



National Climate Change Interpretation and Education Strategy



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Introduction

Forces that shape the landscape—whether conspicuous or subtle, destructive or benign, uplifting or disheartening—form our consciousness and frame the true meanings of place. Yet, imagine visiting a national park where no one relays the story of its history, or of forces that shape it even now. What would your experience be if park staff provided no information about the “river of grass” at Everglades, or World War II at Pearl Harbor, or lava flows at Craters of the Moon? To omit the stories of the influences on these places weakens our understanding and connection to national parks and all that they represent.

Climate change is one of these forces. It is an overarching and omnipresent influence on every acre under the care of the National Park Service (NPS). The changing climate surrounds us, compelling us to tell the story.

The 2010 *NPS Climate Change Response Strategy* recognizes climate change as the greatest challenge our agency has ever faced. The Strategy also provides the basis for how our agency is meeting the challenge. Ongoing science documents climate change effects in parks, and informs our management options. Decision-makers increasingly consider climate change in formulating policy, park plans, and adaptation efforts. And through the *Green Parks Plan*, we are reducing our own greenhouse gas emissions through increasingly sustainable operations.

Together, we are actively responding to climate change. But successful, collaborative stewardship of parks also demands that we converse meaningfully with the American people about their values, perspectives, and opinions around this topic. NPS interpreters, educators, and information officers are uniquely positioned to advance that dialogue.

This National Climate Change Interpretation and Education Strategy outlines a simple framework to engage our visitors on climate change topics. The strategy outlines four broad goals and supporting actions that encourage park staff and visitors to discover personal relevance to climate change and share those connections broadly with others. To support these efforts, an online toolkit of resources accompanies this strategy.

During our first 100 years, national parks served as critical venues for inspiring public thought about everything from wolves, to wildfire, to wilderness, to war. We share all these stories boldly. As we enter our next century, climate change urgently needs our attention. Climate change is not a future event; it is happening now. It is time for the NPS to participate in, facilitate, and inspire critical conversations around this very important issue.

There may be no conversation more important in our time.



Climate change is a powerful force that drives the landscape of Klondike Gold Rush National Historical Park. (Karpilo and Venator 2015). NPS Image by Ronald D. Karpilo and Sarah C. Venator



Half Dome, Yosemite National Park, 1867
NPS Image

Meadow Fire, Yosemite National Park, 2015
NPS Image

The Role of Interpretation and Education in Addressing Climate Change

At the start of our second century, the NPS seeks new opportunities to preserve America's heritage, to engage visitors in understanding that heritage, to make parks relevant to all people, and to inspire people to help steward resources for future generations.

Among the issues that can frame the opportunities in our next century, few are so rich as climate change. National parks are tremendously valuable for understanding and communicating about climate change. That value underlies a vision for how the NPS as a whole will engage our broader society in experiencing and managing change.

All national parks are places to learn about climate change, discover connections between climate change and our own lives, and use this experience to make informed personal decisions.

Climate change is increasingly impacting the natural and cultural resources the NPS protects. This unprecedented and critical issue requires that trusted NPS interpreters and educators communicate the processes and effects of climate change. Our parks are among the most remarkable places in America for recreation, learning, and inspiration. They also provide striking examples of the effects of climate change. As the stewards of these places and stories they tell, it is our duty as trusted sources of information to engage others on this critical issue.

The threat posed by climate change to the integrity of park sites is increasing. Melting glaciers, rising sea-levels, species shifts, and altered precipitation patterns are among some of the clearest indicators of a changing

planet. In order for individuals to join the NPS in responding, they must better understand the issue and consequences of this rapid and unparalleled change. Assisted by partners and other staff, NPS interpreters and educators are the driving force in communicating the impact of climate change on park resources, highlighting the NPS response, and identifying opportunities for visitor involvement.

As places where visitors can witness and experience the impacts of climate change in a place they know and love, parks have extraordinary and unique potential for communicating climate change. This devotion to such special places allows individuals to find their own personal relevance to climate change and to engage others to find their own connection to climate change.



Visitors to the Tidal Basin at East Potomac Park. NPS Image



The southwestern U.S. has seen decreases in spring snow pack contributing to water scarcity. (Melilo et al 2014) The stark white walls encountered at Lake Mead National Recreation Area dramatically illustrate falling water levels resulting from a combination of climate change and urban and agricultural water use. (Barnett and Pierce 2008, Dawadi and Ahmad 2012) USGS Image

Establishing a Collaborative Communication Strategy

This strategy provides direction to our agency leaders and employees on how to communicate the impacts of climate change and the steps the NPS is taking to respond. It describes goals and objectives to be pursued by all directorates and divisions within the NPS in collaboration with partner organizations, other government agencies, and neighboring communities.

NPS leadership will apply this strategy to communication planning and operations. Through site-level climate change communication strategies, the NPS will support and give guidance to employees and partners in their pivotal role in communicating climate change.

The National Climate Change Interpretation and Education Strategy outlines a systematic approach to communicating about climate change in national parks. It draws from and complements documents such as the 2012 Call to Action and the 2014 Achieving Relevancy in Our Second Century. The strategy aims to help park managers incorporate climate change communication into daily park operations by engaging in place-based climate change interpretation and education. In doing so, we can help individuals forge their own meaningful connections, and obtain the knowledge necessary for making informed personal decisions.

Through this strategy the NPS will

Provide opportunities for employees, partners, and the public to find personal relevance and inspiration to understand and respond to climate change

Develop a workforce that is climate literate and capable in climate communication skills

Establish itself as a national and global leader in climate change response

Cultivate a climate change communication community with our partners

Online Toolkit

The companion to the strategy is a public-facing, web-based **Climate Change Communication Toolkit (3CT)**.* The 3CT provides interpretive tools, information, science, and professional guidance to help interpreters and educators communicate about climate change. Throughout this document, icons indicate the sections of the 3CT which correspond with the action listed.

*www.nps.gov/subjects/climatechange/toolkit.htm



Understand Your Story



Best Practices



Who's Your Audience



What We're Doing



Learn and Engage



A ranger surveys damage from Hurricane Sandy at the Statue of Liberty National Monument, NY. Cultural resources face unique challenges in relation to climate change. While it is generally not possible to attribute a single weather storm to climate change, historical sea level rise due to climate change contributed to the major flooding caused by Hurricane Sandy. (Trenberth et al. 2015) NPS Image

Goal 1:

Provide opportunities to find personal relevance in relation to climate change

People relate to their national parks in deeply emotional ways. Through the meaningful stories they relate, America's national parks have a unique power to connect individuals to our nation's heritage. By using these natural laboratories and classrooms to reach the hearts and minds of staff and visitors, we can provide opportunities to engage emotionally and intellectually with climate change and learn from one another. Fostering these connections is fundamental to nurturing the personal relevance necessary for individuals to be fully informed citizens.



Students search for personal relevance in Muir Woods National Monument. NPS Image

Approaches to Achieve This Goal and 3CT Corresponding Areas

Encourage staff to discover and identify personal connections to climate change



Identify climate change effects, impacts, and threats on park sites/resources



Link sites and issues with broader historical and environmental contexts in relation to climate change



Incorporate climate change components into existing interpretation and education programming, and develop new climate change programming



Incorporate climate change communication, into interpretation and education planning and guiding documents





Warmer and drier conditions can lead to greater frequency and severity of wildfire in many places. Across the western U.S.—including Yellowstone National Park—the length of the fire season is longer, consistent with climate change. (Westerling et al. 2011) USDA Image

Goal 2: Develop a Climate-Conscious Workforce

Communicating about climate change can be an empowering act for NPS staff and partners. National parks serve as ideal venues for civic engagement, and NPS interpreters and educators hold an exceptional position with audiences as trained, trustworthy sources willing to engage the public. Furthermore, guidance on best practices and appropriate techniques can help individuals foster the skills necessary to create meaningful and relevant climate change programming.



National Park Service Rangers NPS Image

Approaches to Achieve This Goal and 3CT Corresponding Areas

Provide climate change resources and training for staff and partners



Provide access to current climate-related science, history, and cultural context



Develop greater knowledge of our audiences with respect to climate change



Provide training on climate change communication tools and techniques



Encourage and promote successful practices in climate change communication



Ensure consistency across park sites through use of national key messages and strong partnerships





At Glacier National Park, melting glaciers are revealing relics from the past. Scientists must move quickly to inventory and understand these artifacts before their secrets are lost to time. NPS Image

Goal 3: Provide Leadership in National and Global Climate Change Response

The NPS is a globally trusted source of informal education. As such, we are uniquely positioned to engage all audiences on climate change impacts to our national parks, possible adaptations to changing conditions, and mitigating our carbon footprint. Furthermore, we are well-poised to model the behaviors and actions conducive to addressing climate change. Effective interpretation and education is essential for the NPS to maintain and enhance our institutional influence and continue to lead in the face of this unprecedented challenge.



National Park Service rangers earn trust from visitors.
NPS Image

Approaches to Achieve This Goal and 3CT Corresponding Areas

Responsibly use the public trust and our influence to promote climate literacy and showcase sustainable practices and behaviors



Highlight local opportunities to mitigate carbon footprints, adapt to new “normals,” and encourage sustainable actions



Responsibly use park sites for civic engagement, citizen science, and other public involvement in relation to climate change





Dock damage from Hurricane Sandy at Liberty Island, Statue of Liberty National Monument. As sea levels rise from climate change, damage from storm surge during such events could become more severe. NPS Image

Goal 4:

Cultivate a Community of Climate Communication with our Partners

Meeting the challenge of global climate change will require an unprecedented level of collaboration and cooperation beyond single parks or the National Park System. Working with local communities, government agencies, volunteer networks, concessioners, educational partners, and partner organizations will increase the scope and efficacy of communication efforts. NPS interpreters and educators serve as the ambassadors for community-based efforts and can assist in developing and providing consistent messaging and educational standards, as well as exemplifying climate-friendly behaviors.



National Park Service ranger with the next generation NPS Image

Approaches to Achieve This Goal and 3CT Corresponding Areas

Leverage existing partner networks and actively pursue new collaborations



Ensure partner access to NPS resources for climate change interpretation and education, science, and resource management



Foster, support, participate in, and lead opportunities for internal and external support networks



Foster, support, participate in, and lead local, state, and global partnerships



Use park sites to promote community engagement and to frame climate change discussions



Conclusion

While no single step can reverse the effects of climate change, we have an obligation to future generations to address the issue and maintain the integrity of our national parks. Through meaningful interpretation and education, NPS communicators can steward both parks and people through the uncertainties of climate change. Interpreters and educators are also remarkably established as leaders in the field of conservation, and have the utmost duty to provide opportunities for understanding that inspire individuals to take action.

The time to act is now.



Together we have the power to make a difference. NPS Image

Literature Cited

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Investments in sustainable operations, such as those at
Picture Rocks National Lakeshore, provide
opportunities for visitor engagement. NPS Image



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