

National Interagency Coordination Center

Wildland Fire Summary and Statistics Annual Report 2010





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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 – **PRI** – Private

CNTY – County

CN – Canada

AU – Australia

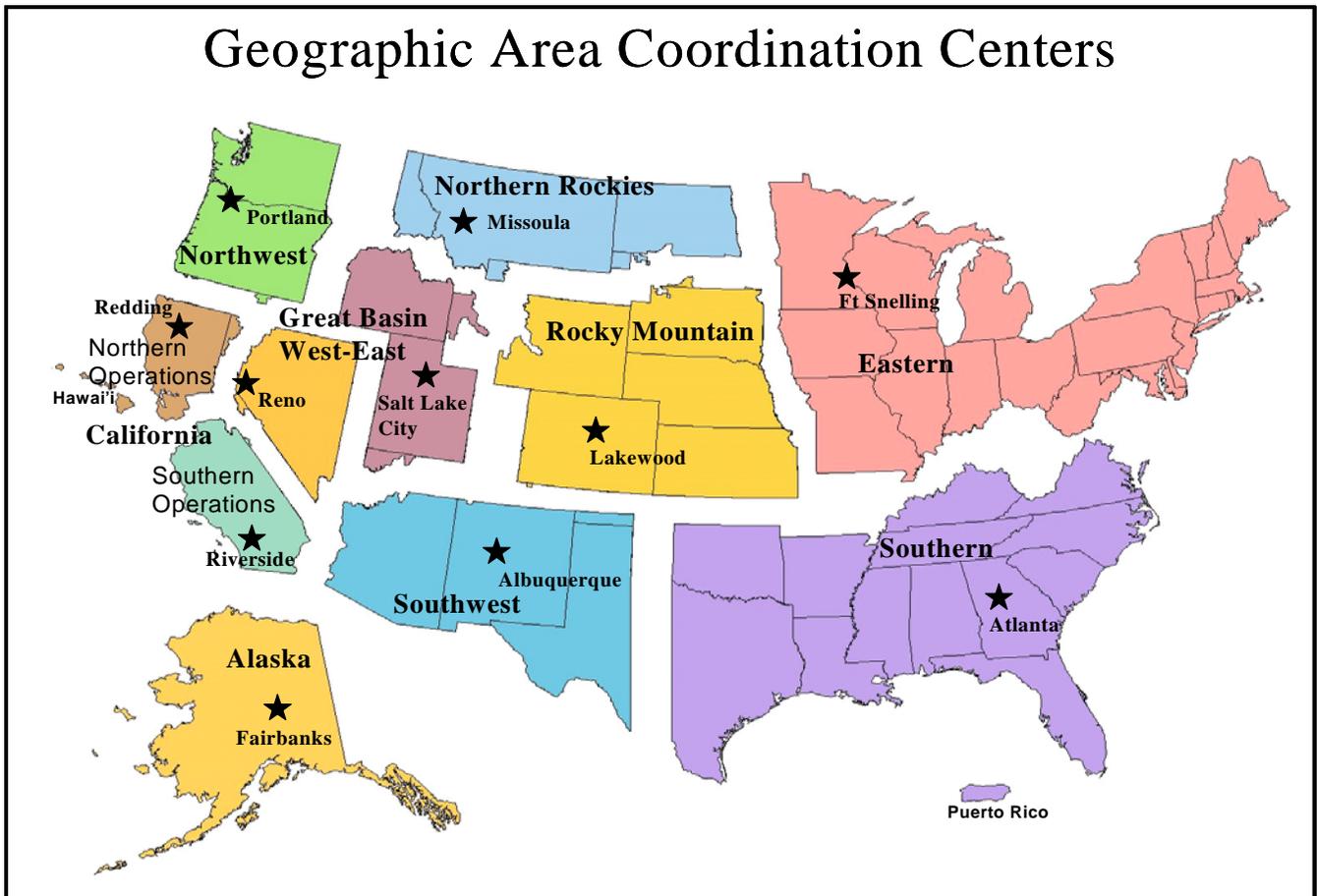
NZ – New Zealand

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/intelligence.htm>.

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

2010 Fire Season Summary

Winter (December 2009 – February 2010)

The winter of 2009-2010 was drier than normal over much of the northwest quarter of the country, including Wyoming and Idaho, as well as Michigan through the Ohio River Valley. Alabama, Florida, Georgia and North Carolina experienced wet winters. Much of the country experienced a cold winter, with the exception being the Northwest, West Coast, and portions of the Northeast. Alaska experienced its fifth driest December-February period on record along with above normal temperatures. Hawaii was exceptionally dry with rainfall totals for January-February in Hilo measuring 2.32 inches compared to a normal of 18.60 inches. Drought conditions persisted across much of the West, portions of the western Great Lakes, the interior of Alaska, and the Hawaiian Islands. Much of the weather pattern for the winter can be attributed to the effects of El Niño, which became most evident beginning in mid-January with a very wet weather pattern across the southern tier of the U.S.

Fire activity was minimal across the country throughout the winter. The Southwest was somewhat active in early January (110 percent of average for number of fires and 127 percent of average acreage), however this was quickly mitigated by widespread heavy precipitation that began in mid-January. Nationally, by the end of February there were 42 percent of the average number of fires and 26 percent of average acreage for the year to date.

Spring (March – May)

In the West, a persistent pattern of low pressure troughs produced a very cool spring. Overall, this was the tenth coolest May on record for the entire West and the second coolest May for Idaho. The Northwest was wetter than normal, while the Southwest was unusually dry. In the East, a strong high pressure ridge gave the area a very warm spring, and the warmest spring ever for the Northeast. Most of the East was also drier than normal, especially over the Great Lakes and Louisiana. Mountain snowpack amounts across the West were significantly lower than normal in early May, with the exception of the Southwest, southern Utah, southern and eastern Nevada, and much of California where above normal snowpack was measured. However, a rather cool and wet spring kept higher elevation fuels moist through the early summer months in many locations.

Due to a very dry winter and spring, Alaska had less than 70 percent of normal snowpack across the central and western portions of the state by May 1, with around 80 percent of normal conditions in the east and north. Record temperatures were observed in parts of the Alaska Interior the last week of May, and relative humidity values in the teens were also recorded for the same period. The Build-Up Index (similar to the NFDPS Energy Release Component and indicates the overall burnability of large fuels) was at all-time record high values during the last week of May.

By the end of May, fire season 2010 could be described as below normal across the contiguous U.S., but much above normal in Alaska. Nationally, by the end of May, 25,784 fires had occurred, burning 674,222 acres. This was 78 percent of the total number of fires, and 62

percent of total acres burned as a comparison to the 10-year national average for this time period. Alaska reported 262 year-to-date fires that burned 259,946 acres, which is 163 percent of its 10-year fire average, and 580 percent of its 10-year average for acres burned. By the end of May, Alaska had burned nearly 40 percent of the total number of acres burned nationally.

Except for Alaska, every Geographic Area experienced below average fire activity. Eastern Area experienced near normal fire activity during the spring, with below average acres burned for the time period. Northern California Operations Area and Eastern Great Basin Geographic Area also reported near average number of fires, but both Geographic Areas were well below average for acres burned. All other Geographic Areas were below their average for both fires and acres burned through the end of May.

Summer (June – August)

The weather patterns for the summer of 2010 featured recurring low pressure systems and associated coolness over much of the West, with hot weather over the East. This was largely due to the weakening, and eventual transition, of El Niño to La Niña. Nationally, it was the fourth warmest summer on record. Ten eastern states experienced record-warm summers; Rhode Island, New Jersey, Delaware, Maryland, Virginia, North Carolina, Tennessee, South Carolina, Georgia, and Alabama. The Northeast experienced its warmest January-August period on record with an average temperature of more than 3.4 degrees Fahrenheit above normal for the region. The summer weather pattern brought significant precipitation to the western Great Lakes, and the nation as a whole averaged above normal precipitation for the summer. Wisconsin had its wettest summer on record with 6.91 inches of precipitation above average. Michigan, Iowa, Illinois, Nebraska, South Dakota, and Minnesota experienced their wettest summer in the past 10 years. A persistent high pressure system and lack of tropical activity produced dry conditions in the Southeast. The Southwest monsoon arrived on time, with average intensity and had greatest impact across the Four Corners, eastern Arizona, New Mexico and west Texas. Alaska experienced near normal temperatures yet relatively wet conditions for the summer months. Precipitation was 12 percent above normal through the June-August period across Alaska.

Mountain snowpack amounts across the West were significantly lower than normal by May 1, with the exception of the Southwest, southern Utah, southern and eastern Nevada, and much of California where above normal snowpack was measured. However, a rather cool and wet spring kept higher elevation fuels moist through the early summer months in many locations. Alaska, due to a very dry winter and spring, had less than 70 percent of normal snowpack across the central and western portions of the state by May 1, and around 80 percent of normal conditions in the east and north.

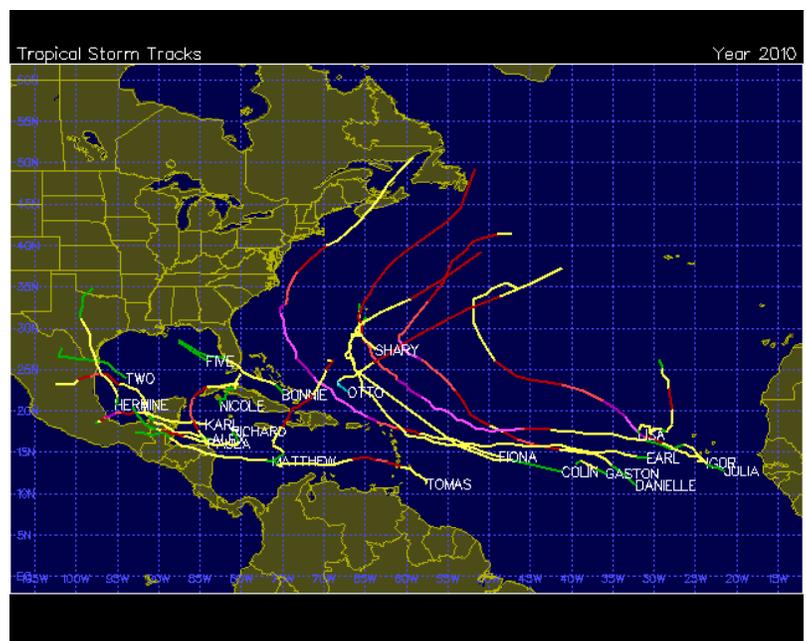
By the end of August, 43,293 fires had occurred, which burned 2,612,608 acres nationally. This represents 71 percent of the total number of fires, and 45 percent of total acres burned as a comparison to the national 10-year average. In 2009 21,570 more fires had occurred and 2,681,721 more acres had burned during the same time frame. All Geographic Areas experienced below average fires and acres burned from June through August, except Alaska. Alaska reported 648 year-to-date fires that burned 1,099,312 acres, which is 147 percent of its 10-year fire average, but only 73 percent of its 10-year average for acres burned. It is notable that by August 31, Alaska had burned 42 percent of the total number of acres burned nationally. Eastern Great Basin reported 1,604 fires, which burned 630,661 acres, which is 78 percent of its 10-year fire average, and 92 percent of its 10-year average for acres burned.

Two fires that burned in Idaho during July and August accounted for nearly 66 percent of the year-to-date acreage total to date for the Eastern Great Basin Area. Collectively these two fires burned a total of 415,549 acres.

All other Geographic Areas experienced below average fires and number of acres burned, and the national preparedness level never exceeded PL 2 for the entire year. The greatest anomaly was Western Great Basin, which experienced 44 percent of its 10-year average number of fires and burned just four percent of normal acreage by August 31. Eastern Geographic Area came closest to average with 94 percent of fire occurrences. Eastern Great Basin Geographic Area came closest to average for number of acres burned. The majority of the fires and acres in both the Eastern and Southern Areas occurred prior to June.

Hurricane Support

The 2010 Atlantic hurricane season experienced above-normal tropical activity during the summer. As of October 1, 2010, there were 19 named storms, including 12 hurricanes, 5 of which were major hurricanes (Category 3 or higher). No tropical systems had a major impact on the U.S. coastline. The greatest impact came from Hurricane Earl that brushed the East Coast in early September and brought gusty winds and heavy rainfall to the Outer Banks of North Carolina and the coast of Maine. 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. Early season tropical forecasts called for above normal tropical activity for the 2010 season, with mid-season updates reinforcing the initial forecast. No Incident Management Teams were mobilized in support of tropical storms activity. Map courtesy of Unisys Corporation:



Map courtesy of Unisys Corporation: <http://weather.unisys.com/hurricane/atlantic/2010/index.html>.

National Fire Activity Synopsis

The 2010 fire season was below normal for number of reported wildfires at 94 percent of the 10-year average by the end of the year. There were 71,971 wildfires reported nationally (compared to 78,792 wildfires reported in 2009). The number of acres burned in 2010 was 3,422,724. This represents just 52 percent of the 10-year average. Alaska led the nation in acres-burned in 2010, with over 1.1 million acres burned.

Three Geographic Areas reported above an average number of fires in 2010: Alaska, Eastern and Southern Areas. Only Eastern Great Basin Geographic Area experienced above average

acres burned in 2010 at 107 percent of its 10-year average. This was largely due to two very large fires that burned in southern Idaho. Nine fires or complexes exceeded 40,000 acres in size in 2010, compared to 27 in 2009 and 24 in 2008 (see Significant Fire Activity below).

Across much of the western U.S., June rains delayed the onset of fire season. By late July, 10 of the 11 Geographic Areas were seeing large fire activity. However, fire activity did not become significantly concentrated in any single Geographic Area, and the fires that did occur generally burned in light fuels and did not create significant suppression issues.

Notable fires of 2010 included the **Schultz fire** just outside of Flagstaff, Arizona which burned 15,000 acres in mid-June. This fire caused the evacuation of 750 homes. Monsoonal flash flooding a few weeks after the fire resulted in a massive mud and debris flow that came out of the burned area and into a subdivision. A Type 2 Incident Management Team was mobilized as a result of the debris flow. The **Four Mile Canyon fire** near Boulder, Colorado burned 167 residences and several outbuildings in early September. This wind-driven fire ultimately burned nearly 6,200 acres. Two massive rangeland fires in Idaho were the largest fires of 2010 that occurred in the contiguous U.S. The **Long Butte fire** scorched 306,000 acres near Hagerman, Idaho, and the **Jefferson fire** burned 109,000 acres of rangeland near the Idaho National Laboratory.

A total of 788 structures were destroyed by wildland fires, including 338 residences, 445 outbuildings and 5 businesses. This is well below the annual average of 1,179 residences, 1,156 outbuildings and 42 businesses destroyed by wildfire (statistics compiled from 1999 to present).

The 2010 fire season did not see any serious competition for firefighting resources. In fact, mobilizations of Area Command, NIMO, and Incident Management Teams were down significantly in 2010. The demand for national Incident Management Teams was significantly lower in 2010. National Type 1 Teams were mobilized just 10 times and spent just 92 days on assignments. This includes one non-fire flood recovery assignment in Arkansas. Nine of the 16 teams were not assigned to an incident.

Type 2 Teams were mobilized 65 times and spent 672 days assigned in 2010 (figures include both national and regional teams). In 2009 there were 62 Type 2 assignments for 571 assignment days. None of the nation's four Area Command teams were mobilized in 2010. Three of the four National Incident Management Organizations (NIMO) were mobilized six times to both fire and non-fire incidents, including one international fire assignment to Israel.

In April, the Deepwater Horizon oil spill in Gulf of Mexico created a significant all-hazard incident for the Southern Geographic Area. Various wildland fire and natural resource personnel were ordered for incident support and management in response to this national disaster.

Military and International Resource Mobilizations

Military: There were no military activations in 2010.

Australia: In January the United States sent 12 fire managers and specialists to Australia for 34 days. A second contingent of 16 personnel departed for Australia in February for assignments lasting up to 40 days.

Haiti: The National Interagency Fire Center mobilized two radio technicians along with 300 radios and five repeaters to Haiti in January following that country's earthquake. The technicians were assigned a total of 17 days.

Canada: The U.S. provided 30 smokejumpers to British Columbia, Canada in August (in two separate contingents). Infrared aircraft flew 18 fire missions in British Columbia and Alberta (five infrared interpreters were utilized to analyze the infrared data back in the U.S.). Additionally an interagency 20 person Type 2 initial attack crew from the Eastern Area was mobilized to a fire in Quebec in July.

Russia: The U.S. provided 100 large capacity water tanks, 1,500 hand tools and 1,000 pairs of goggles in support of the massive wildfires that occurred there in August.

Israel: The National Interagency Fire Center mobilized five members of Custer's NIMO to support a U.S. Agency for International Development Disaster Assistance Response Team (DART) in response to wildfires burning in Israel's Carmel Forest. The team members were assigned from December 4 through December 10. Three 20-person crews were initially staged in Boise for a 24 hour period, but then released.