

Standard Operating Procedure #12:

Reporting

Version 2.1 (1/26/2024)

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Revision History Log

Date	Previous version	New version	Authors
2012	1.0	2.0	Suzanne Sanders and Jessica Grochowski
The timing for reports has been modified; resource briefs were added.			
2024	2.0	2.1	Suzanne Sanders and Jessica Kirschbaum
Revised to: • note that we will not continue completing annual technical reports, but will move to a visualizer-based approach to reporting; • reflect the fact that we do not plan to produce analysis and synthesis reports after every sampling cycle, as originally envisioned; • emphasize that manuscripts for peer-reviewed journals will be a primary venue for reporting analyses; • note that some presentations may be occurring virtually; • improve wording and flow of text.			

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12.0 Introduction

A primary goal of the NPS Inventory and Monitoring program (I&M) is to ensure that the results and knowledge gleaned from monitoring are shared with all appropriate parties, especially the parks and their natural resource managers. Because the network's main focus is to assist parks with monitoring needs, we will strive to provide park managers with clear, meaningful products to convey our findings.

While the network primarily addresses concerns of the parks, this monitoring program has the potential to serve a much broader community. For example, monitoring projects can provide a starting point for external scientific research (especially to establish cause-effect relationships) and can provide insights for adaptive management on other public lands. The network is also accountable to multiple organizations within the federal government, including the NPS I&M Program and the U.S. Congress. To ensure accountability and to meet the requests of all parties, we will provide the types of reports and communications detailed below.

12.1 Summary Reporting

As of 2022, all parks have been visited twice. In lieu of annual reporting, which followed all earlier sampling events, we will be moving to online, visualizer-based reporting. Query-based reporting will be used to show summaries of metrics sampled.

12.2 Resource Briefs

Resource briefs may be produced following the publication of journal articles and analysis and synthesis reports. These briefs will be one to two pages in length and will emphasize the results and management implications of the published article or report. Park superintendents and other park employees not working in resource management are the primary audience. However, resource briefs are intended to be written in a manner that they may also be provided to the public. Topical briefs that include information about more than one park may also be produced on an occasional basis. These briefs are also turned into online web articles that appear on the network website.

12.3 Analysis and Synthesis Reports

Detailed reports in which data are analyzed and synthesized may be produced periodically. They will be written in the format of a scientific journal article (abstract, introduction, methods, results, discussion, literature cited) and will contain in depth analyses as outlined in the protocol (Sanders and Kirschbaum 2024) and SOP 11: Data Summary and Analysis. If produced, these comprehensive reports will:

- place the observed results in both a regional and historical context by relating them to other published literature;
- discuss the significance of the results in terms of environmental change; and

- provide management recommendations based on the findings.

The Terrestrial Ecologist and Botanist will take the lead in writing the analysis and synthesis reports and will work with the network Science Communicator to have them peer-reviewed and prepared for submission to the NPS report series. The target audiences for these reports are the parks (primarily the natural resource managers), the network, and both regional and Servicewide I&M programs. Outside of the National Park Service, the target audience includes the four state departments of natural resources (Indiana, Michigan, Minnesota, and Wisconsin) and the broader scientific community.

12.4 Scientific Journal Articles

Because the vegetation monitoring protocol is designed with rigorous standards for sampling design and analysis, monitoring results are expected to be highly defensible and meet the standards of the peer-review process. The publication of monitoring results in scientific journals will allow the network to reach the scientific community in a way that internal NPS reports typically do not. Further, peer-reviewed publications can promote collaborative investigation by members of the scientific community, either independently or in cooperation with the network. Ultimately, this process should foster a greater understanding of ecosystem components and processes.

The Terrestrial Ecologist and Botanist will strive to produce manuscripts intended for journal publication on a regular basis. These will typically be based on one or more aspects of ecological or management concern, such as ungulate browse or regeneration.

12.5 Other Communications

In addition to the reporting types listed above, other means of communication can further disseminate information to a different or a broader audience. To this end, we will provide the following additional types of communications:

Briefings to park biologists: The project manager will offer to present the findings from the monitoring program to the biologists (and other interested staff) at the park in which monitoring was conducted the previous year. These presentations may occur at the park, may take place virtually, or may occur at some other logical venue such as a regional meeting or workshop. Presentations will provide a concise synopsis of monitoring results as well as management considerations.

Conference presentations: When possible, the project manager will present monitoring results at regional and national scientific conferences. Such presentations will allow the network to reach the broader scientific community as well as land managers and conservation practitioners. Potential conferences include those sponsored by the Ecological Society of America, Society for Conservation Biology, The Wildlife Society, the Natural Areas Association, and the George Wright Society. At a more local scale, the Great Lakes Science for Parks Symposium and the St. Croix Research Rendezvous are valuable venues for information exchange.

12.6 Literature Cited

Sanders, S. M., and J. Kirschbaum. 2024. Vegetation monitoring protocol version 2.1: Great Lakes Inventory and Monitoring Network. Science Report. NPS/SR—2024/166. National Park Service. Fort Collins, Colorado. <https://doi.org/10.36967/2305281>.