

# Fire Management Program Center

National Park Service  
U.S. Department of the Interior

Division of Fire and Aviation



## National Park Service Fire and Aviation Management National Interagency Fire Center October 2007 Fire Briefing



*Babcock Fire, Yosemite National Park*

**Boise, Idaho**



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# Section 1

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## *Who We Are - NPS Fire and Aviation Management*





National Park Service  
U.S. Department of the Interior

National Interagency Fire Center  
Idaho



# NPS Fire and Aviation Management

*Supporting the National Park Service Mission*

*In the National Park Service, Fire and Aviation Management facilitates Wildland Fire Management, Structural Fire Management, and Aviation Management.*

## Wildland Fire Management\*

The history of fire management in national parks dates back to Yellowstone, the world's first national park. In 1886 the U.S. Army was brought in to protect the park from hunting, trapping, grazing, logging, and fire. The soldiers were this nation's first paid wildland firefighters. Formal wildland fire management at a national level began in the National Park Service in 1926, 10 years after the establishment of the bureau. Fire management was and still is addressed primarily at the park level.

encouraging support of landscape and ecosystem management rather than treating parks like isolated islands. Today parks have fire management plans in place which assist park and fire managers in decision-making on a landscape scale and may include partners in other bureaus and agencies.

Throughout the years, a key aspect of fire management that has remained the same is that the top priority is firefighter and public safety. At no time will this objective be compromised.

## Structural Fire Management

The National Park Service is the nation's steward for over 21,000 structures, many of them historic; many national icons, such as the Statue of Liberty; and over 80 million artifacts. These structures include hotels; motels; cabins; visitor centers; interpretative centers; and historical buildings, such as Independence Hall and many former presidents' homes. In terms of buildings alone, the National Park Service is the federal government's third largest landlord--behind only the Department of Defense and the U.S. Postal Service.

The National Park Service enabling legislation, as well as other statues, is responsible for ensuring that the buildings and artifacts entrusted to it are protected and that the people who visit or work in them



Wildland Fire in California.



Structural Fire training.



Aviation resources on a wildland fire.

Suppression of fires was the main orientation of the young fire management program, though there were some proponents of light burning or prescribed fire, which is the term we use today. By the 1950s in the National Park Service, prescribed fire was taking place in several National Park Service units, such as Sequoia, Everglades, and Pipestone.

The evolution of fire management continued in the late 1960s and in the 1970s some parks began using prescribed natural fire, fire which is ignited through natural forces, like lightning and on rare occasion, lava and volcanic ash. Today, the term for naturally ignited but well managed fire is wildland fire use. Scientific discoveries and advancements have enhanced the wildland fire management program

\*Source of historical information used in this document: Rothman, Hal K. (2005). *A Test of Adversity and Strength: Wildland Fire in the National Park System*. Available through <http://www.nps.gov/fire/>

*Structural Fire, continued...*

are safe from undue hazards or risks. The Structural Fire Program assists the Service in its mission to preserve and protect human life and the resources entrusted to its management.

The National Park Service maintains a structural fire capability that meets the diversity and complexity of the different units of the System. The structural fire program provides service-wide policy, standards, operational procedures and accountability; addressing development of new agency policies for structural fire safety responsibilities, developing minimum fire safety requirements, and making park managers aware of them.

The program emphasis is on prevention and education rather than reaction and response and develops a process for conducting structural fire inspections at each unit of the national park system.

The program strives to ensure that all units within the system have an appropriate level of structural fire protection that is provided in a safe and cost effective manner by qualified personnel.

**Aviation Management**

The first aircraft owned by the Department of the Interior was operated by the National Park Service at Cape Hatteras National Seashore starting in the early 1930's.

Pilot Dave Driskill was the first pilot employed by NPS. Dave provided transportation for personnel and supplies to the remote park areas up and down the Outer Banks of North Carolina. Aircraft were used for firefighting efforts immediately after World War II with the introduction of smokejumpers in Glacier National Park in 1946 and Yellowstone in 1951.

Today the National Park Service uses aviation resources to support a wide variety of park programs. Aviation resources are used for search and rescue, law enforcement and visitor protection, natural resource management, wildlife management, wild and prescribed fire management, dignitary protection, facility management and personnel transportation.

Aircraft from fleet and private vendors fly approximately 17,000 hours annually in support of NPS programs.

**Fire and Aviation Management**

Working together with partners, the Division of Fire and Aviation Management provides programmatic support and policy direction which support the NPS mission.



Wildland firefighting has seen many improvements and efficiencies over the past 125 years, but the wildland firefighter remains a constant.



The Statue of Liberty, one of over 21,000 structures in the National Park Service protected by structural fire management.



Aviation resources are frequently used outside of fire management, such as for rescue operations.

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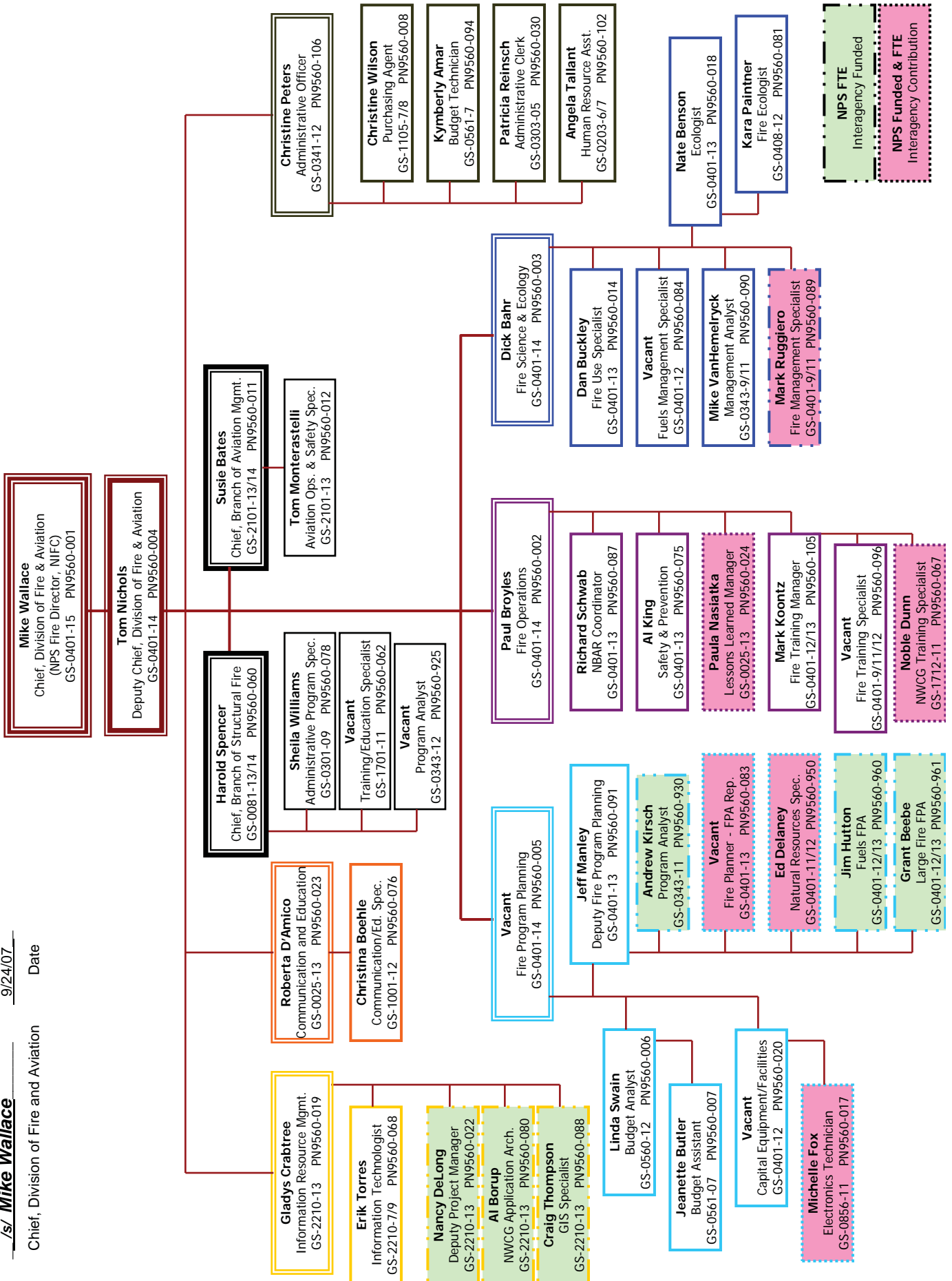
# NPS, Division of Fire & Aviation

9/24/07

Date

/s/ **Mike Wallace**

Chief, Division of Fire and Aviation



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# Wildland Fire

National Park Service  
U.S. Department of the Interior



Branch of Wildland Fire  
Division of Fire and Aviation

## 2007 Fact Sheet

October 2007



Credit: Gary Hartley, NPS

Credit: Donnie Biggs, Potomac News

Credit: NPS

Credit: Cody Wienk, NPS

Credit: Doug Ross, NPS

Credit: Gretchen Baker, NPS

Credit: George Hook

### Leadership – Fire and Aviation

Mike Wallace, Chief  
Tom Nichols, Deputy Chief

### Administration

The National Park Service manages 391 park units and more than 84 million acres of land. These park units are located throughout the entire United States and its territories, from Maine to Guam. Of the over 84 million acres of land, 53 million acres have burnable vegetation.

The National Park Service is one of five federal land agencies that manage wildland fire. The others within the Department of the Interior are the Bureau of Land Management, U.S. Fish and Wildlife Service, and Bureau of Indian Affairs. The U.S. Forest Service resides within the Department for Agriculture. Like the National Park Service, all of these agencies have portions of their total acreages that are burnable and must be managed by similar wildland fire support offices.

In times of need, NPS Fire Management resources are shared with Federal, State, Tribal, and non-governmental partners. Resources are listed as Human Resources and Equipment.

### Human Resources

The National Park Service has 428 personnel, made up of hand crews, Fire Use Modules, engine and helitack crews, as well as support personnel in parks and regional and national offices. The two Type 1 Hotshot Crews, Alpine Interagency Hotshot Crew (IHC) and Arrowhead IHC are based at Rocky Mountain National Park and Sequoia & Kings Canyon National Parks, respectively. The National Park Service also supports one interagency smokejumper, based at West Yellowstone, Yellowstone National Park.

Fire Use Modules mainly support NPS and interagency prescribed fire activities and wildland fire use incidents. The NPS has 9 modules -

- Buffalo National River (AR)
- Zion National Park (UT)
- Saguaro National Park (AZ)
- Great Smoky Mountains NP (TN)
- Bandelier National Monument (NM)
- Yellowstone National Park (WY)
- Cumberland Gap NHP (KY)
- Whiskeytown NRA (CA)
- Black Hills at Jewel Cave NM (SD)

### Equipment

The National Park Service maintains an inventory of equipment, strategically located throughout the United States, to assist in fire management activities.

Water Tenders and Foam Tenders	14
Helicopters	9
Engines	160
Airtanker Base (Knoxville, TN)	1

### For More Information

To learn more about the National Park Service Wildland Fire Management Program, visit [www.nps.gov/fire](http://www.nps.gov/fire).



Credit: David Eaker, NPS

# NPS Wildland Fire Statistics (as of 10/10/2007)

HAZARDOUS FUELS TREATMENT	FY'06 Completed	FY'07 Planned	FY'07 Completed
<b>Wildland-Urban Interface (WUI) Acres</b>			
Mechanical	8,232	5,539	6,599
Prescribed Fire	29,790	41,681	36,322
Other	536	346	248
WUI Hazardous Total Acres	38,558	47,566	43,169
<b>WUI Hazardous Fuels Total Funding</b>	<b>\$14,064,000</b>		<b>\$13,045,000</b>
<b>Other Hazardous Fuels Treatments Acres</b>			
Mechanical	3,300	1,519	2,228
Prescribed Fire	72,975	99,471	159,891
Other	1,802	3,068	4,303
Other Hazardous Fuels Total Acres	78,077	104,058	166,422
<b>Other Hazardous Fuels Total Funding</b>	<b>\$18,084,000</b>		<b>\$17,602,000</b>
Hazardous Fuels Treatment Total Acres	116,635	151,624	209,591
<b>Hazardous Fuels Treatment Total Funding</b>	<b>\$32,148,000</b>		<b>\$30,647,000</b>

OTHER	FY'06	FY'07
<b>Burned Area Rehabilitation</b>		
Acres	24,006	28,117
Funding	\$2,209,006	\$1,418,417
<b>Emergency Stabilization</b>		
Acres	2,486	7,484
Funding	\$987,480	\$944,502
<b>Ready Reserve</b>	<b>\$179,500</b>	<b>\$158,000</b>
<b>Facilities</b>	<b>\$2,041,000</b>	<b>\$3,602,000</b>
<b>Preparedness Funding</b>	<b>\$31,536,000</b>	<b>\$34,695,000</b>

WILDLAND FIRE USE AND SUPPRESSION	FY'06	FY'07
Wildland Fire Use Acres	23,874	42,898
Suppression Acres	94,572	116,512

NPS FY'07 NATIONAL FIRE PLAN OPERATIONS & REPORTING SYSTEM (NFPORS) ACCOMPLISHMENTS	NON-WUI	WUI	TOTAL
AKR	6	0	6
IMR	12,640	10,651	23,291
MWR	21,904	2,803	24,707
NER	0	391	391
PWR	17,140	4,900	22,040
SER	114,732	24,424	139,156
<b>NPS Total</b>	<b>166,422</b>	<b>43,169</b>	<b>209,591</b>

FISCAL YEAR BUDGET	FY'07
<b>Total Funding</b>	<b>\$129,013,000*</b>

\* Funding activities include Preparedness, Suppression, Hazardous Fuels Reduction within the Wildland-Urban Interface (WUI), Hazardous Fuels Reduction outside of the WUI, Ready Reserve, Burned Area Emergency Response (BAER), and Emergency Stabilization. The calculation is a total of Carryover + Appropriation + Rescission + Transfers.

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# Structural Fire

National Park Service  
U.S. Department of the Interior

Branch of Structural Fire  
Division of Fire and Aviation



## 2007 Fact Sheet

October 2007



Credit: NPS

### Leadership

Harold (Hal) Spencer, Branch Chief, Structural Fire

Sheila Williams, National Program Assistant, Structural Fire

Mike Wallace, Chief, Division of Fire & Aviation

### Mission

The mission of the National Park Service Structural Fire management Program is to establish, maintain and operate a viable, integrated and multi-disciplinary structural fire protection program to keep visitors, employees, dependents, buildings and cultural resources of the National Park Service safe from fire, life safety and related hazards.

### Administration

The National Park Service is the nation's steward for over 21,000 structures, many of them historic; many national icons, such as the Statue of Liberty; and over 80 million artifacts. These structures include hotels; motels; cabins; visitor centers; interpretative centers; and historical buildings, such as Independence Hall and many former presidents' homes. In terms of buildings alone, the National Park Service is the federal government's third largest landlord--behind only the Department of Defense and the U.S. Postal Service.

### For More Information

To learn more about the National Park Service Structural Fire Management Program, visit [www.nps.gov/fire](http://www.nps.gov/fire).

### Human Resources

Collateral Duty Engine Company Suppression Personnel	200+
Full-time Fire Department ( <i>Golden Gate NRA</i> )	1
National Program Personnel	2
<i>Program Manager</i>	1
<i>National Training &amp; Education Officer</i>	Vacant
<i>National Program Assistant</i>	1
<i>Regional Structural Fire Officers</i>	7
<i>Regional Structural Fire Inspector</i>	1
<i>Regional Structural Fire Specialist</i>	1

### Equipment

Thirty-three parks have a total of 66 NPS owned and staffed structure fire apparatus:

Park	Region	Park	Region	Park	Region
<i>Denali</i>	AKR	<i>Glacier</i>	IMR	<i>Death Valley</i>	PWR
<i>Glacier Bay</i>	AKR	<i>Glen Canyon</i>	IMR	<i>Golden Gate</i>	PWR
<i>Badlands</i>	MWR	<i>Grand Canyon</i>	IMR	<i>Hawai'i Volcanoes</i>	PWR
<i>Buffalo</i>	MWR	<i>Grand Teton</i>	IMR	<i>Kalaupapa</i>	PWR
<i>Acadia</i>	NER	<i>Guadalupe Mtns</i>	IMR	<i>Lake Mead</i>	PWR
<i>Gateway</i>	NER	<i>Mesa Verde</i>	IMR	<i>Lava Beds</i>	PWR
<i>Everglades</i>	SER	<i>Organ Pipe</i>	IMR	<i>Lassen Volcanic</i>	PWR
<i>Mammoth Cave</i>	SER	<i>Petrified Forest</i>	IMR	<i>Mount Rainier</i>	PWR
<i>Big Bend</i>	IMR	<i>Yellowstone</i>	IMR	<i>Sequoia &amp; Kings Cyn</i>	PWR
<i>Bryce Canyon</i>	IMR	<i>Zion</i>	IMR	<i>Whiskeytown</i>	PWR
<i>Canyonlands</i>	IMR	<i>Crater Lake</i>	PWR	<i>Yosemite</i>	PWR

NPS apparatus staffed and maintained by Volunteer Fire Departments as part of MOU agreement

Park	Region	Park	Region
<i>Denali</i>	AKR	<i>Mammoth Cave</i>	SER
<i>Buffalo</i>	MWR	<i>Hawai'i Volcanoes</i>	PWR



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# Aviation Management

National Park Service  
U.S. Department of the Interior

Branch of Aviation Management  
Division of Fire and Aviation



## 2007 Fact Sheet

July 2007



Credit: NPS

### Leadership

Susie Bates, National Aviation Program Manager

Tom Monterastelli, Aviation Operations & Safety Specialist

Mike Wallace, Chief, Division of Fire & Aviation

These missions include but are not limited to:

- Search and Rescue
- Law Enforcement and Visitor Protection
- Natural Resource Management
- Wildlife Management
- Wildland Fire Management
- Prescribed Fire Management
- Dignitary Protection
- Personnel Transportation

### Mission

The National Park Service Aviation Management Program provides leadership at the national, regional and park levels to ensure safe and efficient use of aviation resources.

### Human Resources and Equipment

The Service uses aircraft from the fleet and private industry for approximately 17,000 hours annually in support of the above missions. Aviation personnel, pilots, and equipment are subject to frequent changes based on mission needs and/or management decisions.

### Administration

The Aviation Management Program is assigned directly under the Chief, Division of Fire and Aviation. The program area is staffed by the National Aviation Program Manager and the National Aviation Operations and Safety Specialist, located in Boise, ID.

A multitude of contract and rental aircraft available from a Departmental source list is used to support aviation needs within the Service. Military and other cooperator resources under appropriate circumstances within prescribed policies also support park missions.

The National Aviation Management Program facilitates national level policy, direction, and aviation technical support to enhance the safe and efficient use of the above resources while performing Service missions using aviation resources.

The National Park Service utilizes aviation resources in support of a multitude of park programs. These NPS aviation projects comprise the most diverse use of aviation resources of any bureau within the Department of the Interior.

The National Aviation Program coordinates its activities with NPS Regional Aviation Managers, the NPS National Aviation Advisory Group (NAAG), departmental, other national bureau and agency aviation offices.

	<i>Pilots</i>	<i>Aircraft (total)</i>	<i>Single Engine Airplanes</i>	<i>Helicopters</i>
<b>Lower 48</b>	15	9	6	3
<b>Alaska</b>	15	15	15	0

### For More Information

To learn more about the National Park Service Aviation Management Program, visit [www.nps.gov/fire](http://www.nps.gov/fire).



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# Section 2

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## *The National Interagency Fire Center*





# Road to NIFC

In 1963, a Bureau of Land Management (BLM) fire program task force, responding to a request from the Bureau of the Budget, proposed that a BLM fire center be created, preferably in Boise, Idaho. By 1965, the BLM had established the Great Basin Fire Center in vacant Idaho National Guard buildings at Gowen Field. A joint Forest Service/BLM Fire Coordination Center was established in Forest Service space across from Julia Davis Park. At the same time, the Forest Service also wanted to establish an air center for forest fire suppression, and fire weather was recognized by both agencies as an important ingredient in fire suppression. These needs ultimately resulted in an agreement among BLM, Forest Service, and the Weather Bureau (now the National Weather Service) to construct the Boise Interagency Fire Center on land acquired by BLM through a land exchange with the state of Idaho. Because construction funding is included in its budget, BLM also owns the buildings and serves as the host agency.



In 1968, construction began on the administration building and warehouse. The three agencies moved into the building in May 1969. By that fall, a mess hall, west wing of a barracks, and smokejumper loft were also com-

pleted. Remaining major construction was completed in 1970.

At that time, the Forest Service operation was administered by the Boise National Forest and operated the Region 4 Western Zone Air Unit, the National Fire Radio Cache, and the Boise National Forest's Fire Control Branch, which included its dispatchers, smokejumpers, air tanker base, fire warehouse, air operations, and law enforcement. BLM's organization included the Divisions of Fire Management, Standards and Technology, Aircraft Management, Communications, and Administration, and its charge was to coordinate wildfire support for BLM nationally.

Different administrative levels and missions have created interesting challenges through the evolution of the Fire Center. For example, at one time, a yellow line in the warehouse separated the BLM's 5,000-person fire cache and the Forest Service's 2,000-person cache. The dispatch office included three separate operations: the BLM's national fire support staff, the Boise National Forest dispatcher, and a Forest Service regional coordinator. By 1973, the Forest Service operation was elevated organizationally to a national level after having been administered for a short time by Region 4. Ultimately, through the leadership of BLM-NIFC Director Jack Wilson and Forest Service Director Bob Bjornsen, a new era of cooperation and coordination evolved.

In 1973, the Department of the Interior established the Office of Aircraft Services, which was headquartered at the Fire Center. In January 1974, the National Wildfire Coordinating Group, composed of the top fire managers of the federal and state wildland fire organizations, was formed. This ultimately had a strong effect on Fire Center operations. That same year, the agencies at BIFC were joined by the National Park Service; and in 1976, the Bureau of Indian Affairs became a permanent partner. In 1979, the U.S. Fish and Wildlife Service officially joined as a partner, bringing the total number of agencies housed on base to seven. In early 1993 the Center's name was changed to "National Interagency Fire Center," or NIFC, to more accurately reflect its national mission. In 2002, a full-time representative of the National Association of State Foresters was established at NIFC, and in early 2003, a permanent representative of the Federal Emergency Management Administration joined the NIFC team.

Since the inception of NIFC, the partner agencies have effectively shared firefighting resources and associated costs. Today, through cooperative agreements, NIFC's highly successful interagency concept extends to all 50 States and Canada. NIFC also supports fires and other emergencies in foreign nations when requested by the Office of Foreign Disaster Assistance of the U.S. Department of State.



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# National Interagency Coordination Center (NICC)

## Organization

- Staffed jointly by Bureau of Land Management and USDA Forest Service.



- When activity warrants, NICC operates 24 hours a day, seven days a week.
- NICC was established in 1975 to provide logistical support, and intelligence for wildfires across the nation. However, because NICC is an “all-risk” coordination center, it also provides support in response to other emergencies such as floods, hurricanes and earthquakes.

The Coordination System is three-tiered and has established ordering protocols.

- Federal and state dispatch offices located throughout the United States receive requests for personnel, fixed and rotor-wing aircraft, equipment and supplies to support fire and non-fire emergency incidents.
- When local dispatch offices (1st tier) have exceeded their internal capabilities to fill requests locally, requests are placed with their Geographic Area Coordination Center (GACC) to fill the requests. For wildland management, the USA has eleven 11 Geographic Area Coordination Centers.
- When GACCs have exceeded their internal capability to fill requests because they are supporting multiple incidents, or when GACCs are competing for resources, the requests for personnel, aircraft, equipment, and supplies are routed to the National Interagency Coordination Center, in Boise Idaho.

- NICC coordinates resources allocation across the U.S., as well as providing support to incidents in foreign countries. The National Multi-agency Coordinating (NMAC) Group establishes priorities. The federal and state representatives for this group are responsible for responding to wildland fire and other events.
- Based upon the “closest forces” and “total mobility” concepts, NICC will request the closest available qualified resource, regardless of agency affiliation.
- In addition to coordinating resources among the GACCs, NICC is the sole source dispatch center for medium and large helicopters, military resources (excluding National Guard assets), airtankers and crews, infrared imagery aircraft, large transport aircraft and telecommunications equipment.

NICC is Organized into five functional areas:

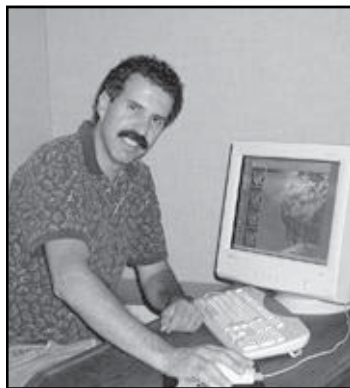
- Equipment/Supply; coordinates telecommunications equipment, mobile food service and shower units,



# National Interagency Coordination Center (NICC)

engines, ground or air transportation for equipment and supplies, portable weather stations, and miscellaneous supplies.

- **Crew & Overhead;** coordinates Area Command teams, Type 1 and 2 Incident Management Teams, Area Command Teams, Fire Use Teams, Burned Area Rehabilitation Teams, 20 person fire crews, and smokejumpers.



- **Aircraft Section;** coordinates the transport of people, supplies, and equipment; airtankers, lead planes, aerial supervision modules, retardant aircraft, large and medium helicopters, FAA portable control towers, and the military Modular Airborne Fire Fighting System (MAFFS), which convert C-130's into retardant airtankers and the flight tracking of aircraft.

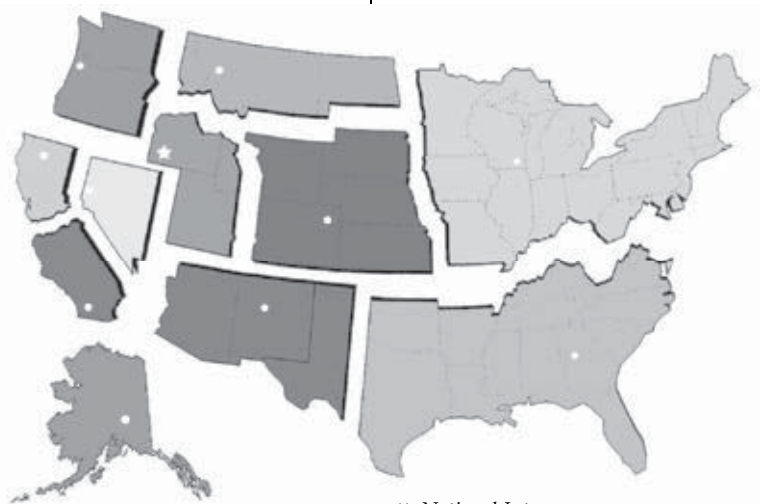
- **Intelligence;** collects, consolidates, and disseminates information to cooperating agencies, prepares daily, weekly, monthly, and annual reports and assists with briefings during periods of high activity.

## Geographic Area Coordination Centers (GACCs)

- The United States is divided into 11 geographic areas for wildland fire coordination. GACCs unify agencies with similar missions and use common coordination processes.

The 11 GACCs are:

- Eastern, Fort Snelling, MN
- Southern, Atlanta, GA
- Southwest, Albuquerque, NM
- Rocky Mountain, Lakewood, CO
- Northern Rockies, Missoula, MT
- Alaska, Fairbanks, AK
- Northwest, Portland, OR
- California North Ops, Redding, CA
- California South Ops, Riverside, CA
- Eastern Great Basin, Salt Lake City, UT
- Western Great Basin, Reno, NV



★ National Interagency Coordination Center

● Geographic Area Coordination Center



# National Incident Radio Support Cache

NIRSC possesses the largest amount of portable low-power communication equipment in one location in the entire nation. Staffed by Forest Service, Bureau of Indian Affairs and Bureau of Land Management employees, NIRSC provides communication equipment for a variety of incidents, from wildland fire to natural disasters to community events.



The National Incident Radio Support Cache, or NIRSC, handles 1,200 "kits" of communication equipment. These kits range from basic public address systems to sophisticated satellite telephone systems. Each kit contains everything necessary to operate the system including batteries, antennas, and tools.

Each kit has a different purpose: some kits contain hand-held radios to provide support for a small wildland fire; others hold different kinds of repeaters to support small or large complex incidents.

Although the main purpose of NIRSC is to provide support to wildland fire incidents, the cache often provides communication equipment to other federal, state, county, and local agencies during major events such as the Mount St. Helens volcano eruption, the Three Mile Island nuclear disaster, the Valdez oil spill, the North Ridge earthquake, the Teton Dam failure, several hurricanes including Hugo and Andrew, as well as the 9/11 incident. The equipment is also requested for events involving large public gatherings such as the Presidential Inauguration and the 2002 Salt Lake City Winter Olympics.

NIRSC can provide communication support to 53 major incidents at the same time.



The radio section repairs and maintains more than 8,000 hand-held radios. Following each use, the radios must be cleaned, programmed, and diagnostically tested and voice-checked before it can be used again. In 2002, an extremely busy fire season, each radio was checked out seven times, resulting in more than 56,000 radios tested and/or repaired.

The value of the 1,200 communication kits and associated test equipment exceeds \$24 million.

NIRSC also provides annual support to law enforcement and the Presidents Federal Response Plan.



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# Section 3

## The 2007 Fire Season to Date



NIFC Large Fires Map - July 19, 2007



## National Interagency Fire Center



## 2007 Fire Season Summary

Taken from: *Fire Season 2007, A Review for Secretary Kempthorne*

Produced by: *External Affairs, National Interagency Fire Center*; Released: October 1, 2007

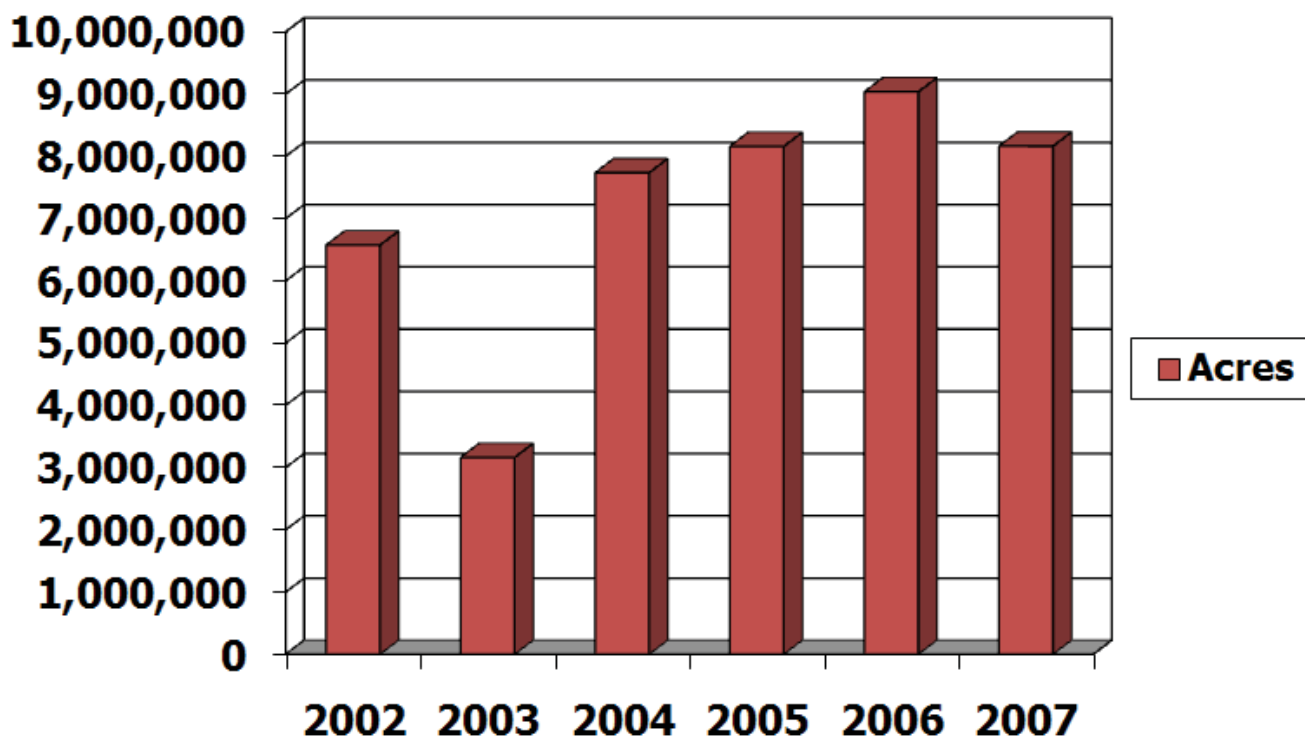
### Characteristics of the 2007 Fire Season

- Continued drought in geographically diverse areas
- Record temperatures
- Widespread thunderstorms in July and August
- Extreme fire behavior
- A good safety record

### The Season to Date (As of September 30, 2007)

- 71,244 fires have burned 8,155,743 acres
- The ten-year averages for this date are 66,926 fires that had burned 5,953,632 acres

## Acres Burned



## A Fast Start

The fire season started early, with 1.1 million acres burning in Georgia and Florida. That was followed by a lull in activity. June was quiet; almost too quiet, other than a wildland-urban interface fire in Lake Tahoe, the Angora Fire.

On July 5, the first in a series of thunderstorms began rumbling through much of the West, igniting 1,500 new fires during the next four days. The national preparedness level went from 2 to 5 in fifteen days.



## On the Move: From Rangelands to the Mountains

More thunderstorms, many with little or no moisture, peppered Idaho and western Montana. As the season dried out, fire activity moved from lower-elevation rangelands to higher-elevation forests.

## Peak of Fire Activity

At its peak, 72 large uncontained fires burned in ten states. Between July 16 and July 20, almost 1,800 new fires were reported. About 24,000 people were either on the lines or served in support positions. Thirty-four incident management teams were assigned to fires.



*Idaho fires, as viewed from the international space station, Summer 2007.  
Image courtesy of NASA*

## Silver Linings: What Went Right in 2007

- The number of fire-related fatalities was the lowest in 25 years
- Initial attack success stood at 98.49% as of late September
- Military resources were not called in
- International resources, which are very costly, were hardly tapped. Only five Type 1 Canadian crews and about 100 pumps were requested
- Other than the Angora Fire, loss of structures was relatively low
- Fire managers relied more on “appropriate management response” to tailor the tactics used for suppression to the practicality of the situation
- Fire season in several states (Arizona, Colorado, New Mexico, and Wyoming) was less active than expected
- The geographic footprint of the fire season, at its peak, was smaller this year than 2006 and 2005

## It Ain't Over Until it's Over

While the bulk of the western season is over, Predictive Services at NIFC is calling for a higher-than-normal potential for the fall in several areas: Southern California, Idaho, Montana, the Southeast, and Northern Great Lakes.



## Emerging and Lingering Issues

Several issues are emerging or continue to be emblematic of today's fire management.

- Residences in areas prone to wildfire
- Climate change
- Accumulation of fuels
- Shifts in suppression strategies
- Firefighter liability
- Unclear budgets

## Building in the Wildland-Urban Interface (WUI)

- Eight million homes have been built in wildfire-prone areas in the last 20 years. It is a major problem for the wildland fire community.
- The social and political demand to protect homes from fire has caused a shift in how firefighters prioritize allocation of resources.
- WUI fires tend to be more dangerous, expensive, and require more resources to suppress.



## Firefighter Liability

Firefighter liability waned an issue as the season progressed, but it will resurface in the off-season.

## Three Steps

State and federal agencies have identified three steps that need long-term attention to address the liability issue.

- Define the scope of duty for firefighters.
- Distinguish between accident investigations and other kinds of investigations.
- Make information and resources available to firefighters.

## Looking into the Future

Here is a preliminary, premature, and subject-to-change forecast for 2008.

- What happens in the winter sets the tone for the summer fire season.
- A weak La Nina – the periodic cooling of equatorial water in the east-central Pacific – is expected through the winter and then to dissipate in the spring.



## What La Niña Usually Means

- The Southwest and southern tier of states have a dry winter with little snowpack, causing an early fire season start.
- The Pacific Northwest and Northern Rockies receive more moisture than usual. That's good news for the higher elevations, but may mean greater fuel loads in the lower elevations.
- The middle tier states is an area of transition between the effects of La Niña.



## “There is no doubt we are operating in a new world.”

*Tom Boatner, chief of fire operations, BLM*

- The three tines of fire – climate change, fuels, and WUI are changing the world of wildfire.
- The three seasons in which the most acres burned in the last 40 years were 2006, 2005 and 2007.
- The definition of a “normal” fire season is changing before our eyes.

# National Wildland Significant Fire Potential Outlook

## National Interagency Fire Center Predictive Services

Issued: October 1, 2007



## Wildland Fire Outlook – October through January 2008

**Significant fire potential in October is expected to be above average from the Ohio River and Tennessee Valley eastward to the Mid-Atlantic States.** Below normal fire potential in October is forecast for portions of central and southern Texas. Significant fire potential will increase or persist as above normal for the November through January period in portions of the southern California coastal area, eastern New Mexico, northwest Texas, western Oklahoma and from the Mississippi Valley to the Mid-Atlantic States.

The main factors influencing fire potential this outlook period are:

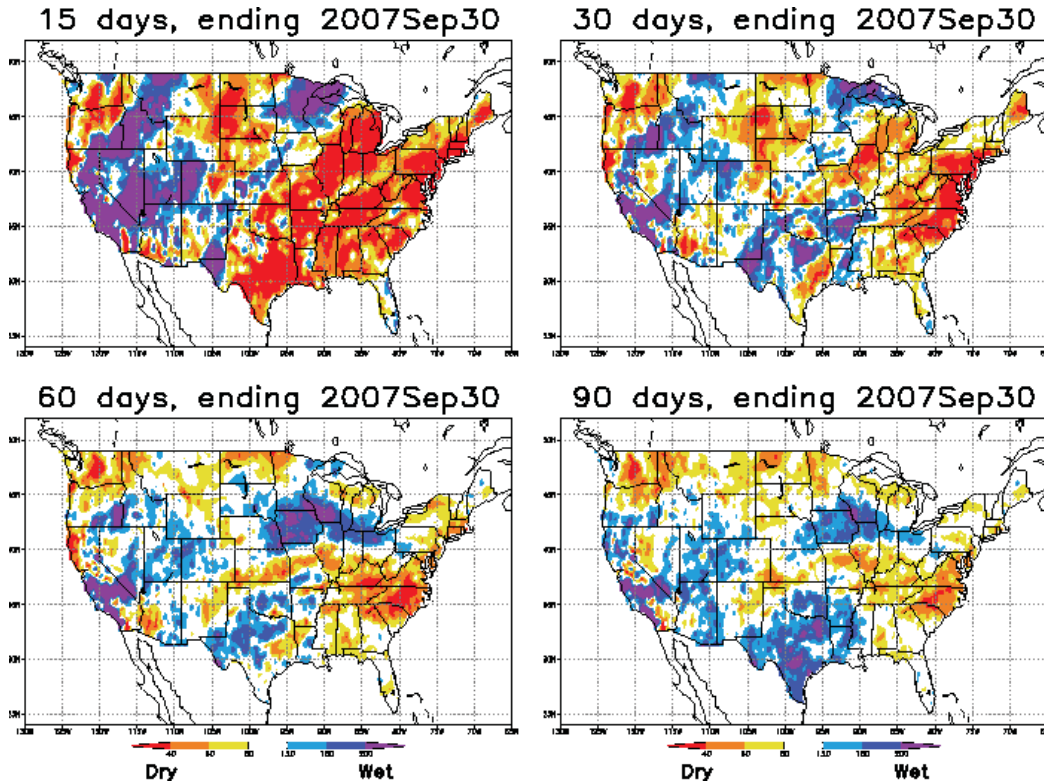
- Current and projected rainfall deficits, continued drought conditions, periods of low relative humidity and elevated fire danger indices are contributing factors to an expected active fall fire season in the east-central portion of the country.
- Dry fuels, windy conditions and abundant grass fuel loadings across the eastern plains of New Mexico, Texas and western Oklahoma are expected to increase fire potential during late fall and early winter.
- Fuels in portions of southern California continue to be abnormally dry and may see increasing fire potential, especially during any offshore wind events, later in the outlook period.



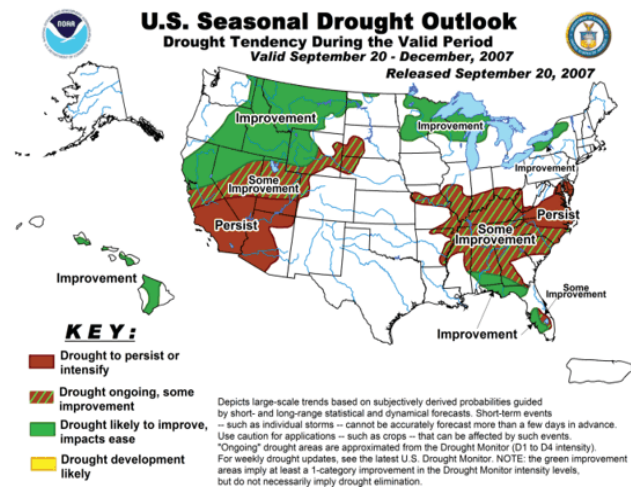
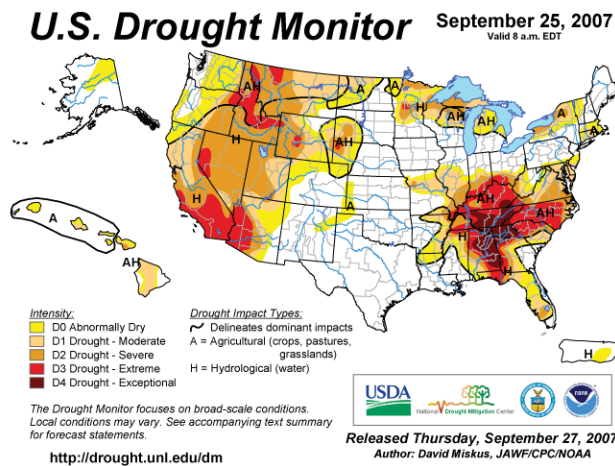
Note: Significant fire potential is defined as the likelihood that a wildland fire event will require mobilization of additional resources from outside the area in which the fire situation originates.

## Past Weather and Drought

Significant rainfall occurred between September 19-24 over portions of California, Idaho and Montana. Rainfall was also noted over the western Great Lakes and portions of the Southeast. Unfortunately, dry conditions remain in an area stretching from Mid-Atlantic States west to the Mississippi River. Drought conditions are expected to persist in the Southwest but show some slight improvement in the Southeast.



[www.cdc.noaa.gov/Drought/images/prec4.gif](http://www.cdc.noaa.gov/Drought/images/prec4.gif)



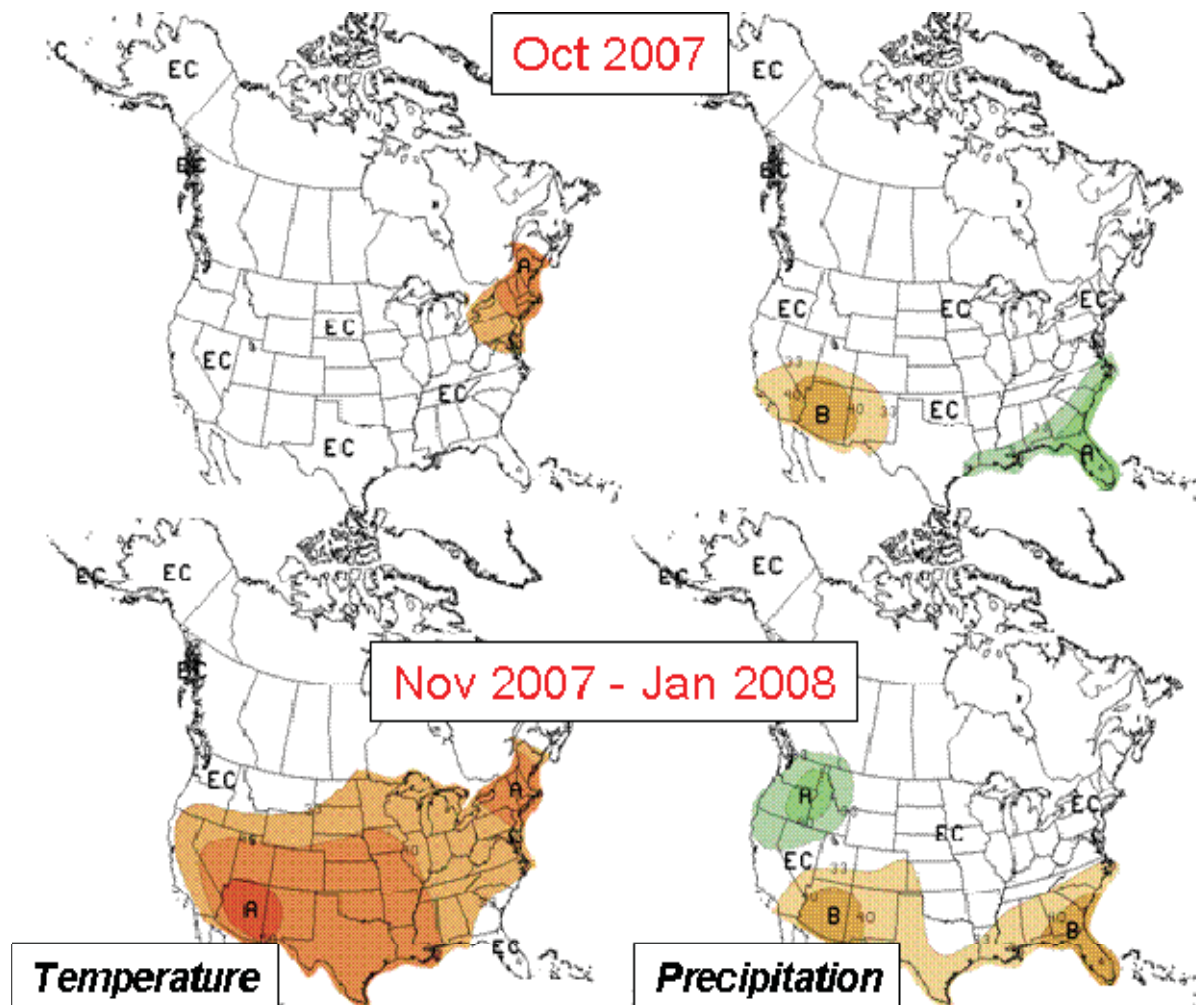
[www.drought.unl.edu/dm/monitor.html](http://www.drought.unl.edu/dm/monitor.html)

## Weather and Climate Outlooks

According to the National Weather Service (NWS) Climate Prediction Center, La Niña conditions (tropical Pacific sea surface temperatures cooler than normal) have developed and are expected to strengthen over the next few months. While La Niña is not expected to influence the weather in October, the November through January outlooks shown below reflect the typical precipitation impacts of La Niña.

The NWS outlook for October calls for warm weather in the Northeast. It should be wetter than normal along the Southeast Coast with drier than normal weather in the Southwest.

November through January is expected to be warmer than normal across most of the country. The Northwest should be wetter than normal with dry weather along the southern tier of states



**A = Above normal, B = Below normal, N = Normal, EC = Equal Chances** of Above/Below/Normal.  
[www.cpc.ncep.noaa.gov/products/predictions/multi\\_season/13\\_seasonal\\_outlooks/color/page2.gif](http://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/page2.gif)



## Area Discussions

**Alaska:** Normal significant fire potential is projected for both the month of October and the extended outlook period. While warmer and drier than normal conditions are forecast for the first part of October, fire activity on older, existing fires has been minimal and is not expected to increase. Some areas of the eastern Upper Yukon Valley continue to have dry fuels. These conditions are not likely to persist much longer, but may be a concern next spring depending on the precipitation prior to freeze-up and through the winter. October typically sees the onset of winter snow cover throughout most of the state.

**Southwest:** Normal fire potential is expected during October Area-wide. However fire potential is expected to increase across portions of the eastern plains in New Mexico and Texas during the extended outlook period primarily due to abundant grass fuel loadings that developed over the past 6 months as an outcome of a very wet spring and early summer. Overall, a dry weather pattern is forecast for October and is expected to extend into early winter with an occasional storm system providing snowy, colder weather across northern sections of the region. Some arctic air intrusions are possible mainly in the eastern half of the region. Down-slope wind events, combined with abundant fine fuels, are expected to increase fire potential across the eastern plains late fall and early winter.

**Northern Rockies:** Normal significant fire potential is expected for October through the extended forecast period for all of the Northern Rockies; however, heavy fine fuel loadings will continue to present the potential for short-lived, wind driven grass fires in the eastern portion of the Area. Weak La Nina conditions are forecast to start impacting weather in November, which could mean wetter than average conditions with sufficient mountain snow and valley rains.

**Great Basin:** Significant fire potential is expected to be normal for the Great Basin during October and the extended outlook period. Most of the persistent, long duration large fires in central Idaho are in the process of demobilization. Long-range patterns appear to support cold, wet troughs passing through the Area every 4-7 days during early October, keeping fuel moistures high and adding snow, especially in higher elevation timbered areas. The combination of shorter days, higher relative humidity, and lower daily temperatures, will all help to mitigate the potential for large fire growth in flashy fuels.

**Northwest:** Normal fire potential is projected for the Area during October and the extended outlook period. The current large wildfire threat is low. Relatively widespread precipitation the latter part of September helped to moisten fuels and lower fire danger indices to levels typical of late September. Continued rainy and cool weather is expected in early October. Longer range forecast models suggest wetter than average conditions during the fall period. Given the current and forecasted conditions, resurgence of high fire danger is very unlikely. Consequently, the Area is expected to see low large fire risk for the remainder of the year.

**California:** Significant fire potential is expected to be near normal Area-wide during October. Recent precipitation, lower temperatures and higher humidity have moderated fire potential across most of northern California, however the potential for active fire behavior continues, especially with north wind events. Moderating conditions will increase the opportunity for prescribed burning across northern California during October. Fuels in portions of southern California continue to be abnormally dry, but improvement is likely especially across central California. Near-normal weather is expected in October with warmer and drier than normal conditions returning to southern California in the fall. Thus, portions of southern California may see increasing fire potential, especially during any offshore wind events, later in the outlook period.

**Rocky Mountain:** Normal fire potential is forecast for the entire Area for October through January. While the Area has experienced an average number of fire starts this season so far, fewer than 40% of 10-year average acres have burned. Recent rainfall and cooler weather has reduced large fire potential. Consequently, fall prescribed burning has begun and will continue through October. It is likely the Geographic Area will see typical short-lived lower elevation fires this fall during dry, windy periods.

**Eastern Area:** Significant fire potential is expected to be above normal across West Virginia, Maryland, Delaware and the southern portions of Missouri, Ohio, Indiana and Illinois during October. Rainfall deficits, continued drought conditions, and elevated fire danger indices are contributing factors in these areas as the fall fire season begins. Precipitation events across the Great Lakes during September helped to mitigate long-term drought conditions, lower fire danger indices, and reduce fire potential. Normal significant fire potential is projected across the remainder of the Eastern Area during the outlook period, however short periods of elevated fire potential are possible given any prolonged warm and dry periods.

**Southern Area:** In spite of some recent precipitation across portions of the central, south and Mid-Atlantic States, drought conditions remain extreme. Drought conditions across most of these areas are forecast to slightly improve between late September and December. However, the worst drought conditions are expected to persist across most of North Carolina and Virginia. An active fall fire season (late October into November) is expected, especially in Virginia, North Carolina, and the eastern portions of Tennessee and Kentucky. Fire potential across north Texas and western Oklahoma is expected to increase during late fall and early winter due to abundant dry fine fuels and windy conditions. In addition, the southeastern half of Puerto Rico will likely see above normal fire potential as the drier winter period approaches due to below normal precipitation anomalies and continued drought.

**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 through the NICC webpage at: <http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm>

## Historic and Predicted Wildland Fires and Acres Burned Data

Based on reported data so far this year, nationally there were 108% of the average numbers of fires, burning approximately 137% of the average acres. The following table displays historical, current and predicted information pertaining to fire statistics.

	SEP 30, 2007 Reported Year-To-Date	Average reported for OCT	Projection for October YTD+Forecast	Average Reported YTD OCT 31	Historical Low YTD OCT 31	Year of Low	Historical High YTD OCT 31	Year of High
<b>ALASKA</b>								
<b>Fires</b>	447	6	451	503	308	2006	715	1997
<b>Acres</b>	469,179	34,787	486,573	1,822,709	121,952	1998	6,645,978	2004
<b>NORTHWEST</b>								
<b>Fires</b>	3,581	272	3,853	3,818	2,791	2005	4,716	2001
<b>Acres</b>	786,526	9,793	794,360	436,357	39,658	1997	1,099,430	2002
<b>NORTH OPS</b>								
<b>Fires</b>	3,378	348	3,795	3,951	2,949	2005	4,839	2001
<b>Acres</b>	205,983	26,121	221,656	157,031	19,124	1997	475,404	1999
<b>SOUTH OPS</b>								
<b>Fires</b>	4,425	349	4,844	4,061	3,310	2006	4,740	1999
<b>Acres</b>	346,697	68,260	408,131	232,555	84,747	2001	578,171	2003
<b>NORTHERN ROCKIES</b>								
<b>Fires</b>	3,232	65	3,297	2,992	1,533	1997	4,364	2000
<b>Acres</b>	1,090,341	13,363	1,103,704	412,781	16,235	1997	1,355,841	2000
<b>EAST BASIN</b>								
<b>Fires</b>	2,332	140	2,472	2,425	1,408	1997	3,167	2001
<b>Acres</b>	2,393,662	10,548	2,409,483	556,142	71,341	1997	1,510,704	2000
<b>WEST BASIN</b>								
<b>Fires</b>	775	29	801	921	685	1997	1,248	2006
<b>Acres</b>	895,025	5,237	901,833	546,461	16,890	2003	1,612,902	1999
<b>SOUTHWEST</b>								
<b>Fires</b>	3,340	150	3,490	4,384	3,364	1999	5,808	2000
<b>Acres</b>	264,525	7,110	274,479	410,889	61,074	2001	974,263	2002
<b>ROCKY MOUNTAIN</b>								
<b>Fires</b>	3,105	521	3,626	3,206	1,884	2004	6,050	2003
<b>Acres</b>	142,587	29,609	169,235	231,310	23,750	1998	668,079	2002
<b>EASTERN AREA</b>								
<b>Fires</b>	11,700	735	12,508	13,057	11,444	2000	16,654	1999
<b>Acres</b>	198,768	6,184	205,571	108,333	59,657	1997	182,875	2003
<b>SOUTHERN AREA</b>								
<b>Fires</b>	36,948	2,061	39,421	31,541	13,336	2003	48,324	2000
<b>Acres</b>	1,434,051	26,103	1,478,426	803,663	241,412	2003	2,472,998	2006
<b>NATIONALLY</b>								
<b>Fires</b>	73,263	4,676	78,559	70,858	56,036	2003	89,784	2000
<b>Acres</b>	8,227,344	237,115	8,453,451	5,718,230	2,274,274	1998	9,602,226	2006

The information above was obtained *primarily* from the Incident Management Situation Report from 1998-2007, however, some inaccuracies and inconsistencies have been corrected. Therefore, the data may not reflect other historic records and should *not* be considered for official statistical purposes.

Prepared October 1, 2007 by the National Interagency Coordination Center – Predictive Services Staff

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