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## **PURPOSE AND NEED FOR ACTION**

The National Park Service (NPS) proposes to upgrade the electrical distribution system on the west side of Catoctin Mountain Park (CATO) in order to prevent power failures. A safe and reliable electrical distribution system is critical to maintain visitor services throughout the Park and ensure public safety. This is the third and final phase of a project that would upgrade the primary electrical distribution system throughout the park.

This environmental assessment (EA) analyzes the impacts that would result from the implementation of the action alternative and the no action alternative. The action alternative proposes the redesign of the primary electrical distribution system on the west side of the Park. This redesign would include the addition of new primary electrical lines underground in conduit, as well as new switches, fuses, meters, fault locators, manholes, equipment cabinets, and transformers. The existing failing underground lines would be abandoned in place. The new electrical distribution system would be installed within disturbed areas, except for a small portion of new road, where conduit would also be placed. This area of new disturbance has been analyzed for impacts and is documented in this EA. Additionally, a new primary master meter with a 20A fused disconnect would be added to service Camp Misty Mount.

This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and implementing regulations, 40 CFR 1500-1508, and NPS *Director's Order 12 and Handbook, Conservation Planning, Environmental Impact Analysis, and Decision-making* (NPS 2001). Compliance with Section 106 of the National Historic Preservation Act of 1966 has occurred in conjunction with the NEPA process.

### **PURPOSE OF THE ACTION**

The purpose for taking action is to provide Park visitors and employees with access to a safe and reliable primary electrical distribution system in a way that protects the resources and values of Catoctin Mountain Park, and that:

- Improves the quality of the visitor experience, assuring continued visitor enjoyment of the park;
- Reduces impacts to park resources caused by frequent repairs of the current aging electrical distribution system ;
- Improves public safety by ensuring primary electrical system meets current code requirements and is reliable.

### **NEED FOR THE ACTION**

The redesign of the primary electrical distribution system on the west side of the Park is needed because:

- The park's power system has been failing for the last 10 to 15 years with as many as 4-5 line failures per year and several failures involving disconnects and feed-through insulators;
- The underground cable has an exposed neutral and is affected by the soil pH in several areas of the park; and,
- The current orientation of the system makes fault location and repairs very difficult and costly.

### **PURPOSE AND SIGNIFICANCE OF THE PARK**

The mission of the National Park Service at Catoctin Mountain Park is to serve as a public park for education, recreation and conservation. The Park is able to welcome visitors to a mountain environment with recreational and educational opportunities. Park visitors may experience cabin camping in an original Recreational Demonstration Area developed by the Works Progress Administration and Civilian Conservation Corps, fly-fishing in one of Maryland's premier trout streams and diversity of flora and fauna

not found in nearby metropolitan areas. Throughout its history, Catoctin has provided, at Camp Greentop, an opportunity for disabled youth and adults to experience the relaxation of outdoor camping in one of the earliest such camps in the nation.

Catoctin Mountain Park's diverse cultural resources provide several vignettes of our nation's history in one small location. Native Americans quarried rhyolite for the production of lithic tools. Remnants of the charcoal and iron industry are still visible today as demonstrated by Catoctin Furnace (maintained by the Maryland Forest and Park Service), along with smaller industries including farms, sawmills, and an old moonshine still. Historic structures and products of the Works Progress Administration and the Civilian Conservation Corps, along with the site of our nation's first Job Corps Center, are tangible reminders of the capability of vigorous public works programs to strengthen the nation's economic and social fabric. The totality of resources found in Catoctin Mountain Park reflects much of the early fabric of our country.

## **SCOPING**

Catoctin Mountain Park conducted extensive scoping to ensure any impacts from the upgrade of the electrical system are minimized. Planning for this project began in 2005 when Gauthier, Alvarado and Associates an architecture, engineering, and planning firm based in Falls Church Virginia, was contracted to create drawings and design specifications. Between 2005 and May 2009, the Park interdisciplinary project review team made adjustments to the design in order to ensure the least amount of environmental impact possible from implementing the action alternative.

Scoping was also conducted with other professionals within the National Park Service. Staff in the following offices provided comments on the proposed alternatives: National Capital Region Maintenance and Design (Architecture and Engineering staff), NCR Cultural Resources, NCR Center for Urban Ecology and the Washington Office - Natural Resources Program Center.

Catoctin Mountain Park also emphasizes an ongoing communication with public and private organizations and agencies, public officials and individuals. The Environmental Assessment for the upgrade of the electrical distribution system at Catoctin Mountain Park will be made available for public review and comment beginning June 30, 2009. Press releases with information regarding the draft EA were sent to local media such as the Frederick News Post, Frederick Gazette and Thurmont Times (Appendix A). The document will be made available for review at Park Headquarters and Visitor Center, at local public libraries and online at the NPS Planning, Environment and Public Comment (PEPC) website <http://parkplanning.nps.gov> and the park's website [www.nps.gov/cato](http://www.nps.gov/cato). Public comments will be accepted via the PEPC website until July 20, 2009.

## **ISSUES**

Issues describe problems or concerns associated with current impacts from environmental conditions or current operations, as well as problems that may arise from the implementation of any of the alternatives. Potential issues associated with this project were identified by the public, park staff, and input from other agencies consulted.

The primary concern of the park, as identified during the internal scoping meetings, is ensuring a safe and reliable electrical distribution system to maintain visitor services throughout the Park and ensure public safety. Other identified issues and concerns are listed below.

**Visitor Use and Experience.** Since the majority of new electrical lines proposed would be placed within Manahan Road, there would likely be periodic road closures and delays affecting visitors using this road. Construction noise may also adversely impact some visitors during this period.

**Natural Resources.** Activities associated with the installation of an electrical line would affect natural resources such as soils and vegetation. Loss of vegetative cover and soils erosion could also impact water quality. The frequent line failures also cause impacts to natural resources. Faults in the existing electric line are difficult to locate. Line repairs often require excavation in relatively undisturbed areas of the Park. These repairs also have the potential to impact soils, vegetation and water quality. Additionally, a portion of the existing line is currently located within the stream bed of Owens Creek. A moderate gradient stream, Owens Creek contains a healthy population of brook trout. Line repairs could require trenching in and around this wetland area.

**Cultural Resources.** The National Historic Preservation Act (NHPA; 16 USC 470 et seq.), NEPA, NPS 1916 Organic Act, the NPS 2006 Management Policies (NPS 2006), DO-12 (Conservation Planning, Environmental Impact Analysis and Decision-making), and NPS-28 (Cultural Resources Management Guideline) require the consideration of impacts on any cultural resources that might be affected, and NHPA, in particular, on cultural resources either listed in, or eligible to be listed in, the National Register of Historic Places (NRHP). Cultural resources potentially impacted by this project include archeological resources and historic structures.

**Health and Safety.** The electrical system proposed for upgrade services the west side of the Park. This system supports visitor use areas such as the Owens Creek Campground, as well as critical infrastructure including wells, pump houses and the Park's Fire Cache. Frequent line failures potentially endanger the safety of CATO visitors and staff.

## **IMPACT TOPICS**

The following impact topics are discussed and analyzed in the "Affected Environment/Environmental Consequences" chapter. These impact topics were identified during internal scoping; from federal laws, regulations, executive orders, NPS 2006 Management Policies (NPS 2006); and NPS knowledge of limited or easily impacted resources. The topics are developed into resources of concern that could be beneficially or adversely affected by the actions proposed under each alternative, and were developed to ensure that the alternatives are evaluated on the most relevant resource topics. A brief rationale for the selection of each impact topic is given below, as well as the rationale for dismissing specific topics from further consideration.

### **Geology and Soils**

The proposed action alternative calls for trench excavation to install conduit. These actions would disturb a total of approximately 2 acres of soil, increasing the potential for soil erosion and loss of topsoil during construction. In addition, some grading and filling would be required. Soil disturbance would primarily occur within existing road or utility right of ways. However, approximately 1,560 square feet of soil would be disturbed in a previously undisturbed area. Additionally, to avoid impacts to a wetland area and stream channel, the proposed action calls for the use of directional drilling. Impacts to soil under the no action alternative are also likely as excavation would be required to find and repair faults as they occur in the existing electric line. As a result of potential impacts to soils and geology from the no action and proposed action alternative, soils and geologic resources are addressed as an impact topic in this EA.

### **Vegetation**

Actions directly related to the proposed installation of an electric line under the action alternative would require the clearing of approximately 1,560 square feet of second growth mixed deciduous forest and associated vegetation. As a result of impacts to vegetation that would occur from the proposed action alternative, vegetation is addressed as an impact topic in this EA.

## **Wetlands**

Wetlands include areas inundated or saturated by surface or groundwater for a sufficient length of time during the growing season to develop and support characteristic soils and vegetation. The NPS classifies wetlands based on the FWS Classification of Wetlands and Deepwater Habitats of the United States, also known as the Cowardin classification system (Cowardin et al. 1979). Based on this classification system, a wetland must have one or more of the following attributes:

- The habitat at least periodically supports predominately hydrophytic vegetation (wetland vegetation);
- The substrate is predominately undrained hydric soil; or
- The substrate is non-soil and saturated with water, or covered by shallow water at some time during the growing season.

The proposed action alternative calls for the new primary electrical line serving the Owens Creek Campground to be placed in the same location as the existing line. This location, however, crosses the stream channel of Owens Creek. Impacts to wetlands could be expected under the no action alternative because a line failure could require excavation within the stream. Under the action alternative, the new line would be installed via directional drilling several feet under the surface. Under this alternative, no impacts to the stream, bank or surrounding floodplain are expected. However, should the directional drilling hit impenetrable bedrock, the line would be trenched resulting in a temporary impact of 4 linear feet (80 square feet) of stream. As a result of potential impacts under both the no action and action alternative, wetlands will be addressed as an impact topic in this EA.

## **Archaeological Resources**

The Park is currently in year three of four of a parkwide archeological overview, assessment, identification and evaluation study of the entire park. The majority of the field investigation for this project has been completed, and there are no archeological sites identified that would be impacted by this project. The majority of actions proposed under the action alternative would take place within roads, road shoulders or utility corridors that have been extensively disturbed by excavation and years of use, and the presence of significant archeological resources is very unlikely. If during construction of the electric line upgrade, significant archeological resources are discovered, all work in the immediate vicinity of the discovery would be halted until the resources could be identified and documented and an appropriate mitigation strategy developed, if necessary, in consultation with National Capital Region Archeology staff and the Maryland State Historic Preservation Officer.

Since a small section of new road would be installed under the action alternative, and this road is in a previously undisturbed area, A Phase I archeological survey was conducted. Additionally, a small section of the existing utility corridor servicing the Owens Creek Campground crosses a sluiceway associated with a historic sawmill. As a result of potential impacts under the action alternatives, archeological resources will be addressed under the cultural resources impact topic in this EA.

## **Historic Structures**

The action alternative proposes the installation of a new road and utility corridor to provide the primary electrical feed to a transformer servicing the Ike Smith Pump House. This structure has been determined eligible for listing on the National Register of Historic Places. The only impact to this structure would be turning up a conduit inside the pump house. As a result of potential impacts of the action alternative, historic structures will be addressed under the cultural resources impact topic in this EA.

## **Visitor Use and Experience**

Currently, disruptions to the electrical system can cause inconvenience to visitors through the loss of electrical power in public use areas. Additionally, prolonged disruptions could affect water availability as this electrical service powers one of the Park water distribution systems. Construction activities associated with the proposed action alternative would have short-term impacts to the overall visitor enjoyment and use of those who use Manahan Road. Since the new electrical conduit would be installed within the road corridor, it is likely that there would be periodic road closures and one-way traffic. As a result of the potential impacts from both the no action and proposed action alternatives, impacts to visitor use and experience are addressed as an impact topic in this EA.

## **Health and Safety**

The action alternative proposes upgrading the electrical distribution that services the west side of the Park. This system supports visitor use areas such as the Owens Creek Campground, as well as critical infrastructure including the Poplar Grove Well Pump, Ike Smith Pump House and the Park's Fire Cache. Frequent line failures potentially endanger the safety of Park visitors and staff. Avoidable electrical outages could darken lighting in public use areas and prevent access to power for emergency operations. It is possible that a prolonged outage could cause a water shortage in one of the Park's water distribution systems. This could cause issues if this water was needed for fire suppression or other public health needs. For these reasons, this impact topic was carried forward for further analysis in this EA.

## **IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS AND CONSIDERATION**

The following impact topics were eliminated from further analysis in this EA. A brief rationale for dismissal is provided for each topic. With mitigation, potential impacts to these resources would be negligible, and localized.

### **Park Operations**

The upgrade of the electrical system on the west side of the Park could divert funds and staff needed to manage and maintain the other recreational facilities throughout the park. After construction, funding needed to manage and maintain these facilities would return. Any adverse impact to park operations and management would be minor and short-term, and the long-term impacts would be beneficial, this impact topic was dismissed from further analysis in this EA.

### **Impacts to Threatened, Endangered or Special Concern Species**

The Endangered Species Act (1973), as amended, requires an examination of impacts on all federally listed threatened or endangered species. NPS policy also requires examination of the impacts on federal candidate species, as well as state-listed threatened, endangered candidate, rare, declining, and sensitive species.

On May 22, 2009 a site survey was conducted at the Ike Smith Pumphouse to inventory the vegetation in the only previously undisturbed area impacted by the proposed action alternative. No rare plants were encountered during this survey.

On June 12, 2009, the Park sent letters to both the U.S. Fish and Wildlife Service (FWS) and the Maryland Wildlife and Heritage Service regarding the potential for any state or federally listed species that could be affected by the proposed upgrade of the Park electrical system. Responses have not yet been received from these agencies regarding this project. Park staff work closely with both the FWS and State of Maryland to identify and protect rare, threatened and endangered species within the Park, and expect that both would concur that the project would have no impact on any federal candidate species or state-listed threatened, endangered candidate, rare, declining, or sensitive species. As a result, this impact topic was dismissed

from further analysis in this EA. Should any concerns arise from these consultations or comments received during public review of this EA, this impact topic will be further analyzed.

### **Water Quality**

The 1972 Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977, is a national policy to restore and maintain the chemical, physical, and biological integrity of the nation's waters, enhance the quality of water resources, and to prevent, control, and abate water pollution. The NPS 2006 Management Policies provides direction for the preservation, use, and quality of water originating, flowing through, or adjacent to park boundaries. The NPS seeks to restore, maintain, and enhance the water quality within the parks consistent with the 1972 Federal Water Pollution Control Act, as amended, and other applicable federal, state, and local laws and regulations.

Currently, the existing electrical system is underground and has little impact to the overall water quality of local drainages, except when excavation is required to repair line faults. During these repairs temporary impacts to the water quality of the local drainages could occur as vegetation is removed and soils are exposed and runoff laden with construction-related sediments is introduced into the watershed. Similar impacts are expected under the proposed action alternative.

The park has sampled water quality in Owens Creek since the late 1970's. During this period, water quality and turbidity values in the park's streams remained fairly constant, well below applicable standards and within the expected range of values based on historic water quality conditions in the watershed. Although the loss of soil from construction activity could cause minor and short-term increases in sedimentation and affect water quality, the areas of disturbance are expected to be small. Since these faults have occurred frequently in the past, and have not had any detectible influence on the Park's on-going water quality sampling results, it is unlikely that future repairs would result in any adverse impacts. Additionally, soil and erosion control mitigation measures would be in place to ensure that impacts to Park water quality are prevented. Since impacts to water quality associated with the no-action and action alternative would be negligible or less, this impact topic was dismissed from further analysis in this EA.

### **Floodplains**

Executive Order 11988 (Floodplain Management) requires an examination of impacts to floodplains and the potential risk involved in placing facilities within floodplains. The NPS 2006 Management Policies, Section 4.6.4, Floodplains; the 1993 NPS Floodplain Management Guidelines; DO-77-2; and the 1983 General Management Plan provide guidelines on developments proposed in floodplains. A portion of the electrical conduit would be installed within the 100 year floodplain of Owens Creek under the action alternative. However, in this area the electrical line would be placed in conduit installed through the use of a directional bore or if needed, by trenching. These actions would not modify the floodplain, nor would the newly installed electrical infrastructure be at risk from flooding. Because both the action alternative and no action alternative would have no long- or short-term adverse impacts associated with the occupancy and modification of floodplains, and would avoid support of floodplain development, this impact topic was dismissed from further analysis in this EA.

### **Air Quality**

The 1963 Clean Air Act, as amended (42 USC 7401 et seq.) requires federal land managers to protect park air quality. Further, the 1963 Clean Air Act provides that the federal land manager must have an affirmative responsibility to protect the park's air quality related values (including visibility, plants, animals, soils, water quality, cultural and historic resources and objects, and visitor health) from adverse air pollution impacts. Under either alternative, local air quality would be temporarily affected by dust and vehicle emissions. Hauling materials and operating equipment would result in increased vehicle exhaust and

emissions during the construction period. Hydrocarbons, nitrogen oxide, and sulfur dioxide emissions would be rapidly dissipated by air movement since air stagnation is uncommon at the project site. Dust plumes from construction equipment would occasionally increase airborne particulates in the area near the project site; however, these loading rates would be of short duration and of negligible to minor consequence. The park would employ mitigations such as implementing dust control measures and limiting idling times to minimize impacts to air quality.

The overall impacts to air quality would be localized and negligible to minor, lasting only as long as construction activities occurred. After construction, there would be no increase in the amount of vehicles currently traveling to and from the site. Because the park's long term air quality would not be affected by the proposal, this impact topic was dismissed from further analysis in this EA.

### **Wildlife and Wildlife Habitat**

Activities associated with the proposed construction necessary to upgrade the electrical distribution system on the west side of the Park would result in the clearing of approximately 1,560 square feet of secondary mixed deciduous forest as a utility corridor and access road. It is expected that there would be temporary movement of animal species (e.g. deer, birds, some insects, etc.) from the area during development and during use. Since the frequency of use is low, animal species would return to the area. The rest of the ground disturbing activities would take place within existing roads or utility right of ways, and are therefore unlikely to have more than a short term and negligible impact on wildlife or wildlife habitat adjacent to the work areas. Since impacts to wildlife and wildlife habitat associated with the action alternative would be negligible or less, this impact topic was dismissed from further analysis in this EA.

### **Traffic and Transportation**

The park does not track the average daily traffic volume along the northern portion of Manahan Road where the majority of construction would take place. Park visitors use this road to access more remote sections of the Park and the Poplar Grove youth tenting area. Last year, 270 camper nights were spent at Poplar Grove. Besides camper traffic, hikers and mushroom hunters, the local residents are the most typical users of this road. Under the proposed action alternative, during construction of the proposed electrical upgrade – impacts on local traffic may occur from the introduction of construction vehicles hauling materials to and from the site. Based on the relatively low traffic volumes on this road, and mitigation measures taken to minimize impact (i.e., conducting all construction activities during daylight hours and avoiding construction during peak visitor use periods) impacts from construction would not be expected to be greater than negligible. Because traffic impacts along Manahan Road would be negligible or less under the proposed action alternative, this impact topic was dismissed from further analysis in this EA.

### **Unique Ecosystems, Biosphere Reserves, World Heritage Sites**

There are no known biosphere reserves, World Heritage sites, or unique ecosystems associated with Catoctin Mountain Park or specifically at the project site; therefore, this impact topic was dismissed from further analysis in this EA.

### **Socioeconomic Resources**

The proposed actions would not appreciably affect local and regional land use or local businesses or other agencies. Implementation of the proposed actions could provide minimal beneficial impacts to the economies of Frederick or Washington Counties (i.e., minimal increases in employment opportunities for the construction workforce and revenues for local businesses and government generated from construction activities and workers). Any increase, however, would be temporary and negligible, lasting only as long as construction. Therefore, socioeconomic resources was dismissed as an impact topic.

## **Cultural Resources**

Cultural resources dismissed from further analysis include cultural landscapes, ethnographic resources, and museum objects, collections, and archives.

*Cultural Landscapes* – According to the National Park Service’s Cultural Resource Management Guideline (NPS-28), a cultural landscape is:

“...a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions.”

Catoctin Mountain Park has two historic districts — Camp Greentop and Camp Misty Mount, which are also designated as cultural landscapes (or in accordance with the “Cultural Landscapes Inventory” as component cultural landscapes). The National Park Service is considering whether to nominate the entire park as a cultural landscape, and the forest is an important character-defining feature for the park’s cultural landscape, as well as for the two cultural landscapes associated with the historic districts. The actions proposed in the alternatives are not expected to have any impact on the any of the Park’s cultural landscapes. There would be no increase in the number of transformers or panel boxes under any of the alternatives. All above ground transformers or panels would be painted brown to better blend with the surrounding landscape. All junction boxes would be located at grade and would not detract from the forested landscape. Because the action and no action alternatives would not cause any discernable impact, cultural landscapes was dismissed as an impact topic.

*Ethnographic Resources* - Ethnographic resources are defined by the NPS as any “site, structure, object, landscape, or natural resource feature assigned traditional, legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it” (Director’s Order # 28, Cultural Resource Management Guideline, 181). Two ethnographic groups are associated with Catoctin Mountain Park: Native Americans and mountain residents. There is no evidence that Native American groups ever permanently resided within the current boundaries of the park or in the vicinity of the proposed project area; however, hunter/gather parties may have used the project area. Mountain residents predate the creation of the park, but were no longer in residence after its creation. Because no known ethnographic resources would be affected by the proposed action, no tribes requiring consultation are affiliated with Catoctin Mountain Park, and because appropriate steps would be taken to protect any human remains, funerary objects, sacred objects, or objects of cultural patrimony inadvertently discovered, ethnographic resources was dismissed as an impact topic.

*Museum Collections* – Implementation of any alternative would have no effects upon museum collections (historic artifacts, natural specimens, and archival and manuscript material); therefore, museum collections was dismissed as an impact topic.

## **Environmental Justice**

Executive Order 12898, General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing the disproportionately high and/or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. According to the Environmental Protection Agency, environmental justice is the:

“...fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.”

The goal of ‘fair treatment’ is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts. Both minority and low-income populations are present in the vicinity of Catoctin Mountain Park; however, environmental justice is dismissed as an impact topic for the following reasons:

- The Park staff and planning team actively solicited public participation as part of the planning process and gave equal consideration to all input from persons regardless of age, race, income status, or other socioeconomic or demographic factors.
- Implementation of the proposed alternative would not result in any identifiable adverse human health effects. Therefore, there would be no adverse effects on any minority or low-income population.
- The impacts associated with implementation of the proposed alternative would not disproportionately affect any minority or low-income population or community.
- Implementation of the proposed alternative would not result in any identified effects that would be specific to any minority or low-income community.
- Any impacts to the socioeconomic environment would not appreciably alter the physical and social structure of the nearby communities.

## **ALTERNATIVES**

NEPA requires federal agencies to explore a range of reasonable alternatives aimed at addressing the purpose and needs of the proposed action. The alternatives under consideration must include the “no action” alternative as prescribed by 40 CFR 1502.14. Project alternatives may originate from the proponent agency, local government officials, or members of the public, at public meetings or during the early stages of project development. Alternatives may also be developed in response to comments from coordinating or cooperating agencies. The alternatives analyzed in this document, in accordance with NEPA, and NHPA, are the result of design scoping, internal scoping, and public scoping. These alternatives meet the management objectives of the park while also meeting the overall purpose of and need for proposed action. Alternatives that were considered but were not technically or economically feasible, did not meet the purpose and need of the project, created unnecessary or excessive adverse impacts to cultural or natural resources, and/or conflicted with the overall management of the park or its resources were dismissed from further analysis. The NPS explored and objectively evaluated two alternatives in this EA, including:

Alternative A – No action.

Alternative B – Upgrade the electrical distribution system on the west side of the Park

### **ALTERNATIVE A – NO ACTION**

The NPS would continue to make repairs to keep the existing electrical distribution system in service. It is likely that the Park would continue to experience frequent line failures resulting in costly repairs.

### **ALTERNATIVE B (NPS PREFERRED ALTERNATIVE) – UPGRADE THE ELECTRICAL DISTRIBUTION SYSTEM ON THE WEST SIDE OF THE PARK**

Under this alternative, NPS would upgrade the electrical distribution system on the west side of the Park order to prevent power failures (Figure 1). This upgrade would affect the existing primary underground electrical service that currently feeds the Fire Cache, Poplar Grove Well Pump, Ike Smith Pump Station, and Owens Creek Campground. This includes providing new feeders in conduit and connecting to existing transformers at all the above locations. In addition to the new electrical lines in conduit, the upgrade would also replace or upgrade switches, fuses, meters, fault locators, manholes, equipment cabinets, transformers, and related support equipment. As a part of this project, a primary master meter would be added near the Park entrance and would provide Camp Misty Mount with a 20A fused disconnect.

The existing failing underground lines would be abandoned in place. The new electrical distribution system would be installed within disturbed areas, except for a small portion of new road, where the conduit would be placed. This road, approximately 156 feet in length, is proposed in order to provide access to the Ike Smith Pump House, and eliminate a stream crossing. The existing bridge that carries the present electrical conduit would be permanently removed to avoid further impacts to the stream channel and prevent the potential for power loss during high water events. The new electrical feed would be placed within the prism of the new road.



# Proposed Electric Line Upgrade

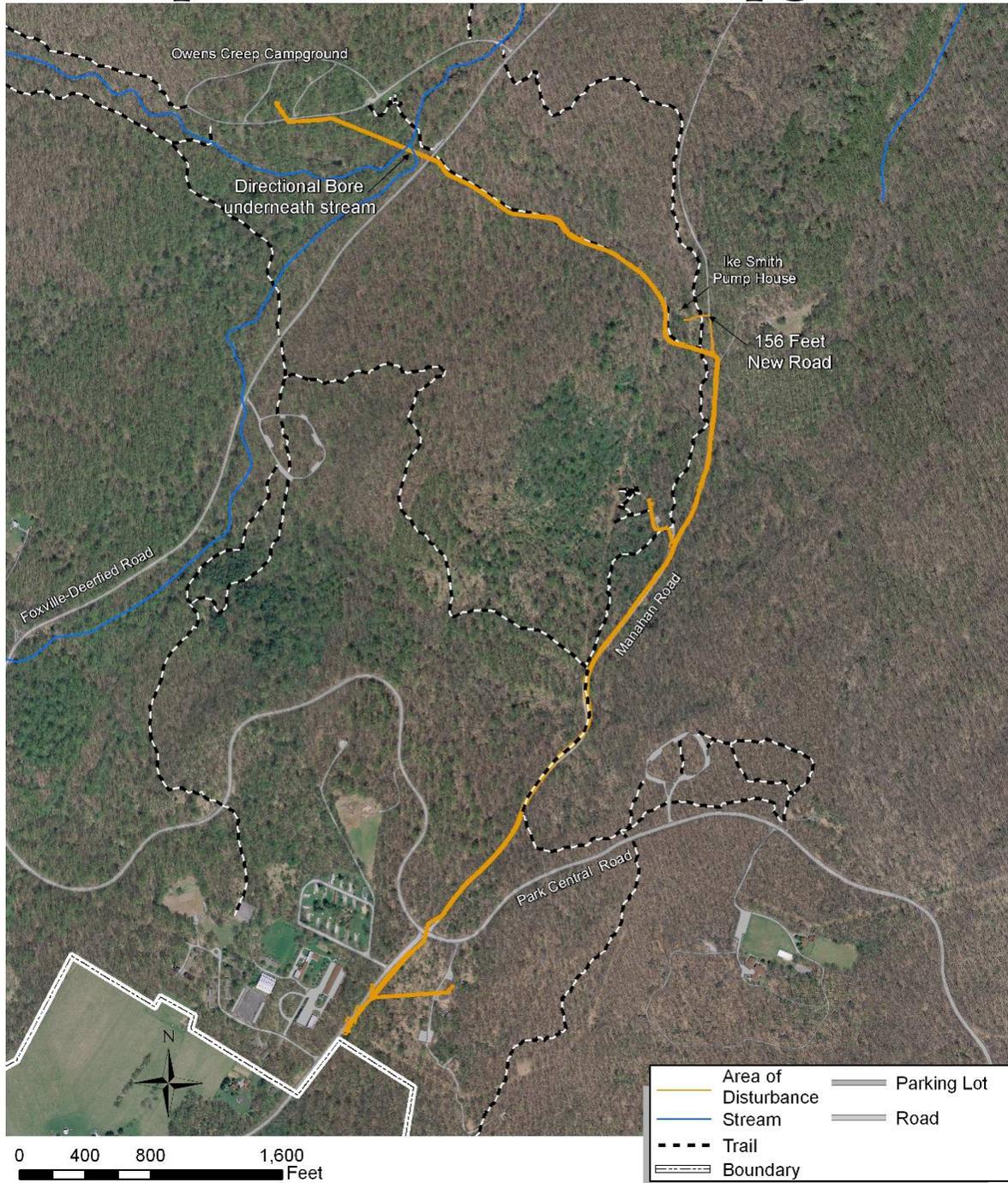


Figure 1

## **MITIGATION MEASURES OF THE ACTION ALTERNATIVE**

The NPS places a strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. To help ensure the protection of natural and cultural resources and the quality of the visitor experience, the NPS would ensure that the following protective measures are implemented as part of the action alternative. The NPS would implement an appropriate level of monitoring throughout the construction process to help ensure that protective measures are being properly executed and are achieving their intended results.

- The Contractor shall provide for erosion and sediment control devices in accordance with Maryland Standards and Specifications.
- Grading would be limited to only those areas involved in current construction activities.
- Exposure of unprotected graded areas would be limited.
- Permanent stabilization of graded areas shall be done as soon as possible after construction.
- If permanent stabilization cannot be provided, temporary seeding and mulching shall be provided, at the direction of the National Park Service.
- To mitigate any impact on the visitor experience from delays experienced due to closures on Manahan Road, when possible these closures would be announced in advance.
- Signs indicating that there is road work ahead would be placed at the northern end of Manahan Road and at the intersection of Manahan Road and Park Central Road, to give visitors an opportunity to choose an alternate route through the Park.

## **ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD**

Council of Environmental Quality (CEQ) regulations for implementing NEPA require federal agencies explore and objectively evaluate all reasonable alternatives to the preferred alternative, and to briefly discuss the rationale for eliminating any alternatives that were not considered in detail. This section describes those alternatives that were eliminated from further study and documents the rationale for their elimination.

During the course of internal scoping, several alternatives were considered but deemed to be unreasonable and were not carried forward for analysis in this EA. Justification for eliminating these options from further analysis was based on the following factors:

- Technical or economic feasibility.
- Inability to meet project objectives or resolve need.
- Duplication with other, less environmentally damaging or less expensive alternatives.
- Conflict with an up-to-date and valid park plan, statement of purpose and significance, or other policy, such that a major change in the plan or policy would be needed to implement.
- Too great an environmental impact.

### **Ike Smith Access Road**

Two additional Ike Smith Access Road options were considered but dismissed. The current electrical feed into the Ike Smith Pumphouse is enclosed in conduit that hangs underneath a small wooden bridge that crosses a stream. This bridge was severely damaged during a storm event in 2005. The potential exists for a rebuilt bridge to be subject to high water events in the future, eliminating vehicular access to the Ike Smith Pump house and potentially resulting in power loss.

An additional alternative that was considered for access to the Ike Smith Pump house was a new road located east of the stream. There was an existing clearing in the forest that would not require any tree removal to place a new road. A Phase I archeological survey revealed that this site contained historic

artifacts, though it is unclear whether these objects are associated with the Ike Smith farmstead, or from an unrelated twentieth century dumping episode. Additionally, this area is seasonally wet and a road could adversely impact surface drainage. For these reasons, these routing options were considered, but not carried forward.

### **THE ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

The environmentally preferred alternative is defined by CEQ as the alternative that would promote the national environmental policy as expressed in NEPA Section 101. This includes:

1. Fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assuring for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. Attaining the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
4. Preserving important historic, cultural and natural aspects of our national heritage and maintaining, wherever possible, an environment that supports diversity and variety of individual choice;
5. Achieving a balance between population and resource use that would permit high standards of living and a wide sharing of life's amenities; and
6. Enhancing the quality of renewable resources and approaching the maximum attainable recycling of depletable resources (NEPA, Section 101).

The NPS is required to identify the environmentally preferred alternative in its NEPA documents for public review and comment. The NPS, in accordance with the Department of the Interior policies contained in the Departmental Manual (516 DM 4.10) and the Council on Environmental Quality's (CEQ) *NEPA's Forty Most Asked Questions*, defines the environmentally preferred alternative (or alternatives) as the alternative that best promotes the national environmental policy expressed in NEPA (Section 101(b) (516 DM 4.10). In their *Forty Most Asked Questions*, CEQ further clarifies the identification of the environmentally preferred alternative, stating "Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources" (Q6a).

After completing the environmental analysis, the NPS identified alternative B as the environmentally preferable alternative in this EA because it best meets the definition established by the CEQ. Alternative B provides the Park personnel and visitors with safe, reliable power with the least impact to the environment. Replacing the current failing underground lines with new lines routed through conduit, would reduce disturbances to soil and vegetation necessary to relocate the line and make repairs. The new system of underground conduit would also allow for future upgrades to be pulled through the existing conduit, reducing the need for additional soil disturbance.

A summary of the environmental consequences follows in Table 1.

**Table 1**

Impact Topic	Alternative A – No Action	Alternative B (NPS Preferred) – Upgrade the electrical distribution system
<b>Geology and Soils</b>	<p>Adverse, long-term, negligible to minor impacts on soils could result from soil erosion and sedimentation due to excavation necessary to repair frequent line faults.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on geology and soils expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts on soils.</p> <p><i>Potential for Impairment:</i> No impairment of soils and geologic resources or values would occur.</p>	<p>Adverse, short-term, negligible to minor impacts on soils could result from soil erosion and sedimentation due to excavation to install new conduit. After construction is complete, long-term beneficial impacts are expected as repairs to the electrical line would be infrequent and would not require excavation.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on physiographic resources expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts on soils.</p> <p><i>Potential for Impairment:</i> No impairment of soils and geologic resources or values would occur.</p>
<b>Vegetation</b>	<p>Adverse, short-term, negligible to minor impacts on vegetation could result from clearing of vegetation necessary to make repairs to faults in the existing electric line.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on vegetation resources expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts.</p> <p><i>Potential for Impairment:</i> No impairment of Park vegetation or values would occur.</p>	<p>Adverse, long-term, negligible to minor impacts on vegetation could result from the clearing of vegetation necessary to install new road (and electric line in road prism) and as a result of trenching needed for installation of conduit not located in the road bed.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on vegetation resources expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts.</p> <p><i>Potential for Impairment:</i> No impairment of Park vegetation or values would occur.</p>
<b>Wetlands</b>	<p>Adverse, short-term, negligible to minor impacts on Owens Creek should excavation be required to make repairs to a fault occurring in or adjacent to the stream bed.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on wetland resources expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts.</p> <p><i>Potential for Impairment:</i> No impairment of Park Wetlands would occur.</p>	<p>The preferred alternative calls for directional drilling underneath Owens Creek to avoid any impacts to Wetlands. However, should the drilling experience refusal, adverse, short-term, negligible to minor impacts are possible. Under this scenario, trenching would be required to install the electrical conduit across Owens Creek.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on wetland resources expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts.</p> <p><i>Potential for Impairment:</i> No impairment of Park wetlands would occur.</p>
<b>Archeological Resources</b>	<p>Adverse, long-term, negligible to minor impacts could result if unidentified archeological resources are disturbed during line repairs.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on cultural resources expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts.</p> <p><i>Potential for Impairment:</i> No impairment of Park Archeological Resources or their integrity would occur.</p>	<p>Adverse, long-term, negligible to minor impacts could result if unidentified archeological resources are disturbed during construction.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on cultural resources expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts.</p> <p><i>Potential for Impairment:</i> No impairment of Park Archeological Resources or their integrity would occur.</p>
<b>Historic Structures</b>	<p>No impacts to Historic Structures are anticipated under the no-action alternative.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on cultural resources expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts.</p> <p><i>Potential for Impairment:</i> No impairment of Park Historic Structures or their integrity would occur.</p>	<p>Adverse, long-term, negligible impacts could result from installing a conduit within a historic structure.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on cultural resources expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts.</p> <p><i>Potential for Impairment:</i> No impairment of Park Historic Structures or their integrity would occur.</p>
<b>Visitor Use and Experience</b>	<p>Adverse, long-term, negligible to minor impacts on Visitor Use and Experience could result from the loss of electrical service. Prolonged outages could also disrupt the water distribution system.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure for recreational use of the Park, would result in adverse, short- and long-term, minor to moderate impacts.</p> <p><i>Potential for Impairment:</i> No impairment of Park Visitor Use and Experience or their values would occur.</p>	<p>Beneficial, long-term impacts are expected from an electrical distribution system with an infrequent failure rate. Adverse, short-term, negligible to minor impacts on Visitor Use and Experience could result from periodic delays or closures along Manahan road during the construction phase of this alternative.</p> <p><i>Cumulative Impact:</i> Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure for recreational use of the Park, would result in adverse, short- and long-term, minor to moderate impacts.</p> <p><i>Potential for Impairment:</i> No impairment of Park Visitor Use and Experience or their values would occur.</p>

<p><b>Health and Safety</b></p>	<p>Adverse, long-term, negligible to minor impacts on Health and Safety could result from electrical outages due to an unreliable distribution system. Electrical outages could create hazardous conditions due to a lack of electrical safety lighting, and lack of power and water for emergency operations.</p> <p><i>Cumulative Impact:</i> Cumulative impacts would primarily be related to other injuries that visitors could sustain in the park; these impacts would also be adverse, long term, and negligible.</p> <p><i>Potential for Impairment:</i> No impairment of Health and Safety would occur.</p>	<p>Beneficial, long-term impacts on Health and Safety could result from providing safe and reliable electrical distribution system. The proposed alternative would upgrade the primary electrical service to the Parks Ike Smith water distribution system and Fire Cache, both critical components of the Parks public health and safety infrastructure.</p> <p><i>Cumulative Impact:</i> Cumulative impacts would primarily be related to other injuries that visitors could sustain in the park; these impacts would also be adverse, long term, and negligible.</p> <p><i>Potential for Impairment:</i> No impairment of Health and Safety would occur.</p>
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## **AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES**

This chapter summarizes the existing environmental conditions and the probable environmental consequences (effects) of implementing the action and no action alternatives. This chapter also provides the scientific and analytical basis for comparing the alternatives. The probable environmental effects are quantified where possible. In the absence of quantitative data, best professional judgment was used and qualitative descriptions are provided.

### **GENERAL METHODOLOGY FOR ESTABLISHING IMPACT THRESHOLDS AND MEASURING EFFECTS**

Potential impacts of all alternatives to each specific impact topic are described in terms of type (beneficial or adverse); context; duration (short- or long-term); and intensity (negligible, minor, moderate, major). Definitions of these descriptors include:

*Beneficial:* A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.

*Adverse:* A change that declines, degrades, and/or moves the resource away from a desired condition or detracts from its appearance or condition.

*Context:* Context is the affected environment within which an impact would occur, such as local, park-wide, regional, global, affected interests, society as whole, or any combination of these. Context is variable and depends on the circumstances involved with each impact topic. As such, the impact analysis determines the context, not vice versa.

*Duration:* The duration of the impact is described as short-term or long-term. Duration is variable with each impact topic; therefore, definitions related to each impact topic are provided in the specific impact analysis narrative.

*Intensity:* Because definitions of impact intensity (negligible, minor, moderate, and major) vary by impact topic, intensity definitions are provided separately for each impact topic analyzed.

Table 2 depicts the impact threshold definitions used in this EA. Significant impact thresholds for the various key resources were determined in light of compliance with existing state and federal laws, and compliance with existing park planning documents.

**Table 2 Impact Threshold Definitions**

<b>Impact Topic</b>	<b>Negligible</b>	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>	<b>Duration</b>
<b>Geology and Soils</b>	Impacts to geology or soils would be below or at the lower levels of detection.	Impacts to geology or soils would be detectable. Impacts to undisturbed areas would be small. Mitigation would be relatively simple to implement and would likely be successful.	Impacts to geology or soils would be readily apparent and result in a change to the soil or geologic character over a relatively wide area. Mitigation measures would likely be successful.	Impacts to geology or soils would be readily apparent and substantially change the character of the soils or geology over a large area both in and out of the park. Mitigation measures success would not be guaranteed.	Short-term impacts occur during the implementation of the alternative; long-term impacts extend beyond implementation of the alternative.
<b>Vegetation</b>	Any impacts in herbaceous or woody vegetation would be so small it would not be of any measurable or perceptible consequence.	A reduction in herbaceous or woody vegetation would be small, localized, and of little consequence.	Some reduction in herbaceous or woody vegetation would occur, and the change would be measurable and/or consequential to the resource but localized.	A noticeable reduction in woody vegetation would occur. The change would be measurable, and it would result in a possible permanent consequence to the resource.	Short-term impacts occur during the implementation of the alternative; long-term impacts extend beyond implementation of the alternative.
<b>Wetlands</b>	Impacts to wetlands would be below or at the lower levels of detection. Any impacts to the stream channel would be slight.	Impacts to wetlands would be detectable. Mitigation would be relatively simple to implement and would likely be successful.	Impacts to wetlands would be readily apparent and result in alternations to the natural physiographic conditions or species composition within the wetland. Mitigation measures would likely be successful.	Impacts to wetlands would be readily apparent and substantially change the natural physiographic conditions or species composition within the wetland. Mitigation measures would be extensive, and their success would not be guaranteed.	Short-term impacts occur during the implementation of the alternative; long-term impacts extend beyond implementation of the alternative.
<b>Archeological Resources</b>	The impact would be at the lowest level of detection with neither adverse nor beneficial consequences. For purposes of Section 106 of the <i>National Historic Preservation Act</i> , the determination of effect would be a <i>no adverse effect</i> .	<u>Adverse impact</u> – An archeological site would be disturbed resulting in little, if any, loss of integrity. For purposes of Section 106, the determination of effect would be <i>no adverse effect</i> .	<u>Adverse impact</u> – An archeological site would be disturbed resulting in a loss of integrity. For purposes of Section 106, the determination of effect would be an <i>adverse effect</i> . Measures are identified to mitigate adverse impacts and reduce the intensity of impact under NEPA from major to moderate. Memoranda of Agreement (MOA) would be developed and negotiated between NPS, SHPO and/or the Advisory Council on Historic Preservation to resolve adverse affects.  <u>Beneficial impact</u> – The site would be stabilized. For purposes	<u>Adverse impact</u> – An archeological site would be disturbed, resulting in loss of integrity to the extent its character defining elements would compromise its listing or potential for listing on the National Register of Historic Places. For purposes of Section 106, the determination of effect would be an <i>adverse effect</i> . Measures to minimize or mitigate adverse impacts would be addressed in an MOA with SHPO and ACHP	For cultural resources there are no short-term effects because a cultural resource is not renewable therefore, once an impact occurs it is considered long-term

			of Section 106, the determination of effect would be <i>no adverse effect</i> .		
<b>Historic Structures</b>	The impact would be at the lowest level of detection with neither adverse nor beneficial consequences. For purposes of Section 106 of the <i>National Historic Preservation Act</i> , the determination of effect would be a <i>no adverse effect</i> .	<u>Adverse impact</u> – A historic structure would be disturbed resulting in little, if any, loss of integrity. For purposes of Section 106, the determination of effect would be <i>no adverse effect</i> .	<u>Adverse impact</u> – A historic structure would be disturbed resulting in a loss of integrity. For purposes of Section 106, the determination of effect would be an <i>adverse effect</i> . Measures are identified to mitigate adverse impacts and reduce the intensity of impact under NEPA from major to moderate. Memoranda of Agreement (MOA) would be developed and negotiated between NPS, SHPO and/or the Advisory Council on Historic Preservation to resolve adverse affects.  <u>Beneficial impact</u> – The structure would be stabilized. For purposes of Section 106, the determination of effect would be <i>no adverse effect</i> .	<u>Adverse impact</u> – A historic structure would be disturbed, resulting in loss of integrity to the extent its character defining elements would compromise its listing or potential for listing on the National Register of Historic Places. For purposes of Section 106, the determination of effect would be an <i>adverse effect</i> . Measures to minimize or mitigate adverse impacts would be addressed in an MOA with SHPO and ACHP	For cultural resources there are no short-term effects because a cultural resource is not renewable therefore, once an impact occurs it is considered long-term
<b>Visitor Use and Experience</b>	The impact would be barely detectable and/or would affect few visitors. Visitors would not be aware of the effects associated with the proposed action.	The impact would be detectable and/or would only affect some visitors. Visitors would be aware of the effects associated with the proposed actions. Visitor satisfaction would not be measurably affected.	The impact would be readily apparent and/or would affect many visitors. Visitors would be aware of the effects associated with the proposed actions. Visitor satisfaction might be measurably affected.	The impact would affect the majority of visitors. Visitors would be highly aware of the effects associated with the proposed action. Changes in visitor use and experience would be readily apparent. Negative impacts may cause visitors to choose other recreational activities.	Short-term impacts occur during the implementation of the alternative; long-term impacts extend beyond implementation of the alternative.
<b>Health and Safety</b>	There would be no discernable effects to visitor or employee health and safety. Park infrastructure would be reliable and available to meet public safety needs.	Impacts to visitor or employee safety and health would be detectable. Park infrastructure may not be available to meet public safety needs. However, only minor injuries or illness would result and emergency response would not be affected.	Impacts to visitor or employee safety and health would be widespread. Park infrastructure may not be available to meet public safety needs. Major injuries or illness could result and emergency response would be affected.	Impacts to be to visitor or employee safety would be widespread. Park infrastructure may not be available to meet public safety needs. Major injuries or illness could result and the Park would be unable to respond to emergencies.	Short-term impacts occur during the implementation of the alternative; long-term impacts extend beyond implementation of the alternative.

## **CUMULATIVE IMPACTS**

NEPA regulations require an assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as “the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative effects can result from individually minor, but collectively moderate or major actions that take place over a period of time.

Cumulative impacts are considered for all alternatives, including the no action alternative. Cumulative impacts were determined by combining the impacts of the alternative being considered with other past, present, and reasonably foreseeable future actions. The following actions were identified as having the potential for impacts to the resources that are evaluated in this environmental assessment.

### **Past Actions within and Around Catoctin Mountain Park**

Euro-Americans began to settle in the Catoctin area in the mid-18th century. Timber utilization and farming continued until the creation of the recreational demonstration area, and over the last 250–300 years these activities have influenced the plant communities that now dominate the park, affecting plant distribution, diversity, and abundance. For example, to support the local charcoal industry, large areas of what later became the park were clear-cut about every 30 years from the mid 1700s until the late 1800s. Similarly, parts of the park were farmed, and other portions were burned to encourage blueberry growth (NPS 2004).

Logging throughout the mountains was heavy and widespread during the early 20th century when as many as 50 logging companies were in operation. Wood was in demand for both the charcoal and barrel industries. After heavy logging, the forests may have reached their limit of profitability. Forest surveys in 1913 indicate that most of the merchantable timber was gone and remaining stands were young (NPS 2000).

With the establishment of the Recreational Demonstration Area in 1935, land uses changed to recreation and conservation. Farm buildings were removed and fields were allowed to follow natural forest succession patterns. These land uses continue today at Catoctin Mountain Park. Developed areas within the park include the visitor center area, the headquarters area, two maintenance yards, a fire cache, Camp Greentop, Camp Round Meadow, Camp Misty Mount, one campground, two picnic areas, and all paved roads. Developed areas have vehicular access and provisions for utilities.

### **Current Actions Within and Adjacent to Catoctin Mountain Park**

#### *Fire*

Experts date fires at Catoctin back to 1876. Since then fires have occurred at intervals of 6 to 20 years. Some fires were set by man to burn areas for increased blueberry production. However, fire within the park has been suppressed for the past 60 years. The park’s most recent fire occurred in November 2001 in the Wolf Rock area. After the burn, vegetation study plots were placed in the area to monitor tree regeneration. Within the first year following the burn many tree and herbaceous species regenerated (NPS 2005). The park’s current *Fire Management Plan*, completed in 2004, requires that all wildfires be suppressed to protect the historic camps and adjacent private landowners. However, the use of prescribed fire will be explored for research purposes (NPS 2004a).

#### *Disease, Blight and Exotic Pests*

The health of Catoctin’s forest has been and continues to be adversely affected by disease, blight, and exotic pests, including hemlock woolly adelgid, gypsy moths, chestnut blight, and dogwood anthracnose.

### *Deer Management*

An overabundance of deer is causing adverse impacts to the forest vegetation in the Park. No actions have been taken to date to modify the size of Catoctin's deer herd within the park unit (although deer hunting is permitted at Cunningham Falls State Park to the south of Catoctin Mountain Park). However, park staff are continuing to take actions to monitor and protect small areas of sensitive vegetation and landscaping.

### *Logging*

Some logging still occurs on lands adjacent to the park boundary. Small tracts continue to be cleared as residential development expands in the region, resulting in the loss of mature deciduous forest in the general area of the park (Swauger, pers. comm., 2005).

### *Ozone Effects on Sensitive Plants*

Ozone concentrations occasionally are high in and around the Washington, D.C., metropolitan area and the park, and ozone has adversely affected some sensitive species within the park (Swauger, pers. comm., 2005b). Some species that are more sensitive to ozone that are found in the park include basswood, white ash, white pine, sweetgum, yellow (tulip) poplar, sycamore, black cherry (*Prunus serotina*), pin cherry (*Prunus pennsylvanica*), and sassafras.

## **Foreseeable Future Actions**

### *Future Construction Projects*

This project is the third and final phase of the upgrade of the existing electrical distribution system at Catoctin Mountain Park. Additional park development, including infrastructure upgrades or construction of roads, buildings, or other facilities may have similar impacts. These future projects, however, would also take place in disturbed areas and involve similar mitigations in order to prevent cumulative impacts of these actions from exceeding minor.

### *Weather*

Weather events such as thunderstorms and hurricanes have occurred with some frequency over the last several years at Catoctin Mountain Park. These storms have caused wide-spread damage to Park natural and cultural resources. It is reasonable to expect that future storms may cause further damage by leveling large forested areas during high wind events and causing damage to historic structures.

### *Growth and Change in Surrounding Land Use*

The properties adjacent to Catoctin Mountain Park are classified as agriculture (6.6%), residential (0.6%), and deciduous forest (92.6%). These patterns are slowly changing as private residences are increasingly intermingled with the traditionally agricultural areas. The town of Thurmont is east of the park. The movement of people who are seeking a rural atmosphere and moving out of metropolitan areas will eventually cause population and infrastructure growth, resulting in habitat loss and greater pressure on remaining resources. Population movement is also gaining momentum due to cost of living in the metropolitan centers of Washington, D.C., and Baltimore, Maryland (NPS 2003).

### *Increased Visitation*

Staff at Catoctin expects a 3% average yearly increase in visitation in future years, as well as increased pressure for various recreational uses.

## **IMPAIRMENT ANALYSIS**

The NPS 2006 Management Policies require an analysis of potential effects to determine whether or not actions would impact park resources, but also to determine whether those actions would impair park resources. The fundamental purpose of the national park system as established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. These laws give the NPS the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. NPS managers must always seek ways to avoid or minimize to the greatest degree practicable, adversely impacting park resources and values. The impairment that is prohibited by the Organic Act and the General Authorities Act is an impact, in the professional judgment of the responsible NPS manager, that would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Whether an impact meets this definition depends on 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. An impact to any park resource or value may constitute impairment, but an impact would be more likely to constitute an impairment to the extent that it has a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park. An impairment determination is included in the conclusion statement for all impact topics related to all of Catoctin Mountain Park's natural resources (soils, surface waters, vegetation, cultural landscapes, and historic structures). Impairment determinations are not made for visitor use and enjoyment, health and safety, socioeconomics, or park operations and management, because impairment findings relate back to park resources and values and these impact areas are not generally considered to be park resources or values. Impairment determinations are not made for visitor use and experience because, according to the Organic Act, enjoyment cannot be impaired in the same way an action can impair park resources and values.

## **IMPACT TOPICS**

### **Geology and Soils**

The proposed project would impact the physiographic resources within the project area of disturbance shown in Figure 1. The project area is located in the Blue Ridge physiographic province of central Maryland. The park is underlain by weathered and fractured metamorphic rock comprised of two main rock types included in the Catoctin Formation. In the eastern one-third of the park, pinkish-quartzite formations are found, the most resistant of which form such promontories as Wolf Rock, Chimney Rock, and the talus field north of Thurmont Vista. The middle and western two-thirds of the park are dominated by greenish gray metamorphous lava called greenstone. The greenstone is interspersed with the rhyolite that was coveted by Native American populations. Large cliffs of greenstone create natural overlooks such as Hog Rock. Together the outcrops, cliffs and talus slopes illustrate the forces of volcanism, folding, faulting and weathering that have occurred in this part of the Middle Atlantic Region. The soils of Catoctin have been characterized in the Soil Survey of Frederick County (Kraft 2002) as primarily rough, stony land. In

general, they are well drained, poorly developed soils containing numerous stones and boulders throughout their profile.

#### **Alternative A – No Action.**

Under Alternative A, the park would continue to operate the existing electrical distribution system on the west side of the Park. Frequent failures of the existing Park electrical distribution system would be expected to continue. As a result, excavation would be required to isolate the faults and make repairs. The current routing of the line does not always follow roadways or utility corridors. In some cases, the line was placed by direct burial through forested areas. As a result, it is possible that in order to access line faults, relatively undisturbed soils would be impacted by heavy equipment. Impacts associated with these actions include soil loss and compaction. However, given that the total impact area for each repair is anticipated to be less than a few hundred square feet, combined with the erosion and sediment control mitigation measures, the impacts are expected to be short-term and negligible.

#### **Alternative B (NPS Preferred) – Upgrade the electrical distribution system on the west side of the Park.**

Approximately 9,028 linear feet of trenching would be required to install underground conduit under Alternative B. This excavation would increase the potential for soil loss in the disturbance zone. The disturbance zone would be approximately 5 feet on either side of the trench centerline, for a typical width of 10 feet. Therefore the total impact area for this project would be 90,280 square feet (roughly two acres). This is less than .03 percent of the total park. Contractors completing the work for this project would be required to implement erosion and sediment control in accordance with Maryland standards and actual soil loss is expected to be negligible. Soil compaction is also a concern as heavy equipment would be utilized to complete this work. However, the majority of the construction would take place along Manahan Road, the road shoulder, and existing utility corridors. These areas have been previously disturbed and no further impacts are anticipated from the actions proposed in Alternative B.

A new road to the Ike Smith Pumphouse is proposed under Alternative B (Figure 2). This road would carry periodic Park maintenance vehicle traffic and would also serve as the utility corridor for the electrical upgrade. This new road would be 156 feet in length, and would impact approximately 1,560 square feet of soil. Since the area of disturbance is small, negligible impacts are expected on Park soils. As in the disturbed areas, erosion and sediment control would be in place during construction in accordance with Maryland standards. After construction, a turf grid paving system would be installed to prevent soil loss and compaction. The turf grid system allows the weight of vehicles to be born by the paver grid while voids in the grid allow water to drain and vegetation to grow. This new road would divert traffic to the Ike Smith Pump House from the adjacent fire road, which currently suffers from soil loss, to a new stable and permeable road surface.

This alternative also proposes directional drilling to avoid any impacts to Owens Creek. The original electrical distribution line was installed by trenching in the creek bottom. Alternative B calls for boring six feet under the stream bed. The boring would likely encounter bedrock, but the impacts to Park geology are expected to be negligible (Denniston, pers. comm. 2009).

#### **Cumulative Effects**

Adverse impacts on the soils are expected from increased soil erosion due to vegetative ground cover loss as a result of increased deer browsing; increased development within the park, which would increase surface runoff and contribute to increased soil erosion; fire suppression, which would cause adverse, short-term minor impacts; and logging that occurs along the park boundaries. Weather events such as thunderstorms and hurricanes would also adversely impact soils within the watershed.

Past actions inside and outside the park that have adversely contributed to the impacts on soil include the use of agricultural lands within the park, residential development, fires that occurred prior to the establishment of the park, and cattle farming both outside and inside the park. Logging roads were built and timber was cut from 11,000 acres for the charcoal and barrel industry, which substantially impacted soils in the watershed. The park's plan to implement limited prescribed burning for research purposes in the future would create adverse, short-term, minor impacts due to increased soil erosion from loss of vegetative cover. Other future actions that would cause adverse impacts include utility development and continued agricultural use outside the park, although the latter would decrease over time due to increasing residential development. Existing land use patterns are slowly changing as private residences are increasingly intermingled with traditionally agricultural areas. This increase in residential development would have an adverse, short- and long-term, minor to moderate impact on soil. All of these activities, when combined with the short-term negligible impacts to soils under the no action and action alternatives, would result in adverse, short- and long-term, minor to moderate impacts on soils.

### **Conclusion**

Adverse, short-term, negligible to minor impacts on soils could result from soil erosion and sedimentation from electric line repair under Alternative A or the trenching or boring proposed in alternative B. Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on soils and geologic resources expected under this alternative, would result in adverse, short- and long-term, minor to moderate impacts on soils. There would be no impairment of park soils or geologic resources under either alternative.



# Proposed Electric Utility - Ike Smith



Figure 2

## Vegetation

The study area for this impact topic is the area of disturbance depicted in Figure 1. Catoctin Mountain Park is approximately 97% forested. In most places the forest is less than 100 years old, with plant communities reflecting the park's varying past uses, as well as the natural influences of soil and exposure on vegetation types (Hickey 1975). Large individual trees (24 to 36 inches diameter) of major canopy species are present, but are widely scattered and infrequent (Hickey 1975). Over 700 species of vascular plants have been recorded in the park, including 60 tree species (Warner 1972; Hickey 1975; Anderson et al. 1976; NPS 1996b), and approximately 100 nonnative plants (NPS 2008).

### Alternative A – No Action.

Under Alternative A, the frequent failures of the existing Park electrical distribution system would be expected to continue. As a result, excavation would be required to isolate the faults and make repairs. It is possible that in order to access line faults, relatively undisturbed forested areas would be disturbed. Ground vegetation, shrubs and trees may need to be removed during excavation. However, given that the total impact area for each repair is anticipated to be less than a few hundred square feet, any impacts to vegetation are expected to be short-term and negligible.

### Alternative B (NPS Preferred) – Upgrade the electrical distribution system on the west side of the Park.

A new road to the Ike Smith Pumphouse is proposed under Alternative B. This road would carry periodic vehicular traffic and would also serve as the utility corridor for the electrical upgrade. This new road would be 156 feet in length, and would impact approximately 1,560 square feet of vegetation. On May 22, 2009 Park staff surveyed the proposed area of disturbance and inventoried the herbaceous vegetation present (Table 3).

**Table 3**

Common Name	Scientific Name
New York fern	<i>Thelypteris noveboracensis</i>
Sweet cicely	<i>Osmorhiza claytoni</i>
Cleavers	<i>Galium aparine</i>
Chickweed	<i>Stellaria sp</i>
Garlic mustard	<i>Alliaria petiolata</i>
Japanese barberry	<i>Berberis thunbergii</i>
Virginia creeper	<i>Parthenocissus quinquefolia</i>
Spicebush	<i>Lindera benzoin</i>
Spring beauties	<i>Claytonia virginica</i>
Christmas fern	<i>Polystichum acrostichoides</i>
Hickory	<i>Carya sp</i>
Violet	<i>Viola sp</i>
Enchanter's nightshade	<i>Circaea sp</i>
Corn speedwell	<i>Veronica arvensis</i>

Several individual plants of the species listed in the table would be removed and replaced by native grasses planted within the voids of the turf grid pavers. All of these plants are very common in the Park and their overall abundance would not be impacted by removing a few individuals from the impact area. Garlic Mustard and Japanese Barberry are invasive exotic plants and their removal is a positive impact.

In addition to herbaceous vegetation, a few trees would also require removal. These are listed in Table 4.

**Table 4**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Diameter of tree(s) removed</b>
Sugar Maple	<i>Acer saccharum</i>	11", 4", 3", 3", 2", 2", 2"
White Ash	<i>Fraxinus Americana</i>	16"
Black Birch	<i>Betula lenta</i>	6"

Only minimal vegetation would be impacted throughout the rest of the project area. No notable vegetation exists along Manahan Road. The Manahan Road shoulder and utility corridors primarily contain unremarkable groundcover, and in many cases, invasive exotic grasses (e.g. Japanese Stiltgrass, *Microstegium vimineum*). These areas would be replanted with locally native grasses and are expected to quickly re-vegetate with the influx of adjacent vegetation. Adverse, short-term, negligible to minor impacts on forest vegetation would result from the removal of limited vegetation proposed in Alternative B.

### **Cumulative Effects**

Increased impacts to the forest within and surrounding the park are expected from increased development within the park, road widening and construction projects, impacts from increased visitation. Past actions within the park, including deer browsing, logging and fire suppression, have adversely affected forest resources. Prior to park establishment, logging for the charcoal and barrel industries resulted in the loss of 11,000 acres of mature forest. Some logging still occurs along park boundaries. Fire suppression has altered the natural structure and composition of the forest. Ozone damage has been observed in some sensitive species, and blowdowns from hurricanes or tornadoes have damaged vegetation and created open areas within the forest. The park's efforts to control invasive exotic species, gypsy moths, chestnut blight, dogwood anthracnose, hemlock woolly adelgid, and other pests would continue to benefit forest resources and their ability to naturally regenerate. The park plans to implement limited prescribed burning for research purposes in the future, which would also benefit the park's forest. All of these activities, when combined with the continued pressure on forest vegetation (woody and herbaceous) and the negligible impact on vegetation expected under both alternatives, would result in both adverse and beneficial impacts to woody and herbaceous vegetation. Overall, cumulative impacts would be adverse, long term, and major.

### **Conclusion**

Adverse, short-term, negligible to minor impacts on forest vegetation would result from vegetation removal for electric line repair under Alternative A or the removal of limited vegetation proposed in Alternative B. Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on vegetation resources expected under these alternatives, would result in adverse, short- and long-term, minor to moderate impacts. There would be no impairment of park vegetation from actions taken under either alternative.

### **Wetlands**

The study area for this impact topic is the utility corridor containing the electric line stream crossing through Owens Creek. Owens Creek is one of only two permanently flowing streams within the park. Several unnamed tributaries flow into Owens Creek throughout its run while its rubble filled streambed is seasonally flooded and dominated by mosses. Owens Creek is defined as a riverine system wetland. Simply defined, riverine systems are wetlands contained within a channel.

### **Alternative A – No Action.**

It is possible that a fault in the electric line crossing the stream bed could necessitate excavation to repair or replace. Additionally, since the original direct burial of the line was only several inches deep, it could one day be exposed by natural erosion and scouring of the stream bed. The water line that crosses the stream at the same location is currently exposed above the stream bottom. Should the electric line within the stream require repair; adverse, short-term, negligible to minor impacts on wetlands would result.

**Alternative B (NPS Preferred) – Upgrade the electrical distribution system on the west side of the Park.**

Directional boring would avoid any impact to the stream bed (Figure 3). The existing electric line would be abandoned in place. Should this line eventually be exposed, it would be removed. Park streams are essentially perched on bedrock, so there would be no impact on the riverine wetland from the directional drilling itself (Denniston, per. Comm. 2009). If directional drilling met refusal due to impenetrable bedrock, the line would be trenched across the stream under permit from the Maryland Department of the Environment and U.S. Army Corps of Engineers. Should trenching be required, adverse, short-term, negligible to minor impacts on wetlands would result.

**Cumulative Effects**

Only a small portion of Owens Creek passes through the Park. The cumulative impacts to wetlands under both alternatives would be similar to those under described in the soil and geologic resources impact analysis. Soil lost from ground disturbing activities degrades water quality by increasing the turbidity and decreasing water quality in Park streams. Other pressures exist on wetlands, however. Only 14.5% of the Owens Creek watershed is within the park boundaries (NPS 1998), so cumulative impacts on soil and water quality would arise not only from activities within the park, but would also be heavily influenced by past, present, and future actions in the areas adjacent to the park. Other past Park actions have had impacts on wetlands as well. After the sewage treatment plant near Camp Round Meadow at the head of Owens Creek was built, the abandoned sewage lagoon was converted into a wetland, offering beneficial impacts to both soil and water quality. All of these activities, when combined with the short-term negligible impacts to wetlands under the no action and action alternatives, would result in adverse, short- and long-term, minor to moderate impacts on wetlands.

**Conclusion**

Adverse, short-term, negligible to minor impacts on wetlands could result from electric line repair under Alternative A or the directional boring proposed in alternative B. Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on wetland resources expected under these alternatives, would result in adverse, short- and long-term, minor to moderate impacts. There would be no impairment of park wetlands from actions taken under either alternative.



# Proposed Electric Utility - Owens Creek

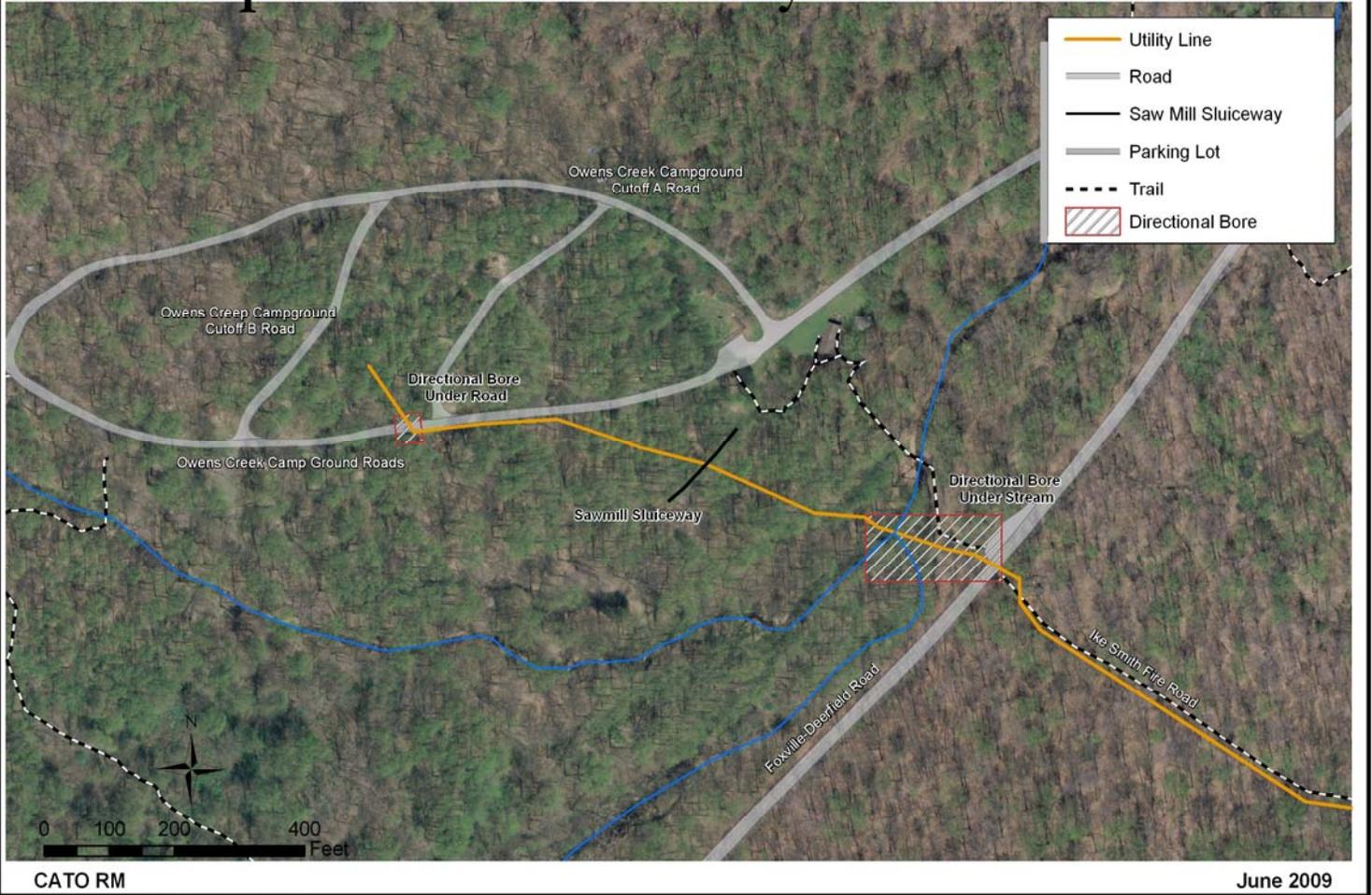


Figure 3

## Archeological Resources

For the purposes of this analysis, the area of potential effect is defined as the potential area of disturbance as illustrated in Figure 1.

### Alternative A – No Action.

No known impacts to cultural resources would occur under alternative A. The only potential for ground disturbance would be in order to make repairs to faults in the existing electrical line. These repairs would take place in areas that were previously disturbed to originally install the lines. No further disturbance of archeological or other cultural resources would be anticipated.

### **Alternative B (NPS Preferred) – Upgrade the electrical distribution system on the west side of the Park.**

The proposed alternative calls for installing a new road and utility corridor near the Ike Smith Pumphouse. Since this area does not show recent evidence of human disturbance, a Phase I archeological survey was conducted. Two shovel tests were placed along a transect considered for routing of the new electric line and road. One shovel test uncovered cultural materials. These artifacts included bottle fragments, container and jar glass shards, a glass chimney (lighting) fragment, brick fragments, an undecorated whiteware fragment, a molded and gilded porcelain fragment, machine cut nails and bone. All were recovered from a 0.5-foot thick fill deposit overlying sterile subsoil. A walkover survey of the adjacent area identified a dump area containing brick halves, shoe leather, bottle and jar glass shards, an unglazed redware drainpipe, an unglazed redware crock fragment, and a large furniture spring. A brick half with a partial name (“...EWOOD”) was also found nearby. This is probably from the Baltimore Brick Company (c. 1915-1926), which produced a brick marked “HOMEWOOD”.

At this time, it is unclear whether these objects are associated with the Ike Smith farmstead, which was purchased as part of the Catoctin Recreational Demonstration Project in April 1937, or from an unrelated twentieth century dumping episode. The lack of diagnostic artifacts and the narrow scope of the survey make it difficult to distinguish between the two. However, the presence of machine cut nails and chimney (lighting) glass may indicate that this is part of an older site, possibly Ike Smith’s farmstead.

In order to prevent any impacts to the archeological site discovered, a new routing of the road and electric line corridor was selected. Shovel test pits in this area revealed no additional archeological findings and the steeper slope of the area has little potential for significant archeological resources.

### **Cumulative Effects**

There is ongoing potential for adverse impacts to Park cultural resources from any park project that causes ground disturbance. Examples include the addition or upgrade of additional utilities within the park; landfills or small dumps around the park and at Camp Round Meadow; and roads and trails, including social trails at Camp Misty Mount. However, the ongoing archeological survey currently underway at Catoctin would result in long-term, minor, beneficial impacts because areas within the park that could contain archeological resources are now being identified and valuable information is available to assist in project location. Overall, the adverse impacts of past and ongoing park projects and the benefits of the ongoing surveys in combination with actions in both alternatives would result in adverse, long-term, negligible cumulative impacts. Each alternative, however, would contribute minimally to the total cumulative impact.

### **Conclusion**

Adverse, short-term, negligible to minor impacts on archeological resources could result from ground disturbance for electric line repair under Alternative A or the trenching or boring of the electrical distribution system proposed in alternative B. Past, present, and future activities both inside and outside the park, when combined with the potential for continued pressure on archeological resources expected under each alternative, would result in adverse, short- and long-term, minor to moderate impacts. There would be no impairment of park archeological resources from actions taken under either alternative.

### **Historic Structures**

There are two Historic Structures potentially impacted by the actions proposed in this EA; The Ike Smith Pumphouse and the Owens Creek Sawmill Sluiceway.

The Ike Smith Pumphouse (Figure 2) was constructed in June 1938 by the Works Progress Administration to pump water from a well to Camps 2, 3 and 4 of the new Catoctin Recreation Demonstration Area (RDA).

Basically unaltered and containing much of its original pumping equipment, the pumphouse is significant as an original park structure constructed by one of the public works agencies that established Catoctin RDA. Its construction of native quartzite and wooden shingles reflects the rustic style of architecture employed throughout the park during this period.

In surveying the Park for this project, it was noted that the existing utility corridor servicing the Owens Creek Campground crosses a sluiceway of a historic sawmill near Owens Creek (Figure 3). While the period of operation for this mill is unknown, it was depicted on maps as early as 1857.

#### **Alternative A – No Action.**

No known impacts to historic structures would occur under Alternative A. The only potential for impacts would be in order to make repairs to the infrastructure in the Ike Smith Pumphouse, or to repair a line fault in the mill sluiceway. These repairs would take place in areas that were previously disturbed when conduit was installed. No further disturbance of historic structures would be anticipated.

#### **Alternative B (NPS Preferred) – Upgrade the electrical distribution system on the west side of the Park.**

The new electrical service installed to service the Ike Smith Pumphouse would upgrade the line entering the building. As a result, conduit for this area would be turned up inside the structure itself. The conduit would be routed into the building through a small hole created for this purpose, or through an existing utility pass-through if available. In accordance with Section 106 of the National Historic Preservation Act and NPS Directors Order 28 (NPS 1998a), the proposed action was reviewed by the National Capital Region Historical Architect and was found to have no adverse affect. Any impacts to the structure will be long-term and negligible. However, since the new electric conduit will power the electrically driven water pumps, the historic use of this structure, Alternative B will also provide long-term beneficial effects.

The preferred alternative also calls for routing the new conduit through the sawmill sluice. No further impacts to cultural resources are anticipated in this area. The sluiceway is a channelized depression that was used to divert water from the creek to power the mill. The new lines would be installed in the same area of disturbance as the existing lines.

#### **Cumulative Effects**

Park historic structures may be impacted from future repairs or upgrades necessary to maintain the structures, damage from storm events, or repurposing of structures to accommodate changing Park needs. These actions may have short- and/or long-term, minor to moderate impacts on historic structures.

#### **Conclusion**

Adverse, long-term, negligible to minor impacts on cultural resources could result from electric line repair under Alternative A or the upgrade of the electrical distribution system proposed in Alternative B. Past, present, and future activities, when combined with the potential for continued pressure on historic structures expected under each alternative, would result in adverse, short- and long-term, minor to moderate impacts. However, since the new electric conduit will support the historic use of this structure, Alternative B will also provide long-term beneficial effects. There would be no impairment of park historic structures from actions taken under either alternative.

#### **Visitor Use and Experience**

The area of the analysis is the entire park for both alternatives. Neighboring landowners outside the park boundaries are also included in this area of analysis. In 2008, total visitation (both recreational and non-recreational) was 664,987 (NPS 2009). Visitors come to Catoctin to participate in various activities associated with its natural mountain setting. According to park staff, hiking and foliage viewing in the fall are very popular activities, as is hiking to scenic overlooks. Although the majority of Catoctin's visitors do

not stay overnight in the park, those who do are primarily campers (NPS 2002). Camping is permitted only in campgrounds, cabins, and shelters. Total overnight stays numbered 36,175 in 2008 (NPS 2009). Owens Creek campground is open mid-April through the third week of October. The roads of Catoctin Mountain Park offer scenic driving all year, but portions of Park Central Road and Manahan Road are closed to vehicles in winter.

#### **Alternative A – No Action.**

Currently, disruptions to the electrical system can cause inconvenience to visitors through the loss of electrical power in public use areas. Additionally, prolonged disruptions could affect water availability as this electrical service powers one of the Park water distribution systems. Also, noise from heavy equipment could be disruptive to the natural experience of some park visitors, including hikers and campers. These impacts are expected to be short-term and minor as the effects will only be experienced by visitors before a repair is made. However, since repeated line failures are expected if the electrical system is not upgraded, the impacts can be considered long-term in duration.

#### **Alternative B (NPS Preferred) – Upgrade the electrical distribution system on the west side of the Park.**

The proposed action should increase the safety and reliability of the power distribution system on the west side of the Park, which includes the Owens Creek Campground. Reducing the number of power failures should result in a long term beneficial impact on Visitor Use and Experience. During construction, however, land restrictions or road closures may be in effect along Park roads. Additionally, noise from heavy equipment could be disruptive to the natural experience of some park visitors, including hikers and campers. These restrictions and/or noise could impact visitor experience and/or movement through the Park and result in short-term negligible adverse impacts.

#### **Cumulative Effects**

Staff at Catoctin expects a 3% average yearly increase in visitation in future years, as well as increased pressure for various recreational uses, which could adversely affect visitor experience. However, park staff also anticipates an increase in scenic driving as opposed to walking, which could ease the burden on park resources from increased recreational activities. Increased impacts to the forest are expected from increased development within the park, increased road widening and construction projects, and increased visitor use. The park's efforts to control invasive exotic plant species, gypsy moths, chestnut blight, dogwood anthracnose, hemlock woolly adelgid, and other pests would benefit forest resources and their ability to naturally regenerate. The park's plans to implement limited prescribed burning for research purposes in the future would also benefit Catoctin's forest. All of these activities, when combined with the continued pressure on visitor experience, would result in both adverse and beneficial cumulative impacts to visitors' ability to use the Park and enjoy scenic views and species diversity. Adverse cumulative impacts would be long term and minor.

#### **Conclusion.**

Adverse, short-term, negligible to minor impacts on visitor use and experience could result from electric line repair under Alternative A or the upgrade of the electrical distribution system proposed in alternative B. Past, present, and future activities both inside and outside the park, when combined with Alternative A would result in adverse, short- and long-term, minor to moderate impacts; and when combined with Alternative B, would result in overall beneficial long-term, minor to moderate impacts. There would be no impairment of park visitor use and experience from actions taken under either alternative.

#### **Health and Safety**

The study area for this analysis is Catoctin Mountain Park. Visitation at Catoctin is expected to sustain an average increase of 3% in future years, increasing pressure for various recreational uses and the potential

for accidents as more people become concentrated in popular locations. Despite increased use, Catoctin has been meeting its visitor safety goal of two accidents per 100,000 visitor days. The safety of both visitors and NPS employees at Catoctin Mountain Park could be affected by implementation of the proposed electrical upgrade.

**Alternative A – No Action.**

Park staff would continue to make repairs to failing lines under alternative A. No accidents or injuries have occurred to visitors as a result of such activities or from a lack of electrical power, and no accidents are anticipated from their continuation. Additionally, no accidents have been reported among Park staff or contractors as a result of electrical power loss, however, there would be a higher risk of accident of injury to this group should repairs to electrical lines be attempted at night. Therefore, adverse, long-term, negligible impacts are expected, with visitors, employees and contractors experiencing no or only slight, reported injuries.

**Alternative B (NPS Preferred) – Upgrade the electrical distribution system on the west side of the Park.**

Under this alternative, safe reliable power would be provided to the west side of the Park. No accidents or injuries have occurred to visitors, Park staff or contractors as a result from a lack of electrical power, though reliable power availability would be a positive benefit. Therefore, beneficial, long-term, negligible to minor impacts are expected to the health and safety of visitors and Park staff.

**Cumulative Effects.**

Some Park visitors engage in certain activities at Catoctin that are inherently more dangerous than others, such as rock climbing. However, only 25 people are permitted to climb in the park at any one time, and permits are not issued during periods of high visitor use or unsafe conditions (NPS 2005). Few park visitors engage in rock climbing, as the majority come to Catoctin to view wildlife and scenery (82%), drive through the park (61%), and hike for one hour or more (46%). Therefore, accidents related to high-risk activities such as climbing are very infrequent, resulting in only negligible impacts to visitor safety. Accidents that may occur as a result of other visitor activities, such as tripping, would combine with the negligible impacts expected under these alternatives, resulting in adverse, long-term, negligible cumulative impacts.

**Conclusion**

Adverse, long-term, negligible impacts would likely occur under no-action and action alternative, as it is expected that no discernible effects to visitor safety would result from either. Cumulative impacts would primarily be related to other injuries that visitors could sustain in the park; these impacts would also be adverse, long term, and negligible.

## COORDINATION AND CONSULTATION

Coordination with state and federal agencies was conducted during the internal scoping process to identify issues and/or concerns related to the human environment within Catoctin Mountain Park.

All consultations mandated in Section 106 of the National Historic Preservation Act of 1966, occurred as part of the development of this EA. There is one National Register structure and an eligible cultural landscape located in the proposed project area. A Phase I archaeological survey of the Ike Smith Area, conducted as part of the EA and Section 106 process, identified a possible historic dump site in the area. As a result of this finding, a new route was proposed to avoid any impacts to archeological resources. The actions proposed in this document were reviewed by the National Capital Regional Cultural Resource Team and Park Resources Management Staff. An assessment of “No Adverse Effect” to cultural resources as a result of the proposed upgrade of the electrical distribution system was delivered. The actions qualified for streamlined review under the programmatic agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers. The proposed actions met the criteria for allowable maintenance or replacement of non-historic utility lines, transmission lines and fences.

In accordance with Section 7 of the Endangered Species Act of 1973, on June 12, 2009, letters were sent by Catoctin Mountain Park to solicit comments from the USFWS (Appendix B) and Maryland Wildlife and Heritage Service (Appendix C) regarding the proposed upgrade of the Park electrical distribution system and the potential for this action to affect any state or federally listed species. Responses have not yet been received from these agencies regarding this project. Park staff work closely with both the FWS and State of Maryland to identify and protect rare, threatened and endangered species within the Park, and expect that both will concur that the project would have no impact on any federal candidate species or state-listed threatened, endangered candidate, rare, declining, and sensitive species. Should any concerns arise from these consultations or comments received during public review of this EA, this impact topic will be further analyzed.

The proposed action involves work in and around Owens Creek and the associated floodplain, and these activities are regulated by the State of Maryland. Consultation with the Maryland Department of the Environment Water Management Administration began in 2006. An Authorization to Proceed was granted on April 29, 2009 (Appendix D). A U.S. Army Corps of Engineers Permit was issued concurrently (Appendix E).

## **LIST OF PREPARERS**

### **NATIONAL PARK SERVICE – Catoctin Mountain Park**

Tina Cartwright, Chief of Maintenance

Sean Denniston, Chief, Division of Resources Management

Brandy Geiger, GIS Intern

Becky Loncosky, Biologist

Mel Poole, Superintendent

Robert Wilhide, Building and Utilities Supervisor

### **NATIONAL PARK SERVICE – National Capital Region**

David Hayes, Regional Planner / Regional Environmental Coordinator

Karen Orrence, Archeologist

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**APPENDIX A – Press Release announcing availability of  
Environmental Assessment**



National Park Service  
U.S. Department of the Interior

Catoctin Mountain Park

6602 Foxville Road  
Thurmont, MD 21788

(301) 663-9388 phone  
(301) 271-2764 fax

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## Catoctin Mountain Park News Release

For Release: June 30, 2009

Contact: Mel Poole, Superintendent

### **Catoctin Mountain Park Announces the Availability of the Draft Environmental Assessment to Upgrade the Park Primary Electrical Distribution System for Review and Comment**

The Draft Environmental Assessment for upgrading the electrical distribution system on the west side of Catoctin Mountain Park is available for public review on-line at the National Park Service's Planning, Environment and Public Comment (PEPC) web site at <http://parkplanning.nps.gov/cato> and on the Catoctin Mountain Park web site at <http://www.nps.gov/cato>. Bound copies are also available for review at the Park Visitor Center located at the intersection of Maryland Route 77 and Park Central Road, at Park Headquarters located approximately 2 miles west of Thurmont on Maryland Route 77, and at the public libraries in Frederick, Thurmont, Smithsburg, and Hagerstown.

This Environmental Assessment (EA) will provide decision-makers with information and analysis of alternatives and potential impacts of the redesign of the primary electrical distribution system on the west side of the Park. This redesign would include the addition of new primary electrical lines underground in conduit, as well as new switches, fuses, meters, fault locators, manholes, equipment cabinets, and transformers. The existing failing underground lines would be abandoned in place.

We encourage comments to be submitted on-line at the PEPC web site at <http://parkplanning.nps.gov/cato>. In the PEPC web site select *Upgrade the Park Primary Electrical Distribution System- Phase III* from the list of Park projects to download the document and submit on-line comments.

Written comments can also be submitted to: Superintendent, Catoctin Mountain Park, 6602 Foxville Road, Thurmont, Maryland 21788. Comments will be accepted until July 20th, 2009. For questions or further information, please contact Sean Denniston, Resources Manager, Catoctin Mountain Park at (301) 416-0536.

Catoctin Mountain Park is one of 391 units administered by the National Park Service, U.S. Department of the Interior. The Park Visitor Center, located on State Route 77 three miles west of Thurmont, Maryland, is open daily from 10:00 a.m. until 4:30 p.m., and from 8:30 a.m. until 5:00 p.m. on Saturdays and Sundays.

Correspondence should be addressed to: Superintendent, Catoctin Mountain Park, 6602 Foxville Road, Thurmont, MD 21788. Our website address is [www.nps.gov/cato](http://www.nps.gov/cato). General information can be obtained by calling the Visitor Center at (301) 663-9388.

-NPS-

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## **APPENDIX B – Request for Consultation with USFWS**



# United States Department of the Interior

## NATIONAL PARK SERVICE

National Capital Area  
Catoctin Mountain Park  
6602 Foxville Road  
Thurmont, Maryland 21788

IN REPLY REFER TO:

L76 (NCR CATO)

June 12, 2009

Ms. Mary J. Ratnaswamy, Program Leader  
Endangered Species  
U.S. Fish and Wildlife Service  
Chesapeake Bay Field Office  
Ecological Services  
177 Admiral Cochrane Drive  
Annapolis, MD 21401

Dear Ms. Ratnaswamy:

Catoctin Mountain Park is in the process of preparing an Environmental Assessment to upgrade the electrical distribution system on the west side of the Park. As part of the National Environmental Policy Act process and in accordance with Section 7 of the Endangered Species Act (87 Stat. 884. as amended; 16 U.S.C. 1531 *et seq.*), Catoctin Mountain Park is requesting a Section 7 consultation on Threatened and Endangered Species within the vicinity of the park. We are also contacting the Maryland Wildlife and Heritage Service on State of Maryland Listed Species.

Enclosed is a Catoctin Mountain Park brochure and a map showing the proposed project area. This area is located on the Blue Ridge Summit United States Geological Survey Quad map.

If you have any questions please contact Sean Denniston, Resources Manager at (301) 416-0536. Thank you for your assistance in this matter.

Sincerely,

J. Mel Poole  
Superintendent

enclosures

## **APPENDIX C – Request for Consultation with MD DNR**



# United States Department of the Interior

## NATIONAL PARK SERVICE

National Capital Area

Catoctin Mountain Park

6602 Foxville Road

Thurmont, Maryland 21788

IN REPLY REFER TO:

L76 (NCR CATO)

June 12, 2009

Ms. Lori A. Byrne  
Environmental Review Specialist  
Maryland Wildlife & Heritage Service  
Tawes State Office Building  
Annapolis, MD 21401

Dear Ms. Byrne:

Catoctin Mountain Park is in the process of preparing an Environmental Assessment to upgrade the electrical distribution system on the west side of the Park. As part of the National Environmental Policy Act process we are requesting consultation on State Rare, Threatened and Endangered Species within the vicinity of the park. We are also contacting the United States Fish and Wildlife Service for federally listed species.

This project will involve the placement of new underground electrical conduit and support infrastructure along existing Park roads and utility right of ways. A small portion of original routing of electrical and water lines was across the bed of Owens Creek. In order to avoid any impacts to the stream by replacing the electric lines in this corridor, the preferred alternative calls for directional drilling six feet beneath the stream bed. This activity has been authorized by the State of Maryland Department of the Environment, Water Management Administration (Authorization Number: 2006637479/06-NT-3384). The only new area of disturbance will be a short section of new road added to service the Ike Smith Pump House.

Enclosed is a Catoctin Mountain Park brochure and a map showing the proposed project area.

If you have any questions please contact Sean Denniston, Resources Manager at (301) 416-0536. Thank you for your assistance in this matter.

Sincerely,

J. Mel Poole  
Superintendent

enclosures

## **APPENDIX D – MD DOE – Waterways Permit**

STATE OF MARYLAND  
DEPARTMENT OF THE ENVIRONMENT  
WATER MANAGEMENT ADMINISTRATION  
AUTHORIZATION TO PROCEED

AUTHORIZATION NUMBER: 200667479/06-NT-3384

EFFECTIVE DATE: April 29, 2009

EXPIRATION DATE: April 28, 2012

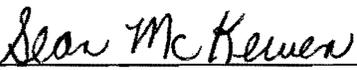
AUTHORIZED PERSON: Catoctin Mountain Park  
National Park Service  
6602 Foxville Road  
Thurmont, MD 21788  
Attn: Superintendent Mel Poole



IN ACCORDANCE WITH ENVIRONMENT ARTICLE §5-503(a) AND §5-906(b), ANNOTATED CODE OF MARYLAND (2007 REPLACEMENT VOLUME), COMAR 26.17.04 AND 26.23.01, AND 26.08.02 AND THE ATTACHED CONDITIONS OF AUTHORIZATIONS, CATOCTIN MOUNTAIN PARK, NATIONAL PARK SERVICE ("AUTHORIZED PERSON"), IS HEREBY AUTHORIZED BY THE WATER MANAGEMENT ADMINISTRATION ("ADMINISTRATION") TO CONDUCT A REGULATED ACTIVITY IN A NONTIDAL WETLAND, BUFFER, OR EXPANDED BUFFER, AND/OR TO CHANGE THE COURSE, CURRENT OR CROSS-SECTION OF WATERS OF THE STATE, IN ACCORDANCE WITH THE ATTACHED PLANS APPROVED BY THE ADMINISTRATION ON MARCH 17, 2009 ("APPROVED PLAN") AND PREPARED BY THE APPLICANT AND INCORPORATED HEREIN, AS DESCRIBED BELOW:

Installation of an electric line under Owens Creek to service Catoctin Mountain Park. The line will be installed by directional drill method with minor, temporary 100-year floodplain impacts. If drilling hits refusal, the line will be trenched resulting in temporary impact to 4 linear feet (80 square feet) of stream. The project location is the sawmill exhibit at Catoctin Mountain Park in Frederick County.

MD Grid Coordinates: N:221133 E:358422

  
Amanda L. Sigillito  
Division Chief  
Nontidal Wetlands & Waterways Division

Attachments: Conditions of Authorization  
MDSPGP3, Cat. I, C, I  
Plans

cc: WMA Compliance Division w/ file  
Sean McKewen/MDE  
John Hart/Catoctin Mountain Park  
Dave Walbeck, MDE/Technical Assistance & Mitigation

1. **Validity**: Authorization is valid only for use by Authorized Person. Authorization may be transferred only with prior written approval of the Administration. In the event of transfer, transferee agrees to comply with all terms and conditions of Authorization.
2. **Initiation of Work, Modifications and Extension of Term**: Authorized Person shall initiate authorized activities with two (2) years of the Effective Date of this Authorization or the Authorization shall expire. Authorized Person may submit written requests to the Administration for (a) extension of the period for initiation of work, (b) modification of Authorization, including the Approved Plan, or, (c) not later than 45 days prior to Expiration Date, an extension of the term. Requests for modification shall be in accordance with applicable regulations and shall state reasons for changes, and shall indicate the impacts on nontidal wetlands, streams, and the floodplain, as applicable. The Administration may grant a request at its sole discretion.
3. **Responsibility and Compliance**: Authorized Person is fully responsible for all work performed and activities authorized by this Authorization shall be performed in compliance with this Authorization and Approved Plan. Authorized Person agrees that a copy of the Authorization and Approved Plan shall be kept at the construction site and provided to its employees, agents and contractors. A person (including Authorized Person, its employees, agents or contractors) who violates or fails to comply with the terms and conditions of this Authorization, Approved Plan or an administrative order may be subject to penalties in accordance with §5-514 and §5-911, Department of the Environment Article, Annotated Code of Maryland (2007 Replacement Volume).
4. **Failure to Comply**: If Authorized Person, its employees, agents or contractors fail to comply with this Authorization or Approved Plan, the Administration may, in its discretion, issue an administrative order requiring Authorized Person, its employees, agents and contractors to cease and desist any activities which violate this Authorization, or the Administration may take any other enforcement action available to it by law, including filing civil or criminal charges.
5. **Suspension or Revocation**: Authorization may be suspended or revoked by the Administration, after notice of opportunity for a hearing, if Authorized Person: (a) submits false or inaccurate information in Permit application or subsequently required submittals; (b) deviates from the Approved Plan, specifications, terms and conditions; (c) violates, or is about to violate terms and conditions of this Authorization; (d) violates, or is about to violate, any regulation promulgated pursuant to Title 5, Department of the Environment Article, Annotated Code of Maryland as amended; (e) fails to allow authorized representatives of the Administration to enter the site of authorized activities at any reasonable time to conduct inspections and evaluations; (f) fails to comply with the requirements of an administrative action or order issued by the Administration; or (g) does not have vested rights under this Authorization and new information, changes in site conditions, or amended regulatory requirements necessitate revocation or suspension.
6. **Other Approvals**: Authorization does not authorize any injury to private property, any invasion of rights, or any infringement of federal, State or local laws or regulations, nor does it obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.
7. **Site Access**: Authorized Person shall allow authorized representatives of the Administration access to the site of authorized activities during normal business hours to conduct inspections and evaluations necessary to assure compliance with this Authorization. Authorized Person shall provide necessary assistance to effectively and safely conduct such inspections and evaluations.
8. **Inspection Notification**: Authorized Person shall notify the Administration's Compliance Program at least five (5) days before starting authorized activities and five (5) days after completion. For Allegany, Garrett, and Washington counties, Authorized Person shall call 301-689-1480. For Carroll, Frederick, Howard and Montgomery counties, Authorized Person shall call 301-665-2850. For Baltimore City, Anne Arundel, Baltimore, Calvert, Charles, Prince George's and St. Mary's, Authorized Person shall call 410-537-3510. For Caroline, Cecil, Dorchester, Harford, Kent, Queen Anne's, Somerset, Talbot, Wicomico and Worcester, Authorized Person shall call 410-901-4020.
9. **Sediment Control**: Authorized Person shall obtain approval from the Frederick County Soil Conservation District for a grading and sediment control plan specifying soil erosion control measures. The approved grading and sediment control plan shall be included in the Approved Plan, and shall be available at the construction site.

**Federally Mandated State Authorizations:**

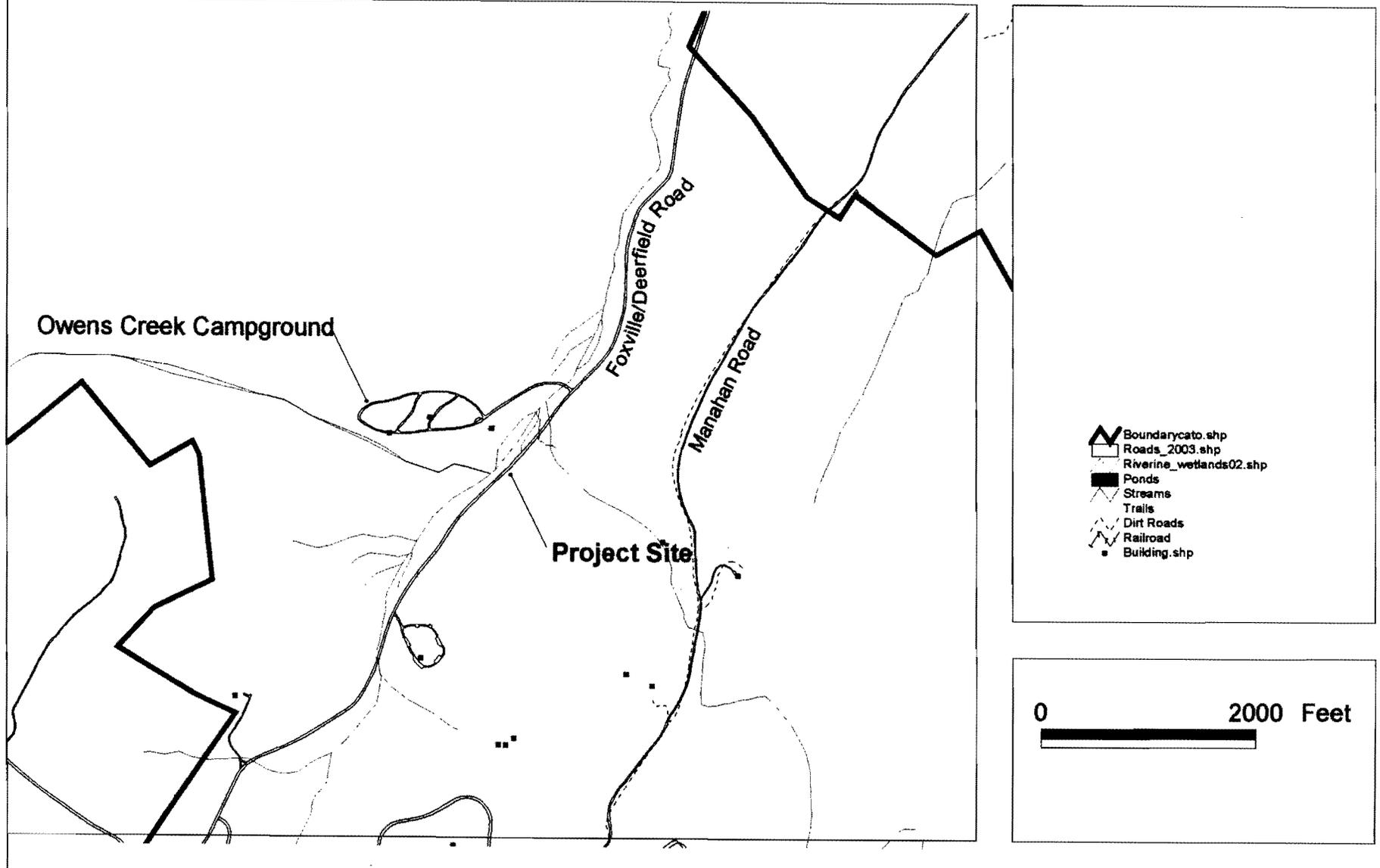
**X Water Quality Certification:** Water Quality Certification is granted for this project provided that all work is performed in accordance with the authorized project description and associated conditions.

**X Coastal Zone Consistency:** This Authorization constitutes official notification that authorized activities are consistent with the Maryland Coastal Zone Management Program, as required by Section 307 of the Federal Coastal Zone Management Act of 1972, as amended. Activities within the following counties are not subject to this requirement:

Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington.

10. **Best Management Practices During Construction:** Authorized Person, its employees, agents and contractors shall conduct authorized activities in a manner consistent with the Best Management Practices specified by the Administration.
11. **Disposal of Excess:** Unless otherwise shown on the Approved Plan, all excess fill, spoil material, debris, and construction material shall be disposed of outside of nontidal wetlands, nontidal wetlands buffers, and the 100-year floodplain, and in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands.
12. **Temporary Staging Areas:** Temporary construction trailers or structures, staging areas and stockpiles shall not be located within nontidal wetlands, nontidal wetlands buffers, or the 100-year floodplain unless specifically included on the Approved Plan.
13. **Temporary Stream Access Crossings:** Temporary stream access crossings shall not be constructed or utilized unless shown on the Approved Plan. If temporary stream access crossings are determined necessary prior to initiation of work or at any time during construction, Authorized Person, its employees, agents or contractors shall submit a written request to the Administration and secure the necessary permits or approvals for such crossings before installation of the crossings. Temporary stream access crossings shall be removed and the disturbance stabilized prior to completion of authorized activity or within one (1) year of installation.
14. **Discharge:** Runoff or accumulated water containing sediment or other suspended materials shall not be discharged into waters of the State unless treated by an approved sediment control device or structure.
15. **Instream Construction Prohibition:**  
 No instream construction is to occur under this Authorization;  
 To protect important aquatic species, motor driven construction equipment shall not be allowed within stream channels unless on authorized ford crossings. Activities within stream channels are prohibited as determined by the classification of the stream (COMAR 26.08.02.08): Owens Creek is a Use-III waterway; in-stream work may not be conducted from October 1 through April 30 inclusive, of any year.
16. **Instream Blasting:** Authorized Person shall obtain prior written approval from the Administration before blasting or using explosives in the stream channel.
17. **Minimum Disturbance:** Any disturbance of stream banks, channel bottom, wetlands, and wetlands buffer authorized by this Authorization or Approved Plan shall be the minimum necessary to conduct permitted activities. All disturbed areas shall be stabilized vegetatively no later than seven (7) days after construction is completed or in accordance with the approved grading or sediment and erosion control plan.
18. **Restoration of Construction Site:** Authorized Person shall restore the construction site upon completion of authorized activities. Undercutting, meandering or degradation of the stream banks or channel bottom, any deposition of sediment or other materials, and any alteration of wetland vegetation, soils, or hydrology, resulting directly or indirectly from construction or authorized activities, shall be corrected by Authorized Person as directed by the Administration.

# Catoctin Mountain Park



## **MGWC 4.2: UTILITY CROSSING**

### ***Temporary in-stream construction***

#### **DESCRIPTION**

The work should consist of installing erosion control devices in and adjacent to the construction of utility crossings.

#### **INSTALLATION GUIDELINES**

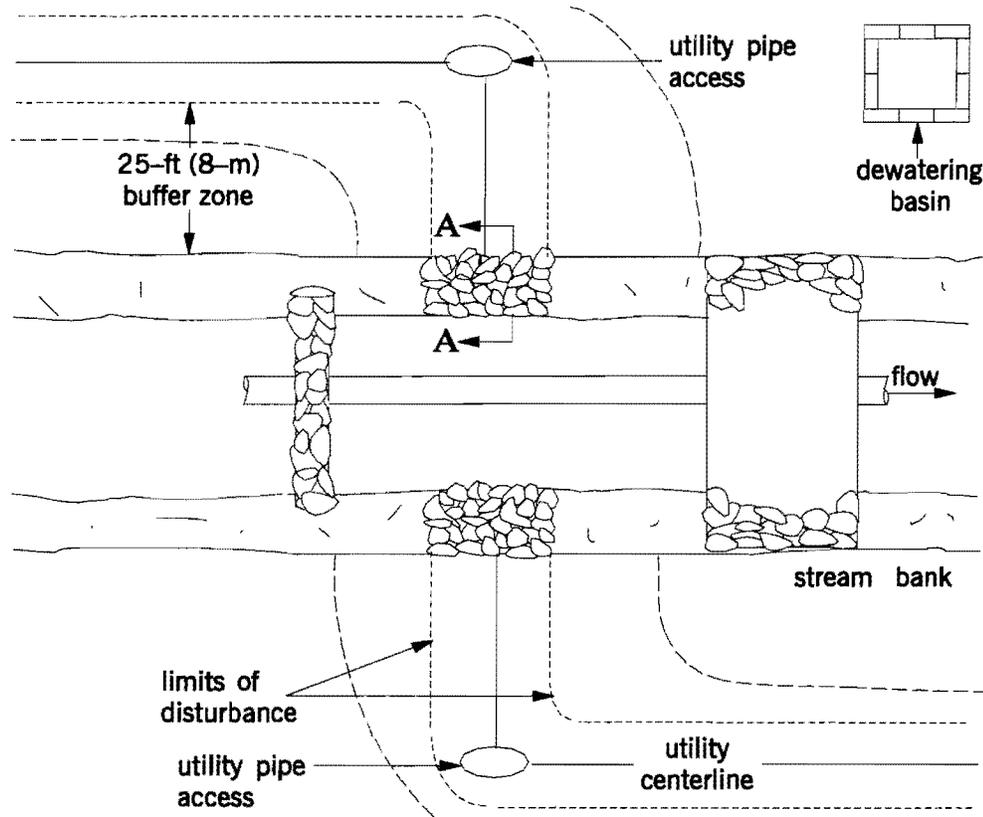
All erosion and sediment control devices, including dewatering basins, should be implemented as the first order of business according to a plan approved by the WMA or local authority. (See *the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control*.) The proposed construction sequence is as follows (refer to Detail 4.2):

1. The contractor should insure that a continuous perimeter control barrier is in place to minimize the amount of pollutants entering the flow. A diversion pipe as shown in MGWC 1.4: Diversion Pipe or other measure should be installed and sandbag or stone barriers as shown in MGWC 1.5: Sandbag/Stone Diversion should be constructed according to specifications to divert the streamflow.
2. Excavated topsoil and subsoil should be kept separate, placed on the upland side of the excavation, and replaced in their natural order.
3. All construction should take place during stream low flows. The length of construction time should be limited to a maximum of 5 consecutive days for each crossing.
4. All utility crossings should be placed a minimum of 3 feet (1 meter) beneath the stream bed unless an alternative section is specifically approved by the WMA. For instances where a 3-foot cover is not viable, two alternate stabilization options are given in the Detail 4.2. A low flow channel shall be constructed through all riprap placements across the stream bed.
5. The stream should be diverted by an approved temporary stream diversion, the construction area should be dewatered, and any disturbed banks should be stabilized. The contractor may elect to construct the utility crossing in two stages. In this case, a WMA approved flow barrier may be constructed to keep the construction area dry.
6. Once the crossing is completed, the diversion should be removed from upstream to downstream. Sediment control devices, including perimeter erosion controls, are to remain in place until all disturbed areas are stabilized in accordance with an approved sediment and erosion control plan and the inspection authority approves their removal.

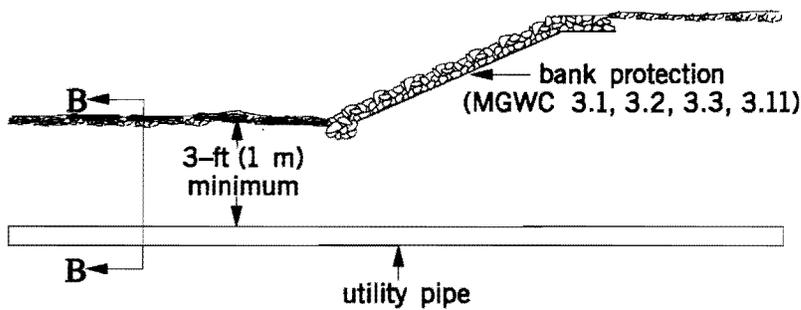
# Maryland's Guidelines To Waterway Construction

## DETAIL 4.2(a): UTILITY CROSSING

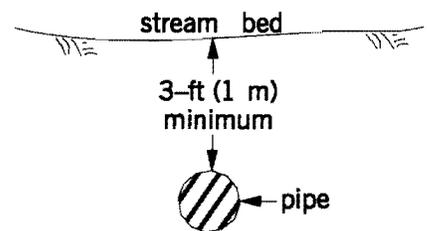
### PLAN VIEW



### SECTION A-A



### SECTION B-B



## **MGWC 1.5: SANDBAG/STONE CHANNEL DIVERSION**

*Temporary measure for dewatering in-channel construction sites*

### **DESCRIPTION**

The work should consist of installing sandbag or stone flow diversions for the purpose of erosion control when construction activities occur within the stream channel.

### **EFFECTIVE USES & LIMITATIONS**

Diversions are used to isolate work areas from flow during the construction of in-stream projects. Diversions which have an insufficient flow capacity can fail and severely erode the disturbed channel section under construction. Therefore, in-channel construction activities should occur only during periods of low rainfall. This temporary measure may not be practical in large channels.

### **MATERIAL SPECIFICATIONS**

Materials for sandbag and stone stream diversions should meet the following requirements:

- *Riprap*: Riprap should be washed and have a minimum diameter of 6 inches (0.15 meters).
- *Sandbags*: Sandbags should consist of materials which are resistant to ultra-violet radiation, tearing, and puncture and should be woven tightly enough to prevent leakage of the fill material (i.e., sand, fine gravel, etc.).
- *Sheeting*: Sheeting should consist of polyethylene or other materials which are impervious and resistant to puncture and tearing.

### **INSTALLATION GUIDELINES**

All erosion and sediment control devices, including dewatering basins, should be implemented as the first order of business according to a plan approved by the WMA or local authority. Installation should proceed from upstream to downstream during periods of low flow. If necessary, silt fence or straw bales should be installed around the perimeter of the work area.

Sandbag/stone diversions can be used independently or as components of other stream diversion techniques. Installation of this measure should proceed as follows (refer to Detail 1.5):

1. The diversion structure should be installed from upstream to downstream.
2. The height of the sandbag/stone diversion should be a function of the duration of the project in the stream reach. For projects with a duration less than 2 weeks, the height of the diversion should be one half the streambank height, measured from the channel bed, plus 1 foot (0.3 meters) or bankfull height, whichever is greater. For projects of longer duration, the top of the sandbag or stone diversion should correspond to bankfull height. For diversion structures utilizing sandbags, the stream bed should be hand prepared prior to placement of the base layer of sandbags in order to ensure a water tight fit. Additionally, it may be necessary to prepare the bank in a similar fashion.
3. All excavated material should be deposited and stabilized in an approved area outside the 100-year floodplain unless otherwise authorized by the WMA.
4. Sediment-laden water from the construction area should be pumped to a dewatering basin.

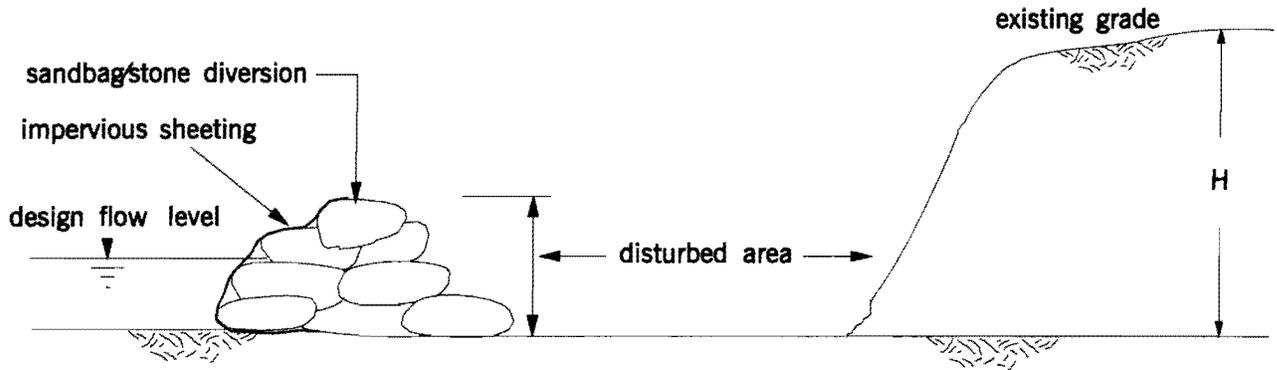
## **MGWC 1.5: SANDBAG/STONE CHANNEL DIVERSION**

5. Sheeting on the diversion should be positioned such that the upstream portion covers the downstream portion with at least a 18-inch (0.45 meters) overlap.
6. Sandbag or stone diversions should not obstruct more than 45% of the stream width. Additionally, bank stabilization measures should be placed in the constricted section if accelerated erosion and bank scour are observed during the construction time or if project time is expected to last more than 2 weeks.
7. Prior to removal of these temporary structures, any accumulated sediment should be removed, deposited and stabilized in an approved area outside the 100-year floodplain unless authorized by the WMA.
8. Sediment control devices are to remain in place until all disturbed areas are stabilized in accordance with an approved sediment and erosion control plan and the inspecting authority approves their removal.

# Maryland's Guidelines To Waterway Construction

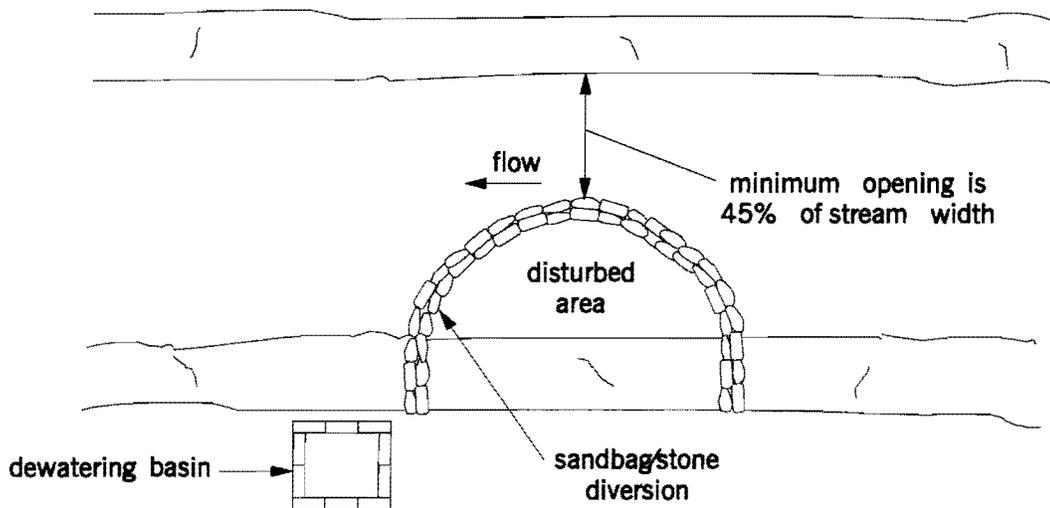
## DETAIL 1.5: SANDBAG/STONE DIVERSION

### TRANSVERSE SECTION VIEW



$H/2 + 1$  ft (0.3 m) for projects of duration < 2 weeks;  
 2-year flood elevation for projects of longer duration

### PLAN VIEW



## **APPENDIX E – USACOE Permit**



REPLY TO  
ATTENTION

**DEPARTMENT OF THE ARMY**  
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
P.O. BOX 1715  
BALTIMORE, MD 21203-1715

**MDSPGP-3 PERMIT COMPLIANCE, SELF-CERTIFICATION FORM (10/1/06)**

Corps Permit Tracking No. 200667479                      Category & Activity Number I, C, 1  
Project Name Catoctin Mountain Park/Utility Line      Applicant Name Catoctin Mountain Park-National  
Park Service  
Waterway Owens Creek                                      County Frederick

Dear Permittee:

In accordance with the compliance certification condition of your MDSPGP-3 authorization, you are required upon completion of all permitted work, or if mitigation/compensation is required, within 60 days following completion of the authorized work and any required mitigation (but not the mitigation monitoring, which requires separate submittals), to complete and sign this certification form and return it to the Corps of Engineers, Baltimore District to the address shown above and include ATTN: CENAB-OP-R.

Please note that the permitted activity is subject to compliance inspections by U.S. Army Corps of Engineers representatives. As a condition of this permit, failure to return this notification form, provide the required information below, or to perform the authorized work in compliance with the permit, can result in suspension, modification or revocation of your authorization in accordance with 33 CFR Part 325.7 and/or administrative, civil, and/or criminal penalties, in accordance with 33 CFR part 326.

**Please provide the following information:**

1. Date authorized work commenced: \_\_\_\_\_ 2. Date authorized work completed: \_\_\_\_\_
3. Was all work and any required mitigation, completed in accordance with your MDSPGP-3 authorization, including all general and/or specific conditions? YES \_\_\_ NO \_\_\_
4. Explain in detail any deviations to the authorized work and/or mitigation (use additional sheets if necessary)  
\_\_\_\_\_  
\_\_\_\_\_
5. Was mitigation accomplished through a contribution to the Maryland Nontidal Wetlands Compensation Fund?  
YES \_\_\_ NO \_\_\_ (if NO complete Nos. 6 and 7 below).
6. Wetland Mitigation: Required? YES \_\_\_ NO \_\_\_ Required Completion Date \_\_\_\_\_  
Completed? YES \_\_\_ NO \_\_\_ Mitigation Monitoring Reports Required? YES \_\_\_ NO \_\_\_
7. Attach labeled photographs showing completed work including mitigation area(s).

I hereby certify that, except as noted above, that all work, including mitigation, has been completed in accordance with the terms and conditions, including special conditions of the above referenced permit.

Signature of Permittee \_\_\_\_\_ Date \_\_\_\_\_

Signature of Contractor/Agent \_\_\_\_\_ Date \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Telephone: \_\_\_\_\_



REPLY TO  
ATTENTION

**DEPARTMENT OF THE ARMY**  
**BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS**  
**P.O. BOX 1716**  
**BALTIMORE, MD 21203-1716**

**IMPORTANT INFORMATION ABOUT YOUR PROJECT**

Corps Permit Tracking No.: 200667479 Date: April 29, 2009

Permittee/Project Name: Catoctin Mountain Park/National Park Service/Utility Line MDSPGP-3 Category and Activity No.: I, C, 1

Dear Applicant:

The U. S. Army Corps of Engineers, Baltimore District, has determined that the proposed work meets the terms and conditions of the Maryland State Programmatic General Permit-3 (MDSPGP-3), provided the work is completed in compliance with the plan(s) (enclosed), the standard MDSPGP-3 conditions (enclosed), the applicable MDSPGP-3 activity-specific conditions (enclosed), and special conditions (enclosed, if applicable). This MDSPGP-3 verification is provided pursuant to Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act. If any of the information contained in your application and/or plans is later found to be in error, the MDSPGP-3 authorization for your project may be modified, suspended, or revoked.

As a condition of the MDSPGP-3 authorization, you, the permittee, are required to complete and sign the enclosed Compliance Self-Certification Form regarding the completed work and any required mitigation, and return to the above address within 60 days following completion of the authorized work and any required mitigation.

In addition, please note, if you sell the property associated with this permit, when the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new property owner(s). Although the construction period for work authorized by this MDSPGP-3 is finite, the permit itself, with its limitations, does not expire. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, you must have the transferee (new owner) provide a mailing address and telephone number along with their signature and date in the space provided below, and mail a copy to the above address.

Your MDSPGP-3 authorization is valid until September 30, 2011 unless the MDSPGP-3 is modified, reissued, or revoked. You must remain informed of the changes to the MDSPGP-3. When changes to the MDSPGP-3 occur, a public notice announcing the changes will be issued. If you have commenced construction or are under contract to commence construction of this authorized work prior to the expiration, modification, or revocation date of the MDSPGP-3 itself, you have 12 months from the effective date of the MDSPGP-3's expiration, modification or revocation to complete the work under the present terms and conditions of this MDSPGP-3.

In order for this authorization to be valid, you must obtain all required Federal, State, and local permits.

William P. Seib  
Acting Chief, Regulatory Branch

\_\_\_\_\_  
TRANSFEEE SIGNATURE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
AREA CODE / TELEPHONE NO.

\_\_\_\_\_  
PRINTED NAME

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_



REPLY TO  
ATTENTION

**DEPARTMENT OF THE ARMY**  
**BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS**  
**P.O. BOX 1718**  
**BALTIMORE, MD 21203-1718**

Effective October 1, 2006

200667479  
Corps Permit Tracking Number

CENAB-OP-R-MDSPGP-3 (MARYLAND STATE PROGRAMMATIC GENERAL PERMIT-3)

TO WHOM IT MAY CONCERN:

Upon the recommendation of the Chief of Engineers, and under the provisions of Section 404 of the Clean Water Act, as amended, and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), the Secretary of the Army hereby authorizes the discharge of dredged or fill material or the placement of structures into Waters of the United States, including wetlands and navigable waters. These discharges and structures must comply with all the terms and conditions identified in this MDSPGP-3. It has been determined that the project qualifies for the MDSPGP-3. Accordingly, you are authorized to undertake the activity pursuant to:

1. Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403); and/or
2. Section 404 of the Clean Water Act (33 U.S.C. 1344).

You are authorized to perform work in accordance with the terms and conditions specified in Section VI of the MDSPGP-3 effective on October 1, 2006.

**VI. General Conditions:** To qualify for MDSPGP-3 authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any activity-specific conditions in the MDSPGP-3 category list and any case-specific special conditions imposed by the Corps.

**A. General Requirements:**

1. **Other Permits:** Authorization under the MDSPGP-3 does not obviate the need to obtain other Federal, State, or local authorizations required by law.

2. **Applicability:** Applicability of the MDSPGP-3 shall be reviewed with reference to the Corps definition of waters of the United States, including wetlands, and navigable waters of the United States. Applicants are responsible for delineating boundaries of all waters of the United States, including wetland boundaries. The delineation of wetland boundaries shall be accomplished in accordance with the current Federal manual for identifying jurisdictional wetlands and appropriate guidance issued by the Corps of Engineers.

3. **Minimal Effects:** Projects authorized by the MDSPGP-3 shall have no more than minimal individual and cumulative adverse environmental effects.

4. **Discretionary Authority:** Notwithstanding compliance with the terms and conditions of the MDSPGP-3, the Corps retains discretionary authority to require an alternate Corps permit review for any project under all categories of the MDSPGP-3 based on concerns for the aquatic environment or for any other factor of the public interest. This authority may be invoked on a case-by-case basis during the review process for Category III activities whenever the Corps determines that, based on the concerns stated above, the potential consequences of the proposed project warrant individual review. In some rare instances, the Corps may have concerns for the aquatic environment or for any other public interest factor pertaining to a specific proposed project, which has already received a case-specific verification as a Category I activity. In order to evaluate this project under an alternate Corps permit review, the verification must be suspended in accordance with Section VII.E of the MDSPGP-3.

Whenever the Corps notifies an applicant that an alternate Corps permit may be required, authorization under the MDSPGP-3 is voided. No work may be conducted until the individual Corps permit is obtained, or until the Corps notifies the applicant that further review has demonstrated that the work may proceed under the MDSPGP-3.

5. **Single and Complete Projects:** The MDSPGP-3 shall not be used for piecemeal work and shall be applied to single and complete projects, including maintenance activities. All components of a project, including all attendant features both temporary and permanent, shall be reviewed together as constituting one single and complete project. All planned

phases of multi-phased projects (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be applied for and reviewed together as constituting one single and complete project. The MDSPGP-3 shall not be used for any activity or portion of a project, e.g., a pier or boat ramp, that is part of, or dependent on, an overall project, e.g., the dredging of a main navigation channel or a spur channel, for which an individual permit or some other alternate Corps permit is required.

**6. Use of Multiple MDSPGP-3 Category I Activities:** More than one Category I activity may be used to authorize a single and complete project under the MDSPGP-3. However the project must meet the specific requirements of each Category I activity and the total extent of project impacts must not exceed the acreage limit of the Category I activity with the highest specified acreage limit (e.g., if armoring the toe of an existing culvert is constructed under Category I.b(2) with an associated nontidal bank stabilization authorized under Category I.f(1)., the maximum total impact limits to waters of the United States for the single and complete project may not exceed 1.0 acre (43,560 square feet).

**7. Authorized Activities in Navigable Waters Subject to Section 10 of the Rivers and Harbors Act of 1899:**

a. If future operations by the United States require removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable water, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

b. The U.S. Code of Federal Regulations, Title 33, Part 64 states that all structures erected in navigable waters in depths in excess of three feet at mean low water (MLW) require obstruction lights unless the applicant is advised to the contrary by the Coast Guard District Commander. If the structures authorized by this permit are to be built in water depths in excess of three feet at MLW, the permittee must contact the Commander (AOWW), Fifth Coast Guard District, Federal Building, 431 Crawford Street, Portsmouth, Virginia, 23704, to ascertain the need for obstruction lights.

**B. National Concern:**

**1. Historic Properties:** Any activity authorized by the MDSPGP-3 shall comply with Section 106 of the National Historic Preservation Act. MDE, in cooperation with the Maryland Historic Preservation Office, shall conduct an initial review and notify the Corps if any archaeological or other cultural resources are in the vicinity of the project. The Corps may require applicants to perform a survey of archaeological and historical resources in the project area. The Corps shall determine if consultation under Section 106 with MHT or the Advisory Council on Historic Preservation is required. The applicant must notify the Corps if the activity may affect any historic properties listed or eligible for listing, or that the applicant has reason to believe may be eligible for listing on the National Register of Historic Places. If the permittee, during construction of work authorized herein, encounters a previously unidentified archaeological or other cultural resource within the permit area subject to DA jurisdiction that might be eligible for listing in the National Register of Historic Places, the permittee shall immediately stop work in the permit area and notify the District Engineer. The permittee shall not begin or continue work until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity may proceed. Information on the location and existence of historical resources can be obtained from the Maryland Historic Trust, Office of Preservation Services, and the National Register of Historic Places.

**2. National Lands:** Activities authorized by the MDSPGP-3 shall not impinge upon the value of any Federal land, including but not limited to, National Wildlife Refuges, National Forests, National Marine Sanctuaries or any area administered by the National Park Service (e.g., Assateague Island National Seashore).

**3. Endangered Species:** The MDSPGP-3 does not authorize any activity that may affect a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA); or which may destroy or adversely modify the critical habitat of such species unless and until appropriate coordination with the applicable resource agency(s) is complete and all such issues are resolved in accordance with the applicable regulations and the procedures outlined in the MDSPGP-3 Standard Operating Procedures. MDE, in cooperation with DNR, shall conduct an initial review and notify the Corps and FWS or NMFS if any Federally-listed species or critical habitat is likely to be in the vicinity of the project. The Corps shall determine if consultation with FWS or NMFS is required under Section 7 of the ESA. If consultation is required, the applicant, after notification, shall not begin or continue work until notified by the Corps that the requirements of the ESA have been satisfied and that the activity is eligible for authorization. Information on the location of threatened and endangered species and their critical habitat can be obtained from the FWS and NMFS.

4. **Essential Fish Habitat (EFH):** Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act requires an EFH consultation with the NMFS for any action or proposed action authorized, funded, or undertaken by a Federal agency that may adversely affect EFH. EFH has been defined by Congress as “those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.” The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. NMFS has determined that many of the MDSPGP-3 Category I activities are eligible for EFH general or programmatic concurrence and require no further EFH consultation. NMFS, in consultation with the District, has determined that individual EFH consultation is needed for some projects potentially eligible for authorization under Category I (includes those projects requiring EFH screening process under Category II) and all Category III projects of the MDSPGP-3 that may adversely affect EFH. The Corps will coordinate with NMFS as part of the Category II and Category III review procedures. EFH conservation recommendations made by NMFS will normally be included as a permit requirement by the Corps. If the EFH coordination and consultation requirements can not be resolved under the MDSPGP-3 process, an alternate Corps permit review is required for the project.

5. **Wild and Scenic Rivers:** No activity is authorized under the MDSPGP-3 that occurs in a component of the National Wild and Scenic River System, including rivers officially designated by Congress as study rivers for possible inclusion in the system, while such rivers are in an official study status, unless the appropriate Federal agency, with direct management responsibility for the river, has determined in writing that the proposed activity will not adversely affect any National Wild and Scenic River, including study rivers. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U. S. Forest Service, Bureau of Land Management, or U. S. Fish and Wildlife Service.)

6. **Federally Authorized Civil Works Projects:**

a. **Federal Navigation Projects:** The MDSPGP-3 does not authorize interference with any Federal navigation project. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration. (See VI.A.7.a. above)

b. **Other Federally Authorized Civil Work Projects (i.e., flood control, dams, and reservoirs):** The MDSPGP-3 does not authorize interference with any proposed or existing Federally-authorized civil works project.

7. **Federal Liability:** In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project, or uses thereof, as a result of other permitted or unpermitted activities or from natural causes;

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest;

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit;

d. Design or construction deficiencies associated with the permitted work; and

e. Damage claims associated with any future modification, suspension or revocation of the MDSPGP-3 or any specific MDSPGP-3 verification.

8. **Navigation:** Projects authorized under the MDSPGP-3 shall not cause interference with navigation, and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to projects authorized under the MDSPGP-3. Nothing in the MDSPGP-3 shall in any way restrict the District Engineer, U. S. Army Engineer District, Baltimore, from exercising his legal authority to protect the public interest in navigation or from exercising his authority under the Navigation Servitude of the United States. (See VI.A.7.a. above)

### C. Minimization of Environmental Impacts:

1. **Minimization:** Discharges of dredged or fill material into waters of the United States and adverse impacts of such discharges on the aquatic ecosystem shall be avoided and minimized to the maximum extent practicable on-site.
2. **Mitigation:**
  - a. Generally, compensatory mitigation will be required for all permanent tidal or nontidal wetland impacts either through the State's tidal or nontidal wetland compensation fund or by the permittee as required by special condition of the MDSPGP-3 or the State authorization.
  - b. Generally, compensatory mitigation will be required for all permanent impacts of 200 linear feet or greater to stream channels, rivers, and other open waters as appropriate under Federal guidance and to the extent necessary to ensure that the impacts are minimal. A proposed compensatory mitigation proposal may be submitted with the application to expedite the process. The Corps will determine if the project is eligible for authorization under the MDSPGP-3 subject to the applicant's submittal of a compensatory mitigation proposal for stream impacts. Compensatory mitigation plans for projects in or near streams or other open waters will generally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat impact concerns.
3. **Work in Wetlands:** Heavy equipment working in wetlands shall be avoided if possible and, if required, soil and vegetation disturbance shall be minimized by using techniques such as timber mats, geotextile fabric, and vehicles with low-pressure tires. Disturbed areas in wetlands shall be restored to preconstruction contours and elevations upon completion of the work.
4. **Temporary Fill and Mats:** Temporary fill and the use of mats are both considered a discharge of fill material and must be included in the quantification of impact area authorized by the MDSPGP-3. Temporary fill (e.g., access roads, cofferdams) in waters and wetlands authorized by the MDSPGP-3 shall be properly stabilized during use to prevent erosion. Temporary fill in wetlands shall be placed on geotextile fabric laid on the existing wetland grade. Upon completion of the work, all temporary fills shall be disposed of at an upland site, suitably contained to prevent erosion and transport to a waterway or wetland. Temporary fill areas shall be restored to their original, pre-construction contours and revegetated with native wetland species.
5. **Erosion and Sediment Control:** Adequate erosion and sediment control measures, practices and devices, such as vegetated filter strips, geotextile silt fences, phased construction, or other devices or methods, shall be used to reduce erosion and retain sediment on-site during and after construction. These devices and methods shall be capable of (a) preventing erosion, (b) collecting sediment and suspended and floating materials, and (c) filtering fine sediment. Erosion and sediment control devices shall be removed when the work is complete and the site has been successfully stabilized. The sediment collected by these devices shall be removed and placed at an upland location, in a manner that will prevent its later erosion into a waterway or wetland. All exposed soil and other fills shall be permanently stabilized at the earliest practicable date. In-stream work shall be conducted "in the dry" whenever practicable. This should be accomplished using stream diversion devices, other than earthen or stone cofferdams. In addition, work in waters of the United States should be performed during periods of low-flow or no-flow, whenever practicable.
6. **Aquatic Life Movements:** No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions. A low flow channel must be maintained through any discharges placed for armoring across the channel so as to not impede flow in the waterway and/or not to block or impede the movements of anadromous, estuarine and resident fish. NOTE: Please refer to Appendix C for an expanded version of General Condition VI.C.6 entitled, "Guidance for Constructing Man-Made Stream Crossings and Scour Protection for Man-Made Stream Crossings to Pass Migratory Fish in The Coastal Plain Region of Maryland, and Lower Piedmont Region of Cecil, Harford, and Baltimore Counties, Maryland". This document includes recommended guidance on fish passage and hydrological parameters to ensure that man-made stream crossings do not adversely affect migratory fish.

## **7. Water Crossings:**

a. All temporary and permanent crossings of waterbodies shall be suitably bridged, culverted or otherwise constructed to withstand and to prevent the restriction of high flows and tidal flows; to maintain existing low flows; and to prevent the obstruction of movement by aquatic life indigenous to the water body, including anadromous, estuarine, and resident fish species.

b. All water crossings (e.g., utility lines and road crossings) must be constructed roughly perpendicular to waters of the United States, including streams and wetlands. Where a utility line or access road is constructed parallel to a stream corridor, an undisturbed buffer shall be maintained between the utility line/access road and the waterway to avoid or minimize potential future impacts to waters of the United States. These potential impacts would include such issues as sewer line leaks or failures, future stream channel meandering, stream bank instability and failure, and right-of-way maintenance.

c. Water crossings must be constructed "in the dry" whenever practicable. This should be accomplished by using stream diversion devices other than earthen or stone cofferdams.

d. Equipment shall cross streams only at suitably constructed permanent or temporary crossings.

e. Temporary structures and fills shall be removed and the area restored to its original contours and elevations, or to the conditions specified in the approved plans. The temporary structures and the areas of fill associated with these structures must be included in the total waterway/ wetlands impacts.

**8. Discharge of Pollutants:** All activities that are authorized under the MDSPGP-3 and that involve any discharge or relocation of pollutants into waters of the United States shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 U.S.C. 1251 et. Seq.), and applicable State and local laws and regulations.

**9. Spawning Areas:** Activities, including structures and work in navigable waters of the United States or discharges of dredged or fill materials, in fish and shellfish spawning or nursery areas during spawning seasons shall be avoided. Impacts to these areas shall be avoided or minimized to the maximum extent practicable during all other times of year. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

**10. Waterfowl Breeding and Wintering Areas:** Discharges into breeding and wintering areas for migratory waterfowl shall be avoided to the maximum extent practicable.

**11. Environmental Values:** The permittee shall make every reasonable effort to construct or operate the work authorized under the MDSPGP-3 in a manner that maintains as many environmental values as practicable, and that avoids or minimizes any adverse impacts on existing fish, wildlife, and natural environmental values.

## **D. Procedural Conditions:**

**1. Inspections:** The permittee shall permit the District Engineer or his authorized representative(s) to make periodic inspections at any time deemed necessary to ensure that the work is being performed in accordance with the terms and conditions of the MDSPGP-3. The District Engineer may also require post-construction engineering drawings (as-built plans) for completed work, and post-dredging survey drawings for any dredging work.

**2. Compliance Certification:** Every permittee who receives a written MDSPGP-3 verification shall submit a signed Compliance Certification Form within 60 days following completion of the authorized work and any required mitigation (but not mitigation monitoring, which requires separate submittals). Failure to submit the Compliance Certification Form by the permittee could result in the Corps taking appropriate non-compliance enforcement action against the permit holder. The blank Compliance Certification Form will be forwarded to the permittee with the MDSPGP-3 verification. The completed form will include the following:

a. A statement that the authorized work either was or was not done in accordance with the MDSPGP-3 verification, including any general and/or specific conditions. If the activity was not done in accordance with the MDSPGP-3 verification, including any general and/or specific conditions, the permittee shall describe the specifics of the deviation from the authorized activity.

b. A statement that any required mitigation was or was not completed in accordance with the permit conditions. If the mitigation was not completed in accordance with the permit conditions, the permittee shall describe the specifics of the deviation from the permit conditions.

c. The signature of the permittee, certifying the completion of the work and compensatory mitigation.

After the project is completed, the certification shall be sent to the Baltimore District at the following address:

U. S. Army Corps of Engineers  
Baltimore District  
Attn: CENAB-OP-R  
P. O. Box 1715  
Baltimore, MD 21203-1715

3. **Transfer of MDSPGP-3 Verifications:** If the permittee sells the property associated with a MDSPGP-3 verification, the permittee may transfer the MDSPGP-3 verification to the new owner by submitting a letter to the Baltimore District Corps of Engineers office to validate the transfer. A copy of the MDSPGP-3 verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this MDSPGP-3 are still in existence at the time the property is transferred, the terms and conditions of this MDSPGP-3, including special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this MDSPGP-3 permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

4. **Maintenance:** The permittee shall maintain the work or structure authorized by the MDSPGP-3 in good condition and in compliance with the terms and conditions of the MDSPGP-3.

5. **Property Rights:** The MDSPGP-3 does not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

6. **Modification, Suspension and Revocation:** The MDSPGP-3, or any verification under it, may be either modified, suspended, or revoked, in whole or in part, pursuant to DA policies and procedures and any such action shall not be the basis for any claim for damages against the United States.

7. **Restoration:** The permittee, upon receipt of a notice of revocation of authorization under the MDSPGP-3, shall restore the wetland or waterway to its former condition, without expense to the United States and as directed by the Secretary of the Army or his authorized representative. If the permittee fails to comply with such a directive, the Secretary or his designee may restore the wetland or waterway to its former condition, by contract or otherwise, and recover the cost from the permittee.

8. **Special Conditions:** The Corps may impose special conditions on any project authorized under the MDSPGP-3, in cases where the Corps determines that special conditions are necessary to avoid or minimize adverse effects on the environment or on any other factor of the public interest. Failure to comply with all conditions of the authorization/verification, including special conditions, will constitute a permit violation/unauthorized work and may subject the permittee to criminal, civil, or administrative penalties, and/or restoration.

9. **False or Incomplete Information:** If the project is verified by the Corps or MDE under the MDSPGP-3 and subsequently discovers that it has relied on false, incomplete, or inaccurate information provided by the permittee, the MDSPGP-3 verification may be revoked and the Government may institute appropriate legal proceedings.

10. **Compliance:** Any activity performed in waters of the United States, including wetlands and navigable waters, that is not in compliance with all the terms and conditions of the MDSPGP-3 that includes the MDSPGP-3 Category List activity-specific conditions, constitutes unauthorized work and is subject to an enforcement action by the Corps or the EPA. Furthermore, the MDSPGP-3 does not delegate any Section 404 enforcement or regulatory authority. When unauthorized work occurs in waters of the United States, including wetlands and navigable waters, it is subject to one or more of the following responses by EPA and/or the Corps:

- a. A Cease and Desist order and/or an administrative compliance order requiring remedial action.
- b. Initiation and assessment of a Class I administrative penalty order pursuant to Section 309(g) of the CWA.
- c. Initiation and assessment of a Class II administrative penalty for continuing violation pursuant to Section 309(g) of the CWA.
- d. Referral of the case to the U. S. Attorney with a recommendation for a civil or criminal action.
- e. If the Corps determines that an after-the-fact application is appropriate, it will be reviewed following the appropriate procedures.
- f. Any other appropriate response.