Climate Change Scenario Planning for Resource Stewardship: Applying a Novel Approach in Devils Tower National Monument, 2020

This article, reproduced from the National Park Service website, showcases a collaboration between the National Park Service, the USGS, the NC CASC, and Devil’s Tower National Monument. NPS photo, Avery Locklear

This report [8.5 MB PDF] introduces scenario planning as a climate change adaptation tool, then describes how it was applied to Devils Tower National Monument in the context of a first-of-its-kind, pilot project to dovetail scenario planning with NPS Resource Stewardship Strategy (RSS) development. An RSS is a long-range planning tool for a National Park Service unit to achieve its desired natural and cultural resource conditions, and therefore can benefit from a flexible tool for working with climate change uncertainty. This report documents the climate-resource scenario development part of the overall process and complements RSS supplemental guidance that draws on lessons from the Devils Tower project to describe how to incorporate climate change scenario planning outcomes into an RSS.

Upcoming Events

NC CASC Scientists Brian Miller, Imtiaz Ringwala to present at Rocky Mountain National Park 2020 Biennial Research Conference
Estes Park, CO. March 10-11, 2020
https://www.nps.gov/rlc/continentaldivide/research-conference.htm

Agriculture and Range Trust Management Meeting
Rapid City, South Dakota. March 31-April 2, 2020

Great Plains Tribal Water Alliance: 2020 Spring Water Conference
Bismarck, North Dakota. April 15-16, 2020

NC CASC seeks Program Manager

The NC CASC is seeking a Program Manager. Position and application details may be found at: https://jobs.colorado.edu/jobs/JobDetail/CIRES-North-Central-Climate-Adaptation-Science-Center-Program-Manager/24061. Review of applications will begin March 8, 2020.
**CSP’s Priya Nanjappa Appointed to Serve on the Wildlife Stamp Habitat Committee in CO**

Shelley Crausbay, Conservation Science Partners

Priya Nanjappa, Director of Operations, Conservation Science Partners (CSP) was recently appointed by Colorado Governor Jared Polis to serve on the Wildlife Stamp Habitat Committee for the state of Colorado. Priya was confirmed on February 6th by the CO State Senate Committee on Agriculture and Natural Resources. Congratulations, Priya!

**Three Centers Retreat**

Heather Yocum, Stakeholder Engagement & Communications Lead

A biannual meeting for the NC CASC, Western Water Assessment (WWA), and the USDA Climate Hub, representatives met to get each other up to date on work being done in each center and to explore potential collaborations or synergistic projects. Hosted in Boulder, Colorado in January, the retreat was led by a variety of representatives to focus on identifying and understanding drought, adaptations to climate change, and various approaches to studying, evaluating, and supporting adaptation efforts.

**Ute Mountain Ute Site Visit**

Stefan Tangen, Tribal Resilience Liaison

Stefan Tangen, NC CASC’s Tribal Resilience Liaison, visited the Ute Mountain Ute Tribe in Towaoc (southern), Colorado in December. By visiting these sites, Stefan can help the NC CASC improve its understanding of the environmental challenges that tribes face. These challenges often include impacts on water quality and quantity, culturally significant plant and animal species, and extreme weather. This visit in particular, helped to better understand the local perspectives to climate change and to provide support as the Tribe’s Climate Adaptation Plan is finalized and implemented. The site visit also developed better connections between the Tribe and the NC CASC so these environmental problems can be better addressed.

**Society for Range Management Meeting**

Heather Yocum, Stakeholder Engagement & Communications Lead

The USDA Climate Hub, BLM, and NC CASC worked together to convene an interactive World Cafe-style “campfire conservation” at the 73rd Annual Society for Range Management meeting in Denver, Colorado, in February. The session brought together range managers and researchers to discuss what changes people have noticed on the landscape, management challenges brought on or exacerbated by climate change, and planned or ongoing adaptation actions. There were many tables and discussions at the event, and a summary report of ideas may be available in the future.
“Fire Circle” at the 8th International Fire Ecology and Management Conference
Phil Higuera, University of Montana

At the 8th International Fire Ecology and Management conference in Tucson, AZ, Phil Higuera and colleagues Carol Miller (Aldo Leopold Wilderness Research Institute) and Dave McWethy (Montana State University) facilitated a 90-minute “fire circle” titled “Demystifying Resilience To Wildfire.” The event was attended by 30 scientists at the conference, who walked through a series of exercises to help scientists, managers, and community members consider what it means to be resilient to wildfire, and the different ways to achieve the goal of becoming more resilient to wildfire activity. The exercises emphasized the social-ecological dimensions of resilience to wildfires, and need to integrate both dimensions in science, policy, and management.

WCS Funding Opportunity

The Wildlife Conservation Society (WCS) is pleased to announce a new round of grantmaking through its Climate Adaptation Fund, a program that supports projects that implement effective interventions for wildlife and ecosystem adaptation to climate change. The Climate Adaptation Fund is made possible through the generous support of the Doris Duke Charitable Foundation. Interested applicants should carefully review the information outlined in this Request for Proposals (RFP) and the accompanying Applicant Guidance Document for instructions. Read more at: https://nccasc.colorado.edu/sites/default/files/2020-02/WCS%202020%20CAF%20RFP_FINAL.pdf.

Recent Publications

*Cattle, conservation, and carbon in the Western Great Plains* ● USDA ARS ● January, 2020 ● Imtiaz Rangwala

*Repeatable approaches to work with scientific uncertainty and advance climate change adaptation in US National Parks* ● Parks Stewardship Forum ● January, 2020 ● NC CASC in Collaboration with National Parks Service

*Gaps and hotspots in the state of knowledge of pinyon-juniper communities* ● Forest Ecology and Management ● January, 2020 ● Funded by NC CASC

* Evidence of climate change impacts on crop comparative advantage and land use* ● Agricultural Economics ● December, 2019 ● Funded by NC CASC

*Projected warming disrupts the synchrony of riparian seed release and snowmelt streamflow* ● New Phytologist ● May, 2019 ● In Collaboration with NC CASC

Tribal Engagement Strategy Plan: Draft for Partner Review
Stefan Tangen, Tribal Resilience Liaison

A revised draft of the NC CASC’s Tribal Engagement Strategy (2019-2024), updated 1/20/2020, is now available for review. Comments may be submitted to the NC CASC’s Tribal Resilience Liaison, Stefan Tangen.