Federal Agency Programs Providing Regional Climate Change Adaptation Services

Below is a summary of some of the Federal Agency initiatives to provide regional climate change adaptation and climate services. The Interagency Climate Change Adaptation Task Force recommended developing regional climate change adaptation consortia to improve coordination among Federal agencies in each region. CEQ is working with key Agencies to implement this recommendation.

Many Agencies also provide additional climate change programs that are relevant to regional planning, but are not necessarily regionally-focused. The Pew Center for Global Change published a <u>report</u> that describes some of these programs (www.pewclimate.org).

National Climate Assessment: Under the Global Change Research Act of 1990, the United States Global Change Research Program (USGCRP) is required to undertake a National Climate Assessment evaluating climate science models and climate impacts. Through coordination with existing Federal, local and regional networks, the National Climate Assessment prepares a report every four years for the President and Congress.

The primary responsibilities of the National Climate Assessment are to:

- Integrate, evaluate, and interpret the findings of the USGCRP and discuss the scientific uncertainties associated with such findings;
- Analyze the effects of global change on natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; and
- Analyze current trends in global change, both human-induced and natural, and project major trends for the subsequent 25 to 100 years.

The next National Climate Assessment is under development and will be released in 2013. Reports from previous assessments can be found at <u>http://www.globalchange.gov/publications/reports</u>. Additional information about the Assessment is located at <u>http://www.globalchange.gov/what-we-do/assessment/nca-overview</u>.

Regional Integrated Sciences and Assessments Program (RISA): The RISA Program was established by the National Oceanic and Atmospheric Administration (NOAA) in the mid-1990s to develop stakeholder-driven climate science and products that decision makers can use to cope with climatic impacts on wildlife, infrastructure, coastal communities and human health. There are currently 11 RISAs, each with region-specific objectives covering various aspects of climate change, across the country.

RISAs co-design and co-develop climate services and science through partnerships among scientists and decision makers. They also contribute to research and assessment activities in direct support of the National Climate Assessment. RISA teams have strong connections with the Department of Interior's Climate Science Centers and Landscape Conservation Cooperatives. For more information on the RISA programs and what may be available for your region visit: http://www.climate.noaa.gov/cpo_pa/risa/.

The Climate Service: The National Oceanic and Atmospheric Administration's proposed Climate Service is a collaborative effort to consolidate climate science, improve monitoring, and provides streamlined access to data. NOAA plans to bring together 'scientific and service communities' within the federal, local, state, regional, and Tribal governments as it develops the climate service to ensure it will be responsive to their needs. In addition, NOAA announced its six new Regional Climate Services Directors that are working to build and strengthen regional partnerships to better assess and deliver regionally-focused climate science and information products and services. They will work closely with RISAs and DOI's Landscape Conservation Cooperatives and Climate Science Centers in the region.

In conjunction, NOAA unveiled a new web site to serve as a single point-of-entry for its extensive climate information, data, products, and services. The **Climate Portal** addresses the needs of five broadly defined user groups: decision makers and policy leaders, scientists and applications-oriented data users, educators, business users, and the public. Climate.gov provides up-to-date climate science information, featured in the *ClimateWatch* magazine, on the 'interactive' climate dashboard, in educational resources for the classroom, and in fact sheets for professionals and the public.

For more information on NOAA Climate Services visit: <u>http://www.noaa.gov/climate.html</u>. To access the Climate Portal visit: <u>http://www.climate.gov</u>. To contact Regional Climate Service Directors: visit http://www.noaanews.noaa.gov/stories2010/20100914_climatedirectors.html

Landscape Conservation Cooperatives (LCCs) and Climate Science Centers (CSCs):

The Department of Interior is developing a network of eight regional CSCs and 21 LCCs to inform science-based adaptation strategies and adaptive management techniques in partnership with resource managers. The CSCs will synthesize existing climate change impact data and management strategies, help resource managers put them into action on the ground, and engage the public through education initiatives. CSCs are being developed in coordination with other Federal agencies, local and state partners, and the public. CSCs will coordinate with RISAs and anticipate using model results and projections produced by RISA-supported scientists.

The LCCs will coordinate landscape-level strategies for conserving public lands, wildlife, water and other natural resources and provide decision-support tools to assist managers in making decisions that will protect and conserve resources. Some of the LCC products and services will include computer models, projections of species' ranges with climate change, assessments of species' and landscapes' vulnerability to climate change and maps showing potential wildlife movement corridors as climate change forces migration. Each of the LCCs is created for a specific landscape type, with boundaries that cross both state lines and international borders. LCCs will collaborate closely with academia, other Federal agencies, local and state partners, and the public, and will coordinate with CSCs and RISAs in their regions.

In cooperation with Federal agencies, state, Tribes, non-governmental organizations, universities and others, LCC lead roles and responsibilities include:

• Initiate resource partnerships and develop resource goals and desired outcomes

- Articulate priority science needs for specific resource goals/outcomes
- Apply down-scaled models to generate spatially-explicit adaptation strategies
- Determine where to conduct on-the-ground activities to accomplish specific goals
- Develop science-based monitoring strategies that link resulting data back to models

To view region-specific information on LCCs visit:

<u>http://www.doi.gov/whatwedo/climate/strategy/LCC-Map.cfm</u>. Information on region-specific CSCs can be located at: <u>http://www.doi.gov/whatwedo/climate/strategy/CSC-Map.cfm</u>.

United State Global Change Research Program (USGCRP)

Global Climate Change Impacts in the US: Summarizes the science of climate change and current and future climate change impacts on the United States. This report is organized by regions and sectors and is available at <u>http://www.globalchange.gov/publications</u>. A powerpoint presentation of the key findings is available at climate.gov under "presentations."

Other climate change data and tools can be found at:

- NOAA Coastal Services Center: <u>http://www.csc.noaa.gov</u>
- National Integrated Drought Information Service: <u>http://www.drought.gov</u>
- EPA's Water Resource Adaptation Program: <u>http://www.epa.gov/nrml/wswrd/wqm</u>
- US Forest Service: <u>http://www.fs.fed.us/climatechange/</u>
- USDA: <u>http://www.usda.gov/oce/climate_change/index.htm</u>
- USGS: <u>http://www.usgs.gov/global_change/</u>