### **Policy Memorandum 14-02**

To: All Employees

From: Director /s/ Jonathan B. Jarvis

Subject: Climate Change and Stewardship of Cultural Resources

This policy memorandum provides guidance and direction regarding the stewardship of cultural resources in relation to climate change. It follows my March 6, 2012, memorandum, <u>Applying National Park Service Management Policies in the Context of Climate Change</u>, which addressed the implications of climate change on the guiding principles of National Park Service (NPS) resource management. Additional guidance, in the form of a Cultural Resource Climate Change Strategy, will be forthcoming.

## **Background**

Since my first climate change memorandum was issued in 2012, the risks posed by climate change to parks and communities across the Nation have become even more apparent. Climate science projections anticipate that the rate and intensity of climate change effects will continue to increase for the foreseeable future. Climate change poses an especially acute problem for managing cultural resources because they are unique and irreplaceable — once lost, they are lost forever. If moved or altered, they lose aspects of their significance and meaning. Every year, we lose irreplaceable parts of our collective cultural heritage, sometimes before we even know they exist. Therefore, the decisions we make and the priorities we set today will determine the effectiveness of NPS stewardship of cultural resources in the coming decades.

The NPS leads the Nation in the care and management of our country's cultural resources through the national park system and our programs. On behalf of the Secretary of the Interior, we manage preservation programs that extend to nearly every American community. The National Register of Historic Places and National Historic Landmark Programs, the Federal Historic Preservation Tax Incentives Program, Technical Preservation Services, National Heritage Areas, National Scenic and National Historic Trails, certification of local governments, and our partnerships — including collaborations through the Landscape Conservation Cooperatives, and with tribal governments, States, universities, and other Federal agencies — form a framework for historic preservation inside parks and around the country. Our leadership role in cultural resources now requires engaging this framework to set priorities, to share techniques for protecting significant resources, and to help guide our collective actions with respect to climate change.

NPS cultural resource management must keep in mind that (1) cultural resources are primary sources of data regarding human interactions with environmental change; and (2) changing climates affect the preservation and maintenance of cultural resources. The NPS will integrate these concepts into information and data gathering and analysis within each of the four components of the NPS <u>Climate Change Response Strategy</u>: science, adaptation, mitigation, and communication. The Cultural Resource Climate Change Strategy currently being prepared will provide further guidance.

Several recent documents set out approaches for the NPS to address current and future effects of climate change: <u>Climate Change Response Strategy</u> (2010), <u>A Call to Action</u> (Action Item 21: Revisit Leopold 2011), <u>Revisiting Leopold: Resource Stewardship in the National Parks</u> (2012), <u>Green Parks Plan</u> (2012), <u>Climate Change Action Plan</u> (2012), and the forthcoming Cultural Resources Challenge. The guidance included in this policy memorandum should be integrated, as applicable, into all actions stemming from those documents.

Based upon discussions across the Service, I address three essential questions with respect to NPS cultural resources and climate change: (1) what is climate change adaptation for cultural resources; (2) how should we make decisions related to cultural resources in light of climate change; and (3) how do we communicate regarding climate change science and impacts.

## 1. Climate Change Adaption for Cultural Resources

\_

The focus for cultural resources adaptation in an era of climate change must be on our research and management practices. Following the Intergovernmental Panel on Climate Change and as incorporated into the NPS Climate Change Response Strategy, adaptation is "an adjustment in natural or human systems that moderates harm or exploits beneficial opportunities in response to change." Because cultural resources have strong ties to place, risk the loss of integrity if moved or altered, and are in large part non-living, their capacity to move or change as environments around them change is limited. Therefore, we must take a flexible approach in our management actions. Our long-standing policies and the regulations we help administer require that management decisions consider the specific characteristics and significance of each cultural resource. Climate change does not alter these requirements, but it does challenge us to manage these resources in the best possible manner given uncertainty and sometimes rapidly changing conditions.

Specific foci for adaptive research and management activities will include:

**A. Integration of Natural and Cultural Resources:** Modeling of climate change impacts and the collecting of environmental monitoring data should, wherever feasible, integrate the data needs of both cultural and natural resource managers. Cultural resources exist within or include parts of the natural world. A given climate variable can affect natural and cultural resources quite differently — heat stresses pikas differently than historic wooden buildings. However, both are stressed and the tracking of that trend provides critical information to both cultural and

natural resource managers. Such information should be integrated into standardized reporting for both cultural and natural resources, such as <u>State of the Parks</u> reports. In turn, cultural resources also have tremendous potential to provide critical information for climate science, such as data about past climates at local scales and the history of human impacts on the environment. We must work with our partners to tap this information more fully and use it effectively in establishing baselines, assessing change, undertaking planning efforts, and setting management goals.

- **B.** Innovation for Emergent Threats: Effective adaptive management requires that our decision processes be nimble and flexible. Because climate change-related impacts to cultural resources can occur rapidly, often with less warning than our budgeting cycle is designed to accommodate, I encourage managers to use appropriate discretion and innovation in their actions and decision processes, including reallocating funds, where appropriate, to address emergent threats.
- C. Incorporation of Cultural Resources into Sustainability Actions: Cultural resources should be important components of efforts to mitigate the effects of climate change nationwide by improving energy efficiency and reducing greenhouse gas emissions. The adaptive reuse of historic buildings and installation of energy-saving design elements, for example, can be more climate friendly than new construction. As the recently revised <u>Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings</u> make clear, rehabilitation to meet current needs often can be done while maintaining historic integrity in accordance with <u>The Secretary of the Interior's Standards for the Treatment of Historic Properties</u>. Within the NPS, cultural resources are integral to full implementation of the NPS <u>Green Parks Plan</u>. I encourage managers to incorporate historic structures and cultural landscapes into their carbon reduction strategies and planning.
- **D. Evaluation of Siting of Museum Facilities and Collections:** In light of the risks posed by climate change, we must revisit past decisions about museum facilities and collections. As part of a broader effort to update how we site and use facilities, I direct the Associate Director for Cultural Resources, Partnerships, and Science to undertake a vulnerability study of our museum facilities and collections, and develop a plan for improving stewardship of them.

#### 2. Cultural Resources Decision-making in an Era of Climate Change

Cultural resources have long been subject to environmental forces. The risks of climate change for cultural resources lie in the alteration and recombination of these forces, which together are increasing the types and intensity of impacts on cultural resources. My memorandum of March 6, 2012, addressed the impairment prohibition of the NPS mission and charged the NPS with continuing to work to preserve resources unimpaired from in-park activities. It directed us to engage fully in cooperative conservation and civic engagement to mitigate the impacts arising from external forces. For cultural resources, this work must include the following:

- **A. Refocus Inventory Responsibilities:** As per our responsibilities under section 110 of the National Historic Preservation Act (16 USC 470h-2), NPS policy is to identify resources, evaluate their significance and eligibility for the National Register of Historic Places, and assess any threats of impairment. Accordingly, parks should focus their resource inventory work on lands not yet investigated in those areas most vulnerable to observed and projected climate change impacts and other threats. These areas may include wilderness.
- **B.** Integrate Resource Vulnerability and Significance: We will prioritize cultural resource funding and management actions on projects that integrate vulnerability and resource significance. The current Service-wide Comprehensive Call already prioritizes such work. As such, all identified cultural resources should be evaluated in terms of their vulnerability and significance so that management decisions are directed to resources that are both significant and most at risk.
- C. Understand the Range of Climate Change Effects: Cultural resources are vulnerable to dramatic and well-publicized effects of climate change, such as sea level rise or storm surge. Evidence from across the Service is beginning to indicate they are also vulnerable to inland and other more subtle effects of climate change, such as the impacts of more freeze/thaw cycles on stone walls or more rapid wetting and drying cycles on adobe buildings. We must improve our understanding of these additional impacts, address them in our stewardship practices, and be able to communicate them to the public.
- **D.** Consult Broadly: Consultation to inform the assessment of resource significance must engage a broad array of stakeholders. This will ensure that our actions are based upon thorough, up-to-date understandings of how and why our resources are valued by many diverse groups, including Native Americans and other traditionally associated people, visitors, and the scientific community. It is critical that we engage with all stakeholders to identify their important stories and strengthen our understanding of cultural resources and their values. The National Register of Historic Places eligibility criteria provide a sound framework for assessing significance. In addition, we may discover during consultation that the contemporary significance of our parks and resources transcends the enabling legislation for individual parks. Consultation to glean and understand the contemporary significance of cultural resources to the American people will help keep the national park system and the NPS relevant for generations to come.
- **E. Value Information from the Past:** National Register criteria challenge us to identify and manage not only our known and honored heritage, but also to understand how cultural resources can address questions about the past. Such questions must now include how our modern climate situation has come about and how human societies have responded to climatic and environmental variability in the past. What do resilient and sustainable societies look like? The resources in our parks, including the ones we have not yet identified, have a vital role to play in answering these questions for our multiple publics. Incorporating these questions into our significance evaluations is another critical piece in maintaining NPS relevance into the future.

**F. Recognize Loss:** We will ensure that our management options recognize the potential for loss. Responsible stewardship requires making choices that promote resilience and taking sustainable management actions. Funding temporary repairs for resources that cannot, because of their location or fragility, be saved for the long term, demands careful thought. Managers should consider choices such as documenting some resources and allowing them to fall into ruin rather than rebuilding after major storms. Such decisions for loss cannot be made lightly nor without appropriate consultation and compliance. They must incorporate interdisciplinary research and should be coordinated on a consistent and Service-wide basis. As with many aspects of climate change adaptation, as yet there are no specific guidelines for these decisions. Guidance and tools to support them are being built in the Cultural Resource Climate Change Strategy, other documents in preparation, and through the continued collaboration and best practices of our parks, regions, and national programs. History will judge us for the choices we make, and we will take comfort in knowing that sometimes the hard choices are also the ones that are best for our resources, our parks, and our Nation.

# 3. Communicating about Climate Change Science and Impacts

The NPS has taken significant strides in communicating about climate change through interpretive and educational programs in our parks and through our Service-wide programs. Cultural resources and the stories they anchor are one of the most powerful means we have to share experiences and connect changes in parks to trends across the Nation and worldwide. Impacts to cultural resources provide tangible examples of the effects of climate change at the human scale. Cultural resources offer lessons in past human successes, and failures, in adapting to environmental changes, and provide insight into the origins of the modern climatic situation. There is much to learn and share from traditional ecological knowledge and the weather- and disaster- related memories, practices, and architecture of traditional communities.

Every place has a climate story, many have more than one. Some are told in various ways by the people who have lived and worked on the land for generations. Building on the communication goals of the NPS *Climate Change Response Strategy*, each park and program should engage its staff, including facilities and maintenance staff, rangers, resource managers, scientists, and superintendent, and its surrounding communities to begin to identify and share their climate stories. It is important to do this — even when doing so is uncomfortable — so that they can spark discussion and inform choices. We must be committed to talking about climate change Service-wide, in our internal and external communications, including acknowledging the uncertainty we face as we make management decisions that will have long-term consequences for cultural resources. We will leverage the additional message about climate change into ongoing stories and programs where appropriate.

### **Looking Forward**

Climate change is one of the great challenges of the 21st century. It is remaking our world and substantially influencing how we set priorities and make management decisions. The process of

adaptation will not return us to the way things have been done before, but it will assist us in making choices in the face of uncertainty and change. Cultural resources remind us of who we are and where we have come from. They offer clues on past climate variability and speak to the many different ways humans have adapted to changing environments over time, in our parks and across the country. We need their information and their inspiration.

We must be well-informed and creative in our approach to resource management given the effects of climate change. The paths climate change will take remain uncertain so we must be open to the unexpected, search out new and useful ideas, and share the innovations we develop. This cannot be a NPS-only effort, but instead will require a collaborative approach in order to be successful. This effort will include our international partners, as we learn from their work and perspectives, and share our own. While we cannot afford to wait for absolute certainty about where and when impacts will occur, we must act based on the best available sound science even as we continue to incorporate new information as it becomes available. I challenge all of us to continue to strengthen our work with our many partners to recognize and respond to the effects of climate change on cultural resources. As stewards of America's greatest national treasures, we must draw on our strengths and join with our partners to meet this challenge over the long term.

[End of Policy Memorandum]