

# State of the Park Report for Catoctin Mountain Park

## Scoping Workshop and Report Development Documentation

April 10-12, 2012

### 1. Introduction

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This document provides background information and methods used to develop the 2014 State of the Park report for Catoctin Mountain Park, including a summary of the scoping workshop process, the list of participants involved in the scoping workshop and the assessments of resource condition, and notes to document why certain decisions or assessments were made.

A State of the Park report will be developed for each park to “assess the overall status of park resources and use this information to improve park priority setting and communicate complex park condition information to the public in a clear and simple way” ([NPS Call to Action Plan](#)). The report is a truthful assessment of the overall condition of priority park resources and values, irrespective of the ability of the park superintendent or the National Park Service to influence it. The purpose of each report is to:

- Provide to visitors and the American public a snapshot of the status and trend in the condition of a park’s priority resources and values.
- Summarize and communicate complex scientific, scholarly, and park operations factual information and expert opinion using non-technical language and a visual format.
- Highlight park stewardship activities and accomplishments to maintain or improve the State of the Park.
- Identify key issues and challenges facing the park to help inform park management planning.

State of the Park reports bring a standardized approach to assessing the condition of priority resources and values for a park, and for communicating the condition summaries. The reports focus on the priority resources and values of the park based on the park’s purpose and significance, as described in the park’s Foundation Document or General Management Plan. The assessments of resource condition are based upon the best available scientific and scholarly research, reports, and publications, which are cited and linked to throughout the report and the associated “drill-down website version” of the report, but the condition assessments also involve expert opinion and the professional judgment of park staff and the subject matter experts involved in developing the report. The in-depth knowledge by park staff of park resources and recent events and activities, plus their expertise from being involved in the day-to-day practice of all aspects of park stewardship, are reflected throughout this report.

The status and trends in the condition of priority park resources and values are continually changing, and this State of the Park Report will require updating as new data and understanding for the resources becomes available. A full revision of the report is expected every five years; however, incremental updates may be made periodically between major revisions.

### 2. Approach and Methodology

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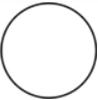
#### 2.1 Definition of Key Terms

- **Fundamental and Other Important Resources and Values:** Fundamental resources and values are the particular systems, processes, experiences, scenery, sounds, and other features that are key to achieving the park’s purposes and maintaining its significance. Other important resources and values are those attributes that are determined to be particularly important to park management and planning, although they are not central to the park’s purpose and significance. These priority resources are identified in the Park Foundation Document and/or General Management Plan. The short-cut name that will be used for this will be **Priority Resources**.

- **Desired Conditions:** A qualitative description of the integrity and character for a set of resources and values, including visitor experiences, that park management has committed to achieve and maintain. These Desired Conditions are tied to the Park Foundation Document and/or General Management Plan.
- **Indicator of Condition:** A selected subset of components or elements of a Priority Resource (i.e., a Fundamental or Other Important Resource or Value for the park) that are particularly “information rich” and that represent or “indicate” the overall condition of the Priority Resource. There may be one or several indicators of condition for a particular Priority Resource.
- **Specific Measure of Condition:** One or more specific measurements used to quantify or qualitatively evaluate the condition of an Indicator at a particular place and time. There may be one or more Specific Measures of Condition for each Indicator of Condition.
- **Current Condition:** The current quantifiable or otherwise objective value or range of values for an Indicator or Specific Measure of Condition based on scientific data or scholarly analysis.

## 2.2 Symbols Used to Communicate State and Trend in Resource Condition

The Status and Trend symbols used throughout the State of the Park report are summarized in the following key. The background color (Green, Yellow, or Red) represents the current condition of a resource, the direction of the arrow summarizes the trend in condition, and the thickness of the outside line represents the degree of confidence in the assessment of condition based on available data and understanding. In some cases, the arrow is omitted because data are not sufficient for calculating a trend (e.g., data from a one-time inventory or insufficient sample size).

Condition Status		Trend in Condition		Confidence in Assessment	
	Warrants Significant Concern		Condition is Improving		High
	Warrants Moderate Concern		Condition is Unchanging		Medium
	Resource is in Good Condition		Condition is Deteriorating		Low

### Examples of how the symbols should be interpreted:



Resource is in good condition, its condition is improving, high confidence in the assessment.



Condition of resource warrants moderate concern; condition is unchanging; medium confidence in the assessment.



Condition of resource warrants significant concern; trend in condition is unknown or not applicable; low confidence in the assessment.

## 2.3 Rules for Combining Multiple Status and Trend Symbols

The overall assessment of the condition for a Priority Resource or Value may be based on a combination of the status and trend of multiple indicators and specific measures of condition. A set of rules are proposed for summarizing the overall Status of a particular Priority Resource based on assessments of Status for two or more specific measures of condition, and for summarizing the overall Trend for the resource based on multiple Trend arrows. The proposed set of rules, based on an approach used by Parks Canada Agency to develop State of the Park reports, is as follows:

### Condition:

To determine the combined condition, each red symbol is assigned zero points, each yellow symbol is assigned 50 points, and each green symbol 100 points. Calculate the average, and apply the scale below to determine the resulting color.

Score 0 to 33	Score 34 to 66	Score 67 to 100
Red	Yellow	Green

### Trend:

To determine the overall trend, subtract the total number of down arrows from the total number of up arrows. If the result is 3 or greater, the overall trend is up. If the result is -3 or lower, the overall trend is down. If the result is between 2 and -2, the overall trend is unchanged.

## 3. Scoping Workshop Agenda and Participants

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The Catoclin Mountain Park State of the Park workshop was held at park headquarters at Thurmont, Maryland on April 10-12, 2012. See Appendix 1 for the workshop agenda.

### 3.1 Participants in Development of the State of the Park Report

Name	Title	e-mail address
Greg Jarvis	Natural Resource Specialist	Greg_Jarvis@nps.gov
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#### 4. Notes/Comments about Decisions Made in Selecting the List of Priority Resources and Values, Indicators of Condition, and Specific Measures of Condition and Assessing the Condition of Priority Resources

The internet version of the park’s State of the Park report, available at <http://www.nps.gov/stateoftheparks/cato/>, provides detailed information and sources of information for the resources summarized in the report, including references, accounts on the origin and quality of the data, and the methods and analytical approaches used in the assessments. The intent of the “drill-down website version” is to allow the reader to access the large amount of complex scientific and scholarly data and information upon which the assessments of condition are based. There will be some situations in which it may not be clear how the assessments were made based on the underlying “evidence” available through the website version plus the professional expertise of the participants. The information and notes in the table below are intended to assist the readers and reviewers of the report in understanding why certain decisions were made as part of summarizing a large amount of complex data and information and professional judgment for the purposes of communicating the information to visitors and the public.

##### 4.1 Notes/Comments about the List of Priority Resources Used in the Report

Priority Resource or Value	Notes/Comments

##### 4.2 Natural Resources Section

Priority Resource	Notes/Comments
Air Quality	
Water Quantity and Quality — Owens Creek	
Water Quantity and Quality	

— Big Hunting Creek	
Geological Resources	
Eastern Deciduous Forest	
Fish Communities	
Wildlife Communities	
Viewsheds	
Natural Sounds	
Night Skies	

### 4.3 Cultural Resources Section

Priority Resource	Notes/Comments
Archeology	
Ethnographic Resources	
Historic Structures in Camp Greentop and Camp Misty Mount	
Other Historic Structures	
Cultural Landscapes	
Museum Collections	

### 4.4 Visitor Experience Section

Priority Resource	Notes/Comments
Number of Visitors	
Visitor Satisfaction and Safety	
Educational and Outreach Programs	
Recreational Opportunities	
Natural Landscape Experience	
Volunteers and Partnerships	

### 4.5 Park Infrastructure Section

Report Component	Notes/Comments
Overall Facility Condition Index (FCI)	Facility condition data extracted from NPS Facility Management Software System (FMSS): Deferred Maintenance (DM) and Current Replacement Value (CRV) are summed by Asset Category for all assets with “Operating”, “Oper/Obso”, or “Inactive” Status. Each Asset Category’s FCI is calculated by dividing its subtotaled DM by its subtotaled CRV. The park’s Overall FCI is calculated by dividing its total DM by its total CRV. A lower FCI indicates a better condition. To achieve standardization between 2008 and 2012, 2008 CRV is multiplied by (1.7774 ÷ 1.45), resulting in 2008 Adjusted CRV.
FCI Condition Status	FCI ≤ 0.100 the facility is in <b>Good</b> condition 0.100 > FCI ≤ 0.150 the facility warrants <b>Moderate</b> concern FCI > 0.150 the facility warrants <b>Significant</b> concern
FCI Condition Trend	Based on calculated percentage change in FCI: (2012 FCI - 2008 FCI) ÷ 2008 FCI. Up Arrow: FCI improved by > 10% over the 5 years Unchanged: FCI is within plus or minus 10%, 2012 vs. 2008 Down Arrow: FCI degraded by > 10% over the 5 years
API/FCI Scatter Plot	Retrieved from AMRS. For more information, refer to: <a href="http://www.nps.gov/stateoftheparks/assets/docs/Park_Facility_Management_Ter">http://www.nps.gov/stateoftheparks/assets/docs/Park_Facility_Management_Ter</a>

	<a href="#">minology and Concepts.pdf</a>
Energy Consumption and Water Consumption	Energy and Water consumption data were downloaded from the NPS Energy Management Database and Reporting System for the five years of 2008-2012. Building gross square footage data were also obtained from the Energy Management database. Data were analyzed, and graphics produced, using some code written for the R statistical package.
Park Carbon Footprint	Measured in MTCO <sub>2</sub> E - metric tons of carbon dioxide equivalent. Information is reported in the State of the Park Report if the park is a member of the Climate Friendly Parks Program. For more information, refer to: <a href="http://www.nps.gov/climatefriendlyparks/about.html">http://www.nps.gov/climatefriendlyparks/about.html</a>

#### 4.6 Other Notes or Comments

### Appendix 1. Workshop Agenda

#### AGENDA

#### State of the Park Report and RSS-Lite Scoping Workshop Catoctin Mountain Park

#### Purpose of this workshop:

Develop a State of the Park report for Catoctin Mountain Park and complete the initial steps in developing a streamlined version of a Resource Stewardship Strategy. The State of the Park report and RSS-lite for the park will summarize the status and trend in the condition of the fundamental and other important resources and values (priority resources), which tie back to the park's Purpose and Significance. There will be a follow-up workshop to develop comprehensive strategies and specific projects as part of the "RSS Lite" to discuss how to advance resources from existing conditions to "where we want to be". Develop a model process that can be used for other parks in the Southeast Region for coordinating the development of a park Foundation Document, State of the Park report, and RSS-Lite.

#### Tuesday, April 10, 2012

##### 8:30am - Morning Session

- Welcome and introductions
- Resource Stewardship Strategy (RSS) overview and objectives
- State of the Park Report (SotP) for CATO: What it is, why it is important, what RSS and SotP reports have in common and how we will coordinate their development for CATO. Review park's purpose, significance, and fundamental and other important resources and values (priority resources) from previous workshop
  - Discuss and agree on list of priority resources to use for SotP report and RSS purposes
  - Show resources example that demonstrates how to use indicators and measures of condition to assess the overall condition of the resource
- Group discussion and brainstorming session:
  - What are some of the actions and activities the park is doing to maintain and improve resource condition for priority resources?
  - What is the biggest success story at the park in the past five years?

##### 11:30 -12:30pm - Lunch Break

### **12:30pm - Afternoon Session**

- Break into four small work groups (natural resources, cultural resources, visitor experience, park infrastructure)
  - For each priority resource or value, determine the indicators and specific measures of condition the park wants to use for the RSS and SotP report
  - Initial impressions of status and trend for each priority resource (green, yellow, red) based on the indicators and measures; document existing data sources for follow-up purposes
  - Discuss initial reference condition/target value for each indicator and measure for context
  - Document the scientific/scholarly rationale for each indicator, specific measure and reference condition/ target value
- Large group discussion – compare notes from work groups and discuss any problematic issues
- Large group – reference conditions 101 – provide reference condition examples
- Break out into work groups and continue to fill in SotP tables and RSS desired conditions table

## **Wednesday, April 11, 2012**

### **8:30am - Morning Session**

- Large group discussion – review notes and results from day 1
  - Continue to refine discussion on actions and activities the park is taking to maintain and improve the condition of priority resources
- Break out into smaller groups and continue work on status and trend condition assessments, and reference conditions/ target values for each indicator and measure

### **11:30 - 12:30pm - Lunch Break**

### **12:30pm - Afternoon Session**

- Large group – finalize priority indicators
- Large group – review desired conditions

## **Thursday, April 12, 2012**

### **8:30am - Morning Session**

- Break into work groups and select and refine reference conditions/ target values for cultural and natural resources

### **11:30 – 12:30pm - Lunch Break**

### **12:30pm – Afternoon Session**

- Large group – review and finalize reference conditions/ target values
- Discuss / review documentation of current resource conditions as represented by values for specific measures of condition

### **4:00pm – Workshop Wrap-Up**

- Set deadlines and deliverables
- Assign data gathering roles
- Assign timing and priority
- Next steps