

No small feat: Managing the nation's changing water supply in climate change

Castle highlights enhanced role of science in DOI

By Nick Aumen, CSSP board member

The members of CSSP were delighted to hear from Anne Castle, Assistant Secretary for Water and Science in the US Department of the Interior. The DOI consists of eight bureaus, about 67,000 employees, and manages approximately 500 million acres of land - about one-fifth of the total US land area, including many of America's treasured places. Castle spoke about the responsibilities of the two DOI bureaus she oversees - the US Geological Survey (USGS) and the Bureau of Reclamation (Reclamation). The USGS is the science arm of DOI, and having no regulatory or management mandate, provides independent science for the department. Reclamation provides water supply, water infrastructure, and hydropower to the 17 western states.

Castle spoke about the enhanced role that science now plays in DOI, and in the Obama administration in general. She said that there is no issue more important than water availability, one of our foremost challenges for the 21st century. Water rights and the limited availability of water are problematic, forcing many local and regional governments to mine groundwater - a practice that is not sustainable, particularly in the arid southwest. In addition, climate change is likely to have disproportionate impacts on water, and is a serious security concern globally. The DOI is playing a leadership role in dealing with climate change, and its scientists and water managers are working hard to better understand the potential impacts of climate change on water supplies. In fact, the United Nations is concerned that climate change may be happening more quickly than predicted by the most recent report from the Intergovernmental Panel on Climate Change. The southwestern part of the United States is likely to be hardest hit by climate change, and also is one of the fastest growing regions in the country.

In March 2009, President Obama signed P.L. 111-11, which includes the Secure Water Act, charging a number of DOI bureaus with, among other things, specific tasks to address the effect of climate change on water supplies. In September 2009, DOI Secretary Ken Salazar issued a secretarial order on climate change, establishing a framework through which DOI bureaus will coordinate their work on climate change. This approach includes eight new regional climate change centers, intended to facilitate data synthesis and to promote public education. In addition, the department will establish regional Landscape Conservation Cooperatives to bring together DOI bureaus, other agencies, local governments, academia, and the public to work cooperatively in addressing climate change threats, and to marry the work of scientists with the work of land managers. Castle noted that the Secure Water Act directed USGS to expand its national streamflow information system, and authorized a national water census (the last one was done in the 1970s). The new information will help agency scientists to monitor a number of water parameters across the nation, and this information will help establish a baseline of data from which to assess future trends and patterns.

Castle said that DOI views science and technology as important allies, and that future generations will judge us based on whether they inherited a clean and reliable water supply. She concluded by assuring CSSP members that the organizations they represent are important for the success of these processes, and that we need to work together to arrive at long-term water supply security.