

## **Executive Summary**

### ***Introduction***

The Commissioner of the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and the Executive Director of the Palisades Interstate Park Commission (PIPC) are proposing to adopt and implement a master plan that will guide the future protection and management of Minnewaska State Park Preserve (the Preserve). Following the most recent major land acquisitions at the Preserve, including the Sam's Point area and Awosting Reserve, it was recognized by OPRHP/PIPC that the 1993 Master Plan for the Preserve should be updated. Two Public Information meetings were held on July 8 and 10, 2008 to gather information from the public.

The 1993 Master Plan recognized the significant natural, cultural, scenic and recreational resources of the Preserve. This 2010 Final Master Plan/Final Environmental Impact Statement (the Plan/EIS) was developed with the same preservation minded approach. This Plan/EIS outlines recommendations to improve safety, resource protection, recreation and Preserve operations.

### ***Preserve Background***

The property comprising the Preserve has evolved from a private summer resort to its use today as a State Park Preserve. The historic and extensive carriageway system within the Preserve serves as a framework for access and use throughout the Preserve.

The Preserve consists of over 21,000 acres of forested lands and lakes located along the Shawangunk Mountain Range (the Shawangunks) in Ulster County, New York. This includes over 9,000 acres acquired since the Preserve's creation in 1971.

### ***Environmental Setting***

The topography of the Preserve is a combination of vertical cliff faces, steep talus slopes and a relatively flat ridge top.

The soils within the Preserve are generally acidic, shallow and nutrient poor. Shale mines have historically been located in the Preserve and provide surfacing material for the carriage road system.

There are three high-elevation water bodies ("sky lakes") within the Preserve: Lake Minnewaska, Lake Awosting, and Mud Pond (Haseco Lake). Lake Maratanza is further along the ridge in Sam's Point Preserve at the southwestern edge of the Preserve and is a water supply for the village of Ellenville. These lakes are all highly acidic, resulting in water with high clarity, little aquatic life and giving rise to very specialized and rare aquatic ecosystems. A fourth water-body, Tillson Lake -- created by damming the Palmaghatt Kill -- is located at a lower elevation.

Four major streams flow northward down the ridge and into the Rondout Creek: Peter's Kill, Stony Kill, Sanders Kill, and Coxing Kill. These streams receive outflow from the lakes within the Preserve.

Waterfalls are important scenic resources within the Preserve. These include: Stony Kill Falls on the Stony Kill near the Preserve's northern edge, the Rainbow, Awosting, Peter's Kill, and Sheldon Falls found along the Peter's Kill and an unnamed falls that is located near the Sanders Kill in the northeastern corner of the Preserve.

Several wetlands, wetland bogs and vernal pools are in a natural state with little or no alteration with the exception of the Lower Awosting causeway wetland, which was created as a result of the causeway construction in the 1950's.

Thirty-two distinct natural community types were identified within the Preserve, twelve of which are considered “Significant Natural Communities” by the Natural Heritage Program. Talus slope woodland, high bush blueberry bog thicket, dwarf shrub bog, Pitch Pine-Oak heath rocky summits and vernal pools are the largest of these communities. The largest tract of Chestnut Oak forest in New York State is the dominant forest type within the Preserve. The Preserve has at least twenty-eight populations of nine rare animals including the timber rattlesnake and the peregrine falcon.

The Preserve provides outstanding bird habitat. The large intact forest landscape along the Shawangunk Ridge is a significant resting point for migratory birds. Many of the bird species supported by the forests of Minnewaska have been listed as Species of Greatest Conservation Need, including Red-shouldered Hawk, Whip-poor-will, Wood Thrush, and Canada Warbler. The unique bird community has been recognized through designation as both an Important Bird Area by Audubon NY, and as a Bird Conservation Area by OPRHP/PIPC.

Invasive species remain a significant threat to the Preserve’s natural resources. Ongoing efforts by staff and volunteers to monitor and control invasive species are conducted regularly.

One of the most significant aspects of the Preserve, and a primary historic feature, is the network of carriage roads or carriageways. These roads provide a network of historic and scenic paths that wind for miles from the Lake Minnewaska area to the most remote areas in the Preserve. The network of roads includes a stable in the Lake Minnewaska area which provided shelter for the carriage horses during the resort era. Both the carriage roads and the stable are eligible for listing on the State and National Registers of Historic Places. Other historic structures remaining in the Preserve include the power house, which provided electricity to the resorts, and the Aumick farmstead, a 19th century farmhouse with an English threshing barn, located in the former Awosting Reserve.

Archeological resources exist throughout the Preserve including rock shelters, open-air sites, and village and camp sites. Potential resources could date from the Paleo Indian period (12,000 - 9,500 years ago), up through and including the Contact period (500 - 300 years ago). An archeological survey of the Dickie Barre area has been conducted by OPRHP staff as part of the climbing expansion in this area.

The recreational activities currently permitted in the Preserve take advantage of the spectacular lakes, topography, and overall wilderness character. The Preserve is open year round and provides a variety of seasonal day use activities. Picnic areas are located in the Peter’s Kill area, Wildmere area, Ball Field and former Cliff House site. Hiking, cycling and horseback riding are allowed on the vast carriage road network. Hiking is also allowed on the footpath trails. Two beaches provide for recreational swimming, one at Lake Minnewaska and one at Lake Awosting. SCUBA diving and distance swimming are allowed by permit in Lake Minnewaska. Rock climbing and bouldering (non-rope climbing of boulders) are allowed in the Peter’s Kill climbing area and deer hunting is allowed in designated areas during the State designated season. Winter uses include cross country skiing on groomed carriage roads and snow shoeing on ungroomed carriage roads and footpaths. Visitors frequently come year round to the Preserve to view the waterfalls, scenic vistas and the forested setting.

Minnewaska State Park Preserve was designated a Park Preserve in 1993 under Article 20 of Parks, Recreation and Historic Preservation Law (PRHPL). See Appendix A for Park Preserve classification definition. In 2006, a significant portion of Minnewaska was designated as a Bird Conservation Area.

## ***Vision and Goals***

### **Agency Mission Statement**

The mission of the Office of Parks, Recreation and Historic Preservation is to provide safe and enjoyable recreational and interpretive opportunities for all New York State residents and visitors and to be responsible stewards of our valuable natural, historic and cultural resources.

### **Preserve Vision**

Minnewaska State Park Preserve will continue to be a place for visitors to enjoy, appreciate and learn about the Preserve's natural, cultural, and physical resources, and participate in the recreational opportunities that the Preserve offers.

### **Preserve Goal**

To preserve and protect the natural, cultural and physical resources of Minnewaska State Park Preserve while making available to the public compatible recreational and educational opportunities.

### **Resource Goals**

- To identify, protect, preserve and interpret the significant natural resources throughout the Preserve.
- To provide recreational opportunities compatible with the character of the Preserve and its resources.
- To protect open space within and adjacent to the Preserve through acquisition, designation and coordination with existing partners, and creation of additional partnerships.
- To identify, preserve, protect and interpret the elements of the Preserve that are significant to the history, archeology and culture of the local community, region, state and nation.
- To enhance, preserve and protect various scenic resources within Minnewaska State Park Preserve.
- To provide appropriate access to the Preserve and its natural, recreational and cultural resources in a manner that ensures the safety and security of the Preserve's patrons and its resources.
- To provide an increased level of education and interpretation for Preserve visitors that supports Agency initiatives.
- To provide a continued high level of service to patrons and employees in a safe clean manner that protects the natural, cultural and recreational resources of the Preserve.
- To provide quality facilities consistent with standard Preserve design aesthetics while being fiscally and environmentally responsible in their development.
- To facilitate information flow to Preserve users, surrounding communities and partners and allow for the creation of partnership opportunities.
- To encourage new and continue ongoing studies and data analysis to enhance and protect the Preserve.
- To protect the natural systems of the Preserve and the region through the implementation of sustainable and environmentally sensitive management and operation actions.

### ***Alternatives***

The plan presents a series of "preferred alternatives" for future development and operation of Minnewaska State Park Preserve. Cumulatively, the actions described below present OPRHP's long-term vision for the rehabilitation and enhancement of public use facilities and the protection and

preservation of the cultural and natural resources at the Preserve. The plan includes alternatives identified below.

### **Status Quo Alternative**

The status quo alternative describes the Preserve as it is used and operated today with no expansion or improvements recommended. The Preserve would remain a day use facility and be operated from the Peter's Kill office. Traffic and safety issues would remain, as well as the current parking configuration. No expansion to recreational activities would be allowed nor would recommendations be made for the recent acquisitions. Natural resource preservation and protection programs would remain the same. The preferred alternatives from the 1993 Master Plan that have not been fully developed are identified within the status quo alternative.

### **2009 Master Plan Preferred Alternative**

The 1993 Master Plan was used as a base and, after review and analysis; enhancements were made to create the 2010 Master Plan and its preferred alternative. The 2010 preferred alternative proposes a low-level development, environmentally conscious plan that includes several improvements identified in the 1993 Master Plan/EIS. Additions and improvements to the previous plan include the adaptive reuse of the former Phillips house as the Preserve office and visitor center, with the intent to renovate it as a sustainable, environmentally sensitive structure; the rehabilitation of the existing maintenance facility; revised parking lot designs; and the expansion of hiking, biking, equestrian and climbing opportunities.

Deer management will be monitored and assessed by OPRHP and DEC to determine the effects deer are having on the biodiversity in the Preserve. Management strategies will be developed and implemented to address this issue. A Ridge-wide fire management plan is being developed by the Shawangunk Ridge Biodiversity Partnership (SRBP) to reduce the threat of wildfires and enhance the biodiversity. OPRHP and DEC are members of the Partnership and are participating in the fire management plan preparation. Invasive species management will be guided by the Park's Invasive Species management plan. The continuation of invasive species management is important to protecting the biodiversity of the Preserve.

Education and interpretation opportunities will be enhanced through an increased programming effort, interpretive kiosks and the creation of a Visitor Center within the former Phillips house. Education and interpretation will focus primarily on natural, cultural and sustainability elements.

Safety, operations, Preserve resources and visitor experiences were analyzed and preferred options were derived from the analysis. The preferred options were then melded to create the Preferred Alternative. The Preferred Alternative is the one that best meets the vision and goals of the Preserve.

### ***The Master Plan***

The 2010 Minnewaska State Park Preserve Master Plan remains consistent with the planning efforts, goals and direction of both the 1971 and the 1993 Master Plans. The Preserve will remain a day use facility with a strong focus on natural resources.

### **Facility Improvements**

The former Phillips house will be reconfigured into the new visitor center and Preserve office overlooking Lake Minnewaska. The structure will be renovated using current sustainable design practices and will meet Leadership in Energy and Environmental Design (LEED) Certification

wherever possible. This structure will provide greater educational opportunities and enhance visitor experiences, while improving the operation of the Preserve. Improvements will be made to parking in both the Lake Minnewaska area and the Awosting parking lot. At the main entrance, a new and relocated gatehouse, associated roads and pedestrian carriage road will improve traffic safety and reduce the stacking of vehicles on highway 44/55. Composting restroom facilities at the Lake Minnewaska Beach and the Awosting parking lot area will be completed in 2009 and a third restroom will be constructed in the Lake Minnewaska area. A new parking lot and trail off Shaft 2A Road will provide improved access to the scenic Stony Kill Falls. The rehabilitation and improvement to the existing maintenance facility is not only sustainable but will significantly enhance Preserve operations. The facility will be screened from public view. Five new rustic gazebos at historic locations will be provided. Within the Tillson Lake area, parking improvements and a gravel boat launch are proposed.

## **Natural Resource Stewardship**

Natural resource management remains a high priority for the Preserve. OPRHP is a key participant in the ridge-wide fire management plan being developed by the SRBP. Consistent with OPRHP's fire management policy, this ridge-wide plan will serve as a basis for specific fire management within the Preserve. The biodiversity within the Preserve is a very diverse and valuable resource. There are, however, several threats to its viability. One potential threat is deer overpopulation. A flexible plan will be developed in consultation with DEC to manage the deer populations through monitoring impacts to vegetation. Invasive species management will be conducted in accordance with the Minnewaska State Park Preserve Invasive Species Management Plan.

## **Recreation and Trail Enhancements**

Trails are a significant recreational resource within the Preserve. The Long Path will use the Mine Hole Area for access to the Preserve from the north and will be rerouted to its historic location around Mud Pond. New trail opportunities in the former Awosting Reserve area include the creation of a sustainable single track mountain bike trail system and the designation of the existing woods roads as hiking and equestrian trails. A fire line that was cut during the wildfire of 2008 will be included as a new trail, as well as an interpretive trail from the Peter's Kill office to the Power House. Climbing access trails will be constructed to provide additional climbing and bouldering opportunities within the Dickie Barre area adjacent to the Peter's Kill climbing area. A climbing management plan will be created for the preserve to determine suitable and unsuitable locations for climbing opportunities.

## **Historic Preservation**

Site specific archaeological review will take place during the design phase for projects proposed within this Master Plan. Recommendations are made to pursue listing the historic carriage road network and support structures on the State and National Registers of Historic Places.

## **Park Designations**

All land acquired since 1993 will be designated a Park Preserve. The entire Preserve, with the exception of the Tillson Lake area will be classified as a Natural Heritage Area and the existing Bird Conservation Area (BCA) will be expanded to include all land acquired after 2006 that is consistent with BCA designation criteria.

## Partnerships

Participation in partnerships with the Shawangunk Ridge Biodiversity Partnership, The Nature Conservancy and the Mohonk Preserve will continue. Biodiversity management strategies will remain consistent with the ridge wide efforts in the areas of deer management, fire management, invasive species management and the continued monitoring of carrying capacities. Facility improvement and management partnership exist with the Mohonk Preserve for carriage road improvement. The continuation of management and capital improvement partnerships are recommended. Education and interpretation will be enhanced through expanded programming, outreach and displays to provide a greater understanding of the character of the land including the diverse natural resources and its unique history.

## Implementation

The Master Plan presents a long-term vision for the rehabilitation and construction of improvements to the Preserve. The plan identifies short term (5-10 years) capital improvements of approximately \$5 million. The pacing of plan implementation will depend on the availability of capital funds to advance the proposed improvements, which need to be sequenced with other pressing capital investments in the Palisades Region and across the entire New York State Park system. Implementation of the plan will require at least ten years and possibly longer. The table below outlines Master Plan implementation priorities.

Priority 1	Description/Development Component
	<ul style="list-style-type: none"> <li>• Complete the design and construction of the Preserve office and visitor center including an initial assessment of water and sewer capacities, electrical and phone/internet requirements and parking area. Evaluate the existing septic field system of the former Preserve office to determine if it can be used in the interim for the Preserve office.</li> </ul>
	<ul style="list-style-type: none"> <li>• Design and construct the Lake Minnewaska entrance area reconfiguration.</li> </ul>
	<ul style="list-style-type: none"> <li>• Design and construct restroom facilities in the Lake Minnewaska picnic area to include potable water, flush toilets, heat, water, electric and sewer systems; the construction of a water plant, if needed, including piping from the lake or construction of a well if quantity and quality are supported; the construction of a waste water plant, including a new sewer collection system from the visitor center and restrooms to the waste water treatment plant.</li> </ul>
	<ul style="list-style-type: none"> <li>• Advance the historic carriage road restoration project to the next phase of design and engineering and begin rehabilitation of carriage roads.</li> </ul>
	<ul style="list-style-type: none"> <li>• Rehabilitate the existing maintenance facility.</li> </ul>
	<ul style="list-style-type: none"> <li>• Repair the Lower Awosting Causeway (75% FEMA Reimbursement).</li> </ul>
	<ul style="list-style-type: none"> <li>• Complete the design of the Shawangunk Gateway Campground.</li> </ul>
	<ul style="list-style-type: none"> <li>• Implement the Trails Plan recommendations for the Mine Hole and the Awosting areas using volunteer labor.</li> </ul>
	<ul style="list-style-type: none"> <li>• Adopt and implement the Shawangunk Ridge Fire Management Plan.</li> </ul>

	<ul style="list-style-type: none"> <li>• Continue implementation of the Invasive Species Management Plan.</li> <li>• Identify and implement Shawangunk Ridge deer management strategies.</li> <li>• Develop a climbing management plan for the Park Preserve.</li> <li>• Construct the Shawangunk Gateway Campground.</li> </ul>
<b>Priority 2</b>	<b>Description/Development Component</b>
	<ul style="list-style-type: none"> <li>• Make improvements to the Peter’s Kill parking area including: make paving and drainage improvements; complete a landscape plan; expand parking by 20 spaces if needed.</li> <li>• Complete the ongoing rehabilitation of Lake Avenue.</li> <li>• Initiate various improvements to the Tillson Lake area including: improve the parking area and boat launch; design and implement improvements to the Tillson Lake dam; renovate the clubhouse; conduct a boundary survey to address encroachment issues.</li> <li>• Demolish and remove old utility overhead lines/poles.</li> <li>• Re-establish a satellite park police base.</li> <li>• Stabilize the stable to avoid further deterioration and consider rehabilitating this structure for operational needs.</li> <li>• Continue the advancement the historic carriage road restoration project and continue rehabilitation of carriage roads.</li> <li>• Install appropriate drainage at the shale mine at the old log mill site.</li> <li>• Formally close the resort era landfill to DEC standards.</li> <li>• Rehabilitate the existing historic gazebo and construct five additional gazebos at historic locations.</li> <li>• Design and construct the Awosting parking lot.</li> <li>• Design and construct the Stony Kill Falls area.</li> <li>• Remove unwanted structures that pose safety hazards or serve no operational use.</li> <li>• Enhance the accessibility of the Beacon Hill Carriageway.</li> <li>• Pave and improve the drainage of the main entrance road.</li> <li>• Initiate the redesign of the parking lots near Lake Minnewaska including across from the maintenance garage.</li> <li>• Implement maintenance garage screening, landscaping and employee parking area improvements.</li> <li>• Pave parking and expand lot at the tennis court lot.</li> <li>• Facilitate the creation of a Friends group and develop partnerships with user groups.</li> <li>• Stabilize and interpret the power house.</li> <li>• Improve Jenny Lane parking area.</li> <li>• Remove the concrete dam structure on the Peter’s Kill.</li> <li>• Remove the old pump house at Lake Awosting.</li> <li>• Install benches around Lake Minnewaska.</li> <li>• Begin the restoration of historic vistas.</li> </ul>

	<ul style="list-style-type: none"><li>• Construct storage facility and maintenance structure for the Awosting Reserve and the Tillson Lake area.</li></ul>
	<ul style="list-style-type: none"><li>• Improve interpretive kiosks and trail head signage.</li></ul>
	<ul style="list-style-type: none"><li>• Expand the parking at the resort era landfill site for visitor center.</li></ul>
	<ul style="list-style-type: none"><li>• Conduct a complete boundary survey for the entire Preserve.</li></ul>
	<ul style="list-style-type: none"><li>• Stabilize or remove the Lake House and Aumick farmhouse upon operational needs.</li></ul>

## ***Environmental Impacts and Mitigation***

Environmental impacts associated with the implementation of the Master Plan have been addressed under eight general areas: traffic/access, recreation/open space, land, water resources, biological resources/ecology, cultural resources, scenic/aesthetic resources, and public health.

The Master Plan does not significantly change traffic patterns or vehicular access locations to the Preserve. The main entrance to the Preserve will continue in its present location off of Route 44/55. The significant safety improvements that are proposed for the entrance area are very similar to those proposed in the 1993 Plan. Improvements address safety concerns related to the stacking of vehicles awaiting entrance to the Preserve on the highway. Improvements to the existing Awosting and Lake Minnewaska parking lots are consistent with what was proposed in the 1993 Plan and are also consistent with the carrying capacity determined to be sustainable in the 1993 Plan. Implementation of the Trails Plan will result in an expanded trails system which will continue to accommodate a variety of uses including walking/hiking, biking, equestrian, snowshoeing and cross-country skiing and provide expanded visitor access to the Preserve.

The implementation of the Master Plan will result in substantial beneficial recreation and open space impacts. The plan provides for a variety of new and improved recreation facilities and visitor amenities including such items as expanded picnic areas, additional climbing and bouldering opportunities within the Dickie Barre area adjacent to the Peter's Kill climbing area, and an expanded trail network as described in the Trails Plan.

The plan will result in some physical change to the land, particularly where new recreation facilities and trails will be constructed or segments of trails relocated. Most new recreation facilities will be located in areas that were previously disturbed. The design guidelines incorporated into the plan also provide direction for environmentally sensitive design and construction of new and renovated facilities and landscape.

The protection of the water resources in the Preserve is a major goal of this plan and new development and site restoration proposed has been sited so as to assure this. Erosion control and storm water management techniques will be incorporated into the detailed site designs for these areas. New potable water and wastewater systems will be designed with consultation and approval of NYS Department of Environmental Conservation and NYS Department of Health. Improvements to carriage road and trails will follow established guidance in such areas as drainage and culvert design. Protection of the wetlands and vernal pools is important to the biodiversity of the Preserve and monitoring will continue, particularly of those wetlands near trails or carriageways. Monitoring of water quality of Lakes Minnewaska and Awosting will continue in partnership with Mohonk. Invasive species will be identified and removed quickly to avoid spread and impairment of habitat.

Overall, the plan will have a positive impact on the significant natural resources within the Preserve. The importance of these resources is recognized with the Park Preserve and BCA designations being

extended to include all the newly acquired lands as well as designation of the Preserve as a Natural Heritage Area. In addition, OPRHP/PIPC will continue working with ridge-wide partners on three major issues affecting natural resources and biodiversity on the Ridge: deer management, fire management and invasive species control. The Trails Plan incorporates measures to inventory and review proposed new trail routes to assure use does not result in any significant adverse impacts. The Palmaghatt Ravine will remain undeveloped with no trails as a protection measure for the old growth forest. Rare plants and animals will be monitored to identify potential impacts and protective measures that need to be taken.

The Master Plan recognizes and protects the important historic and cultural resources within the Preserve. The carriage road restoration plan is being developed with input from OPRHP's Historic Preservation Field Services Bureau (FSB) and the guidance and standards developed will be consistent and protective of the historic resources. Many of the Preserve's other historic structures require further investigation and consultation with FSB. The plan proposes restoring many of the viewing points and replacing several of the gazebos. In addition, any project that could result in ground disturbance and thus potentially affect the cultural resources of the Preserve will be reviewed by FSB.

Significant scenic resources in the Preserve will be protected and maintained through the actions recommended in the plan. Public health and safety are an important element in park operations and facility. Design and development of the Preserve will meet all applicable health and safety codes as well as the Americans with Disabilities Act.

## **Acknowledgements**

The Minnewaska State Park Preserve Master Plan/ Environmental Impact Statement is a result of a cooperative effort by many persons. The Office of Parks, Recreation and Historic Preservation (OPRHP) and the Palisades Interstate Park Commission (PIPC) acknowledges and very much appreciates the time and effort of each individual, public agency and interest group who participated in the development of the Preserve and this Master Plan Document.

In a cooperative effort, OPRHP/PIPC worked with and coordinated input from the following agencies and organizations: New York State Department of Environmental Conservation, The Nature Conservancy, Sam's Point Preserve, The Mohonk Preserve, The New York New Jersey Trail Conference, and Shawangunk Ridge Biodiversity Partnership.

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