



The National Climate Assessment: Preparing the Nation for Change

The coming summer and fall will be filled with National Climate Assessment-related activities as teams across the country begin work on technical inputs related to regional, sectoral, and cross-cutting assessment topics. The NCA marked a major milestone last week with publication of the “Request for Information” in the Federal Register. The Request for Information invites technical inputs to the NCA from individuals and organizations; these inputs will be considered along with inputs developed by Federal agencies and by teams and work groups initiated under the National Climate Assessment Development and Advisory Committee (NCADAC). Some of these teams have already held organizational workshops, while others are being planned; summaries from these recent meetings are included below, as is information about upcoming NCA-related events. The NCADAC is now fully engaged, with their next meeting planned for August. In addition to the Executive Secretariat, which oversees coordination of the entire NCA effort, 12 working groups have been formed to manage the major process and content aspects of the NCA. Finally, the NCA Office at USGCRP is now nearly fully staffed; below you will find information about new members of our team. If you would like to be on the newsletter mailing list, please click [here](#). And as always, we ask you to pass this newsletter on to your networks and help the NCA engage more stakeholders in the assessment process.

NCA Newsletter, Volume 2, Issue 3, July 20, 2011

- **Request for Information: Providing Technical Inputs to the NCA**
- **National Climate Assessment Development and Advisory Committee (NCADAC) Update**
- **Interagency National Climate Assessment (INCA) Task Force Update**
- **NCA at Transportation Summit**
- **Building Capacity in the Colorado River Basin**
- **NCA Session at the International Symposium on Society and Resource Management**
- **Forestry Sector Stakeholder Workshop**
- **NCA Session at the Soil and Water Conservation Society Annual Meeting**
- **Other NCA Activities**
- **New NCA Staff**
- **Upcoming NCA Events**
- **Other USGCRP News: Adaptation Science at the ACCO Workshop**
- **Other USGCRP News: Strategic Planning Making Progress**

Request for Information: Providing Technical Inputs to the NCA

On July 13, 2011 the Federal Register published a Request for Information inviting the public to provide comments and expressions of interest in offering technical inputs or assessment capacity on topics related to the National Climate Assessment. Expressions of interest are due by October 1, 2011, and final inputs are due by March 1, 2012.

The notice is available from the Federal Register in both html and pdf formats [here](#). The Federal Register Notice and supplementary information are also available on the NCA website's [Federal Register Notices page](#).

If you have any questions regarding the Request for Information, please contact Emily Therese Cloyd (ecloyd@usgcrp.gov).

National Climate Assessment Development and Advisory Committee (NCADAC) Update

The Executive Secretariat of the NCADAC met in Washington, DC on July 6 and 7, and is well on its way towards defining a “risk-based” framework for the assessment and solidifying the language that will be used to characterize the degree of scientific certainty about conclusions and likelihood of particular outcomes. In addition, the structure for the Assessment process continues to evolve; some important developments are described below. All of these topics will be discussed, among others, at the next meeting of the NCADAC, scheduled for August 16-18, 2011 in Arlington, Virginia. A Federal Register Notice announcing this meeting will be coming out shortly.

There are 12 NCADAC WORKING GROUPS, composed of NCADAC members, agency employees, and in some cases, external experts. These working groups include efforts focused on Assessment process, such as communications, engagement and evaluation; quality assurance, data management, and portal development; and managing the inputs generated by the Request for Information. Other working groups are focused on coordinating across the regional and sectoral efforts; assessing the current state of knowledge of climate science; developing scenario approaches and guidance for assessment teams; developing indicators of change; proposing ways to incorporate the global context into the NCA; providing advice and identifying priorities for the continuing assessment process; and overseeing the development of the adaptation and mitigation chapter.

Several TECHNICAL INPUT TEAMS are being set up under the NCADAC Working Groups. These teams will build synthesized information that will support the development of the chapters of the 2013 report. Additional teams will be launched to build inputs for products that are due after the 2013 report, reinforcing the concept of the continuing assessment process. Each one of these technical input teams has a NCADAC representative to ensure coordination with the overall

expectations of the Assessment. The leadership of the regional teams is now largely in place, and a first telecon has taken place across those teams to help with coordination; the sectoral team leadership identification is still in process. We will continue to provide updates on progress of technical input teams on our website.

Ultimately, these teams are part of a very distributed process. In addition to the NCADAC-initiated teams, USGCRP agencies are forming teams to develop technical inputs on specific topics, and additional technical inputs generated by external teams are expected as a result of the Request for Information recently published in the Federal Register. The degree to which any team's material will be used in the final report chapters depends on how closely their products follow the essential documentation requirements and focus on the topics and approaches laid out by the NCADAC.

Interagency National Climate Assessment (INCA) Task Force Update

The Interagency National Climate Assessment (INCA) Task Force continues to meet regularly to plan interagency activities and provide updates on progress. A draft charter that will clarify its role as an official interagency working group within the Subcommittee on Global Change Research (the USGCRP) is being considered. The INCA members are all active in launching Technical Input Teams and planning associated workshops. Due to resource constraints, some, but not all, of these workshops are open to the public. Please see the Assessment calendar for updates on these events.

NCA at Transportation Summit

NCA Senior Scientist Ralph Cantral participated in the Climate Change and Freight Transportation Infrastructure summit at Vanderbilt University on June 2-3, giving a presentation on the National Climate Assessment during the opening plenary session. Attendees represented a number of sectors of the freight transportation industry, including marine and riverine transport, railroads, airports, and highways. The discussions centered on the vulnerability of both infrastructure and operations and examined methods for identifying adaptation indicators and thresholds.

Building Capacity in the Colorado River Basin

The workshop *Evaluating Our Capacity: A Discussion of Capability for Ongoing Climate Assessment in the Colorado River Basin* was held in Boulder, Colorado, June 6-8, 2011. Sponsored by the Climate Assessment for the Southwest (CLIMAS), the Western Water Assessment (WWA), and the California-Nevada Application Project (CNAP), the workshop focused on establishing a framework for evaluating multi-sectoral climate change assessment capacity in the Colorado River Basin. The workshop included federal, state, and private professionals working in water, agricultural, and ecosystem management sectors from all seven Colorado River

Basin states and tributary watersheds. The workshop was organized around breakout sessions that covered monitoring and communication capacity, adaptation planning tools, and metrics/methods for evaluating current assessment capacity. Assessment Director Kathy Jacobs provided an overview on the Assessment process and a talk on building the NCA communications networks.

The synthesis from the workshop includes three focus areas to evaluate current assessment activities and to develop activities that build assessment and adaptation capacity in the Colorado River Basin. The first focus area is assessment *activities* in the Colorado River Basin. The workshop participants noted that assessment activities are extensive throughout the basin, with several groups involved in moving into adaptation activities. For example, the Nature Conservancy's Southwest Climate Initiative has four demonstration projects in climate-sensitive landscapes to assess vulnerability, improve resilience, and reduce adverse impacts from changing climate conditions. The second focus area is on *communication*; a major need that was identified is the building of network capacity by supporting key positions that can sustain connections between dispersed organizations in the region. The third focus area is developing a framework of *research areas and best practices* for the region. One area identified by the workshop participants is developing a community of practice in monitoring activities across the region to encourage the cross-sectoral dissemination of data, tools, and projects. The development of these three focus areas has the potential to expand assessment and adaptation capacity across the Colorado River Basin while increasing resiliency in human and natural systems.

NCA Session at the International Symposium on Society and Resource Management

On June 7, 2011, Emily Cloyd (NCA Public Participation and Engagement Coordinator) organized and led a listening session on the National Climate Assessment at the International Symposium on Society and Resource Management in Madison, WI. Following a brief overview of the NCA, Cloyd and NCA staff member Julie Maldonado facilitated a lengthy discussion focusing on a two-way flow for stakeholder participation and engagement, receiving feedback on how the Assessment can be most useful to the social science community and highlighting opportunities for social scientists to engage with the Assessment. The approximately 15 participants included practitioners, researchers, and academics from across social sciences and resource management fields.

Major themes highlighted during the discussion included:

- The need for clear and consistent definitions of terms such as adaptation and mitigation
- Developing an indicator system that is useful and understandable
- Engaging multiple levels of decision-makers (from local to national scales)
- Using scenarios to frame the impacts of climate change on cultural resources

- Using case studies to show real world examples of climate change impacts and human responses
- Creating an evaluation plan for the Assessment that focuses on both scientific quality and user responses
- Ways for the NCA to engage with social scientists and professional societies

Forestry Sector Stakeholder Workshop

The USDA Forest Service sponsored a Forestry Sector Stakeholder Workshop in Atlanta, GA on July 12–14, 2011. Participants included representatives from federal agencies, non-governmental organizations, academia, and professional organizations. Kathy Jacobs presented an overview of the NCA expectations and NCADAC vice-chair Gary Yohe presented on risk and uncertainty frameworks. Much of the workshop focused on small group sessions, during which participants discussed ideas and provided inputs on 1) Risk and Uncertainty Frameworks, 2) Effects of Climate Change on Forest Disturbance, 3) Interactions with Land Use Change & Population, 4) Adaptation & Mitigation to Climate Change, and 5) Carbon Dynamics & Management. Within each session, participants focused their input on identifying the critical scientific issues; critical management and policy implications; identifying models, data and syntheses that have emerged in the last 5 years; and identifying issues that are likely to become increasingly important by 2020 and beyond.

Dave Peterson and Jim Vose, USDA Forest Service leads on the forestry technical input, and Toral Patel-Weynand, INCA taskforce member, circulated and solicited comments on the technical input outline and a timeline for the workshop report and technical input. The workshop report will be completed within the next few months; the technical input is targeted to be ready for external peer review by December 1, 2011 and subsequent submission to NCADAC by March 1, 2012. Technical input co-authors have been identified, and a meeting among all lead- and co-authors on October 5–6, 2011 will facilitate progress on the chapter.

NCA Session at the Soil and Water Conservation Society Annual Meeting

On July 19, 2011, NCA Public Participation and Engagement Coordinator Emily Cloyd organized and led a listening session on the National Climate Assessment at the Soil and Water Conservation Society's Annual Conference. Participation in the session was open to all conference attendees; the approximately 25 attendees included representatives from US and Canadian federal agencies, academia, and intergovernmental organizations.

During the 90 minute session, participants in the discussion highlighted a number of issues and concerns they would like to see addressed by the NCA, including:

- Creating an effective communications strategy for the NCA report and other products, including creating materials that address the validity of climate

science, the differences between climate variability and climate change, and information relevant to specific regions and interest groups

- Including communications as a topic to be assessed, looking at the ways in which public attitudes about climate change have shifted over time and evaluating the success of the NCA in communicating about climate change to a broad audience
- Strengthening the international linkages in the NCA report, especially in cross-border biophysical regions where activities on one side of the border have consequences for both countries
- Discussing the lessons learned from planned and unplanned adaptation measures that have already begun, as well as looking at the potential adaptation measures that may be implemented in the future
- Finding ways to link the discussion of climate change to topics that are on the public's radar, including fossil fuels and alternative energy, and considering these topics within a broader economic context
- Broadening the "science" basis for the NCA to include social science topics and methods
- Defining and using appropriate baselines when evaluating the changes in climate that are due to natural cycles vs. human activities

Other NCA Activities

DOE sponsored two planning workshops in the past week, one designing a technical input report on the implications of climate change on the intersection of water-energy-land systems, and the other focusing on impacts on national infrastructure and urban systems. Kathy Jacobs presented on adaptation and assessment challenges at the AMS Conference on Adaptation in Asheville, NC.

New NCA Staff

Bill Emanuel is a Senior Scientist for the NCA. He is on assignment from the Joint Global Change Research Institute (JGCRI) of the Pacific Northwest National Laboratory where he conducts research on factors that affect atmospheric greenhouse gas concentrations and their relationships to human activities. During the six years prior to joining JGCRI in 2009, he was assigned by the University of Virginia to serve as NASA Headquarters Program Scientist for Terrestrial Ecology and within the Agency's Carbon Cycle and Ecosystems Focus Area. Dr. Emanuel has over 30 years' experience in carbon cycle and ecosystems research. His work at the University of Virginia to better represent fundamental processes in models of terrestrial carbon and nitrogen cycling helped clarify the physiological and environmental constraints that determine ecosystem attributes such as leaf area and canopy height. Dr. Emanuel received a Ph.D. in Electrical Engineering from Oklahoma State University.

Chelcy Ford will be working with the NCA on forestry and related issues. She is a native of Atlanta, GA and graduated with a BS in Applied Biology from the Georgia Institute of Technology in 1997, an MSc in Botany from the University of South

Florida in 1999, and a PhD in Forest Resources from the University of Georgia in 2004. She then started a post-doctoral research position with the USDA Forest Service, Southern Research Station at Coweeta Hydrologic Lab, and was subsequently brought on as a full research scientist there in 2006. Her research interests center on understanding the role of forest tree species, age and structure on forest hydrologic processes (e.g., evapotranspiration and streamflow) and how these processes are affected by human and natural disturbances. She and her husband live & work in rural western North Carolina where they keep bees and chickens, and tend their vegetable, herb and flower gardens.

Nancy Grimm joins the NCA on half-time detail from the National Science Foundation (NSF). She will be coordinating teams in areas of her expertise, including urban ecosystems, biogeochemistry, and ecosystems. A Professor and Senior Sustainability Scientist at Arizona State University, she has been on assignment to the NSF since 2010, working as an interdisciplinary program liaison and program director in the Ecosystem Science program. At NSF, in addition to her program responsibilities, she was a member of the writing teams for the Advance Science and Inform Decisions goals of the USGCRP Strategic Plan and the coordination and implementation group for the NSF's Science, Engineering, and Education for Sustainability (SEES) portfolio. Nancy is an ecosystem scientist who was the founding director of the Central Arizona-Phoenix Long-Term Ecological Research program, an interdisciplinary study of the Phoenix urban socio-ecosystem, from 1997-2010. She maintains active research programs in urban and stream-riparian ecology and biogeochemistry, focusing in particular on aridland ecosystems. Nancy currently is an editor for *Ecohydrology*. She is author or co-author of over 120 scientific publications, and was a contributing author of the 2009 National Assessment synthesis report, *Global Climate Change Impacts in the United States*.

Tess Hart joined the NCA in mid-June as a part-time communications assistant. She supports the NCA's public-facing work by providing communications templates and materials, website updates, and additional content as needed. Tess currently splits her time between the NCA and the World Wildlife Fund, where she works in internal communications. Her diverse communications experiences also include working as an intern in the Alliance for Climate Protection's communications department and as a Staff Assistant for Senator Carl Levin. Tess earned her B.A. in Political Science and Classics at Brown University.

Stuart Luther recently joined the NCA office as a summer intern. Stuart will be helping with the development of the sector teams and with stakeholder databases. Originally from Arkansas, he is currently a senior at Arizona State University where he studies Global Studies, Political Science, and Public Administration. Academically, his focus is on conflict and human rights but he took a strong interest in environmental issues after working with a grant writing team for the EPA. Stuart will graduate in Spring 2012 and plans to either start his career or continue school and get his Master's in Public Administration.

Upcoming Events

The NCA will continue to conduct listening sessions at upcoming professional society meetings, including those listed below. In addition, many of the NCADAC-initiated technical input teams in regions and sectors are beginning to organize. As new events are added, we will update the calendar on the NCA website. If you have questions about any of these events, please contact Emily Cloyd at ecloyd@usgcrp.gov.

Listening Session at Coastal Zone '11 (Chicago, IL)
July 20, 2011, 2:45 pm - 4:00 pm

Midwest Regional Team Organizational Meeting (Ann Arbor, MI)
July 25, 2011

Climate Science Working Group Workshop: Trends of Severe and Local Storms, including Tornadoes and Extreme Precipitation (Asheville, NC)
July 25-27, 2011

Southwest Regional Team Technical Report Organizational Workshop (Boulder, CO)
August 1-4, 2011

Listening Session at Ecological Society of America Annual Meeting (Austin, TX)
August 8, 2011, 10:00 - 11:30 am

Southeast Regional Team Organizational Meeting (Atlanta, GA)
September 1, 2011

Other USGCRP News: Adaptation Science at ACCO Workshop

On September 26th, 2011, the new Adaptation Science Vice Chair for the U.S. Global Change Research Program (USGCRP), Dr. Ann Bartuska (USDA), and the USGCRP Adaptation Science Interagency Working Group co-chair, Dr. David Cleaves (USFS), will co-present at the Association for Climate Change Officers (ACCO) Workshop in Chicago, IL. Dr. Bartuska and Dr. Cleaves will present alongside ACCO's Adaptation Science Workgroup co-chairs, who represent the U.S. Postal Service, Environment Canada, ICLEI – Local Governments for Sustainability USA, and AEA Group-Project Performance Corporation.

The workshop, [*Enhancing Decision Making: A Roundtable Workshop on Improving Understanding of the Economic, Environmental, and Operational Implications of Climate Change*](#), will focus on:

- Creating a communication pathway for operational and policy decision makers in all sectors

- Identification of economic, social, and environmental strategies that build resiliency and long-term sustainability into public and private organizations
- Identification of existing and needed information, tools, and resources available to decision makers
- Assessment of possible/various/range of contingencies for integrated adaptation and mitigation approaches
- Development of evaluation methods that measure effectiveness of adaptation and mitigation actions and quantify associated risks

Information gained from this workshop will help to better inform USGCRP on the needs, challenges, and opportunities for users of global change science and information.

Other USGCRP News: Strategic Planning Making Progress

Since the beginning of the year, over 100 staff members of USGCRP agencies have been hard at work on the new USGCRP decadal Strategic Plan, expected in 2012. In May, a complete first draft of the plan was completed, and the basic structure of the plan is in place. The plan contains four primary sections, describing the four main goals of the USGCRP; those are: Advance Science, Inform Decisions, Sustained Assessments, and Communicate & Educate. Each of these goals represents one of the pillars of the USGCRP, and illustrates how USGCRP is focused on becoming a truly “end-to-end” program, producing the science of climate and global change, practically applying that science, and communicating those results to the broader community.

The plan is currently undergoing several rounds of review, by the Executive Committee and Principals of USGCRP and the Committee on Environment, Natural Resources, and Sustainability (CENRS). In September, the plan will be made available for public comment and formal review by the National Research Council. At the beginning of the public comment period, a public webcast will be broadcast to introduce the plan. Details about the webcast will soon be available on www.globalchange.gov.