

North American Drought Monitor Forum and Global Drought Assessment Workshop

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Hosted by the National Oceanic and Atmospheric Administration / National Climatic Data Center

Background

Drought is one of the costliest and most prevalent natural hazards on the Earth. In recent years within the U.S. alone, drought has resulted in average annual economic losses of \$6-8 Billion (US), and the worst droughts of the past 25 years led to losses exceeding \$40B (US). Drought and its impacts are not confined by any nation's borders. In North America, for example, severe drought during the past several years created concerns about shared water rights not only between states and interests within the U.S., but also between neighboring countries. Agriculture and farming interests were affected in all three countries (Canada, Mexico, and the U.S.), wildfire outbreaks forced the sharing of firefighting resources across borders, and municipalities were forced to levy water restrictions at various times in many parts of the continent. In the developing world, famine and human suffering are often the result of drought. As the demand for water resources has increased across the world due to population growth and economic expansion, naturally occurring droughts have created greater water crises as the already limited supply of this valuable resource is stretched thinner.

The growing threat of drought has prompted international collaboration on drought assessment, prediction, and mitigation on many continents:

- In 2001, government officials within the U.S., Mexico and Canada established a trilateral partnership to improve drought monitoring on the North American continent and provide decision makers with information essential to planning, mitigation and response activities. This was accomplished through the initiation of a North American Drought Monitor (NADM).
- Drought Monitoring Centers have been established on other continents, including eastern and southern Africa and southeastern Europe.
- Other international programs and agencies providing early warning for drought include: the World Meteorological Organization's (WMO's) World Weather Watch and World Climate Programme, the United Nations Food and Agriculture Organization's (FAO's) Global Information and Early Warning System (GIEWS) on food and agriculture, and the Famine Early Warning System (FEWS).
- U.S. and Canadian scientists are collaborating through the Group on Earth Observations (GEO) framework on three testbed and two drought studies related to drought indices and SWSI (Surface Water Supply Index) studies.
- The National Integrated Drought Information System (NIDIS), an internet portal system established for the U.S., is being expanded to provide web services for the NADM and data clearinghouse support for the broader international drought monitoring community.
- The World Meteorological Organization and the U.N. Convention to Combat Desertification were among the sponsors of an Inter-regional Workshop on Indices and Early Warning Systems for Drought (which was held in December 2009 in Lincoln, Nebraska) and are interested in establishing a drought portal with an international flavor.