National Climate Assessment Strategy – Summary 5-20-11

The National Climate Assessment (NCA) will respond fully to the mandate of the Global Change Research Act of 1990 (GCRA), Section 106**, by establishing a continuing, inclusive process that produces authoritative data and reports over time. The report that will be produced in 2013 will set the stage for more comprehensive assessments in the future. The NCA will evaluate climate impacts, including both variability and trends, in a global change context (considering social, economic and ecological implications). Climate related vulnerabilities and response strategies will be documented through ongoing efforts to assess how communities and the nation as a whole can create environmentally sound and sustainable development paths.

Like previous U.S. assessments, this Assessment will evaluate the current state of scientific knowledge relative to climate impacts and trends. However, the process will differ in multiple ways from previous U.S. climate assessment efforts. For example, it will be a continuing effort rather than a periodic report-writing activity; include an evaluation of the Nation's progress in adaptation and mitigation; involve long-term partnerships with non-governmental entities; build capacity for assessments in regions and sectors; include new methods for documenting climate related risks and opportunities; and provide web-based information that supports decision making processes within and among regions and sectors of the US.

The purpose of the National Climate Assessment is to:

- 1. Analyze past and future trends in global change within regions and sectors, considering a full range of possible outcomes, and report on the current and anticipated effects on a number of specific sectors, including those required by the GCRA.
- 2. Provide Congress and the President and the Executive Agencies with sound scientific information they can use to develop policies and strategies to mitigate and adapt to climate change and variability.
- 3. Develop, from a variety of sources, sound, integrated and relevant scientific information about climate change, to support the public and private sectors at local, state, regional levels as they develop policies and strategies for climate change mitigation and adaptation.
- 4. Guide the establishment of a permanent, broad-based and inclusive assessment capacity, which will evaluate the current state of scientific knowledge of climate science, climate impacts and trends and will develop and deploy information that supports decision making processes within regions and sectors of the US; and
- 5. Foster effective communication on climate-related issues with a variety of audiences.

<u>Goal</u>

The overarching goal of the Assessment is to enhance the ability of the United States to anticipate, mitigate and adapt to changes in the global environment.

<u>Vision</u>

To advance an inclusive, broad-based, and sustained process for assessing and communicating scientific knowledge of the impacts, risks and vulnerabilities associated with a changing global climate in support of decision-making across the United States.

Objectives

To provide information and reports in the context of a continuing, inclusive National process that will:

- 1) synthesize relevant science and information;
- 2) increase understanding of what is known and not known;

3) identify needs for information related to preparing for climate variability and change and reducing climate impacts and vulnerability;

- 4) evaluate progress of adaptation and mitigation activities;
- 5) inform science priorities;
- 6) build assessment capacity in regions and sectors; and
- 7) build societal understanding and skilled use of Assessment findings.

8) recognize the global and international context of climate trends and connections between climate risk and impacts in the United States and elsewhere.

An engagement strategy that leverages science and assessment capacity across the United States, while ensuring that the NCA process and products are accessible and useful to stakeholders and the general public, is critical to this vision.

General Principles

The National Climate Assessment will be:

- Sustained, inclusive and integrated
- Accessible and useful to decision-makers and the general public in a wide range of sectors and at multiple levels
- Relevant for adaptation and mitigation decision needs
- Grounded in the best available science
- Authoritative and credible
- Transparent

<u>Outcomes</u>

In collaboration with a broad range of other partners, programs and initiatives at all levels and across sectors, the NCA will measurably contribute to the following outcomes:

- Ongoing analysis of scientific understanding of climate change impacts, risk, and vulnerability that is relevant to a wide range of decisions and policies.
- Enhanced timely access to Assessment-related data from multiple sources.
- Systematic evaluation of progress towards reducing risk, vulnerability, and impacts.
- A sustained and integrated research program that considers climate variability on multiple time scales as well as climate change, guides research priorities, develops indicators of change and progress, and is responsive to both GCRA and other ongoing assessment needs.
- Evaluation of the implications of alternative adaptation and mitigation policy options, including the potential for interactions among these activities.
- Information that provides the foundation for a science-based national discourse on climate change that is supports a more climate-literate citizenry.

**TEXT OF GCRA (1990) SECTION 106:

SEC. 106. SCIENTIFIC ASSESSMENT.

On a periodic basis (not less frequently than every 4 years), the Council, through the Committee, 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.