# National Interagency Coordination Center

# **2004 Statistics and Summary**





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## **Identifier Legend**

#### Interagency Coordination Centers

- AK Alaska
- EA Eastern Area
- EB Eastern Great Basin
- NICC National
- 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

OAS - Office of Air Services

**Department of Agriculture:** 

FS - Forest Service

DDQ - Department of Defense

Department of Homeland Security: FEMA - Federal Emergency Management Agency

**Department of Commerce:** WXW - National Weather Service

- ST State
- CN Canada

### Preface

All wildland fire and acreage statistics were gathered from the National Situation Report program, individual geographic areas detailed situation reports, submitted Incident Status Summaries reports (ICS-209) and previous National Interagency Coordination Center's (NICC) annual reports. The statistics presented in this report provide a national perspective of annual fire activity. The statistics are delineated by agency and geographic areas.

For specific or more detailed information contact individual agencies.

Resource mobilization statistics were gathered from the NICC database. The statistics presented are the resource requests that were processed through NICC and ordered by one of the eleven interagency coordination centers. 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.



# **Annual Fire Summary 2004**

#### National Interagency Coordination Center 2004 Fire Season Summary

#### Winter (December 2003 – February 2004)

The West entered the winter of 2003-2004 suffering from the effects of long-term drought and a warm, dry fall. The West had a relatively wet and mild winter while the East was colder and drier than normal. The interior of Alaska was warmer than usual, with near to above normal precipitation except for January which was colder and drier than normal. By the end of February, snowpack levels over the Alaskan interior were generally 70-110% of normal, except well below normal over the southwest corner of the state.



The fire season outlook issued April 15, 2004 called for above normal potential for large fires over portions of the intermountain West (except near to below normal in the Great Basin) and western Alaska. A large area from Tennessee to New York state was expected to have a below normal fire season.

Fire season 2004 began early with two large fires reported in the Southern Area (Oklahoma), and two large fires in the Eastern Area (Maryland) in January. The Southwest Area experienced its first large fire, contained at 200 acres, in early February. Wildfire activity increased significantly in the Southern Area in mid-February, with 13 large fires reported in Oklahoma, Texas and Mississippi, which combined burned more than 9,000 acres.

#### Spring (March – May)

Spring was very warm across the country, including Alaska, with the third warmest recorded spring over the contiguous United States. May was the warmest on record for Alaska. It was drier than normal for most of the West and Southeast. The spring was wetter than average over the Southwest and from the Great Lakes to the Northeast. A very warm and dry March in the West led to record snowmelt and left snowpack levels well below normal by the beginning of April. After a drier than normal March and April, the interior of Alaska was wetter than average in May.





The National Seasonal Assessment Workshops (NSAWs) were held in late January for the Eastern and Southern States and in late March for the Western States and Alaska. At these workshops. Geographic Area Predictive Service units. climatologists and fire managers from across the country developed fire season outlooks for their respective Geographic Areas. The Southwest produced a graph (right) that predicted Energy Release Component values for their area from March through August. Their forecast of large fire potential reaching critical levels around mid-May proved to be correct.



In southern California large fire activity began in early May. Given the prolonged drought and vegetation mortality, the area was braced for the worst. Fire danger levels moderated somewhat by early June and then remained near or above historic levels for much of the season (graph at left). By the end of May, southern California had burned nearly 200% of their average acres. However, large fire activity moderated later in the fire season.

#### Summer (June – August)

By June 20, 35,606 fires had been reported nationally, which had consumed 731,487 acres. The Southern Area had burned 351,911 acres (48% of the national total). The Southwest Area was second with a reported 121,643 acres burned. Alaska was third with 91,795 acres burned, including one major fire, the Solstice Complex, which consumed 21,950 acres. Overall, the total number of wildfire occurrences and acres burned was less than the national 10-year average of 39,412 fires and 1,001,581 acres by the same date. This represents 90% and 73% of the national 10-year averages for fires and acres.

The summer of 2004 was markedly different than that of 2003. The upper level high pressure that is normally centered over the Four Corners was shifted west over the Great Basin in 2003. This led to one of the hottest and driest summers on record for the West. The past summer featured a more typical Four Corners High with an upper ridge extending northward to a very

strong high over Alaska. This weather pattern resulted in warmer than normal readings west of the Rockies and Alaska with a cool summer over the central and eastern states. The Southwest and upper Midwest areas were drier than usual with wetter than normal conditions over the Northwest, South and East.

Three significant weather patterns took place that resulted in a below normal spring and summer fire season in the West. The first came in late March and early April when a powerful storm system brought substantial rains to the eastern half of the Southwest and Rocky Mountain Areas, delaying the start of fire season in those areas. Secondly, the Southwest monsoon began on time and continued to supply moisture with little interruption over the Southwest, Rocky Mountain and Eastern Great Basin Areas. The monsoonal tap of moisture was also drawn northward at regular intervals, resulting in significant lightning outbreaks.



However, the majority of lightning was accompanied by rain with no significant outbreaks of dry lightning. Finally, periodic low pressure troughs moved across Washington, Oregon, Idaho and western Montana resulting in above normal rainfall this summer.



Last year was very unusual for Alaska, which saw a very prolonged dry period and extensive large fire activity through the end of August. It was one of the warmest and driest summers on record, with Fairbanks and Anchorage recording their hottest summer ever. Fairbanks had its driest August and third driest June-August period on record (only 1.81 inches of rain fell, or 37% of normal). Major fire seasons in Alaska (more than 1 million acres) occur about once per decade when the deep organic layers become dry and the fire season extends well into the summer months. The result is fires that are very difficult to control and have severe ecological

consequences. Alaska began seeing large fire activity in late June with much of the central, eastern, and panhandle areas reporting very high to extreme fire danger indices (see image at right). Lower duff moisture levels the third week of June were running in the lower 300% range with surface fires only consuming a small portion of the forest floor. By late July and early August, lower duff layers were running between 50-60%, well below the threshold for complete combustion of forest floor fuels. Many areas experienced fires burning down to permafrost or mineral soil.



On August 8, satellite imagery showed over 100 active fires in Alaska. The air quality was measured at unhealthful or hazardous levels for 2 months during the summer. Firefighters from 25 states were assigned to Alaska during 2004. Many of Alaska's wildfires burned along interior highways and near towns and villages, instead of being confined to mostly uninhabited backcountry as is typical during a normal Alaska fire season.

#### Fall (September - November)

Rain and snow in September finally put an end to the Alaska fire season. In the West, a series of cold fronts produced high winds in California and the Great Basin. After the fronts passed, an offshore flow brought dry, gusty winds to California. The fire season generally ended in the Great Basin in September but continued in California until heavy rain ended the season in the middle of October. As a whole, September through November was quite wet across the country except for drier than usual weather in the Pacific Northwest, Northern Rockies, portions of the Great Lakes area and New England. Temperatures were much warmer east of the Rockies, but relatively cool in the Southwest.



#### **Fire Activity**

Through the summer of 2004, fire activity was light to moderate in most of the lower 48 states, and very heavy in Alaska. Nationally, a total of 65,461 fires were reported for a total of 8,097,880 acres burned. The national 10-year average is 80,224 fires resulting in 4,455,593 acres burned, which means that the 2004 fire season experienced just 82% of wildfires, but 182% of acres burned compared to the previous 10-year average. The bulk of acreage burned in 2004 occurred in Alaska (see below). The most active Geographic Area in the lower 48

states was the Southern Area, which experienced 28,716 fires for 462,797 acres burned. The Willow fire on the Tonto National Forest in Arizona was the largest fire in the lower 48 states, burning 119,500 acres before being controlled on July 21.

Alaska experienced its busiest fire season on record in 2004, burning 6,645,978 acres, greatly exceeding the previous record of 4,990,571 acres set By June 20, 262 fires had in 1957. occurred in Alaska, resulting in 91,795 acres burned. By July 7, just over two million acres had burned. On June 14 and 15. Alaska experienced approximately 17,000 lightning strikes. The national total acreage burned in 2004 was 8,097,880, with Alaska



accounting for nearly 82% of that total. With Alaska removed from the national acreage totals, the lower 48 states burned just 1,451,902 acres in 2004, or 40% of the annual average of 3,647,273 acres burned (based on a 10-year average less Alaska). Alaska normally burns 765,143 acres, or 17% of the nation's average total acreage (based on a 10-year average).



The National Interagency Coordination Center (NICC) remained at National Preparedness Level (PL) 1 until June 18 when it was elevated to PL 2, and remained there until June 30, when it was elevated to PL 3. The National Preparedness Level remained at PL 3 until August 30 when it was lowered back to PL 2. There were no days at PL 4 or 5 in 2004.

Lightning activity up to mid-August was 56% heavier in the Continental U.S. than for the same period in 2003. A total of 26,413,807 strikes were recorded from May 1 to August 11 this year, compared to 14,938,474 strikes recorded during the same period last year.

Prescribed fire projects in 2004 were down from last year, however accomplished acres were above average.

#### **Resource Mobilizations**

Resource mobilizations from the lower 48 states to Alaska included three Type 1 Incident Management Team assignments, 8 Type 2 Incident Management Team assignments and two Fire Use Management Team assignments. Additionally 31 Type 1 crews, 10 engines and 15 Type 2 initial attack crews were mobilized from the lower 48 states to Alaska. This is the first time engines were mobilized from the lower 48 states to Alaska. Resource assistance from Canada included CL 215 and 415 air tankers and a Canadian Aerial Supervision Module. Alaska's size and remoteness increased the difficulty of locating wildland fires and mobilizing resources to suppress those fires. Resource mobilizations from the United States to Canada

included 16 smokejumpers from the Missoula Smokejumper Base, and 5 Type 1 crews from the Southwest Geographic Area to British Columbia.

Nationally, there were 40 Type 1 Incident Management Team assignments (for a total of 499 days assigned), and 79 Type 2 Incident Management Team assignments (for a total of 748 days on assignments) in 2004. Overall, demand on national fire resources was moderate in 2004.

The Forest Service and the Department of the Interior in May terminated the contracts for 33 large air tankers to be used in firefighting missions due to concerns over the airworthiness of the aircraft, and firefighter and public safety. Mitigation measures were implemented that included the activation of military Modular Airborne Fire Fighting Systems (MAFFS) air tankers, and increased utilization of single engine air tankers (SEATs), and heavy and medium helicopters. These resources were prioritized for initial action and provided a highly mobile and effective force that proved to be very successful.

Two Air Force Reserve MAFFS aircraft (from Peterson Air Force Base, Colorado Springs) supported fire suppression operations from May 14 to September 9 from bases in Arizona, New Mexico, Utah, Idaho, Washington and Oregon. These aircraft flew 327 sorties (approximately 347 hours of flight time) and delivered approximately 869,929 gallons of retardant to fires in the West.

#### Hurricane Support

August 13, 2004 Hurricane Charley



The South experienced four major hurricanes in late summer. Hurricane Charley was the first, sweeping across Florida in mid-August, followed by hurricanes Frances, Ivan and Jeanne. Several Presidential Disaster Declarations were issued, and the Federal Emergency Management Agency (FEMA) was mobilized, along with the military and numerous other relief agencies. Sixteen Type 1 Incident Management Teams were mobilized between August 13 and October 13 in support of relief efforts. Altogether these Teams spent 236 days assigned to support hurricane relief efforts. Additionally, four Area

Command Teams spent a total of 59 days assigned to hurricane relief operations. Thirteen Buying Teams spent a total of 211 days assigned to hurricane support. Several national and regional Type 2 Incident Management Teams, numerous crews, aircraft and other resources were also assigned to hurricane relief operations.