



# Conference program as of February 24, 2017

## PLEASE NOTE

This program is TENTATIVE. The composition of sessions, the order of presentations within sessions, the names of chairs and presenters, room locations — all of this and more are subject to change. However, the dates of sessions generally will not be changed (unless there is a scheduling conflict involving presenters).

Each session has a Value Proposition: a short statement about what attendees can expect to get out of the session. *The Value Propositions are indicated by italics.*

## CURRENT OPENINGS IN THE CONFERENCE PROGRAM

As of this date, we have openings for a 20-minute oral presentation in each of the following sessions:\

- No openings

If you are interested in filling one of these openings, send a note to [dharmon@georgewright.org](mailto:dharmon@georgewright.org).



**Collaboration Sessions** bring attendees together to work on a specific project. At the end of the session, the organizers will give attendees the opportunity to help complete the project.



**Compass Sessions** ask two questions: “Where are we?” and, “Where do we want to go?” These sessions ask the audience to reflect on where we should go from here, with a range of possible directions.



**Update Sessions** bring attendees together to fill them in on the latest developments with regard to an project, program, or issue. Attendees emerge from the session fully up-to-date on the topic.



**Challenge Sessions** ask members of the audience to question their assumptions. Attendees emerge from the session with their critical thinking faculties fully engaged.



**Skills Sessions** are hands-on training opportunities that increase the capacity of attendees to solve a specific problem. Attendees leave with new skills applicable to the problem.



**Fasttrack Sessions** are fast-paced, exciting overviews, with individual 5-minute presentations on aspects of the session’s topic. The outcome is that audience members come away energized and intrigued to learn more.

## Sunday, April 2 • Registration | Field Trips | Precon Meetings | Poster Setup

**Registration** (8:00–8:45a; then again from noon–9:00p, Presidential Foyer, 3rd floor )

**Field Trip** (*ticketed event*): **Colonial National Historical Park: Yorktown Battlefield, Historic Village and Adjacent Cultural Landscapes** (9:00a–3:30p; ticketholders meet in Lobby at 8:45a prior to departure)

Walking tour of the battlefield and village with discussions on the strategic moves of the the battle and the historical significance's of the Yorktown Port and associated commerce.

**Field Trip** (*ticketed event*) | **Sea Level Rise in Norfolk: A Walking Tour** (1:00p–4:30p; ticketholders meet in Lobby at 12:45p prior to departure)

This walking tour will examine many of the public and historic areas of Norfolk that are experiencing increased flooding due to sea level rise and examine how Norfolk is becoming more resilient. We will see flood control structures, buildings that have been elevated to accommodate changes in water levels, and discuss the tradeoffs that the city and property owners face.

**Workshop** (*by invitation only*) | **10677 • National Park Service Invasive Animal Science Workshop** (1:00–5:00p; continues Monday, April 3, 10:00a–5:00p; Elizabeth Boardroom, 4th floor)

Invasive species are the second most significant threat to biodiversity, after habitat loss. This invitation-only workshop will help the National Park Service determine a strategic servicewide approach to this issue.

**Poster / Computer Demo / Exhibit Set-up** (4:00–10:00p; Norfolk Ballroom 1|2, 1st floor)

Presenters of Posters, Computer Demos, and Exhibits will set up in the Norfolk 1|2 Ballroom. Check at the Registration Desk for assigned locations.

**Preconference Meeting, Student Attendees & Mentors** (7:00–8:00p; Hampton 4, 3rd floor)

All student attendees, including George Melendez Wright Student Travel Scholarship recipients, are invited to an informal preconference meet-and-greet. Those who have requested mentors will meet with them at this time. The event will be followed by light refreshments and a chance to mix with Indigenous attendees, who will be meeting next door.

**Preconference Meeting, Indigenous Attendees** (7:00–8:00p; Hampton 5, 3rd floor)

All Indigenous attendees, including Indigenous Participant Travel Grant recipients, are invited to an informal preconference meet-and-greet. The event will be followed by light refreshments and a chance to mix with student attendees, who will be meeting next door.

# Monday, April 3 • 8:00–9:30a | Plenary Session I

## ***Making Big Connections: The Future of Conservation on a Landscape Scale***

(Hampton Ballroom 4|5, 3rd floor)

**Harvey Locke**, Co-founder and Strategic Adviser, Yellowstone to Yukon (Y2Y) Initiative

**Gary M. Tabor**, Founder, Center for Large Landscape Conservation

Linking protected areas with other conservation efforts, and then coordinating them across a vast extent of land, freshwater, and sea — this, for many thoughtful people, is the future of our work. Advocates of “connectivity conservation” see such landscape-scale efforts as the only way to combat the decline of biodiversity, the erosion of cultural landscapes, and the ravages of climate change. Two of the world’s leading thinkers on connectivity conservation will join us to kick off GWS2017 with an overview of the field, where we stand today, where we are likely to go next, and what the prospects for success might be.

**Harvey Locke** is a recognized global leader in the field of parks, wilderness and large landscape conservation. He is a founder of the Yellowstone to Yukon Conservation Initiative, with the goal to create a continuous corridor for wildlife from Yellowstone National Park in the United States to the Yukon in Northern Canada. In 2013, he received the J.B. Harkin Medal for Conservation and the Queen Elizabeth II Diamond Jubilee Medal and in 2014 he was awarded the Fred M. Packard Award for outstanding service to protected areas by the IUCN World Commission on Protected Areas at the World Parks Congress in Sydney, Australia. Locke also received in 2014 the Gold Leaf Award from the Canadian Council on Ecological Areas for his lifetime of extraordinary commitment and vision to advance the cause of parks, wilderness, ecological integrity and landscape connectivity in North America and the world.








**Dr. Gary M. Tabor** is an ecologist and wildlife veterinarian based in Bozeman, Montana. In 2007, Gary founded the Center for Large Landscape Conservation to help people and institutions make better land use decisions at the scale at which nature functions. Gary has worked on behalf of large landscape conservation internationally for over 35 years with ten years of experience in Africa, South America and Australia and 12 years as a leader within the U.S. philanthropic community beginning with the Geraldine R. Dodge Foundation, the Henry P. Kendall Foundation, and finally the Yellowstone to Yukon Program Director for the Wilburforce Foundation. His work in philanthropy also includes the design of international conservation trusts for USAID, and the World Bank. Gary co-founded the Australia Environmental Grantmakers Association. Gary’s conservation achievements include the establishment of Kibale National Park in Uganda; establishment of the World Bank’s Mountain Gorilla Conservation Trust; co-founding the Yellowstone to Yukon Conservation Initiative; pioneering the field of Conservation Medicine and EcoHealth; co-founding Patagonia Company’s Freedom to Roam wildlife corridor campaign; co-founding the Practitioners’ Network for Large Landscape Conservation and the Roundtable of the Crown of the Continent – recent winner of the inaugural climate adaptation award by the US National Fish, Wildlife and Plants Climate Adaptation Strategy. Gary is a Henry Luce Scholar and recipient of the Australian American Fulbright Scholar award in Climate Change. Gary is Chair of the World Commission on Protected Areas’ new Connectivity Conservation Specialist Group.













**Registration** (7:00a–6:00p, Presidential Foyer, 3rd floor )

**Poster Session** (8:00a–10:00p, Norfolk Ballroom 1|2, 1st floor)






# Monday, April 3 • 10:00a–12:00p | Concurrent Sessions

		10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
<p>Concurrent #1 Norfolk 5 6 (1st floor)</p> <p>Session format: Invited speakers</p> 	<p>10775 • Integrating Coastal Climate Adaptation in National Parks I / Amanda Babson &amp; Courtney Schupp, chairs</p>	<p>Sharing NPS guidance, strategies and examples through the Coastal Adaptation Strategies Handbook / Amanda Babson</p>	<p>Climate Change Adaptation Strategies: Case Studies from Coastal National Parks / Courtney Schupp</p>	<p>Lessons Learned: Evaluating the Effectiveness of Cultural Resource Management Actions / Emily Greer</p>	<p>Sea level rise by the numbers / Maria Caffrey</p>	<p>Bringing Back Lost Coastal Habitats for Climate Adaptation / Cliff McCreeedy</p>	<p>Q&amp;A</p>
<p><i>We provide updates on the latest projects and case studies of coastal climate adaptation for national parks integrating across natural resources, cultural resources and facilities. (Part II is Concurrent #65)</i></p>							
<p>Concurrent #2 Marriott 1 2 3 (4th floor)</p> <p>Session format: Invited Speakers</p> 	<p>10602 • People, Politics, and Place in the Historic Shaping of America's Western National Parks / Terence Young, chair</p>	<p>Why Are There No Mining Frontier Units in the National Park System? / Lary M. Dilsaver</p>	<p>"In the Wild Heart of America": Tourism, Gender and the Promotion of Western National Parks / Peter Blodgett</p>	<p>Frederick S. Dellenbaugh: Geographer, Explorer, and National Park Artist / Michael Pretes</p>	<p>Yosemite and the Origins of America's National Parks / Terence Young</p>	<p>Discussant: John H. Sprinkle, Jr.</p>	<p>Q&amp;A</p>
<p><i>Our topic is the evolving understanding of present and absent western national parks. Historians and historical geographers will present the results of original, cutting-edge research.</i></p>							
<p>Concurrent #3 Marriott 4 (4th floor)</p> <p>Session format: Panel Discussion</p> 	<p>10782 • Putting Culture First: Unpacking Toolkits for Large Landscape Preservation / Suzanne Copping, chair</p>	<p>Collaborating with Agencies, NGOs and Tribes to Recognize and Protect Culturally Important Landscapes and Waterways / Jonathan Doherty                      Uniting Communities across a Landscape of Divisive History in Freedom's Frontier National Heritage Area / Julie McPike                      Engaging Partners in the Use of Visual Resources Assessment Tools to Preserve a Dynamic Landscape / Daniel Schaible                      Facilitating Mission Alignment around Regional Conservation among NGOs, Local Government and Conservation Institutions / David Goldstein                      Using Military Terrain Analysis to Support Community Stewardship and Protection of Battlefield Landscapes / Kristen McMasters</p>					
<p><i>Participants evaluate large landscape approaches that bound culture, history and community, identify individual takeaways, and a collective charge for advancing cultural preservation at varied scales.</i></p>							
<p>Concurrent #4 Marriott 5 6 7 (4th floor)</p> <p>Session format: Panel discussion</p> 	<p>10724 • Looking ahead: The future of visual resource management in the NPS / Susan Johnson &amp; Melanie Peters, chairs</p>	<p>Mark Meyer, Visual Resource Specialist, NPS Air Resources Division                      Laura Rotegard, Superintendent, Pictured Rocks National Lakeshore                      Larry Garland, Cartographer, Appalachian Mountain Club                      Jalyn Cummings, Air &amp; Water Quality Program Manager, Shenandoah National Park                      Don Briggs, Superintendent, Potomac Heritage National Scenic Trail</p>					
<p><i>Scenery is central to experiencing parks and protected places. This session will consider how the NPS manages scenery now and in the future.</i></p>							
<p>Concurrent #5 Hampton 1 2 3 (3rd floor)</p> <p>Session Format: Invited Speakers</p> 	<p>10734 • Understanding the Visitor Experience and Transportation Confluence: Innovative Research and Strategies to Support Planning initiatives / Rachel Collins, chair</p>	<p>NPS Visitor Experience and Transportation Initiatives / John Gerbich</p>	<p>Applying best practices in transportation planning to the NPS context / Bill Cranshaw</p>	<p>Visitor use management as a framework to address transportation and resource management challenges, Arapaho-Roosevelt NF / Susie Irizarry</p>	<p>Simulation modeling to estimate integrated transportation and visitor experience capacities, Cadillac Mountain, Acadia National Park / Steve Lawson</p>	<p>A stated choice approach to Grand Teton National Park Visitors' Transportation Preferences / Jennifer Newton</p>	<p>Q&amp;A</p>
<p><i>Presenters will challenge the traditional planning and research paradigms to meet emergent and evolving visitor use management needs in the context of the NPS mission.</i></p>							

# Monday, April 3 • 10:00a–12:00p | Concurrent Sessions











		10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
Concurrent #6 Hampton 4 (3rd floor)  Session Format: Fasttrack presentations followed by workshop  	10647 • Healthy Parks Healthy People: State of the Evidence and Paths to Improve the Science / B. Derrick Taff, chair	NPS's Healthy Parks Healthy People Program – Optimizing health values and benefits of public lands • Diana Allen   Parks & Health: The State of the Scientific Evidence • Lincoln Larson   Trails as Health Resources: Examples from Montana's Park and Trail Rx Program • Jennifer Thomsen   Participatory mapping: a tool to elicit nonmaterial values and identify the health benefits of nature • Carena J. van Riper   The influence of park soundscapes on health and wellbeing • Peter Newman   Physical activity and greenspace: state of the evidence and geospatial opportunities • Aaron Hipp   Urban Parks, Healthy People, and the Pursuit of Environmental Justice • Viece Jennings   Understanding Nature's Resiliency-Building and Restorative Power for Armed Forces Personnel, Veterans, and Their Families • Matt Brownlee   Research Regarding the Restorative Power for Armed Forces Personnel, Veterans, and Their Families • Kelly Bricker   Economic valuation of the health benefits of parks • Lynne Koontz   Economic value and benefits of physical activity/health benefit valuation in our parks: A case study • Leslie Richardson   Healthy Parks Healthy People Criteria Tool: Implementation in Gettysburg and Catoctin Mountain National Parks • Derrick Taff					
		<i>After learning about the state of evidence, panelists and participants will identify deficiencies and develop strategies for advancing park-based health science.</i>					
Concurrent #7 Hampton 5 (3rd floor)  Session Format: Panel Discussion  	10746 • Ocean Acidification: Clarifying and Enhancing NPS Effectiveness in Research and Monitoring / Lewis Sharman, chair	Eva Didonato, Chief, Ocean and Coastal Resources Branch, National Park Service Jeremy Mathis, Director, NOAA Arctic Climate Research Program Jeff Mow, Superintendent, Glacier National Park Mike Bower, Program Manager, Southeast Alaska I&M Network, National Park Service Steve Fradkin, Coastal Ecologist, Olympic National Park					
		<i>NPS ocean acidification research/monitoring currently occur provincially and bottom-up. Would higher-level coordination improve quality and effectiveness? If yes, how could greater coordination be achieved?</i>					
Concurrent #8 Hampton 6 7 8 (3rd floor)  Session Format: Invited Papers  	10748 • Landscape Conservation Cooperatives: Supporting an Ecologically Connected Network of Parks and Protected Areas / Janet Cakir, chair	Implementing the South Atlantic Landscape Conservation Blueprint / Janet Cakir	Envisioning and Developing a Southeast Conservation Adaptation Strategy / Greg Wathen	Partnering to Develop and Implement a Northwest Boreal Landscape Design / Amanda Robertson	Landscape Conservation Design in the Pacific Northwest / Tim Miewald	Panel Discussion, prepared discussion topic questions + dialogue with attendees / Speakers discuss the emerging role of protected area managers in large landscape conservation	
		<i>Demonstrate ways Landscape Conservation Cooperatives have supported parks and protected areas to implement the large landscape and longer timeline management needs identified in "Revisiting Leopold."</i>					
Concurrent #9 Chesapeake 1 2 (4th floor)  Session Format: Contributed Papers  	Connecting Visitor Perceptions with Visitor Understanding	10426 • Did you see that? How differences in attention and perception lead to differences in experience / Nathan Shipley & Robert Bixler	10845 • Does the Timing of Educational Messaging Influence Compliance with Low-impact Hiking Recommendations? / Tian Guo & Jordan W. Smith	10742 • Public perception of timber harvesting for biodiversity in a National Forest / Elizabeth Baldwin	10635 • Assessing the Cultural Context for Predator Conservation in/around Protected Areas: A Social Suitability Index / Kathleen Kraffe et al.	10780 • Evaluating visitor support for restricting brown bear viewing at Katmai National Park & Preserve / Jeffrey Skibins & Ryan Sharp	Q&A
		<i>Perceptions play a powerful role in determining how we understand something. For protected area managers, the first step is knowing how visitors perceive things.</i>					
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# Monday, April 3 • 1:30–3:30p | Concurrent Sessions






		1:30–1:50	1:50–2:10	2:10–2:30	2:30–2:50	2:50–3:10	3:10–3:30
Concurrent #10 Norfolk 5 6 (1st floor)  Session Format: Invited Speakers  	PENDING						
Concurrent #11 Marriott 1 2 3 (4th floor)  Session Format: Fasttrack Sessions  	Concurrent #11a • 1:30–2:00p   10671 • Calling the Shots; Closing the Ranks: Partnerships on the Front Lines of Preservation / Elizabeth Vehmeyer, chair <i>Our presentation provides examples of effective partnerships with stakeholders to preserve battlefields, and the importance of grassroots preservation to achieve permanent protection of battlefield landscapes.</i> Princeton: A Reorientation of the Landscape and New Strategies for Land Preservation • Kristen McMasters   Local Communities Driving Preservation Change • Terence Christian   Conflicting Preservation Directions in a Small Community • Elizabeth Vehmeyer   Connecting to the Latino Community • Kristen McMasters  Concurrent #11b • 2:30–3:00p   10865 • Climate Change and Natural Disasters / Andrew Ferrell, chair <i>Climate change is happening and increasing the frequency and severity of natural disasters. By being informed we can prepare.</i> Preparing the National Parks for Climate Change •   Bigger and Badder Disasters •   Resilient Heritage: Protecting Your Historic Home from Natural Disasters • Surveying to Prepare and Respond • all presented by Andrew Ferrell						
Concurrent #12 Marriott 4 (4th floor)  Session Format: Panel Discussion  	10759 • International Protected Area Management Priorities and Perspectives: Identifying Common Challenges and Leveraging Shared Solutions / Nathan Reigner & Jenn Thomsen, chairs	Tim Badman, IUCN Jon Putnam, NPS Diane Matar Jeff Mow, NPS Nathan Reigner, RSG					
	<i>Protected areas around the globe face common challenges and constraints. Identifying shared solutions can leverage expertise, improve administrative efficiency, better protect resources, and sustain benefits.</i>						
Concurrent #13 Marriott 5 6 7 (4th floor)  Session Format: Invited Speakers  	10586 • NPS and NASA: A Partnership to Address Resource Concerns Through Application of Geospatial Imagery / Don Weeks & Kenton Ross, chairs	Monitoring Snow and Ice Coverage in Intermountain Region Parks to Assess Vulnerability of Archaeological Sites / Michael Brooke	Seeking Ancient Roadbeds Around Chaco Culture National Historical Park / Dashiell Cruz	Monitoring of Tropospheric Ozone Along the Appalachian National Scenic Trail / Jalyne Cummings	Monitoring Invasive Bromes in National Park Lands of the Northern Great Plains / Amanda Clayton	NASA DEVELOP Program: Capacity Building through Earth Observations / Kenton Ross	Q&A
	<i>A partnership to enhance understanding of natural and cultural park resources and responses to stressors through credible science that informs management decisions.</i>						
Concurrent #14 Hampton 1 2 3 (3rd floor)  Session Format: Fasttrack Sessions  	Concurrent #14a • 1:30–2:00p   10606 • Planning for resource protection and visitor use in Brazilian national parks / Sarah McPartland, chair <i>The USFS and NPS collaboration in Brazil provides a novel approach to efficiently and strategically plan for the future protection and use of conservation areas.</i> Setting the context: Federal land management in Brazil • Rose Verbos   Developing approaches for public use in Brazilian conservation units • Susan McPartland  Concurrent #14b • 2:30–3:00p   10678 • Connecting with Conservation: Youth Urban Archaeology Corps Participants Share their Stories / Dania Jordan, chair <i>Instead of talking at youth, this program will create a space for conference participants to listen to them.</i> Kalen Gilliam, Isis Plaza, Brianna Spady (all Urban Archaeology Corps)						



# Monday, April 3 • 1:30–3:30p | Concurrent Sessions











		1:30–1:50	1:50–2:10	2:10–2:30	2:30–2:50	2:50–3:10	3:10–3:30
<p>Concurrent #15 Hampton 4 (3rd floor)</p> <p>Session Format: Contributed Papers</p> 	<p>Collaborating with Citizens for Science, Resource Management, and Stewardship</p>	<p>10632 • Bigger than a BioBlitz: Great Smoky Mountains ATBI—What to do with all that Data / Paul E. Super et al.</p>	<p>10655 • One Hundred Parks and Counting: Biodiversity Findings and Outreach Impacts from a Nationwide BioBlitz • Toni Lyn Morelli et al.</p>	<p>10398 • Turtle T.H.i.S. (Teens Helping in the Seashore) A Citizen Science Project / Susan Teel et al.</p>	<p>10707 • Citizen Science Acoustical Monitoring / Lisa Murphy</p>	<p>PENDING Petit de Mange</p>	<p>Q&amp;A</p>
<p><i>For many parks, citizen science has enhanced the research and resource management program. Presentations here delve focus on citizen-led inventory and monitoring.</i></p>							
<p>Concurrent #16 Hampton 5 (3rd floor)</p> <p>Session Format: Contributed Papers</p> 	<p>The Vegetation Component of Ecosystems: Disturbance, Monitoring, and Restoration</p>	<p>10457 • Forest Vegetation Following Natural Disturbance Events on Preserved Lands / Douglas Manning et al.</p>	<p>10669 • Deer impacts to vegetation recovering from Superstorm Sandy in over-washes of Fire Island National Seashore / Chelby Kilheffer &amp; H. Brian Underwood</p>	<p>10470 • Seasonal water use of Saguaro cacti (<i>Carnegiea gigantea</i>) and their nurses / Daniel Winkler et al.</p>	<p>10800 • The Southern Pine Beetle Attacks Fire Island National Seashore / Jordan Raphael</p>	<p>Q&amp;A</p>	
<p><i>Vegetation is a critical part of ecosystems and ecosystem functioning. This session explores aspects of monitoring and restoration following disturbances.</i></p>							
<p>Concurrent #17 Hampton 6 7 8 (3rd floor)</p> <p>Session Format: Invited Speakers</p> 	<p>10772 • Visitor-Use Management for Delaware Water Gap NRA's next 50 years: Next generation approaches and strategies / Jessica Fefer, chair</p>	<p>Applying Visitor Use Management Planning at Delaware Water Gap National Recreation Area / Rachel Collins</p>	<p>Emerging visitor-use trends at Delaware Water Gap National Recreation Area / Leslie Morlock</p>	<p>The new social scene: Social science for effective visitor-use planning at Delaware Water Gap NRA / Jeffrey Hallo</p>	<p>Recreation Ecology and Visitor Use Management: A Delaware Water Gap National Recreation Area Case Study / Jeffrey Marion</p>	<p>An extension of social science contributions: Problem-based solutions for sustainable park management / Jessica Fefer</p>	<p>Q&amp;A</p>
<p><i>This session is a case study at Delaware Water Gap NRA, updating the audience on next generation approaches and strategies for effective visitor-use management.</i></p>							
<p>Concurrent #18 Chesapeake 1 2 (4th floor)</p> <p>Session Format: Invited Speakers</p> 	<p>10745 • Communicating coastal vulnerability and climate change adaptation strategies to varied audiences / Courtney Schupp &amp; Amanda Babson, chairs</p>	<p>Picture This: Using Novel Elements to Provoke Climate Conversations / Larry Perez</p>	<p>Animating Outreach: Designing public texts that move audiences toward community resilience / Jamie Remillard</p>	<p>Communicating Place-Based Climate Change Adaptation in the Great Lakes: The Apostle Islands National Lakeshore Experience / Bob Krumenaker</p>	<p>Communicating Sea-Level Rise and Coastal Resource Impacts in the Pacific West / Amanda Schramm</p>	<p>Development of a Resource Stewardship Strategy Tool for the National Capitol Region / Simon Costanzo</p>	<p>Q&amp;A</p>
<p><i>Clear, informative communication through various media and methods is crucial for garnering public support of parks' adaptation to climate change and coastal vulnerability.</i></p>							
	<p><b>Collaboration Sessions</b> bring attendees together to work on a specific project. At the end of the session, the organizers will give attendees the opportunity to help complete the project.</p>		<p><b>Compass Sessions</b> ask two questions: "Where are we?" and, "Where do we want to go?" These sessions ask the audience to reflect on where we should go from here, with a range of possible directions.</p>		<p><b>Update Sessions</b> bring attendees together to fill them in on the latest developments with regard to an project, program, or issue. Attendees emerge from the session fully up-to-date on the topic.</p>		<p><b>Challenge Sessions</b> ask members of the audience to question their assumptions. Attendees emerge from the session with their critical thinking faculties fully engaged.</p>
	<p><b>Skills Sessions</b> are hands-on training opportunities that increase the capacity of attendees to solve a specific problem. Attendees leave with new skills applicable to the problem.</p>		<p><b>Fasttrack Sessions</b> are fast-paced, exciting overviews, with individual 5-minute presentations on aspects of the session's topic. The outcome is that audience members come away energized and intrigued to learn more.</p>				

# Monday, April 3 • 4:00–6:00p | Concurrent Sessions

		4:00–4:20	4:20–4:40	4:40–5:00	5:00–5:20	5:20–5:40	5:40–6:00
<p>Concurrent #19 Norfolk 5 6 (1st floor)</p> <p>Session Format: Invited Speakers</p> 	<p>10616 • Planning for the Future of Resource Stewardship in the NPS / Patrick Gregerson &amp; Carrie Miller, chairs</p>	<p>The New Planning Framework for the National Park System / Patrick Gregerson</p>	<p>Foundations for Planning and Management / Presenter TBA</p>	<p>Title TBA / Tamara Delaplane</p>	<p>Title TBA / Carrie Miller</p>	<p>Q&amp;A</p>	
<p><i>The NPS planning framework and System Plan are guiding the future of resource management at every park unit and within the entire national park system.</i></p>							
<p>Concurrent #20 Marriott 1 2 3 (4th floor)</p> <p>Session Format: Panel Discussion</p> 	<p>10641 • Making a global connection to cultural landscapes / Brenda Barrett &amp; Elizabeth Brabec, chairs</p>	<p>Elizabeth Brabec, Director, Center for Heritage and Society, and Professor, Department of Landscape Architecture and Regional Planning Susan Dolan, WASO Program Manager, Park Cultural Landscapes Program William Pencek, Executive Director, US ICOMOS Nora Mitchell, Associate Adjunct Professor, University of Vermont</p>					
<p><i>Learn and share international trends in international cultural landscape practice an approach suited to incorporate dynamic processes as well as natural and cultural values.</i></p>							
<p>Concurrent #21 Marriott 4 (4th floor)</p> <p>Session Format: Invited Speakers</p> 	<p>10725 • Second Century Thinking: Research to Support Interpretation, Education, and Engagement / Steve Lawson, chair</p>	<p>The Inspiring a New Generation Summit: Findings from Census-building Workshops on Engaging Children with Parks / Matthew Browning</p>	<p>Influencing Youth Behavior and Nature Engagement Through Leave No Trace Education / Forrest Schwartz</p>	<p>Education and Interpretation in the Lab: Simulated Soundscapes' Role on Memory, Attention, and Personal Reflection / Jacob Benfield</p>	<p>What Makes an Environmental Education Program Successful? Defining Success and Studying What Leads to It / Robert Powell</p>	<p>Evaluating the Effects of Crowding on Interpretive Experiences at Castillo de San Marcos National Monument / Alex Belenz</p>	<p>Q&amp;A</p>
<p><i>The session will explore state-of-practice research designed to support desired outcomes and enhanced effectiveness of interpretation, education, and engagement programs.</i></p>							
<p>Concurrent #22 Marriott 5 6 7 (4th floor)</p> <p>Session Format: Fasttrack Sessions</p> 	<p>Concurrent #22a • 4:00–4:30p   10808 • Coastal Parks and Refuges as Part of Marine Protected Area Networks / Lauren Wenzel, chair <i>This fast-paced session will explore how Coastal Parks and Refuges are an integral part of MPA networks through video, social media, lightning talks and discussion.</i> What is an MPA network, and why is it important? / Lauren Wenzel   Making connections, I – building ecological networks to expand our conservation impact / Charles Wahle   Making connections, II - connecting managers and communities for coastal and marine conservation / TBD, USFWS   Oceans are us – taking next steps for healthy oceans and communities / Gary Davis</p> <p>Concurrent #22b • 5:00–5:30p   10785 • Perspectives from the field: Monitoring ocean acidification in the National Park Service / Jonathan Jones, chair <i>OA is a growing threat to coastal resources in the NPS. Here, we describe tested methodologies for monitoring ocean acidification and interpreting climate change science.</i> Monitoring ocean acidification in the NCCN network • Steven Fradkin   Monitoring ocean acidification at Cabrillo National Monument / Jonathan Jones   Monitoring ocean acidification in the Channel Islands rocky intertidal • Keith Lombardo   The nuts and bolts of interpreting ocean acidification at the park level / Alex Warnecke</p>						
<p>Concurrent #23 Hampton 1 2 3 (3rd floor)</p> <p>Session Format: Contributed Papers</p> 	<p>Connecting with Youth and Inspiring Them to Get Involved</p>	<p>10749 • Constructing Urban Youth Outreach Strategies in Urban-Proximate Parks / Cassidy Jones &amp; Matt Brownlee</p>	<p>10841 • Effective Intergenerational Approaches for Parks / Shailyn Druks</p>	<p>10701 • Evaluating Diverse Trail Projects Using Standardized Assessment Tools: Conservation Corps Example / Katelin McArdle et al.</p>	<p>10590 • Pathways to Parks: Fostering the Next Generation of Stewards / Scott Esser &amp; Ben Baldwin</p>	<p>10767 • Friday in the park with students: a semester's teaching on parks and policy / Alison Beale</p>	<p>Q&amp;A</p>
<p><i>As the tail-end of the Baby Boomer generation reaches retirement, we are on the cusp of a major workforce shift to a younger generation. How do we inspire youth to take the mantle of leadership?</i></p>							



# Monday, April 3 • 4:00–6:00p | Concurrent Sessions

	4:00–4:20	4:20–4:40	4:40–5:00	5:00–5:20	5:20–5:40	5:40–6:00	
<p>Concurrent #24 Hampton 4 (3rd floor)</p> <p>Session Format: Sharing Circle</p> 	<p>10654 • Drowning in Controversy: How managing submerged lands promises to be messy, complex, and increasingly important / Chris Buczko &amp; Bob Krumenaker, chairs</p>	<p>Bob Krumenaker (facilitator), Superintendent, Apostle Islands National Lakeshore Chris Buczko, NEPA Coordinator, Acadia National Park Julia Brunner, Policy and Regulatory Specialist, National Park Service Bruce Huber, Associate Professor of Law, University of Notre Dame John Nagel, Professor of Law, University of Notre Dame</p>					
<p><i>Participants will leave informed as to the outcome of recent controversies, including Supreme Court decisions, governing access and use of inter tidal and submerged lands.</i></p>							
<p>Concurrent #25 Hampton 5 (3rd floor)</p> <p>Session Format: Panel Discussion</p> 	<p>11422 • Pursuing parks and protected area careers in a changing political climate / Matthew Browning &amp; Jennifer Thomsen, chairs</p>	<p>Panelists TBA</p>					
<p><i>Our session offers lessons learned and career advice for students on how best to adapt to a shifting political climate for parks and protected areas.</i></p>							
<p>Concurrent #26 Hampton 6 7 8 (3rd floor)</p> <p>Session Format: Invited Speakers</p> 	<p>10630 • Advancing the practice and discourse of visitor capacity in parks / Ryan Sharp &amp; Matt Brownlee, chairs</p>	<p>Title TBA / Jeff Marion</p>	<p>Title TBA / Robert Manning</p>	<p>Title TBA / Doug Whittaker</p>	<p>Q&amp;A</p>		
<p><i>Past lessons learned will be applied to new forward thinking frameworks on visitor use and visitor capacity in parks and protected areas.</i></p>							
<p>Concurrent #27 Chesapeake 1 2 (4th floor)</p> <p>Session Format: Café Conversation</p> 	<p>Lessons on Truth, Reconciliation, and Healing for Parks and Cultural Sites / Anne Ketz, café conversation leader</p>	<p>Presentations: 10722 • Lessons on Truth and Reconciliation for Parks and Cultural Sites / Anne Ketz &amp; Regine Kennedy 10729 • Honoring Tribal Legacies: An Epic Journey of Healing / Rose Honey 10464 • Commemorating the 150th Anniversary of the 1868 Treaty of Fort Laramie / Tom Baker &amp; Maryann Neubert Diane Brown Townes (Community Engagement Ambassador, University of Virginia Memorial to Enslaved Laborers)</p>					
<p><i>Understanding the interests, concerns, and frustrations — the truths — held by the communities with whom we work. What is truth, and whose truth are we talking about?</i></p>							
	<p><b>Collaboration Sessions</b> bring attendees together to work on a specific project. At the end of the session, the organizers will give attendees the opportunity to help complete the project.</p>			<p><b>Compass Sessions</b> ask two questions: “Where are we?” and, “Where do we want to go?” These sessions ask the audience to reflect on where we should go from here, with a range of possible directions.</p>			<p><b>Update Sessions</b> bring attendees together to fill them in on the latest developments with regard to a project, program, or issue. Attendees emerge from the session fully up-to-date on the topic.</p>
	<p><b>Challenge Sessions</b> ask members of the audience to question their assumptions. Attendees emerge from the session with their critical thinking faculties fully engaged.</p>			<p><b>Skills Sessions</b> are hands-on training opportunities that increase the capacity of attendees to solve a specific problem. Attendees leave with new skills applicable to the problem.</p>			<p><b>Fasttrack Sessions</b> are fast-paced, exciting overviews, with individual 5-minute presentations on aspects of the session’s topic. The outcome is that audience members come away energized and intrigued to learn more.</p>

## Monday, April 3 • 6:00–10:00p | Evening Activities

**Welcome to Norfolk! Reception** (7:30–8:30p; Norfolk 3|4, 1st floor)

We welcome you to GWS0217 and to Tidewater Virginia with a reception featuring complimentary hors d'oeuvres and a cash bar. It's a great time to meet up with old friends and mingle with new ones. No ticket required, but you must wear your name tag for entry.

## Tuesday, April 4 • 8:00–9:30a | Plenary Session II

### **Decolonizing Conservation**

(Hampton Ballroom 4|5, 3rd floor)

**Jeff Corntassel**, Professor and Director of Indigenous Governance, University of Victoria

Respondent: **Elizabeth Nanticoke**, Elder and member of Mohawk Women's Singing Society, Akwesasne Mohawk Nation

The concept of decolonization does not only refer to the historic global movement, furthered by the United Nations, following World War II, in which former colonies became independent states. It also refers to the dismantling of entrenched attitudes and unexamined assumptions that serve to privilege powerful groups and their interests over others. In this sense, the concept has been referred to as “the decolonizing of the mind.” The connection of the idea of decolonization to parks, protected areas, and cultural sites is that the conservation of these areas has developed within the larger context of entrenched attitudes and unexamined assumptions that decolonization is challenging. For example, decolonizing park science might involve not just using TEK (traditional ecological knowledge) to complement Western science, but in some cases to question how that scientific model is used. Just as ubiquitous climate change and other human-caused change has prompted conservationists to rethink the goals and purpose of protected areas—and indeed the very idea of nature itself—“decolonizing conservation” calls on park professionals, communities and practitioners to reconsider the social and biocultural framework in which their work takes place.

**Jeff Corntassel** (Cherokee Nation) received his Ph.D. in Political Science from the University of Arizona in 1998, and is currently Associate Professor and Director of Indigenous Governance at the University of Victoria. Corntassel's research and teaching interests include sustainable self-determination and Indigenous political mobilization. Jeff's research has been published in *Alternatives*, *Decolonization*, *Human Rights Quarterly*, and *Social Science Journal*. Jeff's first book, entitled *Forced Federalism: Contemporary Challenges to Indigenous Nationhood* (2008, University of Oklahoma Press), examines how Indigenous nations in the U.S. have mobilized politically as they encounter new threats to their governance from state policymakers. His next book is an edited volume in collaboration with Native Hawaiian professors in Indigenous Politics at the University of Hawai'i, Manoa, and is entitled *Everyday Acts of Resurgence: People, Places, Practices*.



Elizabeth Nanticoke bio to come.






**FOLLOW-UP SESSION:** For those who want to continue the conversation on decolonization, Professor Corntassel and Ms. Nanticoke will be taking part in an informal Sharing Circle discussion (Concurrent Session #34a; see below) from 10:00 to 11:30am in Hampton Ballroom 5.

**BOOK SIGNING:** Professor Corntassel will be signing copies of his book *Forced Federalism* in the Presidential Foyer at noon. Copies will be available for purchase.











**Registration** (7:00a–6:00p, Presidential Foyer, 3rd floor)

**Poster Session** (8:00a–10:00p, Norfolk Ballroom 1|2, 1st floor; Poster Spotlight Reception (6:30–7:30 p, Norfolk Ballroom 3|4, 1st floor)






## Tuesday, April 4 • 10:00a–12:00p | Concurrent Sessions

		10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
Concurrent #28 Norfolk 5 6 (1st floor)  Session Format: Invited Speakers  	10819 • Gnarly problems: examining natural resource climate change adaptation in the NPS through the policy lens / Gregor Schuurman & Cat Hawkins Hoffman, chairs	Managing wet meadow systems at Sequoia and Kings Canyon National Parks in a changing climate / Marie Denn	Adapting to wildlife range and distribution shifts in response to climate change: the Desert Tortoise / Tanya Shenk	Fuels management and shifting fire regimes / Gregory Eckert	Infectious disease management in wildlife in the climate change context / Danielle Buttke	‘Take home’ messages – grounding policy evolution for an era of continuous change / Gregor Schuurman	Q&A
<i>Here we showcase an NPS effort that analyzes current policy regarding adaptation, identifies where further guidance is needed, and provides a foundation for policy evolution.</i>							
Concurrent #29 Marriott 1 2 3 (4th floor)  Session Format: Invited Speakers  	10795+10619 • Managing Human Uses and Impacts in Ocean Parks: The Byzantine Marine Scene / chair TBA	Relative Roles of State and Federal Jurisdiction in Managing Coastal Parks / Stephen Simon	Creating a Marine Reserve in Dry Tortugas National Park: Science, People, and Process / Tracy A. Ziegler	Implementing a Partnership Strategy to Increase Marine Resource Protection, Enjoyment and Adaptive Management in Everglades National Park / Fred Herling	Dispersed Fishing Use Monitoring Using GPS: Proof of Concept at Fire Island National Seashore / Karl Brookins	10619 • Establishment of a transboundary MPA network between Grenada and St. Vincent and the Grenadines / Orisha Joseph	Q&A
<i>Participants will explore how monitoring, application of policy and planning, and diligent outreach and communication can address user impacts in this new discipline.</i>							
Concurrent #30 Marriott 4 (4th floor)  Session Format: Invited Speakers  	10706 • Breakthroughs Bring Bison Restoration a Bit Closer / Peter Dratch, chair	Looking forward: using population viability analyses to inform science-based bison metapopulation management strategies / Amanda Hardy	Title TBA / Jennifer Barfield	American Icons in Metropolitan Grasslands: Bison Social Science Breakthroughs on Colorado’s Front Range and Beyond / Rebecca Garvoille	Transforming Interior Bison: From Livestock to Wildlife / Peter Dratch	Q&A	Q&A
<i>Important developments in the biological and social science of bison, are both exciting to the public and bring ecological restoration of the species closer.</i>							
Concurrent #31 Marriott 5 6 7 (4th floor)  Session Format: Panel Discussion  	10640 • Keeping Our Secrets: Sharing and Protecting Sensitive Resource Information in the Era of Open Data / David Gadsby & Anne Vawser, chairs	Archaeological Site Location and the Public Good: The DINAA Project / David Anderson “Open-ish”: Finding Balance between Site Data Protection and Accessibility at the State Level / Jolene L.U. Smith Confidentiality: Who Decides? / Julia Brunner To Share, or Not to Share? Perspectives from the field on Sharing Sensitive Information / Kristen Legg A Tribal Historic Preservation Office Perspective on Sensitive Information / Ryan Spring					
<i>Speakers with diverse perspectives will explore creative solutions for sharing/restricting confidential information on natural and cultural resources.</i>							
Concurrent #32 Hampton 1 2 3 (3rd floor)  Session Format: Invited Speakers  	10781 • The effects of transportation related noise on experiential and ecological conditions in parks / Peter Newman et al., chairs	Overflights and Parks: An Update / Adam Becco	The effects of natural and anthropogenic noise on climber experiences in Grand Teton National Park / Lauren C. Abbott	Effects of anthropogenic noise on wildlife: Synthesis and case studies / Emma Brown	The significance of soundscapes in coupling biodiversity, psychological ecosystem services and conservation in National Parks / Peter Newman	New tool to measure and minimize transportation noise / Kathryn Nuessly	Q&A
<i>Transportation contributes to anthropogenic noise in parks that presents unique challenges to protect and improve park soundscapes. This session provides an update on current knowledge.</i>							

## Tuesday, April 4 • 10:00a–12:00p | Concurrent Sessions











		10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
Concurrent #33 Hampton 4 (3rd floor)  Session Format: Invited Speakers  	10680 • Leveraging GPS tracking for improved decision-making: Innovative analyses and expanded visitor and resource management applications / Susan Irizarry & Ashley D'Antonio, chairs	Spatial analysis of visitor use to inform interagency fee revenue sharing at Sequoia-Kings National Park / Susan Irizarry	Improving predictability in visitor use and natural resource management using agent-based models of hiker movement / Ashley D'Antonio	A spatial classification of vehicular behavior patterns of visitors in Grand Teton National Park / Abigail Kidd	Monitoring use without direct observation: Classifying pack stock behaviors and distributions with GPS tracking / Chelsey Walden-Schreiner et al.	Utilizing crowd-harvested GPS data to manage special events and general use of public lands / Jeremy Wimpey	Q&A
<i>The session will explore new applications for integrating GPS data into visitor use management, encouraging thought and discussion on continued advancements in GPS-based tracking.</i>							
Concurrent #34 Hampton 5 (3rd floor)  Session Format: Sharing Circle + Fasttrack Session  	Concurrent #34a • 10:00–11:30a   Decolonizing Conservation: Continuing the Conversation with Jeff Corntassel & Elizabeth Nanticoke / TBA chair			Concurrent #34b • 11:30a–12:00p   10796 • Decolonizing Landscapes: Documenting culturally important areas collaboratively with tribes / Valerie Grussing, chair  <i>TCL can increase appreciation for past and present indigenous interests in the national landscape, and give original stewards a stronger voice in shaping its future.</i>  Characterizing Tribal Cultural Landscapes: Framework / David Ball   Confederated Tribes of Grand Ronde Case Study: Understanding Place Through Indigenous Voice and Practice / Eirik Thorsgard   Confederated Tribes of Grand Ronde Case Study: Indigenous Voice in Policy and Spatial Planning / Briece Edwards   Changing the Federal Landscape • Valerie Grussing			
<i>Combining a Sharing Circle (10:00–11:30a) and Fasttrack presentations (11:30a–12:00p), this session will continue exploring the concepts around “Decolonizing Conservation.”</i>							
Concurrent #35 Hampton 6 7 8 (3rd floor)  Session Format: Invited Speakers  	10672 • NPS Strategic Invasive Animal Science Workshop / Elaine F. Leslie & Kent Redford, chairs	Title TBA / Jeff Walters	Title TBA / Russ Galipeau	Title TBA / Hilary Smith	Title TBA / Ryan Monello	Title TBA / Elaine Leslie	Q&A
<i>Invasive species are the second most significant threat to biodiversity, after habitat loss. Help the NPS determine a strategic servicewide approach to this pervasive issue.</i>							
Concurrent #36 Chesapeake 1 2 (4th floor)  Session Format: Café Conversation  	10648 • The Goldilocks Syndrome and Park-based Science—Brokering outreach opportunities that are just right	Café conversation leader: Martha Merson, Project Director, iSWOOP at TERC					
<i>Guidelines: setting expectations so that park-based researchers' work builds staff resource knowledge and increases the visibility of the park as a research setting.</i>							
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 <b>Challenge Sessions</b> ask members of the audience to question their assumptions. Attendees emerge from the session with their critical thinking faculties fully engaged.		 <b>Skills Sessions</b> are hands-on training opportunities that increase the capacity of attendees to solve a specific problem. Attendees leave with new skills applicable to the problem.					

## Tuesday, April 4 • 1:30–3:30p | Concurrent Sessions






		1:30–1:50	1:50–2:10	2:10–2:30	2:30–2:50	2:50–3:10	3:10–3:30
Concurrent #37 Norfolk 5 6 (1st floor)  Session Format: Panel Discussion  	10855 • Advancing Nature-Culture Connections / Nora Mitchell & Jessica Brown, chairs	IUCN Perspective on the importance of interlinkages of nature and culture for conservation / Tim Badman ICOMOS Perspective on the importance of interlinkages of nature and culture for conservation / Bill Pencek NPS Perspective on the importance of interlinkages of nature and culture for conservation / Stephanie Toothman Case study 1: Interlinkages of nature and culture in landscape/seascape: Experience from the Pacific Islands / Melia Lane-Kamahele Case study 2: Linking nature-culture in World Heritage: Belize Barrier Reef Reserve System and Sian Ka'an Biosphere Reserve / Jessica Brown Case Study 3: Nature-Culture connections in conservation of Hortobágy National Park and World Heritage Site, Hungary / Nora Mitchell Case Study 4 from Mesoamerica (invited) • Strengthening the Intersection of Conservation, Sustainability and Human Rights / Kristen Walker Painemilla					
<i>Emerging initiatives recognize that natural and cultural heritage are bound together in many landscapes and seek to identify next steps to advance integration in conservation.</i>							
Concurrent #38 Marriott 1 2 3 (4th floor)  Session Format: Contributed Papers  	Wilderness Stewardship	10766 • The State of Unconfined Recreation in the National Wilderness Preservation System / Carol Griffin	10714 • Wilderness Character Monitoring Continues on National Wildlife Refuges / Peter Dratch & Marissa Edwards	10844 • Backcountry Use Concentrated within Denali National Park Wilderness / Lorraine Stamberger & Carena van Riper	10600 • Novel Approaches for Monitoring Solitude in Urban-Proximate Wilderness Areas / Henry Lilly et al.	10454 • Mining Claims in Selected Wilderness Areas of the Greater Yellowstone Ecosystem / Craig Shafer	10611 • A Preservation Paradox: Reconciling the Wilderness Act and Cultural Resource Protection Mandates in Wilderness Management / Karen Mudar & Laura Kirn
<i>Designated wilderness continues to be a highly visible, and sometime controversial, part of the world's protected area estate. Wilderness stewardship is evolving.</i>							
Concurrent #39 Marriott 4 (4th floor)  Session Format: Panel Discussion  	10747+10847 • The Promise and Challenge of New Parks and Protected Areas: Perspectives from Canada and the United States / Rebecca Stanfield McCown et al., chairs	Rebecca Stanfield McCown Jennifer Jewiss Kevin McNamee					
<i>Bringing together practitioners and researchers to identify promising practices in establishing and managing new units allows for knowledge sharing that improves practice and fosters connections.</i>							
Concurrent #40 Marriott 5 6 7 (4th floor)  Session Format: Invited Papers  	10459 • Enhancing the Sustainability of Visitor Use Management through the Application of Recreation Ecology Research / Jeffrey Marion	Recreation Ecology Research and Geospatial Applications to Enhance the Sustainability of Trails / Jeremy Wimpey	Recreation Ecology Research to Enhance the Sustainability of Primitive Camping / Johanna Arredondo	Recreation Ecology Research to Enhance the Sustainability of Rock Climbing / Chris Carr	Successful Applications of Recreation Ecology Science in Enhancing the Sustainability of Park Visitation / Jeffrey Marion	Q&A	
<i>Participants will learn the latest recreation ecology research findings and their implications for the sustainable management of park visitation.</i>							
Concurrent #41 Hampton 1 2 3 (3rd floor)  Session Format: Panel Discussion  	10402 • Return of the Buffalo: A discussion of the impacts of federal buffalo on receiving tribes / Kristine Reed & Jim Stone, chairs	Jim Stone, ITBC Executive Director Ervin Carlson, ITBC President, Blackfeet Nation Delbert Chisholm, ITBC Region 4 Director, Taos Pueblo Mike Faith, ITBC Vice President, Standing Rock Sioux Tribe Robert Magnam, ITBC Tribal Representative for Fort Peck Assiniboine & Sioux Tribes					
<i>Current issues concerning regulations that limit the ability of buffalo to get to Tribes and the transfer of live buffalo from Yellowstone NP.</i>							













# Tuesday, April 4 • 1:30–3:30p | Concurrent Sessions

		1:30–1:50	1:50–2:10	2:10–2:30	2:30–2:50	2:50–3:10	3:10–3:30
Concurrent #42 Hampton 4 (3rd floor)  Session Format: Workshop  	10684 • Expanded Col- laboration Between Cultural Resources and Interpretation/ Education: Challenges and Opportunities	Workshop leaders: Dean Herrin, Chief Historian, National Park Service National Capital Region Emily Button Kambic, Public Outreach Coordinator, Cultural Resources, National Park Service National Capital Region Joy Beasley, Deputy Associate Director, Park Programs and National Heritage Areas, NPS Lu Ann Jones, Acting Chief Historian, NPS Linda Lutz-Ryan, Chief of Interpretation, National Capital Region, NPS Paul Ollig, Chief, Interpretation and Education, National Mall and Memorial Parks, Washington, DC					
<i>Participants of the workshop will work together to identify and discuss the challenges and opportunities of collaboration between Cultural Resources and Interpretation/Education.</i>							
Concurrent #43 Hampton 5 (3rd floor)  Session Format: Contributed Papers  	Investing in the Park Work- force of Today, and Tomorrow: Professionalization and Capacity Development / David Reynolds, chair	10852 • World Ranger Congress 2016: Facilitating International Collaboration for the Front-line Guardians of Protected Areas / Claire Shields	10438 • Undergraduate Park Management Education: Missing the Mark On Indige- neity? / Chance Finegan	10662 • Building a NPS Workforce of Young Leaders in the Second Century / Lisa Norby et al.	10667 • Crafting Internships: Setting Your Interns Up for Success / Paloma Bolasny	11045 • Reimagining the Preservation Workforce, Public Engagement, and Technical Education / Stephen Spaulding	Q&A
Concurrent #44 Hampton 6 7 8 (3rd floor)  Session Format: Invited Papers  	10690 • Native Wildlife and Ecosystem Health: What are the Facts About Impacts from Feral Cats? / Elaine F. Leslie & Kent Redford, chairs	Title TBA • Jeff Watters	Title TBA • Danielle Buttke	Title TBA • Nicole Paquette	Title TBA • Darcy Hu	Title TBA • Presenter TBA	Q&A
<i>Without many precedents and with a volatile topic among stakeholders and employees, the NPS is attempting to deal with feral domesticated cat-wildlife interface issues.</i>							
Concurrent #45 Chesapeake 1 2 (4th floor)  Session Format: Café Conversation  	10762 • Developing Effective Communities of Practice: Us- ing COAST as an Example	Café conversation leaders: Eva DiDonato, Chief, Ocean and Coastal Resources Branch, National Park Service Tracy Ziegler, Marine Ecologist, National Park Service					
<i>We will brainstorm and discuss what can make communities of practice successful as a communication tool to develop knowledge and shared experience for resource management.</i>							
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## Tuesday, April 4 • 4:00–6:00p | Concurrent Sessions

		4:00–4:20	4:20–4:40	4:40–5:00	5:00–5:20	5:20–5:40	5:40–6:00
Concurrent #46 Norfolk 5 6 (1st floor)  Session Format: Contributed Papers  	Wildlife Management	10526 • A Genetically-Mediated Trophic Cascade / Rolf Peterson & John A. Vucetich	10739 • Avoidance of whales by large ships, with implications of varying ship speed and whale behavior / Scott Gende et al.	10668 • Marine Wildlife in the National Park Service / Nicole Brandt & Elaine F. Leslie	10769 • The Science and Politics of Restoring the Black Bear in Big South Fork NRRRA / Tom Blount	Q&A	
<i>Current practice in wildlife management — including genetic and acoustical analyses — are explored in this session.</i>							
Concurrent #47 Marriott 1 2 3 (4th floor)  Session Format: Day-Capper  	10911 • Kontiwennehá:wi: Women Carrying Words / Elizabeth Nanticoke, chair	Day-Capper format: Live dancing and singing; discussion of Kanienkeha:ka (Mohawk) language and culture.					
<i>You'll be introduced to social songs and dances of the Kanienkeha:ka (Mohawk) Nation, their role in the community, and how they support the Mohawk language.</i>							
Concurrent #48 Marriott 4 (4th floor)  Session Format: Invited Papers  	10686 • Multi-Scalar Approaches to Addressing Climate Change Impacts on Cultural Heritage / Lauren Meyer & Marcy Rockman, chairs	Zoom Out: Cultural Resources and Climate Change at the National and Global Scale / Marcy Rockman	Navigating Cultural Landscapes in the Era of Climate Change: Lessons from Western National Parks / Robert Melnick	Climate Change Vulnerability and Risk Assessment Framework for Cultural Resources in NPS Intermountain Region / Brooks Jeffery and Laura Jensen	Climate Change Impacts on Cultural Materials / Andy Ferrell	A Future for Fort Union: Preserving Adobe Ruins in an Age of Climate Change / Frank Matero	Q&A
<i>This session will bring together NPS programs and partner institutions to discuss ongoing scaled-approaches to assess climate change impacts on cultural heritage.</i>							
Concurrent #49 Marriott 5 6 7 (4th floor)  Session Format: Contributed Papers  	Spatial Analysis of Visitor-related Information	10720 • Spatial Temporal Dynamics of Visitor Stopping Behavior Along a Rustic Park Road / Jennifer Newton et al.	10721 • Effects of landscape attributes on visitor spatial behaviors in protected area settings / Robin Graham	10789 • Geospatial Analytics for Park & Protected Area Decision Support / Stacy Supak et al.	10637 • Recreational Suitability Mapping to address Recreational Conflict / Ben Kraja & Matthew Brownlee	10625 • Does use level influence visitors' off-trail behavior in ways that are socially and ecologically important? / Ashley D'Antonio & Christopher Monz	10740 • Scenic Views: Inventory is the First Step Toward Protection / Ksienya Taylor & Melanie Peters
<i>Social science research on park visitors is increasingly being presented and analyzed spatially, giving managers another place-specific tool to work with.</i>							
Concurrent #50 Hampton 1 2 3 (3rd floor)  Session Format: Invited Papers  	10560 • Water—Where did it Come From? Where is it Going? What is it Doing? / Ann Gallagher	Headwaters, Water in a Mountainous Park / Stephanie Uriostegui	Flowing Streams, Descriptions and Trends / Margie Shaffer	Water at the Margins, Changing or Sustaining / Cindy Palinkas	Coastal Waters, Surging and Rising / Maria Caffrey	Sea Levels Rise, Change / Sam Sheline	Q&A
<i>A landscape-level overview, with supporting details chosen from experience and research, will offer a renewed appreciation of environmental complexities including cutting-edge findings from climate-change research.</i>							

## Tuesday, April 4 • 4:00–6:00p | Concurrent Sessions

		4:00–4:20	4:20–4:40	4:40–5:00	5:00–5:20	5:20–5:40	5:40–6:00
Concurrent #51 Hampton 4 (3rd floor)  Session Format: Contributed Papers  	Engaging with Indigenous Peoples	10862 • A Good Beginning – Working With Indigenous Peoples for New National Parks in Northern Canada / David Murray	10846 • Indigenous Consultation in the Era of Sustainable Development: The Ojibway Peoples of Canada / Gabriela Corbera	10737 • Guidance for Improved Tribal Use of Sacred Sites within the National Park Service Intermountain Region / Dorothy FireCloud & Jhon Goes In Center	10595 • Changing Climate, Changing Policy: Subsistence Use and Wilderness Values in Gates of the Arctic / Chris Dunn	10752 • Reverberations in Soundscapes at the Interface Between Indigenous Peoples and National Parks in Southwest USA / Barbara Long	Q&A
<i>As protected area agencies' relations with Indigenous peoples and nations continue to evolve, methods of engagement are being explored that go well beyond pro forma consultation.</i>							
Concurrent #52 Hampton 5 (3rd floor)  Session Format: Panel Discussion  	10543 • GWS Student Summit Reflections: Challenges and Opportunities Facing Protected Areas over the Next Century / Jennifer Thomsen, chair	Gina Depper, PhD Student, Clemson University • Zach Miller, PhD Student, University of Montana Brian Peterson, PhD Student, University of Utah • Chris Zajchowski, PhD Student, University of Utah Sabah Ul-Hasan, PhD Student, University of California–Merced Jess Fefer • Nate Shipley Katie Krafte • Cassidy Jones					
<i>This session offers reflections on where we have been and where we are going in protected area management from the inaugural GWS Student Summit.</i>							
Concurrent #53 Hampton 6 7 8 (3rd floor)  Session Format: Contributed Papers  	Mobilizing Data for Management Decisionmaking	10670 • Trend Analysis for Complex Survey Designs / Leigh Ann Starcevich et al.	10666 • SDrawNPS: A Graphical User Interface for GRTS Sampling and Analysis / Leigh Ann Starcevich et al.	10697 • The Public Lands Flora: Building informatics systems to manage biodiversity in protected areas / Steve Buckley	10713 • A Ten Step Program that Links Monitoring to Management / Peter Dratch	10824 • Measuring the whole night sky, and why it matters / Li-Wei Hung	Q&A
<i>The data firehose shows no signs of being turned off at the spigot. Managers are learning that they need to not just sift through information — they have to proactively plan for finding and using it.</i>							
Concurrent #54 Chesapeake 1 2 (4th floor)  Session Format: Café Conversation  	10756 • Addressing biological resource stewardship needs through community stewardship	Café Conversation leaders: Kris Barnes, Community Stewardship Program Lead, National Park Service Biological Resources Division Kiersten Jarvis, Community Stewardship Program Project Manager, National Park Service Biological Resources Division Kelly Coy, Community Stewardship Program Project Manager, National Park Service Biological Resources Division					
<i>Explore opportunities for community stewardship of biological resources, share stories of challenges and successes, and discuss appropriate metrics and strategies for addressing park needs.</i>							
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## Tuesday, April 4 • 6:00–10:00p | Evening Business Meetings & Activities

More details to come.						
Concurrent #55 Hampton 1 2 3 (3rd floor)  Session Format:	OPEN	8:00–9:30p				
Concurrent #56 Hampton 4 (3rd floor)  Session Format: Business Meeting	10831 • Update on U.S. World Heritage Program / Jonathan Putnam, chair	8:00–9:30p	Speakers: Status of & Future Plans for U.S. World Heritage Program / Steven Morris, Chief, National Park Service Office of International Affairs; and Jonathan Putnam, International Cooperation Specialist, National Park Service Office of International Affairs			
	<i>Will be of particular value to managers of U.S. World Heritage sites, those on the Tentative List, and those interested in becoming World Heritage sites. OPEN TO ALL.</i>					
Concurrent #57 Hampton 5 (3rd floor)  Session Format: Workshop	10551 • The Use of New Digital Technology to Convey Science Concepts through Animation	Workshop leaders: Ann Gallagher, Science Education Coordinator, National Park Service Megan Nortrup				
	<i>Participants will contribute to a set of guidelines or a checklist of what-needs-to-be-done and what-needs-to-be-avoided to ensure comprehensible, science-education, animated videos are created for parks.</i>					
Concurrent #58 Hampton 6 7 8 (3rd floor)  Session Format: Workshop	Meeting of IUCN World Commission on Protected Areas North American Section	Workshop leaders: David Reynolds, WCPA-NA Member Mike Wong, WCPA-NA Vice Chair (via telephone)				
						



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## Wednesday, April 5 • 8:00a–9:30a | Plenary Session III

### *Natureful Cities for All*

**Timothy Beatley**, Teresa Heinz Professor of Sustainable Communities, and Chair of the Department of Urban and Environmental Planning, School of Architecture at the University of Virginia  
**Audrey Peterman**, President of Earthwise Productions Inc.; author and activist

What if our cities were places where nature is front and center? Where natural areas are in close proximity to large numbers of urbanites who value, protect and actively restore their biodiversity? Where there are abundant opportunities to be outside and to enjoy nature through strolling, hiking, bicycling, exploring? Where all these benefits are available to everyone, regardless of race, ethnicity, income, or social status?

Drawing on E.O. Wilson's concept of biophilia (a inborn affinity for nature), Professor Tim Beatley has imagined and written about such biophilic, natureful cities. In this session you will learn about what makes a city natureful, and then hear from one of America's foremost activists for inclusivity, Audrey Peterman, about what needs to be done to make sure our cities are full or nature for everyone.

**Timothy Beatley** is the Teresa Heinz Professor of Sustainable Communities, and Chair of the Department of Urban and Environmental Planning, School of Architecture at the University of Virginia, where he has taught for the last twenty-eight years. Beatley is the author or co-author of more than fifteen books, including *Biophilic Cities: Integrating Nature Into Urban Design and Planning*, *Blue Urbanism: Connecting Oceans and Cities*, and most-recently *Handbook of Biophilic City Planning and Design*. Beatley also writes a column for *Planning Magazine* called Ever Green, which has appeared every other month since 2008, and is a regular contributor to the Nature of Cities collective blog. Beatley founded and directs the Biophilic Cities Project at UVA (<http://biophiliccities.org/>), and recently helped to launch a global Biophilic Cities Network. He also co-founder and co-director, with Reuben Rainey, of UVA's Center for Design and Health, within the School of Architecture. He has been the recipient of the All-University Teaching Award at UVA, and also received the Outstanding Faculty Award, the state's highest award for faculty at its public universities (awarded by the State Council of Higher Education for Virginia). Beatley holds a PhD in City and Regional Planning from the University of North Carolina at Chapel Hill, an MA in Political Science from UNC, a Masters of Urban Planning from the University of Oregon, and a Bachelors of City Planning from UVA.



**Audrey Peterman** is President of Earthwise Productions Inc., the environmental consulting firm she and her husband Frank founded in 1995 to help connect the public lands system to urban populations. She co-founded the Diverse Environmental Leaders Speakers Bureau ([www.delnsb.com](http://www.delnsb.com)) in 2014 to provide one stop access to the breadth of talent in communities of color, including solo circumnavigators, mountaineers, authors and climate/lands experts. She blogs about the National Parks and public lands system at the Huffington Post, and co-author of *Legacy on the Land: A Black Couple Discovers Our National Inheritance and Tells Why Every American Should Care* (2009.) Her travel guide to the national parks, *Our True Nature: Finding A Zest for Life in the National Park System* (2012), features 59 of 179 units she has visited. Mrs. Peterman's repertoire includes the broad range of experience gained from serving on the boards of diverse entities including the National Parks Conservation Association; the Association of Partners for Public Lands (renamed Public Lands Alliance) the National Parks Tourism Promotion Council; the advisory board of Delaware North Parks and Resorts concessionaires, and multiple community based organizations that she helped establish. Her passion for the public lands system and her determination to uphold their sacred place in our lives grows ever stronger.








**BOOK SIGNING:** Timothy Beatley and Audrey Peterman will be signing copies of their books in the Presidential Foyer immediately following the Plenary. Professor Beatley will be signing his brand-new title *Handbook of Biophilic City Planning and Design*, and Mrs. Peterman will be signing her books *Legacy on the Land* and *Our True Nature*. Copies will be available for purchase.

**Registration** (7:00a–6:00p, Presidential Foyer, 3rd floor )











**Poster Session** (8:00a–10:00p, Norfolk Ballroom 1|2, 1st floor)

# Wednesday, April 5 • 10:00a–12:00p | Concurrent Sessions






		10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
Concurrent #59 Norfolk 3 4 (1st floor)  Session Format: Workshop  	10849 - The Next 100 Years: Principles to Guide the National Park Service	Workshop leaders: Rebecca Stanfield McCown, Director, National Park Service Stewardship Institute Bob Ratcliffe, Chief, Outdoor Recreation & Conservation, National Park Service					
		<i>By identifying ways to embed the principles of the Urban Agenda throughout the Park Service, this session will illuminate the potential of NPS to impact communities.</i>					
Concurrent #60 Marriott 1 2 3 (4th floor)  Session Format: Workshop  	10741+10744 • National Park System Planning: Canadian and American Perspectives for the Future	Workshop leaders: Kevin McNamee, Director, Protected Areas Establishment, Parks Canada Stephen Morris, Chief, Office of International Affairs, National Park Service					
		<i>Explore potential collaborative between NPS and Parks Canada to update or revise their respective national park system plans.</i>					
Concurrent #61 Marriott 4 (4th floor)  Session Format: Invited Speakers  	10778 • Science to Support Ecosystem Resilience post-Hurricane Sandy / Amanda Babson, chair	Hurricane Sandy's Silver-lining: Science-based Management for the Wilderness Breach at Fire Island NS / Chris Soller	Toward Understanding Resilience: Measuring and Modeling Hurricane Sandy Impacts and Recovery at Fire Island / Erike Lentz	Post-Sandy Research Projects to Understand and Manage Social-Ecological Resilience in Jamaica Bay, NY / Lesley Patrick	Lessons learned and generalities from looking across a range of coastal marshes / Jim Morris	Tracking Change and Recovery: Metrics of Resilience / Andrea Spahn	Modelling Groundwater Response to Sea Level Rise Beneath Barrier Islands at Three National Seashores / Mat Pajerowski
	<i>Share highlights of the extensive research on ecosystem resilience undertaken in parks post-Hurricane Sandy.</i>						
Concurrent #62 Marriott 5 6 7 (4th floor)  Session Format: Contributed Papers  	Engaging Visitors and Volunteers Online: Maps, Apps, and Social Media	10582 • Visitor Science in Denali National Park and Preserve / Heather Fischer	10801 • Find your park online: An analysis of social media and the National Park Service Centennial / Scott Ogletree & Ingrid Nyakabwa	10689 • Virtual Visitors: Social Media in Yellowstone National Park / Zachary Miller & Wayne Freimund	10790 • Engaging citizens through technology in the field: An overview of iNaturalist in Colorado's State Parks / Matt Schulz	10771 • Using social media data to identify valued recreation resources and inform climate change adaptation planning / Allie McCreary et al.	10621 • On the road to capacities : Registration systems, redistribution, and the "self-limitation" ideal / Doug Whittaker & Bo Shelby
	<i>Many visitors now navigate life primarily through their smartphone or other mobile device. To engage with these folks, maps, apps, and social media are no longer add-ons — they are the name of the game.</i>						
Concurrent #63 Hampton 1 2 3 (3rd floor)  Session Format: Panel Discussion  	10629 • Preserving Ecological, Historical, and Cultural Integrity: The Next Century of NPS Resource Management / Joy Beasley et al., chairs	Stephanie Toothman, Associate Director, Cultural Resources, Partnerships, and Science, National Park Service Raymond Sauvajot, Associate Director, Natural Resource Stewardship and Science, National Park Service Julia Washburn, Associate Director for Interpretation, Education, and Volunteers, National Park Service					
		<i>This session will encourage audience members to think critically about how DO-100 will change NPS natural and cultural resource management in the future.</i>					












# Wednesday, April 5 • 10:00a–12:00p | Concurrent Sessions

		10:00–10:20	10:20–10:40	10:40–11:00	11:00–11:20	11:20–11:40	11:40–12:00
Concurrent #64 Hampton 4 (3rd floor)  Session Format: Contributed Papers  	Understanding Aquatic & Riparian Invasive Species and Outbreak Events	10705 • Adopting molecular techniques in wilderness management and restoration in Yosemite National Park / Colleen Kamaroff & Caren Goldberg	10817 • Harmful Algal Blooms and Our National Parks: Developing Plans and Partnerships / Tracy Ziegler	10822 • Aquatic Invasive Species: Challenges and Solutions Across Boundaries / John Wullschlegler	10788 • Human dimensions of aquatic invasive species management in Texas protected areas / Kenneth Wallen	10815 • Developing a Gateway for Future Land Stewards through Education and Resource Protection / Heather Whitesides	Q&A
<i>Invasive species are especially devastating to aquatic and riparian ecosystems. This session examines a range of challenges and solutions.</i>							
Concurrent #65 Hampton 5 (3rd floor)  Session Format: Contributed Papers  	Climate Change	10553 • Investigating the early snowmelt of 2015 in the Cascade Mountains using new snowmelt timing maps / Donal O'Leary et al.	10814 • 'Resilience' —it's everywhere, but what does it mean in a climate change adaptation context? / Gregor Schuurman et al.	10783 • Climate Driven Extent Changes in Perennial Snowfields in Gates of the Arctic National Park, Alaska / Molly Tedesche et al.	10585 • Dinosaurs of Alaska's National Parks and a regional perspective of their ecosystems and climate / Anthony Fiorillo & Paul McCarthy	Q&A	
<i>Prioritizing historically designated structures for adaptation treatments necessitates continued deliberation of how to best integrate aspects of vulnerability, significance and use potential.</i>							
Concurrent #66 Hampton 6 7 8 (3rd floor)  Session Format: Panel Discussion  	10609 • Indigenous Cultural Landscapes: From Concept to Research, Results, Rewards, and the Future / Deanna Beacham, chair	Progress of the Indigenous Cultural Landscape in the Chesapeake Bay: 2010-2016 / Suzanne Copping Chesapeake Bay Priorities Research and the Rappahannock River Indigenous Cultural Landscape / Julia A. King Tribal Cultural Landscapes and Studies in the Western United States / Eirik Thorsgard Challenges at the Intersection of Indigenous Landscape Perspectives and Established Preservation Practices / Susan Dolan					
<i>Since the concept's 2010 introduction, research on the Indigenous Cultural Landscape has resulted in increased indigenous involvement, intriguing findings, and expanded perspectives. What comes next?</i>							
Concurrent #67 Norfolk 5 6 (1st floor)  Session Format: Café conversation  	PENDING 10940 • Developing a Sustainable Recreation Research Agenda for Public Lands	Conversation leader: Francisco Valenzuela (Director of Recreation, Heritage & Wilderness, USDA Forest Service Southwestern Region)					
<i>We want you to contribute your thoughts and ideas toward Developing a Sustainable Recreation Research Agenda for Public Lands.</i>							
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 <b>Challenge Sessions</b> ask members of the audience to question their assumptions. Attendees emerge from the session with their critical thinking faculties fully engaged.		 <b>Skills Sessions</b> are hands-on training opportunities that increase the capacity of attendees to solve a specific problem. Attendees leave with new skills applicable to the problem.		 <b>Fasttrack Sessions</b> are fast-paced, exciting overviews, with individual 5-minute presentations on aspects of the session's topic. The outcome is that audience members come away energized and intrigued to learn more.			











# Wednesday, April 5 • 1:30–3:30p | Concurrent Sessions

		1:30–1:50	1:50–2:10	2:10–2:30	2:30–2:50	2:50–3:10	3:10–3:30
Concurrent #68 Norfolk 3 4 (1st floor)  Session Format: Workshop  	10850 - Inventories 2.0: Shaping the Next Generation of Baseline Inventories of NPS Natural Resources	Workshop leader: Joe DeVivo, Deputy Chief for Science, Inventory & Monitoring Division, National Park Service					
		<i>The timing and audience at GWS provide an opportunity to engage a broad array of park stakeholders on future needs for NPS Natural Resource Inventories.</i>					
Concurrent #69 Marriott 1 2 3 (4th floor)  Session Format: Panel Discussion  	10791 - Reaching Out on Scaling Up: Lessons from Landscape Scale Conservation / Brent Mitchell, chair	Overview: Opportunities and Challenges for Scaling Up from a Networked Governance Perspective / Brent Mitchell National Parks and the Scaling Up Imperative / Raymond Sauvajot Title TBA / Emily Bateson & Shawn Johnson Chesapeake: A Network of Conservationists Across 64,000 Square Miles / Jonathan Doherty & Suzanne Copping Title TBA / Christina Marts					
		<i>This session will focus on the difficult realities of landscape-scale conservation. Participants will share lessons learned and yet-to-be learned about networked governance.</i>					
Concurrent #70 Marriott 4 (4th floor)  Session Format: Invited Speakers  	10735 - Science and the BIG Picture for National Park Resources / Melanie Peters, chair	Clean Air and Clear Views... Are we there yet? / John Vimont	This place rocks! Digging into the geologic foundation of national parks / Rebecca Port	Climate Change and Our National Parks / Patrick Gonzalez	Advances in Managing for Natural Soundscapes and Lightscares / Frank Turina	Getting a Grip on Invasive Plants / Terri Hogan	Q&A
	<i>Ever wonder how the natural resource conditions in your area fit into the bigger picture? Come learn what NPS knows about resources across the US.</i>						
Concurrent #71 Marriott 5 6 7 (4th floor)  Session Format: Invited Speakers  	10833 - The Important Intersection of Natural and Cultural Resources in Con- servation and Preservation / Elaine Leslie, chair	Title TBA / William Kelso	Title TBA / Jim Horn	Title TBA / Jonathan Connolly	Title TBA / Dave Frederick	Title TBA / Jon Meade	Q&A
	<i>A look at the intersection of natural resources in the restoration and preservation of our cultural history and landscapes.</i>						
Concurrent #72 Hampton 1 2 3 (3rd floor)  Session Format: Invited Speakers  	10548 - Developing the Process: Initiation, Admin- istration and Delivery of the Inaugural Social Science Park Break Experience / Rose Verbos et al., chairs	Understanding and Informing Decision Making in the NPS: Social Science Initiatives, Planning, and Park Break / Rachel Collins et al.	Great Sand Dunes National Park and Preserve Research Themes and post-Park Break Perspectives / Katlin Bur- roughs et al.	International Transference from Park Break: Integrat- ing Social Science in Parks, Protected Areas, and Cultural Sites / Katlin Burroughs et al.	Q&A		
	<i>The NPS and researchers identified growing social science needs in the NPS to inform planning and decision-making and have responded by advancing social science initiatives.</i>						




# Wednesday, April 5 • 1:30–3:30p | Concurrent Sessions

		1:30–1:50	1:50–2:10	2:10–2:30	2:30–2:50	2:50–3:10	3:10–3:30	
Concurrent #73 Hampton 4 (3rd floor)  Session Format: Contributed Papers  	Working Where the People Are: Understanding and Managing Urban and Regional Parks / Lynn Wilson, chair	10754 • A Delicate Balance: Public Access and Healthy Ecological Function / John Roberts	10584 • Opening a near-wilderness regional park close to Victoria, British Columbia, Canada / Lynn Wilson	10804 • Equitable engagement?: Constraints and place attachment of diverse groups in Portland parks / Jaclyn Rushing & Mark Needham	10718 • Assessing Park-Based Urban Sustainability within East Africa Community / Bernard Kitheka	10732 • #NatureForAll: Parks at the heart of a global movement to inspire a love of nature / Pascale van der Leest et al.	10818 • Urban Opportunity: A Multi-method Evaluation of the National Park Service Urban Agenda’s Multi-dimensional Resilience / Elizabeth Perry	
<i>Over 75% of the world now lives in cities, yet urban and regional parks often take a backseat to the so-called “crown jewel” iconic natural-area parks. This session puts the focus where the people are.</i>								
Concurrent #74 Hampton 5 (3rd floor)  Session Format: Invited Speakers  	10760 • Integrating Coastal Climate Adaptation in National Parks II / Amanda Babson & Courtney Schupp, chairs	Scenario Planning to Adaptive Management: A Case Study from Saint Croix Island International Historic Site / Dan Odess	Perspectives of place: Stakeholder sentiments about adaptation strategies for historic buildings at Cape Lookout National Seashore / Erin Seekamp	Piloting an Integrated Vulnerability Assessment at Colonial National Historical Park Across Key Resources and Infrastructure / Dorothy Geyer	Bringing Historical Perspectives on Climate into Current Adaptation Practices / Alanna Casey	Developing adaptation planning through detailed, asset-level vulnerability assessment in coastal parks / Rob Young	Q&A	
<i>We provide updates on the latest projects and case studies of coastal climate adaptation for national parks integrating across natural resources, cultural resources and facilities. (Part I is Concurrent #1)</i>								
Concurrent #75 Hampton 6 7 8 (3rd floor)  Session Format:	OPEN							
Concurrent #76 Norfolk 5 6 (1st floor)  Session Format: Fasttrack presentations followed by workshop  	10647 • Healthy Parks Healthy People: State of the Evidence and Paths to Improve the Science / B. Derrick Taff, chair	NPS’s Healthy Parks Healthy People Program – Optimizing health values and benefits of public lands • Diana Allen   Parks & Health: The State of the Scientific Evidence • Lincoln Larson   Trails as Health Resources: Examples from Montana’s Park and Trail Rx Program • Jennifer Thomsen   Participatory mapping: a tool to elicit nonmaterial values and identify the health benefits of nature • Carena J. van Riper   The influence of park soundscapes on health and wellbeing • Peter Newman   Physical activity and greenspace: state of the evidence and geospatial opportunities • Aaron Hipp   Urban Parks, Healthy People, and the Pursuit of Environmental Justice • Viniece Jennings   Understanding Nature’s Resiliency-Building and Restorative Power for Armed Forces Personnel, Veterans, and Their Families • Matt Brownlee   Research Regarding the Restorative Power for Armed Forces Personnel, Veterans, and Their Families • Kelly Bricker   Economic valuation of the health benefits of parks • Lynne Koontz   Economic value and benefits of physical activity/health benefit valuation in our parks: A case study • Leslie Richardson   Healthy Parks Healthy People Criteria Tool: Implementation in Gettysburg and Catoctin Mountain National Parks • Derrick Taff						
<i>After learning about the state of evidence, panelists and participants will identify deficiencies and develop strategies for advancing park-based health science.</i>								
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# Wednesday, April 5 • 4:00–5:30p | Focus Sessions

		4:00–4:15	4:15–4:30	4:30–4:45	4:45–5:00	5:00–5:15	5:15–5:30
<p>Focus Session I Hampton 1 2 3 (3rd floor)</p> <p>Session Format: Invited Speakers</p> 	<p>10830 • A Framework for Visitor Use Management on Federal Lands and Waters / Kerri Cahill</p>	<p>Introducing the Visitor Use Management Framework from the Interagency Visitor Use Management Council / Kerri Cahill</p>	<p>Applying the VUM Framework at Zion National Park / Susan McPartland</p>	<p>Applying the VUM Framework to re-envision visitor use at Glacier Bay National Park &amp; Preserve / Rachel Collins</p>	<p>Application of VUM on the Pike National Forest / Carin Vadala</p>	<p>Applying the VUM Framework to address camping on the Bridger-Teton National Forest / Linda Merigliano</p>	<p>Q&amp;A</p>
<p><i>This session introduces the newly released IVUMC Visitor Use Management Framework, and will discuss framework application by the agencies involved in the council.</i></p>							
<p>Focus Session II Hampton 4 (3rd floor)</p> <p>Session Format: Panel Discussion</p> 	<p>10878 • Engaging Youth in 21st Century Resource Stewardship • Shaun Eyring &amp; Stephanie Toothman, chairs</p>	<p>Paloma Bolasny, Cultural Resources Youth Program Coordinator, National Park Service Bob Page &amp; Celina Illuzzi, Olmsted Center for Landscape Preservation, National Park Service David Goldstein, Urban Fellow, Detroit, National Park Service Detroit Park Break Fellows: Ariel Schnee, Kat Slocum, Lorin Brace</p>					
<p><i>The audience will benefit from a critical examination of signature NPS resource stewardship youth programs, their challenges and opportunities, and how to measure success.</i></p>							
<p>Focus Session III Hampton 5 (3rd floor)</p> <p>Session Format: Panel presentation followed by open discussion</p> 	<p>10908 • The Rabbit in the Mouth of the Coyote: Indigenous Employees in the Service of Government • Peter Larivière, chair</p>	<p>PANELISTS: Peter Larivière, Parks Canada / Anishinaabe Melia Lane-Kamahele, National Park Service / Native Hawaiian</p>					
<p><i>Indigenous audience members will have the chance to explore the delicate topic of divided loyalties; non-Indigenous participants hopefully will come away sensitized to the issue.</i></p>							
<p>Focus Session IV Hampton 6 7 8 (3rd floor)</p> <p>Session Format: Panel Discussion</p> 	<p>11007 • Positioning for Success in a World of Continuous Change / Raymond M. Sauvajot, chair</p>	<p>PANELISTS TBA</p>					
<p><i>This session will invite discussion and address key concerns about the future of park resource stewardship in a world of continuous and accelerating change.</i></p>							
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# Wednesday, April 5 • 6:00–10:00p | Evening Sessions & Activities

More details to come.		
<p>Concurrent #77 Hampton 1 2 3 (3rd floor)</p> <p>Session Format: Business Meeting</p> 	<p>10928 • GWS Student Chapters Meeting / Gina Depper, Chair</p>	<p>8:00–9:30p</p> <p><i>Meeting to discuss organization and governance of George Wright Society student chapters. OPEN TO ALL.</i></p>
<p>Concurrent #78 Hampton 4 (3rd floor)</p> <p>Session Format: Business Meeting</p> 	<p>10816 • Natural Sounds Advisory Group Organizational Meeting / Jim Barborak et al., chairs</p>	<p>8:00–9:30p</p> <p><i>The IUCN Natural Sounds Advisory Group business meeting will build on momentum gained at the 2016 World Conservation Congress, co-create objectives, and identify new leadership.</i></p>
<p>Concurrent #79 Hampton 5 (3rd floor)</p> <p>Session Format:</p>	<p>OPEN</p>	
<p>Concurrent #80 Hampton 6 7 8 (3rd floor)</p> <p>Session Format: Workshop</p> 	<p>10755 • Decision support for cultural resources climate adaptation planning: Advancing an optimization model piloted at Cape Lookout National Seashore</p>	<p>Workshop leader: Erin Seekamp, Associate Professor, North Carolina State University Sandra Fatoric, Research Associate, North Carolina State University</p> <p><i>Prioritizing historically designated structures for adaptation treatments necessitates continued deliberation of how to best integrate aspects of vulnerability, significance and use potential.</i></p>



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# Thursday, April 6 • 8:00–10:00a | Concurrent Sessions






		8:00–8:20	8:20–8:40	8:40–9:00	9:00–9:20	9:20–9:40	9:40–10:00
Concurrent #81 Norfolk 3 4 (1st floor)  Session Format: Contributed Papers  	Understanding through Planning	10863 • Experiences from the field: Linking community and conservation through ecotourism in Nepalese National Park / Smritee Panta & Brijesh Thapa	10777 • Mapping the spatial dynamics of values among visitors to Denali National Park and Preserve / Clinton Lum and Carena van Riper	10794 • Monitoring and Evaluating Indicators of Recreation Quality on the White Mountain National Forest / William Valliere et al.	10825 • Grand Canyon National Park and Neighboring Development: Stakeholder conflict and potential resolutions / Challie Facemire	10591 • Unplanned trail creation in Gatineau Park, Canada: engaging users in finding a sustainable solution / Catherine Verreault et al.	10447 • In Pursuit of Happiness: Three Centuries of American Park Design by Washington, Olmsted and Disney / Lucy Lawliss
<i>Planning is where all the variety of park-related management disciplines come together. This session offers case studies on how the planning process feeds back to better understanding of parks.</i>							
Concurrent #82 Marriott 1 2 3 (4th floor)  Session Format: Invited Speakers  	10763 • Shifting Seasons in Protected Areas: Science and Engagement in the New Century / Alyssa Rosemartin, chair	AT Seasons: Partnering to Understand Phenology Across 11 Degrees of Latitude / Georgia Murray	Science in the Parks: Phenology for Climate Change Engagement at the Grand Canyon National Park / AJ Lapre	Citizen Science for Climate Adaptation: Integrated Phenology Research at Acadia National Park / Abraham Miller-Rushing	Spring Onset Advancing at the National Park Service / Katharine Gerst	Q&A	
<i>We will build on our shared interests and experiences to strengthen the role of phenology in science, engagement, and conservation in the new century.</i>							
Concurrent #83 Marriott 4 (4th floor)  Session Format:	OPEN						
Concurrent #84 Marriott 5 6 7 (4th floor)  Session Format: Fasttrack Sessions  	Concurrent #84a • 8:00–8:30a   10731 • Utilizing NASA Earth Observations to Enhance Decision Making for the National Park Service / Amanda Clayton & Ryan Avery, chairs <i>Collaboration between NASA and park managers to foster use of Earth observations while providing unique capacity building opportunities for the future natural resource management workforce.</i> Reconstructing Algal Productivity and Clarity of Alpine Lakes in Rocky Mountain National Park / Sarah Carroll   Assessing Snow Cover Distribution and Persistence Changes in the Sky Islands of Saguaro National Park / Elaina Gonso-rski   Monitoring Invasives in Big Bend National Park, Valles Caldera National Preserve, and Bandelier National Monument / Ryan Avery   Monitoring Mangrove Health and Extent in Everglades National Park / Donnie Kirk  Concurrent #84b • 9:00–9:30a   OPEN						
Concurrent #85 Hampton 1 2 3 (3rd floor)  Session Format: Contributed Papers  	The National Park Service in Retrospect and Prospect	10599 • Charting a Path: A Critical History and Analysis of Social Science in America's National Parks / James Gramann	10793 • Historical Ecological Considerations in the Establishment of National Parks and Monuments / Mary Foley & Tim Hudson	10587 • America's Lost National Monuments and the Limits of the National Park System / Joe Weber	10423 • The National Park Service Ranger as a Historically Contradictory Figure / Alice Kelly Pennaz	11245 • Reflections on the Past, Present, and Future of Civic Engagement in National Parks / David Glassberg	Q&A
<i>The U.S. National Park Service just finished celebrating its 100th anniversary. This session offers a range of perspectives on the agency's past development and possible future pathways.</i>							







# Thursday, April 6 • 8:00–10:00a | Concurrent Sessions

		8:00–8:20	8:20–8:40	8:40–9:00	9:00–9:20	9:20–9:40	9:40–10:00	
Concurrent #86 Hampton 4 (3rd floor)  Session Format: Contributed Papers  	Communication and Education / Robert Dvorak, chair	10692 • Using ecosystem services to develop narratives relating ecosystem responses to public values / Michael Bell et al.	10437 • Making SPACE / PT Lathrop	10653 • The Impact of Informal Interpretation / Doug Knapp & Brian Forist	10551 • The Use of New Digital Technology to Convey Science Concepts through Animation / Ann Gallagher & Megan Nortrup	10574 • Current and Future Stewards: Strategies for Communicating Wilderness Values / Robert Dvorak et al.	Q&A	
<i>In the park context, communication and education is not just about imparting information — it's about exchanging values.</i>								
Concurrent #87 Hampton 5 (3rd floor)  Session Format: Invited Speakers  	10685 • Either Leave No Trace...or no trace of this park will be left / Forrest Schwartz & Ben Lawhon, chairs	Is dispersed pristine-site camping effective? Evaluating a Wilderness Therapy program in Grand Staircase-Escalante National Monument / Jeff Marion	Special events on public lands: Understanding participants' attitudes so we can mitigate impacts / Derrick Taff	Diffusion of the Leave No Trace Visitor Education Program in Two U.S. National Parks / Wade M. Vagias	Strategies for understanding off-trail travel in an open-space environment: Pairing observation and self-report data / Ben Lawhon	Will they leave what they find? Efficacy of a Leave No Trace program for youth / Forrest Schwartz	Q&A	
<i>This session will examine state-of-knowledge of Leave No Trace research, sharing lessons learned and practical implications for management and directions for future research.</i>								
Concurrent #88 Hampton 6 7 8 (3rd floor)  Session Format: Panel Discussion  	10658 • Visitor use management: Innovative approaches that inform management solutions / Matthew Brownlee & Ryan Sharp, chairs	Mapping the relationships between trail conditions and experiential elements of long-distance hiking / Brian Peterson & Matt Brownlee Exploring new methods and technologies in trail use and impact monitoring for protected areas / Yu-Fai Leung et al. Re-Evaluating Carrying Capacity and Visitor Use Management at Waterfall-Based Parks in Tennessee / Margaret McGuinness et al. Monitoring multiple visitor use indicators in diverse recreation settings in the White Mountains National Forest / Nathan Reigner et al. Implications of webcam viewing for brown bear management at Katmai National Park and Preserve / Jeffrey Skibins and Ryan Sharp Q&A						
<i>Audience members will leave this organized session with understanding the innovative approaches being used to confront complex management challenges and inform contemporary management solutions.</i>								
Concurrent #89 Norfolk 5 6 (1st floor)  Session Format: Fasttrack Sessions  	Concurrent #89a • 8:00–8:30a   10612 • Evaluating a Blended Approach to Climate Change Literacy / Larry Perez, chair <i>In this session, we will examine three different models of climate change workforce training, with an exploration of relative benefits and success.</i> Climate Change Training Needs Assessment and Strategy / Larry Perez   The Earth to Sky Partnership / Anita Davis   Interpreting Climate Change Virtual Course / Matt Holly Self-Paced Climate Change Training / Ryan Stubblebine  Concurrent #89b • 9:00–9:30a   10802 • Social Science and Planning: Applications in the National Park Service / Susan McPartland, chair <i>To provide context for how and why the National Park Service incorporates social science research into Visitor Use Management planning.</i> Establishing a decision space: identifying planning issues, project scope, and research questions / Susan McPartland   Civic engagement: beyond involvement and into social science information / Rose Verbos Sliding scale of data types: identifying what is needed and in what format / Rachel Collins   Putting it all together: integrating data into the planning process / Kerri Cahill							
	<b>Collaboration Sessions</b> bring attendees together to work on a specific project. At the end of the session, the organizers will give attendees the opportunity to help complete the project.			<b>Compass Sessions</b> ask two questions: “Where are we?” and, “Where do we want to go?” These sessions ask the audience to reflect on where we should go from here, with a range of possible directions.			<b>Update Sessions</b> bring attendees together to fill them in on the latest developments with regard to a project, program, or issue. Attendees emerge from the session fully up-to-date on the topic.	
	<b>Challenge Sessions</b> ask members of the audience to question their assumptions. Attendees emerge from the session with their critical thinking faculties fully engaged.			<b>Skills Sessions</b> are hands-on training opportunities that increase the capacity of attendees to solve a specific problem. Attendees leave with new skills applicable to the problem.			<b>Fasttrack Sessions</b> are fast-paced, exciting overviews, with individual 5-minute presentations on aspects of the session's topic. The outcome is that audience members come away energized and intrigued to learn more.	

# Thursday, April 6 • 10:30a–12:30p | Concurrent Sessions

		10:30–10:50	10:50–11:10	11:10–11:30	11:30–11:50	11:50–12:10	12:10–12:30
Concurrent #90 Norfolk 3 4 (1st floor)  Session Format: Invited Speakers  	10675 • Moving from the Thinking Phase to an Implementation Plan for a Landscape Approach to Conservation / Elaine F. Leslie, chair	The Greater Yellowstone Ecosystem and the Critical Core Migration of Deer and Elk / Arthur Middleton	International and Tribal Partnerships I: Bison Restoration Across Many Nations / Jody Hilty	International and Tribal Partnerships II: Bison Restoration Across Many Nations / Glenn Plumb	Marine Wildlife Connectivity: Shorebirds to Sea Turtles and Marine Mammals and Migration Corridors / Nicole Brandt	Connecting our Skies and our Heritage Through California Condor Restoration / Dave Roemer	Q&A
<i>How do the NPS, other agencies, and private land managers, partners, and neighbors contribute to a National Conservation Strategy - we connect resources at scale.</i>							
Concurrent #91 Marriott 1 2 3 (4th floor)  Session Format: Panel Discussion  	10643 • Is wilderness being forgotten as we plan for climate change adaptation? / Beth Hahn & Peter Landres, chairs	Gregor Schuurman, Adaptation Ecologist, NPS Climate Change Response Program Eric Biber, Professor of Law, University of California, Berkeley David Cole, Emeritus Scientist, Aldo Leopold Wilderness Research Institute Mark Fincher, Wilderness Specialist, Yosemite NP Chris Holbeck, Chair of NPS Wilderness Leadership Council, Midwest Region Wilderness Coord./Chief of Resources					
<i>We want to explore three potential top-down solutions to challenges that agency decision makers face when considering wilderness stewardship responses to climate change.</i>							
Concurrent #92 Marriott 4 (4th floor)  Session Format: Contributed Papers  	Visitor Management	10628 • Factors Affecting Public Awareness of and Visitation to National Parks / Elizabeth Perry, et al.	10657 • The Future of Transportation Safety at the National Park Service / Elissa Goughnour et al.	10776 • Shifts in Messaging at Coupled Human-Natural Systems to Achieve Reduced Impacts to the Acoustic Resource / Ashley Pipkin et al.	10465 • Growth in Chinese Tourism to National Parks: A Case Study in West Yellowstone / Jennifer Thomsen	Q&A	
<i>Park visitors are becoming more diverse and knowledgeable, and managing their experiences and impacts more complex. Cases in this session provide a demonstration.</i>							
Concurrent #93 Marriott 5 6 7 (4th floor)  Session Format: Fasttrack Sessions  	Concurrent #93a • 10:30–11:00a   10676 • Go Tell it on the Mountain: Civil Rights History and the NPS in Washington, DC / Dean Herrin, chair <i>This session will explore why the history of civil rights is important and provide examples of how to research that history.</i> “Education...means emancipation”: Freedpeople’s Schools after the Civil War / Dean Herrin   Breaking Jim Crow: Segregation and National Park Service Golf Courses in Washington, DC / Patti Kuhn Babin   Riots and Recreation: The 1968 DC Riots and the NPS Summer in the Parks Programs / Noel Lopez   Outing LGBTQ History: The Kameny House in Washington, DC / Kathryn Smith  Concurrent #93b • 11:30a–12:00p   OPEN						
Concurrent #94 Hampton 1 2 3 (3rd floor)  Session Format: Sharing Circle  	10910 • Traditional Science: What is its Place in Protected Area Management Today?	Sharing Circle facilitators: Peter Larivière, Parks Canada Melia Lane-Kamahele, US National Park Service					
<i>This session will explore the role of traditional science in protected area management today.</i>							

# Thursday, April 6 • 10:30a–12:30p | Concurrent Sessions

		10:30–10:50	10:50–11:10	11:10–11:30	11:30–11:50	11:50–12:10	12:10–12:30
Concurrent #95 Hampton 4 (3rd floor)  Session Format: Contributed Papers	10596 • Innovative Strategies for Inventory and Monitoring of National Park Service Paleontological Resources / Vincent Santucci, chair	Integration of Paleobiological Data into All Taxa Biodiversity Inventories: A Temporal Perspective / Vincent L. Santucci	The Paleontology Synthesis Project: Data Management and the National Park Service's Fossil Record / Justin Tweet	Quantifying and Assessing Vulnerability of National Park Service Paleontological Resources / Anne Miller	Paleontological Resource Monitoring of Coastal Areas at Point Reyes National Seashore, California / Lillian Kennedy Pearson	Photogrammetric Applications Supporting Paleontological Resource Inventory, Monitoring and Research / John "Jack" Wood	Q&A
 <i>Paleontological Resources Preservation Act (2009) specifically mandates paleontological resource inventory and monitoring. This session shares new and effective strategies and methods for management of fossils.</i>							
Concurrent #96 Hampton 5 (3rd floor)  Session Format: Panel Discussion	10708 • Making nature-culture connections by broadening metropolitan conservation alliances / Ted Trzyna & David Goldstein, chairs	Jon Jarvis, former Director, US National Park Service Dan Ashe, President, American Zoo Association Ted Trzyna, Chair, IUCN WCPA Urban Conservation Strategies Specialist Group; Project Director, Natural Neighbors Mark Bouman, Chicago Design Program Director, Field Museum of Natural History / Chicago Wilderness Stacie Beute, Program Director, Central Arizona Conservation Alliance / Desert Botanical Gardens					
 <i>Bringing cultural heritage together with natural heritage on equal terms has many benefits. How can metropolitan conservation partnerships move in this direction?</i>							
Concurrent #97 Hampton 6 7 8 (3rd floor)  Session Format: Contributed Papers	What We Think, What We See, What We Think We See: Values and Perceptions	10699 • Transmission of environment values: Who are the most influential sources and how effective are they? / Gina Depper	10810 • Water-Based Outdoor Recreation Users' Attitudes Towards Potential Offshore Wind Energy Development in the Great Lakes / Michael Ferguson	10834 • Integrating multiple values and environmental behavior reported by visitors to Denali National Park and Preserve / Carena van Riper et al.	10664 • Linking nature-based recreation and pro-environmental behavior: empirical support for the Conservation-Recreation Model / Lincoln Larson & Caren B. Cooper	10659 • Assessing public perception of the value of long-term ecological monitoring / Christopher Sergeant et al.	Q&A
 <i>What we think we see, and how we value that experience, strongly influences how we think about a topic or a place. Social science is plumbing the explicit connections between values and perceptions.</i>							
Concurrent #98 Norfolk 5 6 (1st floor)  Session Format: Contributed Papers	Technology's Role in Resource Understanding and Protection	10694 • Dispersed Fishing Use Monitoring Using GPS: Proof of Concept / Karl Brookins	10728 • Put it on a map! With inventory data scenic views are more than pretty pictures / Melanie Peters et al.	10757 • The Application of Drones to Applied Science and Management in U.S. National Parks / Everette Newton & Julian Dale	10681 • Using digital point-intercept and sub-meter navigation to assess vegetation recovery in Fire Island's wilderness / Chelby Kilheffer et al.	10779 • Connectivity from space: NASA programs in support of parks and protected areas / Keith Gaddis et al.	10813 • CAPSTONE CAMPAIGN: Exploring the Deep Reaches of Our Pacific Ocean Marine Protected Areas / Frank Cantelas & Kelley Elliott et al.
 <i>Case studies in this session update us on innovative uses of GPS, GIS, drones, remote sensing, and more.</i>							



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# Thursday, April 6 • 2:00–4:00p | Concurrent Sessions

		2:00–2:20	2:20–2:40	2:40–3:00	3:00–3:20	3:20–3:40	3:40–4:00
Concurrent #99 Norfolk 3 4 (1st floor)  Session Format: Panel Discussion  	10828 - The State of Alaska's National Parks in a Rapidly Changing Arctic / Scott Gende, chair	Changes in Arctic shipping, and why the NPS should care / Scott Gende Research and monitoring to address rapidly changing Arctic park resources / James Lawler Climate change and subsistence harvest of wildlife in Alaska's Arctic parks and preserves / Dave Payer  <i>This session will update attendees on the issues faced by the NPS in the Arctic through a series of presentations on park challenges, research and monitoring, and emerging opportunities.</i>					
Concurrent #100 Marriott 1 2 3 (4th floor)  Session Format: Workshop  	10688 - Cooperative Ecosystem Studies Units: Accomplishments and Future Directions / Brendan Moynahan, chair	Workshop presenters: The Big Picture: Introduction, Issues, and Workshop Structure / Brendan Moynahan If not for the CESU Program... / Erin Williams Research Coordinators and the PWR Science Strategy / Chris Lauver Where do CESUs go from here? / Tanya Shenk  <i>NPS annually allocates ~\$40 million through CESUs for technical assistance, research, and education projects. This session will help NPS clarify and improve services.</i>					
Concurrent #101 Marriott 4 (4th floor)  Session Format: Contributed Papers  	Looking to the Past to Chart the Way Forward in Cultural Resource Management and Documentation / Shaun Eyring, chair	10723 - Fifty Years of Preservation in the Parks / Kathryn Smith	10710 - National Colonial Farm in Piscataway Park: Green History, Farming, and the Quest for Relevance / Lisa Hayes	10866 - Letting the Landscape Speak: Values and Challenges of "Primitive Area" Design at Fort Bowie NHS / Robin Pinto	10764 - Traveling through our past: Documenting historic resources on National Trails and Parkways / Bethany Serafine et al.	10709 - Creating Connections through Predictive Modeling and Cultural Resources Research / Lindsey Cochran et al.	Q&A
<i>The past, William Faulkner famously said, "is never dead. It's not even past." This session shows how the ever-present living past can inform how we manage cultural heritage.</i>							
Concurrent #102 Marriott 5 6 7 (4th floor)  Session Format: Workshop  	10642 - Next-Gen Park Interpretation: Giving Visitors More Than They Expect	Workshop leaders: Rebecca Conard, Co-editor, The George Wright Forum / professor emeritus, Middle Tennessee State University John Sprinkle, National Park Service Bureau Historian (WASO) Tom Medema, National Park Service					
<i>Attendees will work on the scope and content of a theme issue of The George Wright Forum on history and interpretation in national parks</i>							
Concurrent #103 Hampton 1 2 3 (3rd floor)  Session Format: Contributed Papers  	Sustainable Tourism & Recreation	10823 - Ecotourism impacts on conservation and local livelihoods: A case study of Ranthambore National Park, India / Devyani Singh et al.	10868 - Impacts of community based ecotourism on Tharu indigenous community in Nepal / Smritee Panta & Brijesh Thapa	10916 - Building capacity for sustainable tourism in protected areas of the Brazilian Amazon / James Barborak & Ryan Finchum	10691 - Benefit of Ecotourism Development of two National Parks in West Africa on neighboring communities / Arowosafe Folusade & RoseEmma Entsua-Mensah	10620 - Recreation habitat vs. ecological habitat in riparian areas: Managing for both in Yosemite Valley / Doug Whittaker	Q&A
<i>The vast majority of parks need tourism to survive, but the question is how to provide for enjoyment and recreation sustainably? Here are some answers.</i>							

# Thursday, April 6 • 2:00–4:00p | Concurrent Sessions

		2:00–2:20	2:20–2:40	2:40–3:00	3:00–3:20	3:20–3:40	3:40–4:00
Concurrent #104 Hampton 4 (3rd floor)  Session Format: Invited Speakers  	10770 - Conserving Climate Change Refugia as a Climate Adaptation Strategy / Toni Lyn Morelli, chair	Managing Climate Change Refugia for Biodiversity Conservation / Toni Lyn Morelli	Climate change refugia for cold water fisheries / Jeff Mow	Remote sensing approaches to identify drought refugia / Jennifer Cartwright	Soda Springs Meadow as a Climate Change Refugium / Deanna Dulen	Title TBA / Alexander Nelson	Q&A with presenters + John Gross
		<i>We will showcase the latest science on climate change refugia and how NPS managers are focusing on them to improve resource management and conservation.</i>					
Concurrent #105 Hampton 5 (3rd floor)  Session Format: Invited Speakers  	10832 - Looking Back and Creating a Vision: Natural Resource Science, Stewardship, and Leadership Beyond the NPS Centennial / Elaine Leslie, chair	Title TBA / Mike Soukup	Title TBA / Bert Frost	Title TBA / Ray Sauvajot	Title TBA / Mary Foley	Title TBA / Sherri Fields	Q&A
		<i>What does it mean to our focus for science and stewardship and DO-100 implementation?</i>					
Concurrent #106 Hampton 6 7 8 (3rd floor)  Session Format: Invited Speakers  	10820 - The Contextual Landscape Values of Werowocomoco and Captain John Smith Chesapeake NHT through different vantage points / Cheryl Widell et al.	Spiritual Values of the Landscape: Engaging indigenous communities / Chief Stephen Adkins	The View from the Water: The Virginia Colony arriving in North America in 1607 / Robert Kelly	Identifying the Character Defining Features in the cultural landscape context of Werowocomoco / Suzanne Copping	Indigenous Cultural Landscape Predictive Modeling: Using Data and GIS to identify Cultural and Natural Resources / James Rush	Q&A	
		<i>Challenge participants to see the many layers of values found in extraordinary places like Werowocomoco and the Captain John Smith Chesapeake Historic Trail.</i>					
Concurrent #107 Norfolk 5 6 (1st floor)  Session Format: Day-Capper  	10631 - Chanties for Change: The Combustion of Science and Art / Tavio del Rio, chair	Day-Capper format: Musical performance					
		<i>Find innovative ways to spread NPS messages and stay current in the global community. Creative platform development keeps our public engaged.</i>					



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# Thursday, April 6 • 4:30–6:00p | Focus Sessions

<p>Focus Session V Hampton 1 2 3 (3rd floor)</p> <p>Session Format: Panel Discussion</p>	<p>10936+10858 • Huika`i `Ōlelo o Hawai`i: Lessons from the 2016 IUCN World Conservation Congress / Melia Lane-Kamahele &amp; Nora Mitchell, co-chairs</p>	<p>Hawai`i Holds Many Lessons for the World / Melia Lane-Kamahele, Manager, Pacific Islands Office, US National Park Service Brief Perspective on the WCC, the Ever-evolving Global Conservation Agenda, and Protected Area Governance / Brent Mitchell, Specialist Group on Privately Protected Areas and Nature Stewardship, IUCN World Commission on Protected Areas Connecting Nature-Culture for More Effective Conservation / Tim Badman, IUCN World Heritage Programme Connecting Nature-Culture for More Effective Conservation / Bill Pencek US/ICOMOS</p>
	<p><i>This session will connect participants to outcomes of the largest global conservation event ever convened in the United States, highlighting case studies that illustrate nature–culture connections.</i></p>	
<p>Focus Session VI Hampton 4 (3rd floor)</p> <p>Session Format: Panel Discussion</p>	<p>10792 • New NPS Guidance: Planning for a Changing Climate / Cat Hawkins Hoffman &amp; Don Wojcik, chairs</p>	<p>The NPS National Perspective on Addressing Climate Change Adaptation in Park Planning Portfolios / Thomas Sheffer Preparing for and Managing Change: Applying the Principles of Climate Adaptation to NPS Planning / Bruce Stein How “Planning for a Changing Climate” Differs from Traditional Planning Approaches / Gregor Schuurman Planning for Cultural Resources in a Changing Climate / Shaun Eyring The NPS Planner’s Hands-on Perspective and Experience with Integrating Climate Change Adaptation into Planning Processes / Don Wojcik</p>
	<p><i>Session attendees will learn about recently-developed NPS planning guidance that integrates climate change adaptation into interdisciplinary planning processes and considers multiple plausible climate futures.</i></p>	
<p>Focus Session VII Hampton 5 (3rd floor)</p> <p>Session Format:</p>	<p>PARKS CANADA AGENCY</p>	<p>TBA</p>
	<p>TBA</p>	
<p>Focus Session VIII Hampton 6 7 8 (3rd floor)</p> <p>Session Format: Panel Discussion</p>	<p>10627 • National Parks as Part of a Broad National “Learning Ecosystem” / Julia Washburn, chair</p>	<p>Sara Melena, National Park Service Tim Watkins, National Park Service Barbara Little, National Park Service</p>
	<p><i>Participants will be inspired to collaborate within and outside the NPS to extend the contribution of NPS science and history to the learning ecosystem.</i></p>	



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**Thursday, April 6 • 7:00-9:30p | GWS Awards Dinner (ticketed event)**

Details to come.



# Friday, April 7 • 8:00a–4:30p | Field Trips (ticketed events) | Floor Plan

## Richmond National Battlefield Park: Resource Protection, Management and Interpretation in a Quickly Growing Park (8:00a–4:30p)

Participants will visit two recently expanded and very different Civil War battlefield landscapes hosting a variety of resources and values. At both units, the trip will highlight the path the NPS has taken to preserve, document, and manage the sites, and the work it has left to do. Participants hear about the history of each site and will be taken on guided tours of each landscape. Both stops will highlight partnerships and various management tools that enabled much of our work there.

## Great Dismal Swamp National Wildlife Refuge

Details forthcoming.

## Colonial National Historical Park

Details forthcoming.

## Fort Monroe National Monument

Details forthcoming.

