from trail corridor.
Sugarloaf (SL)	1.67	Red	H, (E), SS	<ul style="list-style-type: none"> Remove fallen trees from trail corridor. Upgrade portion of trail to meet multi-use standards prior to expanding uses.
Sugarloaf Loop (SU)	1.73	TBD	H, E, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail. Install intersection signage.
Undercliff (UC)	3.60	Yellow	H, SS	<ul style="list-style-type: none"> Remove fallen trees from trail corridor.
Washburn (WB)	2.26	White	H, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Remove fallen trees from trail corridor.
White Rock (WR)	0.87	TBD	H, E, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail. Install intersection signage.
Wilkinson Memorial (WM)	10.36	Yellow	H, SS	<ul style="list-style-type: none"> Implement water management measures as appropriate; consider rerouting if necessary; restore any rerouted sections. Remove fallen trees from trail corridor. Coordinate with Scenic Hudson. Determine final trail alignment for extension of trail through the Northeast Fishkill Ridge area, develop/upgrade trail and blaze trail. Construct bridge over Clove Creek. Develop trailhead parking. Install trailhead and intersection signage. Resign original eastern extension as "Hell Hollow Trail".
Woodle (WO)	0.92	TBD	H, B, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail. Install intersection signage.
Woodle Access (WA)	0.39	TBD	H, B, SS	<ul style="list-style-type: none"> Determine final trail alignment, develop/upgrade trail and blaze trail. Install intersection signage.

Types of Use: H (Hiking), B (Biking), E (Equestrian), SS (Snowshoeing), XC (Cross country skiing – ungroomed).

*Uses noted in () indicate only a portion of that trail is open to the use.

The trails that will have co-alignments, such as the Highlands Trail, will be consistently marked as their development progresses.

Water management measures may include de-berming, installing knicks, rolling grade dips, waterbars, or culverts to divert water off trails. Upgrading trails may involve bringing existing

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undesigned trails up to use standards and assuring they are sustainable or assuring that currently designated hiking trails meet multi-use standards.

Bike racks will be installed at various locations in both parks.

In addition to the trail-specific implementation steps noted above, this plan provides some additional general recommendations as follows:

1. Future assessment of steep trail sections .

A number of trails, especially in Hudson Highlands SPP, have sections located along steep sections of terrain. Although in some cases, this steep climb is considered a part of the trail experience (ex. Breakneck Ridge); there are some sections that are experiencing erosion of the trail tread and/or development of parallel trails by visitors to bypass the steep sections. This plan recommends future case by case assessments of these steep sections of trail. Consideration should be given for either re-aligning some sections of trails, or stabilizing existing routes through use of erosion control techniques, or trail hardening techniques. Future recommended actions should include consideration of the natural resources as well as the expected type of trail experience.

2. Future assessment of trail sections that are aligned near sensitive natural areas such as wetlands, streams, ponds and lakes, rare species populations (e.g. timber rattlesnakes), and ecological communities (summit communities).

A number of trails in both parks, but mostly in Fahnestock SP, are aligned near wetlands, streams, ponds, and lakes or cross through or near important natural habitats. Natural resources such as streams and lakes or summit vista points, can be destination points for trail users and, at a minimum, enhance the trail user's experience. When trails are properly designed, constructed, and maintained they should provide access to the resource without adversely affecting it. Some trail segments have been identified that need further assessment as their location or design is causing impacts such as erosion, bank destabilization, or vegetation trampling. These types of inadvertent use-related impacts can compromise wildlife habitat and water quality and increase the potential for invasive species. This plan recommends future case by case assessments of these trail sections . Consideration will be given to stabilizing these trail sections and stream/pond/lake banks, re-aligning these trail sections to provide an additional buffer between the trail and the sensitive resource, adding design features, and improving signage and education to keep people from going off trail. Some areas have been preliminarily identified and are listed in the implementation steps above. There may be others not identified in this plan, and further assessment on a case by case basis will be required.

The protection of summit areas should include the development of a Summit Stewardship Program/Volunteer Ambassador Program that will increase on-site education about the natural resources and help deter trampling of the vegetation.

Future assessments will be coordinated through the Park Manager or a designee in conjunction with regional staff and the parks' volunteer/user and Friends groups.

I. Monitoring and Future Development

The following guidelines will be used in the implementation of a monitoring system and the approval process for future modification of this plan.

1. Monitoring Program

A monitoring program will be developed to monitor trail conditions. A monitoring program will include an annual inspection of all trails and periodic inspections of trails throughout the year. Volunteers may aid in this process. The monitoring program should include:

- Monitoring trail use to avoid user conflicts and ensure sustainability.
- Monitoring trail conditions, educating trail users, and using other methods to identify and report the locations of invasive species.
- Where overuse is occurring, providing remediation through the use of water control and trail hardening techniques, by relocating sections of trail, and/or by limiting trail use.

2. Future Trails Development

Proposals for modification of the Fahnestock and Hudson Highlands trail systems beyond what is specified in this plan will be evaluated by the Park Manager in consultation with the trails planning unit. All future proposals for trail development projects, including the relocation of existing trails, development of new trails, and new uses of existing trails may need to go through a formal review process. Routine trail maintenance does not need to be addressed within this process. The scope and associated impacts of the proposed project on natural and cultural resources will determine the extent of the review process. In most cases, park-level review is sufficient. In some cases, a more extensive environmental review will be required under the State Environmental Quality Review Act (SEQR).

J. Environmental Review

This Final Trails Plan, as an appendix to the Clarence Fahnestock Memorial State Park and Hudson Highlands State Park Preserve Final Master Plan/Final Environmental Impact Statement, is the subject of an environmental review process under the State Environmental Quality Review Act (SEQR). Environmental impacts are addressed in Chapter 7 of the Master Plan. For the purposes of SEQR compliance, the entire Final Master Plan/ Final Environmental Impact Statement satisfies the requirements for an environmental impact statement as specified in Part 617, the rules and regulations implementing SEQR.

V. Bibliography

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Appendix 1

Trail Standards and Guidelines

A primary goal for all State Park Trails Systems is to develop sustainable trails that have minimal impacts on the environment, require little maintenance, and meet the needs of the users. Standards and guidelines are provided here for design, development, and maintenance techniques that help ensure a sustainable trail system, including guidelines for signage, accessibility, trail monitoring, and trail closure.

1. Trailheads, Kiosks, Signage

It is important that trail users have access to information regarding trails to enhance their experience. Trail information can be disseminated in a wide variety of formats, including kiosks, brochures, websites, guidebooks, and on-trail signs and blazes. But even with good trail guides and websites available, trail signage is indispensable. If trail users are uncertain about trail location or direction, they may become disoriented, or they may create new trails that damage the environment and become a challenge to rehabilitate.

A standardized sign system is a means of creating a cohesive and consistent image for the Park, enhancing its overall appearance, and providing simple guidelines that managers can follow to sign trails. The design and usage of all trailhead and kiosk signage and trail markers will be guided by the *Trail Signage Guidelines for the New York State Park System* (<http://www.nysparks.state.ny.us/recreation/trails/technical-assistance.aspx>). This document includes information on naming and assessing trails, etiquette and safety, materials and techniques, trail symbols, types of signage, kiosks, sign maintenance, and other resources.

A kiosk or similar structure providing information about the park and the trail system will be located at each trailhead. All trails will be named and marked with colored blazes located on trees or other structures at a height that will reduce the level of vandalism but that is still readily visible. Existing signs and kiosks at trailheads that are in disrepair or outdated will be updated and improved to enhance visitor orientation and safety.

2. Design

Trails should be developed using appropriate design standards based on desired uses. Considerations should be made for either a single or multiple treadway, tread width and surface, corridor and vertical clearance, sight distance, grades, and turning radius to provide an appropriate trail experience for expected users and levels of use.

Trail development and maintenance will be guided by design standards as provided in the table below for various types of uses. These standards should be used as a starting point and modified as necessary to address the natural characteristics of the resource and specific needs.

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Trail Development Standards

Trail Type	Vertical Clearance	Corridor Clearance	Treadway Width	Surfacing Materials	Trail Length	Sight Distance	Slope	Turning Radius	Users / Mile
Mountain Biking	8-10 feet	1.5 – 6 ft. (1 lane)	Novice-36 in. Intermediate -24-30 in. Advanced-12-18 in.	Firm natural surface including soil, rocks, wood; hardened surface for wet areas.	Min. – 5 mi. loop (1.5-2 hour) 15-25 mi. of linear or loop trails (day trip)	Min. of 100 ft. up to 150 ft. on downhill curves or road crossings	Over all grade not to exceed 10%. Climbing turns not to exceed 7-12%. Out slope of 3-5%	Novice/ Intermediate - 8 ft. min. Advanced – 6 ft min.	10
Cross-country Skiing	8-10 ft. above snow depth. (10-12 ft in summer)	8 ft (1 lane) 10-12 ft. (2 lane)	4-6 ft. (1lane) 7-8 ft. (2lane) 8-10 ft. (up and down hill)	Snow with underlying bare soil, rocks or wood chips. Outsloped underlying material. Can be groomed or ungroomed.	0.5-3 mi. loops up to 4-8 mi. (2-4 hour trip)	Down hill runs, stream or road crossings 50 ft. Otherwise not critical	0-5% Max – 10% sustained 15-25% shorter than 50 yd. 25-40% shorter than 50 yd., experts only Outslope – 0-2%	Avoid sharp turns. Never locate a turn at the base of a downhill run. Min. - 50 ft. Preferred – 100 ft.	5-30
Hiking (Developed Interpretive, group or connector)	8-10 ft	4 –8 ft	4-6 ft	Bare soil, rocks, stone dust, or wood chips. May have hardened surface (concrete, asphalt or boardwalks) in high use areas.	0.25 – 5 mi. (1/2 day) 5-15 mi. (full day)	Not critical barrier on reverse curves may be used	0-5% Max – 15% sustained 40%+ shorter than 50 yd. Outslope – 4% max	N/A	0-30
Hiking (Primitive Back-packing)	8-10 ft.	4-6 ft.	18 –30 in.	Bare soil, rocks, gravel, wood; hardened surface for wet areas.	Min – 5 mi. 5-15 mi. (full day) 15 – 25+ mi. (multi-day)	Not critical	1-5% Max - 15% sustained 40-50% shorter than 50 yd.	N/A	1-5
Snowshoe	8-10 feet above snow depth (10-12 ft. in summer)	8 ft. (1 Lane) 10-12 ft. (2 Lane)	4-6 ft. (1 Lane) 7-8 ft. (2 Lane) 8-10 ft. up and down hill	Snow with underlying bare soil, rocks or wood chips. Outsloped underlying material. No grooming is needed.	0.3 mi. loops; 4-8 mi. (2-4 hr. trips)	N/A	0-5% Max. - 10% sustained 15-25% shorter than 50 yds. for experienced snowshoers	N/A	5-30
Horse	10-12 ft.	5-6 ft. (1 lane)	18-30 in. (1 lane)	Soils having a large percentage of rocks, clay and/or organic matter. Void of rocks football sized or larger. Little treadway development required if soils are appropriate. In problem areas, water control measures may be installed. Brush and saplings should be cut flush or below ground level. Remove dead or leaning trees.	Min – 5 mi. (1-1.5 hours) 15-25 mi. of looped trails (full day)	Not critical unless 2 way traffic. 50-100 ft. 100-200 ft. at motorized road crossings.	0-10% Max – 10% sustained 20% shorter than 50 yd. Outslope 4% max.	Min. 6 ft. Wider turns preferred.	5-15

3. Accessibility

New trails and altered trails connected to an accessible trail or designated trailhead should be designed to improve accessibility for persons with disabilities. Trail conditions, including topography, geology, and ecology, and expected experience will limit the number of fully accessible trails. The *Draft Final Accessibility Guidelines for Outdoor Developed Areas* (AGODA), published in 2009 by the federal Architectural and Transportation Barriers Compliance Board (“Access Board”), contains the most recent standards used to design and construct pedestrian trails to be accessible, and to assess accessibility. There are some departures permitted from the technical provisions. Although the AGODA only applies to federal agencies or for trails that are designed or constructed using federal funds, OPRHP will follow the proposed guidelines as closely as practicable and apply standards consistently on all State Park pedestrian trails. For further details, refer to the AGODA at <http://www.access-board.gov/outdoor/index.htm>. The following is an abbreviated listing of the proposed standards without the exceptions:

- Surface – The trail surface shall be firm and stable.
- Clear Tread Width – The clear tread width of the trail shall be 36 inches minimum.
- Openings – Openings in trail surface shall be of a size that does not permit passage of a ½ inch diameter sphere. Elongated openings shall be placed so that the long dimension is perpendicular or diagonal to the dominant direction of travel.
- Protruding Objects – Protruding objects on trails shall have 80 inches minimum clear head room.
- Tread Obstacles – Where tread obstacles exist, for concrete, asphalt or boards, they shall not exceed ½ inch in height; for all other surfaces, they shall not exceed 2 inches in height.
- Passing Space – Where the clear tread width of the trail is less than 60 inches, passing spaces shall be provided at intervals of 1000 feet maximum. Passing spaces shall be either 60 inches minimum by 60 inches minimum space, or an intersection of two walking surfaces which provide a T-shaped space provided that the arms and stem of the T-shaped extend at least 48 inches beyond the intersection.
- Slopes – Slopes shall comply with the following:
 - Cross Slopes – For concrete, asphalt or boards, the cross slope shall not exceed 1:48; for all other surfaces, the cross slope shall not exceed 1:20.
 - Running Slope – Running slope of trail segments shall comply with one or more of the provisions of this section. No more than 30 percent of the total trail length shall exceed a running slope of 1:12.
 - The running slope of any segment of a trail shall not be steeper than 1:8.
 - Where the running slope of a segment of a trail is steeper than 1:20, the maximum length of the segment shall be in accordance with the table below, and a resting interval shall be provided at each end of the segment.

Running Slope of Trail Segment		Maximum Length of Segment
Steeper than	But not Steeper than	
1:20	1:12	200 feet (61 m)
1:12	1:10	30 feet (9 m)
1:10	1:8	10 feet (3050 mm)

- Resting Intervals – Resting intervals shall be 60 inches minimum in length and shall have a width at least as wide as the widest portion of the trail segment leading to the resting interval.

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Where the surface is concrete, asphalt, or boards, the slope shall not be steeper than 1:48 in any direction; for all other surfaces, the slope shall not exceed 1:20 in any direction.

- Edge Protection – Where edge protection is provided along a trail, the edge protection shall have a height of 3 inches minimum.
- Signs – Newly constructed and altered trails and trail segments that are accessible shall be designated with a symbol at the trail head and all designated access points. Signs identifying accessible trail segments shall include the total distance of the accessible segment and the location of the first point of departure from the technical provisions.
- Where gates or barriers are constructed to control access to trails, gates and barriers shall provide a clear width of 32 inches minimum.

In all cases, it is recommended that basic information about trail characteristics be displayed at the trailhead. This allows the trail user the opportunity to determine if the trail is appropriate for their abilities. This information should be available for all trails regardless of whether they meet the accessible guidelines.

The following is a recommended list of information that should be displayed at the trailhead:

- Trail Symbol
- Total trail length (in linear feet)
- Length of trail segments meeting accessible standards (in linear feet)
- Location of the first point of exception to accessible standards
- Running slope (average and maximum)
- Maximum cross slope
- Minimum clear tread width
- Surface type, firmness, and stability
- Tread obstacles that limit accessibility
- Elevation (trailhead, maximum, and minimum)
- Total elevation change

4. Trail Maintenance

Maintenance of the trails is carried out by park staff in conjunction with volunteer groups. Trail maintenance standards use acceptable practices and methods in the maintenance of trails to the particular uses of the trails. Maintenance activities may include:

- Using established water management techniques, such as installation of knicks, rolling grade dips, or waterbars, to divert water off of a trail.
- Using established trail construction techniques to stabilize trail surfaces.
- Trimming trees and brush to maintain height and width clearances.
- Maintaining drainage structures, such as culverts.
- Maintaining bridges and other structures.
- Maintaining signage.

These activities will be coordinated with the park manager. Activities that go beyond normal maintenance will require the approval of the park manager (see *Appendix B*). Park staff will maintain the parking lots and support facilities.

The following manuals may be used as resource guides for trail maintenance:

- *Trail Planning, Design, & Development Guidelines*. State of Minnesota, Department of Natural Resources, 2007. Trails and Waterways Division.
<http://www.dnr.state.mn.us/index.html>
- *Trail Maintenance Manual, 7th Edition Revised*. 2007. New York-New Jersey Trail Conference, Inc. <http://www.nynjtc.org/volunteers/vresource.html>.
- *Trail Construction and Maintenance Notebook*. 2007 Edition. Forest Service, US Department of Agriculture. <http://www.fhwa.dot.gov/environment/fspubs/07232806/index.htm>.
- *Lightly on the Land: The SCA Trail-Building and Maintenance Manual*. 2006. Robert C. Birkby, The Student Conservation Association. <http://www.thesca.org/>
- *Trail Solutions: IMBA's Guide to Building Sweet Singletrack*. 2004. International Mountain Bicycling Association. <http://www.imba.com/index.html>
- *Equestrian Design Guidebook for Trails, Trailheads and Campgrounds*. December 2007. US Department of Agriculture, Forest Service - Missoula Technology and Development Center. <http://www.fhwa.dot.gov/environment/fspubs/07232816/index.htm>

5. Trail Closure

Sometimes it is necessary to close or reroute a trail due to poor initial design, overuse, illegal use, or other natural factors having caused some type of degradation. Reclamation strategies include closure, stabilization, recontouring, revegetation, and monitoring. Each site should be evaluated individually for its potential to be rehabilitated. Trail restoration needs to be carefully planned, and the consequences of each strategy should be evaluated. Restoration can be as simple as blocking a closed section of trail and passively allowing the vegetation to recover, or include more complex projects, such as removing any trace of the tread, actively planting native vegetation, and constructing check dams to help stop erosion. Careful monitoring of a restored section of trail is then needed to ensure that little evidence remains of the old trail.

All plantings will be with native, non-invasive species. Vegetation should be allowed to grow on the abandoned trail where it intersects with a designated trail. Remove all blazes along the trail. Brush, rocks and other natural material should be placed on the abandoned trail for a distance so the linear characteristic of the trail can not be readily identifiable. These abandoned trails should not be identified on trail maps.

The *OPRHP Guidelines for Closing Trails*

(<http://www.nysparks.state.ny.us/recreation/trails/technical-assistance.aspx>) provides the detailed process to be taken to close trails in state parks.

Appendix 2

Memorandum of Agreement

Between

Trails Organization #1

And

Trails Organization #2

And

Trails Organization #...

And

The New York State Office of Parks, Recreation and Historic Preservation

By this agreement, #1, #2, and the New York State Office of Parks, Recreation and Historic Preservation confirm and acknowledge the following:

1. The _____ Trail, a linear trail located within _____ State Park, is under the jurisdiction of the New York State Office of Parks, Recreation and Historic Preservation (hereinafter referred to as "PARKS"), an agency of the Executive Department of New York State government.
2. The #1, #2, and, nonprofit trail organizations have a joint interest in the _____ Trail and in coordinating their efforts as a single group, hereinafter known as the Friends of xxxx Trail (the "FRIENDS").
3. The FRIENDS and PARKS have mutual and complimentary interests in the development and maintenance of the trails and associated facilities and program within _____ State Park.
4. The FRIENDS acknowledge that the liaison for PARKS with the FRIENDS for all programmatic and business relations shall be the Regional Director or his/her designee (hereinafter referred to as the Park Manager), who shall be invited to attend all meetings of the FRIENDS, its Board of Directors and committees. The Park Manager may not serve as an ex-officio member of the Board of Directors of the FRIENDS. PARKS acknowledges that the representative of the FRIENDS for all official programmatic and business relations shall be the President of the FRIENDS or the President's designee.
5. The FRIENDS, in furtherance of its purpose to support and supplement development, maintenance, preservation and public education programs at the Park, shall keep PARKS fully informed as to its activities and plans and shall do so through the Park Manager either directly or as provided for in the By-Laws of the FRIENDS.
6. Development and maintenance activities proposed by the FRIENDS must be reviewed and approved by PARKS prior to implementation.
7. Prior to commencing any pre-approved work, each member of the FRIENDS shall sign a volunteer service form through the Park Manager, a sample of which is attached to this Agreement as Exhibit A. Such form shall be kept confidential. PARKS and the FRIENDS acknowledge that by filing a volunteer service form, the FRIENDS will receive New York State Worker's Compensation benefits for any injuries sustained during the course of volunteer work. Filing a volunteer service form also extends the protections offered pursuant to the Public Officers Law in the event they are sued with regard to their negligence during the course of their volunteer work.

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8. In the event that there is an access fee to the Park, FRIENDS shall have access to the Park at no charge upon the authorization of the Park Manager, and only in connection with pre-approved volunteer work at the Park.
9. The term of this Memorandum of Understanding shall be five years. Either party may terminate this agreement at any time prior to the expiration of the five year term upon ninety (90) days' written notice to the other party. This agreement shall terminate automatically in the event of the dissolution of the FRIENDS or if the FRIENDS become incorporated within as a 501 (c) 3 organization at which time a new Agreement will be required.
10. This agreement may not be amended, modified or otherwise changed unless done so in writing and signed by both parties.



Appendix 3 Annual Project Work Plan - Trails

(Submit to Park Manager for review and approval prior to commencing work)

For ALL trail work beyond standard maintenance practices (blazing, clearing brush from treadway/tree pruning, maintenance of erosion control structures) on existing designated trails.

State Park Name: Year: 20__

Organization:
Contact Name:
Contact Address:
Contact Phone #:
Contact Email Address:

Trail Name:
Description of location of trail section to be worked on (if applicable):

GPS coordinates if available (Lat/Long): _____
(Format: Decimal Degrees; Datum (circle one): NAD27, 83 or WGS84 (preferred))

- Type of work (check all that apply):
- Re-alignment/relocation of trail section
 - New trail development (includes designating new trails)
 - Tread upgrades including installation of water management structures
 - Bridge construction/replacement
 - Trail Closure
 - Other: _____

Scope of work included in Trails Plan: Yes No (If no, requires additional review of proposal)

Description of work: (be specific including rock moving, tree cutting, trail work within 100 ft. of a water body/wetland, bridge work (*may require DEC permit*), construction of switchbacks or retaining walls, culvert and turnpike installation, etc.)

Work Schedule:

- Attached map depicting area of work (required).
- Digital photo (before) Digital photo (after)

Submitted by (print name):
Date:

Signature:

Approved by Park Manager (print name):
Date:

Signature:

Forward copy to Regional Natural Resource Steward and Capital Facilities Manager.