

## **5A.5 ASSESSING AND RESPONDING TO THE 2011 SOUTH CENTRAL U.S. DROUGHT FROM A CLIMATE SERVICES PERSPECTIVE**

David P. Brown<sup>1</sup>, Roger S. Pulwarty<sup>2</sup>, Chad A. McNutt<sup>2</sup>, Lisa S. Darby<sup>2</sup>

<sup>1</sup> NOAA National Climatic Data Center (NCDC), Asheville, NC

<sup>2</sup> NOAA National Integrated Drought Information System (NIDIS), Boulder, CO

### **1. INTRODUCTION**

A drought of strong intensity and vast geographic extent was the dominant climatological event of 2011 in the south central United States. As early as November 2010, NOAA's Climate Prediction Center predicted an increased potential for drought formation across the southern U.S. consistent with the formation of a strong La Nina episode. Although La Nina typically produces conditions conducive to drought in this region, the rapid intensification and extreme magnitude of the 2011 event could not have been anticipated, and is only partially explained by La Nina. The aggressive and intense nature of the drought, coupled with the fact that the observational record does not represent the full assortment of drought scenarios possible for this region, left many stakeholders in the south central U.S. struggling to prepare for and respond to the drought's impacts.

### **2. DATA AND METHODS**

To better identify opportunities for the coordination and delivery of drought information between providers, such as the National Integrated Drought Information System (NIDIS), and the user community, NOAA's Southern Regional Climate Services Director organized an ad-hoc group representing NOAA Line Offices and external NOAA-affiliated partners from academia such as the Southern Climate Impacts Planning Program (SCIPP), a Regional Integrated Sciences and Assessments Program (RISA). Together, they developed a three-tiered approach to the delivery of regional climate information and services on the Southern Plains drought. The three-tiered approach included: 1) regional outlook and assessment forums that described the current state of knowledge about the drought and drought predictions to decision makers and stakeholders; 2) bi-weekly webinars to share information on the management of the drought; and 3) media outreach including press interviews and media-specific webinars. Throughout the process, the group met regularly to address emerging information needs, ensure that the right partners were at the table, and keep each other apprised of developments.

### **3. RESULTS**

Two regional outlook and assessment forums in July and November 2011 drew over 80 unique participants from public and private sector constituencies. These forums gave decision-makers and stakeholders representing water resources, agriculture, livestock, forestry, wildfire management, and

state and local government the information and tools to make informed decisions about the drought. The forums also provided guidance to NOAA on both best practices and specific pilot projects that can improve drought information delivery in the future.

Six drought management webinars drew over 190 unique participants from public and private sector constituencies. The webinars were designed to build a sustained network of users of NOAA climate information and products in response to climate-driven management challenges, including drought. To that end, surveys of webinar participants indicated that over 80% of the respondents utilized one or more elements of webinar content in their planning and decision-making activities, and/or shared that content with a colleague, for purposes such as "influencing agency involvement" and "evaluating operations."

The media outreach succeeded in informing the general public about the drought and raising the visibility of NOAA's regional climate services. Specific media engagement included two media-specific webinar briefings on drought conditions in April and May 2011 and media coverage and interviews stemming from the two regional drought assessment forums in July and November 2011. In addition, a NOAA winter outlook teleconference in October 2011 garnered over 120 media participants and was the best-attended winter outlook media call in NOAA's history. Some of the more noteworthy media contacts included The New York Times, Washington Post, USA Today, Wall Street Journal, Los Angeles Times, Climatewire, Associated Press, Reuters, Dow Jones Newswire, Bloomberg News, CBS Evening News, ABC World News, National Public Radio, Fox News Radio, Univision and Voice of America.

### **4. CONCLUSIONS**

The three-tiered approach described here constitutes an example of a regional climate service, coordinated within and among federal agencies in a manner that promotes sustained engagement with impacted user communities. Short-term benefits of the activities include improvements in NOAA's delivery of regional climate information and services to a diverse audience, and establishment of best practices for responding to an ongoing climate event in a coordinated fashion. Longer-term benefits include "on the ground" implementation of interagency agreements among organizations such as NOAA, DOI, USDA, and the Western Governors Association to deliver climate services to key constituents.