

2016 North American Drought, Wildfire, and Climate Services Forum

Goals and Objectives

Climate extremes take a significant toll on society in terms of economic impacts and loss of life. Drought is one of the costliest and most prevalent natural hazards, resulting in average annual economic losses of \$6-8 Billion in the U.S. and more than \$40B for the worst droughts of the past 25 years. 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 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, in November 2002, of a North American Drought Monitor (NADM). Each month, drought experts from these three countries produce the NADM and associated drought indicators using an array of analytical methods for determining the current state of drought across the continent. The NADM provides a comprehensive analysis of end-of-month drought conditions through the use of numerous objective drought indices and indicators along with input from contributors at the regional, provincial, and local levels.

The NADM is one of several areas of international collaboration between Mexico, the U.S., and Canada. Another is the North American Seasonal Fire Assessment and Outlook (NASFAO). The NASFAO provides wildland fire managers a concise look at the expected conditions that will drive wildland fire activity in the coming months and allows them to make strategic decisions about resources needs and distribution of capability. Each month, experts from the U.S., Canada and Mexico coordinate to prepare a three-month outlook of wildland fire potential across North America. The Outlook provides an assessment of the antecedent conditions that contribute to wildland fire and an outlook based on medium- and long-range weather and climate models coupled with historical fire occurrence.

The NADM and NASFAO are parts of a broader collaboration between the U.S., Canada, and Mexico. A North American Climate Services Partnership (NACSP) was formed in 2012 to facilitate the exchange of information, technology and management practices related to the development of climate information and the delivery of integrated climate services for North America. This partnership provides a platform for integrating existing core capabilities and products related to forecasting, modeling, and sectoral needs including drought and wildfires. In addition, the NACSP has developed regional pilot areas where prototype climate-related products and services related to continental-scale core capabilities can be tested at a local or regional scale. For example, the Rio Grande-Rio Bravo (RGB) regional pilot area can develop and deliver drought-based climate services in order to assist water resource managers, agricultural interests, and other constituents within the basin as they respond to future drought events and build capacity to respond to other climate extremes.

Biennial workshops focus on improving various aspects of the NADM to better meet the needs of users and decision makers at all levels of the public and private sector. This year's workshop seeks to build on

the linkages and synergies between the drought and fire teams within the context of NACSP climate services. The goals for 2016 North American Drought, Wildfire, and Climate Services Forum include:

1. Report on the status and progress of improving NADM- and NASFAO-related drought monitoring and fire monitoring and forecasting within each of the three member countries (U.S., Canada, and Mexico).
2. Address administrative, technical, scientific, and user issues related to the production of the NADM and NASFAO map and narrative products.
3. Explore emerging opportunities for strengthening the development, delivery and utilization of transboundary products