

Assessment of Other Important Resources and Values

As noted, Catoctin Mountain Park has other resources and values that are not fundamental to the park’s purpose and significance, but are important to consider in park planning and management decisions. Similar to the assessment of fundamental resources and values, the assessment of other important resources and values (OIRVs) identifies relevant laws and NPS policies related to the management of each OIRV. Following is an assessment of OIRVs for Catoctin Mountain Park:

1. OTHER IMPORTANT RESOURCES OR VALUES: NATURAL SOUNDS / AIR QUALITY / NIGHT SKY	
CONDITION	<ul style="list-style-type: none"> • Visitors can hear natural sounds most of the year in most parts of the park • Traffic sounds are recognizable in most areas of the park—only a few valley areas are outside the audible range of traffic • Air quality can be poor at times, especially during summer months when degraded air (primarily nitrogen and sulfur) enters the park from urban areas • Night skies are of high quality compared to urban areas within the mid-Atlantic region, but are threatened by new development
TREND(s)	<ul style="list-style-type: none"> • Alcohol bans at park (in connection with Cunningham Falls State Park) have decreased noise and rowdy behavior • Helicopters and overflights can be intrusive, but are intermittent • Overall air quality is moderate to poor, but improving • Overall night sky quality is deteriorating
THREATS	<ul style="list-style-type: none"> • Parking lots are closed to the general public at night, which decreases opportunities for night sky and natural sounds experiences • Groups of motorcycle riders on Highway 77 and sometimes Park Central Road can be loud • Increasing traffic from new development and associated nitrogen and sulfur deposition jeopardize air quality • Adjacent development threatens night skies • Night lighting from camps and parking lots within park impairs night sky views
OPPORTUNITIES	<ul style="list-style-type: none"> • Work with military to identify quiet engine technologies and lighting • Frederick County is an ozone nonattainment area and has recently reached a benchmark level to reduce emissions associated with commuting activities • The park is undergoing a climate initiative and using more hybrid vehicles and making its facilities more efficient in general • Educate visitors about emissions by interpreting the viewshed / air quality connection (example: use Sugarloaf viewpoint outside park as an indicator) • Park is actively replacing floodlights with down-facing lights to improve night sky quality

1. OTHER IMPORTANT RESOURCES OR VALUES: NATURAL SOUNDS / AIR QUALITY / NIGHT SKY	
DATA NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none"> • Baseline natural sound measurements • Baseline air quality measurements for specific park locations • Baseline night skies measurements
PLANNING NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none"> • Climate friendly action plan (implementation) • Exterior lighting plan to improve quality of night sky viewing and identify historically appropriate lighting



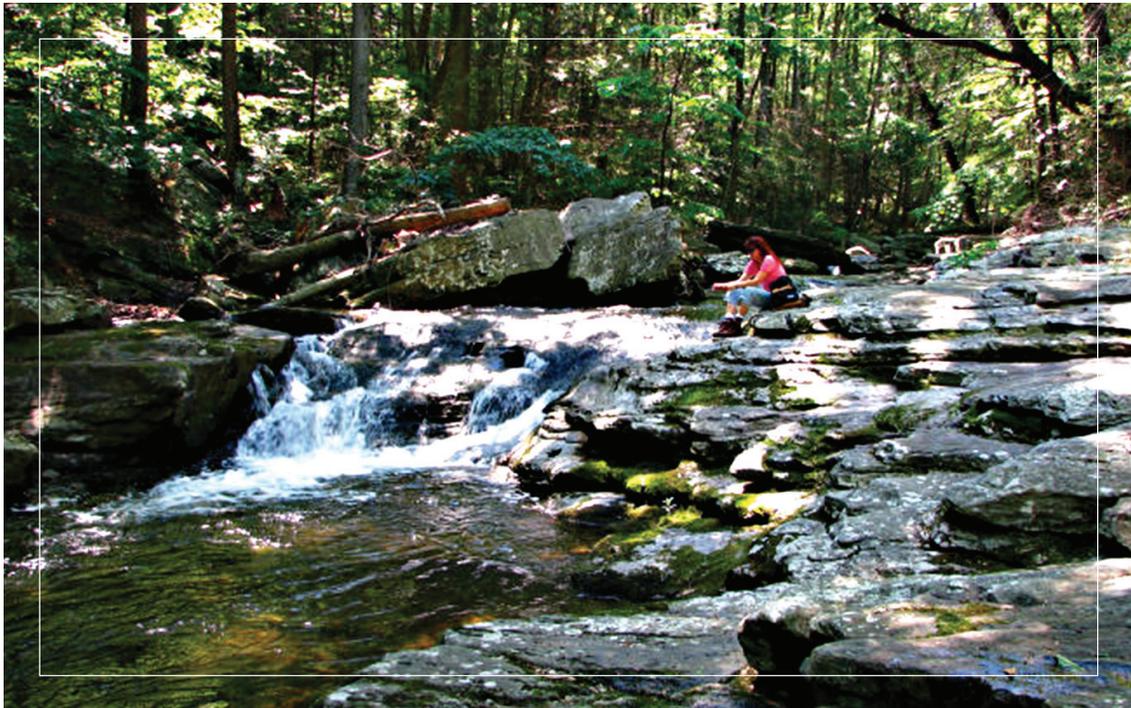
Sunrise at a park vista. NPS photo

1. OTHER IMPORTANT RESOURCES OR VALUES: NATURAL SOUNDS / AIR QUALITY / NIGHT SKY	
<p>LAWS AND POLICIES THAT APPLY TO THE OIRV AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE</p>	<p>Natural Sounds:</p> <p>NPS <i>Management Policies 2006</i> (4.9) and Director’s Order 47: <i>Soundscape Preservation and Noise Management</i> require NPS managers to preserve the natural soundscape (natural quiet) associated with the physical and biological resources (for example, the sounds of woodpeckers in the trees)</p> <p>The concept of natural quiet was further defined in the Report on Effects of Aircraft Overflights on the National Park System (NPS 1995):</p> <p style="padding-left: 40px;"><i>Parks offer a variety of unique, pristine sounds not found in most urban or suburban environments. Quiet also affords visitors an opportunity to hear faint or very distant sounds, such as animal activity and waterfalls. Such an experience provides an important perspective on the vastness of the environment in which the visitor is located, often beyond the visual boundaries</i></p> <p>Other policies to preserve natural sounds include:</p> <ul style="list-style-type: none"> • NPS Cultural Soundscape Management Policy 5.3.1.7 • NPS Director’s Order 47: <i>Soundscape Preservation and Noise Management</i> • 36 CFR Section 2.12 Audio Disturbance • 36 CFR Section 3.15 Maximum Noise Level for Operation of Boats • NPS Use of Motorized Equipment Policy 8.2.3 <p>Air Quality:</p> <p>The Clean Air Act gives federal land managers the responsibility for protecting air quality and related values, including visibility, plants, animals, soils, water quality, cultural resources, and public health, from adverse air pollution impacts within parks.</p> <p>As directed under the Clean Air Act, the Environmental Protection Agency (EPA) has established primary National Ambient Air Quality Standards (NAAQS) for six pollutants, called “criteria” pollutants, at levels considered protective of human health.</p> <p>While the National Park Service is concerned with monitoring the status and trends of criteria pollutant concentrations in parks, as well as the impacts of these concentrations on air quality and related values, the Environmental Protection Agency and state air regulatory agencies have the primary responsibility for ensuring that the standards are maintained to protect human health.</p> <p>Night Sky:</p> <p>Section 4.10 of NPS <i>Management Policies 2006</i> recognizes that the night sky of parks plays a role in natural resource processes and the evolution of species, as well as being a feature that contributes to the visitor experience. The policy further states that NPS staff will seek to minimize the intrusion of artificial light into the night scene. In natural areas, artificial outdoor lighting will be limited to meeting basic safety requirements and will be shielded when possible.</p> <p>Other policies to preserve night sky, air quality, and scenery include:</p> <ul style="list-style-type: none"> • NPS <i>Management Policies 2006</i> (§4.7) and “Natural Resource Management Reference Manual #77” provide further direction on the protection of air quality and related values for park units. • NPS <i>Management Policies 2006</i> (§1.4, 1.6, 3.1) call for the National Park Service to conserve and protect scenery and scenic vistas

2. OTHER IMPORTANT RESOURCE OR VALUE: CAMPGROUNDS AND PICNIC AREAS	
CONDITION	<ul style="list-style-type: none"> • Related to campground and picnic facility use, the park's overall sewage and water systems are in poor condition and will require major upgrades • Related to campground and picnic facility use, the park's electrical system is in good condition overall
TREND(S)	<ul style="list-style-type: none"> • Campground registrations and revenue are slowly decreasing • Picnic area use is decreasing • Associated sewage and water systems are deteriorating
THREATS	<ul style="list-style-type: none"> • Campgrounds are losing revenue for current upkeep and maintenance • A large percentage of campground revenue is programmed for the Land and Water Conservation Fund (LWCF), which decreases a potential funding source for upkeep and maintenance at park campgrounds and picnic areas • Existing sewage system capacity near Owens Creek facilities is nearing capacity, and raises potential for system failure • Restroom facilities are difficult to maintain due to lack of heat to protect plumbing in winter
OPPORTUNITIES	<ul style="list-style-type: none"> • Encouraging increased use of facilities would improve overall visitor experience and provide a potential funding source for facility maintenance and upgrades
DATA NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none"> • Economic analysis for cabin camps and campgrounds
PLANNING NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none"> • Cabin Camps and Campgrounds Comprehensive Management Plan for infrastructure management and revenue enhancement
LAWS AND POLICIES THAT APPLY TO THE OIRVs AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE	<ul style="list-style-type: none"> • NPS <i>Management Policies 2006</i> sections 9.3.2.1 and 9.3.4.1 provide guidance for campgrounds and picnic areas

3. OTHER IMPORTANT RESOURCE OR VALUE: TRAIL SYSTEM	
CONDITION	<ul style="list-style-type: none"> • Overall trail condition is good
TREND(S)	<ul style="list-style-type: none"> • Trail system remains in good shape overall • Trail system is underutilized during winter months
THREATS	<ul style="list-style-type: none"> • Occasional lack of coordination with trail maintenance activities and resource protection • Social trail development in certain parts of trail system
OPPORTUNITIES	<ul style="list-style-type: none"> • Catoctin National Recreation Trail could potentially link to the Appalachian National Scenic Trail, which is less than three miles away • Outreach and partnerships with neighboring landowners, developers, and local governments to improve existing trail system and promote regionally significant linkages

DATA NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none">• Baseline trail count measurements and visitation counts at overlooks• Baseline parking lot car count measurements
PLANNING NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none">• Partnership Enhancement Plan• Scenic Byway Corridor Management Plan
LAWS AND POLICIES THAT APPLY TO THE OIRVs AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE	<ul style="list-style-type: none">• NPS <i>Management Policies 2006</i> sections 9.2.2.2 provides guidance for hiking trails



Solitude under a forested canopy. NPS photo

4. OTHER IMPORTANT RESOURCE OR VALUE: WATER QUANTITY AND QUALITY	
CONDITION	<ul style="list-style-type: none"> Overall water quality is good, with exceptions and cautions noted in “trends” and “threats” below
TREND(S)	<ul style="list-style-type: none"> Increasing water temperatures Water pH and dissolved oxygen are in good condition and stable Nitrate and phosphate concentrations are in poor condition and overall trends are unknown Physical habitat quality ranges from partially degraded to good condition (for Big Hunting Creek and Owens Creek) Benthic quality is good (for Big Hunting Creek and Owens Creek)
THREATS	<ul style="list-style-type: none"> Loss of hemlock and oak trees near streambanks contributes to increased water temperatures (strains brook trout populations) Sediment load is increasing Major erosion during flood events may wash away fish eggs and destroy sensitive fish habitat Agricultural activities outside park boundaries can negatively impact water quality and quantity within stream sections within park boundaries A sewage treatment plant near the headwaters of Owens Creek, upstream of park boundaries, potentially threatens watershed quality (specific impacts are unknown) Water volume at Big Hunting Creek Lake (outside park boundaries and outside NPS control) fluctuates, which affects Catoctin Mountain Park stream flows. There is an ongoing need for the State of Maryland to repair its monitoring equipment at the lake’s dam. Extreme seasonal variability in precipitation can severely reduce headwater streamflows
OPPORTUNITIES	<ul style="list-style-type: none"> Continue to build partnerships with local agencies and partners (i.e., Monocacy and Catoctin Watershed Alliance, Frederick County, extension programs)
DATA NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none"> Use stream data to assure compliance with the existing terms of the Maryland Water Withdrawal Certificate with Cunningham Falls State Park Hydrological analysis for Braestrup Pond
PLANNING NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none"> Use data loggers (with cell call out) to monitor water temperature and water quantity on Big Hunting Creek and Owens Creek Watershed Management Plan (including stormwater management, streams and riparian habitat management)
LAWS AND POLICIES THAT APPLY TO THE OIRVs AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE	<ul style="list-style-type: none"> The Clean Water Act provides a legal basis to restore and maintain the integrity of U.S. waters, which includes waters in the park. NPS <i>Management Policies 2006</i> (4.4.4.1; 4.4.4.2; and 4.6.3) provide direction on the management of alien species and water quality. NPS Natural Resource Management Reference Manual #77 also provides direction on the protection and management of water quality at Catoctin Mountain Park

5. OTHER IMPORTANT RESOURCE OR VALUE: NAVAL SUPPORT FACILITY - THURMONT	
CONDITION	<ul style="list-style-type: none"> Current information is for official government use only due to national security concerns
TREND(S)	<ul style="list-style-type: none"> Resources continue to be managed in coordination with the National Park Service and U.S. Navy concerning environmental compliance and resource management Positive trend in resource management due to increased coordination between agencies
THREATS	<ul style="list-style-type: none"> Park closures due to activities at Naval Support Facility (NSF) - Thurmont (the Presidential Retreat) restrict public visitation to the park
OPPORTUNITIES	<ul style="list-style-type: none"> Continue to build working relationship with the U.S. Navy in strategic efforts to implement future planning and management initiatives that help Catoctin Mountain Park protect its natural and cultural resources and its visitors
DATA NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none"> None noted
PLANNING NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none"> None noted
LAWS AND POLICIES THAT APPLY TO THE OIRVs AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE	<ul style="list-style-type: none"> The U.S. Navy and the National Park Service coordinate NEPA compliance.

6. OTHER IMPORTANT RESOURCE OR VALUE: HISTORIC STRUCTURES (OTHER THAN CABIN CAMPS)	
CONDITION	<ul style="list-style-type: none"> Per the List of Classified Structures, two structures are in good condition, one is in fair condition; the fourth structure has not been assessed for condition.
TREND(S)	<ul style="list-style-type: none"> Deferred maintenance and slow rate of rehabilitation for most historic structures
THREATS	<ul style="list-style-type: none"> Stormwater impacts structural integrity Several structures are in areas of potential flooding, such as the Ike Smith pumphouse and the visitor center Mice, carpenter ants, woodpeckers, carpenter bees, and termites have varying degrees of negative impacts to structures Vegetation upkeep is lacking (e.g., trees, saplings, shrubs to be trimmed and/or removed from contact with structures) Park has no cultural resource professional staff Maintenance staffing is inadequate for maintaining historic carpentry Sources for original building materials are finite (i.e., chestnut is hard to obtain to complete rehabilitation initiatives)
OPPORTUNITIES	<ul style="list-style-type: none"> Repairs are made with historically appropriate (or sympathetic) materials and techniques Apply animal infestation management uses established in Integrated Pest Management Plan

<p>DATA NEEDS TO PROTECT AND MAINTAIN OIRVs</p>	<ul style="list-style-type: none"> • Inventory and evaluate Mission 66 structures (e.g., three residences, three comfort stations); Braestrup structures • List of Classified Structures should be updated for additional structures determined eligible in national register nomination, update, once it has been accepted by the Keeper, Mission 66 and Braestrup structures should be evaluated for eligibility for listing in the National Register of Historic Places. • Historic Structures reports for three buildings at Round Meadow may • Cultural landscape inventory for Round Meadow • Historic Resource Study for Round Meadow
<p>PLANNING NEEDS TO PROTECT AND MAINTAIN OIRVs</p>	<ul style="list-style-type: none"> • Historic Structure Reports for representative buildings and structures
<p>LAWS AND POLICIES THAT APPLY TO THE OIRVs AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE</p>	<ul style="list-style-type: none"> • NPS-28: Structures listed or eligible for listing in the National Register of Historic Places are managed to ensure their long-term preservation and protection of character-defining features. National register-listed or eligible structures continue to be treated and maintained • National Historic preservation Act of 1966, as amended • <i>The Secretary of the Interior's Standards for the Treatment of Historic Properties</i>

<p>7. OTHER IMPORTANT RESOURCE OR VALUE: ARCHEOLOGICAL RESOURCES</p>	
<p>CONDITION</p>	<ul style="list-style-type: none"> • All 131 archeological resources in ASMIS are in good condition
<p>TREND(S)</p>	<ul style="list-style-type: none"> • Identified archeological resources are in stable condition, per site assessment
<p>THREATS</p>	<ul style="list-style-type: none"> • Lack of Archeological Resources Protection Act training for park staff • Not all areas with high probability for archeological resources have been identified • Potential disturbance to archeological resources from invasive nonnative vegetation removal practices and erosion • Occasional lack of coordination between trail maintenance activities and resource protection
<p>OPPORTUNITIES</p>	<ul style="list-style-type: none"> • Minimal public awareness and remote location of some archeological resources protects them
<p>DATA NEEDS TO PROTECT AND MAINTAIN OIRVs</p>	<ul style="list-style-type: none"> • Additional archeological investigation needed at Round Meadow near original CCC/WPA camps • Review archeological overview and COE legacy report to verify OSS-related archeological resources near Camp Greentop at the fire cache site • Conduct additional archeological investigation on prehistoric and historic sites identified in the 2011 archeological report
<p>PLANNING NEEDS TO PROTECT AND MAINTAIN OIRVs</p>	<ul style="list-style-type: none"> • None noted

7. OTHER IMPORTANT RESOURCE OR VALUE: ARCHEOLOGICAL RESOURCES	
LAWS AND POLICIES THAT APPLY TO THE OIRVs AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE	<ul style="list-style-type: none"> • NPS <i>Management Policies 2006</i> (5.3.5.1) calls for the National Park Service to manage archeological resources in situ unless physical disturbance is justified and mitigated by data recovery or other means in concurrence with the SHPO. See 36 CFR 79, Curation of Federally Owned and Administered Archeological Collection and the <i>Secretary of the Interior's Standards and Guidelines for Archeological Documentation</i>. • Other guidance is found in sections 106 and 110 of the National Historic Preservation Act of 1966, as amended (16 USC 470); Director's Order 28: <i>Cultural Resource Management</i>; and <i>Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</i>. • Applicable law: 1979 Archeological Resources Protection Act (as amended)

8. OTHER IMPORTANT RESOURCE OR VALUE: MUSEUM COLLECTION AND ARCHIVES	
CONDITION	<ul style="list-style-type: none"> • Museum collection is in poor condition overall due to poor facility conditions. However, 100% of the objects in the collection are catalogued.
TREND(S)	<ul style="list-style-type: none"> • Museum collection status is poor, but stable
THREATS	<ul style="list-style-type: none"> • Substandard climate control; lack of humidity control; dysfunctional environmental control of museum collection • Insect infestations of museum collection • Lack of fire suppression control for museum collection • Not all of the museum collection is adequately curated or catalogued (primarily archives) • Archives are not located in a centralized location • Primary resources are not being adequately protected
OPPORTUNITIES	<ul style="list-style-type: none"> • Timely archeological curation for recent survey investigations (e.g., beetles) • Potential research partnership connections • Park can access support from Museum Resource Center, Center for Urban Ecology • Park has retained representative collections (archeology, history, archives, natural resources)
DATA NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none"> • Digitization project is needed for historic photos, maps, and drawings
PLANNING NEEDS TO PROTECT AND MAINTAIN OIRVs	<ul style="list-style-type: none"> • Collection management plan (include ethnographic resources, archives, and oral histories)
LAWS AND POLICIES THAT APPLY TO THE OIRVs AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE	<ul style="list-style-type: none"> • NPS <i>Management Policies 2006</i> (5.3.5.5) states that the National Park Service "will collect, protect, preserve, provide access to, and use objects, specimens, and archival and manuscript collections...in the disciplines of archeology, ethnography, history, biology, geology, and paleontology to aid understanding among park visitors, and to advance knowledge in the humanities and sciences." • Applicable law: 1955 Museums Properties Management Act