

SUPPLEMENTARY MATERIAL TO BE POSTED AT <http://www.globalchange.gov/what-we-do/assessment/backgroundprocess/notices>

Supplement to: *Request for Information: Technical Inputs and Assessment Capacity Related to Regional, Sectoral, and Cross-Cutting Assessments for the 2013 U.S. National Climate Assessment (NCA) Report and the Ongoing NCA Process*

Teams interested in providing inputs to the National Climate Assessment (NCA) are encouraged to review the following “Potential Technical Inputs and Assessment Capacities” and “Suggested Best Practices” prior to preparing and submitting an expression of interest (EOI). Additional information about what should be included in such an EOI and where EOIs should be submitted is available in the Federal Register Notice referenced above.

Potential Technical Inputs and Assessment Capacities. Teams may provide one or more types of technical inputs and assessment capacities to the NCA report and process, including those described below. Technical inputs and assessment capacities are not mutually exclusive, and it is possible (even expected) that development of assessment capacity may lead to production of tangible work products and technical inputs. While these are priority inputs, teams may suggest other technical inputs and assessment capacities. The full list of topics proposed for the report and information about the ongoing NCA process is available from <http://www.globalchange.gov/what-we-do/assessment/backgroundprocess>.

Technical Inputs

- 1. Literature Reviews, Discussion Papers, and Other Review Papers.* Papers synthesizing recent work in relevant fields might, for example, review recent findings and advances in the field of interest, consider available assessment and synthesis methods, or highlight important questions that require additional research or analysis. One particularly useful approach would be synthesizing important recent advances in understanding of specific aspects of climate science, sectoral or regional impacts, cross-cutting topics, manager and decision maker information needs related to climate and global change, or adaptation and mitigation options.
- 2. Case Studies.* Case studies might illustrate the particular set of climate change-related issues and opportunities faced by a specific community (e.g., ecological system, watershed, or human community). Case studies may also describe the specific climate and global change information decision makers and resource managers need and how they are preparing for and responding to climate change challenges through adaptation, mitigation, and other activities. These could be viewed as topical assessments that might be “nested” within a larger regional, sectoral, or cross-cutting topic.
- 3. Modeling Results, Interpretation of Data, and Topical Reports.* Modeling runs, data development, and corresponding topical reports are encouraged. However, it is preferred that data inputs or modeling runs be analyzed and synthesized in an accompanying report. Where such analyses are undertaken, data submissions should include metadata based on existing standards, including documentation of who collected the data when, why, and for whom; how data were compiled and analyzed; and the methods used for quality assurance and quality control.

Assessment Capacities

1. Meetings and Workshops. Meetings and workshops are viewed as an effective means for bringing diverse and broad-ranging scientific and technical capabilities to bear on topics and to begin synthesis across disciplinary boundaries. Reports from meetings and workshops can serve as a primary vehicle for documenting inputs from participants, and should address specific topics in the draft NCA outline and process as much as possible. In-person or virtual meetings and workshops might discuss topics such as:

- Proposed assessment products and outlines for product content
- Team building, networking, and roles and responsibilities for ongoing assessment efforts
- Risk and vulnerability assessments; assessments of adaptation capacity related to specific regions and sectors
- Prioritizing questions and issues for the region, sector, or cross-cutting topic (see draft Outline for topics)
- Identification of data sets already in use, data gaps, and suggested ways to address gaps
- Identification of existing impact assessment tools and further needs
- Identification of reports and activities already completed or in process that might contribute to the NCA
- Development of proposed indicators to be used in tracking the impacts of climate change within regions or sectors, documentation of changes in underlying vulnerabilities, and changes in climate drivers
- Building regional or sectoral scenarios for climate change
- Evaluation of possible “climate futures” for the region
- Effectiveness of existing institutional structures in responding to climate and global change challenges and capacity building needs and plans

A number of the above topics build on process workshops convened under the auspices of the INCA Task Force in 2010-2011, and teams are encouraged to use the outputs of these workshops as a basis for discussion (for more information on these workshops, please visit <http://www.globalchange.gov/what-we-do/assessment/nca-activities/supporting-documents>). In addition, it may be possible and desirable to include assessment activities in future professional meetings and workshops, by proposing special sessions that address particular NCA topics. Such approaches are welcome and pose opportunities to reduce the costs associated with convening separate events.

2. Supporting Indicator Systems. It is anticipated that physical, ecological, and societal indicators will be selected as a part of the ongoing NCA process to increase understanding of rates of change, thresholds, etc., in support of decision making. Specific foci within this topic include:

- Helping to integrate data systems and analytical tools to support NCA indicator systems
- Developing plans for maintaining indicator networks for use by NCA, including monitoring and reporting protocols

3. Stakeholder Network Inputs. Much of the stakeholder engagement of the NCA can be accomplished through networks of partners that extend the NCA process and products to a broader audience. Partners in this “network of networks” could work with individuals and groups to develop technical inputs, study the dissemination of climate information within populations, do social network analysis, or identify important data sources, and document resources (human and other) within professional associations and other networks that might be useful to the writing teams within the NCADAC. Network

partners may also propose education and outreach activities related to the NCA process, with associated documentation of effectiveness of alternative strategies.

Suggested Best Practices. The following guidance is provided to describe ways in which teams might participate, and suggests a set of “best practices” meant to ensure that inputs are produced using open, transparent processes and meet standards for quality assurance and quality control.

1. Leadership and Roles. EOI’s should include information about who will be responsible for the processes and products that are proposed, as well as their qualifications to conduct this work. Although federal agencies will be leading technical reports for various topics, this does not preclude either some of these same individuals or other federal participants from contributing to other teams. Implicitly, members of technical input teams may be either federal or non-federal (or both). Where possible and appropriate, teams should engage stakeholders as an integral component of their efforts. A single team leader or a small number of co-leaders may serve as the liaisons to the NCA staff.

2. Timing. A full draft of the NCA report is anticipated by mid-2012, so that the National Research Council, scientific and subject-matter experts, and the broader public will have sufficient time to review the draft and provide comments to the NCADAC on its content. A full year is planned to review and revise the report, with a planned release in 2013. Technical inputs should be provided well in advance of these deadlines, with target dates for activities and inputs as follows:

- Now – Summer 2011: Expressions of interest; Initial work plans
- Now – Fall 2011: Teams conduct activities (workshops, literature reviews, modeling runs, etc.)
- December 2011 – February 1, 2012: Initial inputs, including draft reports
- March 1, 2012: Final inputs, including full reports
- After March 1, 2012: Continued development and delivery of ongoing assessment capacity

Teams are encouraged to provide their inputs as quickly as possible (i.e., ahead of these target dates), to facilitate review by the NCADAC. Work plans should include a timeline for production of technical inputs to be submitted to the NCADAC; these timelines can be further refined after conversations with NCA staff. Failure to provide inputs in a timely way means that the information may not be included in the 2013 report, though it could still be used in subsequent assessment products or be made available online as an NCA resource if documentation requirements have been met.

3. Work Plan. Once teams have indicated their interest in contributing to the NCA, they are encouraged to produce and share with NCA staff a more formal work plan that discusses specific roles, responsibilities, and timelines for producing inputs (particularly for larger efforts). The work plan should be shared in a timely manner (preferably within a month of submitting an EOI) and might discuss the following:

- Type of input(s) the team plans to produce
- Time line (with milestones) for developing input(s)
- Responsibilities of team members in producing input(s)
- Specific activities involved in producing inputs (e.g., workshops, data collection and analysis, draft documents with open or expert review, etc.)
- Proposed methods of engaging broader stakeholder communities in design, development, and review of input(s)
- Strategies for building and sustaining capacity to provide inputs to the NCA
- Plans to ensure information quality and transparency in process

4. Engagement and Communication. The strategic plan for the NCA includes a commitment to working with stakeholders to understand their perspectives and ideas, share data, build partnerships, and collaboratively design, assemble, and deliver assessment information. Teams are encouraged to engage with relevant stakeholder communities as they prepare their inputs. An additional important contribution of teams would be to create stakeholder networks that can support the 2013 NCA report and the sustained NCA process. Suggested best practices related to engagement and communication include:

- Engage critical stakeholder groups starting with credible and trusted intermediaries who can help design the engagement effort, suggest existing pathways and organizations to connect to, and find areas of mutual interest. Capitalize on existing networks and relationships, but also design ways to engage others with established and relevant expertise, as well as entrain new qualified participants to encourage capacity building.
- Workshops and meetings should be held in locations that are, to the extent possible, convenient for the targeted stakeholder or science groups. In some cases, this may mean joining the agenda of an existing meeting or activity rather than holding a stand-alone event. Some activities may have to be virtual due to funding constraints or held in conjunction with already scheduled activities (e.g., professional society meetings).
- If significant public or stakeholder engagement activities are anticipated, an engagement and communication plan should describe the ways in which the team will provide information about their process and products to a variety of stakeholder groups. Ideas for consideration include web-based shared workspaces, websites, email listservs, press releases, newsletters, minutes of meetings that are circulated to participants, development of bibliographies and inventories of resources, pre- and post-workshop reports and summaries, tailored educational materials for specific audiences, and other targeted communications.
- Teams should maintain a list of contact information for all people who participate in workshops and development of work products. For participants who have made significant contributions (e.g., as a member of the planning team, a speaker, an author of reports, etc.) this list should also include a brief biography (including their education, profession, and areas of expertise) and their role(s) in development of the product and process for the NCA.

5. Coordination. Efforts should be coordinated among teams working on similar sectoral and cross-cutting topics and within or in neighboring regions to avoid duplication of effort and stakeholder fatigue. The teams and the NCA staff will work together to maintain open communications on a regular and sustained basis and to ensure that the NCADAC is aware of progress relative to the work plan for the NCA as a whole.

6. Support. The NCA website will include a record of NCADAC-approved guidance on the topics, indicators, and information quality and knowledge management requirements for the NCA report and online database. On a time-available basis, NCA staff will provide additional guidance and information to help with coordination and maximize efficiency of teams' efforts. Teams are also encouraged to take initiative in following NCADAC activities through attendance at public meetings and regularly reviewing updates on the NCA website.

7. Information Quality, Documentation, and Transparency. Transparency and credibility of data and sources are of highest importance because all inputs used by the NCADAC will need to satisfy federal information quality requirements (see <http://www.whitehouse.gov/sites/default/files/omb/fedreg/reproducible2.pdf>). Further guidance on

information quality and data management standards will be provided by the NCADAC, including additional protocols for gauging whether inputs meet standards for information quality and scientific rigor and for inclusion as a part of the NCA web portal. The NCA staff will communicate these guidelines and make them available on the NCA website to ensure that these goals are achieved and that federal information quality standards are met. Ultimately, the NCADAC is under no obligation to use, and will likely disregard, all or part of such reports that do not conform to these standards. As appropriate, information that does not meet these standards may be removed from the NCA database of inputs.

In general, teams should expect to document a full “chain of custody” for data used to reach conclusions will need to be documented (who, what, when, where, why), as well as documentation of analytical techniques used, in any case where information comes from sources that have not already been formally peer reviewed. Teams should maintain a complete set of materials related to the production of inputs, including:

- Scoping documents (including statements of task, initial outlines, work plans, etc.) associated with the design of technical inputs
- Workshop or meeting read-ahead materials, agendas, other hand outs, presentations, post-workshop communications, and attendee lists
- Drafts of papers or reports at important milestones (e.g., review draft, final draft)
- Reviewer comments (for papers and reports)
- Evaluations (from workshop or meeting participants)

The goal of information quality, documentation, and transparency best practices is not to discourage but rather to encourage diverse viewpoints based on sound science and scientific documentation; the review process for expressions of interest and submitted inputs will support this goal.