

FINDING OF NO SIGNIFICANT IMPACT

Rock Outcrop Management Plan Environmental Assessment/Assessment of Effect Shenandoah National Park, Northeast Region Luray, Virginia

INTRODUCTION

The National Park Service (NPS) proposes to direct the future management of rock outcrops in Shenandoah National Park (the Park) through a Rock Outcrop Management Plan (ROMP) that incorporates climbing guidelines. The ROMP will protect, restore, and perpetuate rock outcrops and natural resources associated with the rock outcrops while providing a range of recreational opportunities for visitors to experience.

A management plan is needed because severe degradation of vegetation and soils at some rock outcrops, including impacts to rare species and communities, has occurred due to intense use of rock outcrops by recreational activities. The proposed action will provide the direction to guide management decisions, protect geologic and biological resources, and minimize visitor use impacts. Given that Park management personnel are mandated to protect rock outcrops while still providing opportunities for visitor enjoyment of these resources, this plan will mitigate impacts of visitor recreation activities, accommodate visitor use, and direct the future management of rock outcrops.

The ROMP Environmental Assessment/Assessment of Effect (EA/AoE) was released on November 12, 2012 for a 62-day agency and public review period in accordance with the National Environmental Policy Act of 1969, as amended (NEPA); regulations of the Council on Environmental Quality (CEQ) (40 CFR 1500-1508); and NPS Director's Order #12: *Conservation Planning, Environmental Impact Analysis, and Decision-Making* (DO-12, 2011) and accompanying DO-12 Handbook (2001). The EA/AoE also fulfilled the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), and was prepared in accordance with the implementing regulations of the Advisory Council for Historic Preservation (36 CFR Part 800) and NPS Director's Order #28: *Cultural Resources Management* (DO-28) and accompanying Handbook.

The EA/AoE described the goals of the project; presented a range of reasonable alternatives, including the no action alternative; analyzed the effects of each alternative on the human environment; and solicited agency and public comments on the proposed action. The EA/AoE included Climbing Management Guidelines that were developed to protect the park's natural and cultural resources and values while providing climbing related recreational opportunities for park visitors. The Climbing Management Guidelines were included as Appendix D of the EA/AoE.

SELECTED ALTERNATIVE

The NPS has selected Alternative B: Balance Between Natural Resource Protection and Visitor Use, for implementation. A summary of Alternative B is provided below. A detailed description can be found on pages 32 to 37 of the EA/AoE.

Under the selected alternative, the NPS will provide for visitor use and enjoyment of rock outcrop areas while protecting natural resources at the rock outcrops and minimizing impacts to natural resource conditions.

The actions listed below reference rock outcrop areas by their management category. The seven management categories are based on site size, complexity, ecological value, and degree of human impact. Two management categories, Little Stony Man Mountain, and Old Rag Mountain, consist of single complex sites. The remaining five management categories have been defined according to the ecological value and level of human impact present at the rock outcrop sites. Category One sites are areas that support globally rare flora and/or fauna, and that have sustained widespread human impacts. Category Two sites are areas that support globally rare flora and/or fauna, and that have sustained moderate human impacts. Category Three sites are areas that support globally rare flora and/or fauna, and that have sustained minor human impacts. Category Four sites are areas that support state rare or watch-listed flora and/or fauna, and that have sustained minor human impacts. Category Five sites are areas that contain non state or globally rare flora or fauna, and that have human impacts of any level. An additional explanation of the category rankings may be found on pages 16-17 of the EA/AoE.

General Actions: Three rock outcrop sites will have areas closed to all off-trail visitor uses. Camping will be prohibited in portions of six rock outcrop sites. Climbing ropes will be prohibited from crossing park trails at Little Stony Man Mountain, and climbing impacts at three "watch listed" rock climbing sites will be annually monitored for climbing impacts. In addition, visitor access to some rock outcrop areas will be limited by the closure of unofficial trail segments ("social trails") and the addition of physical barriers and signs at some sensitive vegetation sites. Natural resources monitoring and management at rock outcrops will be guided by actions presented on pages 32-37 of the EA/AoE.

Campsite and trail management and maintenance will continue as directed by the Backcountry and Wilderness Management Plan (BWMP). The BWMP establishes specific backcountry and wilderness management objectives including descriptions of several management zones, resource and social indicators and standards, and describes a variety of management actions to address visitor recreation use impacts. A backcountry campsite management program established by the BWMP will continue to be implemented. This includes a computerized backcountry camping permitting system and informational database; campsite inventory and monitoring; campsite rehabilitation; designated campsite construction and maintenance; campsite impact management strategies and education of visitors.

As directed by the BWMP, the trails program includes establishment of trail construction and maintenance standards as described by management objectives for each of the management zones. Information and education in Leave No Trace practices, a nationwide program established to promote a code of outdoor ethics will continue to be made available to park visitors.

Climbing Management Actions: Recreational climbing management will be implemented through the Climbing Management Guidelines located in Appendix D of the EA/AoE.

Under the selected alternative, most rock outcrop management will rely on light-handed management tactics such as educational trailhead bulletin displays, internet and print information, informational and educational programs, improvement of formal trails, and reduced use of informal trails to concentrate recreation use and minimize site impacts. However, a few sites used for climbing activities will require more intensive management where the use of physical barriers and signage will be implemented.

Physical barriers and signage will be used at a limited number of climbing sites to protect rare resources and direct climbing activities to less sensitive areas. An additional three climbing “watch” sites, North Marshall Summit, Marys Rock, and Old Rag West Summit area, will be monitored annually for climbing impacts and may have further restrictions or prohibitions imposed in the future.

Other Recreational Actions: Existing campsite and trail management guidelines from the BWMP will be augmented by additional guidelines bulleted below that will redirect visitor use and minimize impacts to specific rock outcrop sites. Visitor impacts from day use will be eliminated from specific sites or redirected and concentrated to “durable surfaces” by use of signs, physical barriers, improved trails, visitor education, and elimination of damaging visitor-made “social trails.” Camping will be restricted or eliminated in areas with potential or known Shenandoah salamander habitat. The Park will continue to use existing guidance in the BWMP to manage visitor-created social trails and campsites.

Little Stony Man Mountain:

- All areas of Little Stony Man mountain located south of an east/west line situated 35 meters north of the informal “chute trail” will be closed to climbing and all other off-trail uses. Also closed to climbing and other off-trail uses will be the area of large boulders on the northernmost end of the Little Stony Man Cliffs between the upper and lower cliffs of the AT and Passamaquoddy Trail.
- Visitors engaged in rock climbing will be prohibited from running anchor ropes and webbing across the AT or other trails.
- Rare natural resources will be protected from visitor impacts by re-locating the Appalachian Trail from the cliff top down to the current location of the Passamaquoddy trail on the lower cliffs. This action is contingent upon approval for simultaneous relocation of the AT to its original path through the Skyland Resort

development one mile south of Little Stony Man Mountain. The “chute” trail will be hardened and rock stairs will be constructed. Barriers and signs will direct day hikers and campers away from informal trails, and from the cliff top area to the large view point at the lower cliffs. The actions associated with relocating the AT are separate from the actions in the ROMP. If and when the park decides to relocate this portion of the AT, the actions will be reviewed under a separate planning process and NEPA document with the AT management office and partners.

- Actions and activities that will disturb soil, such as camping and fire-line construction will be prohibited within areas designated as Shenandoah salamander habitat.
- Convert day use shelter Byrds Nest #3 in the Pinnacles area south of Marys Rock to an AT hut complex to relieve camping pressure at Little Stony Man Cliff sites.
- A public education program involving signage, presentations, and literature explaining the need to protect the rare natural resources on Little Stony Man Cliffs will be implemented on-site and/or at the Skyline Drive parking area trailhead.
- Monitoring of visitor use and impacts, rare natural resources, and exotic species will be done annually.
- Exotic species will be controlled within rare plant areas as time and funding allows.

Old Rag Mountain:

- Low barriers and signs will be installed on the Eastern Summit, and along informal trails to protect rare plant populations and communities, and to confine visitor use to existing heavily impacted areas. Informal rock climbing trails will be re-routed around *Huperzia* spp. populations at the base of the north facing summit cliff, and Skyline Wall climbing areas. Visitors will be directed away from the sloping outcrop where the Central Appalachian Mafic Barren and the *Populus tremuloides* are located.
- A public education program involving signage, literature, and presentations will be implemented at various Old Rag Mountain trailhead sites to educate park visitors about the sensitive natural resources on Old Rag Mountain.
- The Western summit will be closed to all visitor use using natural barriers (i.e. tree limb debris and rock material), unobtrusive barrier fencing, and signs to protect rare plant populations.
- Monitoring of visitor use and impacts, rare natural resources, and exotic species will be done annually.
- Exotic species will be controlled within rare plant areas as time and funding allows.
- Peregrine falcon nesting sites will be surveyed, monitored, and provided seasonal protection as detailed in the species recovery plan.

Category One Areas:

- Barriers will be used to eliminate visitor access to portions of rock outcrop areas that contain rare natural resources.
- Hawksbill Mountain and North Marshall Mountain will be closed to camping.

- Camping at Overall Run Falls –North will be restricted to areas away from rare plant populations.
- Rock climbing at North Marshall Mountain will be redirected to other areas by working with the climbing community to choose alternative locations. Additional restrictions could be imposed if resource impacts to this site increase.
- Permanently close the Hawksbill summit north and northwest facing outcrops to off-trail use and climbing to protect peregrine falcon habitat and to allow recovery of native vegetation. Summit unofficial short-cut trails, including the 80-meter unofficial short-cut trail that runs atop the northwest facing summit cliffs, will be closed to all visitor use.
- The Bettys Rock trail will be abandoned. Information about this trail will be removed from all guides, maps, and signs. Since the site is too small to use barriers, the trail will be abandoned to preserve the integrity of the outcrop's ecological community located where the trail dead-ends.
- The Frazier Discovery Trail at Loft Mountain will have signs and physical barriers installed at the northernmost summit outcrop to protect rare plant communities.
- Designated campsites could be constructed in areas free of the invasive mile-a-minute vine (*Persicaria perfoliata*) at the Hogwallow Flats spring area north of North Marshall Summit to redistribute camping activity.
- Conduct further inventories at Hawksbill Summit to determine the status of Shenandoah salamander population at this site.
- The public and Park staff will be educated on the sensitivity of the areas in Management Category 1 using kiosks, publications, and outreach and educational programs.
- Aggressive and potentially damaging exotic species will be controlled using herbicide and hand pulling as time and funding allow. Insecticide use will be avoided at sites with rare invertebrates.
- Monitoring of visitor use and impacts, rare natural resources, and exotic species will be done annually.

Category Two Areas:

- Prohibit camping at Marys Rock. Hiker access may be further restricted in the future as resource conditions are monitored and assessed.
- Recommendation to convert day use shelter Byrds Nest #3 in the Pinnacles area south of Marys Rock to an AT hut complex to relieve camping pressure on the Marys Rock Summit.
- Visitor access to portions of rock outcrop areas that contain rare natural resources will be discouraged using signs, barriers, and trail modifications.
- Off-trail rock scrambling will be discouraged at Blackrock – South District using interpretive signs and barriers to protect the rare lichen community.
- The public and Park staff will be educated on the sensitivity of areas in Management Category 2 using kiosks, publications, and outreach and educational programs.

- Exotic species will be controlled using herbicide and hand pulling to protect rare natural resources as time and funding allow.
- Monitoring of visitor use and impacts, rare natural resources, and exotic species will be done every two to three years, and additional inventories will be completed as time and funding allow.

Category Three Areas:

- No attempt will be made to modify human access or use of areas containing rare natural resources. The only exception will be if monitoring identifies an immediate threat to a sensitive resource, an individual site may be closed to prevent further impacts.
- Park staff and cooperators will be educated about the sensitivity of the natural resources within these areas.
- Select exotic species will be controlled with herbicide and hand pulling as time and funding allow.
- Monitoring of visitor use and impacts, rare natural resources, and exotic species will be done every three to five years, and additional inventories will be completed as time and funding allow.

Category Four Areas:

- No attempt will be made to modify human access or use of areas containing rare natural resources. The only exception will be if monitoring identifies an immediate threat to a sensitive resource, an individual site may be closed to prevent further impacts.
- The use of prescribed fire to simulate the natural fire regimen will be considered and possibly implemented at some areas within three to five years.
- Monitor campsite conditions and invasive plant status at Compton Peak.
- Monitoring of visitor use and impacts, rare natural resources, and exotic species will be done every four to eight years as time and funding allow.

Category Five Areas:

- No attempt will be made to modify human access or use of outcrop areas in Management Category 5. The only exception will be if monitoring identifies an immediate threat to a sensitive resource, an individual site may be closed to prevent further impacts.
- Survey for rare natural resources will be done as time and money allow if an outcrop area will be burned by prescribed fire activity.

OTHER ALTERNATIVES CONSIDERED

The ROMP EA/AoE also analyzed a No-Action Alternative and two other action alternatives.

Alternative A (No Action)

As described in the EA/AoE on page 31 and 32, Alternative A, the No Action Alternative would continue to follow current site management practices and the level of treatment for the resources would remain unchanged.

Under this alternative, current visitor and resource management guidelines such as the Park's BWMP and Resource Management Plan would continue to be followed. Campsite and trail management and maintenance would continue as directed by the BWMP. Monitoring of rare natural resources by Park staff would continue and would include surveying and documenting rare plant populations and identifying threats such as human trampling and invasive plant infestations. Site management of human impacts to rock outcrop areas would be in response to site specific impacts, and not guided by a comprehensive plan. All rock outcrop areas would be open to visitor use unless monitoring identifies an immediate threat to resources, then rock outcrop areas would be closed by the Park Superintendent within the authority of Title 36, Code of Federal Regulations (CFR). However, campsites and social trails would be closed based on professional judgment and on BWMP guidelines. Formal trails would continue to be maintained based on professional judgment, established campsite management objectives, and monitoring protocols. Recreational climbing would be managed by regulations found in 36 CFR. Additional climbing guidelines to manage recreational activity on rock outcrops would not be implemented. All rock outcrop areas would be accessible for climbing unless monitoring identifies an immediate threat to resources, then rock outcrop areas would be closed to visitor use or use may be otherwise restricted in order to prevent further impacts.

Alternative C (Emphasis on Natural Resource Protection)

As described on pages 37-40 of the EA/AoE, under Alternative C, widespread use of restrictive visitor management practices would be used to minimize visitor use impacts and emphasize the protection of natural resources.

Under this alternative, visitor use of rock outcrops would be heavily restricted. Monitoring natural resources at rock outcrops would be guided by actions that would provide prescriptive management objectives for maintaining these special resources. Recreational climbing would be managed through the Climbing Management Guidelines. The same actions associated with the Climbing Management Guidelines for Alternative B would be implemented in Alternative C. In addition, the following sites would be closed to climbing: Little Stony Man cliffs; Hawksbill summit; Old Rag Mountain Eastern summit, Western summit, Skyline wall, Reflector oven; North Marshall summit, Mary's Rock, South Marshall, Blackrock-south, and Bearfence. A section of the Appalachian Trail at Little Stony Man would also be relocated. Rock outcrops would be managed through minimal management tactics such as off-site educational trailhead bulletin displays, internet and print information, informational and education programs, and improvement of informal trails to concentrate recreation use and minimize site impacts. Physical barriers and signage would be used at sites with heavy climbing activities where

more intensive management actions to restore damaged resources and preserve valuable, sensitive resources from impacts by human recreational activities are needed. Existing campsite and trail management guidelines from the BWMP would be supplemented by additional actions that would redirect some visitor use and minimize impacts to specific rock outcrop sites.

Alternative D (Emphasis on Visitor Use)

Alternative D, as described on pages 40-43 in the EA/AoE emphasizes the preservation and enhancement of visitor access and opportunities for the enjoyment of rock outcrops.

Under this alternative, visitor use of rock outcrop areas would be encouraged by providing improved trail access, viewing platforms and railings, interpretive and directional signage and informational publications directing visitors to sites. Climbing activity would be regulated under current management practices. The proposed Climbing Management Guidelines would not be implemented. The only exceptions would be in the event that monitoring identifies an immediate threat to a rare, threatened or endangered species, at which time that individual rock outcrop may be closed to visitor use or use may be otherwise restricted in order to prevent further impacts that would likely lead to the loss of the species. Monitoring of rare natural resources by Park staff would continue and would include surveying and documenting rare plant populations and identifying threats such as human trampling and invasive plant infestations. Site management of human impacts to rock outcrop areas would be in response to site specific impacts and not guided by a comprehensive plan. Protection of rock outcrops would be directed by minimal management tactics, as approved in the BWMP. Increasingly intensive management tactics may include use of physical barriers and signage at sites heavily impacted by recreational use. Existing campsite and trail management guidelines from the BWMP would be supplemented by guidelines to redirect some visitor use and minimize impacts to specific rock outcrop sites that presently are not adequately addressed. Fewer actions would be taken that might restrict visitor use of rock outcrops than Alternative C.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

In accordance with the DO-12 Handbook, the NPS identifies the environmentally preferable alternative in its NEPA documents for public review and comment [Sect. 4.5 E(9)]. The environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative (43 CFR 46.30).

Of the alternatives evaluated, Alternative C was identified as environmentally preferable because it would best protect the natural and cultural resources of the Park by providing a plan that would offer the greatest protection, restoration, and perpetuation of rock outcrops and natural resources associated with the outcrops.

MITIGATION MEASURES

As part of the NPS Selected Alternative, the NPS will implement the following mitigation measures:

Cultural Resources:

- Moving the AT to its original location may impact unknown archeological resources. Further archeological investigation may be needed within the project area to determine if resources are present in areas that might be disturbed and an archeological survey may be conducted prior to moving the trail. Any necessary mitigation measures will not be known until an archeological survey is conducted prior to moving the trail. The Park will follow all NPS guidelines to survey and evaluate archeological resources that may be affected within the project area.
- A Programmatic Agreement (PA) with the SHPO was signed in 2009. The PA will guide further archeological investigations and design of the project. Consultation with the State Historic Preservation Office (SHPO) will continue as the project is developed further to ensure proper identification and treatment of archaeological resources.

Natural Resources:

- The installation of educational signage and barriers on informal access trails may result in short-term impacts to geologic and soil resources, ecological communities, rare, threatened and endangered plants, and wilderness character. To reduce impacts, barriers and signage will be located in sites that have the lowest level of impact on the Park's resources.

Visitor Use:

- The installation of educational signage and barriers on informal access trails will result in short-term impacts to climbing and recreational activities and visitor use when the signage and barriers will be installed. Visitor use and experience will be taken into consideration when barriers and signage are installed to cause minimal disruption to visitor activities.

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR § 1508.27, significance is determined by examining the following criteria:

1) Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS.

As described in the EA/AoE, the selected alternative will result in some adverse impacts to ecological communities, soil, geologic resources, wilderness, climbing and other recreational activities, rare, threatened and endangered species and visitor experience. The selected alternative will also have beneficial impacts to these resources that may, on balance, outweigh the adverse impacts; however, the adverse impacts are negligible to moderate in intensity and no major or significant impacts were identified that would require analysis in an EIS.

2) The degree to which public health and safety are affected.

The selected alternative will have an indirect beneficial impact on overall public safety by directing users to trails that are appropriate and managed for visitor use. The selected alternative will not have an impact on overall public health.

3) Unique characteristics of the area such as proximity to historic or cultural resources, wild and scenic rivers, ecologically critical areas, wetlands or floodplains.

The Park contains some of the largest outcrops in the region which serve as islands of unusual habitat supporting ecological communities and rare, threatened and endangered species. The ROMP will protect, restore and perpetuate rock outcrops and the natural resources associated with the rock outcrops in the park; in particular, the most high quality and pristine natural resources that occur at rock outcrop areas. The selected alternative will have some adverse impacts to these natural resources; however, these impacts are negligible to minor.

The actions associated with cultural resources under the selected alternative involve the potential relocation of the AT at Little Stony Man to its original location at the nearby Passamaquoddy Trail. This action is contingent upon approval for simultaneous relocation of the AT to its original path through the Skyland Resort development one mile south of Little Stony Man Mountain. The Appalachian Trail Cultural Landscape will be affected by the relocation of the AT, however, the relocation will not have an adverse effect on the cultural landscape as the trail would be moved to its original location.

4) The degree to which impacts are likely to be highly controversial.

Based upon comments received from the public, some climbers perceive that climbing activity does not impact natural resources and the Park is unnecessarily restricting areas to climbers. Several comments expressed concern that the Park should allow access to outcrops and keep areas open specifically for climbing because the park contains opportunities for climbing that are not available elsewhere in the region.

Commenters also were concerned about broad and long-term closures to climbing areas and wanted additional analysis by user group because climbers believe they are a small percentage of the Park's recreational users and have fewer impacts than other groups.

Lastly, members of the climbing community expressed dissatisfaction in the EA/AoE's public involvement process and changes to the Climbing Management Guidelines and asked the Park to engage the climbing organizations in future decisions.

As explained in the EA/AoE, the park collected information about rock outcrop resource conditions and the impacts visitor recreational uses had at rock outcrop sites as part of internal scoping. These studies are outlined in the internal scoping section, p. 11 of the EA/AoE. The studies concluded that visitor use, including climbing, was negatively impacting the natural resources. The ROMP and Climbing Management Guidelines were created to guide management decisions regarding rock outcrops and recreation activities. Where visitor use has been restricted at rock outcrops, it has been done to protect and preserve rare resources at the highest quality and most pristine locations, and meet the purpose and objectives of the plan.

The only controversy identified in scoping and public review of the EA/AoE was the belief expressed by members of the climbing community that resource damage occurring at rock outcrops was not caused by climbing activities and that climbers were being unfairly targeted in the management actions to control and reduce resource damage. However, no controversy was identified regarding the nature or extent of the environmental impacts described in the EA/AoE.

5) The degree to which the potential impacts are highly uncertain or involve unique or unknown risks.

No highly uncertain, unique, or unknown risks were identified during preparation of the EA/AoE or the public review period.

6) Whether the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.

The selected alternative neither establishes NPS precedent for future actions with significant effects nor represents a decision in principle about a future consideration. Future actions will be evaluated through additional, project-specific planning processes that incorporate requirements of NEPA, Section 106 of the NHPA and NPS policies.

7) Whether the action is related to other actions that may have individual insignificant impacts but cumulatively significant effects.

As described in Chapter 4 of the EA/AoE, cumulative impacts were defined by combining the impacts of the selected alternative with the impacts of other past, present, and reasonably foreseeable future actions. One project was identified as contributing to cumulative impacts on the resources addressed by the EA/AoE: the proposed

construction of a new Old Rag parking lot at the Nethers park boundary public access. This project will address parking issues in the area, reduce park visitor impacts to the surrounding neighborhood, improve trail access and resolve safety concerns caused by high numbers of vehicles and pedestrians sharing the same roadway. There will be beneficial cumulative effects of the two projects to visitor experience. However, the results will not be cumulatively significant.

8) The degree to which the action may adversely affect historic properties in or eligible for listing in the National Register of Historic Places, or other significant scientific, archeological, or cultural resources.

As described on pages 104-110 and 125-126 of the EA/AoE, the selected alternative will not cause the loss or destruction of significant historic structures, cultural landscapes or scientific resources. As described in the EA/AoE, cultural resources in proximity to rock outcrops include the cultural landscape associated with the AT. The project will not adversely affect cultural landscapes. There are no known archeological sites. When the AT is relocated and archeological investigations occur, the Park will follow all NPS guidelines to survey and evaluate archeological resources that may be affected within the project area.

9) The degree to which an action may adversely affect an endangered or threatened species or its habitat.

Based on correspondence with USFWS, habitat exists in rock outcrop areas for the federally listed Shenandoah salamander at moist talus slopes adjacent to the rock outcrops at Stony Man, Little Stony Man, Pinnacles, Miller's Head, and Hawksbill sites. Shenandoah salamanders would continue to sustain impacts from visitor use. Actions under the selected alternative will largely protect habitat for the Shenandoah salamander from erosion and trampling. Human impacts to the Shenandoah salamander would decrease as people are re-directed away from salamander habitat. Overall, the selected alternative will have both negligible adverse and beneficial impacts to salamander habitat.

10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

The selected alternative will not violate any federal, state, or local environmental protection laws.

PUBLIC INVOLVEMENT

As explained in the EA/AoE, the planning process for the proposed rock outcrop management plan was initiated in 2001 with extensive internal, agency and public scoping. Between April, 2006, and September, 2007, the Park completed various studies, contacted federal and state agencies with jurisdiction and/or special expertise in the

project, and held a series of public workshops, meetings, and field trips. In 2008, the first ROMP EA/AoE was released for a 30-day public review and comment.

The Park received eighty-three pieces of correspondence on the 2008 EA/AoE, from which the following substantive comments were derived:

- the preferred alternative does not protect the park's natural resources and is in conflict with the Organic Act
- questioned whether closing areas to climbing was the only way to protect biological resources
- suggested that impacts at climbing areas are the result of not placing a limit on group size for commercial and non-commercial groups
- questioned whether all cultural resources impacted by the plan were identified
- questioned whether all impacts of relocating the Appalachian Trail were analyzed
- questioned the need to close social trails to climbing sites
- the monitoring plan for natural resources is not sufficient
- stated that the climbing community should be involved in making technical climbing decisions in the park
- stated there should be a presumptive *de minimus* amount of fixed anchors in wilderness
- questioned whether there was a moratorium on bolting
- stated that new climbing routes should be authorized in the park

The park made changes to the ROMP EA/AoE as a result of public comments received and additional NPS review. Clarifications were made to explain that actions associated with relocation of the Appalachian Trail would be reviewed under a separate planning process and NEPA document. The Climbing Management Guidelines were revised and condensed, especially in the Description of Climbing Recreational Setting and Management Actions, and the use of fixed anchors in the park was also updated.

The ROMP EA/AoE, with the changes, was then reissued for a second public and agency review period, beginning on November 12, 2012 and ending on January 12, 2013. A press release was published announcing the availability of the revised ROMP EA/AoE during the 62-day public review and comment period.

The Park received eighty-eight pieces of correspondence on the 2012 EA/AoE. The Park reviewed and responded to comments in a Concern Response Report. The Concern Response Report can be viewed and downloaded at the National Park Service's Planning, Environment and Public Comment site (PEPC)
<http://parkplanning.nps.gov/parkHome.cfm?parkID=274>

AGENCY CONSULTATION

Section 7 of the Endangered Species Act

The Park initiated consultation with the United States Fish and Wildlife Service (FWS) as part of a parkwide programmatic Section 7 consultation effort for ongoing activities in the park. Actions proposed in the ROMP, with the exclusion of the actions associated with the relocation of the AT, were considered within a larger programmatic consultation document that included a large suite of ongoing park activities. On May 4, 2012 FWS issued a biological opinion for these ongoing Park actions, including actions in the ROMP, of likely to adversely affect the Shenandoah salamander. The Park will implement the ROMP in accordance of the biological opinion and will incorporate all appropriate measures outlined in the biological opinion. If further consultation is needed as actions in the ROMP are implemented, the Park will consult with FWS as needed.

Section 106 of the National Historic Preservation Act

The Park consulted with the Virginia Department of Historic Resources in compliance with Section 106 of the National Historic Preservation Act. The Virginia State Historic Preservation Officer (SHPO) provided a finding no adverse effect under Section 106 to cultural landscapes. To address currently undetermined effects to archeological resources, a Programmatic Agreement (PA) was executed between the NPS and the SHPO in 2009. The PA will guide further archeological investigations and the design of the project. Consultation with the SHPO will be ongoing through final design of the AT relocation.

FINDING OF NO SIGNIFICANT IMPACT

The NPS has selected Alternative B: Balance between Natural Resource Protection and Visitor Use for implementation as described in this Finding of No Significant Impact and EA/AoE. The selected alternative will not have a significant effect on the human environment. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the NPS selected alternative will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this action and thus will not be prepared.

Recommended:

Jim Northup
Jim Northup, Superintendent
Shenandoah National Park

7/31/14
Date

Approved:

Michael A. Caldwell
Michael A. Caldwell, Regional Director
Northeast Region, National Park Service

8/11/14
Date

Errata Sheet
Shenandoah National Park
Rock Outcrop Management Plan
Environmental Assessment/Assessment of Effect

Page 4, Background, Park Purpose and Significance. First paragraph, first sentence, delete “within the last ten years.” and replace with “since 1998.”

Page 4, Background, Park Purpose and Significance. Second paragraph, after second sentence insert: “The convergence of many rare and sensitive natural resources in such a small area makes protection from human impacts important.”

Page 8, Relationship of Proposal to Other Planning Projects, Peregrine Falcon Protection and Restoration. Delete first paragraph and replace with: “Since 2000, the Park’s Natural Resource Management staff have been engaged in a Peregrine Falcon restoration program undertaken in cooperation with the Center for Conservation Biology at William and Mary and the Virginia Department of Game and Inland Fisheries. The Peregrine falcon is a state threatened species and mountain populations of this raptor are experiencing particularly slow recovery. The recovery program takes young Peregrine falcons from nests on southeastern Virginia bridges and moves them to safer foster nest sites on cliffs in the Park. This increases the survival rate of chicks because they no longer prematurely fledge over open water, and boosts peregrine falcon populations in the Central Appalachians.”

Page 8, Relationship of Proposal to Other Planning Projects, Peregrine Falcon Protection and Restoration. Second paragraph change to: “One foster nest site for Peregrine falcon on Hawksbill Mountain is protected by a temporary trail closure.”

Page 8, Relationship of Proposal to Other Planning Projects, Rare Plant Monitoring. First paragraph change fourth sentence to: “APO field sites are monitored once a year.”

Page 9, Relationship of Proposal to Other Planning Projects, Exotic Plant Control. Third paragraph, first sentence change to: “Invasive exotic plants such as *Poa compressa* (Canada bluegrass), *Alliaria petiolata* (Garlic mustard), *Ailanthus altissima* (Tree of Heaven), *Centaurea stoebe* spp. *micranthos* (spotted knapweed), *Microstegium vimineum* (Japanese Stilt Grass), and *Persicaria posumbu* (Oriental Lady’s Thumb); occur near or within some rock outcrop plant communities.”

Page 9, Relationship of Proposal to Other Planning Projects, Gypsy Moth Control. Second paragraph change to: “The Park gypsy moth population collapsed between 1995 and 1996 as a result of the *Entomophaga maimaiga* fungus. The fungus has controlled the gypsy moths reasonably well from 1996 through 2012, excepting a period from 2002 – 2008 when gypsy moth defoliation occurred on 2000-3000 acres a year. Spraying of the bacterium Btk (*Bacillus thuringiensis* var. *kurstaki*) was used once in 2008 to protect oak trees within approximately 200 meters of Skyline drive. Impacts to rock outcrops were

minimal to negligible, and included impacting lepidopterans at small outcrops and cliffs associated with Skyline drive and overlooks within the spray zone.”

Page 9, Relationship of Proposal to Other Planning Projects, Gypsy Moth Control. Delete third paragraph: “Current impacts from.....within the spray zone.”

Page 10, Relationship of Proposal to Other Planning Projects, Recovery Plan for the Shenandoah Salamander. Change third sentence to: “A five year review of the endangered status of the Shenandoah salamander was completed in 2008, and again in 2012 by the FWS. These reviews were done to ensure that rarity classification of the salamander by the FWS was accurate. The Shenandoah Salamander remains listed as an endangered species.”

Page 10, Relationship of Proposal to Other Planning Projects, Study to Determine Monitoring Procedures. Delete the paragraph and replace with: “The National Park Service, in collaboration with scientists from the U.S. Geological Survey and the Virginia Department of Game and Inland Fisheries, is currently engaged in a study to determine practical monitoring procedures for the Shenandoah salamander. The ultimate goal of the study is to design a long-term monitoring program to detect future change in the remaining three populations of Shenandoah salamander.”

Page 24, External Scoping. After bulleted list add the paragraph: “Public meetings were used to identify the most popular climbing routes and access points on Little Stony Man and Old Rag mountains. Closure boundaries were selected to protect natural resources and provide the minimum possible disturbance to park visitor recreation.

Page 33, Alternative B description, second paragraph, first sentence. Change: “addresses” to “address”

Page 33, Alternative B description, second paragraph, third sentence. Delete the sentence: “Specific climbing area closures, restrictions and management actions implemented through the Climbing Management Guidelines are outlined in shaded boxes below”

Page 34, Alternative B description, first bullet, first sentence. Change “Little Stonyman Mountain” to “Little Stony Man Mountain”

Page 34, Alternative B description, first bullet, second sentence. Change “Little Stonyman Cliffs” to “Little Stony Man Cliffs”

Page 34, Alternative B description, third bullet, second sentence. Change: “on” to “one”

Page 35, Alternative B description, Category One (HH), fourth bullet. Delete the bullet: “Hawksbill Summit and cliff faces would be closed to all climbing activity.”

Page 35, Alternative B description, Category One (HH), sixth bullet. This bullet is changed to state: "Permanently close the Hawksbill summit north and northwest facing outcrops....to all visitor use."

Page 37, Alternative B description, Category Five (LL), second bullet. Delete "natural or"

Page 37, Alternative C description, Climbing Management Actions. Delete the sentence: "See the shaded boxes above for a description of actions related to the proposed climbing management actions."

Page 112, Impacts to Visitor Use, Alternative B description, first paragraph, second sentence. Change "trials" to "trails"

Page 125, Section 106 Summary by Alternative, Alternative B description. After the second sentence add this sentence: "This action is contingent upon approval for simultaneous relocation of the AT to its original path through the Skyland Resort development one mile south of Little Stony Man Mountain."

Page 129, Brief History of Planning and Scoping. First paragraph, after fourth sentence insert: "This three year multi-agency effort resulted in a series of scientific report totaling more than 1,000 pages combined."

Page 158, Climbing Management Guidelines, section 4.4.2, first bullet and figure 1. Change "Little Stonyman Mountain" to "Little Stony Man Mountain"

ATTACHMENT A
NON-IMPAIRMENT DETERMINATION
Shenandoah National Park
Rock Outcrop Management Plan
Environmental Assessment/Assessment of Effect

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the U.S. Department of Interior and the NPS to manage units “to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations” (16 USC § 1). Congress reiterated this mandate in the Redwood National Park Expansion Act of 1978 by stating that NPS must conduct its actions in a manner that will ensure no “derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress” (16 USC 1a-1).

NPS Management Policies 2006, Section 1.4.4, explains the prohibition on impairment of park resources and values:

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The NPS has discretion to allow impacts on Park resources and values when necessary and appropriate to fulfill the purposes of a Park (NPS 2006 sec. 1.4.3). However, the NPS cannot allow an adverse impact that would constitute impairment of the affected resources and values (NPS 2006 sec 1.4.3). An action constitutes an impairment when its impacts “harm the integrity of Park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values” (NPS 2006 sec 1.4.5). To determine impairment, the NPS must evaluate “the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts” (NPS 2006 sec 1.4.5).

Non-Impairment Determination for the Selected Alternative

This determination on impairment has been prepared for the selected alternative described in this FONSI. An impairment determination is made for all resource impact topics analyzed for the selected alternative including Geologic and Soil Resources,

Ecological Communities, Rare, Threatened and Endangered Plants, Rare, Threatened and Endangered Species, Wilderness Character, Cultural Landscapes, and Archeological Resources. An impairment determination is not made for Climbing Activities, Recreational Activities, or Visitor Experience because impairment findings relate back to park resources and values, and these impact areas are not generally considered to be park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values.

Geologic and Soil Resources

The selected alternative will not result in impairment of geologic and soil resources because access to some rock outcrops will be restricted through trail closures and reduced access, which will preserve soil resources by reducing soil trampling and compaction, and scratches, polishing, and gouges in geologic resources from footprints and crampons. In order to preserve pristine areas and reduce deterioration of soils and geologic resources, visitor use will be directed toward areas that receive high use. Areas that will be open to the public will continue to sustain deterioration from rock climbing, hiking, and other visitor uses. Soil in these areas will continue to sustain impacts from trampling and soil compaction. Sign installation will also impact soil. Geologic resources will continue to sustain impacts such as minor polishing in high-use areas and scratches and gouges left by crampons. Geologic and soil resources will also benefit and recover as a result of redirecting visitor use and reducing social trails.

Ecological Communities

There will be no impairment of ecological communities because the selected alternative will protect pristine to slightly impacted ecological communities by closing areas to visitor use with barriers and signs to facilitate re-vegetation. This will aid in the regeneration of ecological communities. Portions of ecological communities currently impacted by human activity will continue to sustain loss of plants and animals from trampling by visitor use. Ecological communities adjacent to areas of limited visitor use may also sustain impacts from trampling, however, the wide-spread distribution and large acreages of the impacted communities means the collective damage is less than that sustained by communities with highly restricted distributions. Impacted communities and populations will not be lost entirely, as the plan protects larger and more pristine natural communities in other locations.

Rare, Threatened, and Endangered Plants

There will be no impairment of rare, threatened and endangered plants because the selected alternative will implement several treatment approaches that will reduce impacts to rare, threatened and endangered plants. This will be accomplished by closing access to outcrops, social trails, and campsites through installing barriers and educational signage. These actions will reduce most human use-impacts and help restore populations of rare, threatened and endangered plants. Invasive species will continue to grow unimpeded within heavily trampled areas, but selective removal will occur within the protected areas of rare plant populations.

Rare, Threatened, and Endangered Species

The selected alternative will not result in impairment of rare, threatened, and endangered species because several treatment approaches will be implemented that will reduce impacts to rare, threatened, and endangered species. Treatment approaches include closing access to outcrops, social trails, and campsites by installing barriers and educational signage. This will reduce most human use-impacts and help protect and restore populations of rare, threatened and endangered species.

Habitat for the Shenandoah salamander will be largely protected from erosion and trampling. Human impacts to the Shenandoah salamander would decrease as people are re-directed away from salamander habitat. The decreased disturbance to rare, threatened, and endangered species may lead to greater reproduction and increased population sizes.

Wilderness Character

There will be no impairment of wilderness character because the selected alternative will affect wilderness character and quality on a few high visitation sites, specifically the Old Rag Mountain region as visitation is restricted and changes are made to the natural landscape by the installation of signs and physical barriers to manage visitor access and recreational impacts such as trampling to resources. Overall, opportunities for solitude and a primitive, "unconfined" recreational experience will remain high in many wilderness areas in the Park.

Cultural Landscapes

There will be no impairment of cultural landscapes since the AT may be moved to its original location and the relocation will result in improvements to the cultural landscape. There is one cultural landscape, the Appalachian Trail Cultural Landscape, associated with the project. Actions under the selected alternative will relocate the AT at Little Stony Man Mountain from the cliff to the current location of the Passamaquoddy Trail on the lower cliffs. This action is contingent upon approval for simultaneous relocation of the AT to its original path through the Skyland Resort development one mile south of Little Stony Man Mountain.

Archeological Resources

Based on the information available, the selected alternative will not result in impairment of archeological resources because implementation of the selected alternative is not expected to have an adverse effect on resources potentially eligible for the National Register. There are no known archeological sites in the area of potential effect. Moving the AT to its original location may impact unknown archeological resources. Therefore an archeological survey will be conducted prior to moving the trail. Further archeological investigation may be needed within the project area to determine if resources are present in areas that might be disturbed. The Park will follow all NPS guidelines to survey and evaluate archeological resources that may be affected within the project area. The impact to archeological resources cannot be fully determined until archeological investigation and evaluation are completed if determined necessary.

ATTACHMENT B
PROGRAMMATIC AGREEMENT

PROGRAMMATIC AGREEMENT
BETWEEN THE NATIONAL PARK SERVICE AND THE VIRGINIA
DEPARTMENT OF HISTORIC RESOURCES
REGARDING ROCK OUTCROP MANAGEMENT PLAN
SHENANDOAH NATIONAL PARK

WHEREAS Shenandoah National Park (SHEN) is a unit of the National Park Service (NPS) and is charged to meet the directives of the NPS Organic Act of 1916 (P.L. 64-235, 39 Stat.535) to “conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations.” As it applies to Shenandoah National Park; and

WHEREAS The NPS proposes to develop a Rock Outcrop Management Plan in order to protect, restore, and perpetuate rock outcrops and natural and cultural resources associated with the rock outcrops while providing a range of recreational opportunities for visitors to experience; and

WHEREAS, the NPS has determined that the implementation of the Rock Outcrop Management Plan constitutes an undertaking (Undertaking) that may have an effect upon historic properties that are listed in, or are eligible for inclusion in, the National Register of Historic Places (National Register), and has consulted with the Virginia State Historic Preservation Officer (SHPO) pursuant to the 2008 Programmatic Agreement *Programmatic Agreement among the National Park Service (U.S. Department of the Interior), the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers* and to 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. Section 470[f]) and has notified the Advisory Council on Historic Preservation (ACHP) of the potential adverse effect, pursuant, to 36 CFR § 800.6(a)(1) and 36 CFR § 800.14(b)(3); and;

WHEREAS, the NPS has determined in consultation with the SHPO that area of potential effects (APE) for the proposed Undertaking is as outlined in **Table 5: Rock Outcrop Management Categories** on page 16 of the *Rock Outcrop Management Plan Environmental Assessment/Assessment of Effect*, September 2008. Locational information for the sites is in **Figure 3: Map of 50 Rock Outcrop Locations Identified in Rock Outcrop Management Project** on page 13 and the corresponding **Table 2: Rock Outcrop Management Project Study Sites by Park District** on page 14 of the above mentioned plan. See Attachments.

WHEREAS, the NPS has determined and the SHPO concurs that the proposed Undertaking has the potential to have adverse effects on historic properties at Shenandoah National Park as these effects cannot be determined in advance of approval of the Plan, the NPS, pursuant to 36 CFR 800.14(b)(1), has chosen to execute a Programmatic Agreement (PA); and

WHEREAS The NPS has invited the ACHP to participate in this PA and the ACHP has declined to participate; and

WHEREAS The NPS has invited the Catawba Indian Nation to participate in consultation towards this PA and to concur in this agreement and the Catawba Indian Nation has elected not to participate by failing to respond:

WHEREAS The NPS has invited the Monacan Indian Nation, Inc. to participate in consultation towards this PA and to concur in this Agreement and the Monacan Indian Nation, Inc. has elected not to participate by failing to respond:

WHEREAS The NPS has invited the Virginia Council on Indians (VCI) to participate in consultation towards this PA and to concur in this agreement and the VCI has elected not to participate by failing to respond:

WHEREAS The NPS pursuant to 36 CFR § 800.8 has conducted a review process in accordance with the National Environmental Policy Act of 1969 (as amended), for the development of an Environmental Assessment (EA), and solicited public input on the review of potential effects the proposed Undertaking may have on historic properties in both the EA and this Agreement during that process; and

NOW, THEREFORE, the NPS and the SHPO agree that upon the NPS's decision to proceed with the Rock Outcrop Management Plan (Plan), the SHPO shall ensure that the following stipulations are implemented in order to take into account the effects of the Plan on historic properties, and that these stipulations shall govern the Undertaking and all of its parts until the PA expires or is terminated.

Stipulations

The NPS will ensure that the following stipulations are implemented:

I. Planning and Compliance Preparation

1. Consistent with the provisions of the 2008 PA, the NPS shall prepare documentation for the actions pursuant to this PA using the "Assessment of Actions Having an Effect on Cultural Resources" form (also called the Assessment of Effect form). Any forms shall be reviewed as appropriate by cultural resource advisors who meet the professional qualifications set forth in the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* in the fields of archeology, history, historic landscape architecture, and historic architecture.
2. Actions that meet the criteria for streamlined review, found in Stipulation III of the 2008 PA, will require no further review by the SHPO. The NPS will submit Assessment of Effect forms to the SHPO to document actions that the NPS considers to meet the criteria for streamlined found in Stipulation III of the 2008

PA. If the criteria for streamlined review are not met, the NPS will submit the assessment forms to the SHPO for review and comment.

3. If the NPS determines that the proposed improvements may alter the qualities that make a contributing structure, landscape or landscape feature significant, the NPS will prepare design alternatives and/or landscape treatment plans to avoid, minimize, or mitigate the project's adverse effects for submission to the SHPO for review and approval prior to implementation.
4. If the NPS determines in consultation with the SHPO that further efforts are needed to identify archeological sites, the NPS shall ensure that an archeological testing program is developed in consultation with the SHPO. Prior to affecting any potentially eligible archeological site, the NPS will develop a testing program of sufficient intensity to provide an evaluation of eligibility for the National Register of Historic Places by the NPS in consultation with the SHPO, following the regulations outlined in 36 CFR 800.4(c).
5. If as a result of the testing program, archeological sites are identified that are eligible for the National Register of Historic Places, the NPS shall develop a plan for their avoidance, protection, recovery of information or destruction without data recovery, in consultation with the SHPO. The plan shall be submitted to the SHPO for review and approval prior to implementation.
6. All data recovery plans prepared under the terms of this PA shall include the following elements:
 - a) Information on the archeological property or properties where data recovery is to be carried out, and the context in which such properties are eligible for the National Register;
 - b) Information on any property, properties, or portions of properties that will be destroyed without data recovery;
 - c) Discussion of the research questions to be addressed through the data recovery with an explanation/ justification of their relevance and importance;
 - d) Description of the recovery methods to be used, with an explanation of their pertinence to the research questions;
 - e) Information on arrangements for any regular progress reports or meetings to keep the NPS, the SHPO and other consulting parties up to date on the course of the work. The plan should contain the expected timetable for excavation, analysis and preparation of the final report.

II. Review of Documentation

- A. The NPS shall submit two copies of the draft of all technical reports bound in a spiral binding and on acid free paper to the SHPO for review and comment, and one copy each to the other consulting parties. The NPS shall ensure that all comments received within thirty (30) days of report receipt shall be addressed in the final technical reports.
- B. Unless otherwise specified in this PA, concurring parties shall have thirty (30) calendar days after receipt of any document distributed by the NPS for review and comment. Failure to comment within this time period shall be construed as agreement with the document's findings, conclusions, and/or recommendations. Any concurring party may request in writing to the NPS an extension of the review period for up to an additional thirty (30) days.
- C. The NPS shall provide two copies of all final technical reports, bound in a spiral binding and on acid free paper and a digital copy in Adobe Portable Document Format (.PDF) shall be provided to the SHPO for its archives and one copy to the other consulting parties upon request.

III. Professional Qualifications and Standards

- A. All archaeological studies, resulting from this Agreement including data recovery plan(s), shall be performed by an archaeologist meeting the *Secretary of the Interior's Professional Qualifications Standards* (36 CFR Part 61) and in accordance with *The Secretary of the Interior's Standards and Guidelines for Archeological Documentation* (48 FR 44734-37), and the SHPO's *Guidelines for Conducting Cultural Resource Survey in Virginia: Additional Guidance for the Implementation of the Federal Standards Entitled Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44742, September 29, 1983) (1999, rev. 2003), and shall take into account the ACHP's publication *Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites* (1999; updated July 26, 2002), and *Section 106 Archaeology Guidance* (June 2007), or subsequent revisions to these documents.
- B. All evaluations of buildings or structures shall be carried out by or under the supervision of an individual or individuals who meet, at a minimum, the qualifications for architectural history set forth in the *Professional Qualifications Standards* while all design work on historic buildings and structures shall be carried out by or under the supervision of an individual or individuals meeting the qualifications for historic architecture set forth in the *Professional Qualifications Standards*.
- C. All work concerning cultural landscapes shall be carried out by or under the supervision of a qualified landscape historian, landscape architect, or other

pertinent landscape expert, and in accordance with the applicable guidance set forth in Preservation Brief 36 *Protecting Cultural Landscapes Planning, Treatment and Management of Historic Landscapes* (National Park Service 1994) and *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (National Park Service 1996).

IV. Curation and Curation Standards. Materials and records resulting from actions stipulated by this PA shall be curated in accordance with 36 CFR Part 79 and the *National Park Service Museum Handbook*. All curated materials shall reside in the Shenandoah National Park Museum Collection.

V. Post Review Discoveries

- A. In the event that a previously unidentified archeological resource is discovered during ground disturbing activities, the NPS shall immediately notify the SHPO and other consulting parties, as appropriate. All construction work involving subsurface disturbance will be halted in the area of the resource and in the surrounding area where further subsurface remains can reasonably be expected to occur. The NPS and the SHPO, or an archeologist approved by them, immediately will inspect the work site and determine the area and the nature of the affected archeological property. Construction work may then continue in the project area outside the site area. Within two working days of the original notification of discovery, the NPS in consultation with the SHPO will determine the National Register eligibility of the resource.
- B. If the resource is determined to meet National Register Criteria (36 CFR Part 60.6), the NPS will ensure compliance with Section 800.13 of the ACHP's regulations. Work in the affected area shall not proceed until either (a) the development or implementation of appropriate data recovery or other recommended mitigation procedures, or (b) the determination is made that the located remains are not eligible for inclusion on the National Register.
- C. In the event that Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, NPS shall treat the remains in a manner consistent with the ACHP "Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects," (<http://www.achp.gov/docs/hrpolicy0207.pdf>) and will follow the regulations implementing the Native American Graves Protection and Repatriation Act (43 CFR Part 10).

VI. Dispute Resolution

- A. Should any party to this PA object to any action carried out or proposed by the NPS with respect to implementation of this PA, the NPS will consult with the objecting party to resolve the objection.

- B. If after initiating such consultation, the NPS determines that the objection cannot be resolved through consultation, the SHEN shall forward all documentation relevant to the objection to the ACHP, including the proposed response to the objection.
- C. Within forty-five (45) days after receipt of all pertinent documentation, the ACHP shall exercise one of the following options:
 - 1. Advise the NPS that the ACHP concurs in the proposed response to the objection, whereupon the NPS will respond to the objection accordingly;
 - 2. Provide the NPS with recommendations, which the NPS shall take into account in reaching a final decision regarding its response to the objections; or
 - 3. Notify the NPS that the objection will be referred for ACHP comment pursuant to Section 110(1) of the National Historic Preservation Act and 36 CFR 800.7(c), and proceed to refer the objection for comment. Any ACHP comment rendered pursuant to this stipulation shall be understood to apply only to the subject of the objection; all other responsibilities of the parties stipulated in PA shall remain unchanged.
- D. Should the ACHP not exercise one of the above options within forty-five (45) days after receipt of all pertinent documentation, the NPS may assume the ACHP's concurrence in its proposed response to the objection.
- E. At any time during implementation of the measures stipulated in this PA, should an objection pertaining to this PA be raised by a member of the public, the party to this Agreement receiving the objection shall notify the other parties to this PA and the NPS will take the objection into account, consulting with the objector and, should the objector so request, with any of the parties to this PA to resolve the objection.

VII. Amending the Agreement

Any party to this PA may propose to the NPS that the PA be amended, whereupon the NPS will consult with the other parties to this PA to consider such an amendment. All signatories to the PA must agree to the proposed amendment in accordance with 800.5(e) (5). The amendment will be effective on the date a copy signed by all the signatories is filed with the ACHP. This PA may be amended only upon the written agreement of all the signatory parties. If it is not amended, this PA may be terminated by any signatory party in accordance with stipulation VIII below.

VIII. Terminating the Agreement

If the NPS determines that it cannot implement the terms of this PA, or if the SHPO determines that the PA is not being properly implemented, the NPS or the SHPO may propose to the other party that it be terminated.

Termination shall include the submission of any outstanding technical reports on any work done up to and including the date of termination.

A party proposing to terminate this PA shall so notify all parties to the PA, explaining the reasons for termination and affording them at least thirty (30) days to consult and seek alternatives to termination. The parties shall then consult.

Should such consultation fail and the PA be terminated, the NPS will comply with the 2008 PA and 36 CFR 800.3 through 800.6 with regard to individual actions covered by this PA.

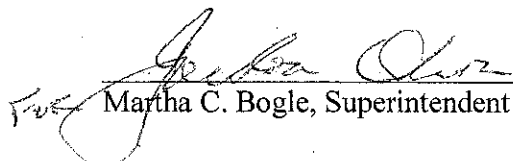
IX. Duration of the Agreement

This PA will continue in full force and effect until ten years after the date of the last signature. At any time in the sixth-month period prior to such date, the NPS may request the signatory parties to consider an extension or modification of this agreement. No extension or modification will be effective unless all parties to the PA have agreed with it in writing.

Execution of this PA by the NPS and the SHPO, and its submission to the ACHP in accordance with 36 CFR 800.6(b)(1)(iv), shall, pursuant to 36 CFR 800.6(c), be considered to be an agreement with the ACHP for the purposes of Section 110(1) of NHPA. Execution and submission of this PA and implementation of its terms evidence that the NPS has afforded the ACHP an opportunity to comment on the Project and its effects on historic properties, and that the NPS has taken into account the effects of the Project in historic properties.

Signatures:

Shenandoah National Park, National Park Service

 Date: 4/13/09
Martha C. Bogle, Superintendent

Virginia Department of Historic Resources

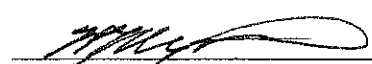
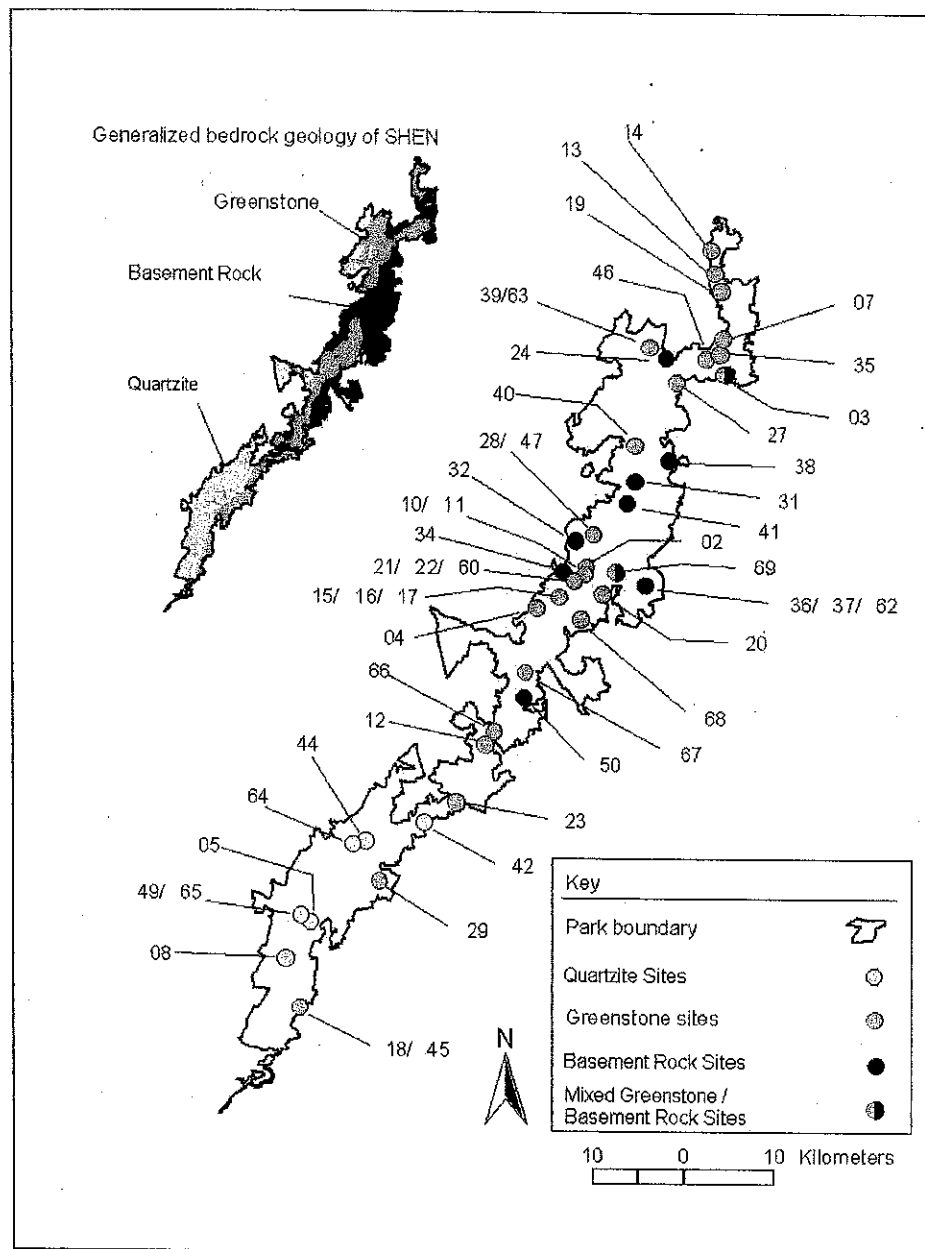
 Date: 4/27/09
Kathleen S. Kilpatrick, Director, Department of Historic Resources
Virginia State Historic Preservation Officer

Table 5: Rock Outcrop Management Categories

Management Category	
Little Stony Man Mountain	The Little Stony Man group includes all rock outcrop areas within the boundary of Little Stony Man Mountain. See Figure 4. This study site is considered as a unique management category because it is a complex area to manage because it has intense visitor use, strong public interest, and extremely sensitive natural resources.
Old Rag Mountain	All rock outcrop areas within the boundary of Old Rag Mountain. See Figure 5. The Old Rag Mountain group applies to three ROMP sites. The Rock Outcrop Management Project sites at Old Rag Mountain are being considered as a unique management category due to the mountain's heavy visitor use, strong public interest, and sensitive natural resources. <ul style="list-style-type: none"> Old Rag South Side Old Rag Summit East Old Rag Summit West
Category One (HH)	Areas that support globally rare flora and/or fauna, and that have sustained widespread human impacts. Category One applies to 12 study sites evaluated as part of the Rock Outcrop Management Project. <ul style="list-style-type: none"> Bettys Rock Crescent Rock Overlook Crescent Rock South Franklin Cliffs Overlook Franklin Cliffs South Hawksbill Summit Loft Mountain summit North Marshall summit South Marshall cliff Stony Man Summit Overall Run Falls North Bearfence Mountain
Category Two (HM)	Areas throughout the Park that support globally rare flora and/or fauna, and that have sustained moderate human impacts. Category Two applies to nine study sites evaluated as part of the Rock Outcrop Management Project. <ul style="list-style-type: none"> Big Devils Stairs Blackrock Central District Blackrock South District Gooney Manor Overlook Hawksbill N slope outcrops Hightop Marys Rock Pass Mountain White Oak Canyon
Category Three (HL)	Outcrop areas throughout the Park that support globally rare flora and/or fauna, and that have sustained minor human impacts. Category Three applies to 17 study sites evaluated as part of the Rock Outcrop Management Project. <ul style="list-style-type: none"> Browntown Valley Overlook Dickey Hill Dickey Ridge Franklin Cliffs North Goat Ridge Halfmile Cliff Hogback Mountain spur Little Devils Stairs Millers Head Nakedtop Upper East Slope Oventop Overall Run Falls South Pinnacles Sawlog Ridge Hawksbill N slope talus Field Hollow Cliff Rose River Cliffs
Category Four (ML)	Areas throughout the Park that support state rare or watch-listed flora and/or fauna, and that have sustained minor human impacts. Category Four applies to six study sites evaluated as part of the Rock Outcrop Management Project. <ul style="list-style-type: none"> Calvary Rocks - Chimney Rock Dean Mountain Ridge Rocky Mountain Trayfoot Saddle boulderfields E Brown Mountain Trayfoot Saddle boulderfield
Category Five (LL)	Category Five applies to two study sites evaluated as part of the Rock Outcrop Management Project as well as areas throughout the Park that contain no state or globally rare flora or fauna, and that have human impacts of any level. <ul style="list-style-type: none"> Powell Gap cliff Upper Devils Ditch

Figure 3: Map of 50 Rock Outcrop Locations Identified in Rock Outcrop Management Project



Previous natural heritage inventories in the Park provided a knowledge base for identifying these sites. Using aerial digital imagery a search was conducted to identify new sites not previously inventoried by VA DCR. Using GIS methods, a USGS researcher generated a map of potential sites that was compared to a map of known sites. Three criteria were used to develop a master list from which 50 study sites were selected: 1) Known occurrences of natural heritage resources, 2) Urgent management issues due to intensity of visitor use/popularity, 3) Sites that represented all the major lithographic groups found in the Park (Catoctin Formation metabasalt, Old Rag granite, Chilhowee Group silicilastic rocks, charnockite, layered pyroxene granulite, and the Swift Run Formation).

Table 2: Rock Outcrop Management Project Study Sites by Park District

Site ID #	Site Name	Park District
02	Bettys Rock	Central
03	Big Devils Stairs	North
04	Blackrock Central District	Central
05	Blackrock South District	South
07	Browntown Valley Overlook	North
08	Calvary Rocks / Chimney Rock	South
10	Crescent Rock Overlook	Central
11	Crescent Rock South	Central
12	Dean Mountain Ridge	Central
13	Dickey Hill	North
14	Dickey Ridge	North
15	Franklin Cliffs North	Central
16	Franklin Cliffs Overlook	Central
17	Franklin Cliffs South	Central
18	Goat Ridge	South
19	Gooney Manor Overlook	North
20	Halfmile Cliff	Central
21	Hawksbill N Slope Outcrops	Central
22	Hawksbill Summit	Central
23	Hightop	South
24	Hogback Mountain Spur	North
27	Little Devils Stairs	North
28	Little Stony Man	Central
29	Loft Mountain Summit	South
31	Marys Rock	Central
32	Millers Head	Central
34	Nakedtop Upper East Slope	Central
35	North Marshall Summit	North
36	Old Rag Southside	Central
37	Old Rag summit East	Central
38	Oventop	North
39	Overall Run Falls South	North
40	Pass Mountain	North
41	Pinnacles	Central
42	Powell Gap Cliff	South
44	Rocky Mountain	South
45	Sawlog Ridge	South
46	South Marshall Cliff	North
47	Stony Man Summit	Central
49	Trayfoot Saddle boulderfields E	South
50	Upper Devils Ditch	Central
60	Hawksbill North slope talus	Central
62	Old Rag Summit West	Central
63	Overall Run Falls North	North
64	Brown Mountain	South
65	Trayfoot Saddle boulderfields W	South
66	Field Hollow Cliff	Central
67	Bearfence	Central
68	Rose River	Central
69	Whiteoak Canyon	Central