

National Interagency Coordination Center

Wildland Fire Summary and Statistics 2008





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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

Other:

PRI - Private

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

Other – Not federal or state

CN - Canada

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.

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.



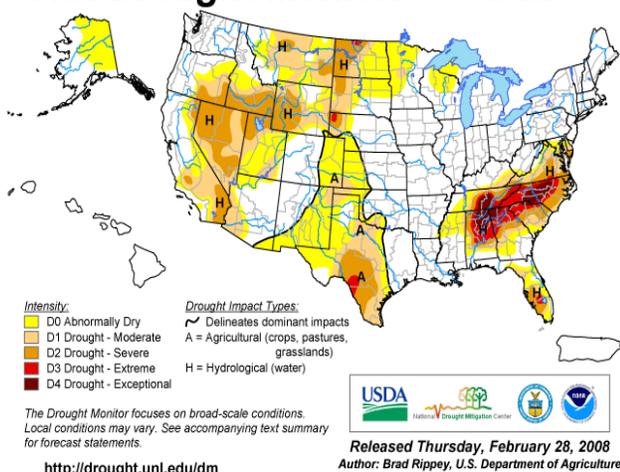
National Interagency Coordination Center

2008 Fire Season Summary

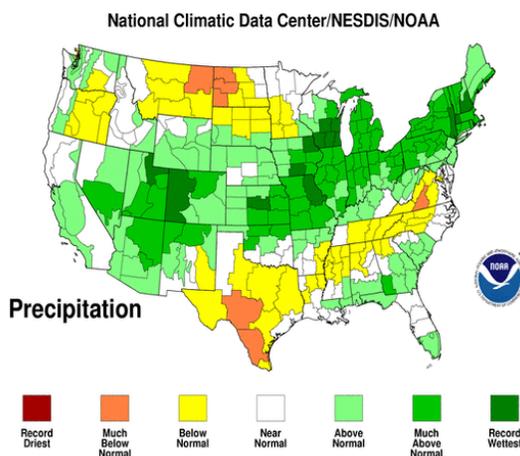
Winter (December 2007 – February 2008)

The winter (December through February) of 2007-2008 was wetter than normal over much of the central U.S. extending from southern California to the northeastern seaboard. The north-central plains and the area from west Texas across to the Appalachian Mountains was drier than normal. Temperatures were generally colder than normal in the West and warmer than normal in the East. Alaska saw near normal temperatures with below normal snow packs in the eastern half of the state. Drought conditions persisted across portions of the West, Texas, and especially the Appalachian Mountains as of mid-winter.

U.S. Drought Monitor February 26, 2008

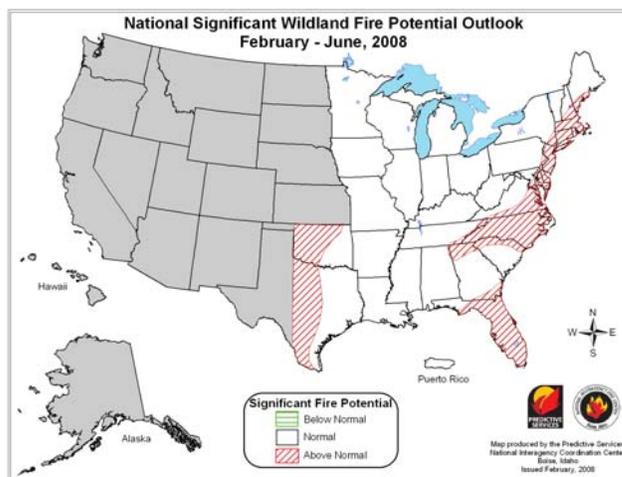


Dec 2007 - Feb 2008 Divisional Ranks



The initial seasonal outlook reports for the Southern and Eastern Areas called for above normal significant fire potential over central Texas, much of Florida, and from the Appalachian Mountains along the eastern seaboard to southern Maine. Normal potential was forecast for the remainder of the area (see image).

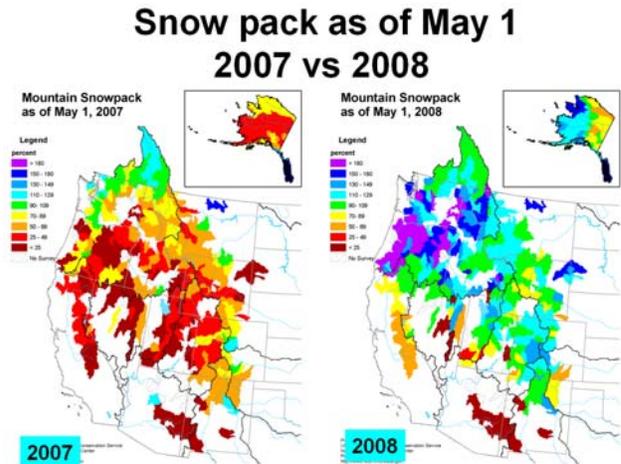
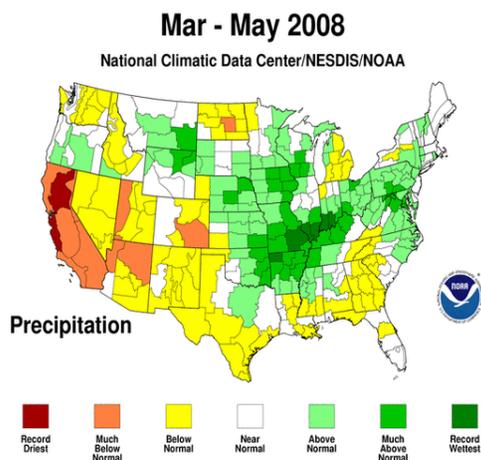
The Glass fire, which burned nearly 220,000 acres in Texas, was the largest fire in 2008. Fire activity in Texas remained well above average through the winter period due to above normal fine fuel loading and very dry, windy conditions. Significant fires were usually associated with frontal passages with low relative humidity and wind speeds exceeding 25 mph. The Glass fire occurred under these conditions and burned 9 miles under a west wind before burning another 40 miles to the south after the winds shifted



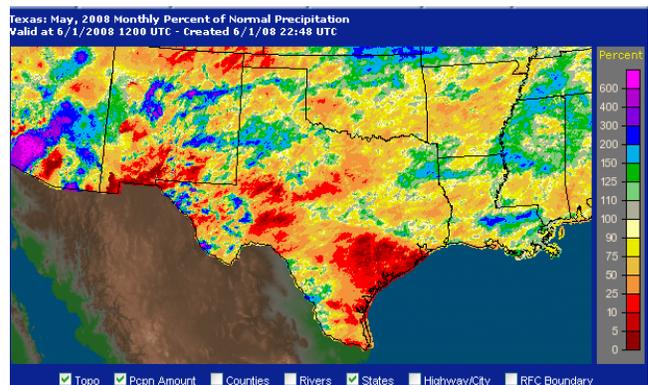
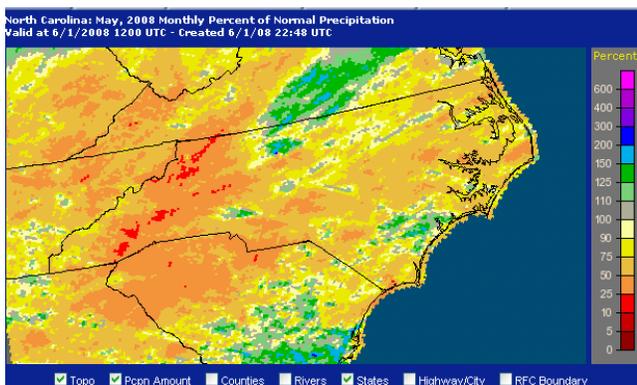
out of the north. The southern Appalachian Mountains also experienced numerous fires due to extreme drought and very dry deep organic soils.

Spring (March – May)

Spring was cooler than normal across most of the country except for warmer than average conditions over Texas and portions of southern California and the northeastern seaboard. Overall, California was far drier than anywhere else in the country and several locations in northern California experienced the driest spring (March – May) on record. Conversely, sections of central U.S. from the western Great Lakes south to Arkansas, then extending northeast into New York was much wetter than normal. Alaska saw drier than normal conditions across the east-central interior. Much of the Southwest and portions of the Southeast also experienced a dry spring. Mountain snowpack amounts across the West were near average in most locations, but well above average in the Cascades, portions of central Oregon and Washington, and northern Nevada. Percent of normal snow pack amounts as of May 1 across the West and in Alaska were dramatically higher than in 2007.



The Southern Area had an active spring fire season and by the end of May had experienced 15,828 fires burning 1,070,536 acres (which is 150 percent of their normal year-to-date acres based on a 10-year average). Rainfall deficits were primarily centered in central Texas and the southern Appalachian Mountains, especially in western North Carolina (see images). Fuels were exceptionally dry in these areas with Energy Release Component values exceeding the 97th percentile or historic maximums in many locations. Large fire activity began to taper off in



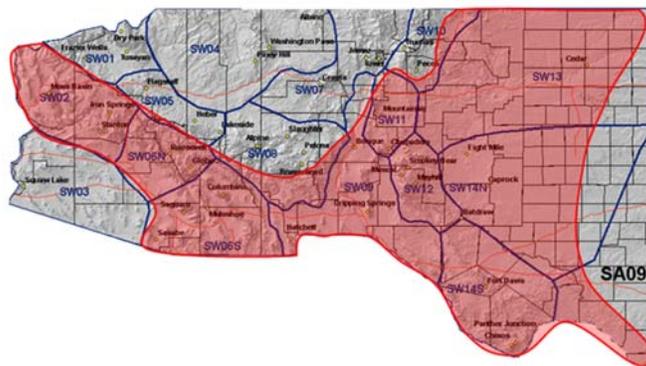
south Texas after March.

Wildfire activity in the Eastern Area was running below normal during the spring both in terms of overall fires and acres burned. By the end of May, the Eastern Area had burned only 44 percent of their average acres.

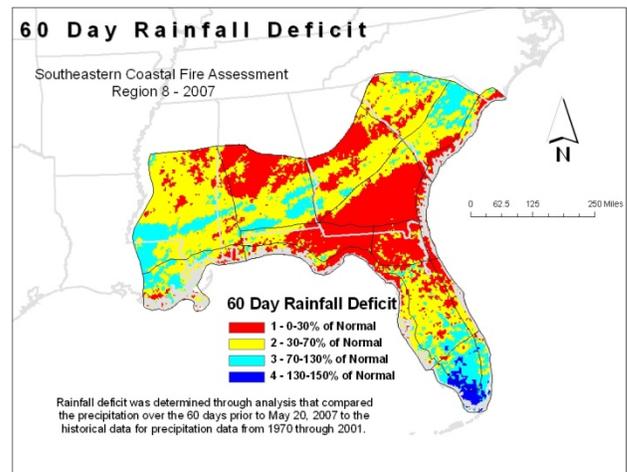
The Southwest Area issued a fuels advisory in early May for very heavy fine fuel loadings combined with very dry conditions across southern Arizona and eastern New Mexico (see image). By the end of May, the Southwest had burned approximately 95 percent of their 10-year average year-to-date acres.

Southwest Area Fuels and Fire Behavior Advisory

Nature of Impact: Heavy loadings of cured fine flashy fuels contributing to potential for extreme fire behavior



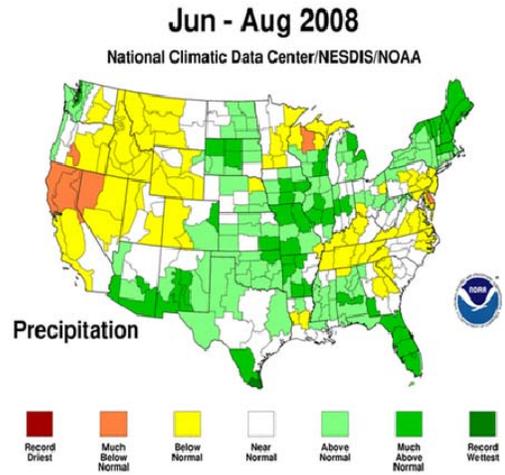
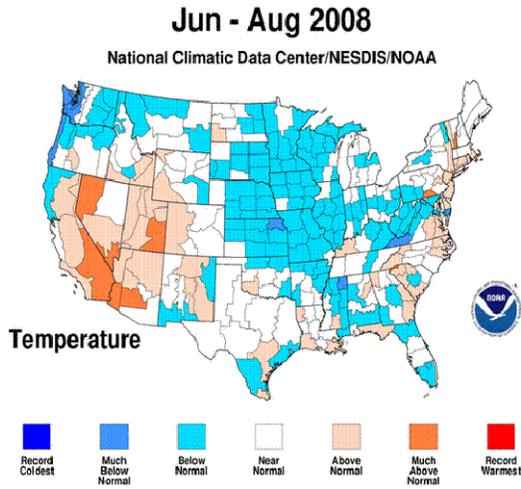
Up until the end of May, fire season 2008 could be described as below average nationally. There were 27,042 fires reported for 1,500,637 acres burned nationally. This was just 59 percent of the 10-year average for fires, and 42 percent of acres burned to date. The Southern Area was the most active Geographic Area during the spring, but experienced only 66 percent of its 10-year average for fires, but 150 percent of its 10-year average for acres burned. The Southwest Area, which typically experiences an early onset to fire season, reported just 40 percent of its 10-year average for fires, and 95 percent of its 10-year average acres burned.



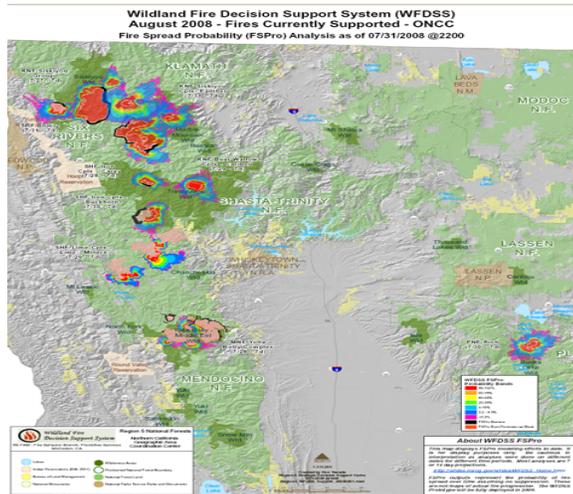
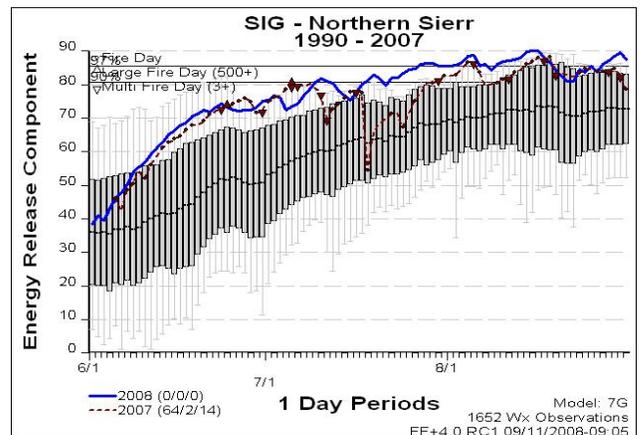
Summer (June – August)

The summer of 2008 started off very warm across the southern half of the nation and unseasonably cool across the northern tier of the country west of the Great Lakes. Temperatures were near to slightly above normal across much of the West in July through the first half of August. It was also drier than normal throughout much of the summer across the northwest quarter of the country with greatest departures in California, eastern Washington and northwest Montana. Dry conditions were also present over the Southeast, Texas and

Oklahoma. A robust southwest monsoon started in early July with the main focus of moisture over Arizona and New Mexico, and extending into the southern California mountains and the extreme southern Great Basin. Mid to late August rain brought some relief to the Pacific Northwest and the Southeast.



Winter snow packs across the mountains of northern California rapidly diminished early in the period from sustained hot, dry weather. This caused higher elevation fuels to dry out much more rapidly than normal with National Fire Danger Rating System (NFDRS) Energy Release Component (ERC) values reaching critical values by mid-June. The image shown at right displays a 2008 ERC index trace for the



Northern Sierras 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 and then remained well above normal into late August.

The exceptionally dry spring, early snowmelt and dry fuels in northern California, set the stage for pronounced large fire activity during the first half of the summer. On June 20 through June 21 widespread lightning started nearly one thousand fires in northern California. The magnitude of ignitions quickly outpaced initial attack capability of firefighting resources. Accessible fires with low resistance to control were easily contained while fires in remote and difficult terrain burned unstaffed for several days. Persistent dry fuels across the area caused many of these fires to get well established in steep mountainous terrain in the Klamath, Six Rivers, and Shasta-Trinity National Forests. The Fire Spread Probability map included on the previous page displays the number and extent of the situation by the end of July.

Higher elevation snow packs across the Northwest, Idaho, and western Montana remained in place longer than normal due to a cool, wet spring. This helped to abate the risk of large fires across much of the northwestern U.S. until mid summer.

Central Texas remained dry and saw continued above average fire activity through the majority of the period. With the transition of spring to summer weather patterns were characterized by intense drying but less frequent and weaker wind events. The bulk of the fire activity shifted into east/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 increase 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 11 percent of their normal year-to-date acres.

By mid-August, fire activity picked up considerably across much of the west. Frequent lightning storms tracked across much of the west, and while initial attack activity remained below normal in most areas, numerous large fires emerged, especially in the Northwest, Idaho and Montana.

Fortunately, Alaska did not dry out sufficiently to become a major concern during the summer, burning only 4 percent of normal acres by the end of August. The Rocky Mountain Area also had a below normal summer season in terms of large fire events. Several wet thunderstorm events worked their way across Colorado and Wyoming, keeping fuels from drying out to critical levels for any sustained periods of time. By the end of August, a lower than average number of fire starts were recorded in the Rocky Mountain Area.

In the East, Ohio and the southern Great Lakes area started the period out much wetter than normal but then turned quite dry by the end of July into August. The southern Appalachian Mountains saw continued dry weather with areas of exceptional drought, especially in the western portions of North and South Carolina, northern Georgia and Alabama, and eastern Tennessee.

The National Wildland Fire Potential Outlook, issued May 1, 2008, called for above normal significant fire potential across much of southern California, southern Arizona and New Mexico, west Texas, Florida, and portions of the central U.S. for May. Significant fire potential was expected to decrease across Florida, west Texas, and the southern half of the central plains during the June through August time period.

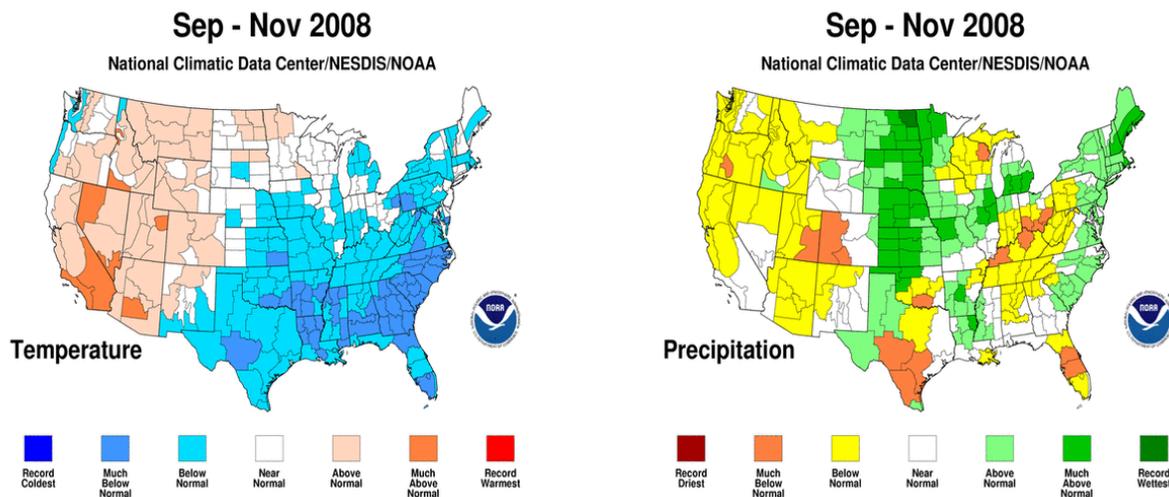
Nationally, by the end of August, 64,326 fires had occurred, burning 4,674,493 acres. This represents 105 percent of the number of fires, but only 89 percent of total acres burned in comparison to the 10-year national average. In 2007, 1,298 more fires had occurred, and 2,252,222 more acres had burned as of August 31. Overall, most Geographic Areas experienced below average numbers of fires, except for Northern and Southern California Geographic Areas and the Southern Geographic Area. Northern California reported 3,796 fires and 850,579 acres burned, which is 130 percent of its 10-year fire average, and 880 percent of its 10-year average for acres burned. Southern California reported 3,788 fires and 365,500 acres burned as of August 31, or 124 percent of its 10-year fire average and 265 percent of its 10-year average for acres burned. The Southern Area reported 36,925 fires and 2,038,493 acres burned, or 129 percent of its 10-year average number of fires and 240 percent of the 10-

year average number of acres burned. Texas remained active through much of the summer due to persistent and exceptionally dry fuels.

Geographic Areas that experienced below average fire seasons (for both number of fires and number of acres burned) were Alaska, Northwest, Northern Rockies, the Great Basin (Eastern and Western), and Eastern Area. The Southwest Area experienced just 63 percent of its average number of fires, but burned 115 percent of acres. The Rocky Mountain Area experienced 77 percent of its average number of fires, yet burned 126 percent of average acres.

Fall (September – November)

September had warmer than normal weather across the country, except cooler than normal in the central states. It was quite dry in the West and Southeast with some portions of California reporting a record dry September. Much of the rest of the country experienced wet conditions, with heavy rainfall in the Mississippi River Valley and Midwest due to moisture from hurricanes Gustav and Ike. By October, much of the nation was cooler than normal except for continued warmth in the Southwest. The West had very dry weather, while the Plains, New England and portions of the Southeast were wetter than usual. November was warm in the West and cool in the East. Rainfall was near to above normal across most of the country, except for dryness from Texas northward into the Midwest.



Resource Mobilizations

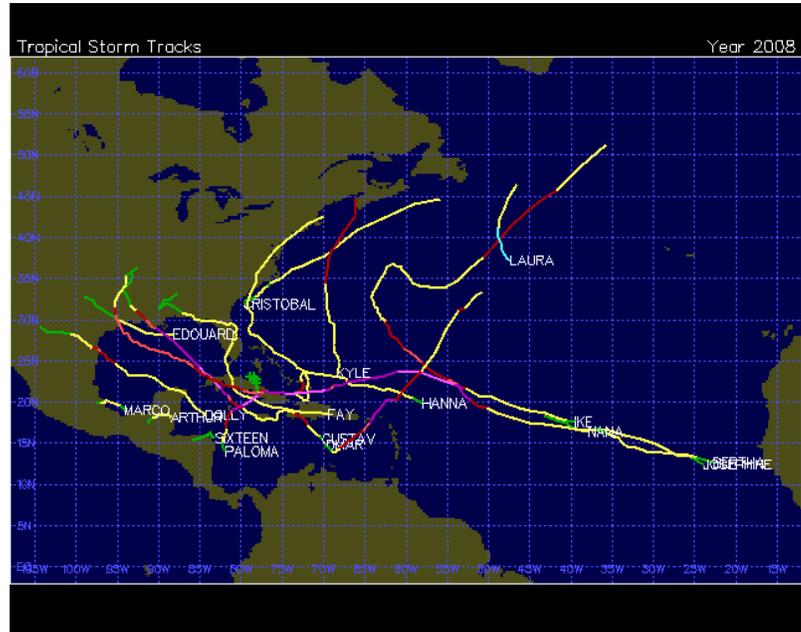
Canada provided two Type 1 crews for 17 days, and 16 fire managers and specialists to California. Australia and New Zealand provided 49 fire managers and specialists to California for 37 days.

Eight National Guard Modular Airborne Fire Fighting System (MAFFS) C-130 aircraft were deployed to California (the first on June 23) to support fire suppression operations in that state. These aircraft, three each from North Carolina and Wyoming, and two from Colorado flew 480

missions and dropped 1,325,000 gallons of fire retardant. The last MAFFS were released on August 1.

Hurricane Activity

The 2008 Atlantic hurricane season experienced much above normal tropical activity. As of November 10, 2008, 17 named storms had occurred, including eight hurricanes, five of them major (Category 3 or higher). 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 6 becoming hurricanes, 2 of which being at least of Category 3 strength. Early season tropical forecasts called for above normal tropical activity for the 2008 season, with mid-season updates reinforcing the initial forecast. Seven Incident Management Teams were requested and/or pre-positioned in support of tropical storm activity. (Map by Unisys Corporation: <http://weather.unisys.com/hurricane/atlantic/2008/index.html>.)



National Fire Activity Synopsis

The 2008 fire season was near normal for both wildfires and acres burned. There were 78,949 wildfires reported to NICC in 2008 (compared to 85,705 wildfires were reported in 2007). This is 98 percent of the 10-year average, and 97 percent of the 20-year average. The number of acres burned in 2008 was 5,292,468, considerably less than the 9,328,045 acres burned in 2007. The number of acres burned in 2008 was 81 percent of the 10-year average, and 108 percent of the 20-year average.

Three Geographic Areas reported an above average number of fires in 2008. Four Geographic Areas experienced above average acres burned in 2008. Seven Geographic Areas, Alaska, Northwest, Northern Rockies, Eastern Great Basin, Western Great Basin, Rocky Mountain and Eastern Area, had below average fire seasons (both wildfires and acres burned) in 2008. The Southwest Area had only 67 percent of average for number of fires, but burned 130 percent of the 10-year average number of acres.

Twenty-four fires or complexes exceeded 40,000 acres in size in 2008, compared to 53 in 2007 (page 13). These fires occurred in seven Geographic Areas (Northern Rockies, Northern and Southern California, Southern Area, Western Great Basin, Rocky Mountain and Southwest Areas). Northern California had the highest number at ten, followed by the Southern Area with six. Half of the 24 largest fires or complexes occurred in California.

A total of 7,669 prescribed fire projects were reported in 2008, down significantly from the previous year's 24,073 projects (page 25). The number of projects was significantly lower than the 10-year annual average of 13,857 projects. The 1,935,001 acres accomplished in 2008 were also down from the 10-year average of 2,187,642. The 2008 figure is also more than a million fewer accomplished acres than in 2007.

A total of 265 Wildland Fire Use incidents occurred in 2008, below the 10-year annual average of 327 incidents (page 29). However, the number of acres burned was well above the 10-year average at 236,835. The 10-year annual average is 187,416 acres.

The nation was at Preparedness Levels 4 and 5 for 58 days in 2008, the fourth highest number of days since 1990 (page 32). The 10-year average is 46 days at PL 4 and 5 combined.

The demand for national Incident Management Teams was lower in 2008 than in recent years. Type 1 Teams were mobilized 41 times and spent 609 days on assignments. This is down considerably from last year when Type 1 teams were mobilized 62 times and spent 805 days on assignments. The 10-year average is 57 assignments annually.

Type 2 Teams were mobilized 125 times and spent 1,232 days on assignments in 2008. In 2007, Type 2 Teams were mobilized 159 times, and spent 1,590 days on assignments. Fire Use Management Teams were mobilized 18 times and spent 230 days on assignments in 2008. In 2007, Fire Use Management Teams were mobilized 19 times, spending 295 days on assignments.

Four Area Command Teams were mobilized seven times and spent 122 days on assignments in 2008. In 2007, five Area Command Teams were mobilized 11 times and spent 154 days on assignments. Two National Incident Management Organizations were mobilized 17 times and spent 246 days on assignments in 2008. This is up from last year when NIMO teams were assigned 11 times and spent 187 days on assignments.