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Introduction

This appendix contains the results of discussions on resource protection and recreation resource development proposed for each park. Each proposal is analyzed using information from Chapter 2 – Park Background, Chapter 3 – Environmental Setting, and Chapter 4 – Vision and Goals. The analysis results in considerations as to the appropriateness of each alternative for the parks. Findings from this analysis are used in identifying preferred alternatives for each of the resource categories. The status quo, alternatives, considerations and preferred alternative for individual issues are described in tabular form.

A complete description of the master plan that results from these preferred alternatives is found in Chapter 6 of this document.

Resource Designations

The Fahnestock and Hudson Highlands State Parks master planning process is addressing three laws which allow OPRHP to designate parks under its jurisdiction as Park Preserves or areas within parks as Park Preservation Areas (PPA). Another law provides that state agencies may designate lands under their jurisdiction as Natural Heritage Areas (NHA). A third designation law, the Bird Conservation Area (BCA) program, also applicable to state agencies, is discussed in this section even though a BCA already exists within the parks.

Park Preserve/Preservation Areas

Background for Analysis:

The Park Preserve law (article 20 of the Parks, Recreation and Historic Preservation Law) provides for designation of park land containing wildlife, flora, scenic, historical and archeological sites that are unique and rare in New York State. Designating the Park as a preserve would provide legal protection to all of the park’s resources—natural, historic and archeological. A park-wide designation would also come with restricting the creation of developed areas. A developed area is considered any portion of the park that is paved or has another hard surface, an area that contributes to the built environment of the park, or an area that is landscaped and not managed for habitat protection. This designation would also preclude moderate and high recreational use from occurring at the park. Existing compatible recreational uses can continue.

The designation of a Park Preservation Area(s) would provide legal protection for the area of the park with the highest ecological value. It would entail everything stated in the preceding paragraph, but the restrictions would apply only to the selected area. Figure 17 is map of the Park Preservation Area.

Alternatives	Considerations
Alternative 1 Status Quo (No Park Preserve or Park Preservation Area)	<ul style="list-style-type: none">• Does not legally recognize the significant natural features within the park.• Sensitive areas could continue to be susceptible to more intensive use/development pressure.• SEQRA reviews would continue.

Alternatives	Considerations
Alternative 2 Designate Hudson Highlands as a Park Preserve	<ul style="list-style-type: none"> • May limit certain activities (moderate and high intensity) within the park. • Passive and low intensity recreational activities will be supported. • Would protect the park as a whole to ensure the land would be safeguarded against incompatible uses in the future. • Recognizes the importance of the park as a whole, instead of as individual areas that are not connected, and facilitates management that recognizes this.
Alternative 3 Designate a Park Preservation Area in selected locations within Hudson Highlands	<ul style="list-style-type: none"> • Designated areas would protect the most significant resources. • Passive and low intensity recreational activities will be supported. • Impacts to resources by more intensive recreational uses will be minimized. • Would leave areas with more intensive uses out of the PPA, thus, ensuring that the PPA includes only the most notable natural resources of the park.
Alternative 4 Designate a Park Preservation Area in selected locations within Fahnestock	<ul style="list-style-type: none"> • Designated areas would protect the most significant resources. • Passive and low intensity recreational activities will be supported. • Impacts to resources by more intensive recreational uses will be minimized. • Would leave areas with more intensive uses out of the PPA, thus, ensuring that the PPA includes only the most notable natural resources of the park.

Preferred Alternative: Alternatives 2 and 4

Natural Heritage Areas (NHA)

The goal of the NHA Program is to provide state land managers with a tool to recognize and assist in the protection of rare animals, rare plants, and significant natural communities on state-owned land. The New York Natural Heritage Areas Program (NHA) was established in 2002 in amendments to the Environmental Conservation Law (§11-0539.7). The NHA designation does not preclude existing or future land use proposals nor should the designation prohibit park development or operational needs. In order to be eligible for NHA designation an area must meet any one of the following criteria.

- provides habitat for "endangered species" or "threatened species" of animals or plants;
- provides habitat for rare species as defined by the Natural Heritage Program (NHP); or

- contains "significant ecological communities" where such term means all rare ecological communities that are rare in the state as well as outstanding examples of more common communities.

Unlike the Park Preserve Law (which provides some reference to recreational uses), there is no definitive statement in the NHA law on allowed uses or recreation. There is an implicit responsibility for the administering agency to assure that existing uses will not be detrimental to the viability of the identified rare, threatened or endangered species or significant natural communities. No provision in the NHA legislation is made to prohibit or hinder future recreational uses. The type and extent of any recreation/ development proposal would be evaluated in the context of the scientific criteria (that led to designation) and site characteristics and management recommendations.

Background for Analysis:

As noted earlier, the park contains ecological communities of considerable acreage that have been identified as significant by the NY Natural Heritage Program. In addition, the park contains rare plant and animal species that contribute to a high level of biodiversity in the Highlands region.

Alternatives	Considerations
Alternative 1 Status Quo (No Natural Heritage Area designations)	<ul style="list-style-type: none"> • Does not legally recognize the significant ecological communities of the park. • A greater awareness of the significance of the resources will not be created. • Significant natural communities and habitat for rare, threatened and endangered species will still be recognized and managed, but they would not be designated as a NHA.
Alternative 2 Designate Natural Heritage Areas in Fahnestock and Hudson Highlands	<ul style="list-style-type: none"> • Designated areas would provide recognition to the most significant ecological communities and rare species in the park. • Designate areas that meet the criteria of the law. • Would create a greater awareness of the significance of the resources. • The boundary would not necessarily coincide with other designations.

Preferred Alternative: Alternative 2

Bird Conservation Areas (BCA)

The BCA program aims to integrate bird conservation into agency planning, management and research projects, within the context of the agency mission. Bird Conservation Area (BCA) is described under Article 11, Title 20 of the Environmental Conservation Law (ECL). The designation itself does not preclude existing or future land use proposals, nor should the designation prohibit park development or operational needs. In addition to recognizing the importance of bird conservation within the planning process, BCA designation can create heightened public awareness of the site’s important bird community, as well as funding opportunities for bird-related education, research and conservation.

Background for Analysis:

There are existing Bird Conservation Areas at Fahnestock State Park and at Constitution Marsh, located within Hudson Highlands State Park. The BCA at Fahnestock was established in 2000, encompasses 10,050 acres and supports a representative community of breeding birds that prefer mature hardwood forests, as well as some marsh and water-dependent bird species.

The BCA at Constitution Marsh was established in 2001, encompasses 270 acres and is a large brackish tidal marsh located on the east shore of the Hudson River. It is one of only five large tidal marshes on the Hudson River. Constitution Marsh is an important wetland site hosting a diversity of birds (200 species have been identified at the site). As noted earlier, these parks have expanded significantly over the last decade; therefore, their respective BCAs were reevaluated and new acquisitions were assessed as part of the master planning process to determine their importance to the bird populations of the parks.

Alternatives	Considerations
Alternative 1 Status Quo (No changes to existing BCAs)	<ul style="list-style-type: none"> • Ignores the recently acquired parcels.
Alternative 2 Expand the BCA at Fahnestock	<ul style="list-style-type: none"> • Would accurately reflect the bird species and habitat in the park as whole. • Would provide updated management guidance for the park including new areas to be added to the existing designation.
Alternative 3 Create a second BCA at Hudson Highlands	<ul style="list-style-type: none"> • Would provide management guidance for the important bird habitat of the park. • Provides a different habitat than Constitution Marsh and, therefore, has different management direction.

Preferred Alternative: Alternatives 2 and 3

Natural Resource Protection Strategies/Management

Protection of natural resources is an important part of OPRHP’s mission. It is imperative that the master plan outline strategies and provide direction for the management and protection of the natural resources of the park. In doing so, the master plan will help carry out the natural resource goals outlined in Chapter 4. Natural resource management strategies should provide guidance for the management of significant natural communities, water resources, flora and fauna, but must also consider potential future impacts to the park, including different user groups and changing environmental conditions.

Effective management strategies derive from a thorough understanding of the significance of each of the resources and elements of that resource. Compiling adequate research and background information is a critical first step toward determining the appropriate management measures that are needed to preserve and protect these resources. The Natural Heritage Survey reports have provided essential baseline information on the park’s ecological communities and rare species. Further data collection and analysis is an ongoing process and OPRHP will continue to work with partners including other agencies, non-profit organizations, and universities to assist with this. Such information and additional research can guide decisions and will help OPRHP evaluate outcomes of management actions. This in turn will help determine if goals are met and can provide a basis for

adaptive management if the strategies are not producing desired results. It also allows for learning and can take into account new information.

Deer Management

Background for Analysis:

Evidence of over-browsing by deer has been observed in both Fahnestock and Hudson Highlands State Parks (Smith and Lundgren 2010b; NYS DEC pers. comm. 2010). This is an indication of a high population of deer. The types of damage associated with deer are degraded forest ecosystems, damage to landscaping, and vehicular collisions. Human health concerns related to deer include the transmission of tick-borne diseases such as Lyme disease, Babesiosis, and Ehrlichiosis. Deer management can help protect the biodiversity of the parks as well as provide recreational hunting opportunities. White-tailed deer are a protected game species with a set season when they may legally be hunted. The DEC is the lead state agency with respect to deer management. Any control measures that involve the handling of deer requires a permit from the DEC.

Alternatives		Considerations
Alternative 1	Status Quo	<ul style="list-style-type: none"> Deer population will continue to impact natural resources.
Alternative 2	Collect information in both parks to better understand the deer population - Establish vegetation monitoring in both parks	<ul style="list-style-type: none"> Would help land managers make informed decisions about deer management in both parks. Would provide information regarding the current size of the deer population and its impact on parkland biodiversity.
Alternative 3	Initiate deer control strategies	<ul style="list-style-type: none"> Control of the deer population needs to be based on information gathered under Alternative 2. Deer control efforts require considerable coordination with DEC and other stakeholders.

Preferred Alternative: Alternatives 2 and 3

Invasive Species Management

Background for Analysis:

A statewide invasive species control program has been established in OPRHP with goals to preserve biodiversity and reduce the threat of invasive species to the quality of the natural, recreational, cultural, and interpretive resources within State parkland.

The NY Natural Heritage survey reports for both parks (Lundgren and Smith 2010a, 2010b) recognize invasive species as one of the greatest threats to their biodiversity. The species of greatest concern are black swallow-wort (*Cyanthum louiseae*), common reed, also known as Phragmites (*Phragmites australis*), multiflora rose (*Rosa multiflora*), mile-a minute weed (*Persicaria perfoliata*), Japanese barberry (*Berberis thunbergii*), and hemlock woolly adelgid (*Adelgus tsugae*). Some invasive species removal efforts are on-going at both parks but further direction and action is required to help protect the biodiversity of the parks.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Natural habitats and park operations will continue to be impacted by invasive species. • No plan to prevent introduction of other invasive species, including animals, that may impact resources • Invasive species removal efforts are ongoing at both parks.
Alternative 2 Develop invasive species management plans for both parks.	<ul style="list-style-type: none"> • Would provide guidance for invasive species inventories and control and monitoring projects. • Would prioritize projects based on the degree of threat and will direct limited resources to the areas in greatest need. • Would promote a greater understanding of invasive issues and their impact on biodiversity by both agency staff and the public.
Alternative 3 Eradicate and prevent new or recent infestations by developing an Early Detection/Rapid Response (ED/RR) plan and using Best Management Practices (BMPs) to prevent accidental introduction through construction, operations and other activities. Continue precautions regarding invasive forest pests through tree survey and monitoring.	<ul style="list-style-type: none"> • Removal of these species, followed by native restoration of the area, would result in improved habitat values and functions. • Invasions of the parks environs by recent or yet undetermined invasive species would be controlled, reducing the impacts from invasive species or in some cases removing the species before they have a chance to have a measureable impact on the environment.. • When invasive species are not yet present, prevention of new infestations is the most effective means of controlling invasive species. This is carried out through BMPs or procedures set in place to minimize spread of invasive species, such as proper material disposal and equipment cleaning methods. Managing invasive species at the early stages of introduction tends to be more successful and less demanding than managing well-established populations of invasive species. • Such control efforts should be coordinated with the Lower Hudson Partnership for Regional Invasive Species Management (PRISM) and other partners. • Those species determined to be in the initial stages of invasion would have to be eradicated. Then, effort would be required

Alternatives	Considerations
	<p>to educate park staff and regularly survey the park for invasive species.</p> <ul style="list-style-type: none"> • Once a new invasive species occurrence is discovered, parks resources would be utilized to eliminate the threat. • Additional resources are available for assistance, particularly for species new to the state or region, through state invasive species program funding and ISC member agencies.
Alternative 4 Remove invasive species at trailheads and along trails and develop informational signage	<ul style="list-style-type: none"> • May help curtail the spread of invasive species. • Would help inform the public regarding invasive species.

Preferred Alternative: Alternatives 2, 3 and 4

Summit Communities Management

Background for Analysis:

Summit communities are distinct ecological communities that occur on warm, dry rocky ridgetops, summits, and exposed rocky slopes of hills (Reschke 1990, Edinger *et al.* 2002). There are three types of summit communities found in both Fahnestock and Hudson Highlands that are considered significant from a statewide perspective; Red Cedar Rocky Summit, characterized by sparse or patchy vegetation, numerous rock outcrops, and Eastern red cedar (*Juniperus virginiana*); Pitch Pine-Oak-Heath Rocky Summit, characterized by sparse or patchy vegetation, numerous rock outcrops, and pitch pine (*Pinus rigida*), oaks (*Quercus* spp.), and heaths; and Rocky Summit Grassland, characterized by open grassland that may include little bluestem (*Schizachyrium scoparium*) and Indian grass (*Sorghastrum nutans*). Fahnestock contains five significant Red Cedar Rocky Summits in the western portion of the park while Hudson Highlands supports more numerous and larger summit communities of all three types.

Summits, by their nature, are some of the most popular visitor destinations due to the scenic opportunities they afford. This oftentimes makes them susceptible to impacts from heavy recreational use. For example, the Pitch Pine-Oak-Heath Rocky Summit communities in Hudson Highlands provide open, scenic viewing areas along an existing trail system, making them susceptible to erosion. Rare plant populations are often present in these areas and along existing trail systems and become vulnerable to trampling.

Certain species of rare animals are also present in these community types and, depending on the species, may rely on them as their preferred habitat or use the open rocky habitat or the plants they support for critical life functions at various times of the year. Inappropriate use of sensitive wildlife habitat within the rocky summit communities may result in habitat changes through erosion or the introduction of invasive species, disturbance of wildlife during sensitive time periods, and human/wildlife interactions that may result in negative conflicts or lead to illegal collection.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Some summit communities will continue to be impacted by recreational use. • Summit communities will continue to be impacted by invasive species. • Park visitors will not have a full understanding of the value of summit communities.
Alternative 2 Monitor conditions in specific summits to ensure that the communities and the flora and fauna they support aren't being negatively impacted	<ul style="list-style-type: none"> • Would provide an accurate assessment of the health and viability of the communities. • Would help inform other management decisions related to the summit communities. • Trail use would continue.
Alternative 3 Develop education programs and materials outlining the importance and fragility of specific summit resources in both parks	<ul style="list-style-type: none"> • Develop educational signage informing hikers of the sensitivity of the summit communities and encourage them to remain on the trail. • Develop a plan to restore impacted native summit communities to the best extent possible. • Trail use would continue.
Alternative 4 Design trails within summit communities to reduce impacts on the resource	<ul style="list-style-type: none"> • Would help direct users away from sensitive areas. • Would provide defined paths helping to prevent users from going off trail. • Trail use would continue.
Alternative 5 Develop a fire management strategy for the summits	<ul style="list-style-type: none"> • Would outline the necessity of fire in specific areas, whether wildfires would be allowed to burn, and the acceptable conditions under which this would be allowed to happen. • Controlled burns mimic the natural disturbance regime necessary to maintain these natural communities.

Preferred Alternative: Alternatives 2, 3, 4, and 5

Rare, Threatened and Endangered Species Management

Background for Analysis:

As mentioned in Chapter 3, numerous rare, threatened, and endangered species of plants and animals have been documented at both Fahnestock and Hudson Highlands State Parks, with Hudson Highlands supporting the majority of these species. In addition, there are several rare species known from historical records in the region and these may be present in the parks.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Continue to survey parks with the assistance of Natural Heritage staff and Agency staff. • Continue to monitor both parks for rare and endangered species.
Alternative 2 Develop and implement monitoring and management guidelines for the protection of rare species of flora and fauna.	<ul style="list-style-type: none"> • Would provide specific direction for the management and protection of rare plant and animal species. • Important habitats may be protected through re-routing trails and relocation of vista areas or other human activities. • May impact public access to popular areas. • Trail closure signage would be improved and additional public education would be provided regarding habitat management efforts. • May entail closing sensitive habitat areas.
Alternative 3 Conduct additional research about the rare and endangered flora and fauna of the park.	<ul style="list-style-type: none"> • Would provide more accurate assessments of the rare ecological community types and rare/endangered plant and animal species of the park. • Would help park managers make better decisions regarding future land management.

Preferred Alternative: Alternatives 2 and 3

Stream Management and Protection

Background for Analysis:

As noted in Chapter 3, there are 48 miles of streams within both parks. These water courses play an important role in the ecosystem of the park and provide habitat for many plants and animals. In addition, some streams within the park are part of a larger hydrological system that is part of the New York City watershed as well as other downstream drinking water sources.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Would continue to utilize Best Management Practices (BMPs).
Alternative 2 Conduct streamside bio-surveys, visual assessments and periodic	<ul style="list-style-type: none"> • Would help gather information regarding the health of the streams.

Alternatives	Considerations
water quality testing of streams in the parks	<ul style="list-style-type: none"> • Would provide a baseline to measure stream health against over time. • Would help identify any changes to the riparian habitat. • May help identify the location of potential pollutants.

Preferred Alternative: Alternative 2

Wetland Management and Protection

Background for Analysis:

Wetlands comprise approximately 705 acres in Hudson Highlands and approximately 1,280 acres of Fahnestock. As noted in Chapter 3, wetlands provide a natural bio-filtration function and provide habitat for many species of the parks. There are many ephemeral wet areas and vernal pools in the parks as well that are not wet year-round, but also provide critical habitat. Natural Heritage and regional staff have noted that some trails are encroaching on wetland areas which have the potential to adversely impact the wetland resource.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Trails and activity adjacent to wetlands may be adversely impacting the resource by trampling, erosion and the threat of spreading invasive species.
Alternative 2 Survey the wetland areas of both parks that are adjacent to activity areas (roads, trails, buildings)	<ul style="list-style-type: none"> • Would help gather information regarding the health of the wetlands. • Would help determine if the wetlands are being adversely impacted by adjacent activities. • Would help park managers make informed decisions regarding future management of wetlands and adjacent activities and/or how to mitigate impacts to the wetlands.
Alternative 3 Relocate activities that are adjacent to wetlands	<ul style="list-style-type: none"> • Would limit access to many areas of both parks. • Would be detrimental to recreational resources of the parks. • May provide a short-term benefit to the wetlands with improved health.
Alternative 4 Develop signage in appropriate locations to help interpret the function and ecological value of wetland areas	<ul style="list-style-type: none"> • Would help park visitors understand the role wetlands play in the eco-system. • Would provide additional environmental education and interpretation in the park.

Preferred Alternatives: Alternatives 2 and 4

Aquatic Invasive Species Management

Background for Analysis:

Aquatic invasive species are present in Canopus Lake (both the upper and lower sections), Pelton Pond and several other water resources within the park. Aquatic invasive species impact recreation and have the potential to degrade the aquatic environment for fish and other species, as well as other water-dependent activities.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Aquatic invasive species would continue to impact recreation and the health of the lakes and ponds of the parks. • Weed harvesting would continue, but is not considered the most effective strategy for some plant species.
Alternative 2 Develop an integrated approach for the management of invasive species <ul style="list-style-type: none"> • May include utilizing herbicides, draw-downs, benthic barriers, or other common management techniques, as well as educating the public about aquatic invasive species. 	<ul style="list-style-type: none"> • Would provide a more sustainable solution than weed harvesting. • Would educate the public regarding the harm of aquatic invasive species will help in the long-term.

Preferred Alternative: Alternative 2

Landscape / Scenic Management

Background for Analysis:

The agency’s Policy on the Management of Trees and Other Vegetation allows for “Pruning or removal of trees and other vegetation to maintain or restore important scenic overlooks and views...” (OPRHP, 2009).

Scenic views are important features of the trail systems in both Clarence Fahnestock Memorial and Hudson Highland State Parks. Historically open areas also exist within both parks which require active management to maintain scenic character. Invasive species have become established in some former open fields.

Numerous scenic view points have been identified in Chapter 3.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Some historically open views from trails have been lost. • Loss of views from highway systems serving the parks. • Loss of habitat (open areas).

Alternatives	Considerations
Alternative 2 Maintain Scenic Views from Trail Systems	<ul style="list-style-type: none"> • Would enhance the visitor experience. • Adherence to guidelines for pruning, removals and restoration of adjacent area is required. • Would be implemented as part of trail maintenance work plans.
Alternative 3 Maintain existing views from Hubbard Lodge, Bear Mountain Overlook, and Bannerman’s Island platform off Route 9D	<ul style="list-style-type: none"> • Visitor experience is enhanced. • Adherence to guidelines for pruning, removals and restoration of adjacent area is required. • Effort required periodically only and related to control of invasive species
Alternative 4 Manage former and existing open areas at Woodle, Route 9/301 intersection, and south of Glynwood Center as open meadows or fields.	<ul style="list-style-type: none"> • Visitor experience is enhanced from existing and proposed trails, use areas and highways. • Contributes visual connection to the Hudson River, Highlands, and agricultural land uses. • Effort required to do periodic mowing. or establish agricultural permit (s).

Preferred Alternative: Alternatives 2, 3 and 4

Recreation Management and Development

The purpose of this section of the plan is to assess the feasibility of potential recreational opportunities within the park. The following activities were either suggested during the public information meeting or developed internally by OPRHP.

Clarence Fahnestock Memorial State Park

Camping

Background for Analysis:
 Fahnestock currently has seventy-nine campsites within its campground. Many of the sites and infrastructure related to the campground were built during the 1930s by the Civilian Conservation Corps and are considered historic. There are no cabins or tent platforms in the campground. Some recent Health Department regulations are not met.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Continue operating the campground as is. • Would continue to maintain existing facilities, but would not provide any improvements.

Alternatives	Considerations
Alternative 2 Improve the current campground by relocating sites 1, 3 and 4, as well as some sites in the 50s and 70s lots.	<ul style="list-style-type: none"> • Would improve the camping experience by relocating sites so that there is more room between sites. • Would require the creation of new sites and the closure of existing sites. • May disturb and impact habitat.
Alternative 3 Identify and develop a second location for camping in Fahnestock	<ul style="list-style-type: none"> • Would create additional camp sites and help meet demand. • Would serve a greater number of people. • May require additional staff to operate a second campground. • May disturb and impact habitat. • Bathrooms and shower infrastructure would need to be constructed.
Alternative 4 Upgrade existing facilities; campground road, bathrooms, showers and potable water sources; identify locations for and develop additional bathrooms and showers	<ul style="list-style-type: none"> • Would bring the campground into compliance according to Department of Health. • May disturb and impact habitat. • Would improve the overall user experience at the campground. • Road improvements would include better drainage, surfacing and grading.

Preferred Alternative: Alternatives 2 and 4

Pelton Pond Use Area

Background for Analysis:

The Pelton Pond day-use area consists of a picnic shelter, picnic tables with grills, a comfort station, and a gravel parking lot, all constructed during the CCC era of the park. The setting is a scenic one overlooking Pelton Pond and is well used. The parking lot is not designed to support access for the handicapped, and the shelter and comfort station are in need of improvements. Efforts to make this area fully accessible are also needed. Improved interpretive signage in general is discussed under “Environmental Education and Interpretation” below.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Facilities will be maintained but not improved.
Alternative 2 Renovate comfort station and improve shelter and overall picnic area (new tables, grills, repairs to pavilion) and replace potable water service	<ul style="list-style-type: none"> • Would improve upon the existing facilities with respect to accessibility. • Would provide a much needed facelift to this well used area.

Alternatives	Considerations
Alternative 3 Redesign (raise the parking area to be level with Route 301, pave with a pervious material, if feasible) and improve walkways/steps to picnic area	<ul style="list-style-type: none"> • Would improve accessibility to the picnic area. • The redesigned parking area will improve safety for cars entering and exiting the lot. • Consider using pervious pavement.
Alternative 4 Improve accessibility (ADA access) to the picnic area and restroom	<ul style="list-style-type: none"> • Would include redesigning the existing trail between the restroom and picnic shelter to ensure ADA access. • The trail would also connect to the parking area.

Preferred Alternative: Alternatives 2, 3 and 4

Fahnestock Winter Park

Background for Analysis:

The Winter Park is located at the Canopus Beach complex and serves as a destination for cross-country skiers, snowshoeing and sledding. The Winter Park is operated by the staff at the Taconic Outdoor Education Center (TOEC) who maintains the Winter Park trail system, the Acorn Café and ski rental. Comments about the Winter Park during the public comment period related to the expansion of the trail system, an improved rental facility and café, snowmaking machines and night skiing. Fahnestock Winter Park draws people from all over the metropolitan New York area and often operates at capacity during snowy weekends.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Facility will be maintained but not improved.
Alternative 2 Expand the existing Winter Park trail system	<ul style="list-style-type: none"> • This is being addressed in the Trails Plan; see Appendix B.
Alternative 3 Install a snow making system	<ul style="list-style-type: none"> • May extend the operating season at the Winter Park, therefore, potentially expanding the opportunity to increase revenue. • Requires a dedicated water source and infrastructure.
Alternative 4 Add lights to some trails within the system to allow for night skiing	<ul style="list-style-type: none"> • Would extend the operating hours of the facility and, therefore, potentially increase revenues. • Would create a permanent structure along some trails which may detract from the natural experience of the park. • The ability to install lighting would be dependent upon the existing electricity infrastructure. • Would increase ambient light in this area and detract from the night sky.

Alternatives	Considerations
Alternative 5 Improve lodge and concession facilities	<ul style="list-style-type: none"> • Please refer to the Buildings and Parking section under the Canopus Lake Recreation Area.

Preferred Alternative: Alternatives 2 and 5

Canopus Lake Buildings and Parking

Background for Analysis:

Development of the Canopus Lake Recreation Area began in the late 1960s and included a dam forming the upper portion of the lake, the roads, utilities, beach, bathhouse and concession buildings. The facility was opened in the early 1980s and provides the only formal swimming facility at Fahnestock.

In recent years, the buildings have been used as a lodge and changing area for the Fahnestock Winter Park; however, these buildings were never designed for four season use. As a result of age and use, the bathrooms and changing rooms as well as the concession / office building are in need of major renovations and upgrades.

The gravel parking lot consists of approximately 300 spaces. The surface treatment is an issue in the winter months when the parking area is plowed.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Buildings would remain in need of renovation. • Buildings would continue to serve a high volume of users. • Buildings are not energy efficient as they could be.
Alternative 2 Renovate and expand the existing structures	<ul style="list-style-type: none"> • Would provide much needed upgrades to the existing facilities. • Would expand the buildings to better accommodate year-round use. • Buildings would have improved energy efficiency.
Alternative 3 Demolish the existing structures and build new structures	<ul style="list-style-type: none"> • Buildings would be designed to accommodate the existing uses. • Buildings would be designed to be energy efficient. • High cost associated with demolition and construction. • May require closing the area during construction. • Buildings would be designed for four season use.

Alternatives	Considerations
Alternative 4 Renovate the changing rooms / bathrooms and demolish and rebuild concession / office building / lodge.	<ul style="list-style-type: none"> • Would provide much needed upgrades to bathrooms and changing rooms. • High cost associated with demolition and construction. • May require closing the area during construction. • Would improve the energy efficiency of the buildings. • Would accommodate four season use.
Alternative 5 Improve existing parking area (paving, striping and drainage)	<ul style="list-style-type: none"> • Would improve the efficiency of the parking area. • Would enhance winter use. • Would not increase the surface area of the existing parking lot.

Preferred Alternative: Alternatives 2 and 5

Canopus Lake Swimming Area and Beach

Background for Analysis:

Formal swimming at Fahnestock is located at Canopus Beach. Canopus Lake was created during the 1930s CCC construction of the park by placing a dam across the Canopus Creek at the present Route 301. The northeast end of the lake was selected as the location for a beach in the 1960s and a second dam was constructed across the middle of the lake to form “Upper Canopus Lake” and add about 6 feet of depth. The beach was opened for swimming in the early 1980s. While very popular, aquatic vegetation and silting plagues the swimming area and creates not only a maintenance issue for park managers, but also degrades the swimming experience.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Maintenance would continue but the swimming area and beach would remain as is. • Swimming area would continue to have issues with weeds and silting.
Alternative 2 Deepen swimming area, place new sand on bottom and institute aquatic vegetation control within swim area using a buffer or barrier system. Explore aquatic vegetation control in upper lake (e.g. winter drawdown, bio-controls.)	<ul style="list-style-type: none"> • Would address the issues of shallow depth and invasive vegetation controls for both the swimming area and the remainder of the lake • Dredging would result in short term environmental impacts, however as it would be maintenance-related, required permits should be feasible.

Alternatives		Considerations
Alternative 3	Raise the dam to increase water depth at swimming area	<ul style="list-style-type: none"> • Construction would be very costly • Would require permits for work in lake/on dam. • The water depth would increase. • Weeds may decrease. • Bottom of swim area may still need improvements.
Alternative 4	Rehabilitation of Beach Area <ul style="list-style-type: none"> • Would include restoring some of the sand areas to grass. 	<ul style="list-style-type: none"> • Reduce sand surface area and rehabilitate with soil, establish turf, native trees and vegetation. • Establish areas for picnic tables, grills, sand volleyball, pavilion, playground, fishing access, and seating. • A turf and native plant surface around the smaller sand area will be more maintainable for the park staff. It will reduce sand washing into the lake during storm events and create a stable surface for other patron activities.

Preferred Alternative: Alternatives 2 and 4

Canopus Lake Recreation

Background for Analysis:

The Canopus Lake Recreation Area serves as the focal point for most of the active recreation at the park. Between the beach area, fishing, Winter Park, its proximity to the campground, and available parking, this area is well utilized year-round. Facilities are aging, however, and could be improved to provide a better overall recreation experience. Swimming will not be addressed in this discussion as it is mentioned earlier in this chapter.

Alternatives		Considerations
Alternative 1	Status Quo	<ul style="list-style-type: none"> • Facilities would remain as is.
Alternative 2	Develop a picnic area with a pavilion in the field near the parking area	<ul style="list-style-type: none"> • Would create a new picnicking opportunity in the park. • Would be available for rental and would potentially generate revenue for the park. • Parking is readily available. • Is close to comfort facilities and beach.
Alternative 3	Develop a ball field (for soccer, baseball, etc) with a backstop near the parking area	<ul style="list-style-type: none"> • Would support active recreation. • Would create a new recreation opportunity. • Parking is readily available. • Is close to comfort facilities and concessions.

Alternatives	Considerations
Alternative 4 Develop a playground near the beach	<ul style="list-style-type: none"> • Would create a new active recreation opportunity for kids. • Would be located closer to the beach area to create a recreation node with swimming.
Alternative 5 Develop docks for fishing	<ul style="list-style-type: none"> • Would be separate from the swimming area. • Would provide dedicated fishing access.

Preferred Alternative: Alternatives 2, 3, 4, and 5

Canopus Lake Boat Launch

Background for Analysis:

The boat launch and boat rental area at Canopus Lake is a small area and in need of upgrading. Other locations for this purpose do not exist although some car-top launching occurs from the parking area slightly west on the north side of Route 301. The existing parking area for the launch exists across Route 301 and pedestrians wishing to launch or rent a boat must cross the road. The existing boat rental facilities are hindered by the poor launch area which is rocky and receives run-off from the highway drainage system. Accessible parking is also an issue at this location due to space restrictions. Route 301 is owned and managed by NYS DOT and is, therefore, beyond the purview of the master plan. However, it is possible to improve the parking on the south side of Route 301 with DOT’s approval. (It is recommended that the next time Route 301 is scheduled for repair that DOT consider widening or restriping Route 301 to create additional space for pedestrians and cyclists.)

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Facilities would remain as is. • Boat launch area requires consistent maintenance due to silting from highway drainage.
Alternative 2 Improve existing rental area by enlarging the structure to improve storage for the boats and adding a self-composting toilet. Develop small parking area to improve accessible parking.	<ul style="list-style-type: none"> • Would improve a well-used recreation area. • Would provide restrooms. • Would help maintain the boats better and for a longer period of time. • Would improve accessibility at this location. • Spatial constraints at the site may limit development.
Alternative 3 Sand reclamation efforts at boat launch area to improve launching conditions	<ul style="list-style-type: none"> • Would create a better boating experience for park visitors. • Rental boats would be less likely to get damaged. • Would likely require permits from DEC. • Would likely involve some invasive species removal.

Alternatives	Considerations
Alternative 4 Add a new dock between the shore and a small island behind the existing rental	<ul style="list-style-type: none"> • Would improve the area as fishing location. • Would improve access to the water and would make it easier for people to get into row boats.
Alternative 5 Improve parking area across Route 301 and create a pedestrian crossing on Route 301	<ul style="list-style-type: none"> • Would formalize parking area to accommodate additional parking spots within the existing area. • Would require paving additional areas adjacent to the existing parking area. • Would create a dedicated entrance and exit to the parking area to improve safety and separate the parking area from the road. • A crosswalk and signage on Route 301 would improve pedestrian visibility and safety.

Preferred Alternative: Alternatives 2, 3, 4, and 5

Peninsula at Canopus Lake

Background for Analysis:
 The peninsula is located adjacent to Route 301 and is a small, but well used recreation area on the lower part of Canopus Lake. There are hiking trails and a small parking area, but the area is in need of some rehabilitation and trail improvements.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Existing issues would continue; trails would continue to erode, parking is insufficient and informal.
Alternative 2 Implement erosion control measures at trails near the water	<ul style="list-style-type: none"> • Would improve the trails. • Would help the plants and trees near that are impacted by the erosion. • Would help stabilize loose soils and may prevent erosion and sedimentation impacts to lake.
Alternative 3 Improve parking by formalizing the park area adjacent to Route 301	<ul style="list-style-type: none"> • Would include striping and minor repairs to the asphalt. • Would better organize parking and may accommodate additional spaces.

Preferred Alternative: Alternatives 2 and 3

Hunting

Background for Analysis:

There are designated areas for bow and shotgun deer and turkey hunting in Fahnestock. Nearly all of Fahnestock is open for bow hunting and specific areas of the park have been identified for shotgun hunting. Hunting occurs during the designated season in accordance with the regulations set forth by the Department of Environmental Conservation. Hunting serves as both a recreational opportunity and one way to help control the deer and turkey population of the park.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> Hunting will continue in designated areas at Fahnestock
Alternative 2 Expand shotgun hunting in Fahnestock off East Mountain Road, near Wiccopee Lake	<ul style="list-style-type: none"> May help with deer management in the park. May help improve the natural resources of the park. Would provide a new recreational opportunity where hunting was previously allowed by prior landowners.

Preferred Alternative: Alternative 2

Hudson Highlands State Park

Camping and Overnight Accommodations

Background for Analysis:

There are no formal camp sites in Hudson Highlands State Park at this time. There are designated locations within the park, especially along the Hudson River shoreline, that have been identified as locations where camping is permitted for paddlers on the Hudson River Water Trail. The recent purchase of the former University Settlement Camp property included a number of cabins in an area directly adjacent to the park.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> No formal camping facilities currently exist. Unimproved campsites along the Hudson River Water Trail would be maintained.
Alternative 2 Identify a location for and develop a campground in Hudson Highlands	<ul style="list-style-type: none"> Would provide a new camping opportunity for the region. Would require the development of the associated infrastructure (showers, bathrooms, water supply, roads, etc.) where it does not exist now. May disturb and impact habitat.

Alternatives	Considerations
Alternative 3 Identify a location(s) for primitive camping in Hudson Highlands	<ul style="list-style-type: none"> • Requires less development than traditional camping. • No more than five (5) camp sites would be developed.
Alternative 4 Utilize the cabins at University Settlement to provide overnight accommodations.	<ul style="list-style-type: none"> • Would be contingent upon the City of Beacon developing overnight accommodations. • Would be consistent with Beacon’s plans for this area.

Preferred Alternative: Alternatives 1 and 4

Hunting

Background for Analysis:

There are designated areas for bow hunting for deer and bow and shotgun hunting for turkey at Hudson Highlands. Hunting occurs during the designated season in accordance with the Department of Environmental Conservation and shotgun hunting is only allowed Monday-Friday and hunters must leave by 10am.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Hunting will continue in designated areas.
Alternative 2 Expand shotgun and bow hunting in Hudson Highlands—Expand shotgun hunting on Northeast Fishkill Ridge (formerly Rodman) parcel and bow hunting west of Route 9D	<ul style="list-style-type: none"> • May help manage wildlife in the park. • May help improve the natural resources of the park. • Would provide a new recreational opportunity in the park.

Preferred Alternative: Alternative 2

Little Stony Point

Background for Analysis:

The 28+/- acre peninsula was formed by the railroad severing it from the mainland and later filling of underwater lands during its use as a processing and shipping area for the quarry east of Route 9D. As a result, the northern portion has a beach of stone screenings mixed with sand, and the southern shoreline is the natural rocky edge dropping sharply to a depth of over 100 200 feet. This well-loved recreation area boasts a modest trail system, shoreline access to the Hudson River, fishing, picnicking, and amazing views of the river and Storm King Mountain.

The Hudson River shoreline is natural, rocky and undeveloped. Because of its natural character (unmonitored water quality, water currents and sharp drop-off), it is not conducive to the traditional beach infrastructure associated with bathing beaches (changing rooms, rest rooms, etc.). There are no designated swimming areas currently located within Hudson Highlands. Historically, Little

Stony Point has been a popular swimming location within the park, but swimming is currently prohibited at this location due to currents, water depth and a lack of water quality testing.

Picnicking areas, the restrooms and the trails are all heavily used at Little Stony Point. Trail improvements are discussed in the Trails Plan, Appendix B and parking is discussed later in this chapter under “Park Operations.”

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Swimming would continue to be prohibited within the park. • Maintains the character of the area. • Kayaking and canoe launching will continue to be allowed. • Fishing will continue to be allowed.
Alternative 2 Guarded swimming at Little Stony Point	<ul style="list-style-type: none"> • Would require lifeguards to staff and monitor the swimming area. • Would require full compliance with the Department of Health regulations.
Alternative 3 Revisit the agreement with the Little Stony Point Citizens Association	<ul style="list-style-type: none"> • Would help inform the future direction of LSP. • Agreement is currently expired.

Preferred Alternative: Alternative 1

Denning’s Point

Background for Analysis:

Denning’s Point is a unique area located within Hudson Highlands State Park. A former estate, railroad terminal, brickyard and industrial site, it sits at the confluence of the Fishkill Creek and the Hudson River. It is a highly scenic setting, rich in natural and cultural resources. One section of Denning’s Point has recently been revitalized through an agreement with the Beacon Institute. The Beacon Institute offers programs and education about the Hudson River estuary. In addition to the Beacon Institute, the area contains a building that was once a paper-clip factory, trails, and habitat for wintering Bald Eagles. The major issues related to Denning’s Point include parking and the bridge over the railroad tracks. Most park patrons utilizing Denning’s Point park adjacent to the City of Beacon’s waste management facility and walk a mile out to the point. The existing bridge is in need of replacement. An Interim Management Guide (IMG), an internal OPRHP planning document, was developed for Denning’s Point in 2007.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Park patrons would continue to park outside of the point. • Beacon Institute will continue to operate on-site. • Bridge would continue to deteriorate and hinder future use of the point.
Alternative 2 Replace bridge	<ul style="list-style-type: none"> • Would improve access to Denning’s Point.

Alternatives	Considerations
Alternative 3 Connect to Klara Sauer Trail and Madam Brett Park	<ul style="list-style-type: none"> • Would improve pedestrian connectivity between areas in and outside the park.
Alternative 4 Revisit the agreement with the Beacon Institute	<ul style="list-style-type: none"> • Would help inform the future direction of the point.

Preferred Alternatives: Alternatives 2, 3 and 4

Dockside Recreation Area

Background for Analysis:
 Dockside is located within the Village of Cold Spring, Putnam County and is a 6.4 acre parcel on the Hudson River. It is located west of the Metro North tracks near Village-owned portions of the waterfront. The property is located in the heart of the community with access provided by village streets. Dockside is a designated stop on the Hudson River Water Trail.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Area would continue to be operated without a management agreement with the Village of Cold Spring. • Fishing and boating would continue.
Alternative 2 Finalize a management agreement with the Village of Cold Spring	<ul style="list-style-type: none"> • Would provide a clear direction with respect to managing this area. • Would define roles, rules and responsibilities for the management of this area. • Fishing and boating would continue.

Preferred Alternative: Alternative 2

North Redoubt

Background for Analysis:
 North Redoubt is located adjacent to Philipse Brook Road in the Town of Philipstown, Putnam County. It's a Revolutionary War fortification and offers trails and scenic views. Parking for North Redoubt can be difficult as there is limited space and is primarily located adjacent to the roadway.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Parking would continue to be limited.
Alternative 2 Improve parking and access to the trails	<ul style="list-style-type: none"> • Would require purchasing adjacent land to improve the area. • Would provide better access and a distinct entrance to the trailhead.

Preferred Alternative: Alternative 2

Arden Point

Background for Analysis:

Arden Point is a 37 acre area located in Garrison and is adjacent to the Metro North train station. The point has an easy trail system with direct access to the Hudson River and spectacular views of the Hudson River and West Point.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> Well-used trail; popular local recreation destination. Entrance is lacking amenities.
Alternative 2 Improve entrance amenities	<ul style="list-style-type: none"> Would provide a more clearly defined entrance. A kiosk would be installed with trail and trail connection information.
Alternative 3 Designate Arden Point as a stop on the Hudson River Valley Water Trail	<ul style="list-style-type: none"> Would be for day-use only; no overnight accommodations. Would provide a new stop on the water trail. May provide a new opportunity for interpretation.

Preferred Alternative: Alternatives 2 and 3

Both Parks

Trails

Hiking, biking and equestrian activities for both Fahnestock and Hudson Highlands State Parks are addressed in the Trails Plan which is part of this Master Plan. Please refer to Appendix B for the complete Trails Plan and for more detailed information regarding the trail system of the parks.

Environmental Education and Interpretation

Background for Analysis:

Taconic Outdoor Education Center (TOEC) provides the majority of the environmental education and interpretation programming at Fahnestock. The programming provided by TOEC is geared towards school groups and occurs during the school year. TOEC does provide some environmental education programming to the general public, but there is a need for more.

At Hudson Highlands, environmental education and interpretative programming is offered by Audubon at Constitution Marsh.

There are numerous organizations offering programs in and around the parks. Additional environmental education and interpretation opportunities would be beneficial at the park through partnerships with these organizations.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • EE& I programming would continue at TOEC and Constitution Marsh. • Existing programs offered are somewhat limited.
Alternative 2 Expand EE&I programming and partnerships for the general public and Fahnestock and Hudson Highlands	<ul style="list-style-type: none"> • Would require additional staff time to develop and execute programming. • Would better serve the general public. • Programming could be offered at Hubbard Lodge in Fahnestock and at the proposed Visitor Center at Hudson Highlands. • Would help the general public understand the importance of the biodiversity of both parks.
Alternative 3 Develop interpretive materials and signage for trails at both parks	<ul style="list-style-type: none"> • Would provide a low-cost alternative to traditional EE&I programming. • Would highlight important ecological features of a trail. • Interpretive trails provide active interpretation for park patrons.

Preferred Alternative: Alternatives 2 and 3

Cultural and Historic Resource Protection and Management

Background for Analysis:

Fahnestock and Hudson Highlands are two parks rich with history and lie within a Federally designated National Heritage Area. The area, as whole, is historically significant from a Native American, early-American trading, Revolutionary War, and Industrial Revolution standpoint. It has a rich history in art, literature and scenic preservation. Hudson Highlands has numerous Revolutionary War sites, former estate landscapes, and remains of mining activities related to quarrying and brick-making within its boundaries. Fahnestock has extensive areas once devoted to iron mining, agriculture, and later park development under the CCC program. Given the wealth of cultural and historic resources of these parks, there is a tremendous opportunity to educate and interpret these resources for the public.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • There is limited cultural and historic education and interpretation offered at either park. • There are historic and cultural elements of the parks that could be interpreted and management could be improved. • There are known historic areas of both parks that are eligible for nomination on the National Register.

Alternatives	Considerations
Alternative 2 Conduct an inventory of cultural and historic elements of both parks	<ul style="list-style-type: none"> • Would help better understand the historic significance of the area. • Would help with education and interpretation of the historic and cultural resources.
Alternative 3 Expand cultural and historic education and interpretation programming for the general public and Fahnestock and Hudson Highlands	<ul style="list-style-type: none"> • Would better serve the general public. • Programming could be offered at the proposed Visitor Center at Hudson Highlands. • Would help the general public better understand the importance of the Hudson Valley in the history of the United States.
Alternative 4 Develop interpretive materials and signage for trails and programming in both parks	<ul style="list-style-type: none"> • Would provide a low cost alternative to traditional education and interpretation programs. • Would provide dedicated interpretive signage to trails that would be available all the time to park visitors. • Interpretive trails provide active interpretation for park patrons.
Alternative 5 Prepare the nomination form for 3,000 acres of Fahnestock	<ul style="list-style-type: none"> • The 3,000 acres would include the original 2,400 acres donated by the Fahnestock family and an additional 600 acres that relate to the early development of the park and parkway. • The nomination would include the CCC era structures of the park. • Would relate to the Taconic State Parkway, already on the National Register, and bolster the historic significance of that era and the idea of the parkway system.
Alternative 6 Improve the management of known culturally and historically significant areas	<ul style="list-style-type: none"> • Would include North Redoubt in Hudson Highlands, the Connecticut Camp area. • Would help park managers better manage the resource. • May include the development of resource management plans for specific locations.

Preferred Alternatives: Alternatives 2-6

Park Operations

Park Office—Fahnestock

Background for Analysis:

The existing park office at Clarence Fahnestock Memorial State Park is located directly off of Route 301. In addition to the park office, the park manager residence and the park maintenance facility is also in the same location which causes congestion. In general, the facility provides poor service to the public. In addition, the park office is located away from the activity at the campground and Canopus Lake which is undesirable.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Park office would remain in its current location. • Conflicts between motorists and park patrons would continue. • Parking would continue to be inadequate.
Alternative 2 Relocate park office to the current location of the Canopus Beach contact station	<ul style="list-style-type: none"> • Would be a more central location and close to the beach and campground. • Would require new construction and changes to the road system to allow people to turn around. • Would bring additional traffic to this already well-used area.
Alternative 3 Relocate park office to the existing buildings at Canopus Beach (concessions and lifeguard office building)	<ul style="list-style-type: none"> • Would be a more central location close to the beach and campground. • Would be difficult from a park operations perspective to distinguish between people coming in for camping and those park patrons who are coming to swim. • Would require renovating the existing building. • May create an operational/traffic problem getting people who are not parking at the Canopus Beach area out and on their way.

Alternatives	Considerations
<p>Alternative 4 Build a new park office building off Route 301, between the campground and Pelton Pond picnic area at the site of the former Winter Campground.</p> <ul style="list-style-type: none"> • Building would be approximately 1,200 square feet • Approximately 16 parking spaces 	<ul style="list-style-type: none"> • Area is located off of Route 301, but set back from the road with better visibility for motorists entering and exiting. • Is located near a trail that leads to the campground; would also be accessible by the Winter Park users. • Would be a new building that would be separate from other park facilities. • May impact some habitat. • The former winter campground area is already cleared. • Is closer to Canopus Lake than the existing park office, but would not create traffic issues.

Preferred Alternative: Alternative 4

Visitor Center—Hudson Highlands

Background for Analysis:

As described earlier in the plan, Hudson Highlands is a unique park in that it's a series of fragmented parcels of land as opposed to a larger, central land mass constituting the park. In addition to its fragmented nature, Hudson Highlands has Route 9D running through many sections of the park and there's no defined entrance or welcome area. In an effort to improve the visitor experience, the planning team felt that a visitor center should be developed for Hudson Highlands.

Alternatives	Considerations
<p>Alternative 1 Status Quo</p>	<ul style="list-style-type: none"> • There is currently no visitor center in the park.
<p>Alternative 2 Develop a visitor center near the City of Beacon line with a parking area and restrooms</p> <ul style="list-style-type: none"> • Building would be approximately 1,500 square feet • Would provide parking for approximately 50 vehicles 	<ul style="list-style-type: none"> • Would create a contact point for park visitors and park staff. • Would provide useful information about Hudson Highlands and other parks and/or natural areas in the Taconic Region. • Could provide environmental/cultural education/interpretation opportunities at the park. • Would require construction of a new building. • Building would be constructed to maximize energy efficiency and would incorporate sustainable design practices. • Would provide a new parking area would connect to nearby trails and the visitor center. • Would require demolition of the existing

Alternatives	Considerations
	structures.
	<ul style="list-style-type: none"> • Would provide restrooms for this section of the park. • Would provide access from Route 9D and to the Highlands.
Alternative 3 Manage shrubland and fields for habitat	<ul style="list-style-type: none"> • Would provide habitat for the New England Cottontail, a known rare species in the park. • Would provide a buffer between Route 9D and the visitor center.

Preferred Alternative: Alternatives 2 and 3

Little Stony Point Parking

Background for Analysis:
 Parking at Little Stony Point is limited to a small, informal lot across Route 9D which can hold approximately 20 cars and informal roadside parking adjacent to and parallel to Route 9D. The current parking situation is undesirable especially given that cars travel at high speeds on Route 9D.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Park patrons would continue to park across from Little Stony Point and adjacent / parallel to Route 9D.
Alternative 2 Improve parking areas across Route 9D and adjacent to the road; improve crossing on Route 9D. <ul style="list-style-type: none"> • Sightline improvements; clearing vegetation; possible reduction of the speed limits 	<ul style="list-style-type: none"> • Would provide designated and formal parking locations for the area. • A crosswalk and signage alerting motorists to the area would improve the crossing for pedestrians trying to get across route 9D. • Pedestrians still have to cross Route 9D.
Alternative 3 Develop a new parking area near the house on Little Stony Point	<ul style="list-style-type: none"> • Would require significant clearing of trees near the Hudson River Shoreline. • This area falls within the designated coastal zone according to the NYSDOS. Parking is not a water-dependent or water-enhanced use; water dependent / enhanced uses are desirable per the NYSDOS Coastal Zone Management Program. • Would make all parking on one side of Route 9D and would eliminate the need for park patrons to cross Route 9D.

Preferred Alternative: Alternative 2

Trailhead Parking

Background for Analysis:

There are numerous trailheads in both parks and some have more defined areas for parking and others are more informal. Nearly all of these trailheads are well used and there are several trailhead parking areas throughout the parks that are close to roadways. In many cases, it is undesirable to relocate these parking areas due to topography and potential adverse impacts to the environment.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Trailhead parking would remain as is. • Trailhead parking is insufficient in both parks. • Parking fails to foster a sense of place for the park visitor. • Trailhead parking areas are generally unknown.
Alternative 2 Improve trailhead parking and add informational kiosks	<ul style="list-style-type: none"> • Would provide informational kiosks for trail users. • The location would serve as a gateway to the park. • Would add parking spaces to the area and create a more organized look.

Preferred Alternative: Alternative 2

Hubbard Lodge Use Area—Fahnestock

Background for Analysis:

The Hubbard Lodge Use Area is located in the western reaches of Fahnestock State Park. It is suitable for year-round use, is served by water, electric and sewage systems, and contains public bathrooms. The lodge is located along the historic Albany Post Road and is currently used for meetings, special events, and is home to the Anne Odell Memorial Butterfly Garden. It also serves as the major trailhead for trails entering Fahnestock from the west. Hubbard Lodge is the closest developed area to Hudson Highlands and is a built, tangible link between Fahnestock and Hudson Highlands.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Facility will be maintained but not improved. • There is no formal parking at this location.
Alternative 2 Design a parking area to formalize parking and to provide equestrian parking	<ul style="list-style-type: none"> • Would create a formal parking area. • Would accommodate approximately 40 vehicles, including horse trailers. • Would utilize a pervious paving material.

Alternatives	Considerations
Alternative 3 Utilize Hubbard Lodge to connect Fahnestock and Hudson Highlands	<ul style="list-style-type: none"> • Could serve as a location to provide environmental education. • Would serve as a gateway between Fahnestock and Hudson Highlands. • Would serve as a satellite park office for this location.

Preferred Alternative: Alternatives 2 and 3

Infrastructure

Former Downhill Ski Area—Fahnestock

Background for Analysis:

The former downhill ski area at Fahnestock is located adjacent to the Taconic State Parkway and was open as a skiing facility during the 1930s and operated until the 1970s. The location of the ski area off of the Taconic State Parkway creates a difficult scenario for motorists attempting to enter or exit this area. From the parkway, only one building and a large former parking lot is readily visible, but there are a total of three buildings (ski rental/ former Police Station, ski lodge, and a building used by the State Police and Park Police) within the area and vary in condition. Currently, the downhill ski area is utilized by the New York State Police Troop K and Park Police as a shooting range and they also occupy one of the three structures (this building is still viable). The ski rental building (visible from the parkway) is plagued with a myriad of issues and the former ski lodge is currently used for storage, but is in need of maintenance.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • State Police and Park Police continue to use the third building for storage and the shooting range.
Alternative 2 Demolish ski rental building and ski lodge, reduce the parking area and actively restore sections of the parking area	<ul style="list-style-type: none"> • Would remove buildings that are no longer viable. • Would turn the parking lot into a more natural look and feel. • Would leave some room for parking and helicopter landings.
Alternative 3 Remove power line no longer in use	<ul style="list-style-type: none"> • Would improve the scenic qualities of the area. • Would require the police to depend on a generator for power to the building they occupy.

Preferred Alternative: Alternatives 1, 2 and 3

Bridge at Route 301

Background for Analysis:

Route 301 is a prominent road in Fahnestock. As noted earlier in the plan, improving parking adjacent to the road, crosswalks and sight distance are all recommendation of the document. Route 301, near the entrance to the Fahnestock Winter Park / Canopus Beach Recreation Area is a popular pedestrian connection between the campground and the beach. In the winter cross-country skiers must cross Route 301 to access additional trails. Improving the pedestrian experience and ensuring a safe road crossing is imperative.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Crossing Route 301 would continue to present a safety concern for pedestrians and cross-country skiers.
Alternative 2 Construct a multi-use bridge over Route 301	<ul style="list-style-type: none"> • Would improve the crossing for pedestrians, cross-country skiers, bikers and equestrians. • Would be designed to reflect the mountain character of the area. • Would be designed with input from NYS DOT.
Alternative 3 Work with NYS DOT to reduce the turning lanes at this location on Route 301	<ul style="list-style-type: none"> • May reduce speeds of motorists. • May cause some traffic backups on account of losing turning lanes.

Preferred Alternative: Alternatives 2 and 3

Taconic Outdoor Education Center—Fahnestock

Background for Analysis:

TOEC, located in Fahnestock, is a widely popular resource for schools and organizations looking for an environmental education experience in the Taconic Region. TOEC also offers environmental education programs to the general public. There have been upgrades to its septic system in recent years and many of the cabins have been renovated, however, the main lodge and two of the cabins are in need of rehabilitation.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Buildings would be maintained, but not improved. • The buildings are older and could be renovated to improve energy efficiency.
Alternative 2 Continue renovations to the remaining cabins	<ul style="list-style-type: none"> • Would improve efficiency. • Would make the cabins available for year-round use. • All but two of the cabins have been renovated.

Alternatives	Considerations
Alternative 3 Rehabilitate and renovate the lodge at TOEC	<ul style="list-style-type: none"> • Would greatly improve the energy efficiency of the building and, therefore, cost less to cool and heat. • Would utilize green / sustainable design and building practices. • Energy improvements could be utilized by staff to help educate visitors about the importance of energy efficiency and green design.

Preferred Alternative: Alternatives 2 and 3

Stillwater Lake

Background for Analysis:
 Stillwater Lake is a popular area in Fahnestock for fishing and boating. The existing access road is in need of improvements and the dock needs to be replaced. The dam at Stillwater is also overgrown and requires management, including tree removal.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • The road, dock and dam would be maintained, but would still require improvements.
Alternative 2 Improve the existing road	<ul style="list-style-type: none"> • Would require resurfacing, grading and drainage improvements. • Would be gravel, not an impervious surface. • Would help with stormwater runoff.
Alternative 3 Replace dock and remove trees from dam	<ul style="list-style-type: none"> • Would improve fishing access from dock. • Would help ensure the future of boating, fishing and recreation at Stillwater Lake.

Preferred Alternative: Alternatives 2 and 3

Buildings for Demolition

Background for Analysis:
 Several structures within Fahnestock and Hudson Highlands are no longer viable and are beginning to deteriorate. In an effort to improve aesthetics, revert built areas back to natural areas and as a safety precaution it is recommended that several buildings be demolished.

Alternatives	Considerations
Alternative 1 Status Quo	<ul style="list-style-type: none"> • Buildings would continue to deteriorate.

Alternatives	Considerations
<p>Alternative 2 Demolish the following structures:</p> <ul style="list-style-type: none">• South Zone Police Building• Old Ski Lodge• Storage Shelter• Repeater Building• Pump House• Cook’s Cottage• Gas Shed• Wiccopee Barn• Ticket Booths no longer in use• Route 9D Residence• Browne House• Brick Structure at Fishkill Town Park• Ruins at Arden Point (3)• Woodle House	<ul style="list-style-type: none">• Would improve overall aesthetics of certain areas.• Some buildings may be unsafe and should be demolished.• Deteriorating buildings are an operational issue.

Preferred Alternative: Alternative 2

Table 2 - Comparison of Status Quo and Preferred Master Plan Alternative

Element/Topic	Status Quo Alternative	Preferred Master Plan Alternative
Park office—Fahnestock	The park office is located within the maintenance area.	A new park office will be constructed off of Route 301 between the Pelton Pond Use Area and the campground. The new office is proposed in a cleared area and on the site of the former winter campground.
Maintenance area	The maintenance area consists of several buildings and is quite small.	No changes are recommended for these buildings; however, when the new park office is built the existing park office will become part of the maintenance area.
Visitor Center—Hudson Highlands	There is no visitor center in Hudson Highlands.	A visitor center is proposed on a property located off of Route 9D. Additional environmental
Picnicking	There are picnic areas in Fahnestock, including Pelton Pond and Canopus Beach; informal picnicking occurs throughout Hudson Highlands.	The picnic area at Pelton Pond will be rehabilitated and improved. The picnic area at Canopus will be improved and a second location and possibly a pavilion will be developed.
Fishing	Fishing is allowed at several locations, including: Canopus Lake, Pelton Pond, Stillwater Lake, John Allen Pond, and the Hudson River.	Fishing access will be improved at select locations within Fahnestock. No changes are proposed in Hudson Highlands.
Trail activities	Hiking, mountain biking, equestrian, cross country skiing and snowshoeing In the winter, the Winter Park provides XC skiing opportunities.	Hiking, mountain biking, equestrian, cross country skiing, and snowshoeing are allowed on designated trails. Improvements will be made to the trail systems in both parks. OPRHP will continue to work with aforementioned partners to maintain and improve the trail system.
Trailhead Parking	Trailhead parking is limited and often adjacent to roadways. There is little room to expand and there is little to no information to orient and educate trail users.	Trailhead parking will be improved where possible. Some areas are limited by the natural landscape and developing a new parking area would not be feasible or desirable from an environmental standpoint. Informational kiosks will be developed at trailhead parking areas to better inform trail users.

Element/Topic	Status Quo Alternative	Preferred Master Plan Alternative
Campground—Fahnestock	The campground at Fahnestock is part of the original 2,400 acres and is in need of upgrades to the campsites, road and additional bathrooms/showers.	The road will be improved and some campsites will be relocated. A new shower/restroom building will be constructed and the older bath/shower house will be renovated.
Overnight Accommodations—Hudson Highlands	There are no overnight accommodations at this time.	The plan supports the recommendations of the City of Beacon’s master plan for the former University Settlement Camp. The plan recommends developing overnight accommodations at some or all of the existing cabins. The Taconic Region will work with the City of Beacon on this project.
Hunting	Hunting is allowed at select locations within both parks.	Recreational hunting will be
Roadways	The main roadways are asphalt. Secondary roadways and most parking lots are gravel.	No major changes are proposed to any roadways in either parks, some roadways (at the Fahnestock campground, for example) will be improved through grading and resurfacing.
Bird Conservation Area	The parks have designated Bird Conservation Areas (BCA).	The BCA at Fahnestock will be expanded and a second BCA will be designated at Hudson Highlands.
Natural Heritage Area	There are no NHAs in the parks.	Natural Heritage Areas will be designated in both parks.
Park Preserve / Park Preservation Area	Neither of the parks has been designated as a Preserve, nor contains a Park Preservation Area.	Hudson Highlands will be designated as a Park Preserve and a Park Preservation Area will be designated in Fahnestock.
Cultural Resources	There are known cultural resources at both parks.	A cultural resource inventory will be conducted at both parks. 3,300 acres at Fahnestock will be nominated to the National Register of Historic Places and cultural resources will be protected and interpreted at both facilities.

Element/Topic	Status Quo Alternative	Preferred Master Plan Alternative
Interpretive and Education Programs	Interpretation and educational opportunities are provided through TOEC.	Interpretation and educational opportunities are expanded.
Invasive Species Management	Invasive species are management is on-going in both parks.	An Invasive Species Management Plan will be developed for both parks. Various methods of control will be implemented and studied.
Summit Communities Management	Summit communities are potentially at risk on account of recreational overuse.	The summit communities will be inventoried and assessed to determine what impacts, if any, are occurring. Signage will be developed to help inform the public about the sensitive nature of these areas. Trail use will continue, however some trails may be relocated or redesigned, if necessary, to mitigate impacts to the summit communities.
Rare and Endangered Species Management	Rare and endangered species would continue to be surveyed and monitored by park staff.	Additional research will be done on the rare and endangered species in both parks and habitat monitoring guidelines will be developed.
Stream Management and Protection	Best management practices are employed when any disturbance within a close proximity of a stream occurs. Streams are not actively managed.	Conduct streamside bio-surveys and visual assessments to help establish baseline criteria to gauge the health of the stream. Water quality samples will also be taken.
Wetland Management and Protection	Activities adjacent to wetlands may have an adverse impact to the wetland complex.	The wetlands with adjacent activities (trails, roads, buildings) of both parks will be inventoried and assessed to determine what, if any, impact is occurring. Signage will also be developed at select locations to inform the public of the importance of wetlands.

Element/Topic	Status Quo Alternative	Preferred Master Plan Alternative
Aquatic Invasive Species Management	Weed harvesting would continue, but is not considered the most effective strategy for some plant species.	Develop an integrated approach for the management of invasive species May include utilizing herbicides, draw-downs, benthic barriers, and educating the public about aquatic invasive species.
Landscape and Scenic Management	Some historic views have been lost.	Maintain Scenic Views from Trail Systems. Maintain existing views from Hubbard Lodge, Bear Mountain Overlook, and Bannerman’s Island platform off Route 9D. Manage former and existing open areas at the former Woodle property, Route 9/301 intersection, and south of Glynwood Center as open meadows or fields.
Pelton Pond Use Area—Fahnestock	Area is currently maintained, but requires improvements.	The parking lot will be redesigned and raised to be level with Route 301. The existing restroom will be renovated and trail improvements will be made between the picnic shelter and the restroom. The picnic shelter will also undergo minor renovations and the potable water system will be replaced. All renovations/restoration will be done in accordance to the State Historic Preservation Office as these are CCC era structures and original to the park.
Hubbard Lodge--Fahnestock	Area is currently maintained, parking is inadequate.	A new parking area will be developed. A satellite park office will be developed here to be a link between Fahnestock and Hudson Highlands.
Fahnestock Winter Park	The Winter Park is well used and the public was vocal about their desires for the Winter Park during the public information period.	The plan proposes additional ski trails and renovations to the Canopus Lake Recreation Area structures.

Element/Topic	Status Quo Alternative	Preferred Master Plan Alternative
Canopus Lake Recreation Area— Fahnestock	Concession/Lifeguard building and showers/restrooms are in need of renovations. The beach area suffers from poor swimming conditions.	<p>The buildings at Canopus Lake will be renovated. The concession and lifeguard building will also be expanded to better accommodate year-round use.</p> <p>The beach area will be made smaller and grass will be planted to and the swimming area will be improved through dredging/sand reclamation.</p> <p>Docks will be installed at both ends of the beach</p>
Canopus Lake Boat Launch and Peninsula--Fahnestock	Current facilities are in need of improvement; launch area has silted in, fishing access could be better, and existing boat house is small and does not allow for storage. Peninsula parking is informal and the existing trails are eroding.	Boat launch area will undergo sand reclamation to deepen the water and improve launch conditions. A fishing area will be developed on the other side of the boat rental building and parking improvements will be made for accessible parking and across Route 301. The parking area at the peninsula will be formalized with striping and minor repairs to the asphalt. Erosion control methods will be implemented on the trails to stabilize soils and help prevent sedimentation.
Stillwater Lake--Fahnestock	Area is in need of improvements.	Trees will be removed from the dam and routine dam maintenance will occur (may include dam design/repair projects). The existing dock is a maintenance issue and will be replaced. Road requires grading and surface improvements, as well.
TOEC--Fahnestock	Two of the cabins did not undergo renovation and would be maintained as is; the Lodge is older and could be renovated to improve energy efficiency.	The remaining cabins will be renovated so that all of the cabins are available for year round use. The Lodge will be renovated to improve energy efficiency and will be done utilizing sustainable energy and design building practices.

Element/Topic	Status Quo Alternative	Preferred Master Plan Alternative
Former Downhill Ski Area-- Fahnestock	Three buildings exist at the former ski area. Two are not maintained and are deteriorating; the third is used by the NYS Police. The parking area is larger than necessary.	The old ski lodge and the south zone police buildings (closest to the parking area) will be demolished. The State Police will continue to use the third building. The parking lot will be made smaller and will revert to grass.
Bridge at Route 301--Fahnestock	Pedestrians, skiers, etc would continue to cross Route 301 to access the campground and the Canopus Lake Recreation Area. Route 301 is a heavily traveled road.	A multi-use bridge will be designed and constructed over Route 301 to facilitate a safer crossing. The structure will be designed with input from NYSDOT.
Buildings for Demolition	Several buildings within the park are no longer viable and would continue to deteriorate.	Several buildings are recommended to be demolished including the following: South zone police building, old ski lodge, storage shelter, repeater building, pump house, cook’s cottage, gas shed, Wicopee barn, ticket booths (no longer in use), Route 9D residence, Browne house, brick structure at Fishkill Town Park, ruins at Arden Point (3), and the Woodle house.
Denning’s Point—Hudson Highlands	Parking would continue to be an issue as park patrons cannot park on the point. Beacon Institute would continue to operate Building One and the bridge to the point will continue to deteriorate.	The plan recommends that the bridge be replaced; however, this action would require a supplemental SEQR review. Trails on Denning’s Point will connect to the Klara Sauer Trail. The management agreement with the Beacon Institute should be revisited to help inform the future direction of the point.
Little Stony Point—Hudson Highlands	Swimming would continue to be prohibited at this location. Kayaking, canoe launching, fishing, and hiking would continue.	Status quo.

Element/Topic	Status Quo Alternative	Preferred Master Plan Alternative
Dockside—Hudson Highlands	There is no management agreement with the Village of Cold Spring; car-top boat launching and fishing would continue.	Recreation will continue, but a formal management agreement will be developed with the Village of Cold Spring.
North Redoubt—Hudson Highlands	Parking is limited in this area.	The plan recommends that parking and access be improved; however, this would require purchasing adjacent land to improve access and to develop a parking area with kiosks and information about the North Redoubt.
Arden Point—Hudson Highlands	This is a well used hiking area with limited amenities or information.	The entrance to the Arden Point trails would be improved with an informational kiosk to better orient visitors. In addition, the plan recommends that Arden Point be designated as a stop on the Hudson River Water Trail, for day-use. No launching area would be developed, however.

