National Wildland Significant Fire Potential Outlook



National Interagency Fire Center Predictive Services

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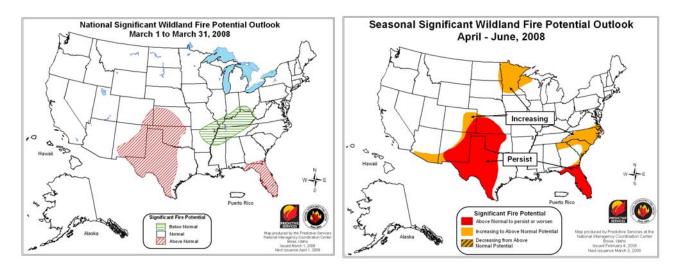
Next Issue: April 1, 2008



Wildland Fire Outlook – March 2008 through June 2008

Above normal significant fire potential is expected across portions of the Southwest, Rocky Mountain, and Southern Areas in March. Below normal significant fire potential is expected west of the Appalachian Mountains extending southwestward into northeastern Arkansas. For the April through June period, significant fire potential is forecast to persist over the areas mentioned above and increase across portions of southern Arizona, eastern Colorado, Minnesota and northern Wisconsin, North and South Carolina, and Georgia. The primary factors influencing fire potential this outlook period are:

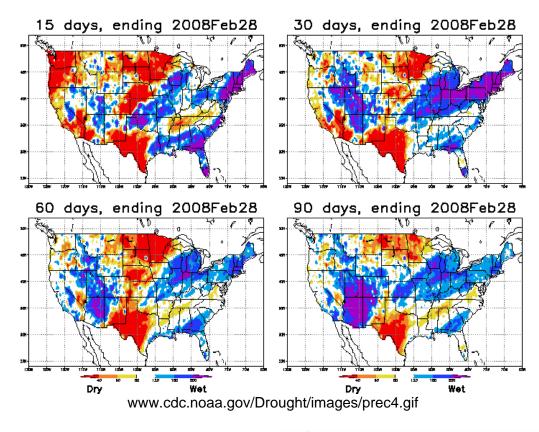
- The combination of La Niña, drought and an expected warmer/drier than normal spring across much of the southeastern tier of states is increasing the likelihood of an active fire season during March, especially in Texas, western Oklahoma, Florida and then later this spring in North Carolina and portions of South Carolina and Georgia.
- Rapid fire spread, spotting and greater difficulty of control due to very dry conditions, heavy fine fuel loadings, and the passage of dry cold fronts are expected across portions of Texas, the Southern Plains, and eastern New Mexico this spring.
- Significant fire potential will likely increase in Minnesota and northern Wisconsin as below normal snow cover melts this spring and exposes fine surface fuels prior to green up.

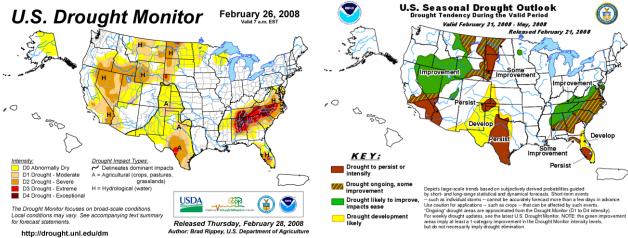


Note: Significant fire potential is defined as the likelihood that a wildland fire event will require mobilization of additional resources from outside the area in which the fire situation originates.

Past Weather and Drought

In February, drier than normal weather persisted over Texas, New Mexico and the western Great Lakes as well as much of the Southeast. Some areas in Texas have seen their driest September through mid-February on record. After a dry January, very wet conditions have developed over much of the central and northeastern U.S. Most of the West continued to see above normal precipitation in February with heavier than usual mountain snow packs, especially in the Pacific Northwest and Four Corners region. Alaska has been relatively dry over the central and eastern portions of the state. February temperatures were generally cooler than normal in the West and Northern Plains with warmer than normal readings over the Southern Plains, Southeast and East. The latest drought conditions and outlook (below) show persisting or developing drought in portions of the Southwest, Southern Plains and Southeast.

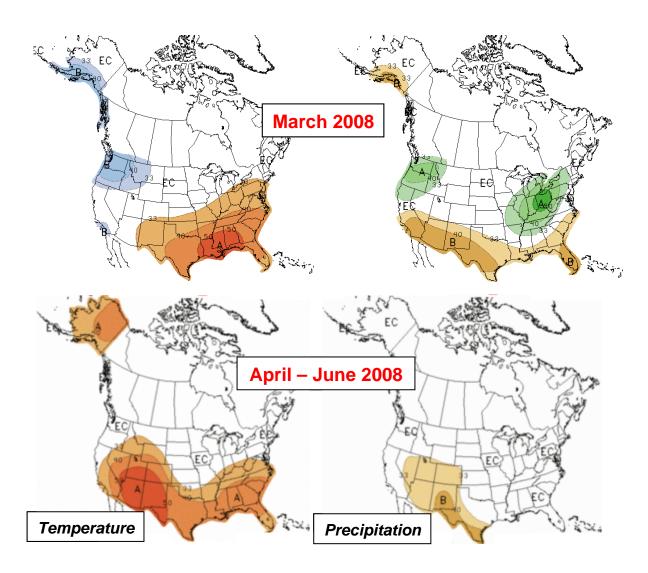




www.drought.unl.edu/dm/monitor.html

Weather and Climate Outlooks

According to the National Weather Service (NWS) Climate Prediction Center, our strong La Niña is expected to continue through the spring and possibly into the summer. The climate outlooks below reflect the usual impacts of La Niña and the overall climate trend toward warmer temperatures. March is expected to feature warmth in the Southeast and wet weather in the Northwest, the Mississippi River Valley and eastern Great Lakes. Dry conditions are expected over the southern tier of states. The April through June outlook calls for warm and dry weather to shift northward into the Great Basin with above normal temperatures for Alaska. This could lead to earlier than normal snow melt in these areas.



A = Above normal, B = Below normal, N = Normal, EC = Equal Chances of Above/Below/Normal. www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/page2.gif

Area Discussions

<u>Alaska:</u> Alaska is currently out of fire season and normal significant fire potential is projected through the extended outlook period. Snow pack is currently running as much as 50% below normal across portions of northeast Alaska. Elsewhere, snow pack is normal to slightly above normal. The U.S. Drought Monitor has classified eastern Alaska as abnormally dry. These factors are not expected to result in much, if any, fire activity during March. At this point, confidence is too low to forecast anything but normal fire potential during the extended outlook period.

<u>Southwest:</u> Above normal potential is expected across eastern New Mexico, all of western Texas, and portions of southern New Mexico. Normal fire potential is expected elsewhere across the Area during March. The area of above normal potential will gradually expand westward into parts of central New Mexico and much of southwestern New Mexico and southern Arizona during April through June. This outlook is based primarily on a climate outlook calling for a drier and milder weather pattern in these areas through the extended outlook period. Periodic active weather patterns through March and April across the northwestern/central sections of the Area will bring scattered periods of precipitation. This pattern will lead to occasional down-slope wind events and will combine with abundant fine fuels to sustain or increase fire potential.

<u>Northern Rockies:</u> The Northern Rockies Area is currently out of fire season and has forecast normal significant fire potential for March and the extended forecast period. Snow pack and precipitation is near to slightly above normal this winter across northern Idaho and western Montana providing some short term drought relief west of the Divide. A dry pattern has persisted this winter from the east slopes of the Divide to the Dakotas. The timing of green up is expected to be normal this spring, but earlier curing is possible, especially east of the Divide, if dry conditions continue. Snow pack will be monitored closely this spring as an early snow melt is typically associated with more severe summer fire seasons.

<u>Great Basin:</u> Normal significant fire potential is expected for the Great Basin during March and the extended outlook period. Mountain snowpack amounts across the Area range from 100 to 130 percent of normal. The Great Basin is on track for continued wet conditions this March, especially in the northern sections. However, longer term La Niña conditions may begin to impact southern Utah. A rapid transition to spring warming could accelerate snow melt and commence drying of fuels early, similar to last year. The wet winter pattern will foster a robust green up, however carryover fine fuels in the lower elevations are mostly well-compacted from several heavy snows this winter. Severe drought conditions continue over much of the Great Basin, however conditions are forecast to improve across the entire Area (except for southern Nevada) this spring.

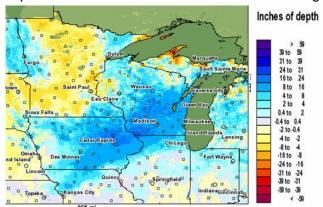
<u>Northwest:</u> The Northwest Area is out of fire season and the threat of large wildfires is expected to remain low through the extended outlook period due to continued cool, wet weather. Overall, winter precipitation is running near to slightly above average across the Area with snow water content levels running well above normal across most of the Cascades. Climate outlooks call primarily for wetter than normal conditions across the Area through March, which should help alleviate existing drought conditions across the southeastern portion of the Area. The period from March through May is not typically associated with large wildfires across the Area. Given the current conditions and long term climate outlook, fire potential is expected to be normal through June.

<u>California:</u> Normal significant fire potential is expected across California during March and the extended outlook period. February was generally drier than average across most of the State. Mountain precipitation in the central Sierra is running near average with snow water content slightly above normal. Surface fuels remain generally snow covered above 4000-4500' in early March and there are presently no significant fuel or fire danger concerns. Any windy and dry periods lasting three days or more could temporarily lead to elevated fire danger at lower elevations.

Rocky Mountain: Above normal significant fire potential is forecast for southeastern Colorado and western Kansas during March, with human caused large fires being the main concern. This area of above normal fire potential is expected to expand north and eastward during the extended outlook period. Fine fuel loading is extensive across eastern Colorado and western Kansas from 2006/07 record snow pack while drought conditions have intensified. The long lead climate outlooks call for below average precipitation and warmer than average temperatures over Colorado. Wind events east of the divide have been frequent this winter, especially across eastern Colorado, southeast Wyoming and the plains of Kansas and Nebraska.

Eastern Area: Normal significant fire potential is forecast for the majority of the Area in March; however a small band of below normal fire potential is expected in southern Ohio, Indiana, Illinois, and Missouri. Significant fire potential is expected to develop in Minnesota and northern Wisconsin during

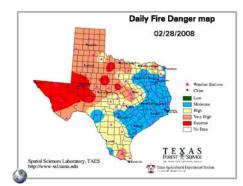
the April through June time period. Above normal snowfall occurred across the Upper Mississippi Valley during December. Since then, snowfall across northern and central Minnesota, northwest Wisconsin, and the western portion of the Upper Peninsula of Michigan diminished significantly. Currently, snow depth is well below average across much of northern Minnesota (see image). If early spring rainfall is less than normal across these areas, significant fire potential will likely increase once surface fuels are exposed this spring. Insect infestations with associated defoliation mortality across much of the Great Lake States may contribute to large fire growth.



Departure from Average Snow Depth as of February 29. 2008

<u>Southern Area:</u> Above normal significant fire potential is expected in central Texas, western Oklahoma, Florida and portions of southern Georgia during March. Above normal significant fire potential is expected to develop over North Carolina and portions of South Carolina and northern

Georgia during April through June. Drought conditions across central and western Texas range from abnormally dry to extreme with the driest conditions over the southwestern portion of the state. Fire danger values in western Texas (see image) remain well above normal and are expected to persist. Large fire growth will remain a significant threat during March with cold frontal activity producing low relative humidity and strong, gusty winds. In the Appalachian and Mid-Atlantic areas, rain activity has provided some short and long term drought relief. KBDI values have been reduced across the Coastal Plain and water table levels have increased. Frequent rain and snow events



expected in March will help mitigate fire danger conditions. In Florida, persistent and developing drought will gradually increase initial attack and large fire activity through the extended outlook period. Fire activity in the Southern Area normally reaches its peak during May through June.

Note: This national outlook and some geographic area assessments are currently available at the NICC and GACC websites. The GACC websites can also be accessed though the NICC webpage at: http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm

Historic and Predicted Wildland Fires and Acres Burned Data

Based on reported data so far this year, nationally there were 98% of the average numbers of fires, burning approximately 186% of the average acres. The following table displays historical, current and predicted information pertaining to fire statistics.

FEB 28, 2008 Reported Year-To-Date		Average reported for MAR	Projection for MAR 31 YTD+Forecast	Average Reported YTD MAR 31	Historical Low YTD MAR 31	Year of Low	Historical High YTD MAR 31	Year of High
ALASKA								
Fires	0	5	3	5	0	many	44	2003
Acres	0	29	29	72	0	many	716	2003
NORTHWEST								
Fires	2	16	18	19	0	1999	78	2005
Acres	3	87	90	139	0	1999	575	2001
NORTH OPS								
Fires	3	22	25	34	0	many	99	2003
Acres	0	301	301	789	0	many	2,799	2006
SOUTH OPS								
Fires	123	77	200	184	10	2005	439	2002
Acres	62	2,242	2,304	4,211	0	2005	11,105	2006
NORTHERN ROCKIES								
Fires	2	17	19	17	0	many	46	2002
Acres	600	490	1,090	598	0	many	1,573	2003
EAST BASIN								
Fires	3	10	13	11	3	2005	36	2002
Acres	5	49	64	50	0	many	101	2006
WEST BASIN								
Fires	0	4	4	6	0	many	35	2007
Acres	0	74	147	87	0	many	677	2007
SOUTHWEST								
Fires	100	184	284	274	2	1998	577	2000
Acres	32,815	33,013	98,841	49,851	585	2004	220,893	2006
ROCKY MOUNTAIN								
Fires	20	51	97	64	0	many	143	2006
Acres	6,566	8,176	20,465	12,050	0	many	92,433	2006
EASTERN AREA								
Fires	99	944	1,043	1,057	140	1999	3,251	2006
Acres	607	13,942	10,366	16,508	2,582	1999	48,067	2005
SOUTHERN AREA								
Fires	5,492	7,074	13,981	12,168	3,804	1998	17,087	2000
Acres	214,336	208,092	630,520	295,202	39,070	1998	1,483,905	2006
NATIONALLY								
Fires	5,844	8,405	15,687	13,840	4,128	1998	20,942	2006
Acres	254,994	266,493	764,216	379,556	56,992	1998	1,849,336	2006

The information above was obtained *primarily* from Incident Management Situation Reports from 1998-2007, however some inaccuracies and inconsistencies have been corrected. Therefore, the data may not reflect other historic records and should *not* be considered for official statistical purposes.

Prepared March 3, 2008 by the National Interagency Coordination Center - Predictive Services Staff