Activities and Plans of the National Integrated Drought Information System

Jim Verdin and Roger Pulwarty

1National Integrated Drought Information System, USGS, Boulder, CO
2National Integrated Drought Information System, NOAA, Boulder, CO

Drought is a slow-onset climatic hazard with the potential to inflict costly and far-reaching impacts across multiple sectors of society. Having imprecise boundaries in space and time, coping with drought has long been troublesome to decision-makers with responsibility for preparedness and response. Based on needs articulated by the National Drought Policy Commission in 2000, and the Western Governor’s Association in 2004, the National Integrated Drought Information System (NIDIS) Act of 2006 (Public Law 109-430) was passed and signed by the President. The law calls for an interagency, multi-partner approach to drought monitoring, forecasting, and early warning led by the National Oceanic and Atmospheric Administration (NOAA). NIDIS is envisioned as a dynamic and accessible drought risk information system that provides users with the capacity to determine the potential impacts of drought, and the decision support tools needed to better prepare for and mitigate the effects of drought.

In order to build a framework for integration of vulnerability and hazard information for planners and decision makers, the NIDIS implementation plan has five key elements:

- Develop the leadership and partnerships to ensure successful implementation of an integrated national drought monitoring and forecasting system at federal, state, and local levels;
- Foster, and support, a research environment that focuses on risk assessment, forecasting, and management;
- Create a drought “early warning system” capable of providing accurate, timely, and integrated information on drought conditions and associated risks at relevant spatial scales to facilitate proactive decisions;
- Provide interactive delivery systems including an internet portal, as part of the early warning information system, for easily comprehensible and standardized products (databases, forecasts, geographic information system (GIS)-based products, maps, etc.); and
- Provide a framework for increasing public awareness and educating those affected by drought on how and why droughts occur, and how they impact human and natural systems.

A NIDIS Program Office has been established in Boulder, Colorado, and the NIDIS web portal has been launched at http://www.drought.gov. Workshops and conferences in 2008 address: the state of the practice of drought early warning in the U.S.; information needs in the drought-stricken Southeast; reconciliation of wide-ranging Colorado River flow projections for the 21st century; and contributions of remote sensing to drought monitoring. An initial NIDIS pilot for design and implementation of a drought early warning system for the Colorado River basin will begin in the latter part of the year.

Contact Information: Jim Verdin, National Integrated Drought Information System, USGS, Boulder, CO, USA; Tel: 303-497-6930; Email: verdin@usgs.gov