National Wildland Fire Outlook

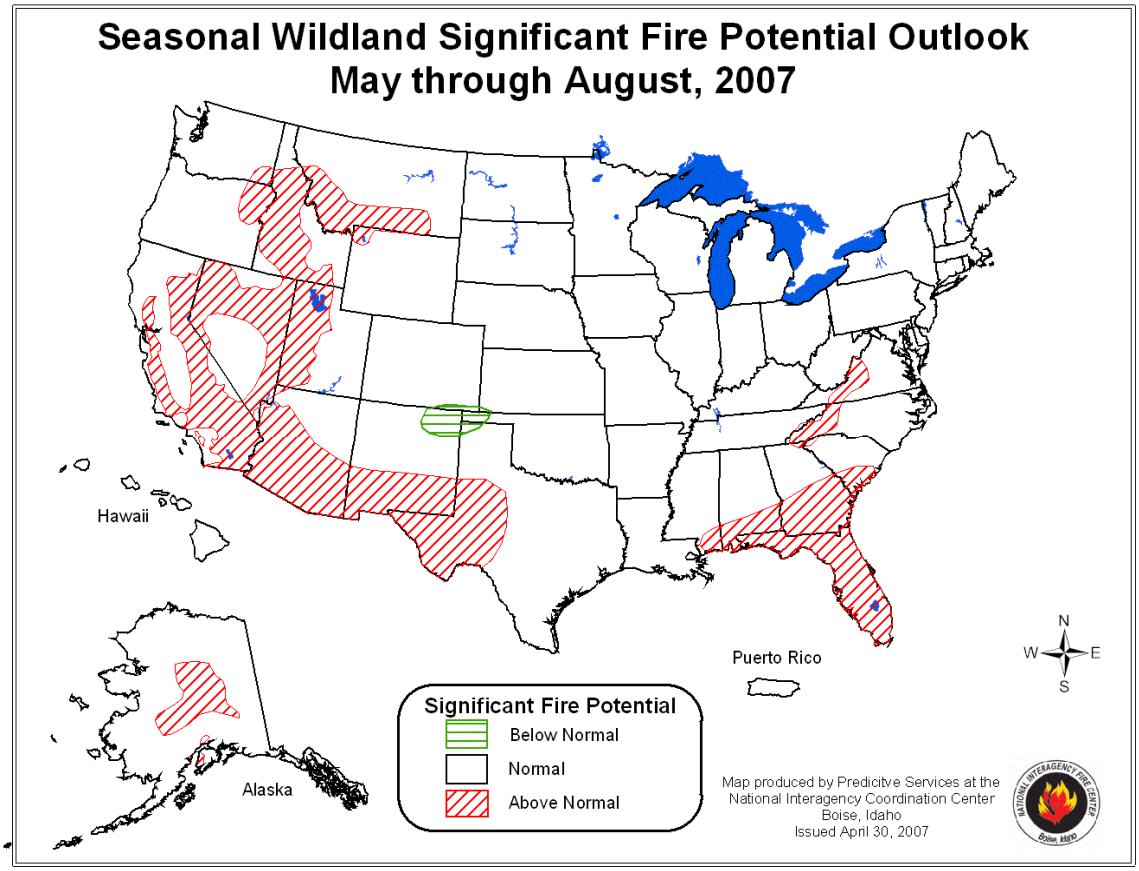
National Interagency Fire Center
Predictive Services Group

Issued: May 1, 2007

Wildland Fire Outlook – May through August, 2007

Significant fire potential is expected to be higher than normal across much of the Southwest and California, portions of the Great Basin, Northern Rockies, Northwest, Alaska and the Southeast. Below normal fire potential is predicted for a small portion of the Southwest Area. The critical factors influencing significant fire potential for this outlook period are:

- **Drought:** Conditions are expanding and intensifying across large portions of the West and Southeast.
- **Early Fire Season Onset:** Low snowpack, warmer than normal forecast temperatures, and early snow melt over most of the West will likely dry out timber fuels, cause early green-up, and bring an early onset of fire season.
- **Active Grassland Fire Season:** Abundant new and carryover fine fuels across much of the West are expected to green-up and cure early, leading to an active and prolonged grassland fire season**.**



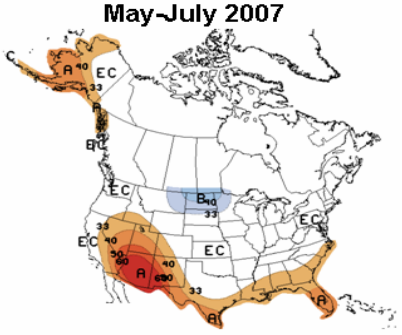
*Significant fire potential is defined as the likelihood that a wildland fire event will require mobilization of additional resources from outside the area in which the fire situation originates.

Weather

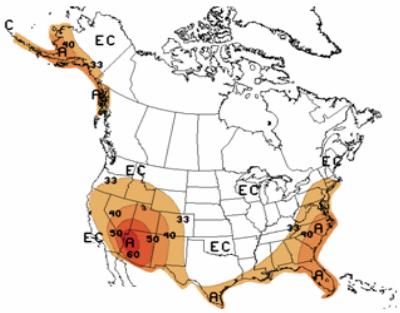
Drought conditions have been expanding and intensifying over much of the West since last autumn. Many areas, including Alaska, have exhibited much below average snowpack through the winter and early spring months. Drought relief is not expected in these areas this summer (*see images below*).

The NOAA Climate Prediction Center seasonal outlooks for May-July 2007 predict a high likelihood of above normal temperature in the Southeast, Gulf Coast and Southwest, as well as southern and western Alaska. Increased likelihood of below normal temperatures is predicted for the northern plains states. For June-August 2007, the likelihood of above normal temperatures covers much of the West, Southeast, East Coast and southern Alaska. There is an increased likelihood for drier than normal conditions over portions of the interior West (*see images at left*).

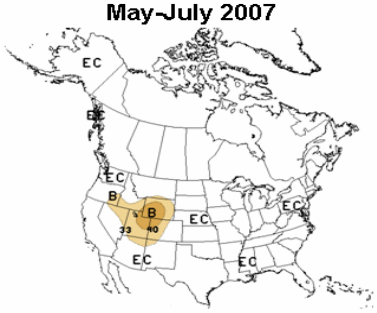
Temperature Forecasts
May-July 2007



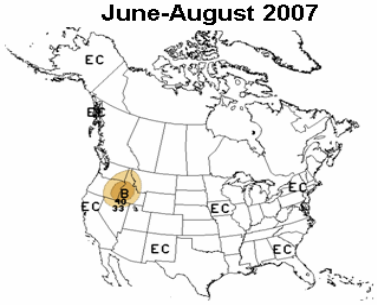
June-August 2007



Precipitation Forecasts
May-July 2007



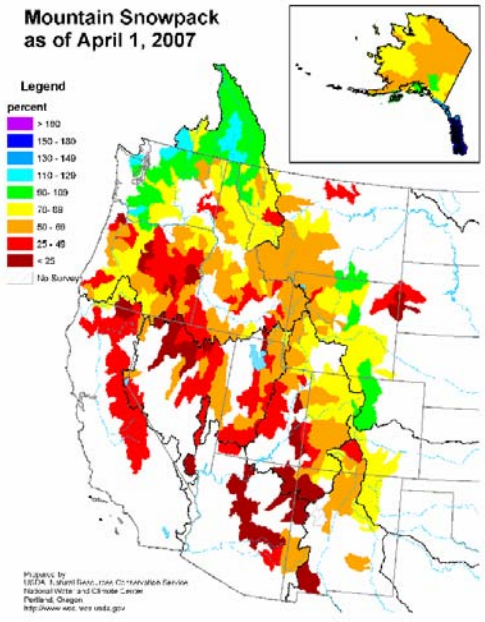
June-August 2007

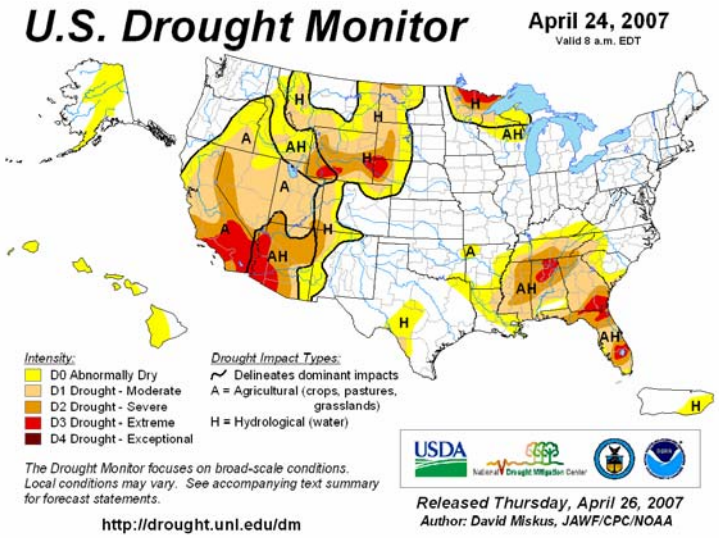


A = Above Normal
B = Below Normal
N = Normal
EC = Equal chances of above, below, or normal conditions

Numbers represent the probability of occurrence.

http://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead04/off_index.html

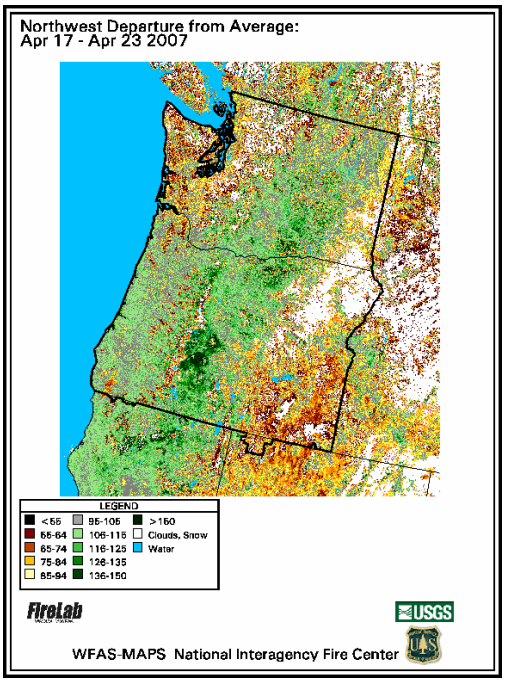




Area Discussions

Alaska: **Potential: Normal to Above Normal**. Snowpack for the past winter was predominantly below normal with snowpack deficits being the worst in the northern/central portions of the state. This same area had higher than normal Drought Code values late last fall and is highlighted as abnormally dry on the latest Drought Monitor. Forecasts for May through August call for above normal temperatures in western and southern Alaska through the outlook period. Bug killed timber, especially on the southwestern Kenai Peninsula and portions of the western Cook Inlet are areas of special concern. The combination of low snowpack and warm summer conditions is expected to create above normal fire potential in portions of central and southwest Alaska. Normal season ending rains are expected by early August if La Niña conditions emerge over the next couple of months.

Northwest: **Potential: Normal to Above Normal.** The Northwest experienced a generally wet winter from the Cascade crest westward. East of the Cascades, the rain and snowfall totals were near normal in Washington and well below normal in Oregon. The most significant precipitation deficits are centered over eastern Oregon and southeastern Washington. Earlier melt-off in precipitation deficient areas could lead to an earlier start for fire season at lower elevations in eastern Oregon. Warmer than average temperatures and dry conditions forecasted for July and August will result in fire danger indices rising to above average levels, especially in southeastern Washington and northeastern Oregon. Departure from average Normalized Difference Vegetation Index (NDVI) maps indicate spring green-up is proceeding ahead of normal in central Oregon and the Columbia Basin. Green-up will begin later than normal in western Washington due to cool, moist spring conditions and in southeastern Oregon due to the ongoing drought and cool temperatures this spring. Predominantly dry Lightning events that occur in areas of dry fuels during the summer tend to be the primary ignition source leading to significant wildfire outbreaks. Surges of monsoon moisture from the desert southwest are likely to be weaker than during 2006. This would tend to provide fewer lightning outbreaks for the Pacific Northwest lowering the potential for large-scale lightning ignitions and numerous wildfire outbreaks.



Northern and Southern California: **Potential: Normal to Above Normal.** Below normal precipitation has occurred state-wide since October 2006 except for the extreme northwestern corner of California. The entire lower third of the state has received less than 50% of normal precipitation since October 2006, with some areas on track for record setting dryness. Below normal precipitation and slightly above normal temperatures are leading to earlier than normal curing of grasses at lower elevations, especially in the north. This early curing of annual grasses, along with below normal live and dead fuel moistures, will lead to an early onset of fire season in some areas. A severe January freeze caused significant dieback of native and non-native vegetation, especially in Ventura, Orange, and San Diego counties. There is increasing concern about the potential for large fires in these freeze-killed areas. Drought stress and recent occurrence of insect-killed timbered areas of the southern most forests constitute further concerns. Prescribed fires and early season wildfires confirm lower than average 1000-hour fuel moistures. Opportunities for prescribed burning started earlier than normal, but an early start to the fire season could prematurely curtail burning operations.

Northern Rockies: **Potential: Normal to Above Normal.** A weak El Niño over the winter resulted in overall above normal temperatures for all locations with below normal precipitation over most locations except eastern North Dakota. As of mid-April, state snowpack amounts averaged 75% of normal in Montana and 55% of normal in Idaho. Moderate long-term drought conditions exist across much of western North Dakota, Montana, and Idaho. Spring precipitation is running above normal across central and eastern Montana which may produce robust green up and add to fine fuel loads upon curing. Above normal May temperatures forecast in Idaho and western Montana along with light snowpack and may accelerate the onset of fire season, especially at higher elevations. Above normal temperatures and below normal precipitation, especially in Idaho and western Montana is forecast for the July through August period. In the event La Niña conditions develop this summer, signals for above normal temperatures and below normal precipitation would strengthen over the Area.

Great Basin: **Potential: Normal to Above Normal.** A relatively dry winter and return to drought conditions, combined with two previous wet winters, has left large amounts of carryover grass across much of the Nevada, western Utah and southern Idaho. Southern Nevada still has large pockets of cured standing cheat grass from 2005. Below normal winter snowpack, earlier than normal snowmelt, and an early green-up at elevations below 6000-7000 feet, will likely cause the onset of fire season to be 3-4 weeks early this year. Another active and prolonged grassland fire season is expected, especially if monsoon moisture is absent. High elevation areas are likely to have lower than normal soil moistures and dead fuel moistures, especially in the north. Insect and frost killed vegetation will increase fire risk in affected timber and shrub regimes across the mountains of Idaho and mid- and upper elevations of Utah and Nevada.

Southwest: **Potential: Below Normal to Above Normal.** Above normal fire potential is expected to emerge in southeast Arizona to southwest Texas by mid-May, shifting westward into southern and western Arizona by mid-June. Abundant fine fuels exist over the entire area, with extensive herbaceous growth in the eastern half of the Area. There is a potential for larger and more active fires in south/central Arizona due to significant growth of buffelgrass, which now provides fine fuel continuity in areas that were historically sparse. Rapid curing of abundant new herbaceous growth across southern New Mexico and western Texas will create a continuous fuel bed by mid-May. However, significant fire activity west of the divide is expected to be average until June as a weather pattern of progressive storm systems is expected to impact the western portion of the Area through late May. This pattern may bring unusually windy conditions, lowering the probability of lightning storms. Hot and dry conditions are then expected to develop in Arizona beneath a strong high pressure ridge from mid-June to mid-July. A strong initial monsoon surge is anticipated, with a trend for above normal precipitation mainly over Arizona and below normal precipitation further east.

Rocky Mountain: **Potential: Normal.** The Rocky Mountain Geographic Area has three major fuel concerns: (1) abundant fine fuel loadings in eastern Colorado, western Kansas and western Nebraska; (2) early green-up and early curing of fuels in the aforementioned regions, especially if La Niña conditions develop during the spring, bringing warm dry conditions to the eastern part of the Rocky Mountain Area; (3) regions of insect-killed trees in the Colorado Rocky Mountains. Portions of the Area experienced rapid snow melt in March and early April, however recent storm patterns have brought additional precipitation and slowed snow melt, which should help fuels remain moist later into the spring in the higher elevation areas. Long-range forecast models predict warmer than normal temperatures over the western half of the area and drier than normal conditions, especially in Wyoming. Overall, current conditions and long-range forecasts suggest the Area will experience normal fire potential for the outlook period.

Eastern Area: **Potential: Normal.** Long-term drought remains in place across portions of the north central and northwest Great Lakes as of late April 2007. However, precipitation events across these areas through late winter and spring were frequent enough to curtail early spring fire potential and begin to alleviate some of the longer term drought over these areas. Green-up was complete or near complete across the southern tier of the Eastern Area at the end of April. Overall, normal significant fire potential is forecast across the Area. However, short periods of elevated fire potential are likely across portions of the Great Lakes prior to green-up. Soil moisture deficits still in place indicate that fires may require extensive "mop up" and peat fires may be problematic.

Southern Area: **Potential: Normal to Above Normal.** Overall, below average precipitation and above average temperatures are expected to dominate the weather pattern for much of the southeast, especially for southeastern Georgia and northeastern Florida. Consequently, above normal significant fire potential is forecast for these areas. In addition, above normal significant fire potential will intermittently spike for the western portions of Virginia and North Carolina during periods of below average rainfall and low relative humidity keeping fuels dry into the first half of the period. There is potential for fire risk to decline the later half of summer due to increased rain activity brought about by the possible emergence of La Niña conditions. Ultimately, moderate to heavy rainfall, likely from tropical activity, will be needed to relieve low water tables and stream flows caused by long-term severe drought conditions.

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: www.nifc.gov/news/pred_services/Main_page.htm