National Interagency Coordination Center

Wildland Fire Summary and Statistics Annual Report 2009

National Interagency Coordination Center

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Identifier Legend

Interagency Coordination Centers

NICC – National Interagency Coordination Center
AK - Alaska
EA - Eastern Area
EB - Eastern Great Basin
NO - Northern California
NR - Northern Rockies
NW - Northwest
RM - Rocky Mountain
SA - Southern Area
SO - Southern California
SW - Southwest
WB - Western Great Basin
CIFFC - Canadian Interagency Forest Fire Centre
NIK - National Interagency Radio Support Cache

Government Agencies

Department of the Interior:
BIA - Bureau of Indian Affairs
BLM - Bureau of Land Management
FWS - Fish & Wildlife Service
NPS - National Park Service
AMD - Aviation Management Directorate

Department of Agriculture:
FS - Forest Service

DOD & **DDQ -** Department of Defense

Department of Homeland Security:
FEMA - Federal Emergency Management Agency
ESF #4 – Emergency Support Function 4, Firefighting

Department of Commerce:
WXW - National Weather Service

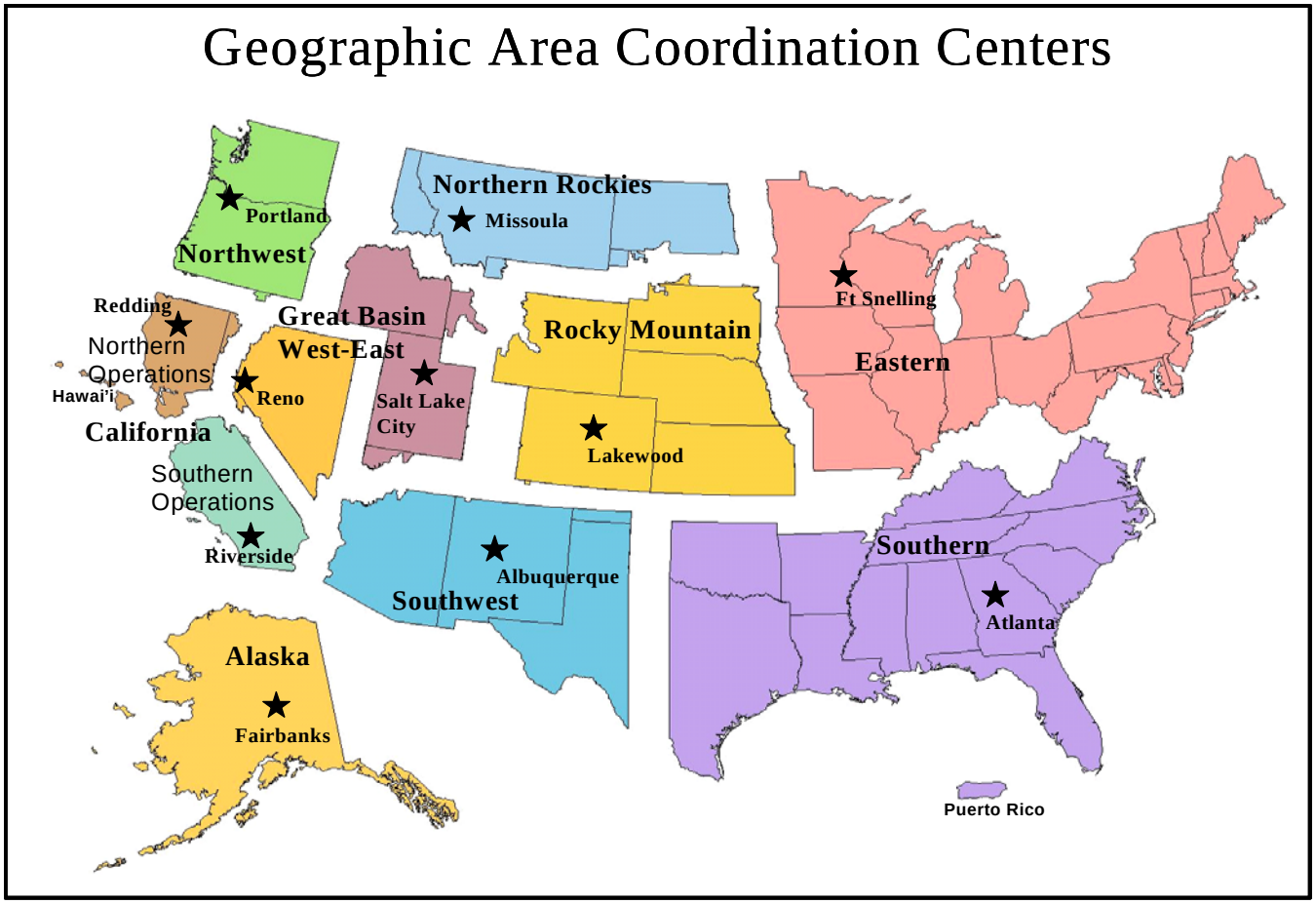
ST – State
ST/OT – State and Other combined
Other – Not federal or state
PRI – Private
CNTY – County
CN – Canada
AU – Australia
NZ – New Zealand

Preface

Statistics used in this report were gathered from the Fire and Aviation Management Web Applications (FAMWEB) system, which includes the Situation Report and Incident Status Summary (ICS-209) programs. Previous National Interagency Coordination Center (NICC) annual reports and other sources were also used in this document. The statistics presented here are intended to provide a national perspective of annual fire activity, but may not reflect official figures for a specific agency. The statistics are delineated by agency and Geographic Areas. Pie chart figures are rounded to the nearest whole percentage point. This document is available electronically at the National Interagency Coordination Center web page: http://www.predictiveservices.nifc.gov/intelligence/2009_statssumm/2009Stats&Summ.html

For agency-specific details or official numbers contact the individual agency.

Resource mobilization statistics used in this report were gathered from the Resource Ordering and Status System (ROSS), which tracks tactical, logistical, service and support resources mobilized by the national incident dispatch coordination system. The statistics presented in this report are the resources requested by one of the eleven Geographic Area Coordination Centers and processed through NICC. Requests by FEMA are placed to NICC through Emergency Support Function (ESF) #4, Firefighting. The resource ordering process and procedures may be found in chapter 20 of the National Mobilization Guide. The National Mobilization Guide can be found on the NICC web site, (www.nifc.gov/news/nicc.html) under reference materials.



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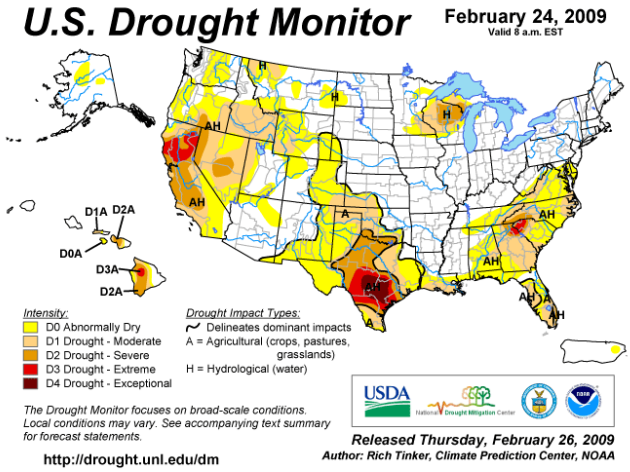
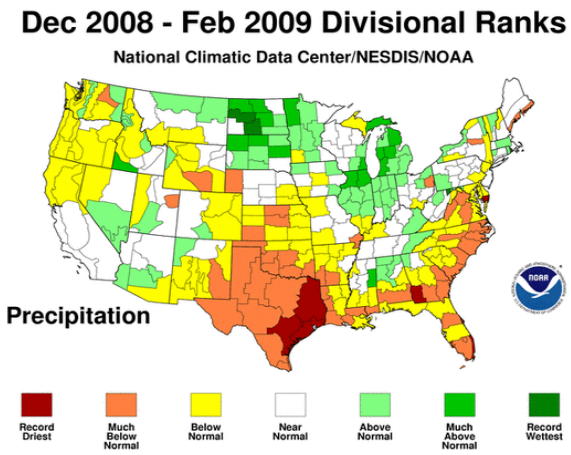
2009 Fire Season Summary

Winter (December 2008 – February 2009)

The winter (December through February) of 2008-2009 was drier than normal over most of the country, except wetter than normal over the north-central Plains and Great Lakes area. Texas recorded its driest winter on record with Florida, Georgia, Louisiana and Oklahoma reporting one of top ten driest winters. The South and Southwest experienced a rather warm winter, while the Great Lakes were cooler than average. Alaska was generally warmer than normal with Fairbanks reporting near normal precipitation for the season. Drought conditions persisted across portions of the West, Southeast, Texas and the Dakotas.

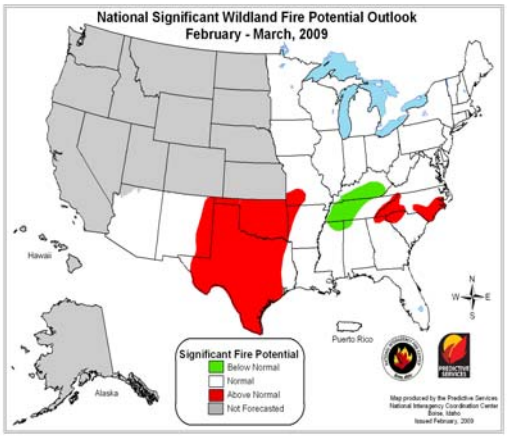




The ***National Seasonal Assessment Workshops*** (NSAWs) were held in late January for the Eastern and Southern states, and in mid April for the Western states and Alaska. These workshops brought together fire managers, fire intelligence personnel, predictive services meteorologists, and climatologists from across the United States to develop fire season outlooks for their respective Geographic Areas. This year's January workshop was held in conjunction international participants from Mexico and the April workshop was held in conjunction with international participants from Mexico and Canada. The April workshop was the fourth annual North American Seasonal Assessment Workshop (NASAW), part of an ongoing effort to coordinate fire potential outlooks among the three countries. Reports from these workshops can be found at: http://www.predictiveservices.nifc.gov/outlooks/outlooks.htm

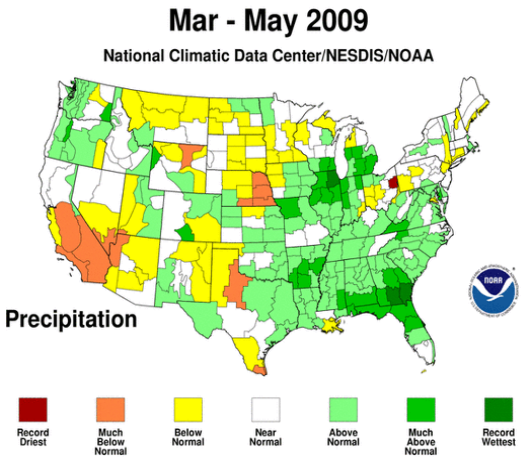
The initial seasonal outlook reports for the Southern, Eastern, and Southwest Areas called for above normal significant fire potential over Oklahoma, much of Texas, eastern New Mexico and portions of the Appalachian Mountains and eastern seaboard. Below normal significant fire potential was forecast from northeast Mississippi to southern Kentucky. Normal potential was forecast for the remainder of the area (see image).

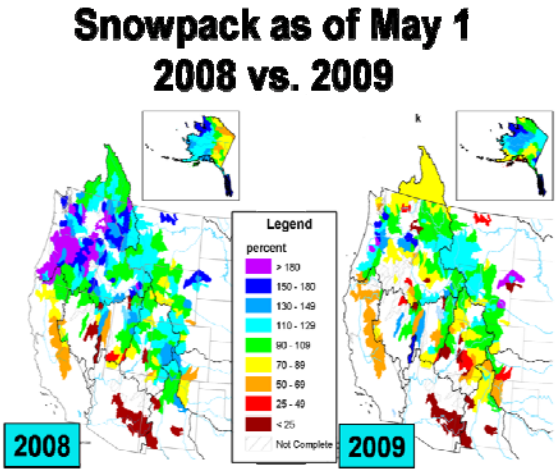
By late January, fire activity in Oklahoma, Arkansas, Texas and Florida had picked up with numerous fires exceeding 1,000 acres in size. By early February a Type 2 IMT had been assigned to Texas to support extended attack operations. Fire activity began to increase in the Rocky Mountain, Eastern and Southwest Areas by mid-February, but these large fires were rapidly contained. By the end of February, the Southern Area was very active with numerous large fires mostly in Texas, Oklahoma, and Florida. The Southern Area had 7,424 fires (133 percent of normal) during January and February, which burned 136,020 acres (118 percent of normal) for the same time period.



Spring (March – May)

Spring was warmer than normal in Alaska as well as the Southwest and Northeast quarters of the country. After a dry winter, the Southeast experienced its second wettest spring on record. The West was mixture of wet and dry regions with much below normal rainfall in California. According to NOAA's National Climatic Data Center, the 32-month period of October 2006-May 2009 ranks as the second driest period in California dating back to 1895. Mountain snow amounts across the West were below average in California and the Southwest and above average in the Cascades. As of May 1, 2009, snowpack levels in the Alaska interior were generally above normal. The interior of Alaska was drier than normal in May.





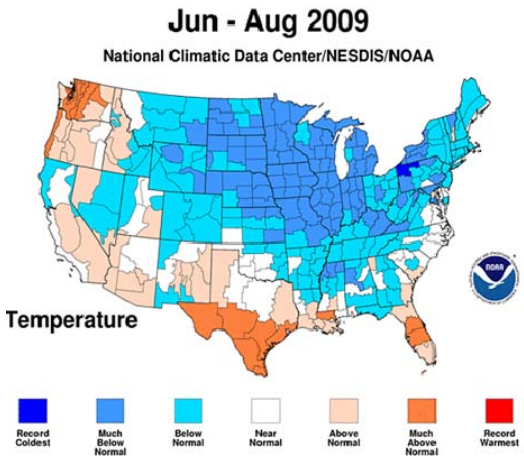
The Southern Area continued to have an active spring fire season and by the end of May had experienced 26,271 fires which burned 897,496 acres (which is 134 percent of their normal year-to-date acres based on a 10-year average). Rainfall deficits were primarily centered in southern California and Nevada, western Arizona, southeast Texas and portions of the central plains (see image). Fuels were exceptionally dry in these areas with Energy Release Component values approaching or exceeding the 90th percentile or historic maximums in several locations, especially in Texas. By late April, large fire activity began to taper off in Texas and pick up in Florida and the Eastern, Southwest, and Rocky Mountain Areas. Elsewhere, wildfire activity across the West was running well below normal, both in terms of overall fires and acres burned.

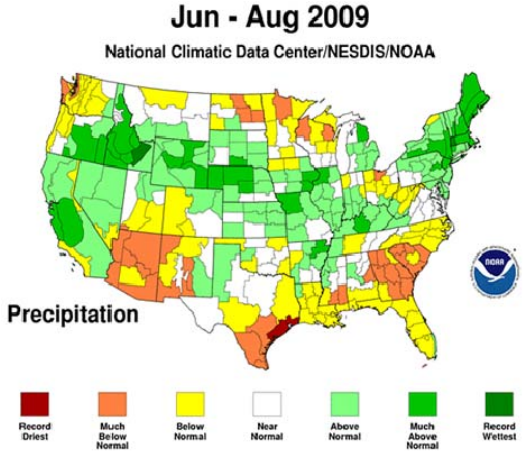
By the end of May, fire season 2009 could be described as slightly above average nationally, primarily due to the fire activity in the Southern, Eastern, Rocky Mountain, and Southwest Areas. Nationally, there were 41,655 fires and 1,400,185 acres reported burned. This is 127 percent of the 10-year average for fires and 136 percent of acres burned.

Wildfire activity in the Eastern Area was above average during the spring. By May 31, 11,552 fires had been reported, which burned 109,988 acres. This is 144 percent above average for fire occurrences, and 119 percent above average for acres burned. Wildfire activity in Alaska, California, Northwest, and Western Great Basin Areas was above normal in terms fires, but below average for the number of acres burned by this date.

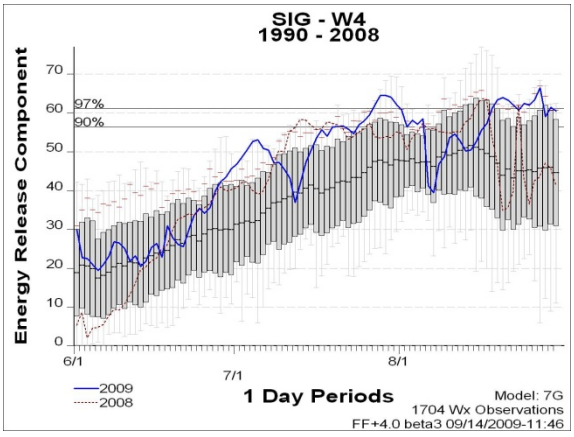
Summer (June – August)

The weather patterns for the summer of 2009 featured recurring low pressure systems and coolness over the central states with high pressure and above normal warmth in the West and southern states. The Southwest, southern Texas and portions of the Northwest were hotter and drier than normal with Phoenix recording their warmest month (August) on record. Seattle had its hottest July ever setting a new all-time high temperature of 103 on July 29, 2009. The Southwest monsoon was much drier than normal, especially in Arizona. In Alaska, June and the first part of July were warmer and drier than normal with July going down as the second warmest on record. The end of July turned quite wet with the fire season ending in August.



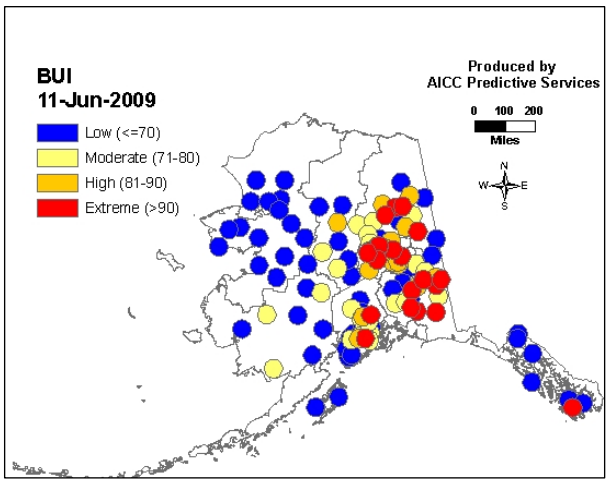


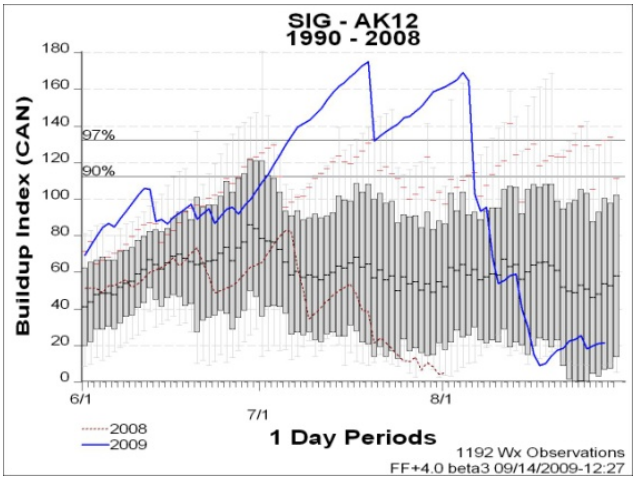
Mountain snowpack amounts across the West were significantly lower as of May 1 this year than in 2008. However, a rather cool spring kept higher elevation fuels moist through the early summer months in many locations. National Fire Danger Rating System (NFDRS) Energy Release Component (ERC) values were predominantly below average across most of the Rocky Mountains, Northern Rockies, and mountains of Idaho through August. However, much of California, western Oregon and Washington saw ERC values reaching critical values, in some cases setting new records, by mid-July, then moderating after early



August. Fuels in southwest Oregon were particularly dry with ERC values spiking well above critical values several times from early June through the end of August. The image above displays a 2009 ERC index trace for southwest Oregon overlaid on the average and one-standard deviation bars for each day since 1990. The image shows how fuels steadily dried out and fire danger indices climbed until early August before rainfall helped to moderate conditions. This reprieve was short lived before fuels dried again causing ERC values to resurge to above the 97th percentile.

Alaska experienced a very dry summer with an extended period of numerous large fires. Fuels were extremely dry across much of eastern Alaska through early August. Canadian Fine Fuel Moisture Code values reached very high to extreme values in early June with Buildup Index (BUI) values reaching critical levels by June 10 across most of eastern Alaska (see image below). It wasn't until the end of the first week in August that rainfall and cooler weather finally drove BUI indices down below critical levels and kept them there through the end of the month. The image shown at right displays a 2009 BUI index trace for southeast Alaska overlaid on the average and one-Standard Deviation bars for each day since 1990. From early July through early August, BUI indices were basically setting new records for dryness in the mid to deep duff layers across much of Alaska. By the end of July, Alaska had 468 fires (115 percent of normal) that burned 2,081,295 acres, which is 186 percent of normal. By the end of August, 511 fires had burned 2,934,455 acres, which is 171 percent of normal.





Fuels in many southern California areas began drying rapidly around the third week of June. By mid-July dead fuel moistures were reaching near record low levels in the western mountains adjacent to Los Angeles. ERC values rapidly climbed above average levels by early July and then hovered near the 90th percentile beginning in mid-July. By August 9, the La Brea fire occurred on the Los Padres National Forest, and eventually grew to approximately 90,000 acres in size. It was one of several large, long duration, and costly fires to occur during the summer in southern California. On August 28, the Station Fire on the Angeles National Forest began, and eventually grew to over 160,000 acres. Fuels remained critically dry across much of California through August.

Fuels across the Idaho, western Montana, and the higher elevation areas of Utah, Colorado and Wyoming remained fairly moist through most of the summer with few large fire issues in forested areas. Most of the large fires in the interior West were in grass and brush fuel types. Concurrently, there were numerous large fires in higher elevation timbered areas that were primarily being managed to accomplish resource benefit objectives.

Central Texas remained dry and saw continued above average fire activity through the majority of the period. Although the number of fires remained high in Texas, the acres burned decreased with the transition of spring to summer weather patterns characterized by intense drying but less frequent and weaker wind events. The bulk of the fire activity shifted into west/central Texas with fires spreading in cured grass with brush and timber fuels adding to fire intensity and persistence.

Western Great Basin was another area that saw a significant jump in fire danger during June and July. Although the area had abundant dry fuels, by the end of August the Western Great Basin had only burned 7 percent of their normal year-to-date acres.

During August, fire activity picked up considerably across portions of southern Utah and western Colorado. Much of the West saw frequent mixed wet and dry lightning storms, yet initial attack and large fire activity continued to be below normal for the most part. Nationally, the preparedness level never exceeded PL-3, which is very unusual for the peak of fire season.

In the East, frequent wetting rain events kept summer fire activity near normal in the Eastern Area and below normal across much of the Southern Area, except for Texas. Many areas with extended drought saw much needed relief.

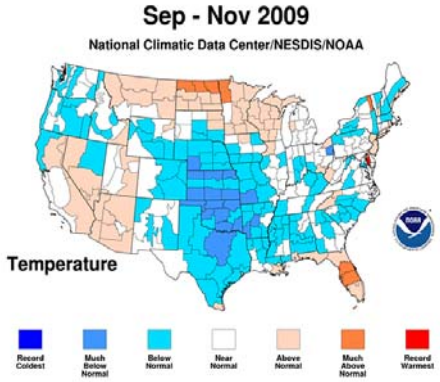
Nationally, by the end of August, 64,863 fires had occurred, burning 5,294,329 acres. This represents 105 percent of the number of fires, but only 94 percent of total acres burned as a comparison to the 10-year national average. Last year 537 fewer fires had occurred, and 669,836 fewer acres had burned by August 31. Overall, most Geographic Areas experienced below average numbers of fires and acres burned from June through August. The most notable exceptions were Alaska and the Southwest. Alaska reported 511 fires year-to-date, burning 2,934,455 acres, which is 116 percent of its 10-year fire average, and 194 percent of its 10-year average for acres burned. The Southwest reported 2,923 fires year-to-date and 601,763 acres burned as of August 31, or 76 percent of its 10-year fire average, but 139 percent of its 10-year average for acres burned. Portions of central Texas remained active through the end of August due to persistent and exceptionally dry fuels.

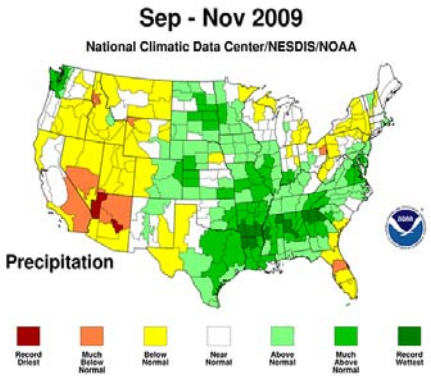
Geographic Areas that experienced below average fire seasons in 2009 (for both number of fires and number of acres burned) were the Northwest, Northern California, Northern Rockies, Great Basin (both Eastern and Western), and Rocky Mountain. Southern California experienced 106 percent of its average number of fires, yet burned just 66 percent of its average acres. The Eastern Area had 123 percent of its average number of fires that burned 109 percent of average year-to-date acres. The Southern Area had 112 percent of its average number of fires burning 114 percent of average year-to-date acres. The majority of the fires and acres in both the Eastern and Southern Areas occurred prior to June.

The National Seasonal Significant Wildland Fire Potential Outlook issued on May 1, 2009 called for above-normal significant fire potential across much of Florida and portions of the Southwest, with increasing to above normal potential in portions of California, Arizona, New Mexico and Washington. Significant fire potential was expected to decrease from above normal in portions of Minnesota, Wisconsin, Texas and New Mexico during the June through August time period. The map below depicts the Seasonal Wildland Fire Potential Outlook with the significant fires reported during the same period.

Fall (September – November)

The West experienced its warmest September on record. It was also quite dry, particularly in the Pacific Northwest. The Northern Plains were also quite warm, with cooler than average weather in the central states and New England. The Southeast was much wetter than normal. In October, a series of cold fronts brought colder and wetter than usual weather to most of the country except for dry weather in the Southwest and Florida. November saw the return of warmer and drier than normal weather to much of the nation. The graphics below show the September through November temperatures and precipitation. For Alaska, the fall was warmer than normal with below average precipitation over most of the interior.



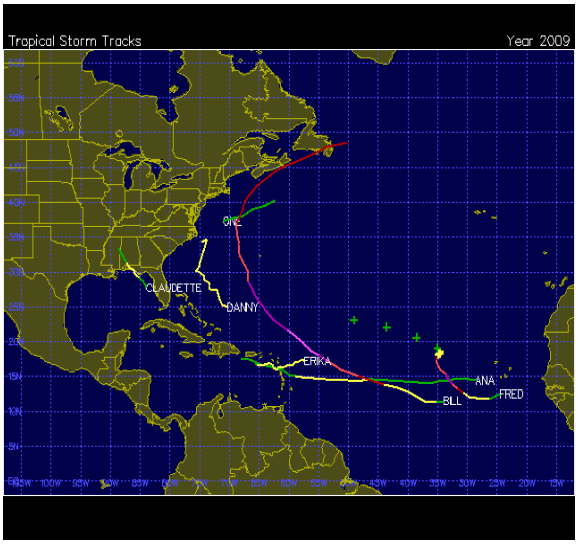


Military and International Resource Mobilizations

There were no military activations in support of wildland fires in 2009. In February the United States sent three Burned Area Emergency Rehabilitation (BAER) teams, a 20 person crew and 15 fire specialists (a total of 73 personnel) to Australia. The last of these resources were released in early April. The U.S. also provided one national Type 1 Incident Management Team and 20 smokejumpers to British Columbia, Canada, in August.

Hurricane Support

The 2009 Atlantic hurricane season experienced below normal tropical activity for the summer, with below-normal activity the remainder of the fall hurricane season. By September 11, there had been seven named storms, including two hurricanes, both of which were major hurricanes (Category 3 or higher). Only one tropical system, Tropical Storm Claudette, impacted the U.S. coastline. The hurricane season runs from June 1 to November 30, with August and September typically being the most active months. Normal activity for the hurricane season is 11 named storms with six becoming hurricanes. Early season tropical forecasts called for normal to below normal tropical activity for the 2009 season, with mid-season



updates reinforcing the initial forecast. No Incident Management Teams were requested in support of tropical storm activity. Map courtesy of Unisys Corporation: http://weather.unisys.com/hurricane/atlantic/2009/index.html.

National Fire Activity Synopsis

The 2009 fire season was slightly above normal for number of reported wildfires. There were 291 more fires reported than the average for the past ten years. There were 78,792 wildfires reported (compared to 78,949 wildfires reported in 2008). This represents 97 percent of the 10-year average, and almost exactly the 20-year average for wildfires. The number of acres burned in 2009 was 5,921,786. This represents 85 percent of the 10-year average, and 115 percent of the 20-year average for acres burned.

Five Geographic Areas reported above average number of fires in 2009: Alaska, California, Eastern, Southern, and Southern and Northern Operations (California) Areas. Three Geographic Areas experienced above average acres burned in 2009, Alaska, Southwest and Southern Areas. The Rocky Mountain Area experienced just 69 percent of its average number of fires, and burned just 33 percent of its 10-year average for acres.

Twenty-seven fires or complexes exceeded 40,000 acres in size in 2009, compared to 24 in 2008. Alaska had the highest number at 17, including the seven largest in 2009. Other Geographic Areas that had fires over 40,000 acres included Southern California Area, Southern Area, Western and Eastern Great Basin Areas, Northwest Area and Southwest Area.

While the 12,429 prescribed fire projects reported in 2009 were lower than the 10-year average of 14,846 projects, the 2,531,133 acres accomplished were slightly above the 10-year average of 2,347,067 acres.

Fire activity in 2009 kept the national Preparedness Level to no higher than 3 for only the sixth time since 1990. The 275 days at PL 1 in 2009 was the highest since 1992, which had 278 days at PL 1.

The demand for national Incident Management Teams was significantly lower in 2009 than in recent years. National Type 1 Teams were mobilized just 10 times and spent just 125 days on assignments. This includes one assignment to British Columbia, Canada. This is down considerably from last year when Type 1 teams were mobilized 44 times and spent 609 days assigned to incidents.

National Type 2 Teams were mobilized 63 times and spent 573 days assigned in 2009 (figures include both national and regional teams). This is roughly half the assignments and assignment days as occurred in 2008.

There were no Area Command Team mobilizations in 2009. Four National Incident Management Organizations (NIMO) were mobilized nine times to fire and non-fire incidents.