

Proposal for Selecting Future NCA Report Topics
National Climate Assessment (NCA)
Second Draft
August 13, 2012

This proposal suggests a path forward for selecting and prioritizing Assessment report topics that will be undertaken in the intervening years between the larger four-year NCA “synthesis” reports required under the Global Change Research Act of 1990. The process will result in an annually updated 5-year outlook of Assessment activities that can be linked to broader USGCRP planning and implementation efforts. Producing assessment reports on an ongoing basis not only has multiple benefits from a budgeting and staffing perspective, but also results in a truly “sustained” assessment process as envisioned in the USGCRP Strategic Plan. It has the additional benefit of resulting in more timely and responsive delivery of USGCRP information and products that are useful to agencies, scientists and public and private stakeholders.

The selection process would be facilitated by the Interagency National Climate Assessment (INCA) Workgroup, which would compile input on priorities from a variety of sources, including NCA partners and stakeholders, the public, and the National Research Council (NRC). Important considerations in the decision process of the USGCRP Principals include interagency priorities and capacity and availability of resources, among others. The initial proposal will be followed by an iterative conversation with the NCADAC, through which the NCADAC would indicate its preferences regarding topics, preferably prior to August 1 of each year. The outcome would be an annually updated five-year priorities document for the NCA that is developed by INCA in time to influence the annual discussion of interagency budget priorities.

Rationale for Selection of Topics:

- Build capacity to conduct more in-depth, useful and credible assessments over time
- Investigate new issues of concern/opportunity; emerging science topics and applications
- Deepen our understanding of climate change effects that are of national importance on a particular sector or region
- Better support decisions that reduce risk and increase opportunities; respond to “drivers” from the user community
- Ensure that the *sustained* assessment process is efficient and effective in meeting the legislative mandate, agency needs, and those of regional and sectoral decision-makers, and partner organizations
- NCA reports are rigorously reviewed through agency, interagency, NRC and NCADAC processes in order to ensure highest credibility and visibility for topics of national policy and/or scientific significance.

Process for selection/prioritization:

At least once per year (at a time appropriate to support budget decisions) the INCA will provide to the USGCRP Principals their recommended list of proposed topics for the next 5 years, each year extending one more year into the future¹. The Principals will discuss these topics in an in-person

¹ The recommendation can include modifications to the previous year’s adopted priorities, if needed, in addition to new topics for the later years in response to changing demands for information and resource availability.

meeting², and make a decision to either affirm or amend the proposed priorities. The proposed priorities will be forwarded to the NCADAC for review. The NCADAC will provide advice and recommendations regarding their preferences regarding the priorities to the USGCRP principals, who would then consider the NCADAC input prior to a decision on topics and processes for completion. Once the priorities are adopted, INCA would conduct a “scoping session” to establish the appropriate workplan, timeline and responsible parties for each topic and report back to the USGCRP and the NCADAC.

Topic Selection Process:

There are two principal types of topics: foundational topics and special issue reports. Foundational topics are focused primarily on improving and developing assessment processes and more useful NCA outcomes; these should be considered separately from special issue topics that generally address a specific scientific, policy or technical issue. Foundational topics such as indicators, scenarios and the development of on-line data storage, access and retrieval tools are likely to be a top priority for both the NCADAC and the USGCRP and are crucial to the sustained assessment. However, the sustained assessment also provides the opportunity for focused special issue reports that may be designed to provide inputs to later synthesis efforts or have other relevance to achieving the USGCRP mission and goals. Some topics (and the underlying assessment processes) will be ongoing and incremental, while others will end and have specific products at completion. Phasing of the workload, staffing and budget considerations need to be carefully considered. Different criteria or different weighting of criteria may be required for considering different categories of assessment efforts.

One way to ensure efficient outcomes is to produce several different types of assessment products, some of which are developed as “technical input documents” to be used in later synthesis reports. This type of report would not require a full NCADAC review because it would be integrated into the review of future synthesis reports. There are many types of possible NCA products, but some that have already been identified include:

- 1) Individual agency-sponsored technical input documents that meet specific agency and assessment needs
- 2) Multi-agency technical input documents or reports
- 3) NCADAC products or special reports, produced within the FACA guidelines. These may be produced by a workgroup of the NCADAC or by an author team but would be approved by the full NCADAC and receive public and NRC review.

It is important for the USGCRP Principals to discuss and decide which type of report will be produced for each interim topic and clarify expectations about the nature of the product and how it will be reviewed from the beginning. In addition, it is very possible that a topic that is suggested as a “technical input” one year will actually emerge as a much higher profile effort in a subsequent year. For each topic, a NCADAC Executive Committee liaison should be named to ensure good coordination between the NCADAC and the USGCRP and clear expectations regarding the nature and timing of the product.

² These discussions are likely to benefit from engagement with the NCADAC early in the process to reduce the number of iterations required.

Criteria for Prioritizing NCA Report Topics/Processes:

- Critical to building enhanced assessment capacity and improving subsequent NCA Synthesis reports, eg the indicators effort or work to incorporate CMIP5 results into scenarios
- Identified through the NCA process as serious gaps, eg the recent identification of the International Context topic as a “gap” by the NCA/NRC Review Panel
- Ability to rapidly synthesize and deploy information about emerging major changes in scientific understanding in physical and/or social science
- Availability of resources, staffing and capacity to successfully support and complete the process/product
- Ability to produce salient, credible and actionable outcomes that meet the needs of specific categories of stakeholders in a timely way
- Responsive to established USGCRP interagency priorities
- Mission-critical to agencies and/or interagency efforts, e.g. efforts to solve specific science problems that are hindering fundamental understanding or adaptation or mitigation efforts
- Advance knowledge or understanding on topics of scientific or societal interest, particularly those related to decision support
- High importance to NCA partners and/or stakeholders, leading to increasing awareness and accessibility of agency data and programs
- Balance between long-term process support and short-term high priority product-focused efforts

Based on these criteria, preliminary 5-year recommendations for NCA Products are:

Foundational Reports/Topics:

- 1) Incremental development and deployment of indicators, with NCADAC reports in 2014 and 2016
- 2) Scenario development for 2017 report and to provide enhanced decision support for regional and sectoral stakeholders
 - a. Incorporation of new scientific information, from socio-economic conditions to physical systems and ecosystems (including CMIP5 results, new emissions info) into regional scenarios and other projections of impacts on sectors for 25 and 100 years in the future, interagency technical input document due 2014, with NCADAC report in 2015
 - b. Development of standardized land use and socioeconomic scenario data for regions with reviewed interagency report produced in 2015 for use as a foundation for the 2017 NCA synthesis report
- 3) Development of a “roadmap” for the NCA for establishing the cost of climate-related impacts in the US as related to benefits of adaptation as proposed by the new BECS board of the NRC by the end of 2015³

Special Reports/Topics

Proposed topics:

- 1) International context assessment with NCADAC report in 2015
- 2) Mississippi watershed/Gulf Impacts assessment with reviewed interagency report due in 2016 for inclusion as a case study in the 2017 NCA synthesis report

³ Proposal is preliminary and has not been funded.

- 3) US Food security assessment with USDA-led interagency report due in 2015 and NCADAC report due in 2016

Review Process Options

The following chart provides some examples of different types of initial reports that can become Assessment reports following one or more kinds of review. When decisions are made regarding new topics reports (or as part of the scoping phase) there will need to be parallel decisions about which of several review options will be selected to ensure that the timelines and milestones can be met for each deliverable. For example, a NCADAC and/or NAS/public review takes far more time than an interagency review.

Type of Review	Scientific Review Options			Agency Review		OSTP or CENRS Review
	No scientific peer review or limited review	Scientific Peer Review to Consistent Standards	NCADAC or specially commissioned reviews, e.g. NAS	Single or Multi-Agency Review	Fully Coordinated USGCRP Agency Review	
External Institutions*						
Single Agency						
Multi-Agency (self-assembled or through IWGs)						

* Comment: External partners could conceivably produce topical reports in support of NCA.

TYPES OF INITIAL REPORTS AND REVIEW PROCESSES THAT CAN BE CONSIDERED IN ESTABLISHING A PROPOSED PATH FOR SPECIAL TOPICS REPORTS