



United States Department of the Interior

NATIONAL PARK SERVICE

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Washington, D.C. 20240

IN REPLY REFER TO:

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Policy Memorandum 15-01

To: All Employees

From:

Director *Jonathan Jarvis*

Subject: Addressing Climate Change and Natural Hazards for Facilities

This Policy Memorandum provides guidance on the design of facilities to incorporate impacts of climate change adaptation and natural hazards when making decisions in national parks. It is the third “policy pillar” of our Service-wide climate change response. It joins the March 6, 2012, Policy Memorandum 12-02, *Applying National Park Service Management Policies in the Context of Climate Change*, which addressed the implications of climate change on the guiding principles of National Park Service (NPS) natural resource management. It also joins the February 10, 2014, Policy Memorandum 14-02, *Climate Change and Stewardship of Cultural Resources*, which provided guidance and direction on the stewardship of cultural resources in relation to climate change.

Facilities play a critical role in the mission of the Service: they house our employees, protect and store equipment and materials, demonstrate sustainable design to our visitors, provide context for periods significant to our history, and connect the Service with the public. The Service has the responsibility to invest wisely in these facilities for the long term. Unquestionably, climate change and natural hazards pose a significant threat to our investment in current and future NPS facilities. This Policy Memorandum, in conjunction with the Level 3 guidance, *Addressing Climate Change and Natural Hazards Handbook (Handbook)*, will help park personnel in planning and designing facilities that are responsive to the existing and projected climate change and other natural hazards. Managers must apply the guidance in the Handbook. The Associate Director for Park Planning, Facilities and Lands has the authority to update the Handbook periodically as necessary.

Managers and planners are required to complete a checklist (found in the Handbook) as a guide, and to identify and outline baseline information and assessments for specific NPS assets. Using the information from the checklist and the background baseline data for a given asset, park managers will have identified potential risks associated with climate change and other natural hazards. The Handbook’s checklist includes the range of natural hazards as well as a detailed hazard assessment for coastal storm surge in the context of sea level rise. Future versions of the Handbook will include updated information on how to handle other specific hazards. We anticipate that other facility related handbooks may be developed for additional topics in the future to help facility managers respond more effectively to climate change.

Background

As I stated in the *Climate Change Response Strategy* (2010), “I believe climate change is fundamentally the greatest threat to the integrity of our national parks that we have ever experienced. The current science confirms that the planet is warming, and the effects are here and now.” The NPS was established to conserve natural landscapes and historic places significant to the American people and their stories in a way that allows current and future generations to enjoy these sites long into the future. To respond adequately to climate change and to fulfill our mission, NPS managers and employees must incorporate knowledge and develop approaches based upon not only natural hazards known today, but also those that potentially will affect our resources, facilities, and infrastructure into the future.

Authorities

Various Executive Orders, Departmental guidance, and NPS authorities establish the legal and policy foundation for management approaches that the Service uses to address current and future effects of climate change. These authorities currently include the following:

Executive Office of the President

- Executive Order 13653 of November 1, 2013 (Preparing the United States for the Impacts of Climate Change)
- The President’s Climate Action Plan (June 2013)

Department of the Interior

- Secretarial Order No. 3289 of September 14, 2009 (Addressing the Impacts of Climate Change on America’s Water, Land, and Other Natural and Cultural Resources), Amendment No. 1
- Climate Change Adaptation Plan (2012-2014)
- Part 523 of the Department of the Interior Manual (Climate Change Policy)(2012)

National Park Service

- NPS Management Policies (2006)
- Climate Change Response Strategy (2010)
- Climate Change Action Plan (2012-2014)
- A Call to Action: Preparing for a Second Century of Stewardship and Engagement (August 25, 2011, as updated in 2012, 2013, 2014)
- Green Parks Plan (2012)

The guidance included in this Policy Memorandum will be integrated, as applicable, into all actions stemming from the documents listed above. Chapter 9 of *NPS Management Policies* (2006) outlines several foundational approaches to planning, design, and integration of facilities into the park environment that align with the purpose of this Policy Memorandum. Section 9.1.1.5, Siting Facilities to Avoid Natural Hazards, states, “The Service will strive to site facilities where they will not be damaged or destroyed by natural physical processes.” Additionally, it states that the design and location of facilities and infrastructure must be based upon a “thorough understanding of the nature of the physical processes” and that the Service

must avoid or mitigate “the risks to human life and property.” The principles and practices outlined in documents listed above and the attached Handbook create a framework for future guidance in this rapidly evolving area.

This Policy 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.

Scope

This Policy Memorandum is intended for all NPS managers and employees who are part of the decision-making process for the budgeting, scoping, design, planning, construction, and maintenance of facilities across the Service.

The focus of this Policy Memorandum is to incorporate known climate change impacts and natural hazards into the decision-making process for NPS facilities, including cultural and historic sites and assets. It is not intended to provide direction or guidance in our immediate response to natural hazard incidents, such as that of the Incident Command System and teams (found in Director’s Order #55: Incident Management Program).

Policy

NPS managers and their teams must proactively identify and document facility vulnerabilities to climate change and other natural hazards. The guidance in this Policy Memorandum broadly frames climate change and natural hazard response in the three questions below.

Natural hazard and climate change risks are most easily managed by planning for avoidance, resilience, or adaptation before events occur. Therefore, decision makers should use this guidance to identify options throughout all levels of facility planning and design. To ensure consideration and better understanding of the hazards facing a park, the natural hazard checklist in the Handbook will be required as part of a Regional or Servicewide Development Advisory Board submission. Reviews by those groups will cover the following questions:

Question 1: What natural hazards apply at this location?

For locations that are vulnerable to the effects of climate change or other natural hazards, managers must work to evaluate the immediate and projected risks. This evaluation process must rely on multi-disciplinary professional judgment. No single solution or simple formula can be relied upon Service-wide to address how these risks should be handled on every project. The Handbook includes a Natural Hazard Checklist that serves as a screening tool to be used at the earliest stages of project planning to determine the most likely natural hazards a project may confront.

Question 2: How important are these assets to the park?

The condition, mission importance, and significance of assets are already being evaluated and recorded for a large variety of decisions. These data are independent of any natural hazard, and are basic attributes that must be known to allow sound decision-making related to park priorities

in light of limited resources. These resources provide the foundation for decisions when planning park improvements in an area susceptible to a natural hazard.

Question 3: What measures are going to be taken to promote resilience?

This Policy Memorandum and the accompanying Handbook address our evolving and NPS-specific understanding of all natural hazard risks to park facilities and infrastructure, and the effects of climate change on these. The natural hazards that exist today in our parks, programs, and offices may not be the same ones that impact our resources and assets in the future. These new guidelines work to identify natural hazards and provide, through an evolving process, decision-making strategies, such as quantitative risk analysis and cost-benefit analysis that should result in lower overall physical and financial risk to the Service and our visitors. This guidance provides sources for such data and questions you should address as you make facility planning and design decisions.

Future Actions

Going forward, all decisions will be informed by an increased understanding and appreciation of climate change impacts and other natural hazards. Park managers should use current science on climate change, as well as the guidance from existing park plans, before creating projects in the Project Management Information System. Scientific information regarding climate change impacts is rapidly developing and we should not assume that decisions made in planning documents five or 10 years ago still provide the best on-going solution for climate change adaptation and resilience.

During the design and construction phase, alternatives should be evaluated using sound science to make assets more resilient and adaptive through innovative design options. As has been policy, we will continue to utilize value analysis methods in our decision-making.

I am proud and very appreciative of all the hard work and actions we have already taken together to increase the resilience of NPS facilities to a wide variety of natural hazard risks. Using these new guidelines, we will continue to drive progress in our NPS response to climate change and natural hazards that affect our facilities.

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