Climate Ready Water Utilities Working Group

Meeting #1 Summary

December 3 & 4, 2009

The following is a recap of the first meeting of the Climate Ready Water Utilities (CRWU) Working Group. The meeting took place in Washington D.C. on December 3 & 4, 2009 and focused on defining attributes of a climate ready utility. The substance of the Working Group's discussion is captured in the attached *Synthesis of Meeting One Discussions*. Also attached, for reference, is the meeting agenda.

Welcome, Overview, and Introductions

- Lauren Wisnewski, EPA's Designated Federal Official for this process, opened the meeting.
- Peter Silva, Assistant Administrator for Water provided opening remarks.
- Duane Smith, Working Group Co-Chair, and Rob Greenwood, Lead Facilitator, provided an overview of the meeting objectives.

Background Presentations

The lead facilitator, an EPA representative, and two members of the Working Group gave the following background presentations.

- Rob Greenwood presented on key challenges and considerations drawn from the pre-meeting interviews with all of the Working Group members. Key points made during ensuing discussion are captured in the Meeting Discussion Section below, and in the attached *Synthesis of Meeting One Discussions*.

- Rachel Schmeltz, EPA, presented on current Federal climate change legislative efforts of relevance to utilities. All of the information provided, along with additional details on offset methodologies and a hotline number can be found at: http://www.epa.gov/climatechange/.

- Paul Fleming, Seattle Public Utilities (SPU), gave a presentation covering practice based examples of adaptation and mitigation actions undertaken by SPU. In response to questions relating to the nature of the climate adaptation planning SPU has undertaken, Mr. Fleming indicated the following: SPU's current worst case planning includes the use of existing dead storage combined with a new pumping facility which can be deployed reasonably quickly; SPU has placed substantial emphasis on conservation as the means to address demands from new growth; SPU has not yet undertaken a close look at possible water chemistry impacts but recognizes water quality impacts as an area of important future research; and SPU has extended its planning horizon to 2050 in the context of planning for climate change. He also indicated that shifts in climate patterns to the extent Australia has experienced combined with a five to ten year drought would cause significant, "game-changing" implications. In addition, the current research agenda has been focused on water quantity; however there are signals of a shift to enhanced research on water quality concerns in the upcoming years.

- Pat Davis, Orange Water and Sewer Authority (OWSA), also gave a presentation on practice based examples of adaptation and mitigation actions to address water sector climate change impacts. Mr. Davis, in response to questions, indicated that it has been very helpful to be located in close proximity to a major university that can provide scientific and technical expertise to examine potential climate change impacts; however one challenge the utility faces is figuring out how to most effectively tap into this resource and obtain data and analytical results in a timely manner. With respect to regional

cooperation, he indicated that in North Carolina, as many areas of the country, such cooperation faces several challenges; however, many opportunities exist where water agencies could collaborate to derive mutual water supply or drainage benefits without creating new governance structures.

Meeting Discussions

The majority of the meeting focused on discussions around initial identification of attributes and characterization of what it means to be a "climate ready utility." Following is a summary of key points from these discussions. A more in-depth summary of these discussions can be found in the attached document *Synthesis of Meeting One Discussions*.

Discussion Highlights

- "Climate Ready" needs to be viewed as a process, not an outcome – some group members believe a re-labeling to something like "climate responsive" is needed.

- Different local conditions, including immediacy and certainty of impacts, and technical and financial capacity, will lead to different responses and intensity of engagement. The program must provide a reasonable entry point for lower capability utilities, while also containing an aspirational aspect that speaks to high capability utilities experiencing a sense of climate change urgency.

- A substantial portion of the water sector does not have the technical or financial capacity to be "climate ready" anytime in the near future. Other immediate, concrete needs (e.g., aging infrastructure, regulatory requirements) will by necessity remain priorities that will absorb all of, if not more than, available capacity.

- The defining aspect of climate change in terms of utility adaptation behavior relates to the historical record becoming increasingly less likely to be a good predictor of future experience and that the utility anticipates increasing amounts and extremes of variability from climate related impacts such as precipitation patterns, temperature trends, and extreme weather events. This defining aspect was referred to as the climate ready "pivot point." The concept of a climate ready "pivot point" (where situational awareness indicates the likelihood of local climate-related impacts outside of historical norms) is useful for discussion purposes but requires substantially more development. In particular, work needs to be done to articulate what "signals" a utility could monitor (e.g., storm intensities) to understand changing dynamics, as well as the inclusion of practical case examples of how utilities have made the determination of enhanced climate variability and how they have moved to address these conditions.

- Substantial focus existed on discerning the distinction between a "well managed" utility and the added engagement that constitutes "climate ready." In this context, discussion suggested "well managed" may be a precursor for "climate ready" success. Additionally, the Attributes of Effectively Managed Utilities were identified as highly relevant to discussions of "climate ready," with an acknowledgement of the need to connect the two concepts as discussions move forward. Several members expressed the view that "climate ready" will redefine what it means to be an effectively managed utility (e.g., a need to expand planning horizons and to work in partnerships forged outside of existing fence lines to ensure enhanced resiliency).

- Worst case scenario planning suggests that conditions could exist that will substantially challenge existing institutional and regulatory frameworks. In response, there is a need for regulatory agency and utility partnerships to ensure an adaptive, problem solving mentality underlies addressing climate change-related challenges. Discussion indicated that EPA may need to play a role in preparing or supporting the preparation of worst case scenarios for utility consideration and working to ensure sufficiently flexible regulatory approaches are available to address such conditions.

- Discussions acknowledged that public perception regarding climate change remains mixed and highly variable, thus creating a challenge to local decisions makers. Furthermore, a key, traditional institutional motivator – regulatory action – is lacking.

- Although significant work needs to be done on the technical side to reduce uncertainties, climate change adaptation and mitigation efforts need to move forward in parallel with the science.

- A key component of useful recommendations to NDWAC will be an articulation of the overarching strategic framework and associated vision needed to support implementation of a climate ready utilities program. This includes the overall role for EPA, states, water sector associations and advocates, as well as individual utilities.

Planning for Meeting #2

Planned Meeting 2 agenda topics include:

- Attributes Task Team report out followed by more in-depth discussion with the goal of reaching stability around draft attributes.
- Enabling Environment Task Team report out followed by more in-depth discussion on the concept of mechanisms for motivating and enabling climate ready utility action.
- Identification of an initial list of potential climate change-related tools, training, and products.
- A brief discussion on a draft outline of the CRWU Working Group Report to the NDWAC.
- Background presentations by outside experts. Suggestions from Working Group members include:
  - Land use planners and agriculture representatives to discuss how other water-related interests are going about anticipating climate change – what tools are they using or developing, what assumptions they are making, how that connects to water utilities;
  - Climate change-related public health impacts;
  - Conditions in Australia and utility adaptation responses;
  - Insurance industry perspectives on climate change impacts and related adaptation expectations;
  - Energy sector adaptation approaches (possibly consider a representative from the Electric Power Research Institute);
  - Washington State efforts (presented by Greg McKnight); and/or
  - Federal climate change efforts (presented by Paul Wagner).

Next Steps

- Organize two task teams (one to refine the attributes of a climate ready water utility and another to further develop enabling environment considerations and recommendations) to complete work prior to the second meeting.
- Follow-up with Federal Partners to create a list of relevant on-going activities.
- Begin to secure expert presenters for the second meeting.
- Check-in with working group members who were unable to attend the meeting or had to leave early to ensure they are fully informed.
- Add suggested documents to the online reference bibliography.
- Elect the second co-chair.
- Prepare meeting summary and refine the synthesis of discussions.

Public Comments and Closing

- There were no public comments. Written comments are welcome throughout the process and should be sent to Ms. Wisnewski. In addition, all face-to-face meetings will include time for public comment.
- Ms. Blette, on behalf of Ms. Wisnewski, adjourned the meeting at 1:00pm Eastern Time.

Attendees

Working Group Members		Federal Partners
Matt Appelbaum	Sri Rangarajan	Veronica Blette, EPA
Katherine Baer	Steve Schmitt	Geoff Bonnin, NOAA
George Crombie	Duane Smith	Joan Brunkard, CDC
Pat Davis	Lisa Sparrow**	Sheila Frace, EPA
Paul Fleming	Marcia St. Martin*	Kim Fox, EPA
Cindy Forbes	Michael Wallis	Becky Fulkerson, USBR
Gregory McKnight	Rebecca Weidman	Marty Savoie, Army Corps
Olga Morales-Sanchez	Paul Whittemore*	David Travers, EPA
Pat Mulroy	Doug Yoder	Paul Wagner, Army Corps
Tony Quintanilla		Phil Zahreddine, EPA

*Present first day only; **Alternate attended