# **National Wildland Significant Fire Potential Outlook**



# National Interagency Fire Center Predictive Services

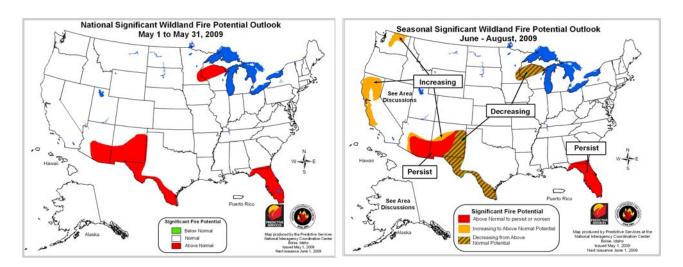
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## Wildland Fire Outlook - May 2009 through August 2009

**During May, above normal significant fire potential is expected across portions of the Southwest, Southern and Eastern Areas.** For June through August, significant fire potential is forecast to increase or persist across parts of California, the Northwest, Southwest, and Southern, Areas. Significant fire potential is expected to decrease in western Texas, eastern New Mexico, and the Great Lakes area. Below normal significant fire potential is expected across portions of the Western Great Basin and Alaska for the June through August period. The primary factors influencing fire potential this outlook period are:

- Drought conditions continue to persist or intensify over portions of the West, especially in California, Nevada, and portions of Texas and New Mexico.
- Wet fall conditions and above normal snowpack in Alaska are expected to limit fire potential. Below normal snowpack in north-central Washington and northern California along with warmer and drier than normal forecasted conditions will lead to an early snowmelt and rapid drying of fuels.
- Abundant new and carryover fine fuels across southern and eastern portions of the Southwest are
  expected to lead to an active grassland fire season, particularly during May. A robust monsoon in the
  Southwest should help mitigate fire potential by early July.
- Continued moisture deficits in Nevada are expected to limit fine fuel production and fire spread.
- Dry spring conditions in northern California are expected to cause annual grasses to cure 3 to 5 weeks early.
- An above normal snow pack should delay snow melt and fire season onset over higher elevation areas across portions of the northern Rocky Mountains, especially in northern Idaho and Montana.

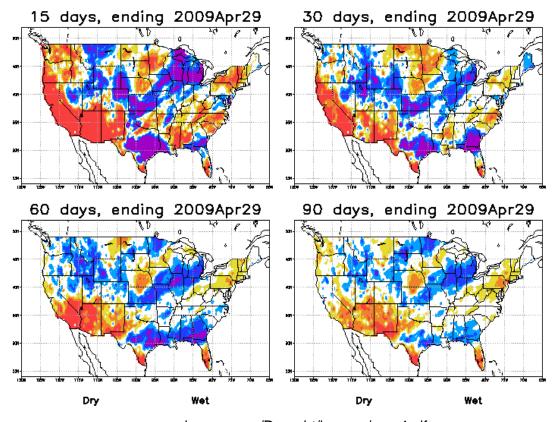


Note: Significant fire potential is defined as the likelihood that a wildland fire event will require mobilization of additional resources from outside the area in which the fire situation originates.

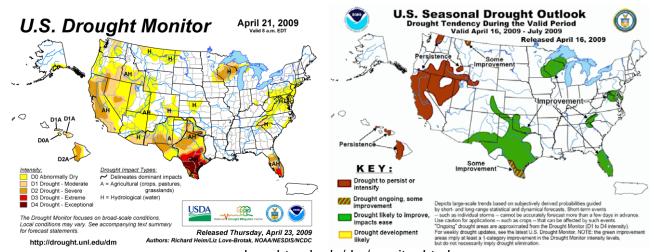
## **Past Weather and Drought**

April was drier than normal over the West Coast, Southwest, northern Plains and many locations east of the Mississippi. The lower-right graphic below shows the greatest dryness extending back for the last 90 days across the Southwest, south Texas, Florida, and the Northeast. Drought conditions persist over portions of the West. Compared to last year, drought severity has intensified over much of California and Texas, and decreased across the northern Rocky Mountains, Great Plains, and Alaska.

After a cool start, April turned quite warm in Alaska. It has also been a fairly dry month across the eastern and central portions of the state, with many stations receiving less than half the average monthly precipitation.



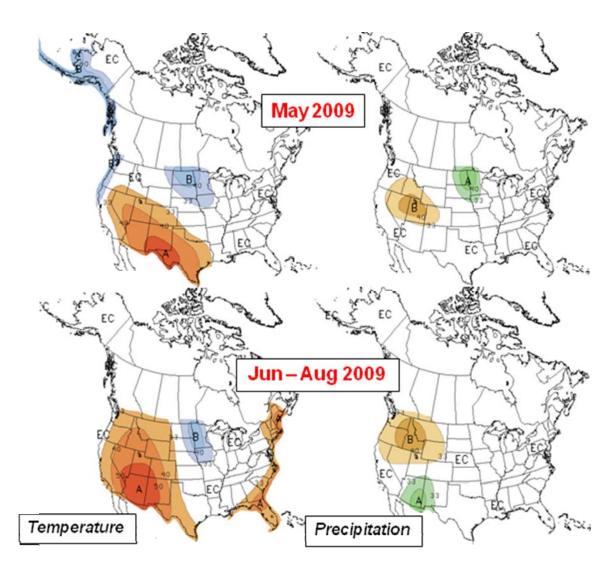
www.cdc.noaa.gov/Drought/images/prec4.gif



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

### **Weather and Climate Outlooks**

A weak La Niña is forecast to continue and weaken into summer. During the summer, a typical fading La Niña tends to enhance summer dryness across a region stretching from Northern California northeastward to the Montana Rockies. The Climate Prediction Center (CPC) model guidance as well as typical fading La Niña conditions tend to favor a robust monsoon in the Southwest.



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**

Alaska: Significant fire potential is projected to be normal for May and then below normal for much of the Area during June through August. The combination of wet fall conditions, above normal winter snow pack and anticipated cooler and wetter than normal conditions this spring and early summer is expected to create below normal significant fire potential across much of the state through August. Canadian drought code values were low across the eastern interior last fall due to wet conditions. This was followed by good snow amounts during the winter across most of the state. This has mitigated the abnormally dry drought conditions that were in place at this time last year. Forecasts for May through August call for near to below average temperatures and near average precipitation across portions of western and southern Alaska through the outlook period. In areas of bug-killed timber, especially on the southwestern Kenai Peninsula and portions of the western Cook Inlet, there is an elevated risk of large fires. Historically, fire seasons following La Niña conditions tend to burn less than the average number of acres.

<u>Southwest:</u> Above normal significant fire potential currently in place across the southeast half of the Area will shift north and west to central and southeast Arizona and the southwest quarter of New Mexico during late May to early June. This will occur as spring winds gradually give way to hotter and drier conditions across much of the Area. At the same time, moisture events are expected to intrude into west Texas and eastern New Mexico, which will begin to moderate fire potential in those areas. Significant fire potential will moderate across the majority of the region by early to mid-July with the onset of a robust monsoon. Currently, fine fuels across central and southeast Arizona, southern and eastern New Mexico, and west Texas are cured and have above normal loading and continuity. Green up is expected across portions of this area in May, which will help moderate fire potential. Fine herbaceous fuels needed to support large fire activity in the southwest Arizona deserts do not exist. The combination of adequate moisture, cool temperatures, and a delayed green up should keep fire potential normal across much of northern Arizona and northwest New Mexico (much of the timber regime in the Southwest Area).

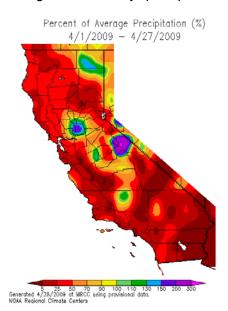
<u>Northern Rockies:</u> Normal significant fire potential is expected across the Area during the forecast period. Winter snow amounts coming into the 2009 fire season are averaging 80-110 percent of normal. June is a critical month in the Northern Rockies because of the timing of snowmelt and the curing of fine fuels. Increased chances of above normal temperatures and below normal precipitation are expected across Idaho and western Montana later this summer. Unless rapid snow melt occurs during May or early June, allowing fuels to dry earlier than expected and the Area experiences unusually active lightning, normal significant fire potential is expected.

Great Basin: Significant fire potential is expected to be normal across the Area for May and below normal across most of Nevada during June through August. Snowpack at the end of April were near normal across most of the Great Basin. Drought is expected to persist or intensify across much of Nevada and southern Idaho this summer. Active fire years in Nevada typically have well above normal winter rainfall, abundant grass and an above average snowpack, none of which are present so far this year. Consequently, Nevada is expected to have a below average fire season in terms of total acres burned. Most areas in the Eastern Great Basin received adequate winter precipitation except for portions of the southern Utah mountains. Bug kill remains a significant problem, especially in northern Utah, Idaho and western Wyoming. Heavy dead-and-down fuel loadings in combination with below average precipitation in the southern Utah mountains, may create conditions more favorable to lightning ignitions. Unless there is a premature loss of snowpack followed by a very hot summer, the Eastern Great Basin should see normal significant fire potential this year.

Northwest: Normal significant fire potential is forecast across most of the Area through August. The exception will be in north-central Washington east of the Cascades where significant fire potential is expected to increase to above normal levels during June through August. The Northwest experienced a cooler than normal winter, however April precipitation was below average across Oregon and the lowlands of central Washington. The mountainous areas in both Washington and Oregon currently have near to above normal snow pack measurements, except some coastal and southeast mountain areas in Oregon and in north/central Washington where snow pack and snow water content amounts are running 70-80 percent of normal. The first half of May is expected to be cool and wetter than normal followed by a warm and dry summer. Snow melt timing will likely be normal this year for most areas, except for north/central Washington were low snow accumulations will likely melt early. Significant fire potential is expected to increase to above normal levels in north/central Washington by mid-late June as fuels cure and dry early in the fire season. Elsewhere, some spikes in large fire activity are expected during the summer fire season, especially during dry lightning events.

<u>California:</u> Normal significant fire potential is forecast for the Area during May. However, most of northern California and portions of the central coast and adjacent interior areas in southern California will see increasing significant fire potential during June through August. Monthly precipitation

remained below average for most areas during April (see image). In northern California, long-term drought and dry spring conditions are expected to cause annual grasses to cure 3 to 5 weeks early. Herbaceous fuels are greening up early and should peak at below normal levels. One thousand hour fuel moistures are also drier than average this time of year at all elevations due to below normal snowpack and winter precipitation. These factors, along with early snow melt, are expected to result in an early onset to fire season in the northern half of the state. Fire restrictions may be enacted earlier than usual as well. In southern California, fuels are drier than normal across the central coastal and adjacent interior areas. In the desert areas grass growth is near average this spring and a normal onset to fire season is expected. Across the state, long-term drought is expected to persist or intensify through mid-summer. Insect infestations and associated tree damage continue to present problems across many forested The spring prescribed burning season in northern California may be locally shortened due to dry conditions.



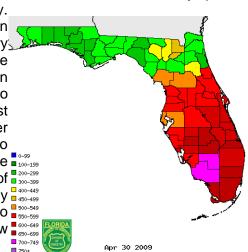
Rocky Mountain: Normal significant fire potential is forecast through August. Above normal precipitation during April has helped to alleviate early spring fire potential concerns across eastern Colorado and Kansas. Elsewhere across the Area, moisture has been near normal during the winter and early spring in terms of precipitation and higher elevation snowpack. This has retarded the start of fire season in the higher elevation areas. As fuels begin to cure from south to north across the Area during the summer, there are still fire potential concerns. Abundant fine dead fuels remain in eastern Colorado below 9,000 feet elevation from an extensive snowfall in 2007. These fine dead fuels, in combination with long term drought, may result in brief periods of above normal fire potential in June until moisture from the southwest monsoon arrives in July. Drier than average conditions in the lower elevations of southwest Colorado during early spring may also result in brief periods of elevated fire potential in June. Most large fire potential is expected to shift into northwest Colorado, Wyoming and the Black Hills during July and August, which is normal. Climate outlooks call for warmer than normal temperatures during the outlook period with dry early summer conditions followed by a robust monsoon.

<u>Eastern Area:</u> Above normal significant fire potential is forecast for northern Wisconsin and southeast Minnesota in May. During June through August, significant fire potential will decrease in these areas as green up progresses. Moderate to severe drought persists across northern

Wisconsin, southeast Minnesota, and a portion of the western Upper Peninsula of Michigan. Any warm, dry weather patterns that occur during May will likely result in above normal significant fire potential. Drought is expected to continue to improve across these areas through the summer. Normal summertime thundershowers occurring across the Great Lakes through late spring and early summer months should provide adequate rainfall to mitigate fire potential. The remainder of the Eastern Area should experience normal fire potential through the rest of the spring and the summer. However, short periods of elevated fire potential are expected whenever above normal temperatures and drier than normal conditions persist.

<u>Southern Area:</u> In May, above normal significant fire potential is forecast across much of Florida and portions of southern and western Texas. During June through August, significant fire potential is expected to persist across Florida into June, and decrease across west Texas with the onset of the monsoon and the green up of herbaceous fuels. Recent fire activity in the Southern Appalachian Mountains, western Carolinas, and coastal South Carolina was the result of a dry pattern

accompanied by an extended period of low relative humidity. Green up across these areas should help mitigate fire activity in the coming months. Portions of southern Texas are very dry and have not had significant rainfall for over four months. Above average fire activity is expected to continue until monsoon moisture arrives and dampens fuels in early July. Severe to extreme drought and critically low fuel moisture levels exist across the southern half of Florida (see image at right). Drier than average precipitation patterns are forecast to persist into early May and significant fire potential will remain well above average. Days since significant rainfall along the east coast of loosed at the previous record set in 1985 by the sound of the same of the sound of the same of the sound of the same of



Keetch Byram Drought Index (KBDI)

#### Historic and Predicted Wildland Fires and Acres Burned Data

Based on data reported in 2009, nationally there were 131% of the average numbers of fires burning approximately 141% of the average acres. The following table displays 10 year historical, current and predicted information pertaining to fire statistics.

APRIL 30, 2009 Reported Year-To-Date		Average reported for MAY	Projection for May YTD+Forecast	Average Reported YTD MAY 31	Historical Low YTD MAY 31	Year of Low	Historical High YTD MAY 31	Year of High
ALASKA								
Fires	17	132	149	156	90	2004	259	2002
Acres	20	70,746	56,616	42,612	223	2004	355,363	2002
NORTHWEST								
Fires	46	154	200	215	66	2003	385	2004
Acres	123	1,393	1,098	2,057	91	2003	6,991	2001
NORTH OPS								
Fires	173	305	539	417	218	2007	724	1997
Acres	559	2,572	2,874	4,182	100	2005	9,719	2001
SOUTH OPS								
Fires	377	561	1,050	879	131	2006	1,560	2007
Acres	1,614	7,484	8,349	11,959	1,836	2003	34,779	2004
NORTHERN ROCKIES								
Fires	84	342	323	626	369	2006	1,050	2004
Acres	15,500	8,575	25,790	16,821	5,244	1999	27,960	2000
EAST BASIN								
Fires	42	82	124	113	46	2005	188	2006
Acres	411	2,846	2,403	3,822	641	2003	13,806	1999
WEST BASIN								
Fires	24	55	100	69	36	2005	130	2007
Acres	231	3,806	2,515	4,289	106	2003	18,036	1999
SOUTHWEST								
Fires	730	594	1,443	1,208	723	2004	1,910	2006
Acres	152,012	58,215	224,781	151,566	18,401	2001	387,424	2006
ROCKY MOUNTAIN								
Fires	248	221	491	441	197	2005	758	2000
Acres	62,887	5,812	77,416	36,823	2,665	2003	150,308	2006
EASTERN AREA								
Fires	7,130	2,964	10,390	8,016	5,758	2004	10,327	1999
Acres	65,136	31,107	99,353	92,656	46,292	2008	168,614	2003
SOUTHERN AREA								
Fires	22,983	3,206	27,150	20,853	9,889	2003	27,884	2000
Acres	787,412	151,257	1,029,423	667,015	172,627	2003	1,889,359	2006
NATIONALLY								
Fires	31,854	8,614	41,959	32,993	21,349	2003	41,845	2006
Acres	1,085,905	343,813	1,530,620	1,033,803	370,640	2003	2,556,162	2006

Prepared May 1, 2009 by the National Interagency Coordination Center Predictive Services Staff. 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 <u>not</u> be considered for official statistical purposes.

**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: <a href="http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm">http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm</a>