



The National Climate Assessment: Preparing the Nation for Change

The January and February news from the National Climate Assessment includes progress on our assessment workshops and updates about the Federal Advisory Committee for the Assessment. As you will read below, the charter for the committee was approved in January and a Federal Register Notice soliciting nominees and announcing the meeting of the committee on April 4-6 was published on March 2, 2011. We also recently held two “methodology” workshops that engaged approximately 140 invited participants from government, academia, NGOs, and the private sector, and we’ve released two new workshop reports. For further updates on the federal advisory committee and other NCA activities, please see <http://assessment.globalchange.gov>.

NCA Newsletter, Volume 2, Issue 1, March 04, 2011

- **The National Climate Assessment Development and Advisory Committee (NCADAC): Establishment and Federal Register Notice**
- **FAQ’s About the National Climate Assessment**
- **Valuation Workshop**
- **Vulnerability Assessment Workshop**
- **Two New Workshop Reports Available**
- **New Staff to Join the NCA Team (but we still need more help!)**
- **Other USGCRP News: Strategic Planning Update**

The National Climate Assessment Development and Advisory Committee (NCADAC): Establishment and Federal Register Notice

The federal advisory committee for the National Climate Assessment, the National Climate Assessment Development and Advisory Committee (NCADAC), was established with a charter filed on January 12, 2011 and federal register notice published on December 27, 2010. The Committee’s purpose is twofold: first, it is meant to synthesize and summarize science and information pertaining to current and future impacts of climate change on the United States within the context of global change; second, it is also expected to provide advice and recommendations toward the development of an ongoing, sustainable capacity across the nation to conduct assessments of global change impacts and related adaptation and mitigation strategies. The Committee’s short-term objective is to produce a National Climate Assessment report that meets the requirements of the Global Change Research Act of 1990. The committee charter is available at <http://globalchange.gov/what-we-do/assessment/backgroundprocess>.

A Federal Register Notice, “National Climate Assessment Development and Advisory Committee; Request for Nominations and Notice of Meeting,” was published on March 2, 2011 at <http://www.federalregister.gov/articles/2011/03/02/2011-4562/national-climate-assessment-development-and-advisory-committee-request-for-nominations-and-notice-of>.

There are two parts of this Federal Register Notice. The most important is a request for nominations of qualified individuals to serve on the Committee. Individuals who are interested are asked to submit a resume of no more than two pages and a paragraph describing about how you (or the individual being nominated) will strengthen the ability of the advisory committee to meet its charge. Please refer to the instructions at <http://globalchange.gov/what-we-do/assessment/backgroundprocess/notices> and send the information to FRN@usgcrp.gov by **March 16, 2011**.

Committee members will provide advice and recommendations toward the development of an ongoing, sustainable national assessment of global change impacts and adaptation and mitigation strategies for the Nation. Because the breadth of knowledge that will be covered in the report is large a very wide range of expertise is required on the NCADAC. Nominees are sought who have:

- sectoral expertise, including the natural environment, agriculture and forestry, energy, land cover and land use, water resources, transportation, health, human social systems, biodiversity, coastal and marine resources;
- systems expertise, including oceans, atmosphere, biogeochemical cycles, etc.; climate modeling, climate impacts, atmospheric science, land use and land cover change;
- assessment expertise, including people who are familiar with economic assessment and valuation, vulnerability assessment, adaptation, mitigation, and integrated assessment; international issues and assessment components; and,
- other expertise including, data systems development and management; communications, stakeholder engagement and public processes; urban systems and infrastructure; homeland security; environmental justice and cultural resources and indigenous perspectives.

In addition, we are seeking individuals with a range of perspectives, including experience in private industry, state, local, and regional government, academia, and non-governmental organizations, and who are drawn from a broad geographic distribution.

Proposed Nominees to the National Climate Development and Advisory Committee

Biographical sketches of these proposed nominees are available at <http://globalchange.gov/what-we-do/assessment/proposedfacmembers>

Proposed Non-Federal Members:

Daniel Abbasi, Mission Point Capital Partners

Dr. E. Virginia Armbrust, University of Washington

Dr. Rosina Bierbaum, University of Michigan

Maria Blair, Rockefeller Foundation

James Buizer, Arizona State University

Dr. Lynne Carter, Louisiana State University

Dr. F. Stuart Chapin III, University of Alaska

Camille Coley, Florida Atlantic University

Jan Dell, CH2MHill

Dr. Gary Yohe, Wesleyan University

Plácido Dos Santos, Arizona Department of Water Resources

Guido Franco, California Energy Commission

Mary Gade, Gade Environmental Group, LLC

Dr. Aris Georgakakos, Georgia Institute of Technology

Dr. David Hales, College of the Atlantic

Dr. Mark Howden, Australian Commonwealth Scientific and Industrial Research Organisation

Dr. Peter Kareiva, The Nature Conservancy

Dr. Kenneth Kunkel, North Carolina State University and NOAA Cooperative Institute for Climate and Satellites

Dr. Rattan Lal, The Ohio State University
Arthur Lee, Chevron Corporation
Dr. Jo-Ann Leong, University of Hawai'i
Dr. Diana Liverman, University of Arizona and Oxford University
Dr. Edward Maibach, George Mason University
Dr. Jerry Melillo, Marine Biological Laboratory
Dr. Susanne Moser, Susanne Moser Research & Consulting, Stanford University, and University of California-Santa Cruz
Dr. Richard Moss, Joint Global Change Research Institute, Pacific Northwest National Laboratory and University of Maryland
Dr. Philip Mote, Oregon State University
Dr. Marie O'Neill, University of Michigan
Terese Richmond, Gordon Derr, LLP
Dr. Andrew Rosenberg, University of New Hampshire and Conservation International
Dr. Richard Schmalensee, Massachusetts Institute of Technology
Joel Smith, Stratus Consulting
Dr. Donald Wuebbles, University of Illinois

Proposed Ex-officio Members (appointed by the federal government):

Dr. John Balbus, Department of Health and Human Services
William Breed, U.S. Agency for International Development
Dr. Gary Geernaert, Department of Energy
Dr. John Hall, Department of Defense
Alice Hill, Department of Homeland Security
Dr. Leonard Hirsch, Smithsonian Institution
Dr. Patricia Jacobberger-Jellison, National Aeronautics and Space Administration
Thomas Karl, Subcommittee on Global Change Research
Cathleen Kelly, White House Council on Environmental Quality
Dr. Chester Koblinsky, National Oceanic and Atmospheric Administration
Linda Lawson, Department of Transportation
Dr. Robert O'Connor, National Science Foundation
Dr. Jonathan Pershing, Department of State
Dr. Michael Slimak, Environmental Protection Agency
Dr. Alan Thornhill, Department of the Interior
Dr. Margaret Walsh, U.S. Department of Agriculture

The second part of the notice announces the first meeting of the Federal Advisory Committee on April 4-6, from 9 am on the 4th to 2 pm on the 6th. The agenda will be similar in content to the agenda for the previously posted meeting on February 3-4 that was cancelled; however, it will be amended to reflect the longer time frame for this April meeting. A revised agenda will be posted on the Assessment website shortly.

FAQ's about the National Climate Assessment

The National Climate Assessment (NCA) is a scientific synthesis of information drawn from the public and private sectors to understand the impacts of climate change in the United States -- what changes are already observed, what are the current status and trends, and what changes are anticipated in the future? Congress, decision makers at all levels and in all sectors, federal agencies, private businesses and others may use knowledge gained from this synthesis in developing effective adaption and mitigation strategies. However, in order to effectively participate or use the knowledge from the Assessment, stakeholders must understand the Assessment process. To aid in this we have developed the answers to a series of frequently asked questions about the goals and process of the National Climate Assessment.

1. Why a National Climate Assessment?

The National Climate Assessment is an important periodic update to the Nation on the state of climate change science. The NCA will also establish consistent methods for evaluating climate impacts in the context of broader global changes. This information is designed to support policy and decision makers as they work to reduce risk and identify economic opportunities that arise as the climate changes. It will integrate scientific information from multiple sources and highlight key findings and significant gaps in our knowledge. The NCA aims to help the federal government prioritize climate science investments, and in doing so will help to provide the science that can be used by U.S. communities and businesses to create more sustainable and environmentally sound plans for the Nation's future.

The United States Global Change Research Program (USGCRP) is mandated by statute with the responsibility to undertake scientific assessments of the potential consequences of global change for the United States. The "Global Change Research Act of 1990" (P.L. 101-606) states that the program "shall prepare and submit to the President and the Congress an assessment which:

1. integrates, evaluates, and interprets the findings of the Program and discusses the scientific uncertainties associated with such findings;
2. analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; and
3. analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years."

2. What are the expected benefits/outcomes of this activity?

The National Climate Assessment will present a comprehensive picture of the changes in regions and sectors that occur in response to climate variability and change, including effects on people, public health and human well-being, the economy, infrastructure, and the environment. This information will help decision makers throughout the country design better adaptation policies, help citizens better prepare themselves for climate change impacts, and help everyone to better understand how their everyday decisions impact the climate and the environment.

3. What is the timeline?

The law requires that Assessments be prepared every four years. The USGCRP published the last national climate assessment, *Global Climate Change Impacts in the United States*, in 2009. The next report is due in 2013, and as such a draft report would need to be completed a year earlier, in 2012. The draft report will be thoroughly reviewed by scientists and experts from within and outside the federal government as well as the National Academies of Sciences. However, the focus on developing a continual assessment process means that activities within regions and sectors are expected to be ongoing, and reports will be produced on a more frequent basis.

4. What is the process?

Assessment participants hope to build the country's capacity to assess climate related impacts in the context of other kinds of social and environmental stressors like changes in land use and employment. This requires a broad scientific base, human capital, a long-term and consistent engagement process, and the establishment of a set of national indicators for evaluating the implications of changes in the climate in the context of other existing stressors. Economic opportunities for addressing climate change will be identified, along with anticipated negative effects, by connecting what we have learned through decades of climate research to citizens and decision-makers whose livelihoods are likely to experience effects of changes in the climate. This information will be synthesized in a report that will be released in 2013 and will become part of the longer-term NCA strategy for the United States.

5. What are the opportunities for public engagement?

The Assessment process is designed to be transparent and inclusive, and has a strong focus on stakeholder engagement. Although the NCADAC has not yet met to approve the strategic plan or establish an engagement strategy, there is a commitment by the Federal agencies and the staff to work with stakeholders in a truly transparent and inclusive manner. One planned mode of engagement is to connect to existing networks of regional and sectoral organizations that are interested in scientific assessments and willing to provide support to the Assessment in the form of time, data or other kinds of technical reports. Networks of regional interests are already being identified, as well as professional societies who may wish to engage in providing information or otherwise partnering with the Assessment activities.

6. How can I participate and provide feedback?

Since the inception of the most recent NCA effort in 2010, multiple methodological workshops have been held for experts and representatives from a wide range of sectors and regions to offer their individual insights and suggestions, and there will be numerous future opportunities for citizens and experts alike.

The National Climate Assessment also has an e-newsletter, which you can subscribe to by e-mailing engagement@usgcrp.gov. This e-newsletter, which comes out approximately every six weeks, will offer news of upcoming public events and opportunities for public comment. The public can also contact the Assessment staff at engagement@usgcrp.gov to indicate further interest in engaging with the process. In addition, Assessment activities are included on a calendar on the website, at <http://www/globalchange.gov/what-we-do/assessment>. Regional and sectoral meetings are being planned that will be designed to maximize effective public input and ongoing engagement. The Assessment team welcomes your active participation.

Valuation Workshop

The workshop, "Valuation Techniques and Metrics for Climate Change Impacts, Adaptation, and Mitigation Options: Methodological Perspectives for the National Climate Assessment" was held in Arlington, VA on January

12-13, 2011. Sponsored by the US Environmental Protection Agency and the US Department of Energy, the workshop was planned in consultation with researchers who have expertise in different aspects of valuing environmental, natural resource, and economic impacts.

This meeting covered various techniques and issues related to economic and non-economic valuation approaches to be used in the next NCA. The principle goal of this workshop was to provide expert input on the capabilities, readiness, and methodologies for quantitatively valuing impacts and adaptation (and to a lesser degree, mitigation options). The forthcoming workshop report will provide foundational insights for the Federal Advisory Committee's consideration, and may help shape the subsequent recommendations and guidance to analysis teams engaged in the NCA.

Three primary issues were addressed during the workshop:

- a survey of the current valuation landscape and the role of economics in that landscape
- a detailed discussion of the applicability and boundaries of economic techniques for valuation
- an exploration of general principles for applying valuation techniques for climate change analysis in a consistent and comparable manner

The workshop convened about 70 representatives from federal agencies, non-governmental organizations (NGOs), and research organizations and included economists, social scientists, public health experts, climate scientists, ecologists, and engineers. Workshop participants had productive, nuanced discussions regarding valuation methods, especially economic techniques, and their strengths and limitations when applied to climate change impacts. Several individuals shared their experiences of valuing climate impacts, as well as from similar efforts in other fields. Viewpoints included the assertion that some sectors and types of impacts may be more amenable to economic valuation than others; that there should be some common framework for assessment teams' approaches to valuation (including the suggestion that economists be asked to participate in all regional and sectoral assessment teams); that interactions between economic sectors and cascading effects should be examined; and finally that the NCA should aim for transparency and a clear description of assumptions in the analyses.

Vulnerability Assessment Workshop

The U.S. Global Change Research Program held a Vulnerability Assessment Workshop, co-sponsored by the U.S. Forest Service and the Centers for Disease Control and Prevention, on January 19-20, 2011 at the Embassy Suites Atlanta-Buckhead Hotel in Atlanta, Georgia.

There were 69 workshop participants, representing social and natural scientists, vulnerability assessment practitioners, and experts across multiple sectors and disciplines. Participants, who included federal and state government employees, non-governmental organizations, tribal representatives, academics, and community organizers were invited based on their experience conducting vulnerability assessments as well as their expert knowledge on the broader concept of vulnerability, related to both climate change and other issues. This was the first time that many of the participants had engaged with the NCA, which resulted in productive dialogues about connecting to new networks and knowledge-sharing.

The goal of the two-day workshop was to consider the needs and options for incorporating vulnerability assessments into the June 2013 NCA report as well as sustainable, long-term NCA activities. Through workshop breakout sessions, plenaries and in-depth group discussions, participants provided input on criteria for vulnerability assessments, evaluation of existing vulnerability assessments, and developing an integrated

vulnerability assessment across regions and sectors. Participants also provided a tremendous amount of guidance on how to conduct vulnerability assessments within the context of a sustained process and how to build a community of practice. Invited panelists shared key insights and lessons learned through on-the-ground experience with applied vulnerability assessments. Some observations included the need for a national framework that links local assessments because adding value comes from synthesizing and integrating what comes from these local assessments. An alternative view was that the NCA could help build a national framework, with high level, overarching questions about things that need to be understood at a larger scale. Particular concerns were about interactions among vulnerabilities that are hard to identify.

The guidance and outcomes resulting from the workshop will be captured and summarized in an upcoming workshop report.

Two New Workshop Reports Available

In fall 2010, the National Climate Assessment held a series of many methodological workshops that were aimed to provide guidance to the FAC and to the Assessment process. Summary reports from two of these workshops, the Knowledge Management Workshop, and the Regional and Sectoral Workshop, are now available online at <http://globalchange.gov/what-we-do/assessment/nca-activities/supporting-documents>.

New Staff to Join the NCA Team (but more still needed!)

Ralph Cantral will join the NCA team in mid-March. Mr. Cantral is a geographer and Senior Advisor for NOAA's Office of Ocean and Coastal Resource Management. He has been involved in ocean and coastal resource management for more than 30 years at the local, state, and national level. Prior to coming to NOAA, Mr. Cantral served as Administrator of the Florida Coastal Management Program, Acting Executive Director of the Florida Communities Trust, Assistant Director of the North Carolina Division of Coastal Management, and Chief Planner for the North Carolina Division of Community Assistance. In addition to his work at the state and federal levels, he has worked for local government and regional agencies in North Carolina, Illinois, and Missouri.

Other USGCRP News: Strategic Planning Update

The USGCRP Strategic Planning team has made significant progress in the past two months and is well on its way towards producing the next Strategic Plan. In the past month, the Steering Committee and the Integration Team have significantly refined the outline for the strategic plan, and have identified a draft set of goals and their corresponding objectives. The writing teams, with members nominated by their agency Principals, have been formed, and the writing process is about to begin. A public webinar is expected to be held in April to highlight the goals, objectives, and the timeline, and a public comment period will open up in the summer. Please watch the Federal Register and www.globalchange.gov for announcements about these events.

For more information:

For more information, please see <http://globalchange.gov/what-we-do/assessment> or contact the U.S. Global Change Research Program, Suite 250, 1717 Pennsylvania Ave. NW, Washington DC 20006. Tel. (202)223-6262, Email engagement@usgcrp.gov

###

The U.S. Global Change Research Program (USGCRP) coordinates and integrates federal research on changes in the global environment and their implications for society. The USGCRP began as a presidential initiative in 1989 and was mandated by Congress in the Global Change Research Act of 1990(P.L. 101-606), which called for "a comprehensive and integrated United States research program which will assist the Nation and the world to understand, assess, predict, and respond to human-induced and natural processes of global change."

The National Climate Assessment (NCA) is being conducted under the auspices of the Global Change Research Act of 1990, which requires a report to the President and the Congress that evaluates, integrates and interprets the findings of the USGCRP every four years. The NCA aims to incorporate advances in the understanding of climate science into larger social, ecological, and policy systems, and with this provide integrated analyses of impacts and vulnerability, helping the federal government prioritize climate science investments, and helping to provide the science that can be used by communities around our Nation try to create a more sustainable and environmentally-sound plan for our future.