



Climate Change Response Program News

October 2009



Mitigation



Adaptation



Communication

Monthly Climate Change Webinar Series

Join colleagues and friends for our monthly web-based seminars on climate change and national parks.

When: 2nd Thursday of the month
When: 2:00 pm—3:30 pm EST

Next Webinar: Nov 12th, 2009

Dr. Greg Aplet, Director of Ecology at The Wilderness Society will present "The Role of Wilderness in Climate Change Adaptation: A Case Study from the Northern Rockies."

Fourteen webinars have been recorded from previous sessions and are available for viewing at:
<http://nrpcsharepoint/climatechange/communication/Web%20Seminars/Forms/AllItems.aspx>

Definitions:

Paleolimnological - studies that reconstruct the environments of inland waters of the past and specifically looks at changes associated with climate change and human impacts.

Dendroecological - the study of tree rings to determine ecological conditions of the past, like fire history, insect outbreak, and climate conditions.

Exploring Climate Change Research Opportunities in the Central Rocky Mountains

Jill Baron and Don Campbell of the USGS led a field trip to Loch Vale in Rocky Mountain National Park on October 16th. Fourteen people participated in the 5-mile hike, including representatives from NOAA, USGS, NPS, USBR, and the CSU Colorado Climate Center. Participants viewed research installations in the watershed and discussed opportunities for future research and monitoring related to climate change. Research conducted at the site over the past several decades has led scientists to differentiate natural from human-caused variability in hydrology, biogeochemistry, and ecology in alpine and subalpine ecosystems, which include lakes and streams, tundra, meadows, and forests. Using a combination of tools, including monitoring, experiments, models, *paleolimnological*, and *dendroecological* studies, the Loch Vale site has been compared with other systems across a broad spatial gradient from Canada to New Mexico, and across other Western mountains. Participants discussed the possibilities of creating a consortium to promote and conduct coordinated studies of climate change and effects in the southern Rocky Mountain area-South Platte-Upper Colorado River area. Components could include monitoring, modeling, and hydrologic and ecological effects.

Contact: Glenn_Patterson@nps.gov or Barry_Long@nps.gov.



Loch Vale is an alpine/subalpine watershed in Rocky Mountain National Park where the U.S. Geological Survey has been conducting research since the 1980s.



Upcoming Workshops & Meetings

"Greater Yellowstone Area Science Agenda Workshop" will be held November 4-5, 2009
<http://www.greateryellowstonescience.org/gyascienceworkshop>.

"Wild09" conference, November 4-13, 2009 in Mérida, Mexico. The first two days will be a pre-congress forum for government agencies, followed by a wilderness forum. The last five days will be the wilderness working session (www.wild09.org).

"Climate Change in the Southern Appalachians" Southern Appalachian Man and the Biosphere (SAMAB) Workshop, November 17-19, 2009, Asheville, NC, <http://www.samab.org/>.

Inventory and Monitoring Advisory Council Meeting will be held at Biscayne National Park in Miami, FL on December 7-10, 2009. <http://www1.nrintra.nps.gov/im/imac>.

"Predicting the Climate of the Coming Decades" South Floridian Caribbean CESU, January 11-15, 2010, Miami, FL
http://www.clivar.org/organization/decadal/rsmas_decadal.php.

"Mid-Atlantic Climate Change Workshop" NER, March 23-25, 2010 Cambridge, MD.
David_W_Reynolds@nps.gov;
Holly_Salazar@nps.gov.

PWR Climate Friendly Parks Workshops 2009

- San Francisco Bay Network—Oct 27-28
- Mojave Network—December 1-2
Judy_Rocchio@nps.gov

"Seeking Social Solutions for Climate Change"

Dr. Andreas Rechkemmer, the senior scientific advisor, UN Convention to Combat Desertification, presented "Seeking Social Solutions for Climate Change" on October 13, 2009 at Colorado State University to a full lecture hall of social and natural scientists and other members of the campus community. Dr. Rechkemmer discussed incorporating social structures and processes into climate change planning in the international arena. For more information visit:

http://www.ihdp.unu.edu/article/IHDP_Andreas_Rechkemmer

Interagency Committee on Climate Change Adaptation

The Council on Environmental Quality is spearheading an interagency initiative to develop a national strategy for climate change adaptation. Five working groups (science policy, agency process, water, insurance, and international assistance) have been formed to consider the capacity of the Federal government to respond to the impacts of climate change on various critical sectors, institutions, and agency mission responsibilities and suggest options for improving that capacity. Efforts will include examining policies and procedures, interviewing employees, and conducting listening sessions. A draft report is due the end of December. Contacts: Leigh_Welling@nps.gov and Shawn_Carter@nps.gov.

Climate Change and Oceans

Climate Change and Oceans and Coastal Programs have a number of common issues in Alaska, including coastal erosion, subsistence fisheries and wildlife, invasive species, geohazards, and a severe lack of basic climate and geographic data across the state. The Ocean Alaska Science and Learning Center and the Alaska Sealife Center recently hosted an Alaska-focused Pacific Ocean Park Strategy workshop in Seward. The workshop brought together personnel from Alaska's ocean and coastal parks to develop and prioritize needed actions in Alaska under the NPS Pacific Ocean Parks Strategic Plan, and to identify a core group of individuals to oversee their implementation.

Contact: Jeff_Mow@nps.gov.



A cruise ship reportedly grounded on uncharted glacial outwash in Glacier Bay and became stranded on outgoing tide in 2008.

More Information

This newsletter is a monthly forum to share the latest news relating to NPS efforts to manage our parks in a changing climate.

Climate Change Response Program

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Comments, Submissions

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Grand Canyon Hosts Climate Friendly Parks Workshop

Grand Canyon National Park held a Climate Friendly Parks workshop on October 14-15th to discuss climate change impacts and scenarios of future climatic changes in the park and lower Colorado Plateau. Mitigation and adaptation strategies explored by breakout sessions included alternative energy and energy conservation, transportation emissions management, effective outreach efforts for park staff, visitors and the local community, and a review of the Grand Canyon's Greenhouse Gas (GHG) emissions inventory. Outcomes included visions of a climate friendly Grand Canyon National Park that will aid in the development of a Climate Change Action Plan for the park's centennial in 2019. Contact: Kathryn_Parker@nps.gov.

Climate Change Needs

NPS is working closely with other national, statewide, and community agencies, institutions, and organizations in Alaska to develop climate change needs and priorities through several working groups. These include the Alaska Climate Change Executive Roundtable, North Slope Science Initiative, and State of Alaska Climate Change Strategy, among others. While the various organizations have a wide range of concerns, there is a strong sense of consensus developing on several pressing issues, such as: rapid warming, ice and permafrost thaw, natural hazards, wild land fire, basic climate and geospatial data needs, database access and interoperability. Contact: Robert_Winfree@nps.gov.

Regional News

Northeast Region

The Northeast Temperate I&M Network and the Appalachian Trail Park Office, in collaboration with NASA, USGS, USDA Forest Service, and academic researchers, is integrating phenology and other climate change metrics into an internet-based decision support system for Appalachian Trail managers. In addition, the Northeast Temperate I&M Network is working with the Appalachian Mountain Club, the National Phenology Network, and park staff and partners on a citizen science based program for monitoring phenologic changes resulting from climate change. Pilots were launched at Acadia National Park, Boston Harbor Islands, and Saugus Iron Works in 2009, while broader implementation is planned for 2010. Contact: John_Karish@nps.gov.

National Capital Region

The National Capital Region conducted a one-day Climate Change Training Seminar on Oct. 8th, to foster understanding and a multidisciplinary regional discussion about the impacts of climate change to NCR parks at the George Washington Memorial Park. Contact Vincent_Santucci@nps.gov.

Alaska Region

The Alaska Region's climate change response strategy is nearing completion. Representatives of six advisory committees and the Inventory and Monitoring program recently prioritized a wide range of climate change-related needs under four high-level goals (resource stewardship and science, communications, mitigation and adaptation). The prioritized list will be incorporated into an implementation plan, used for developing and ranking project statements, and folded into the overall regional climate change strategy. Contact: Robert_Winfree@nps.gov.



Warming air temperature has increased the severity of forest insect pest outbreaks across Alaska, with devastating ecological and economic impacts. Lake Clark NP, photo by Paige Spencer.



Loss of protective sea ice and permafrost thaw contributes to rapid coastal erosion in Cape Krusenstern NM and other areas of Northwest Alaska. NPS photo.