SOCIO-ECONOMIC BENEFITS OF METEOROLOGICAL AND HYDROLOGICAL SERVICES

INVENTORY OF DECISION SUPPORT TOOLS

ITEM	DESCRIPTION
Sector	Agriculture and Natural Resources
Sub-sector	Drought
Tool Name	Drought Impact Reporter
Tool Description	The primary goal of the Drought Impact Reporter is to collect, quantify, and map reported drought impacts for the United States and provide access to the reports through interactive search tools.
Weather, Climate or Water inputs	U.S. Drought Monitor overlays
Specific weather, climate, water data required	Shapefiles for the D0, D1, D2, D3, and D4 layers of the U.S. Drought Monitor map
Spatial resolution	United States
Temporal resolution	Current week
Delivery methodology	Current week
Frequency of data requirement	Once a week
Other	
Detailed Tool Description	The Drought Impact Reporter was designed to be a comprehensive database of drought impact information. Users have access to the database through a color-coded map interface that allows the user to specify the impact category, time, information source, and location. The information for the impact report database comes from a variety of sources: on-line drought-related news stories and scientific publications, reviewed by NDMC staff; members of the public who visit the website and submit a drought-related impact for their region through the “Add A Drought Impact” link; members of the media; and members of government agencies such as National Oceanic and Atmospheric Administration (NOAA) and U.S. Department of Agriculture (USDA). Some of the initial funding for the tool came from a small seed grant through NOAA’s Office of Global Programs.
Spatial resolution	County-level
Temporal resolution	Daily
Delivery methodology	Web-based with GIS architecture supported by a MySQL relational database on the back end.
Frequency of provision	Real-time
Other	
Benefits of tool application	The National Drought Mitigation Center developed the Drought Impact Reporter in response to the need for a national drought impact database for the United States. Drought

	impacts are inherently hard to quantify, therefore there has not been a comprehensive and consistent methodology for quantifying drought impacts and economic losses in the United States. Improved information on drought impacts will help policy and decision makers identify what types of impacts are occurring and where. In addition, the Drought Impact Reporter will aid them in understanding the magnitude of the impacts by providing access to reported drought impacts. More precise estimates of drought impacts will aid the government in instituting programs before drought occurs, as opposed to incurring high expenditures on post-drought relief. In a little more than one year of operation, the database has over 4,000 drought impact reports. Approximately 75% of the reports come from the media, with the remaining 25% coming from either the public or government agencies. While agricultural reports make up approximately 25% of the total reports, reports in the environmental and social categories are each 10% of the total, providing good visibility for the less obvious impacts in these categories.
Possible future advances	The NDMC is working to build back the historical drought impacts for past events. This will take time. The NDMC also received some funding through USDA's Risk Management Agency to implement a second phase in the development of the tool, which is now in the planning stages. This second phase will improve the map delivery options and the functionality of the impacts database. The NDMC will also be placing a significant effort on outreach of the tool over the next several years.
Comments	The Drought Impact Reporter is used in the weekly assessment of drought conditions in the U.S. (i.e., the U.S. Drought Monitor) since impacts are one of the indicators used in this assessment, along with typical climate and water supply indicators and indices. The U.S. Drought Monitor is produced through a collaborative partnership with NOAA and the U.S. Department of Agriculture.
URL	http://droughtreporter.unl.edu