




April 2013

www.epa.gov/climate-ready-utilities

EPA's Climate Ready Water Utilities (CRWU) initiative's mission is to provide resources for drinking water, wastewater, and storm water utilities to adapt to climate change by promoting a clear understanding of climate science and adaptation options.

To meet this mission EPA is/has:

1. Developed the second version of our Climate Resilience Evaluation and Awareness Tool (CREAT.) The tool assists the water sector, which includes drinking water, wastewater, and stormwater utilities, in identifying climate change threats, assessing potential consequences of extreme weather events, and evaluating adaptation options. CREAT 2.0 builds on the capabilities of the first version of the tool by providing local historical climate data, as well as more comprehensive downscaled climate change projections. This new version uses a flexible framework, which allows utilities, regardless of size or type, to consider multiple locations and climate scenarios. CREAT 2.0 also includes basic and advanced video training modules and allows utilities to conduct analysis comparison scenarios for multiple time periods. 
2. Conducting training workshops in New Jersey and New York focused on climate impacts and CREAT. These two-day training workshops will assist the water sector in developing a better understanding of climate change, managing impacts, and planning adaptation strategies. Workshops will be held on April 15 and 16, 2013 at the EPA Environmental Center in Edison, NJ and on April 29 and 30, 2013 at the EPA Region 2 Office in New York, NY. Each workshop will feature a "case-study" utility. At the Edison, NJ workshop, we are working with Mike Ruppel of Southern Monmouth Regional Sewerage Authority, located in Belmar, NJ, is collaborating with EPA to apply CREAT to his utility. At the NY workshop, we are working with Randy Alstadt of the Poughkeepsie, NY Drinking Water Facility. **To REGISTER for a workshop either in-person or via webcast, please visit the following link:**
<https://docs.google.com/spreadsheet/viewform?formkey=dDhFdnBDMTJvUHVjNXJYRWICVIFxOXc6MA>

For more information on CRWU efforts, please visit us at: www.epa.gov/climate-ready-utilities

For any help, feedback or questions, please contact us at CRWUhelp@epa.gov



April 2013

www.epa.gov/climatereadyutilities

3. Providing a series of webinars on its CRWU tools and resources for the water sector. These 45 to 60 minute webinars assist participants in developing a better understanding of climate change, managing impacts and developing adaptation strategies. Webinar topics include climate change readiness and an introduction to climate science for the water sector, followed by more in depth discussions of CRWU tools, as well as building adaptation through decision-making and planning. The webinars feature case studies from utilities that have used CRWU tools to become more climate ready. **To register, view the "Training" tab at www.epa.gov/climatereadyutilities**; already provided webinars are archived at this same web link.
4. Updated our Adaptation Strategies Guide to include green infrastructure and energy management components. The Guide serves as an introduction to climate change adaptation planning for drinking water, wastewater, and stormwater utilities. Users can navigate this interactive PDF document similar to clicking through pages of a website. A series of briefs organized by region and climate-related impacts provide a better understanding of what challenges utilities can expect to face along with adaptation strategies that can be used to prepare their systems for those impacts. The Guide also includes worksheets to assist utilities in identifying threats such as drought and flooding, and provides examples of how to implement recommended adaptation options.
5. Built the CRWU Toolbox, which is a searchable web-based toolkit that contains approximately 600 climate-related resources for water utilities. The Toolbox was updated in February of 2012 enabling faster and easier access to the newest and most relevant climate information. The resources available include reports and publications, funding resources, activities, upcoming events, and models and tools for technical information. EPA is considering options to update the Toolbox or to work with our partners to host and maintain this resource. **Any interested partners should contact CRWU at CRWUhelp@epa.gov to discuss hosting options in further detail.**
6. Finalized the Preparing for Extreme Weather Events: Workshop Planner for the Water Sector to assist users in preparing, as well as customizing and conducting, water sector-specific workshops related to five different extreme event scenarios (Flooding, Drought, Sea Level Rise, Intense Wildfire, and Reduced Snowpack). Each scenario walks users through a long-term planning exercise in which they gain a better understanding of how projected changes in the frequency and intensity of extreme events can impact their utility, and how they can begin to develop adaptation plans to prepare for these changes. The Workshop Planner includes everything a utility needs to plan and hold a workshop, including a participant list, a facilitator's guide, a climate science basics presentation, group discussion topics, and a report template to document the process and help organize actionable next steps.

For more information on CRWU efforts, please visit us at: www.epa.gov/climatereadyutilities

For any help, feedback or questions, please contact us at CRWUhelp@epa.gov



April 2013

www.epa.gov/climate-ready-utilities

7. Coordinated the CRWU i and the Climate Ready Estuaries efforts by conducting three pilots with utilities and National Estuary Programs. The North Hudson Sewerage Authority and the New York/New Jersey Harbor National Estuary Program project was completed in 2011 and the report is now available on EPA's website. The most recent pilots were conducted in 2012 with the Albemarle-Pamlico National Estuary Program in North Carolina and the Morro Bay National Estuary Program in California. For all three pilot projects, CREAT was used to conduct a joint risk assessment to identify current and future climate threats and adaptation options. Among the lessons learned, utility participants have found it to be very beneficial to conduct these risk assessments with the National Estuary Programs. This lesson could be transferable to other utilities to invite watershed partners into their climate change risk assessments and adaption planning efforts. Reports documenting the methodology and outcomes for the two most recent projects will be available online in late spring / early summer 2013.
8. The Adaptive Response Framework (ARF) reference document was completed and is now available online. It is based on the ARF concept in the 2011 National Drinking Water Advisory Council's Climate Ready Water Utilities report and explains why using an adaptive management approach is important when conducting climate change planning. The ARF is an interactive PDF and it drives users towards elements they should conceptualize and consider in the process of becoming more climate ready. These elements include the following: awareness; adaptation; mitigation; policies; community; and partnerships. The document explains each element's relevance and importance to the water sector, details actions utilities can take to become more climate ready, and leads users to further resources from both the EPA and its partners.



The finalized resources mentioned above are available at www.epa.gov/climate-ready-utilities.

For more information on CRWU efforts, please visit us at: www.epa.gov/climate-ready-utilities

For any help, feedback or questions, please contact us at CRWUhelp@epa.gov