National Wildland Significant Fire Potential Outlook



National Interagency Fire Center Predictive Services

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Wildland Fire Outlook – September 2008 through December 2008

During September, above normal significant fire potential is expected across portions of California, the western Great Lakes, and from the central Appalachians to New Jersey. Below normal significant fire potential is forecast for portions of the Northwest, much of the Southeast, Alaska, and Puerto Rico. For October through December, significant fire potential is forecast to persist in the central Appalachians and decrease in California, the western Great Lakes, and the Northeast. The primary factors influencing fire potential this outlook period are:

- California has been extremely dry this year and below normal rainfall is expected to continue through September over much of the state. Dry north to northeast (offshore) wind events become more frequent in September and fire potential is expected to spike during these periods.
- Fire danger indices are above normal in the western Great Lakes region due to below normal summer rainfall. Above normal significant fire potential is expected through the early fall.



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

During August, a number of low pressure troughs brought significant rainfall to the Northwest, northern Idaho and northwest Montana. A low pressure system dropping down along the east slopes of the Rockies produced heavy rains over southeast Wyoming, eastern Colorado as well as Texas and Oklahoma. Tropical Storm Fay brought very heavy rainfall to much of the Southeast. California and most of the rest of the country was drier than normal. August has been warmer than normal west of the Rockies with generally cooler than normal east of the Rockies. Alaska was cool and wet for the first half of the month with drier and more seasonal temperatures the latter half of the month. The latest Drought Monitor and Outlook products are shown below.



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



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

Weather and Climate Outlooks

The National Weather Service (NWS) Climate Prediction Center, predicts neutral El Niño / La Niña conditions through the end of the year. The monthly outlook for September calls for warmer than normal weather across the Southwest and cooler than normal conditions in the central states. It should be dry in the Northwest and northern California with wetter than normal weather in the Southeast due to increased tropical activity. The October through December period favors warmer than normal temperatures over the southwest, central and northeastern sections of the country and above normal precipitation over the Gulf Coast and Northeast states.



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> Below normal significant fire potential is projected across Alaska during September with normal significant fire potential expected the remainder of the outlook period. This summer was the sixth wettest August on record, and little or no fire activity is expected for the rest of 2008.

Southwest: Normal significant fire potential is expected across the Southwest Area through September and the extended outlook period. September and the fall will feature frequent low pressure troughs moving across the West causing periods of dry, windy weather in the Southwest. A very wet monsoon season has produced normal to above normal fuel moistures with fine herbaceous fuels remaining predominantly green. Even with periodic wind events forecast this fall, there is high confidence that overall fire potential will remain near normal through the end of the year.

Northern Rockies: Normal significant fire potential is expected for the outlook period. August brought wetting rains and cooler temperatures to the Idaho Panhandle, central Idaho, and northwest Montana. The projected weather pattern continues to look favorable with increasing chances for passing storm systems. Dry cold fronts and associated wind events become more common in early fall and could increase the risk of large grass fires. However, thunderstorm activity and lightning ignitions will decrease dramatically by mid September

<u>Great Basin:</u> Significant fire potential is expected to be normal across the Area through December. The Great Basin fire season typically wanes during September due to shorter and cooler days, better nighttime humidity recovery and less lightning. Precipitation at the end of August in Utah and Idaho has diminished fire potential in those areas. Western Nevada remains quite dry but typically sees few if any large fires during September. Periodic dry cold fronts could bring brief periods of elevated fire potential.

Northwest: Normal to below normal significant fire potential is expected through December. Several wetting rain events over the region reduced large fire potential significantly in mid to late August, particularly in western Washington and northwest Oregon. The latest greeness imagery suggests vegetative moisture is at or above late August normals. Dry, but not unusually warm, weather is expected across most of the region through September, with normal conditions anticipated thereafter. Coastal areas may see slightly cooler than normal conditions. Fire potential from lightning ignitions historically drops dramatically in September, and this fall appears no different as the projected weather pattern does not look conducive for large lightning outbreaks.

California: Above normal significant fire potential is projected for most of northern California through September. The Sierra foothills and central coastal mountains and valleys of southern California will also experience above normal significant fire potential in September with all areas seeing decreasing fire potential during October through December. Elsewhere significant fire potential will be normal. August was very dry across most of the state (see image) and marked the eighth month in a row of below normal rainfall in northern California. A northeast/offshore wind pattern will dominate northern California for increased fire potential during the first week of September. September normally sees increased northeast (offshore) winds events in the north, particularly during the later part of the month. Live and dead fuels remain critically dry across most of the state. In southern California, Energy Release Component (ERC) values were above the 90th percentile in many areas with the southern Sierra foothills at record levels during late August.



5 25 50 70 90 100 110 130 150 200 300 Generated 8/26/2008 at WRCC using provisional data. NDAA Regional Climate Centers **Rocky Mountain:** Normal significant fire potential is expected across the Area through December. Lack of significant precipitation across Wyoming and northwest Colorado throughout the summer caused fuels to dry to critical levels, however a late August/early September storm system provided widespread rainfall, which improved fuel moistures and lowered fire danger indices. Climate outlooks call for near to below normal temperatures and near normal precipitation for the outlook period. Significant fire potential may increase at times during normal fall frontal passages and associated wind events, especially if the abundant grasses across northeast Wyoming, South Dakota and eastern Colorado become cured. Overall, however, fire activity is anticipated to be normal.

Eastern Area: Normal to above normal significant fire potential is expected for September, with most areas becoming normal for the extended outlook period. Much of the north-central and western Great Lakes, and northwest Iowa, received much below normal precipitation over the last 90 days. Fire danger indices should remain above normal over much of this area through the early fall. Decreasing daylight hours, improved overnight humidity recoveries, and cooler temperatures overall should decrease fire potential in most areas later this fall.

Southern Area: Significant fire potential will be normal to below normal across the Area. Rainfall from Tropical Storm Fay and Hurricane Gustav brought widespread rainfall to much of the Southeast. This moisture, along with possibly more storms over the next few weeks, will keep significant fire potential low across the coastal states.

Historic and Predicted Wildland Fires and Acres Burned Data

Based on reported data so far this year, nationally there were 104% of the average numbers of fires, burning approximately 81% of the average acres. The following table displays historical, current and predicted information pertaining to fire statistics.

AUG 31, 2008 Reported Year-To-Date		Average reported for SEP	Projection for September YTD+Forecast	Average Reported YTD SEP 30	Historical Low YTD SEP 30	Year of Low	Historical High YTD SEP 30	Year of High
ALASKA								
Fires	324	17	335	464	308	2006	676	2004
Acres	56,553	99,887	66,542	1,641,214	121,950	1998	6,298,136	2004
NORTHWEST								
Fires	2,572	567	2,941	3,615	2,623	2005	4,239	2001
Acres	192,114	56,163	214,579	501,057	111,696	1999	1,061,373	2002
NORTH OPS								
Fires	3,826	655	4,580	3,585	2,627	2005	4,390	2001
Acres	840,847	53,178	931,250	150,209	31,757	1998	346,604	1999
SOUTH OPS								
Fires	3,792	601	4,513	3,665	3,046	2006	4,350	2007
Acres	365,502	46,036	420,745	184,192	48,263	2003	425,005	1999
NORTHERN ROCKIES								
Fires	2,428	399	2,707	3,090	1,895	2005	4,244	2000
Acres	214,486	93,054	270,318	504,778	37,097	2004	1,348,156	2000
EAST BASIN								
Fires	1,183	303	1,395	2,382	1,579	1998	3,009	2001
Acres	120,989	93,332	162,988	779,173	88,088	2004	2,393,631	2007
WEST BASIN								
Fires	392	94	448	905	707	1998	1,192	2006
Acres	66,404	37,936	79,682	625,517	16,531	2003	1,602,162	1999
SOUTHWEST								
Fires	2,497	186	2,627	4,189	3,082	2007	5,594	2000
Acres	461,122	5,688	462,571	402,449	59,390	2001	973,624	2002
ROCKY MOUNTAIN								
Fires	1,800	274	2,047	2,667	1,806	2004	3,984	2006
Acres	213,287	35,680	241,831	205,804	20,811	1998	650,971	2002
EASTERN AREA								
Fires	8,667	1,066	9,733	12,387	10,877	2000	16,194	1999
Acres	46,589	4,984	53,069	116,433	61,614	2001	198,607	2007
SOUTHERN AREA								
Fires	36,926	2,041	39,375	30,844	12,350	2003	43,014	2000
Acres	2,038,493	41,090	2,096,018	891,772	230,523	2003	2,433,532	2006
NATIONALLY								
Fires	64,407	6,204	70,701	67,792	49,295	2003	86,035	2006
Acres	4,616,386	567,029	4,999,594	6,002,598	2,171,825	1998	9,189,781	2006

Prepared September 2, 2008 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: http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm