



NOAA Plays Critical Role in Helping Texans Prepare and Respond to Wildfires

By April 2011, Texas was in the midst of what may be its worst fire season in history. According to the Texas Forest Service, more than nine thousand fires have charred over two million acres, leaving hundreds of homes and business destroyed, lives lost, and causing officials to declare burn bans in more than 200 counties.

And yet it might have been worse. While it's impossible to fully anticipate a record-breaking fire season, NOAA scientists were able to warn state fire managers as early as last December of the forthcoming extreme drought conditions that would lead to high fire risk. This long-range forecast helped in the repositioning of fire-fighting assets and resources so that first responders could act quickly when the fire season did arrive to save lives and property.

Seasonal climate forecasts, including precipitation, temperature and drought outlooks from NOAA's Climate Prediction Center (CPC), as well as information from the agency's weather satellites are examples of the nation's decades-long investment in weather and climate services, an investment that allows decision-makers to plan for and respond to evolving threats quickly and efficiently.

NOAA weather forecasts focus on short-term conditions – from minutes to days – while climate forecasts are targeted at months, seasons, and beyond. NOAA climate services place weather and climate events in historical context, providing a scientific yardstick that helps risk assessors and insurance companies understand the scale of disasters, and communities prepare for future extreme events. By working closely with local and state officials in Texas and from across the country, NOAA can deliver these forecasts as part of a range of climate and weather services that meet the short- and long-term needs of the fire management community.

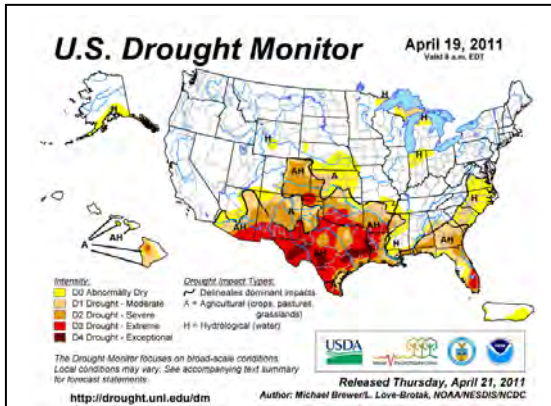
"NOAA's long-range climate forecasting capabilities are critical to our strategic planning, and will pay huge dividends to our agency in helping us prepare for this and future fire seasons."

-Tom Spencer,
Head of Predictive Services,
Texas Forest Service

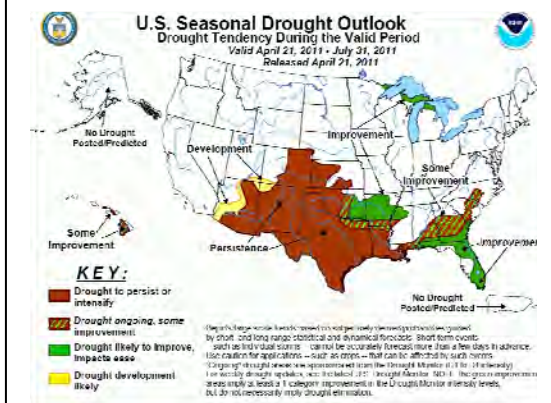
The winter seasonal forecasts proved to be spot on. Drought conditions emerged in many areas of the South as early as November. By February dry conditions stretched from Arizona to Florida. By the end of April, much of Texas was characterized by "exceptional drought," the most severe drought classification possible. The 7-month period from October 2010 to April 2011 was the driest in Texas history, and the NOAA-affiliated state climatologist in Texas called the resulting drought impacts the worst drought Texas has seen in nearly half a century.

Citizens, farmers, businesses and emergency managers follow how the drought continued to evolve via the U.S. Drought Monitor, hosted on the

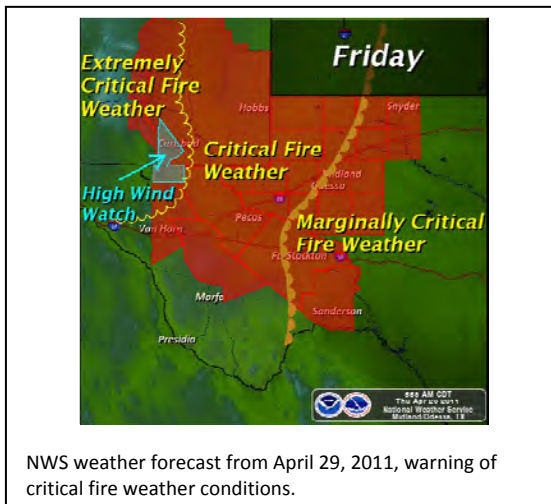




U.S. Drought Monitor, issued April 19, 2011. Source: <http://www.drought.unl.edu/dm/monitor.html>



U.S. Seasonal Drought Outlook, issued April 21, 2011. http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html



NWS weather forecast from April 29, 2011, warning of critical fire weather conditions.

For more information

- Long-Range Forecasts: www.cpc.noaa.gov
- Daily to Weekly Forecasts: www.weather.gov
- National Integrated Drought Information System: www.drought.gov
- State of the Climate-Wildfires: www.ncdc.noaa.gov/sotc/fire

NOAA-led National Integrated Drought Information System (www.drought.gov), a tool that tracks drought onset, scope, and intensity. Weekly updates show where the drought is worsening or improving, and the tool supports the ability of local and state managers to respond accordingly to changing conditions.

When the fires did erupt, NOAA deployed specially trained National Weather Service (NWS) meteorologists to the field to support real-time, on-the-ground forecasts to help first responders battle the fires. In addition, the 13 NWS forecast offices serving Texas continued to issue drought information statements and high wind warnings, and update short-term and long-term weather forecasts.

As the historic fire season progressed, the climate and weather experts in NOAA continued to provide critical and timely information and services that help first responders protect homes and businesses and save lives. At the same time, NOAA continues to work on building the next generation of tools and products that our fire management partners need – for instance, forecasts that can pinpoint the local onset of drought even further in advance. The outcome of these efforts will also help farmers, ranchers, and water managers, and require the coordination of many NOAA offices and close partnerships at federal, state, and local levels.

NOAA's Drought and Fire Products and Services

Long-Range (Seasonal)

- NOAA issues 3-month seasonal temperature, precipitation and drought outlooks
- NOAA convenes training workshop for state and local emergency response offices
- NOAA monitors the State of the Climate, putting climate events in historic context
- NOAA works with local, state and national partners in the agricultural, water and other sectors on using drought and fire information to reduce impacts and develop drought management plans.

Monthly

- NOAA issues 30-day temperature and precipitation outlooks

One - Two Weeks

- NOAA issues 8-14 day nationwide weather forecasts, including fire weather outlooks
- NOAA, USDA and the National Drought Mitigation Center issue the U.S. Drought Monitor

Daily to Weekly

- NOAA issues daily to 7-10 day nationwide weather forecasts, and special fire weather reports
- NOAA meteorologists are deployed to fires and operation centers to support real-time forecasts
- NOAA conducts briefings with media and emergency response personnel