

2013 Annual Report of the Water Resources Adaptation to Climate Change Workgroup to the Advisory Committee on Water Quality Information

The Water Resources Adaptation to Climate Change Workgroup (WRACCW) provides this *2013 Annual Report* to the Chair and Members of the Advisory Committee on Water Information (ACWI).

The WRACCW was established as a subgroup of ACWI on July 10, 2012. The Workgroup's purpose is to promote, support, and provide information for effective management and protection of water resources in the United States as the climate changes and to advise Federal agencies on water policy as it relates to climate change adaptation. The Workgroup also serves as a public forum for Federal, State, Tribal, and local government organizations and public interest and professional organizations to exchange information, views, and ideas, and to connect efforts concerning adapting water resources to a changing climate. WRACCW operates under Terms of Reference approved by ACWI and available on the Internet at http://acwi.gov/climate_wkg/index.html.

The WRACCW adopted a *2013 Workplan* to guide its activities for the year (available at: http://acwi.gov/climate_wkg/2013_workplan_wraccw_final.pdf). The *Workplan* notes that the 2013 priorities for the Workgroup were to focus on:

- informing and educating Workgroup representatives and alternates with the goal of establishing a common level of knowledge among Workgroup participants with respect to the impacts of a changing climate on water resources and the plans and programs underway to adapt water resources management to changing climatic conditions; and
- responding to specific requests for input and comment from Federal agencies on issues or products related to climate change and water resources.

In general, the co-chairs and members believe that the Workgroup substantially accomplished these objectives and contributed to national discussions concerning adaptation of water resources to a changing climate.

Given the constraints around scheduling an in-person meeting, the Workgroup's focus on building a common base of understanding sets a strong foundation for collaboration on issues and development of constructive recommendations that take into consideration a comprehensive breadth of knowledge by all members. It not only facilitates dissemination of knowledge but also will improve the effectiveness and efficiency of the Workgroup activities.

Some highlights of activities to implement this *Workplan* are described briefly below.

- 1) **Hold Meetings of the Workgroup:** The full workgroup met by conference call on the following dates in 2013:
 - **January 17;** including a briefing on the water elements of the draft National Climate Assessment;
 - **March 7;** including a review of climate change activities of the Bureau of Reclamation and a report on the 2012 highlights of progress by the Federal Water Resources Workgroup and the 2013 workplan of the Federal workgroup;
 - **April 17;** including a review of climate change activities of the Army Corps of Engineers and a report on the *Fish, Wildlife and Plants Climate Change Adaptation Strategy* and its intersection with water resources issues;
 - **June 20;** including a review of a "Water Preparedness Guide for State Action" developed by NRDC and American Rivers, a report on the climate change elements of the National Ocean Policy Implementation Plan Appendix, and a presentation by NASA on potential indicators for the National Climate Assessment;
 - **August 8;** including a report on the President's Climate Action Plan and a presentation by the American Water Works Association on climate induced water supply risk;
 - **September 12;** including a series of presentations on flooding issues including a report on Bulletin 17 B by the US Geological Survey, a report on National Flood Insurance Program and climate change by the Federal Emergency Management Agency, and precipitation frequency and duration estimates by NOAA;
 - **October 25;** including reports on sea level rise mapping by the Global Change Research Program and the organization Climate Central; and
 - **December 5;** including a report on the President's Executive Order on Climate Change Preparedness and Resilience.

Most meetings included Workgroup business and administrative topics as well as round robin reports of climate change adaptation actions of Workgroup members. Agendas and supporting materials for these meetings are available on the Internet at: http://acwi.gov/climate_wkg/minutes/index.html

- 2) **Hold Webinars to Inform Workgroup Members:** To advance understanding of the impacts of a changing climate on water resources, the Workgroup sponsored several webinars for members on topics identified in polling of the Workgroup. The webinars were developed and organized by a Subcommittee chaired by Levi Brekke. Materials from the webinars are posted on the WRACCW website (http://acwi.gov/climate_wkg/index.html).

A webinar on March 25 addressed how the range of Federal agencies and interagency coordination groups are working together to respond to the impacts of a changing climate on water resources. As part of the webinar the Workgroup developed background “fact sheets” that reviewed the origin, purpose, membership, and activities of a range of over a dozen different Federal agencies and interagency coordination groups related to climate change and water programs.

A series of two webinars on May 30 and June 27 addressed the impacts of climate change on more extreme weather and the consequences of extreme weather for water resources.

- 3) **Develop Background Information Database on Climate Change and Water:** The Workgroup developed an electronic database of reports and studies on topic of water resources and climate change. This database was organized by a Subcommittee of members chaired by Carol Collier. The database includes a diverse range of carefully selected documents and has been made available to Workgroup members. Work is underway to post this information on the WRACCW website.

- 4) **Maintain Workgroup Membership:** The 2013 membership of the WRACCW includes a total of 40 representatives of Federal agencies, State, Tribal, and local government organizations, and non-profit organizations representing diverse interests (see http://acwi.gov/climate_wkg/WRACCW_Members_11_22_2013.pdf).

In 2012 and 2013, the Workgroup was co-chaired by Paul Freedman, representing the Water Environment Federation and Jeff Peterson, representing the Environmental Protection Agency. A list of the full membership of the Workgroup is attached.

- 5) **Plan In-Person Meeting:** The Workgroup established a Subcommittee, chaired by Ben Grumbles, to organize an in-person meeting. The Workgroup was forced, on several occasions, to amend plans for the in person meeting due to

uncertainties caused by the government shutdown in the fall of 2013 and a range of budget issues. Planning for the in-person meeting continued in late

2013 and the Workgroup expects to meet in person for a two day meeting on February 19 and 20 in the Washington, D.C. area. (NOTE: This meeting occurred and material related to the meeting will be posted on the WRACCW website (http://acwi.gov/climate_wkg/index.html)).

In addition to reviewing work by Federal agencies to response to the threats posed to water resources to a changing climate, the Workgroup decided to use the meeting to develop ideas and recommendations to provide to Federal interagency groups implementing the President's Executive Order on Climate Change Preparedness and Resilience. A set of 5 subgroups were organized addressing the key topics of recommendations in *the National Action Plan: Priorities for Managing Freshwater Resources in a Changing Climate*. These subgroups are:

1. Data and Information
2. Assessing Vulnerability
3. Water Use Efficiency
4. Integrated Water Resources Management
5. Training and Capacity Building

A report from the Workgroup reporting the recommendations at the meeting is expected to be submitted to the full ACWI in April.

This report is submitted to the Advisory Committee on Water Information on behalf of the members of the Water Resources Climate Change Adaptation Workgroup by the co-chairs:



Paul Freedman
Water Environment Federation



Jeff Peterson
Environmental Protection
Agency

March 20, 2014