

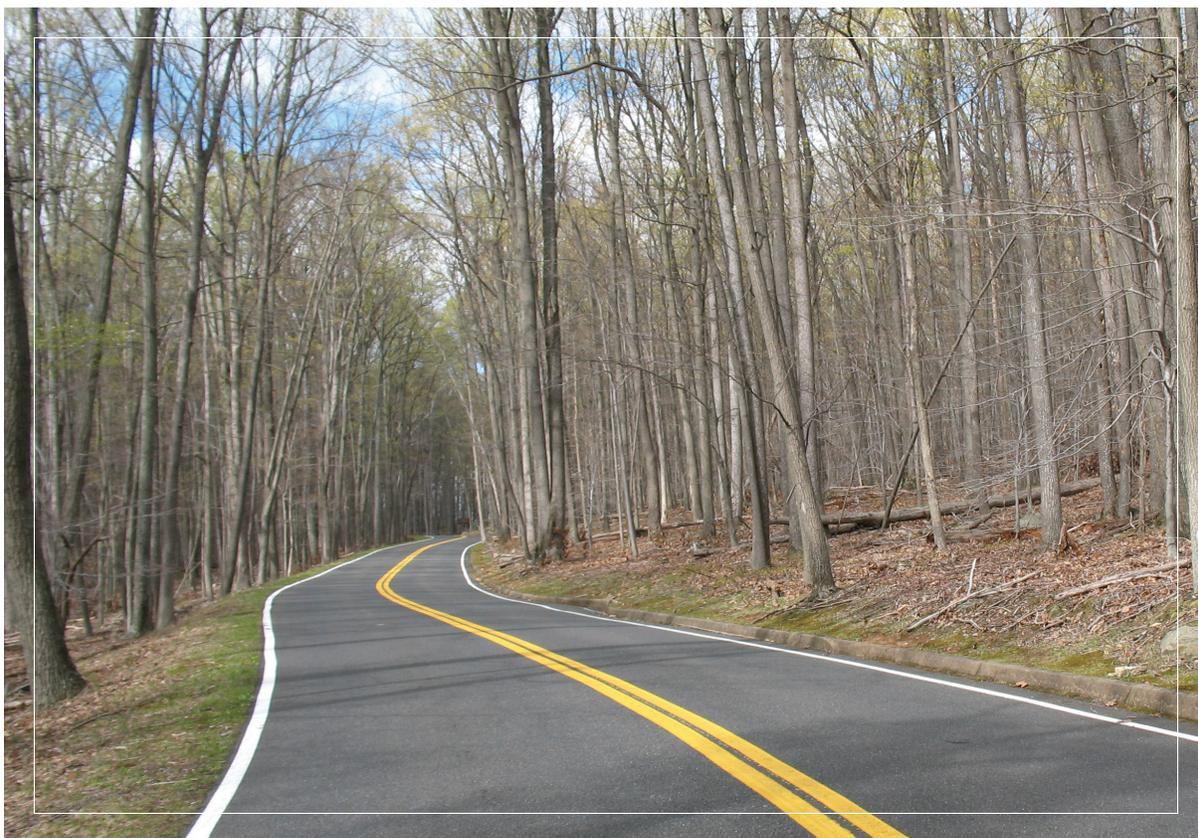
## Assessment of Fundamental Resources and Values

The analysis of fundamental resources and values further articulates the importance of each fundamental resource and value by discussing its current condition, potential threats, opportunities, and associated parkwide issues. Associated with the FRV analysis, the assessment of planning and data needs identifies and prioritizes planning and data collection priorities for future management decisions.

Included in the assessment is the identification of relevant laws and NPS policies related to the management of each fundamental resources and values. This section of the foundation document will require periodic reviews and updates as monitoring, data collection, and research improves the understanding of each fundamental resource and value.

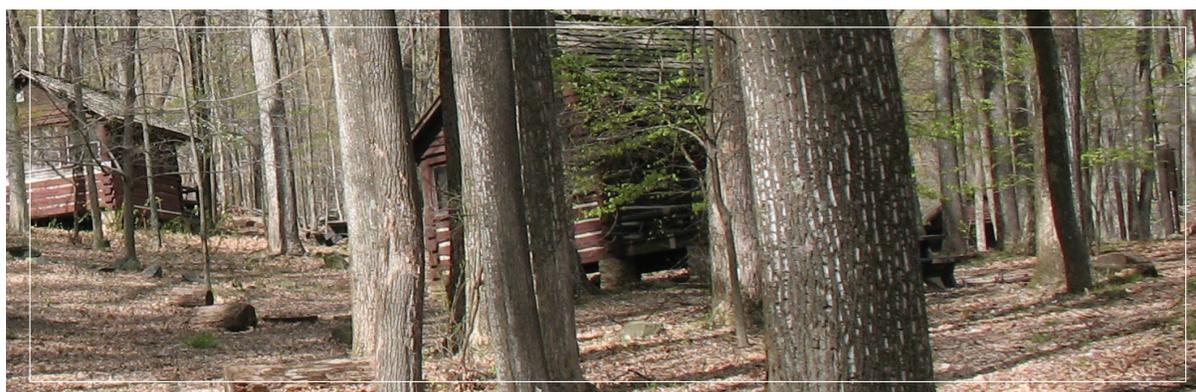
1. FUNDAMENTAL RESOURCE OR VALUE: EASTERN DECIDUOUS FOREST	
<b>CONDITION</b>	<ul style="list-style-type: none"> <li>• Forest is healthy overall</li> <li>• Native species richness is healthy overall</li> </ul>
<b>TREND(S)</b>	<ul style="list-style-type: none"> <li>• Forest floor nonnative species are increasing</li> <li>• Existing and potential pest species and diseases remain neutral (caution)</li> <li>• Native tree regeneration is poor overall due mainly to deer browsing impacts; remains neutral</li> <li>• Current fire suppression regime could lead to the build-up of debris and cause less frequent but much larger and more destructive wildfires</li> </ul>
<b>THREATS</b>	<ul style="list-style-type: none"> <li>• Current deer density and browsing activities severely impact native tree regeneration</li> <li>• Presence of existing pest species, such as hemlock woolly adelgid and gypsy moth, kill large numbers of trees</li> <li>• Potential pest species, such as emerald ash borer, could harm the ash trees</li> <li>• Presence of existing fungal diseases, such as dogwood anthracnose, kill trees</li> </ul>
<b>OPPORTUNITIES</b>	<ul style="list-style-type: none"> <li>• Continue to replant selective riparian areas to regenerate native species</li> <li>• Provide education and interpretive efforts to aid park visitors in recognizing climate change processes and the potential threats climate change can cause to forest resources of the park, as well as the overall environment</li> </ul>
<b>DATA NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>• Deer management data correlated with nonnative forest species management data</li> </ul>
<b>PLANNING NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>• Vegetation management plan (including alien pest management and prescribed fire components)</li> <li>• Climate friendly parks plan</li> </ul>
<b>LAWS AND POLICIES THAT APPLY TO THE FRV AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE</b>	<ul style="list-style-type: none"> <li>• <i>NPS Management Policies 2006</i> (4) and Reference Manual 77, "Natural Resource Management," provide general direction on natural resource management for the park. The National Parks Omnibus Act of 1998 established the framework for integrating natural resource inventories and monitoring into park management. Section 5934 requires the Secretary of the Interior to develop a program of inventory and monitoring national park system resources to establish a baseline and to provide information on long-term trends in the condition of national park system resources.</li> <li>• Climate change (general) guidance that addresses climate change includes the NPS Organic Act, Department of the Interior Secretarial Orders 3226 and 3289 (ensure that climate change impacts be taken into account in connection with departmental planning and decision making), and <i>NPS Management Policies 2006</i> (including sections on environmental leadership [1.8]).</li> </ul>

2. FUNDAMENTAL RESOURCE OR VALUE: GEOLOGICAL RESOURCES	
<b>CONDITION</b>	<ul style="list-style-type: none"> <li>• Good overall – localized erosion occurring in some areas</li> </ul>
<b>TREND(S)</b>	<ul style="list-style-type: none"> <li>• Localized erosion increasing in some areas and widening stream corridor widths</li> </ul>
<b>THREATS</b>	<ul style="list-style-type: none"> <li>• Erosion and sedimentation along streams</li> </ul>
<b>OPPORTUNITIES</b>	<ul style="list-style-type: none"> <li>• Provide improved education and interpretive efforts that aid park visitors' appreciation of the geological and topographical makeup of the park and how associated human-caused and naturally caused erosion events affect park resources</li> </ul>
<b>DATA NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>• Geological hazard reports (including landslide hazard analysis)</li> </ul>
<b>PLANNING NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>• No specific geological plans noted, but erosion management issues may be captured in other identified planning needs, such as the vegetation management plan</li> </ul>
<b>LAWS AND POLICIES THAT APPLY TO THE FRV AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE</b>	<ul style="list-style-type: none"> <li>• <i>NPS Management Policies 2006 (4.8)</i> and the <i>Natural Resource Reference Manual 77</i> provide general direction on the management of geological resources in park units</li> </ul>



Park Central Road. NPS photo

3. FUNDAMENTAL RESOURCE OR VALUE: WILDLIFE COMMUNITIES	
<b>CONDITION</b>	<ul style="list-style-type: none"> <li>• Ranges from healthy to poor overall</li> <li>• Bird communities are moderate in integrity</li> <li>• White-tailed deer browsing is negatively affecting habitat for small mammals such as foxes, raccoons, possums, skunks, and flying squirrels</li> <li>• Reptile and amphibian communities are healthy overall</li> <li>• Macroinvertebrate studies indicate healthy populations overall</li> </ul>
<b>TREND(S)</b>	<ul style="list-style-type: none"> <li>• Integrity of bird communities is increasing</li> <li>• White-tailed deer densities are extremely high, but density is slowly decreasing (improving) due to current management practices</li> <li>• Increasing black bear sightings in the park</li> </ul>
<b>THREATS</b>	<ul style="list-style-type: none"> <li>• Current deer density and browsing activities severely impact habitat for small mammals</li> <li>• Wildlife fatalities due to vehicle collisions</li> <li>• Development outside park boundaries causes habitat fragmentation and limits wildlife corridors</li> <li>• Incidences of Lyme disease</li> <li>• Potential Chronic Wasting disease outbreak</li> <li>• Potential for Hantavirus transmission from rodents to humans</li> </ul>
<b>OPPORTUNITIES</b>	<ul style="list-style-type: none"> <li>• Improve public education / public policy advocacy regarding healthy deer density targets from an ecosystem perspective</li> </ul>
<b>DATA NEEDS TO PROTECT AND MAINTAIN FRV</b>	<ul style="list-style-type: none"> <li>• Update population surveys for bats and small mammals (Note: the park conducted a small mammal survey in 2001 and a bat population survey that includes data from as late as 2007)</li> <li>• Baseline population surveys for certain insect communities</li> </ul>
<b>PLANNING NEEDS TO PROTECT AND MAINTAIN FRV</b>	<ul style="list-style-type: none"> <li>• Ensure proper coordination and protocol with U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) on threatened and endangered species consultation and policy updates</li> </ul>
<b>LAWS AND POLICIES THAT APPLY TO THE FRV AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE</b>	<ul style="list-style-type: none"> <li>• Deer management would continue to follow park protocol and best management practices for reducing the deer population to targets documented in the White Tailed Deer Management Plan / Environmental Impact Statement (2008).</li> <li>• In addition, Director's Order 77: <i>Natural Resource Protection</i> provides direction to parks on the management and protection of park natural resources, including wildlife. NPS <i>Management Policies 2006</i> (4.4.2) directs the management of native plants and animals.</li> </ul>



Second growth forest at Camp Misty Mount. NPS photo

4. FUNDAMENTAL RESOURCE OR VALUE: VIEWS AND VISTAS	
<b>CONDITION</b>	<ul style="list-style-type: none"> <li>• Overall viewshed condition is moderate and in danger of decreasing due to increasing external residential and commercial development (lighting) and slightly declining air quality</li> <li>• Vistas condition is good overall – tree and overgrowth clearing performed periodically to maintain sight lines; emphasis placed on actively maintaining selected vistas such as Chimney Rock, Hog Rock, Thurmont Vista, and Blue Ridge Summit</li> </ul>
<b>TREND(S)</b>	<ul style="list-style-type: none"> <li>• Development outside park boundaries is diminishing viewshed experience; possibly contributing to decreased park visitation</li> <li>• Vistas condition is stable</li> </ul>
<b>THREATS</b>	<ul style="list-style-type: none"> <li>• Development outside park boundaries (e.g., certain agricultural areas north and south of the park; development pressure related to the generally pro-development policies of surrounding counties)</li> <li>• Natural, overgrown vegetation at vistas diminish views</li> <li>• Nonnative vegetation species at vistas diminish views (e.g., stiltgrass, barberry, lanthis)</li> <li>• Graffiti exists at some vistas</li> </ul>
<b>OPPORTUNITIES</b>	<ul style="list-style-type: none"> <li>• Agricultural easements adjacent to the park’s southwest boundary have been registered with Maryland Environmental Trust</li> <li>• Scenic byways, such as park roads through Catoctin Mountain Park, annually generate an additional \$32,000 per mile in tourism revenues and are increasingly important within the region</li> <li>• Park has land purchase authority – no separate legislation required</li> </ul>
<b>DATA NEEDS TO PROTECT AND MAINTAIN FRV</b>	<ul style="list-style-type: none"> <li>• Viewshed analysis (for views and vistas)</li> <li>• Trail use counts</li> </ul>
<b>PLANNING NEEDS TO PROTECT AND MAINTAIN FRV</b>	<ul style="list-style-type: none"> <li>• Scenic Byway Corridor Management Plan</li> <li>• Partnership Enhancement Plan</li> </ul>
<b>LAWS AND POLICIES THAT APPLY TO THE FRVs AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE</b>	<ul style="list-style-type: none"> <li>• Executive Order 11514, “Protection and Enhancement of Environmental Quality”</li> <li>• The Clean Air Act (42 USC 7401 et seq.) 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.</li> <li>• NPS <i>Management Policies 2006</i> (§4.7) and “Natural Resource Management Reference Manual #77” provides further direction on the protection of air quality and related values for park units.</li> <li>• NPS <i>Management Policies 2006</i> (§1.4, 1.6, 3.1) calls for the NPS to conserve and protect scenery and scenic vistas.</li> <li>• 56 Stat.326 (Public Law 77-594 dated June 6, 1942) required that “all RDA project areas be maintained for “public park, recreational and conservation purposes.”</li> </ul>

5. FUNDAMENTAL RESOURCE OR VALUE: CABIN CAMPS (CAMP MISTY MOUNT AND CAMP GREENTOP)	
<b>CONDITION</b>	<ul style="list-style-type: none"> <li>Of the 64 camp structures included in the List of Classified Structures (2010), 51 are rated "good," 11 are "fair," and 2 are "poor"</li> </ul>
<b>TREND(S)</b>	<ul style="list-style-type: none"> <li>Overall deterioration</li> <li>Camps are losing revenue</li> <li>Deferred maintenance and slow rate of rehabilitation</li> </ul>
<b>THREATS</b>	<ul style="list-style-type: none"> <li>Lack of rent and associated revenue for rehabilitation</li> <li>Stormwater impacts structural integrity</li> <li>Mice, carpenter ants, woodpeckers, carpenter bees, and termites have varying degrees of negative impacts to structures</li> <li>Vegetation upkeep is lacking (e.g., trees, saplings, shrubs need to be trimmed and/or removed from contact with structures)</li> <li>Park has no dedicated cultural resource professional staff</li> <li>Carpenters with historic preservation carpentry skills are unable to keep up with the continuing workload</li> <li>Lack of succession planning for when staff with historic preservation carpentry skills retire</li> <li>Modern appliances / systems / utilities are damaging to the historic fabric of some of the cabin buildings</li> <li>Sources for original building materials are finite (i.e., chestnut is hard to obtain to complete rehabilitation initiatives)</li> <li>Graffiti and carvings harm structures (especially at Greentop and Misty Mount)</li> <li>Misty Mount pool leaks and loses significant amount of water daily</li> </ul>
<b>OPPORTUNITIES</b>	<ul style="list-style-type: none"> <li>Trained carpenters (in-house) have excellent capabilities to rehabilitate camps</li> <li>Volunteers assist in vandalism repair and graffiti removal</li> <li>Check-in/check-out procedures for cabins and collection for damages helps discourage vandalism and support cleanup</li> <li>Repairs are made with historically appropriate (or sympathetic) materials and techniques</li> <li>Most cabin camp structures are in areas not likely to be impacted by flooding</li> <li>Animal infestation management uses established Integrated Pest Management Plan</li> <li>National Register of Historic Places eligibility has been established for cabin camp structures</li> <li>All structural changes made in compliance with the Americans With Disabilities Act (ADA), such as entrance ramps, are reversible</li> <li>Adaptive reuse of building interiors could attract additional visitors</li> </ul>
<b>DATA NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>Review List of Classified Structures to record any sites in poor condition (may need to rehabilitate / protect / mitigate to improve structures in "poor" or "fair" condition through preservation)</li> </ul>
<b>PLANNING NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>Historic Structure Reports and/or Historic Structure Assessment Reports</li> <li>Cabin Camp Management Plan / Preservation Maintenance Plan</li> <li>Financial Sustainability Plan</li> </ul>
<b>LAWS AND POLICIES THAT APPLY TO THE FRV AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE</b>	<ul style="list-style-type: none"> <li>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 properties continue to be treated and maintained</li> <li>National Historic Preservation Act of 1966, as amended</li> <li><i>The Secretary of the Interior's Standards for the Treatment of Historic Properties</i></li> </ul>

6. FUNDAMENTAL RESOURCE OR VALUE: FISH COMMUNITIES	
<b>CONDITION</b>	<ul style="list-style-type: none"> <li>• Biotic integrity is healthy overall</li> <li>• Brook trout population numbers are moderate</li> </ul>
<b>TREND(S)</b>	<ul style="list-style-type: none"> <li>• Brook trout population numbers are decreasing</li> </ul>
<b>THREATS</b>	<ul style="list-style-type: none"> <li>• Loss of hemlock and other tree species near streambanks contributes to increased water temperatures</li> <li>• Major erosion during flood events may wash away fish eggs and destroy sensitive fish habitat</li> <li>• Agricultural activities outside park boundaries can negatively impact water quality and quantity within stream sections within park boundaries</li> <li>• Fish passage barriers harm natural ecological processes by limiting or preventing the movement of fish species</li> </ul>
<b>OPPORTUNITIES</b>	<ul style="list-style-type: none"> <li>• Continue to build and maintain partnerships with local agencies and partners (i.e., Monocacy and Catoctin Watershed Alliance, Frederick County, extension programs)</li> </ul>
<b>DATA NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>• Use stream data to assure compliance with the existing terms of the Maryland Water Withdrawal Certificate with Cunningham Falls State Park</li> <li>• Use data loggers (with cell call out) to monitor water temperature and water quantity on Big Hunting Creek and Owens Creek</li> </ul>
<b>PLANNING NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>• Watershed Management Plan (including stormwater management, streams and riparian habitat management)</li> </ul>
<b>LAWS AND POLICIES THAT APPLY TO THE FRV AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE</b>	<ul style="list-style-type: none"> <li>• The Clean Water Act provides a legal basis to restore and maintain the integrity of U.S. waters, which includes waters in the park.</li> <li>• 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.</li> </ul>

7. FUNDAMENTAL RESOURCE OR VALUE: ETHNOGRAPHIC RESOURCES	
<b>CONDITION</b>	<ul style="list-style-type: none"> <li>• No systematic ethnographic survey has been conducted at the park; however, all ethnographic resources determined to be of significance to traditional cultural groups will be protected</li> <li>• General lack of ethnographic information</li> </ul>
<b>TREND(S)</b>	<ul style="list-style-type: none"> <li>• The park has only anecdotal information and overall ethnographic documentation is deteriorating as oral history sources are lost</li> </ul>
<b>THREATS</b>	<ul style="list-style-type: none"> <li>• Loss of oral history sources</li> <li>• Deterioration of recorded archival media and primary source preservation (e.g., video and cassette tapes)</li> </ul>
<b>OPPORTUNITIES</b>	<ul style="list-style-type: none"> <li>• Researching and documenting New Deal era program transcripts could help fill ethnographic data gaps and serve as an exemplary museum conservation project</li> <li>• Potential for improved community engagement, research partnerships, interpretation, and educational opportunities</li> </ul>

7. FUNDAMENTAL RESOURCE OR VALUE: ETHNOGRAPHIC RESOURCES	
<b>DATA NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>• Park wide Ethnographic Overview and Assessment</li> <li>• Documentation of pre-park affiliation (i.e., landowners, Church of the Brethren, early tourism, mushroom/morel gathering as cultural foodways, etc.)</li> <li>• Documentation of World War II activities (i.e., Presidential Retreat and Office of Strategic Services)</li> <li>• Documentation of post-park establishment affiliation (i.e. members of the Maryland League for the Disabled, Works Progress Administration, pre-presidential use of Camp 3, Civilian Conservation Corps, Jobs Corps, and Youth Conservation Corps)</li> <li>• Documentation of major environmental education programs (Washington D.C., Frederick, and Washington Counties in the cabin camps)</li> </ul>
<b>PLANNING NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>• Collections Management Plan (include ethnographic resources, archives, oral histories, etc.)</li> <li>• Oral History Program and plan</li> </ul>
<b>LAWS AND POLICIES THAT APPLY TO THE FRV AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE</b>	<ul style="list-style-type: none"> <li>• NPS <i>Management Policies 2006</i> (5.3.5.3) requires gathering ethnographic information through anthropological and collaborative community research, which recognizes the sensitive nature of such cultural data and documents. Executive Order 13007, "Indian Sacred Sites" also requires NPS managers to accommodate access to and ceremonial use of American Indian sacred sites by practitioners and to preserve the physical integrity of the site.</li> <li>• National Historic Preservation Act of 1966, as amended</li> <li>• Applicable law: 1978 American Indian Religious Freedom Act (PL 95-341)</li> </ul>



Park entrance sign. NPS photo

8. FUNDAMENTAL RESOURCE OR VALUE: CULTURAL LANDSCAPES	
<b>CONDITION</b>	<ul style="list-style-type: none"> <li>The Catoctin Mountain Park cultural landscape is in fair condition; Camp Misty Mount is in good condition; the condition of Camp Greentop is undetermined</li> </ul>
<b>TREND(S)</b>	<ul style="list-style-type: none"> <li>Lack of cultural landscape information for newly acquired properties and some landscape components (Braestrup Tract, Walnut Springs, and Lewis property)</li> <li>Regional air quality will likely continue to degrade viewsheds associated with cultural landscapes</li> <li>Increasing presence of nonnative vegetation species negatively impact cultural landscape character</li> </ul>
<b>THREATS</b>	<ul style="list-style-type: none"> <li>Current deer density and browsing activities negatively impact cultural landscape character</li> <li>Social trails negatively impact cultural landscapes in some areas</li> </ul>
<b>OPPORTUNITIES</b>	<ul style="list-style-type: none"> <li>Understanding value of cultural landscape dynamics informs landscape maintenance practices, vegetation management, trail planning, and stewardship of views and vistas</li> <li>Improving the interpretation of human interaction with the Catoctin landscape would connect history and prehistory with present landscape management issues</li> </ul>
<b>DATA NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>Cultural landscape inventories need to be updated using more recent research (i.e., national register update and archeology reports)</li> <li>Cultural landscape inventory needed for Camp Greentop</li> <li>Component cultural landscapes; Braestrup Tract, Mission 66 areas, and Camp Round Meadow, need to be assessed for integrity. If integrity is found, cultural landscape inventories should then be prepared.</li> <li>Cultural landscape treatments need to be developed for Catoctin Mountain Park, Camp Misty Mount, and Camp Greentop—this could take the form of a cultural landscape report or other treatment plan (i.e., a vegetation plan)</li> </ul>
<b>PLANNING NEEDS TO PROTECT AND MAINTAIN FRVs</b>	<ul style="list-style-type: none"> <li>Cultural Landscape Report or other Treatment Plan for Catoctin Mountain Park, Camp Misty Mount, and Camp Greentop</li> </ul>
<b>LAWS AND POLICIES THAT APPLY TO THE FRV AND THE NPS POLICY-LEVEL CONDITION OF THE RESOURCE OR VALUE</b>	<ul style="list-style-type: none"> <li>The National Historic Preservation Act requires analyzing the effects of possible federal actions on structures listed in or determined eligible for listing in the National Register of Historic Places, and for inventorying and evaluating their significance and condition</li> <li>NPS <i>Management Policies 2006</i> (5.3.5.4) requires that treatment of historic structures, including prehistoric ones, be based on sound preservation practices to enable long-term preservation of the structure's historic features, materials, and qualities, adhering to <i>The Secretary of the Interior's Standards for the Treatment of Historic Properties</i></li> </ul>