Progress and Prospects for Connecting the Climate and Water Resource Communities: Predictions, Applications, and Decision Making

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The water resource community relies on skillful seasonal forecasts coupled with operations models to manage often conflicting basin resources. Adapting to future climate change impacts requires capabilities in hydroclimate monitoring, short-term prediction and application of such information to support contemporary water management decisions. These needs were identified in a report, "Short-Term Water Management Decisions: User Needs for Improved Climate, Weather, and Hydrologic Information," published by the Bureau of Reclamation and the U.S. Army Corps of Engineers with the National Oceanic and Atmospheric Administration.

This report identified how Federal agencies, along with state, local, tribal and non-governmental organizations and agencies are working together to identify and respond to the needs of water resource managers in the face of a changing climate. The report is broken into four categories: Monitoring Product Needs, Forecasting Product Needs, Understanding and Using Information Products in Water Management, and Information Services Enterprise.

The needs identified under the first three categories are presented outlining the research and product development water managers are requesting to enhance monitoring, forecasting and the information that are critical for water operations and basin management.

Lastly, focusing on the sustained drought occurring throughout the Southwest a workshop was held to discuss water managers' drought planning and management experience during the 2012 water year, a year when much of the Southwest experienced significant drought. Workshop products are presented including additional user needs specific to drought planning and management and science opportunities that if addressed, will benefit water resource management.