

Frequently Asked Questions - Sept 2011
Preliminary Guidance on Information Quality Assurance in
Preparing Technical Input for the National Climate Assessment

Overview

These FAQs are intended to provide preliminary guidance regarding information quality in the preparation of the National Climate Assessment (NCA) by the National Climate Assessment Development and Advisory Committee (NCADAC). The NCA is envisaged as an ongoing process that will result in periodic syntheses, the next one of which will be in 2013. For more information about the National Assessment, please view our website: <http://www.globalchange.gov/>

In July 2011, NOAA issued a *Request for Information: Technical Inputs and Assessment Capacity Related to Regional, Sectoral, and Cross-Cutting Assessments for the National Climate Assessment* requesting submittal of expressions of interest (EOI) from teams of experts and/or individuals (“teams”) in climate-related fields interested in providing inputs to the NCA. For a more detailed timeline and more information about submittal of EOI and Technical Inputs, please see the Federal Register Notice (FRN). <http://www.gpo.gov/fdsys/pkg/FR-2011-07-13/pdf/2011-17379.pdf> As the FRN explains, the NCADAC cannot make a commitment as to how or whether these technical inputs will be used in the NCA, but these FAQs are intended to help ensure that input is of maximum possible usability.

We are releasing these FAQs now for use by teams intending to submit EOIs and technical inputs. *Please bear in mind that this guidance will evolve, and revised versions of these FAQs will be available over the next few months at <http://www.globalchange.gov/what-we-do/assessment/nca-activities/opportunities-for-engagement>*, and notice of updates will be included in the NCA newsletter: <http://www.globalchange.gov/what-we-do/assessment/news-archive>

FAQs

Question 1: Who will determine whether my technical input will be incorporated into the assessment?

Answer 1: Based on the topics to be covered in the NCA and particular priorities within these topics, the NCA authors will determine whether the input relates to and provides usable information on the topics being addressed. Each chapter of the 2013 product will be concise and will deal only with key issues. Therefore the NCADAC cannot make a commitment that your technical input will be used, either in whole or in part. However, additional topics will be covered after 2013 in a sustained NCA process and your input may be used in these subsequent

products. For a current outline of the 2013 assessment please see:
<http://www.globalchange.gov/what-we-do/assessment/backgroundprocess>

Question 2: What is the Quality Assurance Process that the authors will go through when accepting or rejecting technical input?

Answer 2: To help ensure the overall quality, the NCA authors will be required to assess the quality of the technical input they receive by applying the standards set forth in the National Oceanic and Atmospheric Administration's (NOAA) Information Quality Guidelines. The Guidelines implement the requirements of the Information Quality Act (Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554)) and are intended to ensure the objectivity, utility and integrity of disseminated information. The Guidelines require that information undergo a pre-dissemination review to assess its objectivity, utility and integrity against standards included in the Guidelines. As provided for in the Guidelines, the review required and standards applied will vary according to the nature of the technical input. For example, original data (such as direct weather observations) will require a different review and be assessed against different standards than synthesized information (such as a regional assessment). NCA authors will have some latitude in determining whether inputs meet the standards in the Guidelines. Therefore, we encourage submissions of all technical input that may be relevant to topics addressed by the NCA. For further information on NOAA's Information Quality Act Guidelines please visit:
http://www.cio.noaa.gov/Policy_Programs/info_quality.html

Ways to assess objectivity, utility and integrity

- 1) Utility. Utility refers to the usefulness of the information to its intended users, including the public. Transparency and traceability of information is relevant for assessing the information's usefulness to the NCA. Images, findings and statements in the NCA must be associated with identifiable and publicly accessible source material. When submitting your technical input, you should be prepared to provide significant documentation as to sources and data, as well as links to the data/information itself. (See Answer 3 for more details.)
- 2) Integrity. Integrity refers to certainty that a version submitted as documentation has not been compromised through corruption or falsification.
- 3) Objectivity. Objectivity consists of two distinct elements: presentation and substance. The presentation element includes whether disseminated information is presented in an accurate, clear, and complete manner and in a proper context. The substance element

involves a focus on ensuring accurate, reliable, and unbiased information. For information of a scientific, financial, or statistical nature, the original and supporting data must be generated, and the analytic results must be developed, using sound statistical and research methods.

The NCADAC intends to share guidance and a decision tree, when finalized, to help all contributors better understand the process the NCA authors will follow to ensure that technical inputs are used appropriately in association with the NCA. Appropriate use may include incorporation of the technical input, in whole or in part, or inclusion of a reference or hyperlink. We anticipate that the guidance and decision tree will be available by the end of 2011 and will incorporate established best practices under the NOAA guidelines, as well as be consistent with National Academy of Sciences and international guidance developed through the Intergovernmental Panel on Climate Change (IPCC).

Question 3: What level of documentation and access to my source material do I have to provide (Traceability)?

Answer 3: The NCA will provide access to its source material in order to meet IQA requirements. Figures that are used in the NCA will have links to the data and source (for both on-line and print versions); values and numbers in the NCA will link to data sources; etc. If the NCA authors wish to use key figures, statements or data that are in your technical input, you will be required to provide digital links, original papers, data etc. Rights and permissions will be required for the reproduction and use of any image or article. Thus, it is strongly preferred that you submit your technical input with as much information regarding sources as possible and links to the underlying material and data.

The more documentation you provide as to the provenance, methods and review of your input, the easier it will be for the NCA authors to verify its quality. For example, if some key information in your technical input comes from data issued by a professional organization, then some documentation regarding how it was collected, who reviewed it and under what circumstances will be helpful. As a general practice, the data should also be publicly available.

Please note that the NCA authors will make a distinction between fields documenting basic source information about figures and data (using criteria such as those below), and more rigorous metadata required for enhanced documentation of datasets. In consideration of the latter category of metadata, every effort will be made to comport with commonly accepted standards for such, (e.g. Federal Geospatial Data Consortium [FGDC], and International Organization for Standardization [ISO] metadata standards).

As an illustration, below is an initial list indicating fields that are likely to be needed for documentation of figures/graphics. More complete guidance on documenting your input and

its data sources and methods will be forthcoming. Fields likely to be required for documenting graphics:

- 1) Title: (short, descriptive and searchable):
- 2) Author/designer(s):
- 3) Author/designer(s)' organization:
- 4) Source of graphic: (publication and URL)
 - a. Date of publication
 - b. Modified from original? (y/n). If yes, describe changes
- 5) Source for analysis method, if different from above citation (publication and URL):
- 6) Sources for publically available data:
 - a. Publication and URL
 - b. Archive location/institution and URL
- 7) Contour interpolation method (if applicable):
- 8) Plotting software used (version and OS):
- 9) Description (general for search):
- 10) Geographical information (lat/long), region):
- 11) Type of data (e.g. model, observation):
- 12) Other relevant references:
- 13) Rights for reproduction:
- 14) Additional Comments:

Question 4: I have non-published information to share with the assessment. Will it be acceptable?

Answer 4: We understand that a variety of information may serve as useful sources for the NCA and a large range of data and information types may be considered for inclusion and/or reference. We anticipate that some new analysis may be generated specifically for technical inputs. Examples of important, non-published or non-peer-reviewed sources include: professional reports; technical reports; presentations and conference proceedings; stakeholder meeting summaries; stakeholder conversations, interviews, correspondences; stakeholder position papers; observational data sets and model output produced by government agencies, international organizations, universities, research centers, nongovernmental organizations, corporations, or professional societies; reports from farmer cooperatives, government agencies, nongovernmental organizations, and companies; industry journals; and indigenous or traditional knowledge.

It is not required that all source material be based on peer reviewed material; however, documentation of sources and methodologies used in collecting the data (often referred to as the metadata) is needed. This does not have to result in a published document, but if you are able to demonstrate that qualified professionals in your field or relating to the subject matter have reviewed your methods and data, (and/or are using the results) then this will facilitate easier acceptance of the technical input.

The role of NCA authors will be crucial in the evaluation of such inputs. The more documentation you provide regarding the methods and use of your information, the more likely it will facilitate use in the assessment.

Question 5: I want to use downscaled data specific to my region that are not published in the peer reviewed literature – can they be incorporated into the NCA?

Answer 5: We understand that currently available climate information (both historical and projected) may not be sufficient to capture particular vulnerabilities or impacts for each region and that supplemental and higher resolution information might be necessary. In order for it to be of maximum use to the assessment, it should meet several criteria:

- The models used (whether regional models or Global Climate Models) should be cited in published literature.
- The methods being used (either dynamical or statistical downscaling) should be available in published literature and in the case of statistical downscaling should be documented as appropriate in your region and for your purpose.
- The model data output should be publicly available – either already, or should be made available within the next several months and with assurance of a permanent archive or willingness to permit agencies to archive the data.

Questions 6: Who should I contact if I have other questions?

Answer 6: Revised versions of these FAQs will be available over the next few months at <http://www.globalchange.gov/what-we-do/assessment/nca-activities/opportunities-for-engagement>. You may also send additional questions to Emily Therese Cloyd, NCA Public Participation and Engagement Coordinator, at ecloyd@usgcrp.gov.

PLEASE REFER TO <http://www.globalchange.gov/images/NCA/rfi%20eoi%20faq.pdf> for further information about the Request For Information itself and where and how you can submit your expression of interest.