

National Wildland Significant Fire Potential Outlook



National Interagency Fire Center
Predictive Services



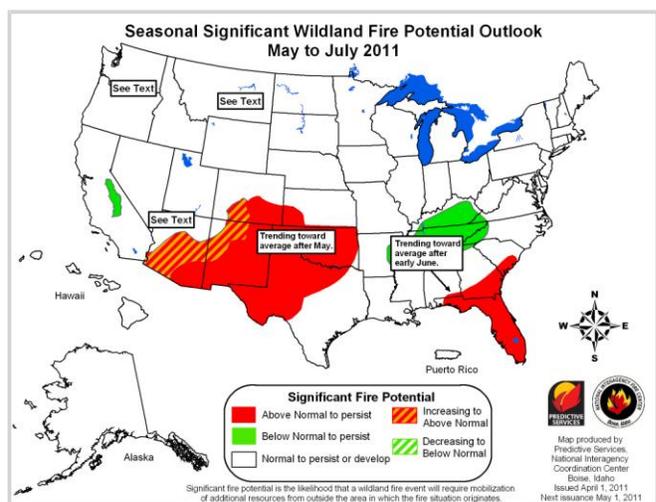
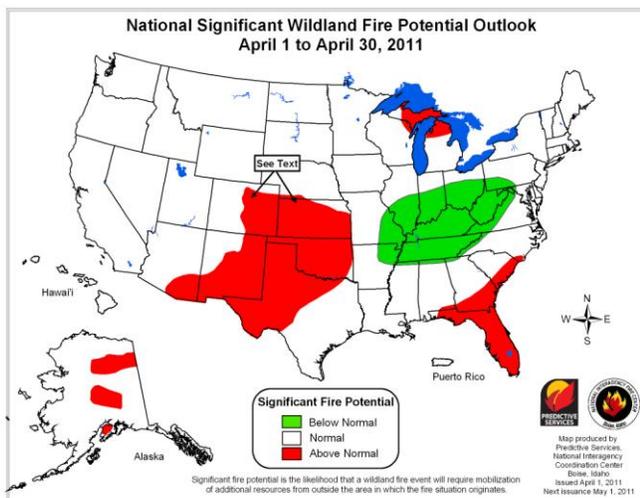
Issued: April 1, 2011

Next Issue: May 1, 2011

Wildland Fire Outlook – April through July 2011

The April, and May through July 2011 significant fire potential outlooks are shown below. The primary factors influencing these outlooks are:

- **La Niña:** The ongoing La Niña episode is forecast to weaken in the spring and return to El Niño-Southern Oscillation neutral conditions.
- **Drought:** Conditions are expected to persist and worsen across portions of the southwestern, southern, and central U.S. and along the mid-Atlantic seaboard. Some improvement is likely over Arkansas and sections of Virginia.
- **Fuel Dryness:** Dryness observed over Florida and the extreme southeast states during the winter will continue into the summer. Unusually dry areas with above normal significant fire potential will expand westward across New Mexico and northward in Arizona through spring.

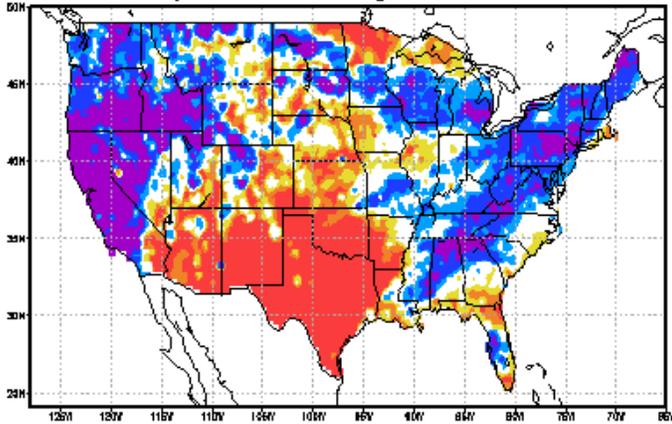


Note: Significant fire potential is defined as the likelihood that a wildland fire event will require mobilization of additional resources from outside the area in which the fire situation originates.

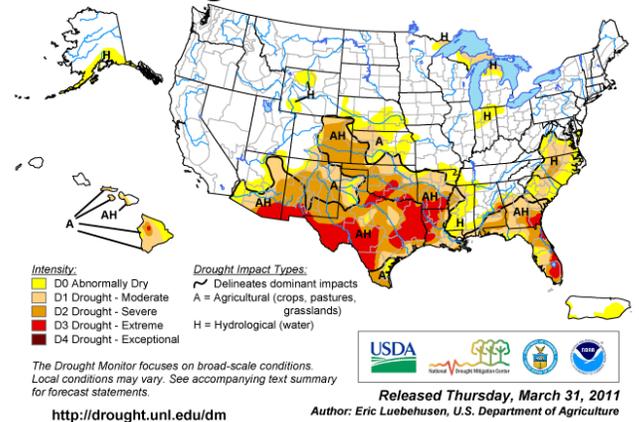
Past Weather and Drought

March finished with colder than usual temperatures across much of the northern and far western U.S. In the south, March temperatures were above normal with areas well above normal in the Southwest. Precipitation trends were quite moist over the last 30 days over much of the West and the Appalachian chain, and unusually dry in the southwest. Drought is forecast to persist and worsen across much of the already dry areas as shown in the Drought Outlook below. Some notable improvement is expected over Arkansas and portions of Virginia. Alaska was colder than usual and is expected to remain so through April, with moderation for May through July.

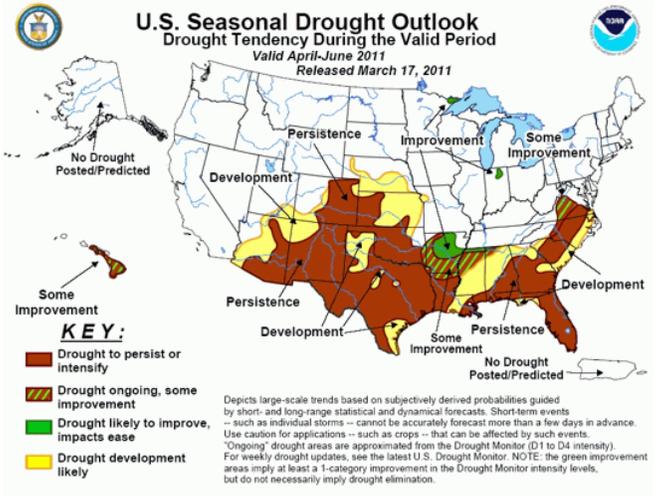
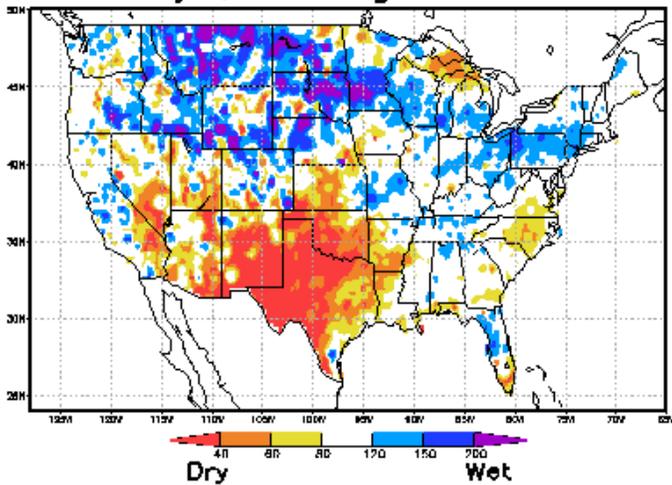
30 days, ending 2011Mar29



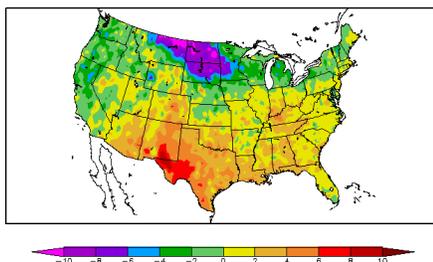
U.S. Drought Monitor March 29, 2011 Valid 8 a.m. EDT



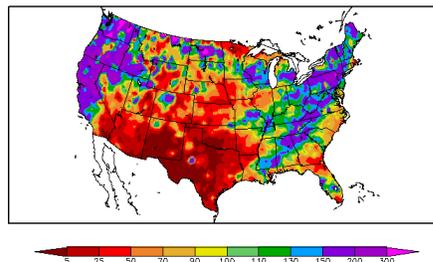
90 days, ending 2011Mar29



Departure from Normal Temperature (F)
 3/1/2011 - 3/30/2011

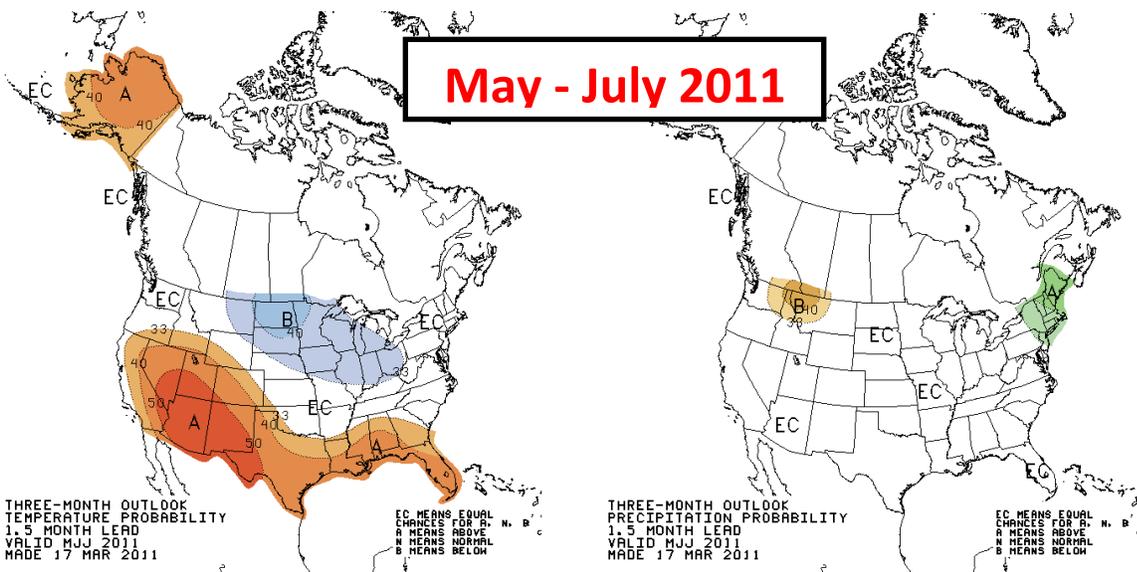
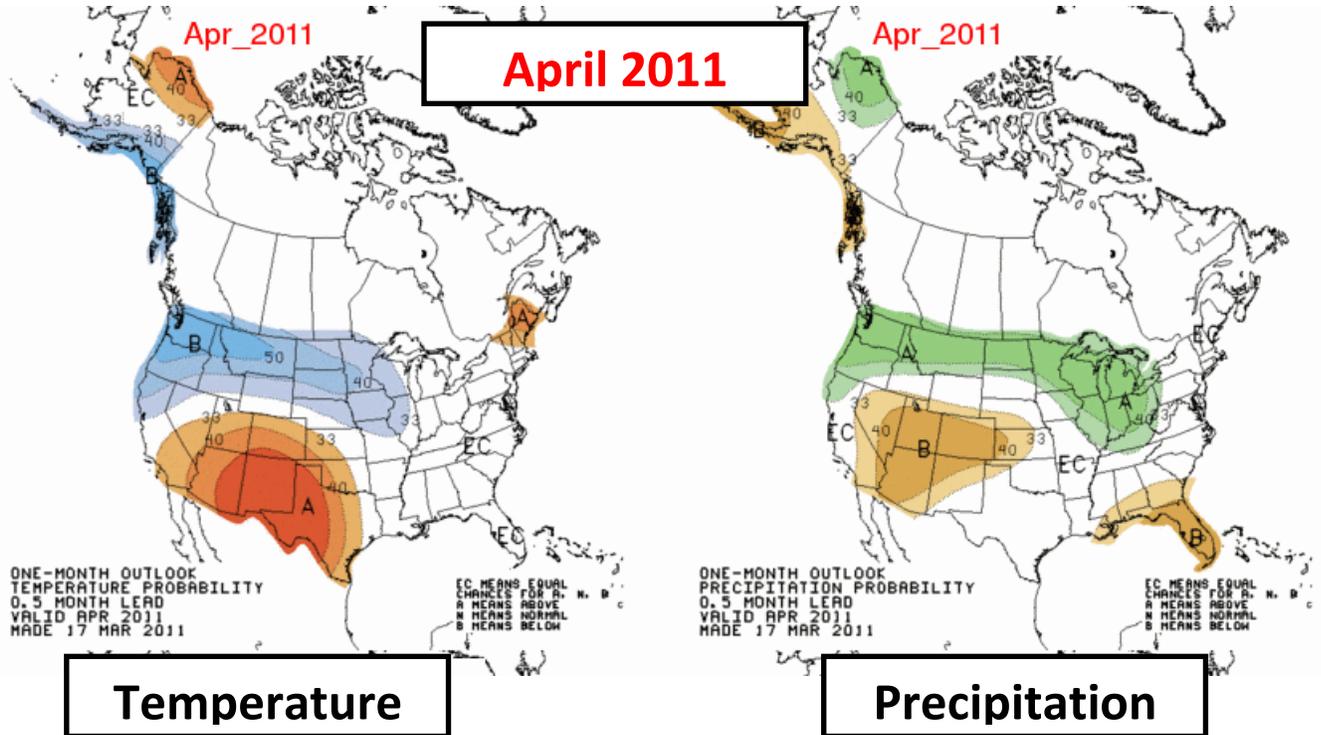


Percent of Normal Precipitation (%)
 3/1/2011 - 3/30/2011



Weather and Climate Outlooks

La Niña climate effects are expected to slowly weaken across the U.S. through the spring before fading out during the summer. The National Weather Service Climate Prediction Center's monthly and seasonal outlooks through July are based heavily on these typical La Niña impacts slowly diminishing in the spring.



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: Alaska is rapidly approaching fire season. Expect normal significant fire potential for most of Alaska through April with a few areas of concern, including areas in the Upper Yukon Valley and north of the central Alaska Range. Dry conditions resulting from low fuel moistures going into winter freeze-up are a cause for concern. Areas on the Seward Peninsula where down and dead spruce bark beetle killed trees with a heavy grass understory may cause problems prior to green-up. The forecast for April calls for above normal temperatures and precipitation across the North Slope, and below normal temperatures and precipitation along the Gulf of Alaska coast and into southwest Alaska. For May through July, warmer than normal temperatures are expected statewide.

Southwest: A La Niña condition signifies temperatures will be above normal with below normal precipitation across the Area, except for the northern quarter of the region. Thus, above normal significant fire potential is expected across approximately the southeastern half to two-thirds of the region in April. Above normal significant fire potential will spread north and west to encompass approximately the southeastern half of Arizona and persist over much of New Mexico into west Texas for May through July.

The eastern portions of the area with above normal significant fire potential will begin to diminish sometime in mid to late May as moisture will become more entrenched in these areas from the southeast. Lightning ignited fires are expected to peak in the early to middle part of June and the seasonal thunderstorm period (or monsoon) is likely to initiate around late June or early July.

A robust monsoon is expected for many portions of the Southwest Area with a potential focus for above normal precipitation near the continental divide region. Sections of the eastern plains could see normal precipitation amounts.

Northern Rockies: Prior to green-up in mid to late April, conditions are not expected to favor the brief, active shoulder seasons that sometimes develop across the grasslands of the Northern Rockies Area. Prolonged periods of warm, dry, and breezy conditions are not expected to develop. With La Niña conditions continuing through at least the month's end, overall weather conditions are expected to be cooler and possibly wetter than normal. Therefore, a more typical shoulder season is expected for April with normal significant fire potential.

Lingering effects of a fading La Niña should translate to overall cooler than normal conditions across the Northern Rockies Area through early June. While climatology trend data points to a transition from normal to drier than normal conditions by July, the anticipated cooler pattern during the first half of this period should slow snow melt rates in the higher elevations, delaying the growth and curing of fuels by a few weeks in the higher terrain. With the anticipated drying trend in July, grasses should be able to cure out by month's end. Fuels in the mid elevations should become increasingly dry as well. However normal significant fire potential is expected in most areas until the end of July.

Western Great Basin: Normal significant fire potential is forecast for the entire period. Temperatures through March have been 2 to 4 degrees cooler than average across the Area and precipitation has been well above normal for the north and west portions, with the south showing areas of near normal rainfall interspersed with very dry spots. Overall, the Area has had well above normal precipitation since October 1, 2010. Over the last month, a weakening La Niña has allowed the jet stream to drop southward, bringing several cool and wet systems to the Area. Forecasts for late April are for near normal temperatures and below normal precipitation.

Due to the weakening La Niña, cooler than normal temperatures are expected over the next few months. This will likely occur with slightly wetter than normal conditions in northern Nevada, and normal, but dry conditions in southern Nevada. With a very good snowpack (averaging 125-150 percent of normal), even average spring rainfall will bring an abundance of fine fuels. With summer

warmth, dry dead fuels will usher in an active, but normal fire season, with significant fires starting mid to late June. The Area typically has a few small fires at the end of May, our first significant fires in the last half of June, and full fire activity July and August.

Eastern Great Basin: Normal significant fire potential is expected in April, when a transition season for much of the Eastern Great Basin takes place, where fuels are largely influenced by spring precipitation. April is the usual start of the wet season for lower elevations of Idaho and Utah. This will aid green-up in the western deserts of Utah and Arizona Strip. Standing carryover fuels in these areas could support a moderate level of fire activity. Below normal rain and snow in southeast Utah the last two months will slow new growth.

May continues the wet season for Idaho and Utah and is the peak green-up period. Fire activity in May is historically insignificant. With La Niña projected to weaken by late spring, do not expect weather extremes that will largely influence fire potential. Normal significant fire potential is expected to continue from May through July, however, a combination of carryover and new fine fuels in southwest Utah and Arizona Strip could produce fuel loadings that would support an upward trend in significant fire activity heading into June and July.

Northwest: Normal significant fire potential is expected from May through July across the Northwest Area. Conditions were wet and cool across the Northwest Geographic Area in March with considerably greater than usual precipitation. After a dry start to the year, rain and snow amounts are equal to or have surpassed normal for late March. As is typical with La Niña conditions, April and May are also expected to be cool and damp.

The Northwest Area is normally considered out of fire season until late June due to the persistence of cool, wet weather typically found in spring. Thus there is minimal little risk of significant fires until late June. A cool and damp spring is likely to retard snowmelt and delay green-up several weeks later than usual. Prescribed fire opportunities are also likely to arrive later than usual and the onset of fire season will very likely be pushed back well into July.

Northern California and Hawaii: April is forecast to begin wet as a pair of fronts move in early with widespread light to moderate precipitation. After a brief dry period with near normal temperatures in mid April, long range models are beginning to show a more active storm track developing across the central Pacific and the California coast. Prolonged periods of warm and dry conditions are not expected over the region through April. There will be some short warm periods, but not the longer lasting high pressure ridges that can often dominate much of the monthly pattern. As a result cooler than normal temperatures along with near to slightly above normal precipitation are expected, with much of the above normal precipitation occurring across the northern third of the Area. Normal significant fire potential is expected across northern California for April.

Significant fire potential in Hawaii is normal. Much of the western halves of the Hawaiian Islands continue to experience moderate drought, with pockets of severe drought. Despite recent rainfall, fuels affected by the drought are conducive to burning, and given recent fire activity, will burn well.

Southern California: Normal significant fire potential is forecast for April across the Area. The high frequency of Pacific storm systems during late February and March has resulted in significantly above normal fuel moisture across nearly all of southern California. Fire danger indices are below average across most areas and full green-up of fine fuels has occurred below 3,000 feet. At elevations above 6,000 feet, a significantly above average snowpack is in place. In April average daily rainfall is expected to quickly decline. However, there are few signs of any prolonged period of warm or exceedingly dry weather developing over the Area. There is a slight potential for some fire activity over the lower and eastern deserts where rainfall has been scarce, but any fire should be limited to periods of gusty winds and of limited scope overall. Other areas will see the seasonal grass crop reach full maturation, but full curing is not likely to occur until May.

Rocky Mountain: Significant precipitation deficits in the last 30 to 60 days continue over the eastern plains and foothills of Colorado into Kansas and southern Nebraska, which is consistent with moderate La Niña conditions. Precipitation has been more significant across the remainder of the Area, especially over South Dakota, northern Nebraska, and the higher elevations of Colorado and Wyoming with above average precipitation. Snowpack estimates over the mountains of Colorado, Wyoming, and western South Dakota range from 105 to 125 percent of average while southern Colorado ranges from 80 to 95 percent. As of late March drought indices show an expansion of severe drought across eastern Colorado and western Kansas. Occasional warm, dry and windy pre-frontal conditions combined with abundant cured 1-hour fuels are expected to result in above normal significant fire potential over the plains and foothills of eastern Colorado into southwest Nebraska and Kansas during April. However, precipitation and spring green-up is expected to bring fire potential back into the average range in late April over a larger area of northeast Colorado, southwest Nebraska, and northern Kansas. Normal significant fire potential is anticipated across the remainder of the Rocky Mountain Area where precipitation has been more prevalent.

Moderate La Niña conditions are forecast to diminish by June. This climatic pattern is expected to result in a continuation of above normal temperatures and drier than average conditions over Colorado during the May to June period. These warm and dry conditions are anticipated to result in above normal significant fire potential spreading into south-central and southwest Colorado by late May through June. Spring green-up conditions and forecast precipitation are expected to expand in eastern portions of the region limiting above normal significant fire potential east of the divide to southeast Colorado and southwest Kansas during May.

Eastern Area: Long term drought was in place across much of the mid-Mississippi and Ohio Valleys entering the winter. This was alleviated through the end of winter with above normal precipitation, influenced by a weakening La Niña. This trend is forecast to linger into April and lead to near to below normal significant fire potential over the southern tier of the Eastern Area through the spring fire season. Below normal snow depths were in place across the eastern Upper Peninsula and northern Lower Peninsula of Michigan entering April. Lack of snow cover will lead to standing fine fuels as well as lower fine fuel moistures entering the early spring fire season. This may lead to above normal significant fire potential over these areas as April progresses and temperatures warm.

Southern Area: The above normal significant fire potential pattern that has characterized the Area so far through this year will persist into April. The highest potential will remain across Oklahoma and Texas, and from Florida and southeastern Georgia to the southeastern half of South Carolina. Periodic colder temperatures and post cold frontal low relative humidities, coupled with continuing elevated potential from a longer term drought situation across the deep southeast will provide conditions for spikes of increased ignition potential.

Temperatures through April will continue to exhibit wide swings from warmer than normal to below normal. This variability is characteristic of a very energetic, stormy weather pattern forecast for April, especially from the Ohio/Tennessee Valley south to Alabama, Georgia and Florida. Significant budding and green-up will reach further from the central South into Kentucky and Virginia, and will be the primary factor in reducing above normal significant fire potential conditions. In spite of this, Florida's more tropical climate and this past winter's higher dead fuel loading from hard freeze conditions should provide receptive fuel beds. Fire activity here is expected to peak in May to early June, especially in the southern portion of the state, with potential trending back to normal following the return of seasonal easterly Atlantic flow and daily showers and thunderstorms.

Historic and Predicted Wildland Fires and Acres Burned Data

Based on data reported Year-to-Date in 2011, nationally there were 121 percent of the number of fires burning approximately 142 percent of the acres compared to the 10 year national averages. As of March 31, the 10 year average number of fires is 14,130 with 419,156 acres burned. The following table displays 10 year historical, current and predicted information pertaining to fire statistics.

	MAR 31 Reported Year-To-Date	AVG reported for APR	Projection for APR YTD+Forecast	Average Reported YTD APR 30	Historical Low YTD MAR 31	Year of Low	Historical High YTD MAR 31	Year of High
ALASKA								
Fires	4	24	14	29	9	2006	49	2003
Acres	1	427	8	499	3	2006	2,228	2010
NORTHWEST								
Fires	0	42	0	63	13	2003	127	2004
Acres	0	367	0	481	3	2003	1,699	2008
NORTH OPS								
Fires	10	59	21	115	12	2002	259	2004
Acres	2,078	87	2,151	1,225	20	2010	3,262	2000
SOUTH OPS								
Fires	157	100	247	286	21	2005	637	2002
Acres	934	284	1,001	3,989	3	2005	11,106	2006
NORTHERN ROCKIES								
Fires	3	248	17	276	84	2009	515	2007
Acres	0	6,683	0	9,354	3,234	2002	20,127	2003
EAST BASIN								
Fires	12	25	37	38	11	2005	86	2002
Acres	6	859	873	940	7	2005	4,806	2008
WEST BASIN								
Fires	2	10	5	19	0	many	59	2007
Acres	0	417	0	510	0	many	3,436	2007
SOUTHWEST								
Fires	383	332	970	567	183	2001	1,129	2002
Acres	113,574	36,737	187,853	83,741	7,690	2001	258,107	2006
ROCKY MOUNTAIN								
Fires	118	137	223	225	78	2001	406	2002
Acres	72,319	15,411	97,474	32,981	1,240	2001	138,474	2006
EASTERN AREA								
Fires	448	3,846	4,234	5,192	2,860	2007	7,951	2006
Acres	19,526	45,381	67,496	62,327	29,829	2005	138,992	2003
SOUTHERN AREA								
Fires	15,906	4,702	22,432	16,851	8,708	2005	25,328	2006
Acres	385,265	201,887	668,666	530,717	153,358	2005	1,759,212	2001
NATIONALLY								
Fires	17,043	9,519	29,677	23,649	15,407	2003	35,102	2006
Acres	593,703	308,639	1,076,273	727,795	267,689	2005	2,251,409	2006

Prepared March 31, 2011 by the National Interagency Coordination Center Predictive Services Staff. The information above was obtained *primarily* from Incident Management Situation Reports from 2001-2011, 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.

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 through the NICC webpage at: <http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm>