

## Resource Stewardship for the 21st Century – Interim Policy

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June 9, 2016

### **Policy Memorandum 16-01**

To: All Employees

From: Director /s/ Jonathan B. Jarvis

Subject: Resource Stewardship for the 21st Century – Interim Policy

The National Park System, as well as all the natural and cultural resources under National Park Service (NPS) oversight, faces environmental and social changes that are increasingly widespread, complex, accelerating, and uncertain. These challenges require us to carefully update our policy framework to reflect the complexity of decisions needed to manage the natural and cultural resources in our care. This Policy Memorandum (Memorandum) will guide us in taking the necessary actions to fulfill the NPS mission in the 21st century.

This Memorandum sets the framework and direction for creating and implementing a comprehensive new Director's Order #100: Resource Stewardship for the 21<sup>st</sup> Century (Director's Order), which will be completed by December 15, 2016. The Director's Order will update the guiding principles and policies of resource management and stewardship in the National Park System.

This Memorandum and the subsequent Director's Order reflect the completion of an important element in the NPS *A Call to Action*, namely:

Action #21: Create a new basis for NPS resource management to inform policy, planning, and management decisions and establish the NPS as a leader in addressing the impacts of climate change on protected areas around the world.

### **Purpose**

This Memorandum: (1) updates guiding principles for resource stewardship in parks, programs, and offices of the NPS; and (2) provides interim guidance to employees during the development of the Director's Order.

This Memorandum is intended only to improve the internal management of the NPS, and is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, its departments, agencies, instrumentalities or entities, its officers or employees, or any other person.

## **Background**

In 1963, A. Starker Leopold chaired a committee of scientists in preparing a report titled, *Wildlife Management in the National Parks*. The report, which became known as the “Leopold Report,” represented the first comprehensive attempt at evaluating best practices and principles for sustainable resource management, and was the source of longstanding policies for natural resource management in the National Park System. Much has changed for the NPS since the 1960s. The number and types of parks in the system, and the overall size of the system, have increased significantly. The annual number of visitors has grown four-fold. Social, cultural, and demographic changes to American society have been profound. Climate change is creating, and will continue to create, dynamic environmental shifts that impact both natural and cultural resources<sup>1</sup>. Additional pressures such as biodiversity loss, invasive species, land use change, and pollution require effective response and management. New science—and new disciplines of science—have expanded our understanding of natural and cultural systems, and have revealed how much we do not yet know about how these systems function.

For all these reasons, I asked the Science Committee of the National Park System Advisory Board (NPSAB) to revisit the Leopold Report, and report to me their findings and recommendations. Importantly, this new report was to examine both natural and cultural resource management. The committee was composed of scientists from a wide range of disciplines, with broad experience, and included several Nobel Laureates and members of the National Academy of Sciences. The committee delivered the Report, [Revisiting Leopold: Resource Stewardship in the National Parks](#) (Report)<sup>2</sup> to the NPSAB, which adopted it and presented it to me.

The Report makes several important recommendations for advancing resource stewardship in the 21st century, noting:

The overarching goal of NPS resource management should be to steward NPS resources for continuous change that is not yet fully understood, in order to preserve ecological integrity and cultural and historical authenticity, provide visitors with transformative experiences, and form the core of a national conservation land- and seascape. [[Report](#), page 11.]

This Memorandum, and the Director’s Order, will help prepare the NPS—its parks, its programs, and its people—to continue what the Report aptly describes as our “enduring responsibility,” which is the NPS mission:

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<sup>1</sup> There are a number of climate change policy initiatives throughout the Federal Government including, for example the [President’s Climate Action Plan](#) (2013), the NPS [Climate Change Action Plan \(2012-2014\)](#), the NPS [Climate Action Plan](#) (2010), and the [National Fish, Wildlife and Plants Climate Adaptation Strategy](#) (co-led by the National Oceanic and Atmospheric Administration and the U.S. Fish and Wildlife Service, 2012).

<sup>2</sup> Portions of this Memorandum are derived from text in the Report.

The National Park Service preserves unimpaired the natural and cultural resources and values of the [N]ational [P]ark [S]ystem for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world. [*Management Policies* (2006), [inside front cover](#).]

## **The Overarching Goal of Resource Stewardship**

This Memorandum reaffirms that resource stewardship is a preeminent duty of the NPS, and that “[w]hen proposed park uses and the protection of park resources and values come into conflict, the protection of resources and values must be predominant.” *Management Policies* (2006), [section 1.5](#). The NPS defines resource stewardship as both an ethic of active responsibility to pass on the parks unimpaired to future generations and the application of the necessary expertise to meet this duty. We do not redefine “unimpaired” in this Memorandum, but instead recognize that there are new and complex forces that impact park resources and that must be considered in resource management.

Therefore, the overarching goal of resource stewardship is to manage NPS resources in a context of continuous change that we do not fully understand, in order to:

- preserve and restore ecological, historical, and cultural integrity that includes multiple perspectives;
- provide visitors and users of our programs with opportunities for transformative experiences that educate and inspire; and
- contribute as an ecological and cultural core of a national and international network of protected lands and waters. See [section 1.6](#) of *Management Policies* (2006).

## **Developing the Director’s Order**

Building upon the framework set out in this Memorandum, the Director’s Order will be developed, in collaboration with appropriate directorates, regions, and programs, to articulate and communicate the guiding principles and policies of resource management and stewardship of the NPS. Upon issuance, the Director’s Order will supersede this Memorandum.

## **POLICY**

In support of the overarching goal of resource stewardship, we will implement the following:

- A. We will integrate the overarching goal of resource stewardship into all appropriate policies, stewardship plans and strategies, resource planning, program funding, inventory and monitoring, educational and interpretive programs, and field

operations. We will fully define and describe the new concepts in the Director's Order; current definitions for some of these concepts are included in the Appendix. Integration of efforts to create transformative visitor experiences are already underway and can be found in *Achieving Relevance in Our Second Century* (2014).

B. We will ensure that the National Park System is core of a national and international network of protected lands and waters.

C. Informed by scientific and scholarly research, and traditional ecological knowledge, we will manage our resources emphasizing resiliency, connectivity at landscape scales, and life-cycle stewardship.

D. NPS resource stewardship decision making will be explicitly based upon best available sound science and scholarship, accurate fidelity to the law, and long-term public interest. While used in every decision, these criteria will not always be weighted equally.

- **Best available sound science and scholarship** is defined as up-to-date and rigorous in method, mindful of limitations, peer-reviewed, and delivered at the appropriate time in the decision-making process in ways that allow managers to apply its findings.
- **Accurate fidelity to the law** means that the NPS decision-making process must adhere with precision to the law, be mindful of legislative intent, and consistently and transparently follow public policy and regulations.
- **Long-term public interest** emerges from an evolving understanding of public wants and needs, meaningful civic engagement including multiple inclusive perspectives and generations, the NPS mission, and the expert judgment of NPS professionals.

E. We will ensure all superintendents and those who aspire to positions of leadership in the NPS possess scientific literacy appropriate to their positions and resource management decision-making responsibilities. Scientific literacy is defined as the knowledge and understanding of scientific concepts and processes relevant to biological, physical, social, and cultural sciences, and an understanding of the strengths and limitations of scientific findings and the appropriate application of scientific research to management and policy issues.

F. We will fully integrate the precautionary principle and adaptive management into resource stewardship decision making at all appropriate levels. As applied by the NPS, the precautionary principle requires managers to act in furtherance of the NPS mission, even where the possibility for harm is not yet fully quantified. Adaptive management requires managers to monitor the consequences of resource management actions, and use these results to improve the effectiveness of actions. We will develop and incorporate guidance for the application of the precautionary principle and adaptive management into appropriate guidance documents.

## **ACTIONS**

In support of the overarching goal of resource stewardship, we will begin to implement the following actions:

### **A. Integrating Natural and Cultural Resource Stewardship**

As the Report states, “Parks exist as coupled natural-human systems. Natural and cultural resource management must occur simultaneously and, in general, interdependently. Such resource management when practiced holistically embodies the basis of sound park stewardship.” [Report](#), page 9. We will:

- Strengthen the integration of natural and cultural resource programs, functions, and funding mechanisms when it is beneficial to resource stewardship.
- Expand internal and external partnerships to achieve the policy objective of the National Park System serving as a core of a national and international network of protected lands and waters.
- Increase our understanding and use of traditional ecological knowledge to strengthen resource stewardship.

Implementation of the above actions will be led by the Natural Resources, Stewardship and Science (NRSS) and Cultural Resources, Partnership and Science (CRPS) Directorates, and will engage all relevant parks, regions, offices, and programs.

### **B. Updating our Workforce**

We will take the following actions to diversify, modernize, and support our workforce to:

- Create, through strategic partnerships with educational institutions and other organizations, a new generation of scientists, scholars, and resource managers who can transform the NPS workforce to reflect the diversity of the Nation.
- Incorporate the overarching resource stewardship goal into new and revised position descriptions and performance plans for all appropriate positions throughout the NPS.

Implementation of the above actions will be led by the Workforce and Inclusion Directorate and the regional directors, and will engage all relevant parks, offices, and programs.

### **C. Investing in Service-wide Resource Stewardship Training**

To ensure the workforce is adequately trained to understand and implement these policies, strategies, and actions, we will develop and make available the following:

- Additional Service-wide training for resource stewardship so that every employee understands her or his responsibility to implement the overarching goal.

- Training to effectively apply the three primary criteria for resource stewardship decision making (see Policy, section D, above) and scientific literacy (see Policy, section E, above). Appropriate training will also incorporate the definition and application of the precautionary principle and other concepts, using case studies and other tools.

Implementation of the above actions will be led by the Workforce and Inclusion Directorate, and will engage all relevant parks, regions, offices, and programs.

## **Conclusion**

As we embark on our second century of stewardship and public engagement, our employees are faced with more complex decisions and unprecedented change that threaten the resources in our care. This Memorandum begins our process of creating a new policy framework for NPS resource stewardship. The new framework will ensure that decision makers have the scientific literacy to make difficult decisions, and to apply the precautionary principle in the long-term interest of the public. When applied within the context of landscape-level conservation, for example, the framework will ensure that we will meet our mandate of “unimpaired” for future generations. The NPS is uniquely positioned to lead the Nation in this “enduring responsibility” of stewardship, with our ability to integrate natural and cultural resources along with strategies informed by science and scholarship to effectively address the many challenges ahead. By adopting this updated policy direction, we will create a resilient course for meeting our mission in a continuously changing world. I am confident that the NPS, with its extraordinary employees and partners, will carry forward this mission so as to serve this and future generations.

-----*End of Policy Memorandum*-----

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## **APPENDIX–DEFINITIONS**

Note: Definitions for the new concepts appearing below are interim in nature. They will be fully defined and described in Director’s Order #100: Resource Stewardship for the 21<sup>st</sup> Century.

### **Accurate fidelity to the law**

The NPS decision-making process must adhere with precision to the law, be mindful of legislative intent, and consistently and transparently follow public policy and regulations. [Report](#), p. 17.

### **Best available sound science**

Information that is up-to-date and rigorous in method, mindful of limitations, peer-reviewed, and delivered at the appropriate time in the decision-making process in ways that allow managers to apply its findings. [Report](#), p. 17.

### **Continuous change**

The concept that parks are not a static entity, but instead are undergoing nearly constant and seasonal changes including periods of extreme, volatile swings in conditions within longer-term trends of change. [Report](#), pp. 11-12.

### **Core of a national and international network of protected lands and waters**

NPS-administered resources that are ecologically and/or culturally essential to national and international networks of protected areas, and that are managed through exemplary resource stewardship practices.

### **Ecological integrity**

The ability of an ecological system to support and maintain a community of organisms that has a species composition, diversity, and functional organization comparable to those of natural habitats within a region. [NPS Ecological Integrity Assessment Framework](#) (January 2009), p. 2.

### **Historical and cultural integrity**

Note: While the Report utilized “cultural and historical authenticity,” this term is not being adopted by the NPS. Rather, during the development of the Director’s Order, NPS staff will consult with cultural resource management practitioners to develop a definition of “historical and cultural integrity” that incorporates a variety of perspectives, reflects current theories and best practices of all relevant disciplines, and promotes dynamic, adaptive, and data-driven resource management interpretation.

### **Life-cycle stewardship**

Managing natural resources such that species’ full life cycles are sustained over time ([Report](#), p. 14) and managing cultural resources for long-term preservation.

### **Long-term public interest**

Based on the NPS mission, the expert judgment of NPS professionals, and an evolving understanding of public wants and needs now and for multiple generations in the future. [Report](#), p. 17.

## **National conservation land- and seascape**

Large, interconnected regional and continental landscapes with recognized conservation values that are influenced by adjacent land and water uses and regional cultures, and require connectivity for system resilience over time. [Report](#), p. 9; [Scaling Up website](#).

## **Precautionary principle**

When an activity raises plausible or probable threats of harm to human health or the environment, precautionary measures should be taken even if all cause and effect relationships are not fully established scientifically. A key element is to take anticipatory action in the absence of scientific certainty. [1998 Wingspread Statement](#). See also [section 1.4.7.1](#), “Unacceptable Impacts,” of *Management Policies* (2006).

## **Scientific literacy**

The knowledge and understanding of scientific concepts and processes and an understanding of the strengths and limitations of scientific findings and the appropriate application of scientific research to management and policy issues. [Report](#), p. 21.

## **Traditional ecological knowledge (TEK)**

Although the definition varies in each setting, TEK is generally regarded as a cumulative body of knowledge, practice, and belief, evolving by adaptive process, and handed down through generations by cultural transmission, about the relationship of living beings with one another and their environment. It is knowledge based on long-term observation and interactions with the natural world associated with societies who have a strong connection to a geographic location and historical continuity in resource use and management practices. Berkes, F. 1993. Traditional ecological knowledge in perspective, Traditional ecological knowledge: Concepts and cases. Canadian Museum of Nature/International Development Research Centre, Ottawa, Ontario, Canada.

## **Unacceptable impacts**

Impacts that, individually or cumulatively, fall short of impairment, but are still not acceptable within a particular park’s environment. Park managers must not allow uses that would cause unacceptable impacts. *Management Policies* (2006), [section 1.4.7.1](#).

## **Visitor**

The term “visitor” encompasses individuals who physically visit a national park, and any audiences that actively engage with a park’s or program’s interpretive and educational services, regardless of where or how such use occurs.